

City of Surrey PLANNING & DEVELOPMENT REPORT Application No.: 7920-0012-00

Planning Report Date: July 27, 2020

PROPOSAL:

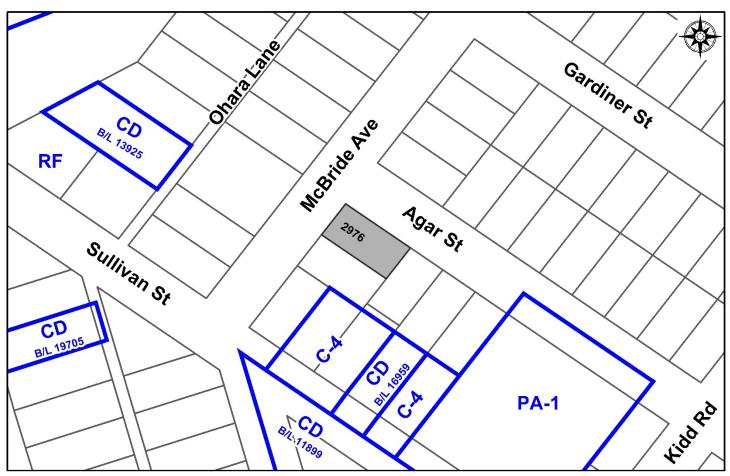
• **Rezoning** from RF to CD

to permit the construction of a new single family dwelling.

LOCATION: 2976 - McBride Ave

ZONING: RF
OCP DESIGNATION: Urban

LAP DESIGNATION: Urban Residential



RECOMMENDATION SUMMARY

• By-law Introduction and set date for Public Hearing for rezoning.

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

None.

RATIONALE OF RECOMMENDATION

- The proposal complies with the 'Urban' designation in the Official Community Plan (OCP), the 'General Urban' designation in the Metro Vancouver Regional Growth Strategy (RGS) and the 'Urban Residential' designation in the Crescent Beach Local Area Plan (LAP)
- The proposed dwelling establishes the habitable floor level at 4.3 metres above sea-level.
- The proposal responds to rising sea levels and will help maintain the water volume carrying capacity of the Crescent Beach floodplain in a flood event while ensuring that the habitable area of the proposed dwelling is above the Flood Construction Level (FCL).
- The applicant has garnered neighbourhood support for the proposed "Comprehensive Development Zone (CD)" and accompanying residence. The CD zone seeks to accommodate a more flood resilient dwelling with an appropriate built form compatible with the neighbourhood character.
- Staff support the proposed application as a progressive pilot project for the construction of flood tolerant buildings in the Crescent Beach floodplain.

RECOMMENDATION

The Planning & Development Department recommends that:

- 1. A By-law be introduced to rezone the subject site from "Single Family Residential Zone (RF)" to "Comprehensive Development Zone (CD)" and a date be set for Public Hearing.
- 2. Council instruct staff to resolve the following issues prior to final adoption:
 - (a) submission of a finalized tree survey and a statement regarding tree preservation to the satisfaction of the City Landscape Architect;
 - (b) registration of a Section 219 Restrictive Covenant that stipulates the ground floor level is not to be used as a habitable space or storage area, all mechanical and electrical systems are to be constructed above the flood construction level of Crescent Beach, and that the City is indemnified against any potential losses to the property owner as a result of having the uninhabitable space within a floodplain; and
 - (c) demolition of existing buildings and structures to the satisfaction of the Planning and Development Department.

SITE CONTEXT & BACKGROUND

Direction	Existing Use	LAP Designation	Existing Zone
Subject Site	Single Family Residential	Urban Residential	RF
North (Across McBride Avenue):	Single Family Residential	Urban Residential	RF
East (Across Agar Street):	Single Family Residential	Urban Residential	RF
South:	Single Family Residential	Urban Residential	RF
West:	Single Family Residential	Urban Residential	RF

Context & Background

- The subject property is located at 2976 McBride Avenue in Crescent Beach and is designated 'Urban' in the Official Community Plan (OCP), and 'Urban Residential' in the Crescent Beach Local Area Plan (LAP).
- The subject property is currently zoned 'Single Family Residential Zone (RF)' and is approximately 464 square metres in size.
- The property is located within the flood plain area for Crescent Beach and contains a single family dwelling that is not built to modern flood construction requirements for the area.

