

RECOMMENDATION SUMMARY

- By-law Introduction and set date for Public Hearing for Rezoning.

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- None.

RATIONALE OF RECOMMENDATION

- The proposed rezoning and subdivision is consistent with the established land use pattern in the area, and complies with the Farming Protection Development Permit guidelines in the OCP.
- The proposed subdivision will enhance the ALR buffer along this portion of Greenway Drive with the dedication of parkland at the northeast corner of the subject site.
- Complies with the Suburban designation in the Official Community Plan (OCP) for sites within 200 metres (650 ft.) of the Agricultural Land Reserve (ALR) and beyond 200 metres (650 ft.) of the ALR.
- Complies with Policy O-23: Residential Buffering Adjacent to the ALR/Agricultural Boundary.

RECOMMENDATION

The Planning & Development Department recommends that:

1. a By-law be introduced to rezone the subject site from “General Agriculture Zone (A-1)” 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) 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) submission of a finalized tree survey and a statement regarding tree preservation to the satisfaction of the City Landscape Architect;
 - (d) 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;
 - (e) demolition of existing buildings and structures to the satisfaction of the Planning and Development Department; and
 - (f) the applicant satisfy the deficiency in tree replacement on the site, to the satisfaction of the Planning and Development Department.

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:**

7 Elementary students at Coat Meridian Elementary School
3 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 2017.

Parks, Recreation & Culture:

Parks have some concerns about the pressure this project will place on existing Parks, Recreation and Culture facilities in the neighbourhood. The applicant will be required to address these concerns prior to final adoption of the rezoning by-law.

Agricultural and Food Security Advisory Committee (AFSAC):

When considered at the March 3, 2016 AFSAC meeting, AFSAC expressed support for the proposal (Appendix V).

SITE CHARACTERISTICS

Existing Land Use: 5-acre treed agricultural lot, with single family dwelling to be demolished

Adjacent Area:

Direction	Existing Use	OCP Designation	Existing Zone
North (Across Greenway Drive):	Charles Richardson Nature Reserve Park.	Agricultural	A-1
East:	Single family dwellings on small suburban lots.	Suburban	CD (By-law No. 15407B)
South:	Single family dwellings on small suburban lots, and single family dwelling on 5-acre lot	Suburban	CD (By-law No. 15131) and A-1
West (Across Greenway Drive):	Single family dwellings on small suburban lots.	Suburban	RH-G

DEVELOPMENT CONSIDERATIONS

- The subject site is 2 hectares (5 acres) in size and is located at the south-east corner of Greenway Drive and 171 Street in Fleetwood.
- The subject site is designated Suburban under the Official Community Plan (OCP) and is zoned "General Agriculture Zone (A-1)".
- The immediate surrounding neighbourhood is generally characterized by RH-G lots or RH-G type lots (zoned "Comprehensive Development Zone (CD)").
- The applicant proposes rezoning the site from "General Agriculture (A-1)" to "Comprehensive Development Zone (CD)" based on the "Half-Acre Residential Gross Density Zone (RH-G)", in order to permit subdivision into thirteen (13) small suburban residential lots and one park lot.
- The proposed lots range in width from 18.5 metres (61 ft.) to 33.7 metres (111 ft.), in depth from 30 metres (98 ft.) to 60 metres (197 ft.), and in area from 930 square metres (10,010 sq. ft.) to 1,326 sq.m. (14,273 sq. ft.).

