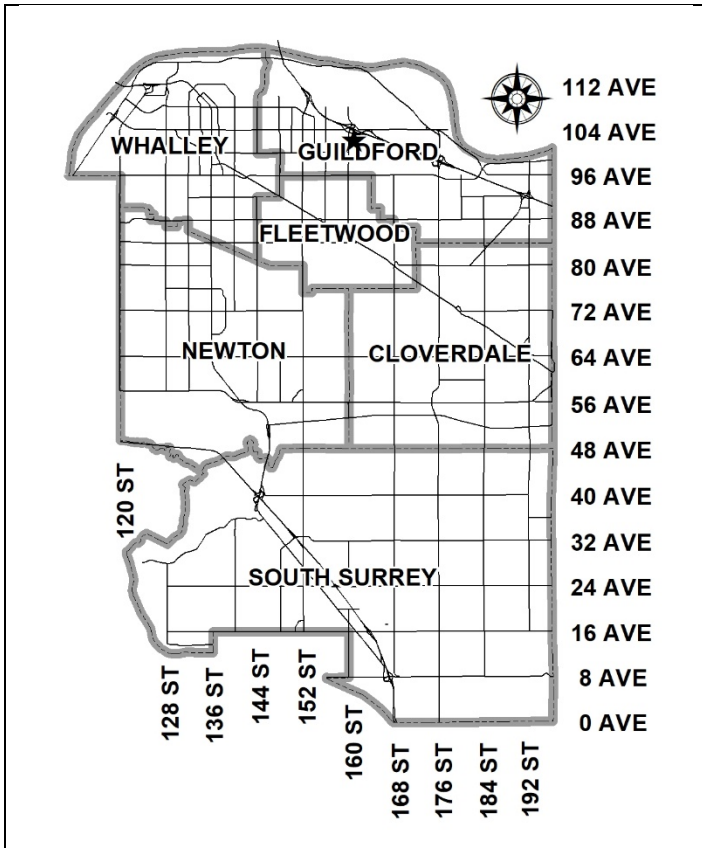


City of Surrey
PLANNING & DEVELOPMENT REPORT

File: 7918-0061-00

Planning Report Date: September 16, 2019



PROPOSAL:

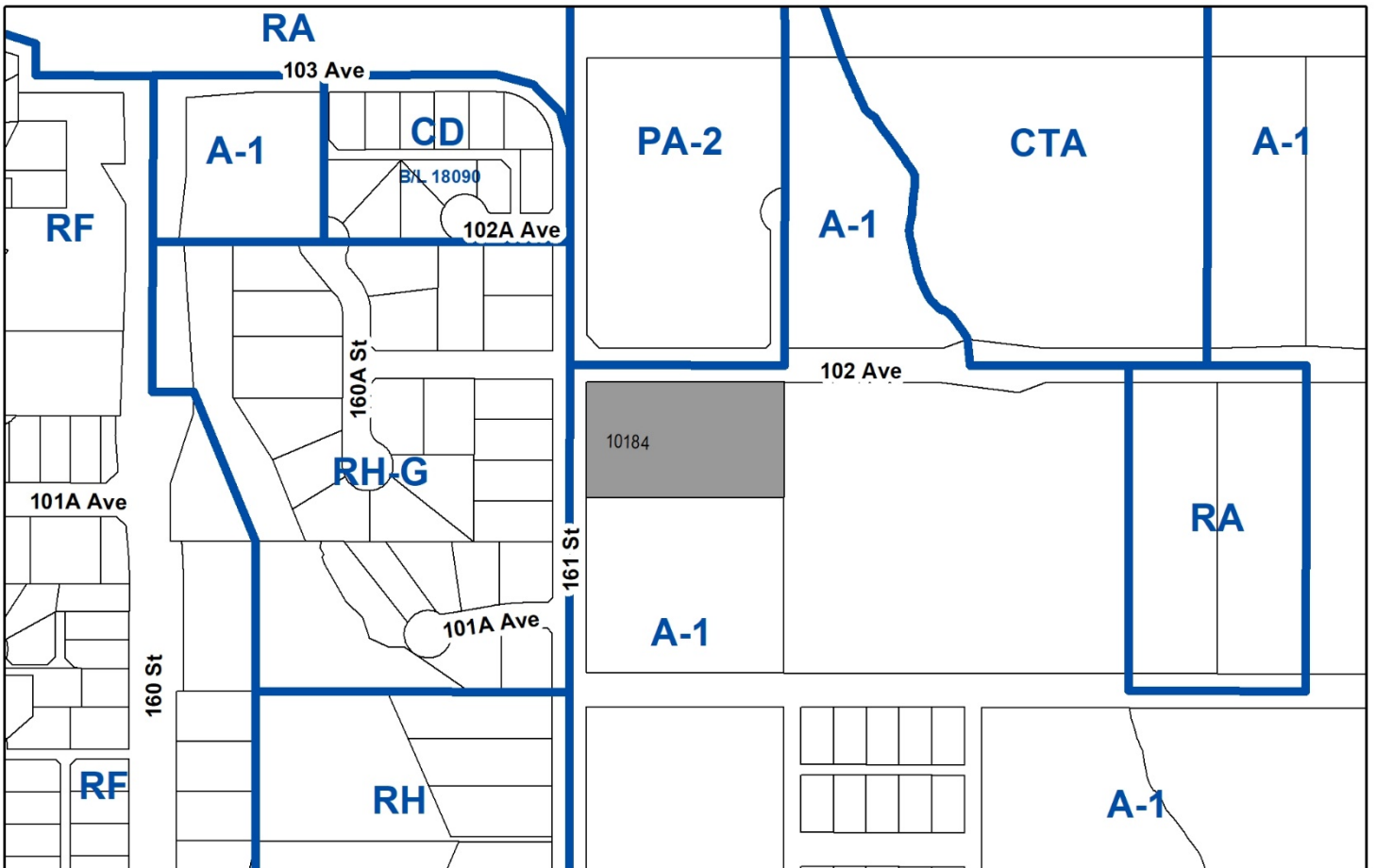
- **Rezoning** from A-1 to RQ
- **Development Variance Permit**

to allow subdivision into 8 single family suburban lots and one conservation lot. A variance is required to reduce the minimum required lot width for proposed Lots 1, 4, 5, 6 and 7 as well as reduce the minimum side yard (north) building setback for proposed Lot 1.

LOCATION: 10184 - 161 Street

ZONING: A-1

OCP DESIGNATION: Suburban



RECOMMENDATION SUMMARY

- By-law Introduction and set date for Public Hearing for Rezoning.
- Approval for Development Variance Permit to proceed to Public Notification.

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- The applicant is requesting a variance to reduce the minimum lot width requirement for Lots 1, 4, 5, 6 and 7 under the RQ Zone.
- The applicant is requesting a variance to reduce the minimum side yard (north) building setback for proposed Lot 1 under the RQ Zone.

RATIONALE OF RECOMMENDATION

- The proposal complies with the Suburban designation in the Official Community Plan (OCP).
- The proposed subdivision will provide an appropriate transition from Tynehead Regional Park towards the "Half-Acre Residential Gross Density (RH-G) Zone" properties on the west side of 161 Street.
- The requested variance to reduce the minimum required lot width for proposed Lots 1, 4, 5, 6 and 7 is supportable given the 51 metre (164 ft.) depth of these lots exceed the requirements of the RQ Zone, and all the lots meet the minimum lot area of the RQ Zone.
- The proposed variance for lot width will not impact adjacent properties as the lots are internal to the site.
- The requested variance to reduce the minimum side yard (north) building setback for Lot 1 will allow for the construction of a suitable sized dwelling while accommodating a 3 metre (10 ft.) wide landscape buffer along the south lot line, adjacent Tynehead Regional Park.
- The proposal protects the Class B (yellow-coded) watercourse located in the southeast corner of the site through conveyance of a conservation/riparian area lot to the City. No variances to the streamside setback requirements in the Zoning By-law are proposed.
- Landscape buffers are proposed adjacent to Tynehead Regional Park, as requested by Metro Vancouver.