- The current Flood Construction Level (FCL) for Crescent Beach is 3.3 metres above sea-level. This means that buildings within the Crescent Beach floodplain must have their habitable space located above this elevation.
- Based on the Provincial Sea Level Rise Curve for year 2100 and local wave effects, the future FCL requirement for Crescent Beach is expected to increase by more than a metre from the current level.
- A previous Development Application (No. 7917-0550-00) in Crescent Beach at 2954 Ohara Lane was granted Final Adoption by Council to rezone from RF Zone to a CD Zone (By-law No. 19705) in order to permit the construction of a flood tolerant single family dwelling with a non-habitable ground floor level.
- On April 6, 2020, Council received Corporate Report No. Ro60 as information and instructed staff to consult with area residents on proposed new zoning provisions that take into account current and future flood construction level requirements for all new single family dwellings constructed in the Crescent Beach Neighbourhood. Staff have reached out to the Crescent Beach Property Owner's Association to determine an appropriate public consultation strategy given current social distancing requirements and expect to be progressing with this in the fall of 2020.

DEVELOPMENT PROPOSAL

Planning Considerations

- The property owners are proposing to build a flood resilient, three-storey single family dwelling on the subject lot. All storeys are proposed to be above grade. The ground level would be a 2.5 metre high, uninhabited, flood tolerant space. The second and third levels of the building would be habitable living space constructed at an elevation that is above current and anticipated future FCL requirements.
- The purpose of the proposed house construction is to provide for increased flood mitigation with anticipated rising flood elevations in the future. The uninhabitable space at the ground floor level will also maintain the existing water volume carrying capacity of the floodplain in a flood event.
- To permit this construction, the applicant is proposing to rezone the subject property from "Single Family Residential Zone (RF)" to "Comprehensive Development Zone (CD)" in order to:
 - o Have the ground floor level be built below the FCL at full height and excluded from Floor Area Ratio (FAR) (density) calculation requirements;
 - o Increase lot coverage and reduce the east and north yard setbacks to accommodate an increased number of stairs to reach the main floor; and
 - o Increase building height to accommodate the raised main floor level.
- The property owners have proposed an RC indemnifying the City for the proposed construction in the floodplain which will include provisions that prohibit the ground floor level from being used as a living or storage space.

- Staff support the application as a pilot project reflecting flood adaptation strategies for new construction in the Crescent Beach floodplain while the planning process that is looking at the larger issue of development in the Crescent Beach community is being considered. As such, the proposed regulatory changes (CD Bylaw) in this application are not intended to be implemented broadly in Crescent Beach at this time.
- The applicant has provided letters of community support for the proposal from neighbouring property owners. This includes a letter from the adjacent property owner to the west (2970 McBride Avenue) who has reviewed the proposed plans for the new dwelling, and states that they are fully supportive of the plans, including the roof deck, as proposed.

Crescent Beach Building Practices

Current Practices

- The Flood Construction Level (FCL) for Crescent Beach is based on the Geodetic Survey of Canada and is currently set at 3.3 metres above sea-level. This means that buildings within the Crescent Beach floodplain must have all habitable space located above this elevation.
- To accommodate the FCL for the area, newly constructed homes either need to be built atop a fill pad that is 3.3 metres above sea-level or be constructed with a crawl space that is no more than 1.5 metres high and brings the main floor of the building out of the floodplain.

Proposed Construction

- The property owners are proposing to build a flood-resilient house that raises the habitable areas of the dwelling above the anticipated future FCL. To achieve this, the proposal is to build the underside of the habitable floor space at 4.3 metres above sea-level. Rather than using fill to achieve this main floor elevation, the applicant is proposing a 2.5 metre high uninhabited open space on the ground floor level. The ground floor would be constructed with concrete walls and floor which could withstand a future flood event.
- By keeping the ground floor level as a single open and uninhabitable room, the property maintains the carrying capacity of the Crescent Beach floodplain. In contrast, when fill is used to reach the FCL, space for accommodating flood waters in the existing floodplain is displaced. Subsequently, as more properties use fill for their construction, the 200-year flood elevation increases above the natural level for the area due to the reduced overall water volume carrying capacity of the floodplain.
- The property owners would be permitted to use the ground floor level for parking only. No storage, electrical, plumbing, windows or internal access to the habitable levels will be permitted to be in the ground floor level. These no-build provisions will be included in the proposed indemnification Restrictive Covenant.