- The applicant proposes 4 lots fronting Greenway Drive, and the remaining 9 lots fronting the new proposed 171 Street, which the applicant will be required to construct to the Neo-traditional Through Local Road standard.
- A 3,031-square metre (3/4 acre) park lot is proposed at the northeast portion of the site, which is intended to be conveyed to the City and will act as a natural buffer between the residential lots and the Agricultural Land Reserve (ALR) / Charles Richardson Nature Reserve Park.
- The proposal complies with the OCP density requirements for the Suburban designation. For the 1.36-hectare (3.4-ac.) portion within 200 metres (656 ft.) of the ALR edge, densities up to a maximum of 5 units per hectare (2 u.p.a.) are permitted. The applicant's proposed density for this portion is approximately 5 units per hectare (2 u.p.a.). For the 0.66-hectare (1.6-ac.) portion beyond 200 metres (656 ft.) of the ALR edge, densities within the Suburban designation may range up to a maximum of 10 units per hectare (4 u.p.a.). The applicant's proposed density for this portion is approximately 7 units per hectare (2.7 u.p.a.). In addition, the applicant's proposed density as averaged over the entire site is 6.5 units per hectare (3 u.p.a), or 13 units.
- The project was referred to the Agricultural and Food Security Advisory Committee (AFSAC) on March 3, 2106. AFSAC recommended support to the General Manager of Planning and Development (Appendix V).
- The proposed layout is consistent with the concept plan presented to Council in 2004 as part of Development Application No. 7903-0442-00, however the applicant is now proposing 171 Street to be a through road instead of a cul-de-sac (Appendix VI).

Proposed CD By-law (Appendix IX)

- The proposed CD By-law is based on the requirements of the "Half-Acre Residential Gross Density Zone (RH-G)" with modifications to lot size, floor area ratio (FAR), lot coverage, lot width and setbacks.
- The proposed CD By-law sets out specific requirements for proposed Lots 1, 2, 12 and 13 (Block A), proposed Lots 3, 4, and 5 (Block B₁), proposed Lots 8 through 11 (Block B), and proposed Lots 6 and 7 (Block C).
- The table below provides a comparison of the proposed CD By-law and the RH-G Zone:

	RH-G Zone	Proposed CD By-law
Density	5 units per hectare (2 u.p.a.)	6.5 units per hectare (3 u.p.a.)
Floor Area Ratio	0.32	<u>Blocks A and C</u> 0.38 FAR, with cap at 358 sq.m. (3,853 sq.ft.) <u>Blocks B and B₁</u> 0.32

	RH-G Zone	Proposed CD By-law
Lot Coverage	25%	<u>Blocks A and C</u> 28%
		<u>Blocks B and B₁</u> 25%
Principal Building Setbacks	Front: 7.5 m (25 ft.) Rear: 7.5 m (25 ft.) Side: 3.0 m (10 ft.) Flanking Side: 7.5 m (25 ft.)	<u>Blocks A and B</u> Front Yard: 7.5 m (25 ft.) Rear: 7.5 m (25 ft.) Side: 3.0 m. (10 ft.) Flanking side: 7.5 m. (25 ft.)
		<u>Block B₁</u> Front Yard: 7.5 m (25 ft.) Rear: 10.0 m (33 ft.) Side: 3.0 m. (10 ft.) Flanking side: 7.5 m. (25 ft.)
		<u>Block C</u> Front Yard: 7.5 m (25 ft.) Rear: 10.0 m (33 ft.) Side: 3.0 m. (10 ft.) Flanking side: 5.5 m (18 ft.)
Subdivision	Lot Area: 1,120 sq.m. / 1,300 sq.m. Lot Width: 30 m / 24 m Lot Depth: 30 m	<u>Blocks A and C</u> Lot Area: 930 sq. m. (10,010 sq. ft.) Lot Width: 18.5 m (61 ft.) Lot Depth: 30 m (98 ft.)
		<u>Blocks B and B₁</u> Lot Area: 1,120 sq.m. (12,056 sq. ft.) Lot Width: 18.5 m (61 ft.) Lot Depth: 30 m (98 ft.)

