G.1.a.b 1768 Chandler Avenue: Development Variance Permit Application No. 00272 (Gonzales)

Moved By Councillor Caradonna **Seconded By** Councillor Coleman

That Council, after giving notice and allowing an opportunity for public comment at a meeting of Council, consider the following motion:

"That Council authorize the issuance of Development Variance Permit Application No. 00272 for 1768 Chandler Avenue in accordance with:

- 1. Plans date stamped January 24, 2023
- 2. Development meeting all Zoning Regulation Bylaw requirements, except for the following variances:
 - i. reduce the minimum lot width from 15m to 10.67m
 - ii. increase the building height from 1.5 to 2 storey
 - iii. reduce the minimum combined side yards from 5.40m to 3.50m
 - iv. increase the maximum drive aisle slope from 8% to 15%.
- 3. Final Plans to be generally in accordance with the plans date stamped January 24th, 2023, to the satisfaction of the Director of Sustainable Planning and Community Development
- 4. The Development Permit lapsing two years from the date of this resolution."

CARRIED UNANIMOUSLY

E.2 <u>1768 Chandler Avenue: Development Variance Permit Application No.</u> 00272 (Gonzales)

Moved By Councillor Thompson **Seconded By** Councillor Coleman

- That Council, after giving notice and allowing an opportunity for public comment at a meeting of Council, consider the following motion:
 "That Council authorize the issuance of Development Variance Permit Application No. 00272 for 1768 Chandler Avenue in accordance with:
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 - 4. The Development Permit lapsing two years from the date of this resolution."

CARRIED UNANIMOUSLY



Committee of the Whole Report

For the Meeting of April 6, 2023

To: Committee of the Whole **Date:** February 17, 2023

From: Karen Hoese, Director, Sustainable Planning and Community Development

Subject: Development Variance Permit Application No. 00272 for 1768 Chandler

Avenue

RECOMMENDATION

1) That Council, after giving notice and allowing an opportunity for public comment at a meeting of Council, consider the following motion:

"That Council authorize the issuance of Development Variance Permit Application No. 00272 for 1768 Chandler Avenue in accordance with:

- 1. Plans date stamped January 24, 2023
- 2. Development meeting all *Zoning Regulation Bylaw* requirements, except for the following variances:
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- Final Plans to be generally in accordance with the plans date stamped January 24th, 2023, to the satisfaction of the Director of Sustainable Planning and Community Development
- 3. The Development Permit lapsing two years from the date of this resolution."

LEGISLATIVE AUTHORITY

In accordance with Section 498 of the *Local Government Act*, Council may issue a Development Variance Permit that varies a *Zoning Regulation Bylaw* provided the permit does not vary the use or density of land from that specified in the *Zoning Regulation Bylaw*.

EXECUTIVE SUMMARY

The purpose of this report is to present Council with information, analysis, and recommendations for a Development Variance Permit application for the property located at 1768 Chandler Avenue.

The proposal is to construct two single-family dwellings, each with a secondary suite. The proposed variances are related to lot width, building height, combined side setback, and drive aisle grade.

The following points were considered in assessing this application:

- the proposal is consistent with the Traditional Residential Urban Place Designation in the Official Community Plan (OCP) and with housing objectives contained in the Gonzales Neighbourhood Community Plan
- the requested variances are supportable as the proposed design responds to the site and neighbourhood context and includes measures to mitigate impacts on adjacent properties.

BACKGROUND

Description of Proposal

The proposal is to demolish the existing house, subdivide the existing lot and construct two single-family dwellings, each containing a secondary suite. The single-family dwellings are proposed as two storey buildings with secondary suites located in the basements, which is permitted under the existing R1-G Zone, Gonzales Single Family Dwelling District. The proposed dwellings are sited approximately 10m from Chandler Avenue to accommodate a garage, which is further than the 7.5m minimum required in the R1-G zone.

The proposed variances, which are discussed below, include:

- reducing the minimum lot width from 15m to 10.67m
- increasing the building height from 1.5 to 2 storeys
- reducing the minimum combined side yard setback from 5.40m to 3.50m
- increasing the maximum driveway slope from 8% to 15%.

Affordable Housing

The creation of two new single-family dwellings with secondary suites would marginally increase the overall supply of housing in Gonzales.

Sustainability

The applicant has proposed the use of permeable pavers for the proposed driveways to mitigate impacts to the City's stormwater system and the environment.

Active Transportation

The applicant has not identified any active transportation impacts associated with this application.

Public Realm

No public realm improvements beyond City standard requirements are proposed in association with this application.

Accessibility

No accessibility measures beyond those contained in the *British Columbia Building Code* are proposed.

Existing Site Development and Development Potential

The property currently contains a single-family dwelling. The existing R-1G zoning permits single-family dwellings that may contain either a secondary or garden suite, house conversions, as well as roomers and borders.

Data Table

The following data table compares the proposal with the existing R1-G Zone. An asterisk is used to identify where the proposal does not meet the requirements of the existing Zone.

Zoning Criteria	Proposal (Lot A)	Proposal (Lot B)	R1- G Zone
Site area (m²) – minimum	487.64	487.64	460.00
Density (Floor Space Ratio) – maximum	0.41	0.41	0.5:1
Combined floor area (m²) (max.)	288.57	290.19	300.00
Lot width (m) – minimum	10.67*	10.67*	15.00
Height (m) – maximum	7.56	7.57	7.60
Storeys – maximum	2 *	2 *	2/1.5 with Basement
Site coverage (%) – maximum	29.82	30.00	30.00
Open site space (%) – minimum	60.60	60.00	50.00
Open site space front yard (%) (min.)	59.80	59.20	50.00
Setbacks (m) – minimum			
Front	10.75	10.05	7.50
Rear	13.72	13.72	13.72 (30%)
Side (east)	1.90	1.60	1.50 or 15% of lot width
Side (west)	1.60	1.90	1.50 or 15% of lot width
Combined side yards	3.50*	3.50*	5.40
Parking – minimum	1	1	1
Drive Aisle/parking slope (%) (max.)	15 *	15 *	8.00

Community Consultation

Consistent with the Community Association Land Use Committee (CALUC) Procedures for Processing Rezoning and Variance Applications, on August 13, 2021 the application was referred for a 30-day comment period to the Fairfield Gonzales CALUC. At the time of writing this report, a letter from the CALUC had not been received on the initial submission or subsequent plan revisions.

This application proposes variances; therefore, in accordance with the City's *Land Use Procedures Bylaw*, it requires notice, sign posting and a meeting of Council to consider the variances.

ANALYSIS

Official Community Plan

The property is designated Traditional Residential under the *OCP*. The proposal is consistent with the vision for Traditional Residential areas, which envisions ground-oriented residential uses with front and rear yards, variable landscaping and trees within the boulevard.

Gonzales Neighbourhood Community Plan

The proposed development of two single-family dwellings with secondary suites supports specific housing objectives articulated in the *Gonzales Neighbourhood Community Plan*, which includes retention of existing neighbourhood character and adding new housing options such as secondary suites.

Regulatory Considerations

The four requested variances relate to lot width, combined side yard setback, building height (number of storeys), and drive aisle grade.

Lot Width and Combined Side Yard Setback

The proposal would reduce the minimum lot width from 15m to 10.67m and reduce the combined side yard setback from 5.40m to 3.50m. The variances are considered supportable because the design minimizes privacy impacts on neighbouring properties by limiting windows on the upper floors to non-habitable rooms. In addition, only one of the three upper floor bedrooms would face the interior side yards located between the two new homes, with glazing for the two other rooms facing the front and rear yards. A proposed perimeter privacy fence will provide additional screening for lower floors.

Building Height

The proposal would increase the building height from 1.5 to 2 storeys. It should be noted that the R1-G Zone does permit two storey buildings if there are no basements. As noted, basements are proposed in order to accommodate a secondary suite and garage; therefore, a variance is required. The variance is considered supportable because the three-level Glengarry Hospital is located on the opposite side of Chandler Avenue. Additionally, the flat roof design will comply with the 7.6m maximum height in the R1-G Zone, and the inclusion of a secondary suite as part of the proposal is consistent with housing objectives to create more rental housing.

Drive Aisle Grade

The proposal would require an increase in the maximum drive aisle slope from 8% to 15%, which is needed to access the proposed garage. Initial staff review concluded that the variance could be avoided by providing a surface parking stall, which could also reduce the paving in the front yard. However, the applicant has considered this recommendation and responded that their client requires the garage as a suitable space for electric vehicle charging and bike parking. While staff assessment is that a 15% drive aisle is not functional for outdoor parking and loading, the grade change between the building and the street, combined with a larger front yard setback will reduce the visual impact. In addition, no safety concerns were identified therefore this variance is recommended as supportable.

Tree impacts

The arbourist report identified 14 trees on the subject property and neighbouring properties, including 2 municipal trees, 7 bylaw-protected trees, and 5 undersized trees. The report identifies 2 bylaw-protected trees on the subject property that would be removed, in addition to 4 unprotected undersized trees. One bylaw protected tree requires removal to accommodate the future driveway on Proposed Lot A, while the other protected tree identified for removal is due to anticipated excavation impacts to construct the primary building on Proposed Lot B.

One bylaw protected tree on the subject property and all five neighbouring trees are proposed for retention, as well as both municipal trees, although moderate impacts on the municipal trees are anticipated to result from the proposed driveways. Three replacement trees are proposed within suitable planting areas on the Tree Replacement Plan provided. Following subdivision of the property, and the planting of the replacement trees, the site will meet the tree minimum of two trees on each proposed lot.

Tree Impact Summary

Tree Status	Total # of	Trees to be	New	NET CHANGE
	Trees	Removed	Trees	(new trees minus
				total to be removed)
Subject property trees, protected	3	2	3	+1
Subject property trees, unprotected	4	4	0	-4
Casjeet property areas, amprotested				
Municipal trees	2	0	0	0
Neighbouring trees, protected	4	0	0	0
Neighbouring trees, unprotected	1	0	0	0
Total	14	6	3	-3

CONCLUSIONS

The Development Variance Permit Application to construct two new single-family dwellings, each with a secondary suite, is generally consistent with relevant policies. The variances are supportable as the development proposal is compatible with the site context, and mitigation

measures have been provided to reduce potential privacy concerns. Therefore, staff recommend for Council's consideration that the application be advanced to an opportunity for public comment.

ALTERNATE MOTION

That Council decline Development Variance Permit Application No. 00272 for the property located at 1768 Chandler Avenue.