Restrictive Covenant

• Under Section 219 of the *Land Title Act*, a local government and property owner may enter into a covenant in order to enact additional restrictions beyond the standard Zoning Bylaw regulations on how a building may be built or used on a given property. These covenants are registered on the property's title and run in perpetuity.

- The applicant has proposed a Restrictive Covenant in support of the construction of a flood tolerant ground floor level in their new dwelling. The Restrictive Covenant will cover the following:
 - o The ground floor level is not to be used as habitable or storage area;
 - o No mechanical, electrical, heating, or plumbing systems are to be installed in the ground floor level;
 - No windows or internal accesses to the second storey are to be provided in the ground floor level; and
 - o Indemnification for the City against any potential losses suffered by the property owner as a result of having an uninhabitable space within a floodplain.

Referrals

Engineering: The Engineering Department has no objection to the project as

outlined in Appendix II.

Transportation Considerations

The subject site will be accessible via a driveway off Agar Street.

POLICY & BY-LAW CONSIDERATIONS

Regional Growth Strategy

• The proposal complies with the General Urban designation in the Metro Vancouver Regional Growth Strategy (RGS).

Official Community Plan

<u>Land Use Designation</u>

• The proposal complies with the Urban designation in the Official Community Plan (OCP).

Themes/Policies

The proposed development is supported by the following policies of the OCP.

 A_{3.5} - Support infill development that is appropriate in scale and density to its neighbourhood context and that uses compatible design to reinforce neighbourhood character.

(The proposed development has been designed to be in keeping with the established character of the Crescent Beach community.)

• D2.10 - Consider and prepare for the projected impacts of climate change on flood hazard areas due to sea level rise and flood risk. Take into account the effects of long-term climate change such as increased flooding events, increased runoff due to development and a reduced percentage of overall mature tree cover.

(The proposed development includes a 2.5 metre high uninhabitable ground floor level that provides for increased flood mitigation with anticipated rising flood elevations in the future.)

Secondary Plans

Land Use Designation

• The proposal complies with the Urban Residential designation in the Crescent Beach Local Area Plan (LAP)

Themes/Objectives

- Preserve and enhance the semi-rural residential and seaside village character of the community, maintaining the dominant character of the residential buildings.
- Encourage the design of new homes to maintain the existing seaside residential character.

CD By-law

- The applicant proposes to rezone the subject site from "Single Family Residential Zone (RF)" to "Comprehensive Development Zone (CD)".
- The applicant is proposing a "Comprehensive Development Zone (CD)" to accommodate a proposed single family dwelling on the subject site. The CD By-law will be based on the "Single Family Residential Zone (RF)". The CD By-law for the proposed development site identifies the uses, densities and setbacks.
- A comparison of the density, lot coverage, setbacks, building height and permitted uses in the RF Zone and the proposed CD By-law is illustrated in the following table:

Zoning	RF Zone (Part 16)	Proposed CD Zone
Permitted Uses:	One single family	One single family dwelling
	dwelling	where the ground level is
		permitted to only be used for
		parking.
Floor Area Ratio:	All covered areas	The uninhabitable ground floor
	located above grade are	level is excluded from the floor
	calculated as floor area	area ratio calculation.
	ratio	
Lot Coverage:	39.1% maximum	44%
Setbacks:		
Front Yard (north):	7.5 m	5.0 m
Side Yard (west):	1.8 m	1.8 m
Side Yard Flanking (east):	3.6 m	1.0 m
Rear (south):	7.5 m	7.5 m
Lot Size:	560 m²	464 m²
Lot Width:	15 m	15.3 m
Lot Depth:	28 m	30.5 m
Principal Building Height:	9 m max. for roof slope	10.3 m for roof slope greater
	greater than or equal to	than or equal to 1:4
	1:4	
	7.3 m max. for roof	9.5 m for roof slope less than
	slope less than 1:4	1:4

• Permitted Use

- Under the existing RF Zone, the property owners are permitted to have a single family dwelling (with secondary suite) on their property. The RF Zone's permitted uses section does not stipulate what each storey of the single family dwelling is to be used for.
- The CD Zone has been proposed to permit a single family dwelling provided that the ground floor level, which is to be built below the 3.3 metre FCL, is to be used only for parking.