RECOMMENDATION

The Planning & Development Department recommends that:

1. A By-law be introduced to rezone the subject site from "General Agricultural Zone (A-1)" to "Quarter Acre Residential Zone (RQ)" and a date be set for Public Hearing.
2. Council approve Development Variance Permit No. 7918-0061-00 (Appendix VII) varying the following, to proceed to Public Notification:
 - (a) to reduce the minimum lot width of the RQ Zone from 20 metres (66 ft.) to 16 metres (53 ft.) for proposed Lot 1;
 - (b) to reduce the minimum lot width of the RQ Zone from 20 metres (66 ft.) to 15 metres (49 ft.) for proposed Lots 4, 5 and 6;
 - (c) to reduce the minimum lot width of the RQ Zone from 20 metres (66 ft.) to 17 metres (56 ft.) for proposed Lot 7; and
 - (d) to reduce the minimum side yard (north) building setback of the RQ Zone from 2.4 metres (8 ft.) to 1.2 metres (4 ft.) for proposed Lot 1.
3. Council instruct staff to resolve the following issues prior to final adoption:
 - (a) ensure that all engineering requirements and issues including restrictive covenants, dedications, and rights-of-way where necessary, are addressed to the satisfaction of the General Manager, Engineering;
 - (b) submission of a subdivision layout to the satisfaction of the Approving Officer;
 - (c) final approval from the Ministry of Transportation & Infrastructure;
 - (d) submission of a finalized tree survey and a statement regarding tree preservation to the satisfaction of the City Landscape Architect;
 - (e) submission of a landscaping plan and landscaping cost estimate for a landscape buffer located along the southern and eastern boundary of proposed Lot 1 to the specifications and satisfaction of the Planning and Development Department;
 - (f) the applicant satisfy the deficiency in tree replacement on the site, to the satisfaction of the Planning and Development Department;
 - (g) submission of a finalized lot grading plan to the satisfaction of the Planning and Development Department;
 - (h) submission of a finalized Ecosystem Development Plan to the satisfaction of the Planning and Development Department;
 - (i) demolition of existing buildings and structures to the satisfaction of the Planning and Development Department;

- (j) submission of a finalized building envelope analysis for proposed Lot 1;
- (k) the applicant will convey proposed Lot 9 to the City, without compensation, for riparian protection purposes;
- (l) registration of a Section 219 Restrictive Covenant for side access garages on proposed Lots 1 through 8;
- (m) registration of a Section 219 Restrictive Covenant on proposed Lots 1 through 8 for tree protection;
- (n) registration of a Section 219 Restrictive Covenant for a landscape buffer along the southern and eastern boundary of proposed Lot 1;
- (o) registration of a Section 219 Restrictive Covenant for increased building setbacks of 4.2 metres (14 ft.) along the south lot line of proposed Lot 1; and
- (p) the applicant address the concern that the development will place additional pressure on existing park facilities to the satisfaction of the General Manager, Parks, Recreation and Culture.

REFERRALS

Engineering: The Engineering Department has no objection to the project subject to the completion of Engineering servicing requirements as outlined in Appendix III.

School District: **Projected number of students from this development:**

4 Elementary students at Serpentine Heights Elementary School
2 Secondary students at North Surrey Secondary School

(Appendix IV)

The applicant has advised that the dwelling units in this project are expected to be constructed and ready for occupancy by Fall, 2020.

Parks, Recreation & Culture:

Parks staff have requested further clarification on drainage and servicing details which will need to be confirmed prior to Final Adoption, to the satisfaction of the Parks, Recreation and Culture Department.

Parks will accept cash-in-lieu of the 5% unencumbered parkland subdivision requirement. In addition, Parks will accept proposed Lot 9 for riparian protection purposes. The lot is to be conveyed to the City, without compensation, as part of this application.

Parks supports the application but has some concerns with the pressure the application will place on park amenities in the area. The applicant has agreed to provide a financial contribution of \$9,100, which represents a payment of \$1,300 per newly created lot, and Parks has accepted this amount to address these concerns.

Ministry of Transportation & Infrastructure (MOTI):

Preliminary approval from MOTI is granted for one year.

Metro Vancouver

No concerns.

SITE CHARACTERISTICS

Existing Land Use: Single family residential

Adjacent Area:

Direction	Existing Use	OCP Designation	Existing Zone
North (Across 102 Avenue):	St. Andrew Kim Parish	Suburban	PA-2
East and South:	Tynehead Regional Park	Agricultural	A-1
West (Across 161 Street):	Single family residential	Suburban	RH-G

DEVELOPMENT CONSIDERATIONS**Background**

- The subject property is approximately 0.8 hectare (1.97 acres) in total area and located on the east side of 161 Street, just south of 102 Avenue. The property is designated "Suburban" in the Official Community Plan (OCP) and zoned "General Agricultural Zone (A-1)".
- The property is located directly adjacent to Tynehead Regional Park and across the street from existing suburban lots, on the west side of 161 Street, with larger single family dwellings that are zoned "Half-Acre Residential Gross Density Zone (RH-G)".

Current Proposal

- The applicant is proposing to rezone the subject site from "General Agricultural Zone (A-1)" to "Quarter Acre Residential Zone (RQ)" in order to subdivide into 8 single family suburban lots and one conservation lot (Lot 9).
- The proposed single family suburban lots range in size from 775 square metres (8,342 sq. ft.) to 1,049 square metres (11,291 sq. ft.). All proposed lots meet the minimum required lot depth and area under the RQ Zone.
- The applicant requests a Development Variance Permit (DVP) in order to reduce the minimum required lot width for proposed Lots 1, 4, 5, 6 and 7 under the RQ Zone. The requested variance is supportable given the lots have a depth of 51 metres (167 ft.), which greatly exceeds the 30 metre (100 ft.) lot depth minimum requirement of the RQ Zone.
- In addition, the applicant is seeking a DVP in order to reduce the minimum side yard (north) building setback for proposed Lot 1 under the RQ Zone. The proposed variance will permit the construction of a suitable sized dwelling and accommodate a 3 metre (10 ft.) wide landscaped buffer, along the south lot line, adjacent Tynehead Regional Park.
- Given that proposed Lot 1 is located directly adjacent to Tynehead Regional Park, the applicant has volunteered, in consultation with Metro Vancouver staff, to provide a 3 metre (10 ft.) wide landscape buffer along the south lot line and 14 metre (46 ft.) wide landscape buffer along the east lot line, adjacent to municipal riparian area (Lot 9). In an effort to allow for wildlife movement and prevent human encroachment, the applicant will install a split rail fence with page wire along all residential lot lines abutting parkland. The proposed landscape buffer on Lot 1 will be protected by a Section 219 Restrictive Covenant, that includes provisions for installation and maintenance, which will be registered on title.
- In order to ensure the landscape buffer along the southern boundary of proposed Lot 1 is protected from encroachment, the applicant will register a S. 219 Restrictive Covenant on title that requires an increased building setback, along the south lot line, of 4.2 metres (14 ft.). This will result in a 1.2 metre (4 ft.) wide building setback from the northern boundary of the landscape buffer adjacent Tynehead Regional Park which enables the future owner of Lot 1 to access the rear yard and maintain the dwelling without encroaching into the 3 metre (10 ft.) wide landscape buffer area.
- The applicant proposes to convey Lot 9 to the City, without compensation, for the purposes of riparian protection. The riparian area will have legal frontage off 102 Avenue via a 4 metre (13 ft.) wide panhandle.
- Under the RQ Zone, the applicant may subdivide the property into lots with a minimum width of 20 metres (66 ft.), depth of 30 metres (100 ft.) and total area of 775 square metres (8,300 sq. ft.) provided that no less than 15% of the land to be subdivided will be set aside as open space. Proposed Lot 9, excluding the undevelopable area located within 5 metres from top-of-bank, equates to roughly 1,195 square metres (12,863 sq. ft.) which is 15% of the gross site area and, thereby, fulfills the subdivision requirements of the RQ Zone.

Building Design Guidelines and Lot Grading

- The applicant retained Ran Chahal of Apex Design Group Inc. to prepare a Character Study and Building Design Guidelines for the subject property to maintain consistency with the existing single family suburban dwellings in the surrounding neighbourhood.
- The Character Study involved reviewing a number of existing homes in the neighbourhood in order to establish suitable design guidelines for the proposed subdivision. The study found that the majority of existing older homes within the surrounding area do not provide an appropriate context for future re-development. As such, the Building Scheme for the subject property will reflect updated design standards common of modern RQ type lots (Appendix V).
- The preliminary Lot Grading Plan by Hub Engineering Inc. was reviewed by City staff and considered generally acceptable. The Lot Grading Plan indicates that in-ground basements are proposed for all lots and that modest amounts of fill are proposed for Lots 3, 4, 6, 7 and 8 in order to address grade changes on-site and achieve in-ground basements.