Respectfully submitted,

Patrick Carroll Karen Hoese, Director

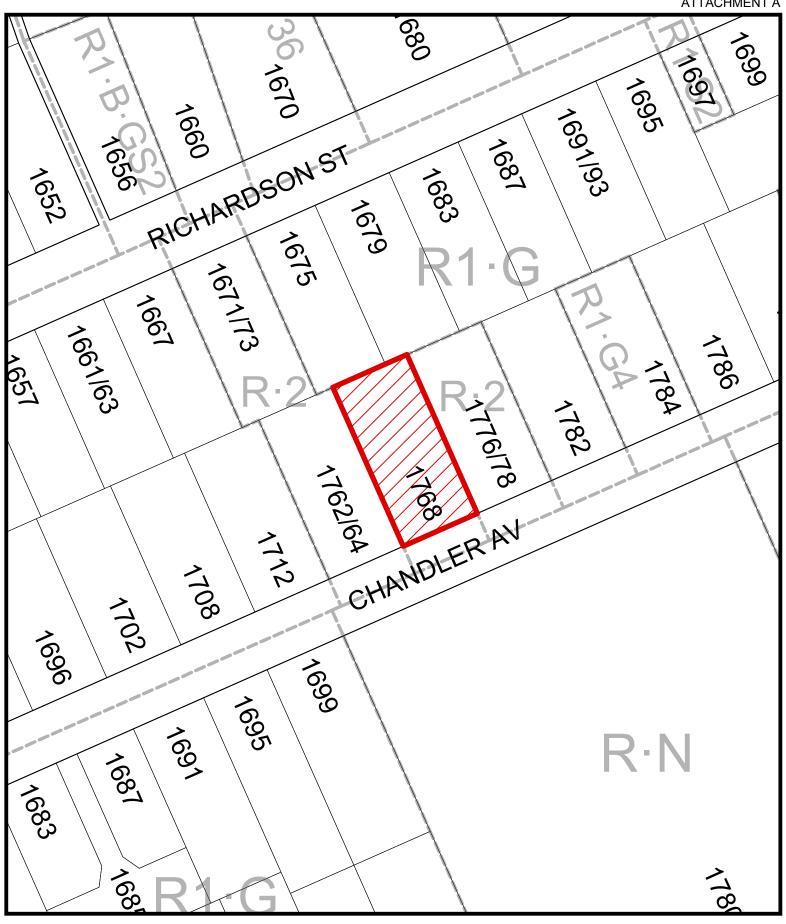
Senior Planner Sustainable Planning and Community

Development Services Division Development Department

Report accepted and recommended by the City Manager.

List of Attachments

- Attachment A: Subject Map
- Attachment B: Aerial Map
- Attachment C: Plans date stamped January 24th, 2023
- Attachment D: Letter from applicant to Mayor and Council dated January 24th, 2023
- Attachment E: Arborist report dated November 22nd, 2021.



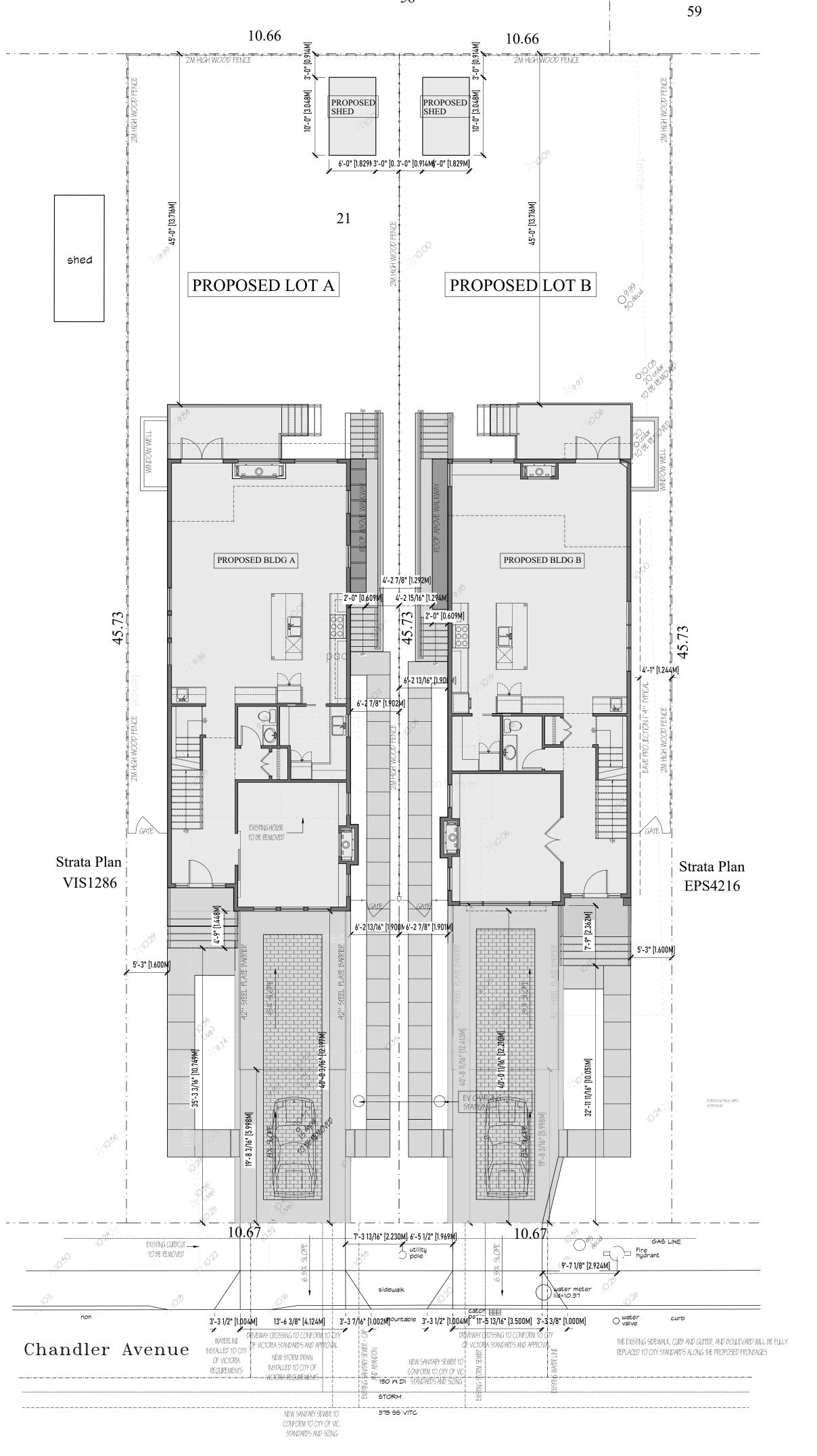






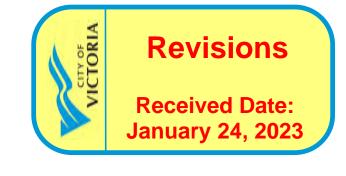








ZONING:	SUBDIVISION	JE - VICTORIA	A			
ONING PROPOSED:	R1-G R1-G (WITH VARIANCES	S)				
ONING REQUIREMENTS	REQUIRED	PROPOSED LO	OT A	PROPOSED LO	OT B	
OT AREA	460.00 M ² 4951.16 FT ²	487.64 M ²	5249.19 FT ²	487.64 M ²	5249.19 FT ²	
OT WIDTH	15.00 M	10.68 M	35.04 FT	10.68 M	35.04 FT	VARIANCE of 4.32 M
OT DEPTH	N/A	45.73 M	150.03 FT	45.73 M	150.03 FT	
ETBACKS FRONT	7.50 M	12 10 M	40.10 ET	10.57 M	41 21 ET	
REAR	7.50 M 30% LOT DEPTH	12.19 M 13.71 M	40.18 FT 45.00 FT	12.57 M 13.71 M	41.21 FT 45.00 FT	
SIDE WEST	15% LOT WIDTH	1.60 M	5.25 FT	1.90 M	6.23 FT	
SIDE EAST	15% LOT WIDTH	1.90 M	6.23 FT	1.60 M	5.25 FT	
SIDE COMBINED VERAGE GRADE	5.40 M NA	3.50 M 9.77 M	11.48 FT 32.05 FT	3.50 M 9.77 M	11.48 FT 32.05 FT	VARIANCE of 1.90 M
OOF HEIGHT	7.60M	7.56 M	24.80 FT	7.57 M	24.83 FT	
LOOR AREA						
UPPER FLOOR AREA	NA	81.31 M ²	875.29 FT ²	81.65 M ²	878.95 FT ²	70% M.F. (81.61M ²)/(81.69m ²)
MAIN FLOOR AREA GARAGE ALLOWANCE	NA 18.58 M ²	$\frac{116.59 \text{ M}^2}{-18.58 \text{ M}^2}$	$\frac{1254.99 \text{ FT}^2}{-200.00 \text{ FT}^2}$	-18.58 M^2	1255.92 FT ² -200.00 FT ²	
BASEMENT (garage inc.)	NA	109.25 M ²	1176.06 FT ²	110.45 M ²	1188.93 FT ²	
OTAL FLOOR AREA - MAIN & 2nd	240.00 M ² 2583.42 FT ²	197.90 M ²	2130.28 FT ²	198.32 M ²	2134.87 FT ²	
OTAL FLOOR AREA	300.00 M ² 3229.27 FT ²	288.57 M ²	3106.34 FT ²	290.19 M ²	3123.80 FT ²	
AXIMUM F.A.R.	0.50	0.40		0.40		
UILDING FOOTPRINT	NA	139.86 M ²	1505.46 FT ²	140.77 M ²	1515.34 FT ²	INCL. 5.57m2 FOR SHED
AXIMUM LOT COVERAGE	30%	29.82%		30.00%		
PEN SITE SPACE - FRONT YARD	50%	59.8%		59.2%		
PEN SITE SPACE - TOTAL REES TO BE REMOVED	50% NA	60.6%		60%		
EQUIRED PARKING STALLS	1	1		1		
RIVEWAY SLOPE	8%	15%		0		VARIANCE - PARKING CONDITION
CCESSORY BUILDING (SHED)						
LOOR AREA	37.00 M ²	5.57 M ²	59.95 FT ²	5.57 M ²	59.95 FT ²	
EIGHT	3.50 M	3.11 M	10.20 FT ²	3.11 M	10.20 FT ²	
EAR YARD SETBACK	0.60 M	0.914 M	3.00 FT ²	0.914 M	3.00 FT ²	
DE YARD SETBACK	0.60 M	0.914 M	3.00 FT ²	0.914 M	3.00 FT ²	
JILDING SEPARATION	2.40 M	9.75 M	32.00 FT ²	9.75 M	32.00 FT ²	
EAR LOT COVERAGE	25%	3.80%		3.80%	G. 19	-8
PROPOSED	LOT A			P	ROPOSEI	D LOT B



DRAWING LIST

- A1 SITE PLAN & SITE DATA A2 LANDSCAPE PLAN \$
- STREETSCAPE A3 FLOOR PLANS & ELEVATIONS
- LOT A A4 FLOOR PLANS & ELEVATIONS
- A5 SHED PLANS & ELEVATIONS LOT A & B