Floor Area Ratio (FAR)

- Floor Area Ratio (FAR) is a form of density in the Zoning Bylaw which regulates the maximum amount of floor area permitted for buildings and structures based on the area of a given lot. All covered areas of a building or structure that are constructed above grade are counted towards the FAR maximum for a lot. Basement levels, which by definition, are building levels that are 50% in-ground, are not applied against the maximum FAR of a lot.
- The FAR calculation for the subject property under the existing RF Zone is 0.6 and would permit the property owners to construct a new single family dwelling with a maximum habitable floor area of approximately 279 square metres.

- O However, based on how floor area is defined in the Zoning Bylaw, the proposed three-storey single family dwelling results in a total floor area of 402 square metres; 143 square metres of uninhabitable space on the ground level and 235 square metres of habitable space on the second, third and roof levels. This total floor area exceeds the maximum FAR allowance if the property were to remain in the RF Zone.
- The proposed CD Zone excludes the uninhabitable, ground floor area from the overall FAR calculation and restricts the space to only be used for parking. Once the 143 square metre uninhabitable space is excluded from the FAR calculation, the proposed habitable area on the second, third and roof levels totals 235 square metres, which is below what would normally be permitted under the RF Zone for the subject site. As such, the property owners are not receiving additional habitable floor area by way of the CD Zone when compared with the existing RF Zone.

Lot Coverage

- Lot coverage is a regulation that sets the maximum footprint for buildings and structures based on the area of a given lot. Covered spaces and those spaces that are uncovered but are located o.6 metres above grade, are applied to the total lot coverage maximum for a given lot.
- Under the existing RF Zone, the maximum lot coverage for the subject property is 186 square metres or 40%. All buildings, covered patios, and exterior stairs above 0.6 metres would need to be included in the 186 square metres site coverage maximum.
- O Due to the higher main floor elevation, more exterior stairs are required to access the habitable areas of the building. Based on the way the lot coverage is calculated, many of these stairs are applied against the lot coverage maximum for the lot. Therefore, the applicant has proposed that the CD Zone have a maximum lot coverage of 44% with additional lot coverage of 9% for uncovered staircases providing access to the habitable areas of the dwelling and 3% for planters to help reduce the visual impact of the stairs and elevated main floor level from the streets. The proposed 32% lot coverage, which would be used specifically for the principal dwelling, is below the permitted 40% lot coverage under the existing RF Zone. As such, the property owners are not receiving additional habitable floor area or covered, outdoor patio space under the CD Zone when compared with the existing RF Zone.
- The stairs have been designed in segments leading to a series of landings rather than having a straight staircase from the property grade to the entrances on the second level. While doing so increases the required lot coverage, it provides for a more gradual and low profile stair system, which minimizes the visual impact resulting from the required number of stairs to reach the main floor level.

Setbacks

Under the RF Zone, the standard front yard setback for a principal building is 7.5 metres and the standard side yard setback on a flanking street for a principal building is 3.6 metres.

- o To accommodate the proposed stair system noted above, the applicant has proposed to reduce the front yard setback (north) from McBride Avenue from 7.5 metres to 5.0 metres and the side yard setback on a flanking street (east) from Agar Street from 3.6 metres to 1.0 metres for exterior staircases in the CD Zone.
- The principal building envelope and patio spaces will retain the required 7.5 metre setback from McBride Avenue and the required 3.6 metre setback from Agar Street.

Building Height

- O Under the existing RF Zone, the maximum building height for a principal dwelling is 9 metres where the roof pitch is 1:4 or greater, and 7.5 metres where the roof pitch is less than 1:4. The measurement for building height is taken from the existing average grade of the property to the mid-point between the ridge and the eaves of the highest building roof. When dormers and other similar roof elements exceed 25% of the plan view area of the roof on which they are located these elements shall be included in the measurement of building height.
- o The applicant, under the CD Zone, is proposing to increase the maximum building height to 10.3 metres in order to accommodate the higher main floor elevation of the proposed dwelling. The roof has been designed where dormers exceed 25% of the roof area, and as such factor into the measurement for building height. In this case building height for a principal building for a sloped roof is calculated to the top of the east side dormer. The building has been designed to minimize its visual impact and shadowing, with design queues taken from established homes in the Crescent Beach area. The steep roof pitch proposed for the main roof (7:6) will help reduce the massing of the increased building height from the streetscape.
- The applicant is also proposing to increase the maximum building height to 9.5 metres where the roof pitch is less than 1:4 in order to accommodate a southwest facing roof deck. The applicant has worked with staff to address concerns regarding the proposed roof deck by reducing the size in order to help mitigate any adjacent lot overlook issues. The applicant has provided a letter of support from the neighbouring property owner to the west at 2970 McBride Avenue which indicates their support for the proposed location of the deck.