TREES

- Conor Corbett, ISA Certified Arborist of Diamond Head Consulting 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	Existing	Remove	Retain
Alder and Cottonwood Trees			
Alder	14	14	0
Black Cottonwood	15	14	1
Deciduous Trees (excluding Alder and Cottonwood Trees)			
Apple	3	2	1
Birch	2	2	0
Maple	27	25	2
Unknown Species	1	1	0
Coniferous Trees			
Cedar	14	13	1
Hemlock	2	2	0
Spruce	2	1	1
Total (excluding Alder and Cottonwood Trees)	51	46	5
Additional Estimated Trees in the proposed Riparian Area	13	0	13

Total Replacement Trees Proposed (excluding Boulevard Street Trees)	40
Total Retained and Replacement Trees	46
Contribution to the Green City Fund	\$32,000

- The Arborist Assessment states that there is a total of 51 protected trees on the site, excluding Alder and Cottonwood trees. Twenty-nine existing trees, approximately 36% of the total trees on the site, are Alder and Cottonwood trees. It was determined that 6 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.
- Table 1 includes an additional 13 protected trees that are located within the proposed riparian area (Lot 9). The trees within the proposed riparian area will be retained, except where removal is required due to hazardous conditions. This will be determined at a later time, in consultation with the Parks, Recreation and Culture Department.
- For those trees that cannot be retained, the applicant will be required to plant trees on a 1 to 1 replacement ratio for Alder and Cottonwood trees, and a 2 to 1 replacement ratio for all other trees. This will require a total of 120 replacement trees on the site. Since only 40 replacement trees can be accommodated on the site (based on an average of 5 trees per lot), the deficit of 80 replacement trees will require a cash-in-lieu payment of \$32,000, representing \$400 per tree, to the Green City Fund, in accordance with the City's Tree Protection By-law.
- The applicant is proposing a 3 metre (10 ft.) wide landscape buffer along the south lot line and 14 metre (46 ft.) wide landscape buffer along the east lot line of proposed Lot 1. The landscape buffer will provide visual screening and physical separation between the proposed single family suburban lot (Lot 1), future municipal parkland to the east (Lot 9) and Tynehead Regional Park to the south. The landscape buffer will be protected by a Section 219 Restrictive Covenant, that includes provisions for installation and maintenance, which is registered on title as a condition of rezoning. The landscape buffer will consist of six Douglas Fir trees as well as a variety of low-level shrubs or grasses including Indian plum, salmonberry, snowberry, thimbleberry, salal and sword fern.
- In summary, a total of 46 trees are proposed to be retained or replaced on the site with a contribution of \$32,000 to the Green City Fund.

PRE-NOTIFICATION

The development proposal sign was installed on January 21, 2019 and pre-notification letters were mailed out on October 30, 2018. To date, staff have not received any responses from area residents.

HAZARD LANDS DEVELOPMENT PERMIT (STEEP SLOPES)

- The southeast corner of the subject site is located with a Development Permit Area (DPA) for Hazard Lands (Steep Slopes). The applicant submitted a letter from Braun Geotechnical Ltd., dated July 18, 2018, which indicates that the proposed residential lots (Lots 1 – 8) are located beyond the limits of the geotechnical setback requirement. As such, the existing steep slopes on the subject site do not pose a credible hazard to the proposed development. Given that the Hazard Lands (Steep Slope) area is located primarily on Lot 9 which the applicant will convey to the City, without compensation, for riparian protection purposes, it was determined by staff that a Development Permit for Hazard Lands (Steep Slopes) is not required under the subject application.

SENSITIVE ECOSYSTEMS DEVELOPMENT PERMIT (STREAMSIDE AREAS AND GIN)

- The City of Surrey Biodiversity Conservation Strategy (BCS) Green Infrastructure Network (GIN) map, adopted by Council on July 21, 2014 (Corporate Report No. R141; 2014), identifies a BCS Hub with high ecological value located directly adjacent to the subject site in Tynehead Regional Park.
- Within the Tynehead Management Area, the BCS identifies several management objectives which include working with landowners to maintain and enhance natural habitat on private land as well as naturalize yards adjacent to Green Infrastructure Network hubs and corridors.
- Given that the applicant is proposing to convey Lot 9 to the City, without compensation, for riparian protection purposes as well as provide a landscape buffer on Lot 1, it was determined by staff that these features will benefit Tynehead Regional Park and, therefore, are consistent with the guidelines contained in the BCS.
- On September 12, 2016, Council approved amendments to the Official Community Plan (OCP) and Zoning By-law No. 12000 to implement Sensitive Ecosystem DPAs as well as Streamside Protection Measures, collectively known as Surrey's Ecosystem Protection Measures, for the protection of the natural environment and riparian areas. These changes were identified in Corporate Report No. R188, which was approved by Council on July 25, 2016. The subsequent amendment by-laws were given Final Adoption on September 12, 2016.
- The OCP is used to identify the specific types of ecosystems that are intended to be protected including Class A, A/O and B watercourses. The Zoning By-law (Part 7A Streamside Protection) is used to identify the specific protection areas that are required to be established, known as the Streamside Setback Area.
- The subject property is located within 50 metres (164 ft.) of a Development Permit Area (DPA) for Sensitive Ecosystems (Streamside Areas). In accordance with OCP guidelines, the applicant contacted a Qualified Environmental Professional (QEP), Erin Vekic of Envirowest Consulting Ltd., who prepared an Ecosystem Development Plan (dated May 14, 2019) that identifies a Class B watercourse at the northwest corner of Tynehead Regional Park, and encroaching onto the southeast corner of the subject site.

- Under Part 7A (Streamside Protection) of Zoning By-law No. 12000, a Class B (yellow-coded) watercourse requires a minimum 15 metre (49 ft.) streamside setback measured from top-of-bank.
- However, Part 7A of Zoning By-law No. 12000 includes a flex provision which enables the minimum distance from top-of-bank to be reduced by no more than 5 metres (16 ft.) and increased by no more than 10 metres (33 ft.) provided there is no net loss in the total size of the streamside setback area.
- The applicant proposes to utilize the flex option on proposed Lots 7, 8 and 9. The applicant indicates that the proposed flex option would result in a riparian habitat gain of roughly 92 square metres (990 sq. ft.). With the use of the flex provision under the Zoning By-law, the streamside setback variance is not required for proposed Lots 7 and 8. The proposed flex provision will result in an additional 219 square metres (2,357 sq. ft.) of setback area that will be conveyed to the City as part of Lot 9, without compensation. As such, the proposed development complies with the Zoning By-law and with Development Permit Area (DPA) guidelines for Sensitive Ecosystems (Streamside Areas), per the Official Community Plan (OCP).
- The applicant has submitted an Ecosystem Development Plan which has been reviewed by staff and found to be generally acceptable. A finalized Ecosystem Development Plan will be required prior to Final Adoption.

SUSTAINABLE DEVELOPMENT CHECKLIST

The applicant prepared and submitted a sustainable development checklist for the subject site on February 8, 2018. The table below summarizes the applicable development features of the proposal based on the seven (7) criteria listed in the Surrey Sustainable Development Checklist.

Sustainability Criteria	Sustainable Development Features Summary
1. Site Context & Location (A1-A2)	<ul style="list-style-type: none"> • The proposal complies with the "Suburban" designation in the OCP. • The proposal is located within the Tynehead urban infill area.
2. Density & Diversity (B1-B7)	<ul style="list-style-type: none"> • The proposed dwelling units may contain secondary suites which provide a wider range of affordable housing options for residents.
3. Ecology & Stewardship (C1-C4)	<ul style="list-style-type: none"> • The applicant proposes the following Low Impact Development Standards (LIDS): [1] absorbent soils; [2] vegetated swales/rain gardens/bio-swales; [3] roof downspout disconnections; [4] on-lot infiltration trenches or sub-surface chambers; [5] dry swales; and [6] sediment control devices. • The applicant will convey 15% of the gross site area to the City, without compensation, for municipal parkland in accordance with the subdivision requirements in the RQ Zone. • The applicant will convey proposed Lot 9 to the City, without compensation, for riparian protection purposes.