RE-ISSUED FOR DVP 2023-01-20



Victoria, B.C. V8S 5E6 Phone: (250) 360-2144 Fax: (250) 360-2115

Drawn By: LOUIS HORVAT

Date: DECEMBER 7, 2020

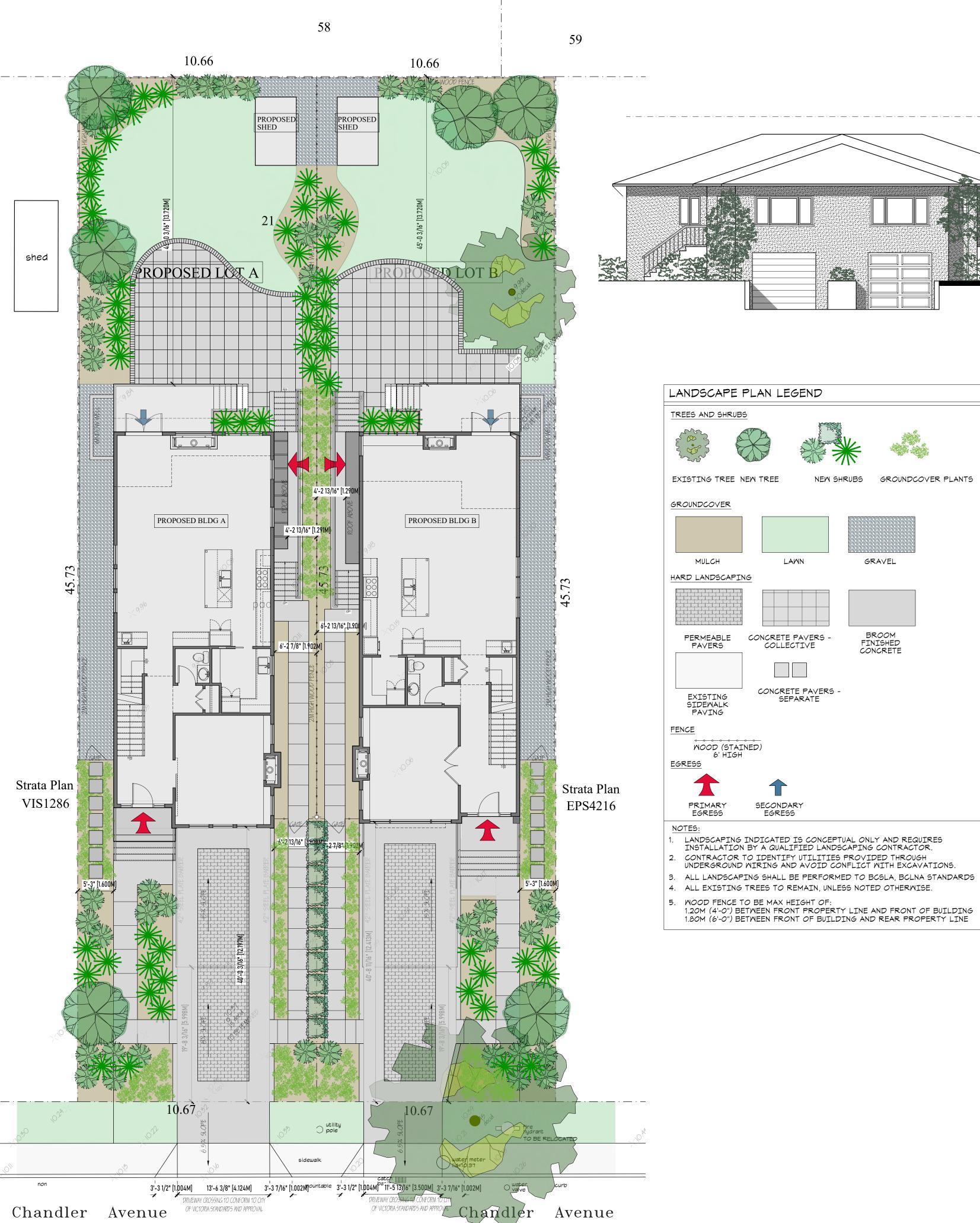
Scale: AS NOTED

Project:
MAHER 2 LOT SUBDIVISION @1768 CHANDLER AVE

SITE PLAN & SITE DATA









CHANDLER AVENUE



NEW SHRUBS GROUNDCOVER PLANTS

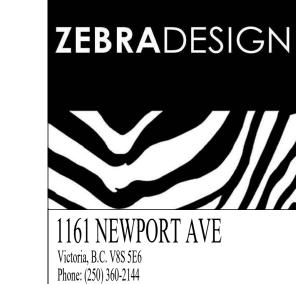
BROOM FINISHED CONCRETE

CONCRETE PAVERS -SEPARATE

SECONDARY EGRESS

TREES	BOTANICAL NAME	COMMON NAME	SIZE
	CORRUS VENUS CAMELIA JOPNICA SPECIMEN HIS MAJESTY CULTIVAR QUERCUS GARRYANA	FLOWERING DOGWOOD EVERGREEN CAMELIA CORK TREE GARRY OAK	2.5M HT. B&B 3.0M HT. B&B 2.5M HT. B&B 3.0M HT. B&B
SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE
	ARBUTUS UNEDO COMPACTA BERBERIS THUNDERGILL ATROPURPUREA BUXUS MICROPHYLLA CAMELIA JAPONICA CISTUS LADANIFER CEANOTHUS GLORIOSUS INCRABRE ERICA CARNEA SPRINGWOOD ERICA X DARLEYNSIS FURZEY ERSCALLONIA NEWPORT DWARF HEBE "PATTY'S PURBLE" LAVENDULA ANGUSTIFOLIA HIDCOTE RIBES SANGUINEAUM KING EDWARD RHODODENDRON SPIREA PRUNIFOLIA VIBURNUM DAVIDII	STRAMBERRY TREE BARBERRY DWARF BOXWOOD RED CAMELIA CRIMSON ROCK ROSE PROSTRATE MOUNTAIN LILAC WHITE HEATHER PINK HEATHER DWARF ESCALLONIA HEBE HIDCOTE LAVENDER PINK FLOWERING CURRENT WHITE RHODODENDRON BRIDAL WREATH SPIREA EVERGREEN VIBURNUM	# # # # # # # # # # # # # # # # # # #
GROUND	BOTANICAL NAME	COMMON NAME	SIZE
COVER	PARTHENOCISSUS QUINQUEFOLIA THYMUS PINK RIPPLE	VERGIN CREEPER CREEPING TYME	#1 5P3, 30CM 0/0





Victoria, B.C. V8S 5E6 Phone: (250) 360-2144 Fax: (250) 360-2115

Drawn By: LOUIS HORVAT

DECEMBER 7, 2020

AS NOTED

MAHER 2 LOT

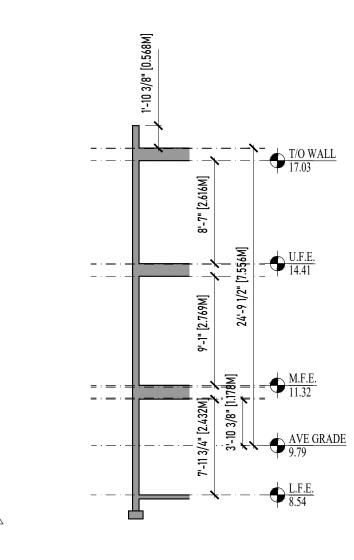
SUBDIVISION @1768 CHANDLER AVE

LANDSCAPE PLAN AND STREETSCAPE

Revision:







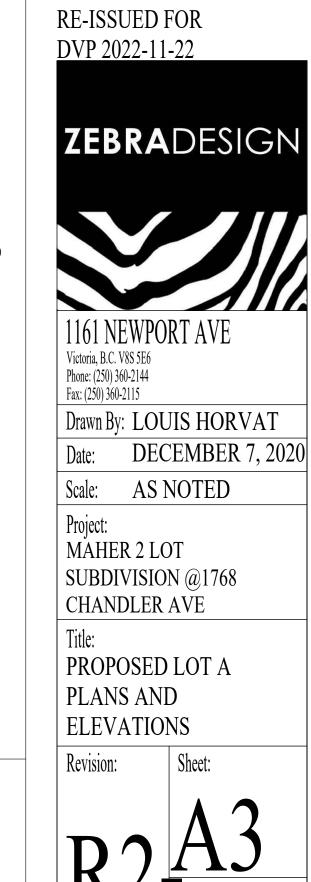
MALL SECTION - LOT A

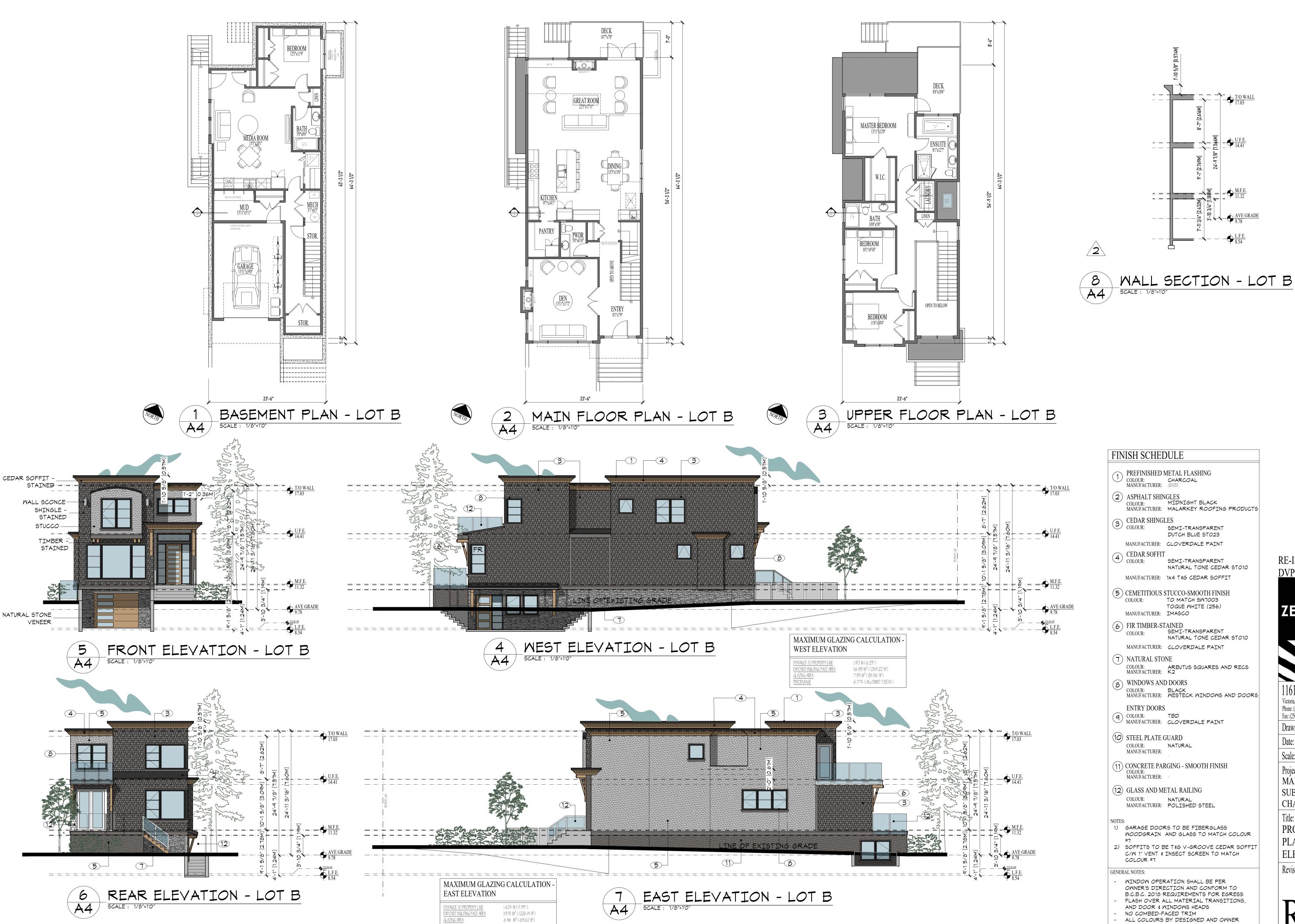


- 1 PREFINISHED METAL FLASHING
 COLOUR: GRAPHITE
 MANUFACTURER: GENTEK
- (2) PREFINISHED METAL ROOFING GRAPHITE 9821 MANUFACTURER: VICWEST
- (3) SHIPLAP WOOD SIDING SEA SERPENT SW6237 MANUFACTURER: SHERWIN-WILLIAMS
- CEMETITIOUS STUCCO-SMOOTH FINISH
 COLOUR: TO MATCH SW7757 HIGH
 REFLECTIVE WHITE (256)
 MANUFACTURER: IMASCO
- (5) FIR TIMBER-STAINED COLOUR: SEMI-TRANSPARENT STOO7
 MANUFACTURER: CLOVERDALE PAINT
- (6) NATURAL STONE COLOUR: OCEAN PEARL SAWN
- ASHLAR STONE VENEER
 MANUFACTURER: K2 (7) WINDOWS AND DOORS
- COLOUR: BLACK
 MANUFACTURER: WESTECK WINDOWS
 AND DOORS (8) CONCRETE PARGING - SMOOTH FINISH
- COLOUR: NATURAL MANUFACTURER:
- (9) STEEL PLATE GUARD COLOUR: NATURAL MANUFACTURER:
- (10) GLASS AND METAL RAILING COLOUR: GRAPHITE TO MATCH MANUFACTURER: FLASHING
- 1) GARAGE DOORS TO BE METAL (BLACK) AND OPAQUE GLASS 2) SOFFITS TO BE T&G V-GROOVE CEDAR SOFFIT C/W 1" VENT & INSECT SCREEN
- MINDOM OPERATION SHALL BE PER OWNER'S DIRECTION AND CONFORM TO B.C.B.C. 2018 REQUIREMENTS FOR EGRESS FLASH OVER ALL MATERIAL TRANSITIONS, AND DOOR & WINDOWS