PUBLIC ENGAGEMENT

• Pre-notification letters were sent on February 12, 2020, and the Development Proposal Signs were installed on February 19, 2020. Staff received 1 response from a neighbour requesting general project information.

TREES

• Xudong Bao, ISA Certified Arborist of Woodridge Tree Consulting Arborists Ltd., prepared an Arborist Assessment for the subject property. The table below provides a summary of the tree retention and removal by tree species:

Table 1: Summary of Tree Preservation by Tree Species:

Tree Species	Exi	isting	Remove	Retain	
Deciduous Trees					
Laburnum	1		О	1	
Mountain Ash		1	О	1	
Cherry	1		О	1	
European larch		1	О	1	
Coniferous Trees					
Western Red Cedar	1		0	1	
Pacific Yew	1		0	1	
Total (excluding Alder and Cottonwood Trees)		1	o	6	
Total Replacement Trees Proposed (excluding Boulevard Street Trees)		o			
Total Retained and Replacement Trees		6			
Contribution to the Green City Program		nil			

- The Arborist Assessment states that there are six (6) mature trees on the site. Five (5) of these trees are located in the City Boulevard, but are considered to be on-site. It was determined that all of the trees can be retained as part of this development proposal. The proposed tree retention was assessed taking into consideration the location of services, building footprints, road dedication and proposed lot grading.
- In summary, a total of six (6) trees are proposed to be retained on the site with no contribution to the Green City Program.

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I. Site Plan, Building Elevations, and Perspective

Appendix II. Engineering Summary

Appendix III. Tree Preservation Summary and Protection

Plan

approved by Shawn Low

Jean Lamontagne General Manager Planning and Development

SR/cm

Appendix I

58.86 ft²







SCHEMATIC AREA PLANS

PROPOSED CD ZONE

Exclude uninhabitable

Guard rail allowance

Building complies Building complies Building complies

Relaxation to allow

functional second storey

Relax to 10.64m Relax to 9.45m for flat parapet

Building complies Relax to 5m for stairs & planters

Relax to 1.0m for stairs & planters

+9% Stairs +3% Planters

ground floor

3/64" = 1'-0"

RF ZONE

40% for lots of

560m² or less

60% for lots

9.0m

560m² or less

7.5m Frontyard

7.5m Rearyard

1.8m Sideyard 3.6m Flanking St.

Limited to 25% of

plan view area

PROPERTY INFORMATION

CIVIC: 2976 McBRIDE AVENUE in CRESCENT BEACH

LEGAL: LOT 2, BLOCK 14, DISTRICT LOTS 52 AND 491, GROUP 2, NWD PLAN 9044

AREA CALCULATIONS

LOT AREA 464.4985 m² | 4999.82 ft²

PERMITTED FLOOR AREA RATIO [Typical in RF Zone]
0.60 x 464.4985 m² = 278.6988 m² | 3000 ft²

PROPOSED FLOOR AREA:

1534 ft² 1325 ft² Main Floor: 123.14 m² Upper Floor: Roof Access: 99.77 m² 12.48 m² 1074 ft² 134 ft² Roof Covered >1.8m 5.47 m² 59 ft² 146 ft² 13.55 m² Covered Porch: Stoop:

- 1534 ft² 2533 ft

LOT COVERAGE

Stairs to Principal Bldg:

TOTAL PROPOSED COVER

41 m² 10 m²

lequired in RF Zone Typical: 3 parking spaces 3 parking spaces

GENERAL NOTES

- All notes contained on all pages of this plan apply to all other pages These plans conform to BC Building Code 2018 (Latest Edition)

- Exterior dimensions measured from outside of sheathing or concrete face Interior dimensions to centre of stud, except where otherwise noted
 Room dimension labels indicate finished drywall

DESIGN

assumes no liability for any errors or omissions in these plans.