4. Sustainable Transport & Mobility (D1-D2)	<ul style="list-style-type: none"> No measures are proposed.
5. Accessibility & Safety (E1-E3)	<ul style="list-style-type: none"> The proposed dwelling units will provide "eyes-on-the-street".
6. Green Certification (F1)	<ul style="list-style-type: none"> No measures are proposed.
7. Education & Awareness (G1-G4)	<ul style="list-style-type: none"> No measures are proposed.

BY-LAW VARIANCE AND JUSTIFICATION

(a) Requested Variance:

- To reduce the minimum lot width of the RQ Zone from 20 metres (66 ft.) to 16 metres (53 ft.) for proposed Lot 1.
- To reduce the minimum lot width of the RQ Zone from 20 metres (66 ft.) to 15 metres (49 ft.) for proposed Lots 4, 5 and 6;
- To reduce the minimum lot width of the RQ Zone from 20 metres (66 ft.) to 17 metres (56 ft.) for proposed Lot 7; and
- To reduce the minimum side yard (north) building setback requirement in the RQ Zone from 2.4 metre (8 ft.) to 1.2 metres (4 ft.).

Applicant's Reasons:

- The proposed subdivision will create lots that exceed the minimum lot depth and meet the total area requirements under the RQ Zone.
- The applicant has provided a building envelope analysis which indicates the affected lots are of sufficient width to construct an appropriately sized dwelling under the RQ Zone.
- The proposed variance to reduce the minimum side yard (north) building setback will permit the construction of a suitable sized dwelling on Lot 1 while accommodating a 3 metre (10 ft.) wide landscape buffer, located along the south lot line, adjacent Tynehead Regional Park.

Staff Comments:

- A reduction to the proposed width requirement under the RQ Zone can be supported given that the 49 metre (161 ft.) depth for Lot 1 and 51 metre (167 ft.) depth of Lots 4, 5, 6 and 7 exceed the minimum required lot depth of the RQ Zone. In addition, all lots meet the minimum required total lot area specified in the RQ Zone where the applicant provides at least 15% open space.
- The proposed widths for Lots 1, 4, 5, 6 and 7 will allow for an appropriately dimensioned house to be constructed, as confirmed by the applicant.
- The proposed variances for lot width will not impact adjacent properties, as the lots are internal to the site.
- The applicant provided a layout with the same number of lots that did not require lot width variances, but this alternative layout was considered by staff to be inferior from a livability and streetscape perspective.
- The proposed variance to the side yard (north) building setback on proposed Lot 1 will have a negligible impact on the adjacent northerly property (Lot 2) given it is a side yard condition and the lots are internal. In addition, the northerly lot (Lot 2) will maintain a 2.4 metre (8 ft.) wide side yard (south) building setback which will help to mitigate any visual impact.
- Staff support the proposed variances.

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I.	Project Data Sheets
Appendix II.	Proposed Subdivision Layout and Landscape Plan
Appendix III.	Engineering Summary
Appendix IV.	School District Comments
Appendix V.	Building Design Guidelines Summary
Appendix VI.	Summary of Tree Survey and Tree Preservation
Appendix VII.	Tree Retention and Tree Replacement Plans
Appendix VIII.	Development Variance Permit No. 7918-0061-00

INFORMATION AVAILABLE ON FILE

- Environmental Report Prepared by Erin Vekic of Envirowest Consulting Inc., Dated May 14, 2019.
- Complete Set of Landscape Plans prepared by Envirowest Consulting Inc. Dated May 14, 2019.

original signed by Ron Gill

Jean Lamontagne
General Manager
Planning and Development

MRJ/cm

SUBDIVISION DATA SHEET

Proposed Zoning: RQ

Requires Project Data	Proposed
GROSS SITE AREA	
Acres	1.97 ac.
Hectares	0.8 ha.
NUMBER OF LOTS	
Existing	1
Proposed	9
SIZE OF LOTS	
Range of lot widths (metres)	15 m. to 25.8 m.
Range of lot areas (square metres)	775 sq. m. to 1,049 sq. m.
DENSITY	
Lots/Hectare & Lots/Acre (Gross)	10 u.p.ha./4 u.p.a.
Lots/Hectare & Lots/Acre (Net)	13.3 u.p.ha./5.4 u.p.a.
SITE COVERAGE (in % of gross site area)	
Maximum Coverage of Principal & Accessory Building	25%
Estimated Road, Lane & Driveway Coverage	35%
Total Site Coverage	55%
PARKLAND	
Area (square metres)	1,195 sq. m.
% of Gross Site	15%
	Required
PARKLAND	
5% money in lieu	NO
TREE SURVEY/ASSESSMENT	YES
MODEL BUILDING SCHEME	YES
HERITAGE SITE Retention	NO
FRASER HEALTH Approval	NO
DEV. VARIANCE PERMIT required	
Road Length/Standards	NO
Works and Services	NO
Building Retention	NO
Lot Width (Lots 1, 4, 5, 6 & 7)	YES
Side Yard (South) Building Setback (Lot 1)	YES

G:\Projects\18010\18010-140_Drawings\Layouts\Lot_Layout - Op_28 - Apr_18_2018 - AREAS.dwg [Lot_Layout - 11x17] 4/23/2019 2:32PM

PLAN 1670

Appendix II

PLA

102 AVENUE

161 STREET

3
PLAN 82589

4
PLAN 82589

5
AN 82589

6
AN 82589



REM. A
PLAN 5920

REM. 15
PLAN 1670
PP LMP31610

**PRELIMINARY SUBJECT TO
REVIEW AND APPROVAL**

CLIENT:		PROJECT: 10184 161 STREET, SURREY			
DRAWING TITLE: RESIDENTIAL SUBDIVISION					
PROJECT No:	18010	DATE:	APR 2018	LEGAL:	MUNICIPAL PROJECT No:
SCALE: 1:500					
PRELIMINARY PLAN - SUBJECT TO APPROVAL(S) FROM FEDERAL, PROVINCIAL AND LOCAL AUTHORITIES					

Hub Engineering Inc.
Engineering and Development Consultants

Member
PACIFIC LAND GROUP

Suite 212, 12992 - 76 Avenue, Surrey, B.C. V3W 2V6
tel: 604-572-4328 | fax: 604-501-1625 | mail@hub-inc.com | www.hub-inc.com

TO: **Manager, Area Planning & Development
- North Surrey Division
Planning and Development Department**

FROM: **Development Engineer, Engineering Department**

DATE: **May 30, 2019** PROJECT FILE: **7818-0061-00**

RE: **Engineering Requirements
Location: 10184 161 Street**

REZONE AND SUBDIVISION

Property and Right-of-Way Requirements

- Dedicate 3.0 m x 3.0 m corner cut at 102 Avenue and 161 Street.
- Register 0.5 m SRW for inspection chambers and sidewalk maintenance along 102 Avenue and 161 Street.

Works and Services

- Construct south side of 102 Avenue to Local Road Standard.
- Construct east side of 161 Street to Local Road Standard.
- Construct 6.0 m concrete letdown to each lot.
- Construct onsite sustainable drainage features in accordance to the Upper Serpentine Integrated Stormwater Management Plan (ISMP). These features are to ensure the base flows are maintained to Miraki Creek and that there is no increase in flows from pre to post development to the downstream drainage system.
- Construct a sanitary main along 102 Avenue for the full development frontage.
- Provide water, storm, and sanitary service connections to each lot.

A Servicing Agreement is required prior to Rezone and Subdivision.

DEVELOPMENT PERMIT AND DEVELOPMENT VARIANCE PERMIT

There are no additional engineering requirements beyond those above required prior to issuance of the Development Permit and Development Variance Permit.