- The proposed CD By-law requires a minimum 15% open space dedication, the same as the RH-G Zone.
- The minimum lot area for Blocks A and C is 930 square metres (10,010 sq.ft.) which is modestly less than the RH-G Zone minimum of 1,120 square metres (12,056 sq.ft.). The minimum lot area in Block B is 1,120 square metres (12,056 sq.ft.).
- The floor area ratio (FAR) and lot coverage has been increased in Blocks A and C from 0.32 to 0.38 FAR and from 25% to 28% lot coverage to accommodate a comparable house size and massing as in the RH-G Zone on the smaller 930 square metre (10,010 sq.ft.) lots, which a maximum house size of 358 square metres (3,853 sq.ft.).
- The minimum lot width of 18.5 metres (61 ft.) is less than the 24-metre (79-ft.) width required in the RH-G Zone.
- The rear yard setback has been increased from 7.5 metres (25 ft.) in the RH-G Zone to 10.0 metres (33 ft.) in Block B₁ and C, to improve the interface with the existing lots to the southwest. This was suggested by the applicant upon consultation with the Fleetwood Community Association.

- The side yard on flanking street setback has been reduced from 7.5 metres (25 ft.) in the RH-G Zone to 5.5 metres (18 ft.) to reflect the narrower lot width, but only in Block C, and only applicable to proposed Lot 7.

Building Scheme and Lot Grading

- The applicant retained Tynan Consulting Ltd. as the Design Consultant. The Design Consultant conducted a character study of the surrounding homes and based on the findings, proposed a set of building design guidelines. The guidelines will ensure that the new homes are constructed to a high architectural standard for executive estate subdivisions.
- A summary of the proposed building design guidelines is attached as Appendix VII.
- A preliminary lot grading plan, submitted by WSP Engineering, has been reviewed by staff and found to be generally acceptable.
- The applicant proposes in-ground basements on all lots. The feasibility of in-ground basements will be confirmed once the City's Engineering Department has reviewed and accepted the applicant's final engineering drawings.

Development Permit for Farm Protection

- The OCP requires that all development within 50 metres (164 ft.) of the ALR obtain a Development Permit for farming protection and conform to specific guidelines, prior to subdivision of the site. The Development Permit is required to reduce agricultural-urban conflicts through increased setbacks and vegetated buffering.
- The applicant conforms to the Development Permit guidelines for Farming Protection through the conveyance of a 3,031-square metre (3/4 acre) park at the northeast portion of the site. The park will act as a natural buffer between the residential lots and the ALR / Charles Richardson Nature Reserve Park and therefore a Development Permit for increased setbacks and buffering on the proposed lots is not necessary.

PRE-NOTIFICATION

Pre-notification letters were sent on January 12, 2016 and staff received six (6) responses as summarized below (*staff comments in italics*):

- Five (5) residents expressed concern that the proposed development will result in more traffic, and will put more pressure on Greenway Drive and 172 Street, which already have issues with speeding. Traffic calming measures are needed, as well as sidewalks along Greenway Drive and 172 Street to increase pedestrian safety. Two residents prefer a cul-de-sac on 171 Street, instead of the proposed through road, as it will help to reduce traffic.

(Staff have previously received a traffic calming request along this section of Greenway Drive in 2010. A traffic speed survey was conducted at the time and found that the 85th percentile speed was 50 kilometres per hour, which is the speed limit of this roadway. Therefore, traffic calming measures were not warranted. No traffic calming requests have been received for 172 Street to date. Engineering staff will follow up with the resident with information regarding traffic calming requests along 172 Street.)

The south side of Greenway Drive will be constructed as part of this application, and the sidewalk will be extended from the 17000 block to 86A Avenue.

The development application is consistent with the road network established by previous applications in the area. Having through local roads will allow future residential traffic volume generated by this application to distribute onto existing roads, while cul-de-sac(s) will burden one particular existing road.)

- Four (4) residents expressed concern that the lot sizes and density are not consistent with the existing lots in the area.