ALL COLOURS BY DESIGNED AND OWNER

NO COMBED-FACED TRIM





5.67% (ALLOWED 7.25%)

RE-ISSUED FOR

DVP 2022-11-22

Victoria, B.C. V8S 5E6

Phone: (250) 360-2144

MAHER 2 LOT

CHANDLER AVE

SUBDIVISION @1768

Fax: (250) 360-2115

ZEBRADESIGN

Drawn By: LOUIS HORVAT

AS NOTED

DECEMBER 7, 2020

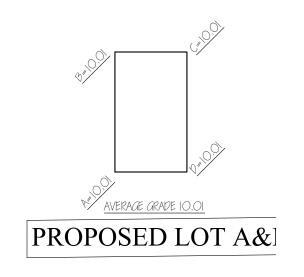
NATURAL TONE CEDAR STO10

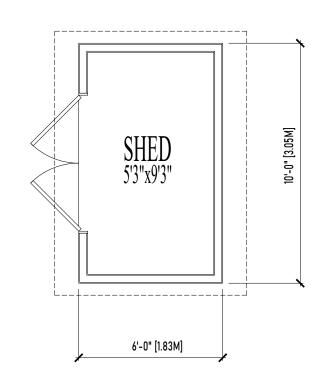
- COLOUR: ARBUTUS SQUARES AND RECS MANUFACTURER: K2
- COLOUR: BLACK
 MANUFACTURER: WESTECK WINDOWS AND DOORS

- MOODGRAIN AND GLASS TO MATCH COLOUR
- 2) SOFFITS TO BE T&G V-GROOVE CEDAR SOFFIT

ALL COLOURS BY DESIGNED AND OWNER

PROPOSED LOT B PLANS AND **ELEVATIONS** Revision:



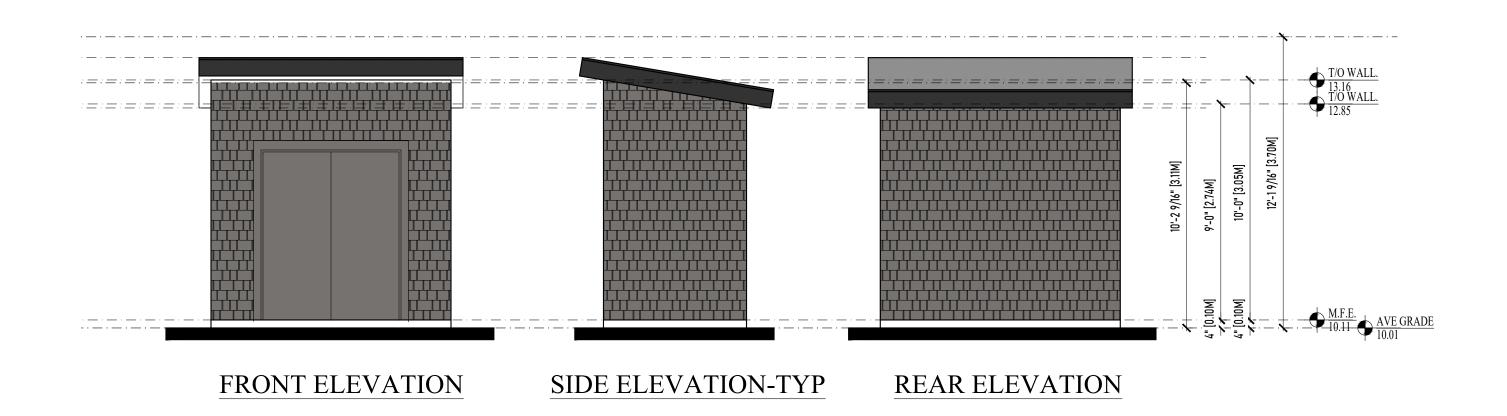








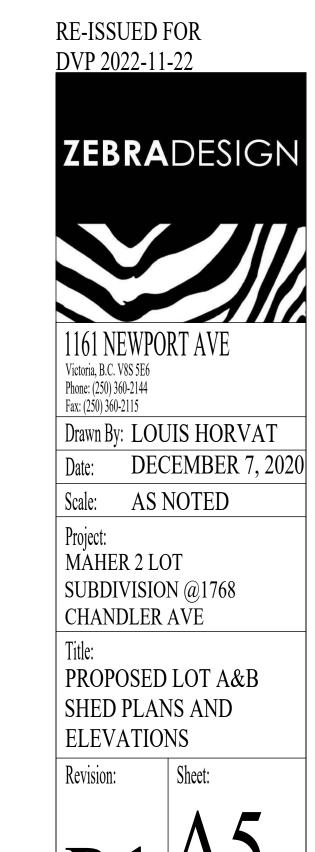
3 SHED ELEVATIONS - LOT A A5 SCALE: 1/4"=1'0"













January 20, 2023

#1 Centennial Square Victoria, B.C. V8W 1P6

Re: 1768 Chandler Avenue, Zone R1-G - Development Variance Permit application

To Mayor Marianne Alto and Members of City of Victoria Council,

On behalf of our client Jamna Maher we are applying for a subdivision at 1768 Chandler Avenue, in order to create two R1-G lots and construct two new single family homes, each with a secondary suite. A rezoning is not required for this application; it is already zoned R1-G.

The proposed subdivided lots would meet and exceed the required lot area requirements for R1-G but variances would be required for lot width. Proposed Lots 1 and 2 would each be 10.68M wide (4.32M lot width variance required for each lot); combined side yard setback variances would also be required for both the properties (combined side yard setback relaxations of 1.9M required). In all other manners the proposed new lots and home designs meet the R1-G zoning requirements. Due to technicalities of the wording in the Parking Schedule C, two parking variances have recently been identified as well. We ourselves disagree with the wording and have had extensive discussions with City Staff about the reference to a drive aisle, which is soon to be changed when staff re-examine and update Schedule C. Please see supplementary letter for further detail on this matter.

At the outset of the design process, after preliminary consultation with the Planning and Development Services Department at City Victoria, Ms. Maher extensively canvassed neighbours in the area to determine what kind of development would be most supportable and received favourable responses for the subdivision concept, so decided to proceed with detached homes. Although duplexes are also supported in this location, the net dwelling unit increase is the same, from one current to four proposed units. Ms. Maher prefers detached homes to duplexes because of the privacy and yards space provided by this housing option. Her daughter will live in one of the homes. The proposal is well in sync with the objectives of the Fairfield Gonzales Neighbourhood Plan because this area supports permitting infill housing, has a mixed residential character, and subdivisions with lot width variances are not unprecedented in the area. The project will offer appropriate and attractive housing options for the Gonzales area, with a modest increase in density.

We have designed the proposed new homes with flat roofs, trying to keep the height of the homes low, and have located the parking under the homes to reduce the dominance of the garages in the streetscape. The homes are well distanced from the front property line as a

result. The homes complement one another and are the same overall size and massing but are differentiated visually in several ways. The houses have contemporary styling with some West

Coast design elements, softened with more traditional design details such as wooden knee brackets, trellis and arbours, and cedar shingles so that they are not overly modern.

Architectural details on proposed Lot A include: a combination of stained, narrow horizontal wood siding, stucco and natural stone cladding; a cable-supported flat front entry cover; glass and metal railings; knee brackets with a wooden trellis above; standing seam metal accent shed roofs; modern windows and glazed entry doors. Lot B details include: stucco and stained cedar shingle siding; natural stone cladding; upward angled soffit detail; window aprons; a curved roof window box-out with wooden corbels below; glass and metal guard rails; modern windows and wood and glass entry doors.

Comments have been received from the Planning Departments after their Application Review Summary, as many of which as possible we have adopted with our current proposal.

Both houses are designed with a lower secondary suite as the zoning allows, with separated entries and plenty of window wells for natural lighting. Window overlook and privacy have been considered in relation to the neighbouring houses, with design revisions to sizes and locations of windows in habitable spaces, per input from the Planning Department. Rear patios, private back yards and ample green space are provided for both properties. New landscaping and fencing will be installed for both homes, with water permeable ground treatments to help with rainwater management. There is room for raised gardening beds in the rear of the lots for potential personal use as vegetable gardens by residents, if desired. A professional arborist has been retained to review and consult on trees on the boulevard and proximal to the property line.

The homes and possible future rental or in-law suites address current and future growing demand for family housing and density in the neighbourhood, without contributing to urban sprawl. We are pleased to put forward this proposal in light of current residential challenges in the Capital Region. Considering that the proposed new homes would contribute visual harmony and texture to the streetscape, as well as desired additional housing stock, we hope that the merits of the proposal are apparent.

We thank you for your time and consideration of this application.

Sincerely,

Rus Collins

Zebra Design & Interiors Group, Inc.



January 20, 2023

Development Services #1 Centennial Square Victoria, B.C. V8W 1P6

Re: Drive Aisle wording for Single Family Dwelling Parking conditions, Schedule C, Zoning Regulation Bylaw (no. 80-159), p. 16 item 13

To Mayor Marianne Alto, Members of City of Victoria Council, and Development Services staff,

We have recently encountered a couple separate occurrences of unnecessary difficulties with parking conditions for single family homes, due to what we feel is erroneous or misleading wording in Parking Schedule C of the City's Zoning Bylaws, as for example with our 1768 Chandler Avenue subdivision application.

In this instance at 17768 Chandler Ave., for these new homes with secondary suites we are proposing parking under the homes, to lessen demand for street parking and simultaneously diminish the prominence of the garages in the streetscape and front elevation of the new homes. Our client wants garages in these homes not only for parking and vehicle charging but also importantly for indoor bicycle storage. Street parking was identified to her by neighbours as a concern when she originally canvassed them, as well.

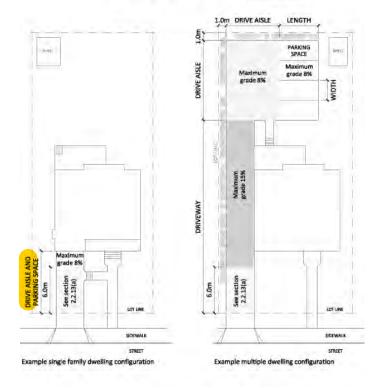
City of Victoria's Schedule C, Zoning Regulation Bylaw (no. 80-159) on page 16 says:

- 13. (a) Where a drive aisle or parking space is located within 6.0m of a street boundary it must comply with applicable grade requirements prescribed in this Schedule and the Highway Access Bylaw.
- (b) The maximum grade for a drive aisle or parking stall is 8%.
- (c) The maximum grade for a driveway is 15%

We have designed the driveways for this project to have less than 8% slope for the first 6 metres from the property line (we are at 6.5%), as is required for safety reasons, then 8% slope for the next 5.998 metres, then the driveway steepens to 15% to get down to the level of the garage floor and the grade flattens out for the vehicle to enter the under-house garage.