Tommy Buchmann, P.Eng.
Development Services Manager

CE4



Planning

June 13, 2019

THE IMPACT ON SCHOOLS

APPLICATION #: 18 0061 00

SUMMARY

The proposed are estimated to have the following impact on the following schools:

8 Single family with suites

Projected # of students for this development:

Elementary Students:	4
Secondary Students:	2

September 2018 Enrolment/School Capacity

Serpentine Heights Elementary	
Enrolment (K/1-7):	47 K + 301
Operating Capacity (K/1-7)	38 K + 396
North Surrey Secondary	
Enrolment (8-12):	1415
Capacity (8-12):	1175

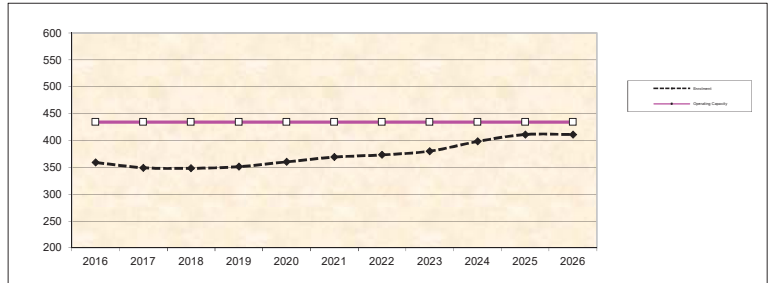
School Enrolment Projections and Planning Update:

The following tables illustrate the enrolment projections (with current/approved ministry capacity) for the elementary and secondary schools serving the proposed development.

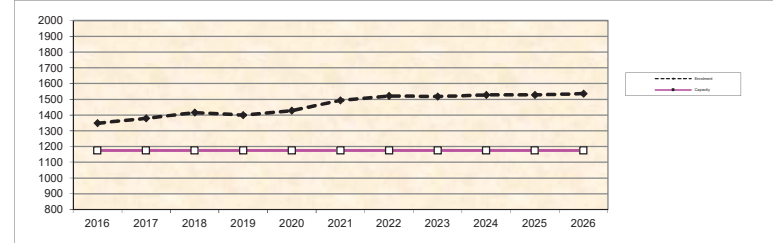
Serpentine Heights is one of the few elementary schools in the northeast area of the District that still has enrolling space available, and whose enrollment is projected to continue at its current level over the next 10 years. However, when city services are extended further into the Port Kells area, this school will be ideally located to accommodate students from the potential new developments in South Port Kells. As the need to address immediate growth is more urgent in other areas of the District, there are no current capital plan requests for adding additional space in the catchment.

North Surrey Secondary is currently operating at 118%. Over the next 10 years, enrolment is projected to grow by over 150 students. As part of the District's 2019/20 Five Year Capital Plan submission, there is a request 325 capacity addition targeted to open September 2022.

Serpentine Heights Elementary



North Surrey Secondary



* Nominal Capacity is estimated by multiplying the number of enrolling spaces by 25 students. Maximum operating capacity is estimated by multiplying the number of enrolling spaces by 27 students.

BUILDING GUIDELINES SUMMARY

V.1.0

Surrey Project no.: 18-0061 (Kaybee Homes)
Property Location: 10184 161A Street, Surrey, B.C

Design Consultant: Apex Design Group Inc.
Ran Chahal, Architectural Technologist AIBC, CRD
#157- 8120 -128 Street, Surrey, BC V3W 1R1
Off: 604-543-8281 Fax: 604-543-8248

The draft Building Scheme proposed for this Project has been files with the City Clerk. The following is a summary of the Residential Character Study and the Design Guidelines, which highlight the important features and form the basis of the draft Building Scheme.

1. Residential Character

1.1 General Description of the Existing and/or Emerging Residential Character of the Subject Site:

The area surrounding the subject site is an urban area built out in the 1980's - 1990's. Most homes are simple "West Coast Traditional" style structures with habitable areas between 3000 – 5000 sf and over.

Most of the existing homes have low to mid-massing characteristics with 86% of the homes having a one storey front entry.

Roof pitch varies from economical pitch of 4-6/12 and to a medium pitch of 8-9/12 or higher common truss roofs with simple gables and common hips with Asphalt Roof Shingles being most common.

Wall surface materials are limited in the most part to one of the following: Stucco (dominant), Vinyl, Cedar and Hardi. Brick or Stone for an accent material. Accent trims are evident on most of the existing homes.

Landscaping is of a moderate planting standard with 57.00% of the homes having Exposed Aggregate driveways.

1.2 Prevailing Features of the Existing and Surrounding Dwellings Significant to the Proposed Building Scheme:

Most of the homes located in the study area have covered front verandas and would be encouraged to be constructed in any new home to be built in the future. Since the majority of the existing homes in the study area are 15-35 years old, rather than use the existing homes to provide architectural context for the new development, the best strategy will be to employ modern development standards especially with respect to overall massing and balance in each design and to proportional massing between individual elements. Trim and detailing standards and construction materials standards will meet 2000's levels. Continuity of character will be ensured through style and home type restrictions as described below.

Dwelling Types/Locations: "Two-Storey" 93.00%
 "Basement /Cathedral Entry" 0.00%
 "Rancher (Bungalow)" 7.00%
 "Split Levels" 0.00%

**Dwelling Sizes/Locations:
 (Floor Area and Volume)** Size range: 0.00% under 2000 sq.ft excl. garage
 57.00% 2001 - 2999 sq.ft excl. garage
 43.00% over 3000 sq.ft excl. garage

Exterior Treatment /Materials: Stucco: 43.00% Vinyl: 29.00% Cedar: 21.00% Hardi: 7%
 Brick or stone accent on 71.00% of all homes

Roof Pitch and Materials: Asphalt Shingles: 93.00% Cedar Shingles: 0.00%
 Concrete Tiles: 7.00% Tar & Gravel: 0.00%
 7.00% of homes have a roof pitch of 4/5:12 and
 93.00% have a medium roof pitch of 6:12 and over .

Window/Door Details: 71.00% of all homes have rectangular windows

Streetscape:A variety of simple "Two Story", 15-35 year old "West Coast Traditional" homes in a common urban setting. Roofs on most homes are simple medium pitch common hip or common gable forms with Asphalt Roof Shingles is on most of the homes. Most homes are clad in Stucco, Vinyl, Cedar, and Hardi.

Other Dominant Elements: Most of the existing homes located in the immediate study area have covered front verandas.

2. Proposed Design Guidelines

2.1 Specific Residential Character and Design Elements these Guidelines Attempt to Preserve and/or Create:

The guidelines will ensure that the existing character of the homes are maintained with modestly sized Two-Storey, Bungalow and Split Level type homes are constructed to 2000's standard. Continuity of character will be achieved with restrictions permitting the use of compatible styles, roof forms and exterior construction materials. Landscapes will be constructed to a modern urban standard.

2.2 Proposed Design Solutions:

Dwelling Types: Two-Storey, Split Levels and Ranchers (Bungalows).
Dwelling Sizes: Two-Storey or Split Levels - 2000 sq.ft. minimum
Floor Area/Volume: Basement Entry - 2000 sq.ft. minimum
 Rancher or Bungalow - 1400 sq.ft. minimum
 (Exclusive of garage or in-ground basement)

Exterior Treatment /Materials:	No specific interface treatment. However, all permitted styles including: “Neo-Traditional”, “Neo-Heritage”, “Rural-Heritage” or “West Coast Modern” will be compatible with the existing study area homes.
Exterior Materials /Colours:	Stucco, Cedar, Vinyl, Hardiplank, Brick and Stone in “Neutral” and “Natural” colours. “Primary” and “Warm” colours not permitted on cladding. Trim colours: Shade variation on main colour, complementary, neutral or subdued contrast.
Covered parking:	Garages on lots 4-8 can only have side-loaded or side-entry garage access in order to avoid having the garage door face the street.
Roof Pitch:	Minimum 4:12
Roof Materials/Colours:	Cedar shingles, Concrete roof tiles in a shake profile and asphalt shingles in a shake profile. Grey or brown only.
Window/Door Details:	Dominant: Rectangular or Gently arched windows.
In-ground basements:	Permitted if servicing allows.
Landscaping:	Trees as specified on Tree Replacement Plan plus min. 17 shrubs (min. 3 gallon pot size).
Compliance Deposit:	\$ 5,000.00

Summary prepared and submitted by:



 Rah Chahal, Design Consultant
 Architectural Technologist AIBC, CRD.ASTTBC
 Apex Design Group Inc.

November 5, 2018
 Date

4.0 Tree Preservation Summary

Table 2: City of Surrey tree preservation summary table for on-site and off-site trees, including the number of replacement trees proposed.