(The surrounding area is designated Suburban in the OCP and is generally zoned RH-G and CD (based on RH-G). The OCP permits a maximum density of 5 units per hectare (2 u.p.a.) for areas within 200 metres (656 ft.) of the ALR and 10 units per hectare (4 u.p.a.) for areas beyond 200 metres (656 ft.) of the ALR. The applicant's proposed density is approximately 5 units per hectare (2 u.p.a.) for the portion of the subject site within 200 metres (656 ft.) of the ALR and approximately 7 units per hectare (2.7 u.p.a.) for the portion of the subject site beyond 200 metres (656 ft.) of the ALR, and therefore consistent with the OCP. In addition, the applicant's proposed density as averaged over the entire site is 6.5 units per hectare (2.6 u.p.a.).

The proposed range of lots sizes between 930 square metres (10,010 sq. ft.) and 1,364 square metres (14,682 sq. ft.) is compatible with existing lots in the area.

The proposed floor area ratio in the proposed CD By-law will facilitate similar house sizes as an RH-G-zoned neighbourhood. As such, the streetscape will be comparable to an RH-G-zoned neighbourhood.)

- One (1) resident expressed concern that the proposed houses will have secondary suites and that the suites will exacerbate parking issues in the neighbourhood.

(Since December 2010, the Zoning By-law permits one secondary suite in all single family homes. Although the older CD Zones do not currently include secondary suites, staff are working towards addressing this as per Corporate Report No. R240; 2010.

The proposed zoning allow for two parking spaces in the attached garage, and three parking spaces in the driveway. All roadways within the neighbourhood will ultimately allow for on-street parking on both sides of the road.)

- One (1) resident requested that the proposed park remain as natural as possible, with passive uses such as trails and benches. Active uses such as a skate park are not desirable and do not fit with the neighbourhood.

(The new parkland will be in keeping with the existing parkland in the area with natural enhancements and tree planting. There are no plans for formal trails or seating in the new park, aside from the sidewalk along Greenway Drive.)

TREES

- Nick McMahon, ISA Certified Arborist of Arbortech 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 / Cottonwood	10	10	0
Deciduous Trees (excluding Alder and Cottonwood Trees)			
Apple	5	5	0
Bay Laurel	6	6	0
Bigleaf Maple	3	3	0
Flowering Cherry	1	0	1
Green Ash	1	1	0
Coniferous Trees			
Austrian Pine	1	1	0
Douglas-Fir	3	3	0
English Holly	1	1	0
Giant Sequoia	1	0	1
Norway Spruce	1	0	1
Western Red Cedar	6	5	1
Total (excluding Alder and Cottonwood Trees)	29	25	4
Additional Trees in the proposed Open Space	7	1	6
Total Replacement Trees Proposed (excluding Boulevard Street Trees)			
		60	
Total Retained and Replacement Trees			
		64	
Contribution to the Green City Fund			
		N/A	

- The Arborist Assessment states that there are a total of 29 mature trees on the site, excluding Alder and Cottonwood trees as well as the proposed open space area. Ten (10) existing trees, approximately 26 % of the total trees on the site, are Alder and Cottonwood trees. It was determined that 4 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 7 mature trees that are located within the proposed open space area. The trees within the proposed open space 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 60 replacement trees on the site. The applicant is proposing 60 replacement trees, meeting City requirements.
- In summary, a total of 64 trees are proposed to be retained or replaced on the site excluding the proposed open space area, with no contribution to the Green City Fund required.

SUSTAINABLE DEVELOPMENT CHECKLIST

The applicant prepared and submitted a sustainable development checklist for the subject site on November 26, 2015. 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 proposed development is consistent with the Suburban designation in the OCP.
2. Density & Diversity (B1-B7)	<ul style="list-style-type: none"> • The proposed development is within the allowable density for suburban lots. • One secondary suite will be permitted in each future home.
3. Ecology & Stewardship (C1-C4)	<ul style="list-style-type: none"> • 15% parkland will be dedicated on the northernmost portion of the lot.
4. Sustainable Transport & Mobility (D1-D2)	<ul style="list-style-type: none"> • N/A
5. Accessibility & Safety (E1-E3)	<ul style="list-style-type: none"> • N/A
6. Green Certification (F1)	<ul style="list-style-type: none"> • N/A
7. Education & Awareness (G1-G4)	<ul style="list-style-type: none"> • Pre-notification letters were mailed to area residents and a development proposal sign was installed on site.