However, the diagram on the left which follows the above item in Schedule C, ("Example single family dwelling configuration") we think is mislabeled. Please see yellow heighted area on next page. We believe this should say "DRIVEWAY AND PARKING SPACE". As a result, the sloping portions of our driveways are being interpreted as "drive aisles" rather than "driveways".

Examples: Maximum Grades for Parking Areas



Drive aisles should be specific to multi-space parking situations as in the diagram on the right ("Example multiple dwelling configuration"). Drive aisles are not permitted to be sloped greater than 8%, because they are used for maneuvering and greater turning radii are required. In our case, there will be no maneuvering into the parking stall (the garage), it will be straight in and straight out, with the maneuvering occurring in the boulevard portion of the driveway and also the street itself.

Although we do not feel that City Staff are wrong about identifying this condition as a variance in the context of this diagram, we do feel that the diagram wording itself is wrong and should be changed. We have had extensive discussions with City Staff about this specific item, and in fact they agree with us and encouraged us to write this letter; additionally they indicated that they would support our application for the variance. We understand that there will soon be a session to address the inconsistency within the next couple of months.

We thank you for your time and consideration of this topic. Please see <u>Schedule C</u> (victoria.ca) page 16 Item 13 for additional information if required.

Sincerely,

Rus Collins

Zebra Design & Interiors Group, Inc.



1768 Chandler Avenue, Victoria, BC

Construction Impact Assessment & Tree Management Plan

PREPARED FOR: Jamna Maher

C/O Zebra Group

PREPARED BY: Talbot, Mackenzie & Associates

Noah Talbot – Consulting Arborist

ISA Certified # PN-6822A

Tree Risk Assessment Qualified

DATE OF ISSUANCE: July 20, 2021

UPDATED: September 23, 2021

CONTENTS

1. 2. 3. 4. 5. 6.	TREE EXEC TREE SITE FIELD	DDUCTION	1 1 2 5 5
8.		STRUCTION IMPACT ASSESSMENT	
	8.1.	Retention and Removal of Municipal Trees	
	8.1.1.	Additional mitigation recommendations for municipal trees	6
	8.2.	Retention and removal of private offsite trees	6
	8.3.	Retention and removal of onsite trees.	7
	8.4.	Tree impact summary table	7
9. 10.		CT MITIGATION1	
11.	IN CL	OSING1	1
12.	REFE	RENCES 1	1
	s LES e 1. Tre	e Inventory	4
APF	PENDIC	ES	

Appendix A Tree Management Plan (T1)

Appendix B Tree Replacement Plan (T2)

Appendix C Tree Preservation Summary

Appendix D Site Photographs

Appendix E Hard Surface Over Tree Roots Detail

REVISION RECORD

REVISION	DESCRIPTION	DATE (YYYY-MM-DD)	ISSUED BY
0	Original TPP report for the proposed subdivision.	2021-07-20	NT
1	Revision to original TPP report dated 2021-07-20 to include review of the preliminary site servicing plan and to correct the tree impact summary table (As requested by COV parks).	2021-09-23	NT

1. INTRODUCTION

Talbot Mackenzie & Associates was asked to complete a tree inventory, construction impact assessment and management plan for the trees at the following proposed project:

Site: 1768 Chandler Avenue

Municipality City of Victoria

Client Name: Zebra Group

Dates of Site Visit(s): June 9, 2021

Site Conditions: 1 lot with an existing residence. No ongoing construction activity.

Weather During Site Visit: Clear and sunny

The purpose of this report is to address requirements of the City of Victoria arborist report terms of reference, and Tree Preservation Bylaw No. 21-035. The construction impact assessment section of this report (section 8), is based on plans reviewed to date, including the Architectural site plan (By Zebra Group). Note that the site plan shows proposed underground utility locations.

2. TREE INVENTORY METHODOLOGY

Prior to our site visit we were provided surveyed tree locations by Powell & Associates. For the purpose of this report, the size, health, and structural condition of trees was documented. For ease of identification in the field, numerated metal tags are attached to the lower trunks of onsite trees. Trees located on neighbouring properties, the municipal frontage or in areas where access was restricted, were not tagged. Each tree was visually examined on a limited visual assessment basis (level 1), in accordance with Tree Risk Assessment Qualification (TRAQ) methods (Dunster *et al.* 2017) and ISA Best Management Practices.

3. EXECUTIVE SUMMARY

Based on review of the architectural site plan, 1 onsite bylaw protected tree can be retained, provided that its critical root zone can be adequately protected during construction. 2 onsite bylaw protected trees are located where they required removal to facilitate construction of the foundations of the proposed residences. The municipal trees and private offsite trees are located where they can be retained, using mitigation recommendations outlined in this report.

Based on bylaw criteria, 3 replacement trees are required to be planted, to meet the 4 tree minimum (2 trees per lot). The tree replacement plan (T2) shows conceptual locations for 3 onsite replacement trees to meet the required quantity of onsite trees for the project.

4. TREE INVENTORY DEFINITIONS

Tag: Tree identification number on a metal tag attached to tree with nail or wire, generally at eye level. Trees on municipal or neighboring properties are not tagged.

NT: No tag due to inaccessibility or ownership by municipality or neighbour.

DBH: Diameter at breast height – diameter of trunk, measured in centimetres at 1.4m above ground level. For trees on a slope, it is taken at the average point between the high and low side of the slope.

- * Measured over ivy
- ~ Approximate due to inaccessibility or on neighbouring property

Dripline: Indicates the radius of the crown spread measured in metres to the dripline of the longest limbs.

Relative Tolerance Rating: Relative tolerance of the tree species to construction related impacts such as root pruning, crown pruning, soil compaction, hydrology changes, grade changes, and other soil disturbance. This rating does not take into account individual tree characteristics, such as health and vigour. Three ratings are assigned based on our knowledge and experience with the tree species: Poor (P), Moderate (M) or Good (G).

Critical Root Zone: A calculated radial measurement in metres from the trunk of the tree. It is the optimal size of tree protection zone and is calculated by multiplying the DBH of the tree by 10, 12 or 15 depending on the tree's Relative Tolerance Rating. This methodology is based on the methodology used by Nelda Matheny and James R. Clark in their book "Trees and Development: A Technical Guide to Preservation of Trees During Land Development."

- 15 x DBH = Poor Tolerance of Construction
- 12 x DBH = Moderate
- 10 x DBH = Good

To calculate the critical root zone, the DBH of multiple stems is considered the sum of 100% of the diameter of the largest stem and 60% of the diameter of the next two largest stems. It should be noted that these measures are solely mathematical calculations that do not consider factors such as restricted root growth, limited soil volumes, age, crown spread, health, or structure (such as a lean).

Health Condition:

- Poor significant signs of visible stress and/or decline that threaten the long-term survival of the specimen
- Fair signs of stress
- Good no visible signs of significant stress and/or only minor aesthetic issues

Structural Condition:

- Poor Structural defects that have been in place for a long period of time to the point that mitigation measures are limited
- Fair Structural concerns that are possible to mitigate through pruning
- Good No visible or only minor structural flaws that require no to very little pruning

Suitability ratings are described as follows:

Rating: Suitable.

A tree with no visible or minor health or structural defects, is tolerant to changes to the growing
environment and is a possible candidate for retention provided that the critical root zone can be
adequately protected.

Rating: Conditional.

A tree with good health but is a species with a poor tolerance to changes to its growing environment or
has a structural defect(s) that would require that certain measures be implemented, in order to consider it
suitable for retention (ie. retain with other codominant tree(s), structural pruning, mulching, supplementary
watering, etc.)

Rating: Unsuitable.

 A tree with poor health, a major structural defect (that cannot be mitigated using ANSI A300 standards), or a species with a poor tolerance to construction impacts, and unlikely to survive long term (in the context of the proposed land use changes).

Retention Status:

- Remove Not possible to retain given proposed construction plans
- Retain It is possible to retain this tree in the long-term given the proposed plans and information available. This is assuming our recommended mitigation measures are followed
- Retain * See report for more information regarding potential impacts

Table 1. Tree Inventory

		Location		Name				Critical		Conditio	n	Detention				
Tag or	Surveyed ?	(On, Off, Shared,	Bylaw protected ?			dbh	Ht	root zone radius	Dripline radius			Retention Suitability (onsite	Relative			Retention
ID#	(Yes / No)	City)	(Yes / No)	Common	Botanical	(cm)	(m)	(m)	(m)	Health	Structural	trees)	tolerance		Tree retention comments	status
M 1	Yes	City	Yes	Sweet gum	Liquidambar	46	20	4.8	5	Good	Foir/good		Good	Codominant stems for at 5m above grade – included bark – not active, overhead utilities run through the canopy, historic pruning wounds with associated surface decay, existing fire hydrant 1.2m from East side of root collar.	*Driveway proposed within the critical root zone. Project arborist to supervise all excavation required within the crz.	Potoin*
IVI I	res	City	res	Sweet gum	styraciflua	40	20	4.0	3	Good	Fair/good		Good	Codominant stems for at 5m above	all excavation required within the crz.	Retain*
M2	Yes	City	Yes	Sweet gum	Liquidambar styraciflua	53	20	5.6	5	Good	Fair/good		Good	grade – included bark – not active, overhead utilities run through the canopy, historic pruning wounds with associated surface decay.	Project arborist to supervise all excavation required within the crz.	Retain*
1337	Yes	On	Yes	Japanese maple	Acer palmatum	11, 9, 5, 10	5	2.4	2	Good	Fair	Conditional	Good	Multiple stems form at 5 – 1m above grade – no major weaknesses visible at stem union, rooted .5m from existing retaining wall.	Located within the footprint of the proposed driveway.	Remove
1338	No	On	Yes	Cherry	Prunus sp.	21, 14	5	3.7	3	Good	Fair	Conditional	Moderate	Fruiting cherry, codominant stems form at base – no more weakness visible at stem union,	Will be heavily impacted by excavation required to construct the foundation of the proposed residence.	Remove
1339	No	On	No	Cherry	Prunus sp.	11	5	1.4	2	Good	Fair	Conditional	Moderate	Fruiting cherry, corrected trunk lean, heavily surface rooted.	Will be heavily impacted by excavation required to construct the foundation of the proposed residence.	Remove
1340	No	On	No	Purple leaf plum	Prunus cerasifera	5, 4x4, 3x7	4	1.7	2	Good	Fair	Conditional	Moderate	Multiple stems Custer, suppressed by 1341	Will be heavily impacted by excavation required to construct the foundation of the proposed residence.	Remove
1341	No	On	No	Excelsa cedar	Thuja plicata 'excelsa'	25	10	3.1	3	Good	Fair	Conditional	Moderate	Codominant crown with 1342 – asymmetric crown on North side due to shading.	Will be heavily impacted by excavation required to construct the foundation of the proposed residence.	Remove
1342	Yes	On	No	Excelsa cedar	Thuja plicata 'excelsa'	23	10	2.9	3	Good	Fair	Conditional		Suppressed by 1343 – asymmetric crown on North side due to shading, multiple stems form at 1.5m above grade with narrow angles of attachment.	Will be heavily impacted by excavation required to construct the foundation of the proposed residence.	Remove
1343	Yes	On	Yes	Silver birch	Betula pendula	36	15	5.6	5	Fair	Fair	Conditional	Poor	5 x 5cm dbh competing stems form at base, codominant leaders form at 2.5m above grace – no major weaknesses visible at stem union.	*Patio proposed within the crz. Project arborist to supervise all excavation required within the crz.	Retain*
OS1	No	Off	Yes	Silver birch	Betula pendula	50 ~	20	7.8	6	Fair	Fair		Poor	Recent large pruning wounds.	Project arborist to supervise all excavation required within the crz.	Retain
				Weeping	Salix									History of large scaffold limb removal	*Shed buildings proposed within the crz. Project arborist to supervise all	
OS2	No	Off	Yes	willow	babylonica	80 ~	20	12.4	5	Good	Fair/poor		Poor	with associated decay.	excavation required within the crz.	Retain*
OS3	No	Off	3 bylaw stems	Excelsa cedar	Thuja plicata 'excelsa'	8 – 35cm ~	15	4.4	4	Good	Fair		Moderate	Hedge row consisting of 17 individual stems, 3 stems over 30cm dbh.	*Shed buildings proposed within the crz. Project arborist to supervise all excavation required within the crz.	Retain*
OS4	No	Off	Yes	Lombardi poplar	Populus nigra	100 ~	30	10.5	4	Good	Fair		Good	Measured below bh, multiple stems form at 1 – 2.5m above grade – no major weaknesses visible at stem union. End tree of poplar row.	*Shed buildings proposed within the crz. Project arborist to supervise all excavation required within the crz.	Retain*
OS5	No	Off	No	Crabapple	Malus sp.	25 ~	5	3.1	3	Fair	Fair		Moderate	Small tops removed historically. (T1): CRZ + 0.5 * d.b.h. (drawn from the co	Project arborist to supervise all excavation required within the crz.	Retain