Surrey Project Number

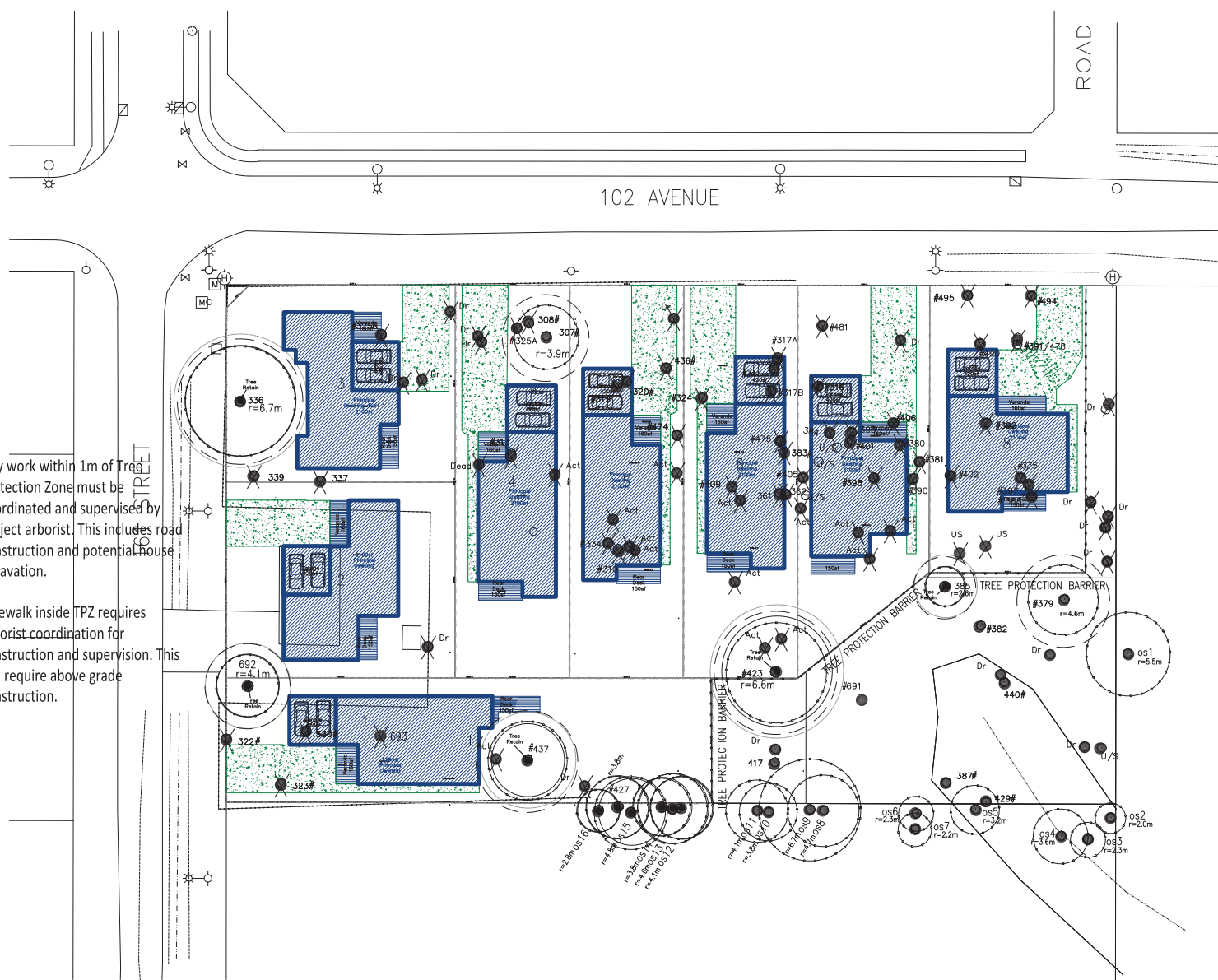
Site Address 10184 – 161st Street

Registered Arborist Conor Corbett

On-Site Trees	Number of Trees
Protected Trees Identified (On-site and shared trees, including trees within boulevards and proposed streets and lanes, but excluding trees in proposed open space or riparian areas)	80
Protected Trees to be Removed	74
Protected Trees to be Retained (excluding trees within proposed open space or riparian areas)	6
Total Replacement Trees Required: - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio 28 X one (1) = 28 - All other Trees Requiring 2 to 1 Replacement Ratio 46 X two (2) = 94	120
Replacement Trees Proposed	40
Replacement Trees in Deficit	80
Protected Trees to be Retained in Proposed Open Space / Riparian Areas	13

Off-Site Trees	Number of Trees
Protected Off-Site Trees to be Removed	0
Total Replacement Trees Required: - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio 0 X one (1) = 4 - All other Trees Requiring 2 to 1 Replacement Ratio X two (2) = 0	0
Replacement Trees Proposed	0
Replacement Trees in Deficit	0

Appendix VII



Any work within 1m of Tree Protection Zone must be coordinated and supervised by project arborist. This includes road construction and potential house excavation.

Sidewalk inside TPZ requires arborist coordination for construction and supervision. This will require above grade construction.

LEGEND

- = TREES TO BE RETAINED
- ⊗ = TREES TO BE REMOVED
- = PROTECTION BARRIER

DATE	REVISIONS	NO.
Apr/19	revised site plan	5
Jul/18	tree retention	4
May/18	tree retention	3
Feb/18	tree retention	2
Apr/18	revised lot layout	1

C.KAVOLINAS & ASSOCIATES INC.
BCSA CSA
2462 JONQUIL COURT
ABBOTSFORD, B.C.
V3G 3B9
PHONE (604) 857-2376

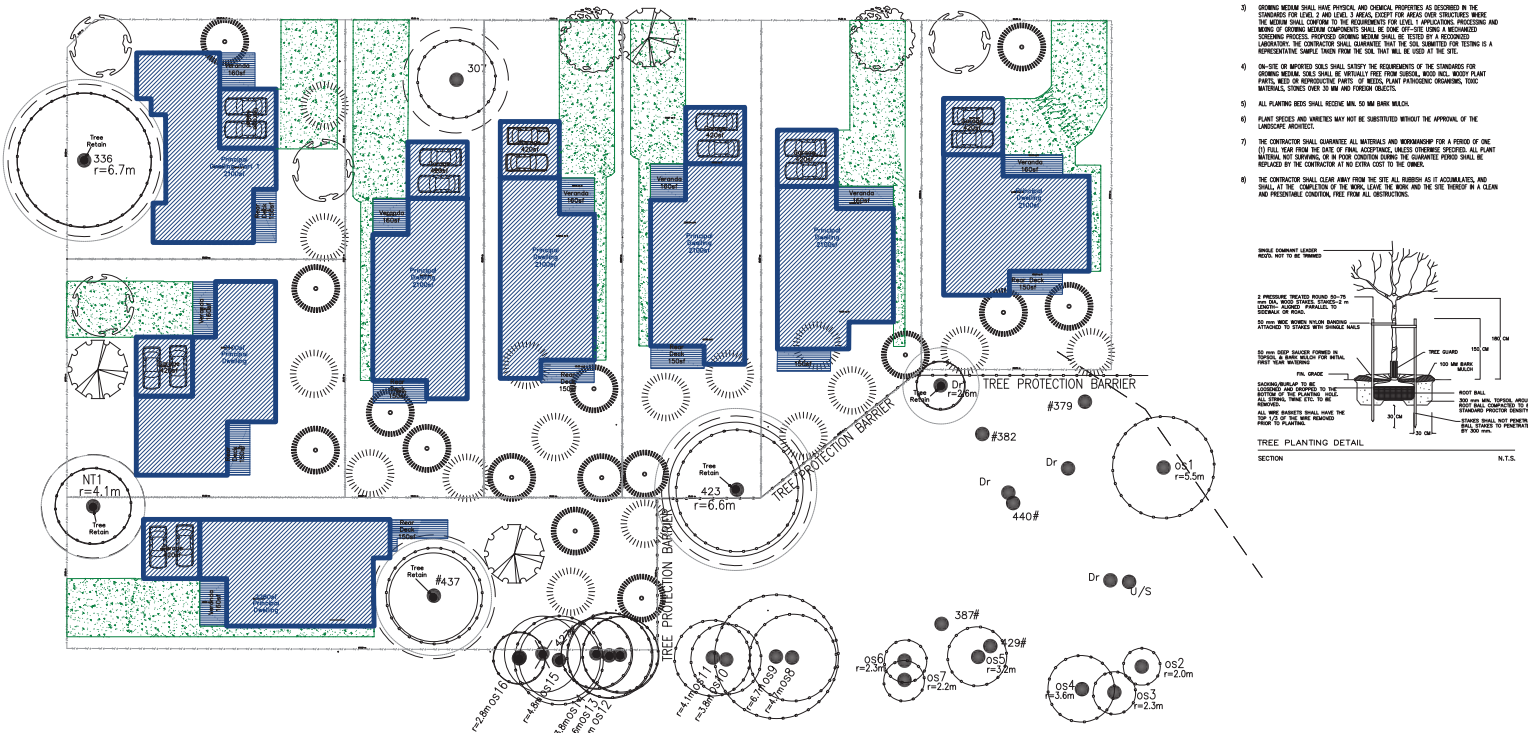
CLIENT
TRISH KHATTRA
KAYBEE HOMES
c/o HUB ENGINEERING INC
#212 12095 - 76 AVENUE
SURREY, B.C.
V3W 2J5
604-572-4328