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I.	Lot Owners, Action Summary and Project Data Sheets
Appendix II.	Proposed Subdivision Layout
Appendix III.	Engineering Summary
Appendix IV.	School District Comments
Appendix V.	Agricultural and Food Security Advisory Committee Minutes
Appendix VI.	Concept Plan for 7903-0442-00
Appendix VII.	Building Design Guidelines Summary
Appendix VIII.	Summary of Tree Survey and Tree Preservation
Appendix IX.	Proposed CD By-law

original signed by Judith Robertson

Jean Lamontagne
General Manager
Planning and Development

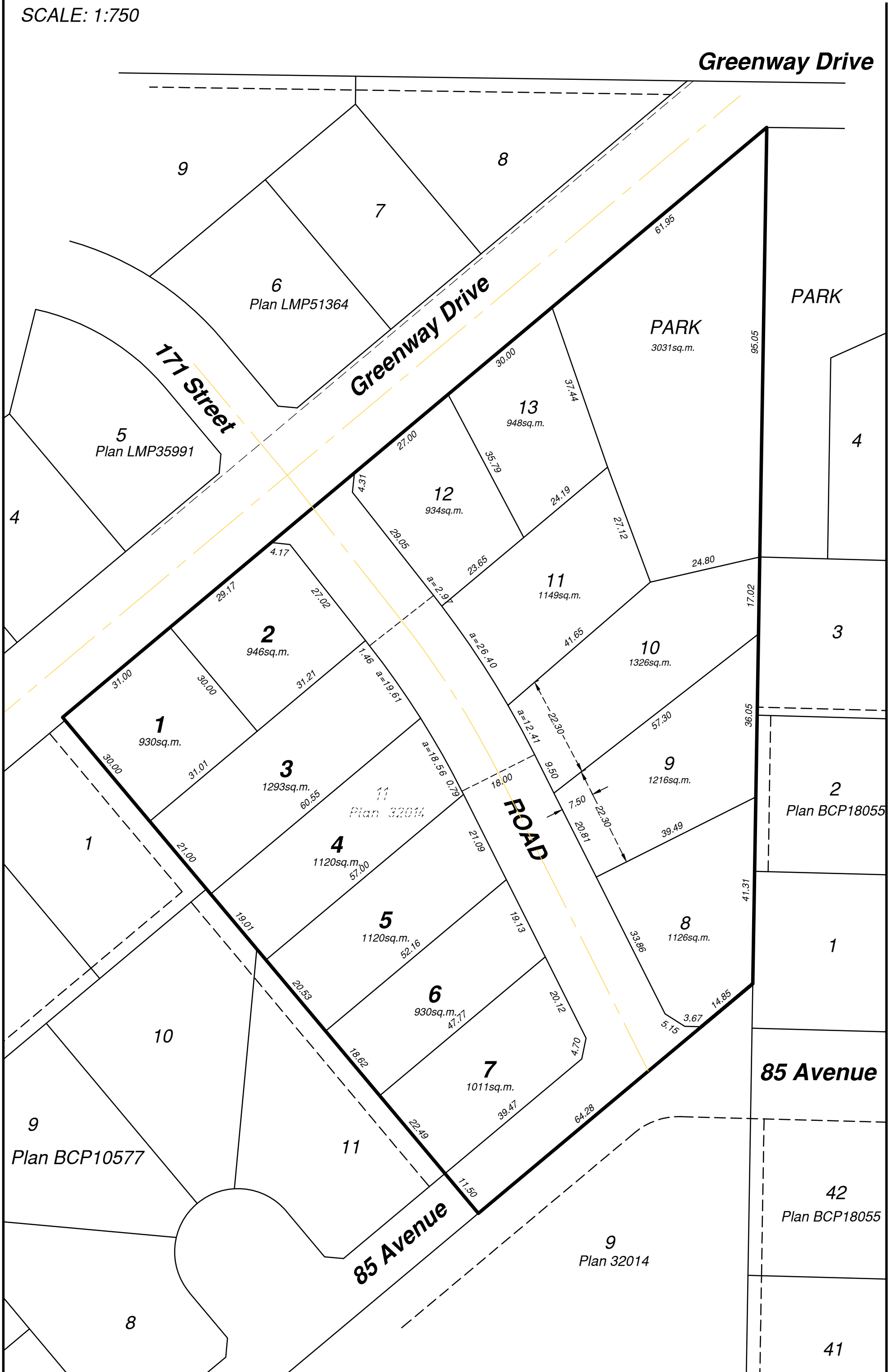
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SUBDIVISION DATA SHEET