*CRZ calculated above and drawn as follows on Tree Management Plan (T1): CRZ + 0.5 * d.b.h. (drawn from the center of the stem)

5. SITE INFORMATION & PROJECT UNDERSTANDING

The development site consists of one lot (1768 Chandler Avenue), in Victoria, B.C., which has an existing residence at the South side of the lot. It is our understanding that the proposal is to remove the existing residence and subdivide the property. At this time we have not reviewed a site servicing plan.

Below is a general observation of the tree resource, as it appeared at the time of our site visit:

6. FIELD OBSERVATIONS

The onsite tree resource consists of a mixture of nonnative tree species growing in open landscape conditions around the perimeter of the property (see *figure 1*).



figure 1: Site context air photo: The approximate boundary of the subject site is outlined in Yellow.

7. TREE RISK ASSESSMENT

During our June 9, 2021 site visit and in conjunction with the tree inventory, onsite trees were assessed for risk, on a limited visual assessment basis (level 1), and in the context of the existing land uses. The time frame used for the purpose of our assessment is one year (from the date of the tree inventory update). Unless otherwise noted herein, we did not conduct a detailed (level 2) or advanced (level 3) risk assessment, such as resistograph testing, increment core sampling, aerial examinations, or subsurface root/root collar examinations.

Existing Land Uses

We did not observe any trees that were deemed to be moderate, high or extreme risk (in the context of the existing land uses, that would require hazard abatement to eliminate present and/or future risks (within a 1-year timeframe). Targets considered during this TRAQ assessment include: occupants of the existing residence (constant use), occupants of vehicles travelling on Chandler Avenue (frequent use), pedestrians travelling along existing sidewalks (frequent use), hydro lines (constant use).

8. CONSTRUCTION IMPACT ASSESSMENT

8.1. RETENTION AND REMOVAL OF MUNICIPAL TREES

The following municipal trees (indicated by ID #) are located where they are possible for retention providing that the critical root zones are adequately protected during construction. The project arborist must be onsite to supervise and excavation or fill placement required within its critical root zone (shown on the tree management plan (T1) in *appendix A*):

Retain and protect 2 municipal trees

M1 and M2

8.1.1. Additional mitigation recommendations for municipal trees

• Hard surface over tree roots specifications will be required for the section of driveway and sidewalk that are proposed within the critical root zone (see appendix E).

8.2. RETENTION AND REMOVAL OF PRIVATE OFFSITE TREES

The following private offsite trees (indicated by ID #) are located where they are possible for retention providing that their critical root zones are adequately protected during construction. The project arborist must be onsite to supervise and excavation or fill placement required within the critical root zone (shown on the tree management plan (T1) in *appendix A*):

Retain and protect 4 trees and 1 hedge located on the neighbouring properties

OS1, OS2, OS3 (hedge consisting of 17 individual stems), OS4, OS5.

*Prior written consent from the neighbouring owner is required prior to the removal of any trees located on neighbouring properties. Unsurveyed trees may require surveying to verify ownership.

8.3. RETENTION AND REMOVAL OF ONSITE TREES

The following <u>Bylaw protected</u> size onsite tree (indicated by tag #) is located where it is possible for retention providing that the critical root zone can be adequately protected during construction. The project arborist must be onsite to supervise any excavation or fill placement required within their critical root zone (shown on the tree management plan (T1) in *appendix A*):

Retain and protect 1 bylaw protected onsite tree

1343

The following <u>Bylaw protected</u> onsite trees (indicated by tag #) are located where they will be impacted by proposed onsite construction and are proposed for removal:

1337, 1338

The following Non bylaw protected size onsite trees (indicated by tag #) are located where they will be impacted by proposed onsite construction and are proposed for removal:

Remove 4 non bylaw protected onsite trees

• 1339, 1340, 1341, 1342

8.4. TREE IMPACT SUMMARY TABLE

Pursuant to City of Victoria Tree Preservation Bylaw No. 21-035, the tree replacement calculations are as follows:

	Α	В	С	D
Tree Status	Total # of	# Of Trees	# Of NEW or	# Of EXISTING
	Protected	to be	REPLACEMENT	non-protected
	Trees	REMOVED	Trees to be	Trees Counted as
			Planted*	Replacements
Onsite Trees	3	2	3	0
Private Offsite Trees	6	0	0	0
Municipal Trees	2	0	N/A	N/A
Total	11	2	3	0

Based on bylaw criteria, 3 replacement trees are required to be planted, to meet the 4-tree minimum (2 trees per lot). If the site cannot accommodate the required quantity of replacement trees, any replacement tree planting shortfall will be compensated to the city via a cash in lieu payment by the owner.

9. IMPACT MITIGATION

Tree Protection Barrier: The areas, surrounding the trees to be retained should be isolated from the construction activity by erecting protective barrier fencing (see *Appendix A* for municipal barrier specifications). Where possible, the fencing should be erected at the perimeter of the critical root zone. The barrier fencing to be erected 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 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.

Arborist Supervision: All excavation occurring within the critical root zones of protected trees should be completed under supervision by the project arborist. Any severed or severely damaged roots must be pruned back to sound tissue to reduce wound surface area and encourage rapid compartmentalization of the wound. In particular, the following activities should be completed under the direction of the project arborist:

- All excavation required within the crz of M1 for the installation of the proposed driveway and sidewalk.
- All excavation required within the crz of M1 and M2 for the installation of proposed underground utilities and to exposed and cap any existing underground utilities.
- All excavation required within the crz of M2 to remove the existing driveway surface.
- All excavation required within the crz of 1343 for the installation of the proposed patio and for the removal of the stumps of 1341 and 1342.
- All excavation required within the crz of OS2, OS3 and OS4 for the foundation of the proposed shed buildings.

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, driveways, 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.

Paved Surfaces Above Tree Roots:

If the new paved surfaces within the CRZ of tree to be retained require excavation down to bearing soil and roots are encountered in this area, this could impact their health and structural stability. If tree retention is desired, a raised and permeable paved surface should be constructed in the areas within the critical root zone of the trees. The "paved surfaces above root systems" diagram and specifications is attached.

The objective is to avoid root loss and to instead raise the paved surface and its base layer above the roots. This may result in the grade of the paved surface being raised above the existing grade (the amount depending on how close roots are to the surface and the depth of the paving material and base layers). Final grading plans should take this potential change into account. This may also result in soils which are high in organic content being left intact below the paved area.

To allow water to drain into the root systems below, we also recommend that the surface be made of a permeable material (instead of conventional asphalt or concrete) such as permeable asphalt, paving stones, or other porous paving materials and designs such as those utilized by Grasspave, Gravelpave, Grasscrete and open-grid systems.

Mulching: Mulching can be an important proactive step in maintaining the health of trees 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. No mulch should be touching the trunk of the tree. See "methods to avoid soil compaction" if the area is to have heavy traffic.

Blasting: Care must be taken to ensure that the area of blasting does not extend beyond the necessary footprints and into the critical root zones of surrounding trees. The use of small low-concussion charges and multiple small charges designed to pre-shear the rock face will reduce fracturing, ground vibration, and overall impact on the surrounding environment. Only explosives of low phytotoxicity and techniques that minimize tree damage should be used. Provisions must be made to ensure that blasted rock and debris are stored away from the critical root zones of trees.

Scaffolding: This assessment has not included impacts from potential scaffolding including canopy clearance pruning requirements. If scaffolding is necessary and this will require clearance pruning of retained trees, the project arborist should be consulted. Depending on the extent of pruning required, the project arborist may recommend that alternatives to full scaffolding be considered such as hydraulic lifts, ladders or platforms. Methods to avoid soil compaction may also be recommended (see "Minimizing Soil Compaction" section).

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.

10. DISCLOSURE STATEMENT

This arboricultural field review report was prepared by Talbot Mackenzie & Associates for the exclusive use of the Client and may not be reproduced, used or relied upon, in whole or in part, by a party other than the Client without the prior written consent of Talbot Mackenzie & Associates. Any unauthorized use of this report, or any part hereof, by a third party, or any reliance on or decisions to be made based on it, are at the sole risk of such third parties. Talbot Mackenzie & Associates accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report, in whole or in part.

Arborists are professionals who examine trees and use their training, knowledge, and experience to recommend techniques and procedures that will improve a tree's 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. The arborist's review is limited to a visual examination of tree health and structural condition, without excavation, probing, resistance drilling, increment coring, or aerial examination. There are inherent limitations to this type of investigation, including, without limitation, that some tree conditions will inadvertently go undetected. The arborist's review followed the standard of care expected of arborists undertaking similar work in British Columbia under similar conditions. No warranties, either express or implied, are made as to the services provided and included in this report.

The findings and opinions expressed in this report are based on the conditions that were observed on the noted date of the field review only. The Client recognizes that passage of time, natural occurrences, and direct or indirect human intervention at or near the trees may substantially alter discovered conditions and that Talbot Mackenzie & Associates cannot report on, or accurately predict, events that may change the condition of trees after the described investigation was completed.

It is not possible for an Arborist to identify every flaw or condition that could result in failure nor can he/she guarantee that the tree will remain healthy and free of risk. The only way to eliminate tree risk entirely is to remove the entire tree. All trees retained should be monitored on a regular basis. 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.

Immediately following land clearing, grade changes or severe weather events, all trees retained should be reviewed for any evidence of soil heaving, cracking, lifting or other indicators of root plate instability. If new information is discovered in the future during such events or other activities, Talbot Mackenzie & Associates should be requested to re-evaluate the conclusions of this report and to provide amendments as required prior to any reliance upon the information presented herein.

11. IN CLOSING

We trust that this report meets your needs. Should there be any questions regarding the information within this report, please do not hesitate to contact the undersigned.