TITLE
PLAN VIEW
TREE LOCATION PLAN
TREE RETENTION PLAN
8 LOT SUBDIVISION
10184 - 161 STREET
SURREY, B.C.

SCALE	DATE
1:250	Sept/19
DWPT	CHK'D
ENG.	CHK'D
APPROV	AS BUILT

PRINTED	JOB No.
DRAWING No.	
TR-1	

KEY	BOTANICAL NAME	PLANT LIST				REMARKS
		COMMON NAME	QTY.	SIZE	SPACING	
	SYRINGA RETICULATA 'IVORY SILK'	LILAC TREE	4	6 CM. CAL.	AS SHOWN	B. & B.
	PRUNUS 'YEDENSIS' 'WEIKM'	DAWBREAK CHERRY	4	6 CM. CAL.	AS SHOWN	B. & B.
	CORNUS FLORIDA 'RUBRAM'	RED FLOWERING DOGWOOD	2	6 CM. CAL.	AS SHOWN	B. & B.
	CHAMAECYPARIS NODIKATENSIS PENDULA	WEeping NOTKA CYPRESS	14	3.00 METERS	AS SHOWN	B. & B.
	PICE PUNGENS GLAUCA	BLUE SPRUCE	16	3.00 METERS	AS SHOWN	B. & B.



NOTES / GENERAL

1. PLANT SIZES IN THIS LIST ARE SPECIFIED ACCORDING TO THE LANDSCAPE STANDARD 'LATEST EDITION'. CONTRACTOR SHALL BE SPECIFIED AS PER THIS STANDARD BOTH PLANT SIZE AND CONTAINER SIZE AND THE MINIMUM ACCEPTABLE SIZE. SHARP AND HEAVY SAWN PLANT MATERIAL AVAILABLE FOR OPTIMAL REVIEW BY LANDSCAPE ARCHITECT AT SOURCE OF SUPPLY. AREA OF SEARCH TO INCLUDE LOWER MAINLAND AND HAZEL VALLEY 'SUBSTITUTIONS' MUST OBTAIN WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO MAKING ANY SUBSTITUTIONS TO PROVIDED MEDIA. QUALITATIVE SUBSTITUTIONS WILL BE REJECTED. ALLOW A MINIMUM OF FIVE WORKING DAYS PRIOR TO DELIVERY FOR DELIVERY TO SITE. SUBSTITUTIONS ARE SUBJECT TO THE LANDSCAPE STANDARD.

2. ALL PLANT MATERIAL MUST BE PROVIDED FROM GROWN 'TROPIC FREE' SOURCES. ALL PLANT MATERIAL MUST CONFORM TO THE LATEST EDITION OF THE 'BC LANDSCAPE STANDARD'. PROVIDE CERTIFICATION FROM GROWER. ALL LANDSCAPING AND LANDSCAPE MATERIALS TO CONFORM TO THE LATEST EDITION OF THE BRITISH COLUMBIA 'LANDSCAPE STANDARD'.

3. MIN. GROWING MEDIUM DEPTH OVER PREPARED SUBGRADE SHALL BE:

- LANE AREAS 400 mm
- DRIVING/STREET AREAS 400 mm
- SMALL AREAS 400 mm
- TREE PITS 300 mm AROUND ROOT BALL

4. GROWING MEDIUM SHALL HAVE PHYSICAL AND CHEMICAL PROPERTIES AS DESCRIBED IN THE STANDARD FOR LEVEL 2 AND LEVEL 3 MEDIA. EXCEPT FOR MEDIA FROM SPECIFIED SOURCE THE MEDIA SHALL CONFORM TO THE REQUIREMENTS FOR LEVEL 2. ANALYTICAL PROCEDURE AND METHOD OF TESTING MEDIA COMPONENTS SHALL USE OFF-SITE TOPIC MICROANALYSIS. CONTINUOUS PROCESS. PROVIDED GROWING MEDIUM SHALL BE TESTED BY A RECOGNIZED LABORATORY. THE CONTRACTOR SHALL GUARANTEE THAT THE SOIL OBTAINED FOR TESTING IS A REPRESENTATIVE SAMPLE TAKEN FROM THE SOIL THAT WILL BE USED AT THE SITE.

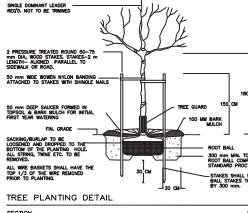
5. ON-SITE OR IMPORTED SOILS SHALL SATISFY THE REQUIREMENTS OF THE STANDARD FOR GROWING MEDIUM. SOILS SHALL BE RETRIEVED FROM SUSICAL, ROAD, RAIL, WOODY PLANT PARTS, WEED OR NON-PRODUCTIVE PARTS OF WEEDS, PLANT PARASITIC, ORGANIC, TOXIC MATERIALS, STONES AND TO BE FREE FOREIGN OBJECTS.

6. ALL PLANTING BEDS SHALL RECEIVE MIN. 50 MM BANK WALK.

7. PLANT SPECIES AND VARIETIES MAY NOT BE SUBSTITUTED WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT.

8. THE CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE, UNLESS OTHERWISE SPECIFIED. ALL PLANT MATERIAL, NOT SURVIVING, OR IF NOT SURVIVING DURING THE GUARANTEE PERIOD SHALL BE REPLACED BY THE CONTRACTOR AT NO EXTRA COST TO THE OWNER.

9. THE CONTRACTOR SHALL CLEAR AREA FROM THE SITE ALL OBSTRUCTIONS AND SHALL, AT THE COMPLETION OF THE WORK, LEAVE THE WORK AND THE SITE THEREIN IN A CLEAN AND PRESENTABLE CONDITION FREE FROM ALL OBSTRUCTIONS.



LEGEND

- = TREES TO BE RETAINED
- ⊗ = TREES TO BE REMOVED
- = PROTECTION BARRIER

DATE	REVISIONS	NO.
apr/19	revised site plan	5
Jul/18	tree retention	4
May/18	tree retention	3
Feb/18	tree retention	2
apr/18	revised lot layout	1

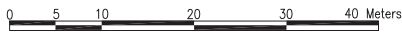
C.KAVOLINAS & ASSOCIATES INC.
BCSA CSA
2482 JONQUIL COURT
ABBOTSFORD, B.C.
V3G 3E8
PHONE (604) 857-2376

CLIENT
TRISHA KHATTRA
KAYBEE HOMES
c/o HUB ENGINEERING INC
#212 12992 - 76 AVENUE
SURREY, B.C.
V3W 2V6
604-572-4326

TITLE
PLAN VIEW
TREE LOCATION PLAN
TREE REPLACEMENT PLAN
8 LOT SUBDIVISION
10116A - 161 STREET
SURREY, B.C.

SCALE	DATE
1:250	Sept/19
DMT	CHW
ENL	CHW
APP'D	AS BUILT

PRINTED
JOB No.
DRAWING No.
TR-2



(the "City")

DEVELOPMENT VARIANCE PERMIT

NO.: 7918-0061-00

Issued To:

(the "Owner")

Address of Owner:

1. This development variance permit is issued subject to compliance by the Owner with all statutes, by-laws, orders, regulations or agreements, except as specifically varied by this development variance permit.