Proposed Zoning: CD (based on RH-G)

Requires Project Data	Proposed
GROSS SITE AREA	
Acres	5.0 acres
Hectares	2.0 hectares
NUMBER OF LOTS	
Existing	1
Proposed	13 plus one open space lot
SIZE OF LOTS	
Range of lot widths (metres)	18.6 m. – 31 m.
Range of lot areas (square metres)	930 sq.m. – 1,326 sq.m.
DENSITY	
Lots/Hectare & Lots/Acre (Gross)	6.4 u.p.h. (3 u.p.a.)
Lots/Hectare & Lots/Acre (Net)	6.4 u.p.h. (3 u.p.a.)
SITE COVERAGE (in % of gross site area)	
Maximum Coverage of Principal & Accessory Building	31%
Estimated Road, Lane & Driveway Coverage	18.3%
Total Site Coverage	49.3%
PARKLAND	
Area (square metres)	3,031 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
Others	NO

27 JUNE 2016
SCALE: 1:750



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

FROM: **Development Project Engineer, Engineering Department**

DATE: **June 27, 2016** PROJECT FILE: **7815-0405-00**

RE: **Engineering Requirements
Location: 17056 Greenway Drive**

REZONE/SUBDIVISION

Property and Right-of-Way Requirements

- Dedicate 18.0 m for 171 Street for the 18.0 m Local Road allowance;
- Dedicate 11.5 m for 85A Avenue towards the 18.0 m Local Road allowance;
- Dedicate 3.0 m x 3.0 m corner cuts at the intersections; and
- Provide 0.5 m statutory rights-of-way along the road frontages for maintenance access;

Works and Services

- Construct south side of Greenway Drive to Through Local standard;
- Construct 171 Street to Through Local standard;
- Construct north side of 85 Avenue to Half Road standard;
- Construct storm main, sanitary main and water main on 171 Street and 85 Avenue;
- Complete development coordinated works; and
- Register restrictive covenant for on-site detention, if applicable.

A Servicing Agreement is required prior to Rezoning and Subdivision.



Robert Cooke, Eng.L.
Development Project Engineer

HB



Wednesday, February 03, 2016
 Planning

THE IMPACT ON SCHOOLS

APPLICATION #: 15 0405 00

SUMMARY

The proposed 13 Single family with suites are estimated to have the following impact on the following schools:

Projected # of students for this development:

Elementary Students:	7
Secondary Students:	3

September 2015 Enrolment/School Capacity

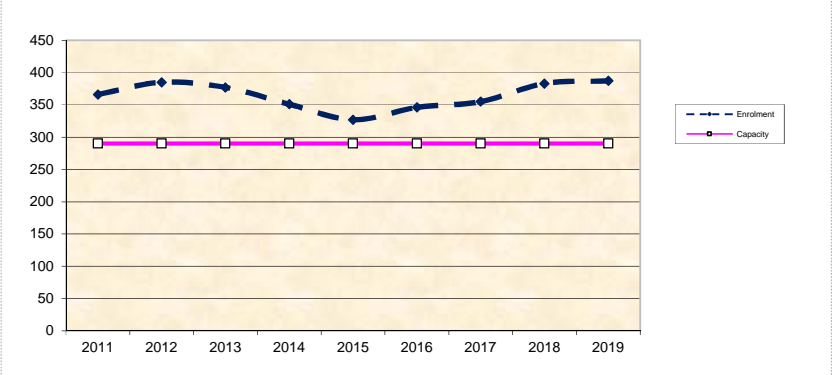
Coast Meridian Elementary	
Enrolment (K/1-7):	25 K + 302
Capacity (K/1-7):	40 K + 250
North Surrey Secondary	
Enrolment (8-12):	1371
Nominal Capacity (8-12):	1175
Functional Capacity*(8-12):	1269

School Enrolment Projections and Planning Update:

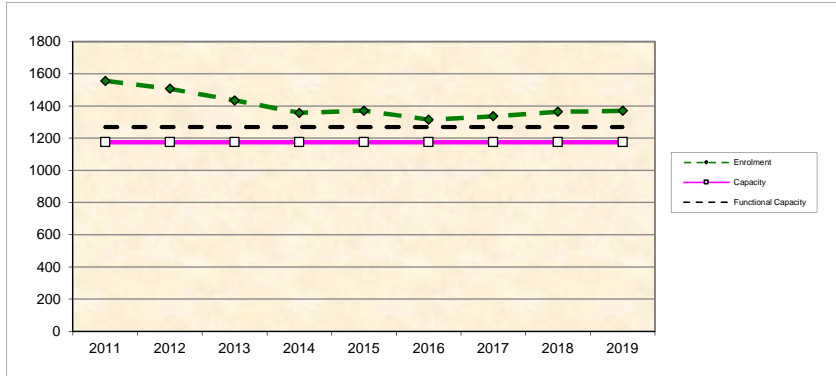
The following tables illustrate the enrolment projections (with current/approved ministry capacity) for the elementary and secondary schools serving the proposed development.

There are currently no new capital space projects proposed at Coast Meridian Elementary and no new capital projects identified for North Surrey Secondary. The school district is in the design phase of planning for a new North Clayton secondary school on site 215 which, when completed, will reduce existing and projected overcrowding at Lord Tweedsmuir Secondary, North Surrey Secondary and Clayton Heights Secondary. The subject development will not have an impact on these projections.

Coast Meridian Elementary



North Surrey Secondary



*Functional Capacity at secondary schools is based on space utilization estimate of 27 students per instructional space. The number of instructional spaces is estimated by dividing nominal facility capacity (Ministry capacity) by 25.

D. NEW BUSINESS**2. Subdivision of 17056 Greenway Drive**

Stephanie Long, Planner

File: 6880-75; 7915-0405-00

The following comments were made:

- The applicant proposes to rezone from A-1 to CD and subdivide into 13 lots, plus a 3,031 square metre (3/4 acre) park lot. A through-road is proposed for the extension of 171 Street to 85 Avenue.
- The site is located across from the Charles Richardson Nature Reserve and is within 50 metres of the Agriculture Land Reserve (ALR) and requires a Farm Protection Development Permit