It is the sole responsibility of the builder and owner(s) to review and verify elevations, data, dimensions, compliance, and structural requirements, as per

SHEET LIST		LEGEN
Number	Sheet Name	
A001	SITE	
A002	PERSPECTIVES	
A100	ELEVATIONS	
A101	ELEVATIONS	
A202b	ROOF PLAN	1
A301	SECTIONS	1
		· +-
		١,

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6-3033 King George Blv Surrey, BC, V4P 1B8

Collage

S 2976 Stone

Avenue

McBride /

While careful attention has been taken to ensure accuracy, the designer

local governance and codes.

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9	HEET LIST	LEGEND	
Number	Sheet Name		Proposed Area
A001	SITE		
A002	PERSPECTIVES		Covered Areas
A100	ELEVATIONS		Property Line
A101	ELEVATIONS		Property Line
A202b	ROOF PLAN		Setback Line
A301	SECTIONS		
		1—	Spot Elevations
		$\stackrel{'}{\longrightarrow}$	Direction of Surface Draina
		•	Lawn Basin
			Service Connection Locatio

40173 m²

Less Allowances:

Extended Height (up to 19m²) - m² Covered Allowance (up to 10%) - 23.83 m² Covered Allowance (up to)
TOTAL PROPOSED F.A.R:

Principal Building

Proposed:

1540 ft² 441 ft² 108 ft²

OFF-STREET PARKING





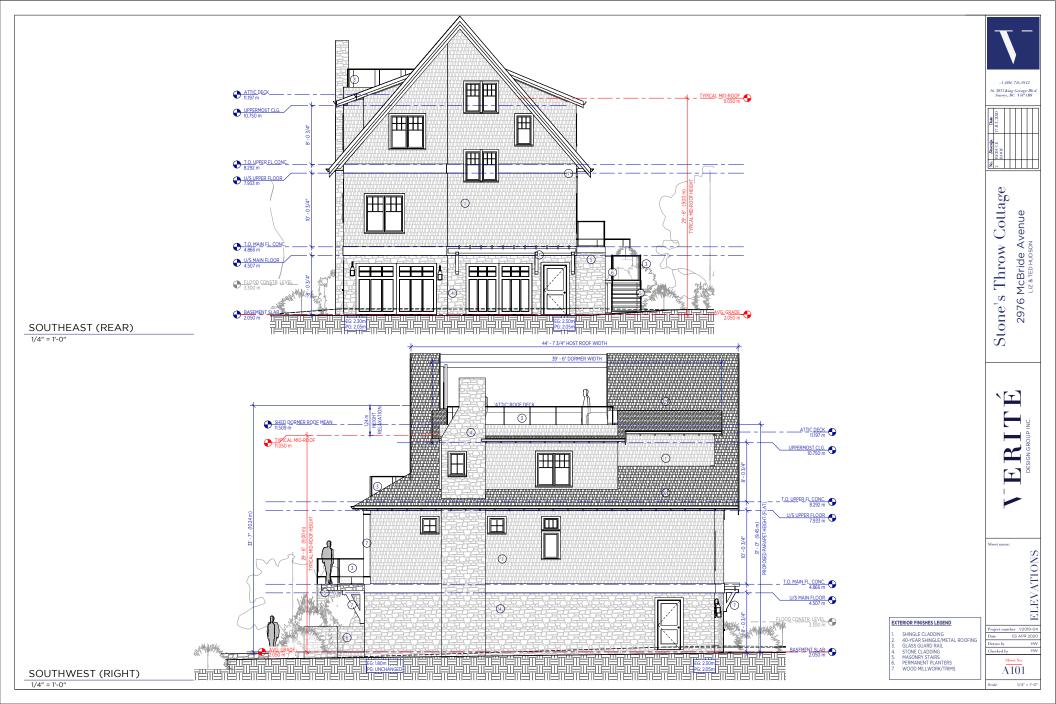
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2976 McBride Avenue Throw Stone's

Cottage

16-3033 King George Bh Surrey, BC V4P 1B8

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Appendix II



INTER-OFFICE MEMO

TO: Manager, Area Planning & Development

- South Surrey Division

Planning and Development Department

FROM: Development Engineer, Engineering Department

DATE: **July 16, 2020** PROJECT FILE: **7820-0012-00**

RE: Engineering Requirements

Location: 2976 McBride Avenue

REZONE

Property and Right-of-Way Requirements/Works and Services

- No dedication or road construction requirements as the rezoning is not intensifying the existing use (RF to CD based on RF).
- Applicant is meeting the minimum 3 off-street parking stalls requirement.
- No drainage concerns on the proposal for lowest flow to be non-habitable and have all habitable constructed above the Flood Construction Level (FCL).
- Standard Building Permit Application processes to be followed, including evaluation of
 adequacy of existing services (existing driveway, water, sanitary and storm service
 connections) and relocation/upgrade or construction as required through the Building
 Permit process. This will also include abandonment of existing service connections as
 required.