2. This development variance permit applies to that real property including land with or without improvements located within the City of Surrey, with the legal description and civic address as follows:

Parcel Identifier: 012-289-868

Lot 15 Except: The South 340.31 Feet; Section 26 Block 5 North Range 1 New Westminster District Plan 1670

10184 – 161 Street

(the "Land")

3. (a) As the legal description of the Land is to change, the City Clerk is directed to insert the new legal description for the Land once titles have been issued, as follows:

Parcel Identifier:

- (b) If the civic addresses change, the City Clerk is directed to insert the new civic addresses for the Land, as follows:

4. Surrey Zoning By-law, 1993, No. 12000, as amended is varied as follows:
 - (a) In Sub-Section 2.(a) of Section K of Part 15C, Quarter Acre Residential Zone (RQ), the minimum lot width is reduced from 20 metres (66 ft.) to 16 metres (53 ft.) for proposed Lot 1;
 - (b) In Sub-Section 2.(a) of Section K of Part 15C, Quarter Acre Residential Zone (RQ), the minimum lot width is reduced from 20 metres (66 ft.) to 15 metres (49 ft.) for proposed Lots 4, 5, and 6;
 - (c) In Sub-Section 2.(a) of Section K of Part 15C, Quarter Acre Residential Zone (RQ), the minimum lot width is reduced from 20 metres (66 ft.) to 17 metres (56 ft.) for proposed Lot 7; and
 - (d) In Section F. of Part 15C, Quarter Acre Residential Zone (RQ), the minimum side yard (north) building setback is reduced from 2.4 metres (8 ft.) to 1.2 metres (4 ft.) for proposed Lot 1.
5. This development variance permit applies to only the portion of the Land shown on Schedule A which is attached hereto and forms part of this development variance permit. This development variance permit does not apply to additions to, or replacement of, any of the existing buildings shown on attached Schedule A, which is attached hereto and forms part of this development variance permit.
6. The Land shall be developed strictly in accordance with the terms and conditions and provisions of this development variance permit.
7. This development variance permit shall lapse unless the subdivision, as conceptually shown on Schedule A which is attached hereto and forms part of this development variance permit, is registered in the New Westminster Land Title Office within three (3) years after the date this development variance permit is issued.
8. The terms of this development variance permit or any amendment to it, are binding on all persons who acquire an interest in the Land.

9. This development variance permit is not a building permit.

AUTHORIZING RESOLUTION PASSED BY THE COUNCIL, THE DAY OF , 20 .
ISSUED THIS DAY OF , 20 .

Mayor – Doug McCallum

City Clerk – Jennifer Ficocelli

PLAN 1670

Proposed variance to reduce the minimum lot width requirement of the RQ Zone from 20 metres (66 ft.) to 15 metres (49 ft.) for proposed Lots 4, 5 and 6.

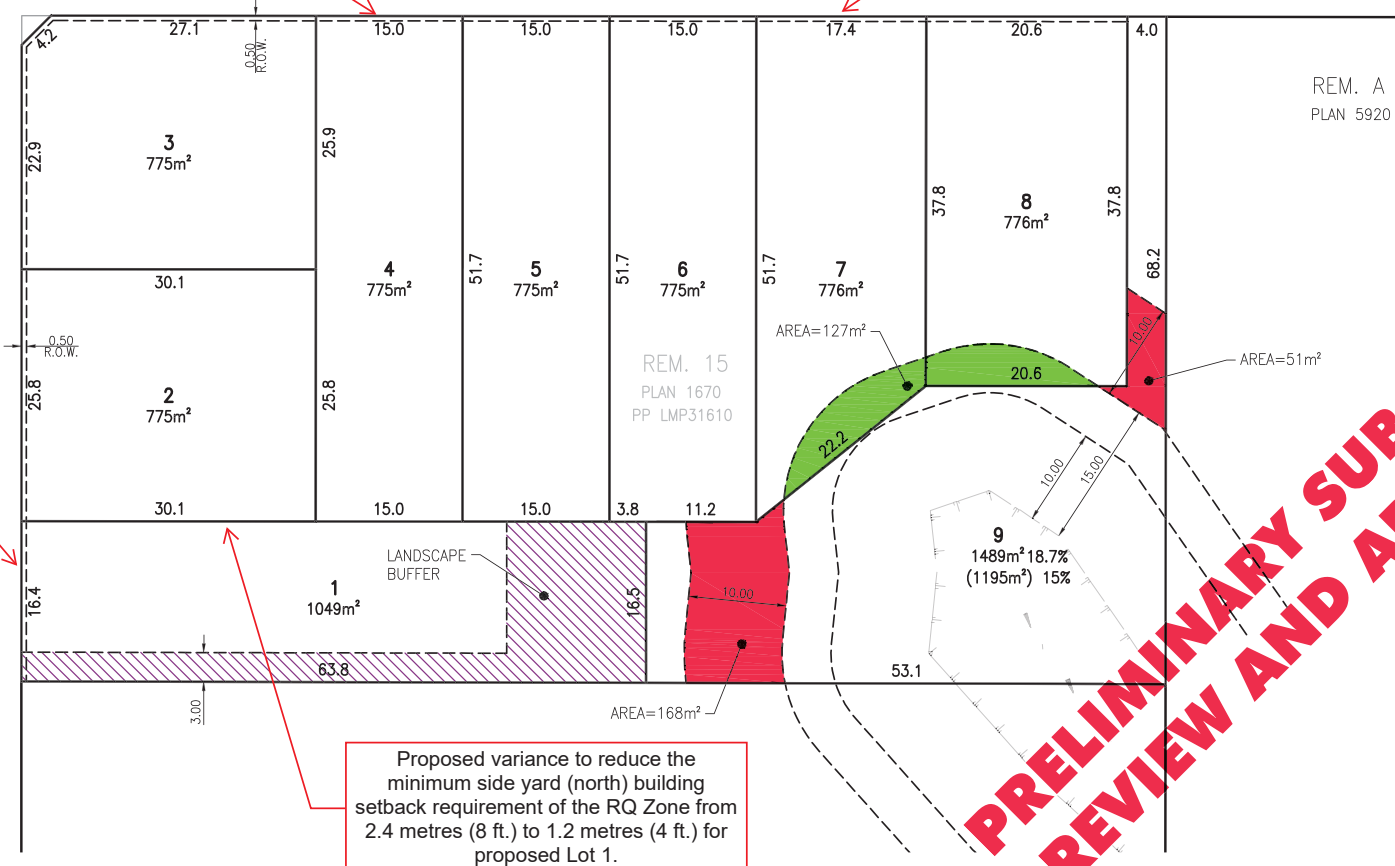
Proposed variance to reduce the minimum lot width requirement of the RQ Zone from 20 metres (66 ft.) to 17 metres (56 ft.) for proposed Lot 7.

Proposed variance to reduce the minimum lot width requirement of the RQ Zone from 20 metres (66 ft.) to 16 metres (53 ft.) for proposed Lot 1.

Proposed variance to reduce the minimum side yard (north) building setback requirement of the RQ Zone from 2.4 metres (8 ft.) to 1.2 metres (4 ft.) for proposed Lot 1.

161 STREET

102 AVENUE



PRELIMINARY SUBJECT TO REVIEW AND APPROVAL

G:\Projects\18010\18010_HUB_Drawings\Layouts\Lot_Layout - 11x17 - 4/23/2019 2:32PM

CLIENT:	PROJECT: 10184 161 STREET, SURREY		
DRAWING TITLE:	RESIDENTIAL SUBDIVISION		
PROJECT No:	18010	DATE:	APR 2018
LEGAL:		SCALE:	1:500
PRELIMINARY PLAN - SUBJECT TO APPROVAL(S) FROM FEDERAL, PROVINCIAL AND LOCAL AUTHORITIES		MUNICIPAL PROJECT No:	

Hub Engineering Inc.
 Engineering and Development Consultants
 Member PACIFIC LAND GROUP
 Suite 212, 12992 - 76 Avenue, Surrey, B.C. V3W 2V6
 tel: 604-572-4328 | fax: 604-501-1625 | mail@hub-inc.com | www.hub-inc.com