Yours truly,

Talbot Mackenzie & Associates

Prepared by:

Noah Talbot, BA

Inh albot

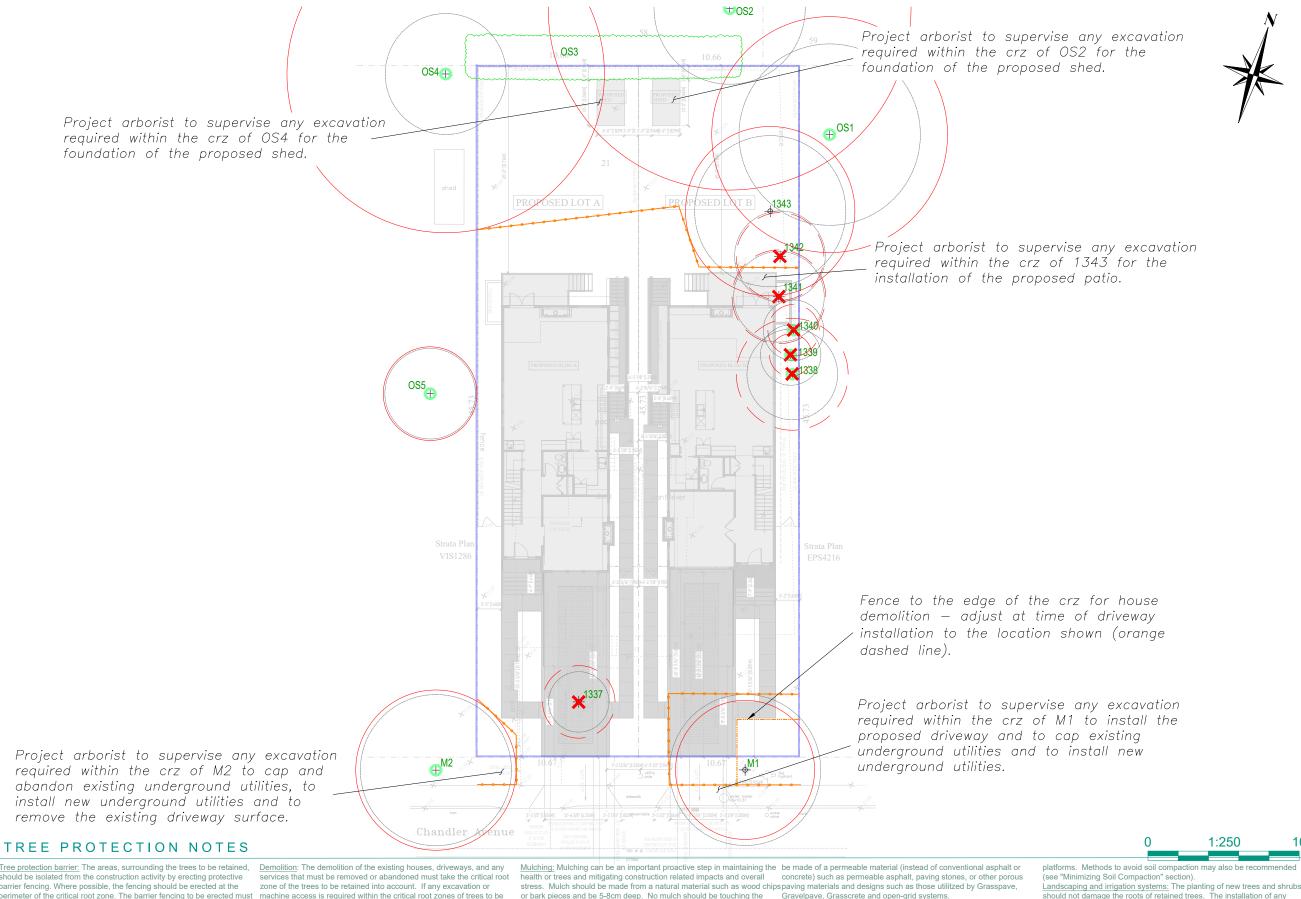
ISA Certified Arborist PN – 6822A Tree Risk Assessment Qualification Email: tmtreehelp@gmail.com

12. REFERENCES

Dunster, J.A., E.T. Smiley, N. Matheny, and S. Lily. 2017. Tree Risk Assessment Manual, International Society of Arboriculture (ISA).

The City of Victoria Tree Preservation Bylaw No. 21-035.

APPENDIX A - TREE MANAGEMENT PLAN (T1)



Tree protection barrier: 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 zone. The barrier fencing to be erected must machine access is required within the critical root zones of trees to be be a minimum of 1200mm in height, of solid frame construction that is attached to wooden or metal posts. A solid board or rail must run betwee the posts at the top and the bottom of the fencing. This solid frame can then be covered with flexible snow fencing. The fencing must be erected immediately after the supervised demolition.

Pruning: We recommend that any pruning of bylaw-protected trees be demolition.

Methods to avoid soil compation: In areas where construction traffic must performed to ANSI A300 standards and Best Management Practices. prior to the start of any construction activity on site (i.e. demolition, project. Signs should be posted around the protection zone to declare it off limits to all construction related activity. The project arborist must be methods consulted before this fencing is removed or moved for any purpose. Arborist supervision: All excavation occurring within the critical root zones of protected trees must be completed under the supervision of the project arborist. Any severed or severely damaged roots must be pruned back to • sound tissue to reduce wound surface area and encourage rapid compartmentalization of the wound.

retained, it must be completed under the supervision of the project arborist. If temporarily removed for demolition, barrier fencing must be

encroach into the critical root zones of trees to be retained, efforts must be Paved surfaces above tree roots: Where paved areas cannot avoid excavation, construction), and remain in place through completion of the made to reduce soil compaction where possible by displacing the weight encroachment within critical root zones of trees to be retained,

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

or bark pieces and be 5-8cm deep. No mulch should be touching the Gravelpave, Grasscrete and open-grid systems.

Pruning: We recommend that any pruning of bylaw-protected trees be

of machinery and foot traffic. This can be achieved by one of the following construction techniques, such as floating permeable paving, may be required. The "paved surfaces above tree roots" detail above offers a compromise to full depth excavation (which could impact the health or structural stability of the tree). The objective is to avoid root loss and to instead raise the paved surface above the existing grade (the amount depending on how close roots are to the surface and the depth of the paving material and base layers). Final grading plans should take this trees, the project arborist should be consulted. Depending on the extent potential change into account. This may also result in soils which are high of pruning required, the project arborist may recommend that alternatives • in organic content being left intact below the paved area. To allow water to full scaffolding be considered such as hydraulic lifts, ladders or to drain into the root systems below, we also recommend that the surface

trunk of the tree. See "methods to avoid soil compaction" if the area is to Blasting and rock removal: Care must be taken to ensure that the area of blasting does not extend beyond the necessary footprints and into the

critical root zones of surrounding trees. The use of small low-concussion charges and multiple small charges designed to pre-shear the rock face will reduce fracturing, ground vibrations and overall impact to the surrounding environment. Only explosives of low phytotoxicity and techniques that minimize tree damage should be used. Provisions must be made to ensure that blasted rock and debris are stored away from the

Arborists role: It is the responsibility of the client or his/her representative Scaffolding: This assessment has not included impacts from potential scaffolding including canopy clearance pruning requirements. If scaffolding is necessary and this will require clearance pruning of retained • trees, the project arborist should be consulted. Depending on the extent • Locating work zones and machine access corridors where required.

to contact the project arborist for the purpose of: Locating the barrier fencing.

Reviewing the report with the project foreman or site supervisor.

be retained. This may require the project arborist supervise the

Supervising excavation for any areas within the critical root zones of trees to be retained including any proposed retaining wall footings and review any proposed fill areas near trees to be retained

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

technical 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

excavations associated with installing the irrigation system. Excessive

frequent irrigation and irrigation which wets the trunks of trees can have a

detrimental impact on the tree health and can lead to root and trunk decay

LEGEND

Existing tree with tag or ID # Dripline radius (m)

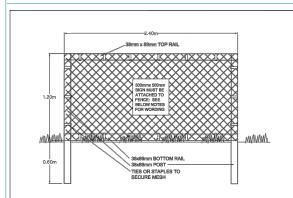
Tree protection fencing

Critical root zone radius (m) Tree to be removed (proposed)

Site boundary

- Unsurveyed tree
- Non-bylaw undersize tree

TREE PROTECTION FENCING



TREE PROTECTION FENCING

- FENCE WILL BE CONSTRUCTED USING 38 mm X 89mm WOOD FRAME: TOP, BOTTOM AND POSTS * USE CRANGE SNOW-FENCING MESH AND SECURE THE WOOD FRAME WITH ZIP TIES OR GALVANIZED STAPLES.
- ATTACH A 500mm X 500mm SIGN WITH THE FOLLOWING WORDING: PROTECTED ROOT ZONE NO ENTRY. THIS SIGN MUST BE AFFIXED ON EVERY FENCE OR AT LEAST EVER 10 LINEAR METERS.
- IN ROCKY AREAS, METAL POSTS (T-BAR OR REBAR) DRILLED INTO ROCK WILL BE

10 Tree Management Plan - T1 1768 Chandler Avenue Victoria, BC

DATE: September 23, 2021 PREPARED FOR: Jamna Maher SCALE: 1:250 @ 11" X 17" DRAWN BY: NT REVISION: 1

REFERENCE DWG: Architectural site plan (December 7, 2020) TALBOT MACKENZIE & ASSOCIATES

CONSULTING ARBORISTS BOX 48153 VICTORIA, BC, V8Z 7H2 TEL: 250-479-8733 EMAIL: tmtreehelp@gmail.com www.treehelp.ca

APPENDIX B – TREE REPLACEMENT PLAN (T2)



				Replacement Trees Proposed Soil Volume Required (m3)							
Planting Area ID	Area (m2)	Soil volume multiplier	A. Estimated soil volume	B.# Small	C.# Medium	D.# Large	E. Small	F. Medium	G. Large	Total	085
				0	nsite						OS5
Planting Area											
1	20 m2	1	20m2	0	1	0	N/A	20	N/A	20	N.
Planting Area											1
2	20 m2	1	20m2	0	1	0	N/A	20	N/A	20	
Planting Area											
3	20 m2	1	20m2	0	1	0	N/A	20	N/A	20	
			Offsite	e (exclud	ling City p	roperty)					
Planting Area											
OSA X	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
			C	alculatio	n Instructi	ons					
							If B=1,	If C=1,	If D=1,		
					Ca	lculation	Bx8	Cx20,	Dx35, If	E+F+G	

	SUGGESTED REPLACEMENT TREE LIST											
Plan Ref. Quantity Minimum Size Botanical Name Common Name												
	3 Small to Medium Size - BroadLeaf Trees											
СВ	2	6cm cal	Carpinus betulus 'fastigiata'	Pyramidal hornbeam								
QR	1	6cm cal	Quercus robur 'fastigiata'	Pyramidal English oak								
			ent practices and BCSLA/BCLNA standar ig/staking and establishment care.	rds apply to; quality, root ball,								

TREE IMPACT SUMMARY TABLE

Pursuant to City of Victoria Tree Preservation Bylaw No. 21-035, the tree replacement calculations are as follows:

	Α	В	С	D
Tree Status	Total # of Protected Trees	# Of Trees to be REMOVED	# Of NEW or REPLACEMENT Trees to be Planted*	# Of EXISTING non-protected Trees Counted as Replacements
Onsite Trees	3	2	3	0
Private Offsite Trees	6	0	0	0
Municipal Trees	2	0	N/A	N/A
Total	11	2	3	0

Based on bylaw criteria, 3 replacement trees are required to be planted, to meet the 4-tree minimum (2 trees per lot). If the site cannot accommodate the required quantity of replacement trees, any replacement tree planting shortfall will be compensated to the city via a cash in lieu payment by the owner.