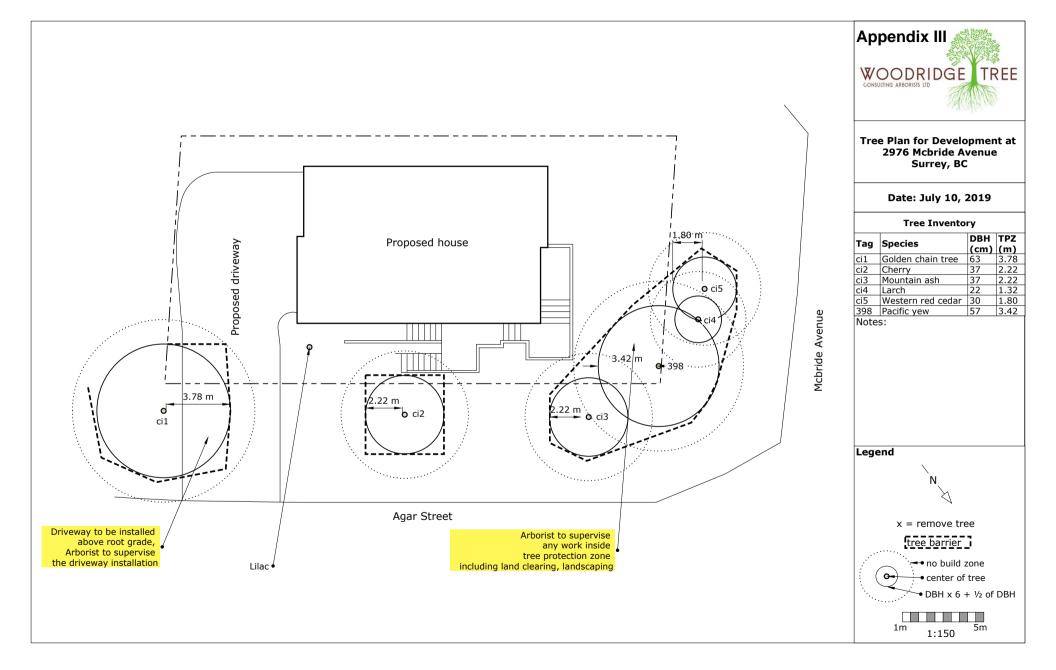
A Servicing Agreement is not required for the proposed Rezone. The driveway crossing, sanitary and storm connections can be constructed subject to issuance of a City Road and Right-of-Way Permit obtainable at the Engineering front counter upon payment of securities and permit fees. City crews will do the installation of the water service once payment has been made and a work order has been issued (if required).

Jeff Pang, P.Eng.

Jeffy Lang

Development Engineer

IK₁



Tree Preservation Summary

Surrey Project No:	Address:	2976 Mcbride Avenue, Surre
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Registered Arborist: Woodridge Tree Consulting Arborists Ltd., Xudong Bao - PN 8671A

On-Site Trees	Number of Trees	Off-Site Trees	Number of Trees
Protected Trees Identified *	6	Protected Trees Identified	0
Protected Trees to be Removed	0	Protected Trees to be Removed	0
Protected Trees to be Retained (excluding trees within proposed open space or riparian areas)	6	Protected Trees to be Retained	0
Total Replacement Trees Required: - Alder & Cottonwoods to be removed (1:1) 0 X one (1) = 0 - All other species to be removed (2:1) 0 X two (2) = 0	0	Total Replacement Trees Required: - Alder & Cottonwoods to be removed (1:1) 0 X one (1) = 0 - All other species to be removed (2:1) 0 X two (2) = 0	0
Replacement Trees Proposed	0	Replacement Trees Proposed	0
Replacement Trees in Deficit	0	Replacement Trees in Deficit	0
Protected Trees to be Retained in Proposed Open Space or Riparian Areas	0		•

*on-site and shared trees, including trees within boulevards and proposed streets and lanes, but excluding trees in proposed open space or riparian areas

Summary, report and plan prepared and submitted by:

July 9, 2019

(Signature of Arborist)

Date