TREE PROTECTION NOTES

Tree protection barrier: 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 zone. The barrier fencing to be erected must be a minimum of 1200mm in height, of solid frame construction that is the posts at the top and the bottom of the fencing. This solid frame can erected immediately after the supervised demolition. then be covered with flexible snow fencing. The fencing must be erected prior to the start of any construction activity on site (i.e. demolition, off limits to all construction related activity. The project arborist must be consulted before this fencing is removed or moved for any purpose. Arborist supervision: All excavation occurring within the critical root zones cted trees must be completed under the supervision of the project arborist. Any severed or severely damaged roots must be pruned back to • sound tissue to reduce wound surface area and encourage rapid

Demolition: The demolition of the existing houses, driveways, 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 of the project attached to wooden or metal posts. A solid board or rail must run between arborist. If temporarily removed for demolition, barrier fencing must be

⊕M2

Methods to avoid soil compation: In areas where construction traffic must perform encroach into the critical root zones of trees to be retained, efforts must be Paved surfaces above tree roots: Where paved areas cannot avoid excavation, construction), and remain in place through completion of the made to reduce soil compaction where possible by displacing the weight encroachment within critical root zones of trees to be retained, project. Signs should be posted around the protection zone to declare it of machinery and foot traffic. This can be achieved by one of the following construction techniques, such as floating permeable paving, may be

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

health or trees and mitigating construction related impacts and overall concrete) such as permeable asphalt, paving stones, or other porous stress. Mulch should be made from a natural material such as wood chipspaying materials and designs such as those utilitzed by Grasspaye. or bark pieces and be 5-8cm deep. No mulch should be touching the Gravelpave, Grasscrete and open-grid systems.

have heavy traffic. Pruning: We recommend that any pruning of bylaw-protected trees be ned to ANSI A300 standards and Best Management Practices.

__dM1

required. The "paved surfaces above tree roots" detail above offers a compromise to full depth excavation (which could impact the health or structural stability of the tree). The objective is to avoid root loss and to instead raise the paved surface above the existing grade (the amount Placing medium weight geotextile cloth over the area to be used and depending on how close roots are to the surface and the depth of the paving material and base layers). Final grading plans should take this potential change into account. This may also result in soils which are high of pruning required, the project arborist may recommend that alternatives in organic content being left intact below the paved area. To allow water to full scaffolding be considered such as hydraulic lifts, ladders or to drain into the root systems below, we also recommend that the surface

trunk of the tree. See "methods to avoid soil compaction" if the area is to Blasting and rock removal: Care must be taken to ensure that the area of blasting does not extend beyond the necessary footprints and into the critical root zones of surrounding trees. The use of small low-concussion charges and multiple small charges designed to pre-shear the rock face will reduce fracturing, ground vibrations and overall impact to the surrounding environment. Only explosives of low phytotoxicity and techniques that minimize tree damage should be used. Provisions must be made to ensure that blasted rock and debris are stored away from the

> Scaffolding: This assessment has not included impacts from potential caffolding including canopy clearance pruning requirements. If scaffolding is necessary and this will require clearance pruning of retained • trees, the project arborist should be consulted. Depending on the extent •

critical root zones of trees.

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 echnical consult with the project arborist about the most suitable location be retained. This may require the project arborist supervise the

platforms. Methods to avoid soil compaction may also be recomm

1:250

for the irrigation lines and how best to mitigate the impacts on the trees to excavations associated with installing the irrigation system. Excessive frequent irrigation and irrigation which wets the trunks of trees can have a detrimental impact on the tree health and can lead to root and trunk decay Arborists 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.

(see "Minimizing Soil Compaction" section).

- Reviewing the report with the project foreman or site supervisor
- Locating work zones and machine access corridors where required. Supervising excavation for any areas within the critical root zones of trees to be retained including any proposed retaining wall footings and review any proposed fill areas near trees to be retained.

LEGEND

Existing tree with tag or ID # Dripline radius (m)

Tree protection fencing Critical root zone radius (m)

Tree to be removed (proposed)

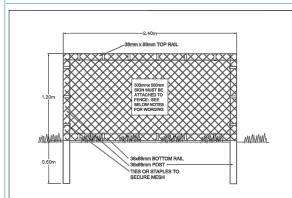
Site boundary

Non-bylaw undersize tree

Unsurveyed tree

Suggested replacement tree Soil volume analysis

TREE PROTECTION FENCING



TREE PROTECTION FENCING

- FENCE WILL BE CONSTRUCTED USING 38 mm X 89mm WOOD FRAME: TOP, BOTTOM AND POSTS * USE ORANGE SNOW-FRICKING MESH AND SECURE THE WOOD FRAME WITH-ZIPTIES OR GALVANIZED STAP-LES.
- ATTACH A 600mm X 500mm SIGN WITH THE FOLLOWING WORDING: PROTECTED ROOT ZONE NO ENTRY. THIS SIGN MUST BE AFFIXED ON EVERY FENCE OR AT LEAST EVER 10 LINEAR METERS.
- IN ROCKY AREAS, METAL POSTS (T-BAR OR REBAR) DRILLED INTO ROCK WILL BE ACCEPTED.

Tree Replacement Plan - T2 . 1768 Chandler Avenue Victoria, BC

DATE: September 23, 2021 PREPARED FOR: Jamna Maher SCALE: 1:250 @ 11" X 17" DRAWN BY: NT REVISION: 1

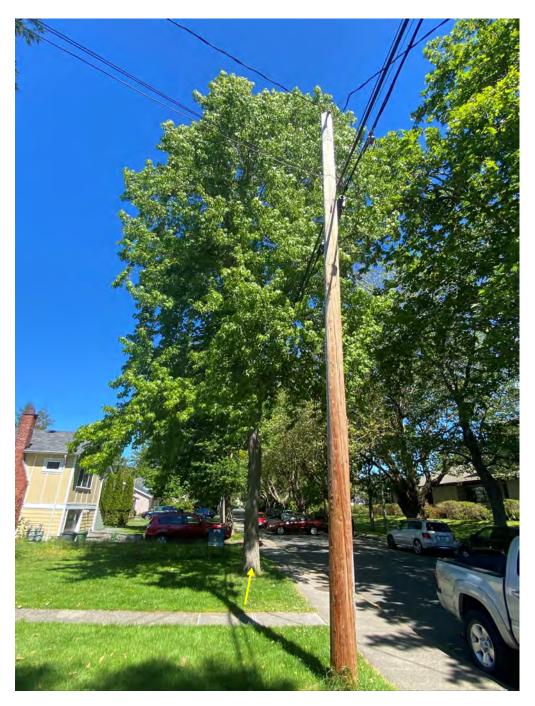
REFERENCE DWG: Architectural site plan (December 7, 2020) TALBOT MACKENZIE & ASSOCIATES

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APPENDIX C – TREE PRESERVATION SUMMARY

Tree Preservation Summary					
City of Victoria Project No: Unknown					
Address: 1768 Chandler Avenue					
Arborist: Noah Talbot, BA					
Certifications/Qualifications: ISA Certified Arborist (PN6822A), Tree Risk Assessment Qualified					
		Count	Multiplier	Total	
ONSITE Minimum replacement tree requirement					
	Protected Trees Removed	2	X 1	A.	2
B.	Replacement Trees Proposed per		X 1	B.	3
	Schedule "E", Part 1	3			
C.	Replacement Trees Proposed per		X 0.5	C.	0
	Schedule "E", Part 2	0			
D.	Replacement Trees Proposed per	_	X 1	D.	0
	Schedule "E", Part 3	0			
E. Total replacement trees proposed (B+C+D) Round down to nearest whole number				E.	3
F. Onsite replacement tree deficit (A-E) Record 0 if negative number				F.	0
ONSITE Minimum trees per lot requirement (onsite trees)					
					4
	Tree minimum on lot*			•	es per lot)
H.	Protected trees retained (other than		X 1	H.	1
	specimen trees)	1			
l.	Specimen trees retained	0	X 3	J.	0
J.	J. Trees per lot deficit (G - (B+C+H+I) Record 0 if negative number				0
OFFSITE Minimum replacement tree requirement (offsite trees)					
K.	Protected trees Removed	0	X 1	K.	0
L.	Replacement trees proposed per		X 1	L.	0
	Schedule "E", Part 1 or Part 3	0			
M.	Replacement trees proposed from Schedule "E", Part 2	0	X 0.5	М.	0
N.	N. Total replacement trees proposed (L+ M) Round down to nearest whole number				0
O. Offsite replacement tree deficit (K - N) Record 0 if negative number				О.	0
Cash-in-lieu requirement					
P. Onsite trees proposed for cash-in-lieu Enter F. or J., whichever is the greater number				P.	0
Q. Offsite trees proposed for cash-in-lieu Enter 0.				Q.	0
R. Cash-in-lieu proposed ((P+Q) X \$2,000)				R.	0
Summary prepared and submitted by: Date: July 20, 2021					

APPENDIX D – SITE PHOTOGRAPHS



Photograph 1. Yellow arrow indicates municipal Liquidambar (M1)



Photograph 2 – Yellow arrow indicates onsite Japanese maple (tag# 1337).



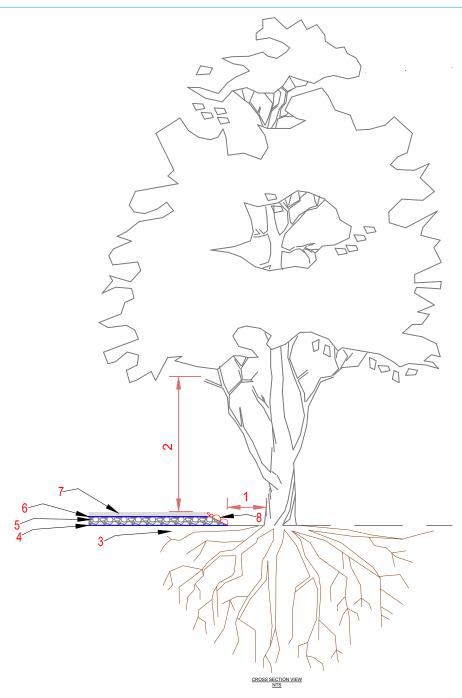
Photograph 3 – Yellow arrow indicates onsite Silver birch (tag# 1343).



Photograph 4 – Image taken looking toward the North property boundary and offsite trees on the opposite side of the fence.

APPENDIX E – HARD SURFACE OVER TREE ROOTS DETAIL

HARD SURFACE ABOVE TREE ROOTS DETAIL



HARD SURFACE ABOVE TREE ROOTS NOTES

- 1. Maintain as large a setback between the fill encroachment and the root collar of the tree as possible.
- 2. Review any canopy clearance pruning requirements to accommodate vehicle or pedestrian clearances (Pruning to be performed to ANSI A300 standards).
- 3. Excavate the new footprint of the driveway or sidewalk under the supervision of the project arborist. Excavation will be limited to the removal of the existing sod layer. Excavation around root structures must be performed by hand, airspade, or hydroexcavation.
- 4. Install a two-dimensional (such as Combigrid $\frac{30}{30}$) or Three-dimensional geogrid reinforcement.
- 5. Install a 150mm depth layer of clear crushed gravel (no fines) using 20mm and/or 75mm diameter material or approved equivalent. *Note the depth may be less than 150mm in some situations (dependant on grading constraints).
- 6. Install meduim weight geotextile fabric (such as Nilex 4535 or similar) over the clear crushed gravel layer to prevent fine particles of sand from infiltrating this layer.
- 7. The bedding or base layer and new driveway or sidewalk surface can be installed directly on top of the felted filter fabric.
- 8. Fill slopes where possible install loose stacked boulders to reduce the footprint of the fill slopes that encroach within the critical root zone. Fill slope materials must be permeable to air and water. Do not pile fill material directly against the trunk of a tree.



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Aerial Photo

Aerial Photo

1



Subject Property





Neighbouring Properties