It was

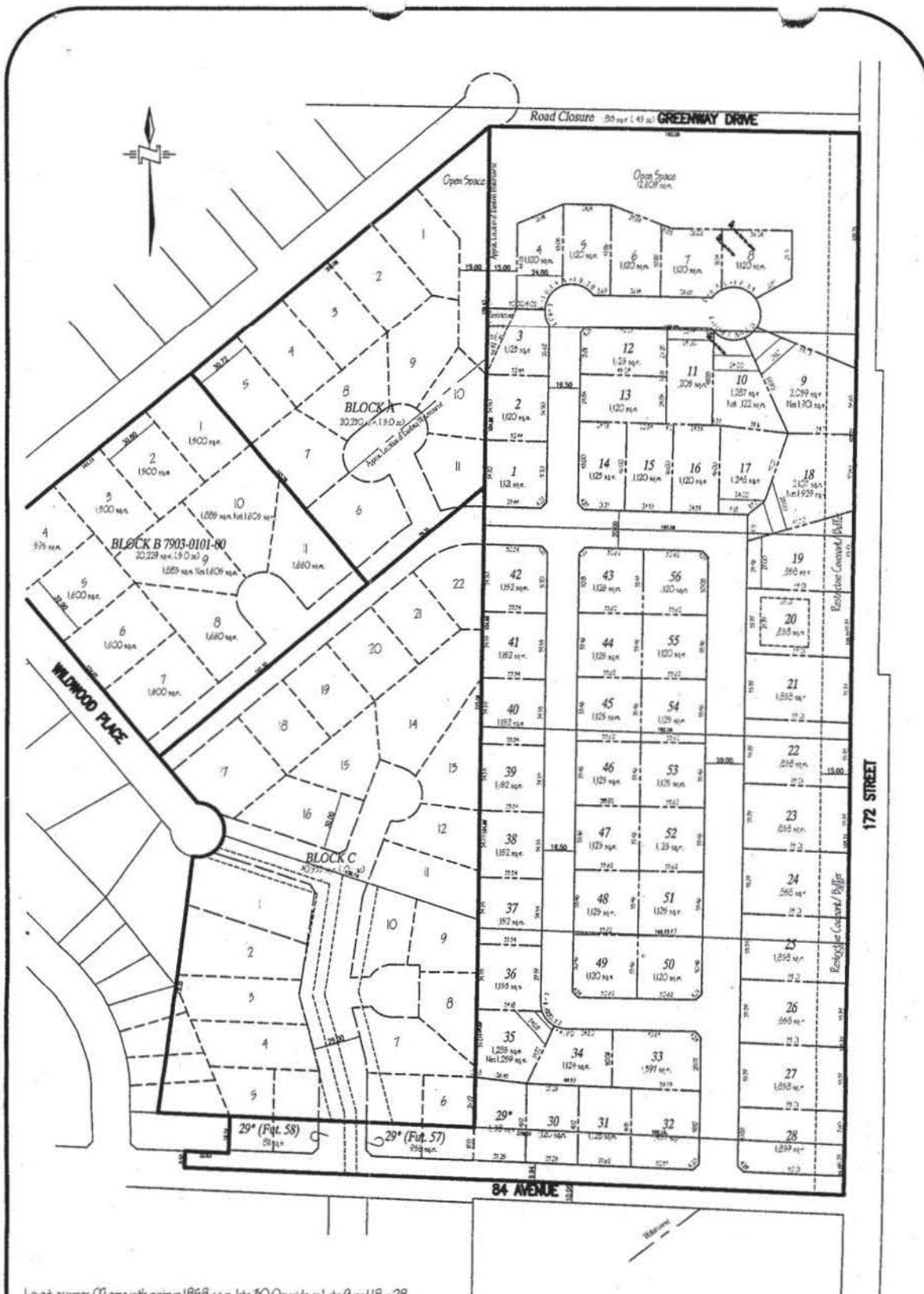
Moved by S. VanKeulen

Seconded by D. Arnold

That the Agriculture and Food Security

Advisory Committee recommend to the General Manager of Planning and Development that the Committee accept the proposal of the zoning and subdivision of 17056 Greenway Drive.

Carried



Layout assumes C1 zone with minimum 1856 sq.m. lots 30.0m wide on Lots 9 and 15 - 28.
 Other Lots minimum 1120 sq.m. lots 24.0m wide 30.0m deep.
 Total Area approx. 109,852 sq.m. (27.14 ac)
 Open Space shown is approx. 12,609 (11.5%)
 Density shown with 98 future lots is 5.28 units/ha or 2.13 u/sa.
 Survey and environmental review of watercourses and setbacks required.

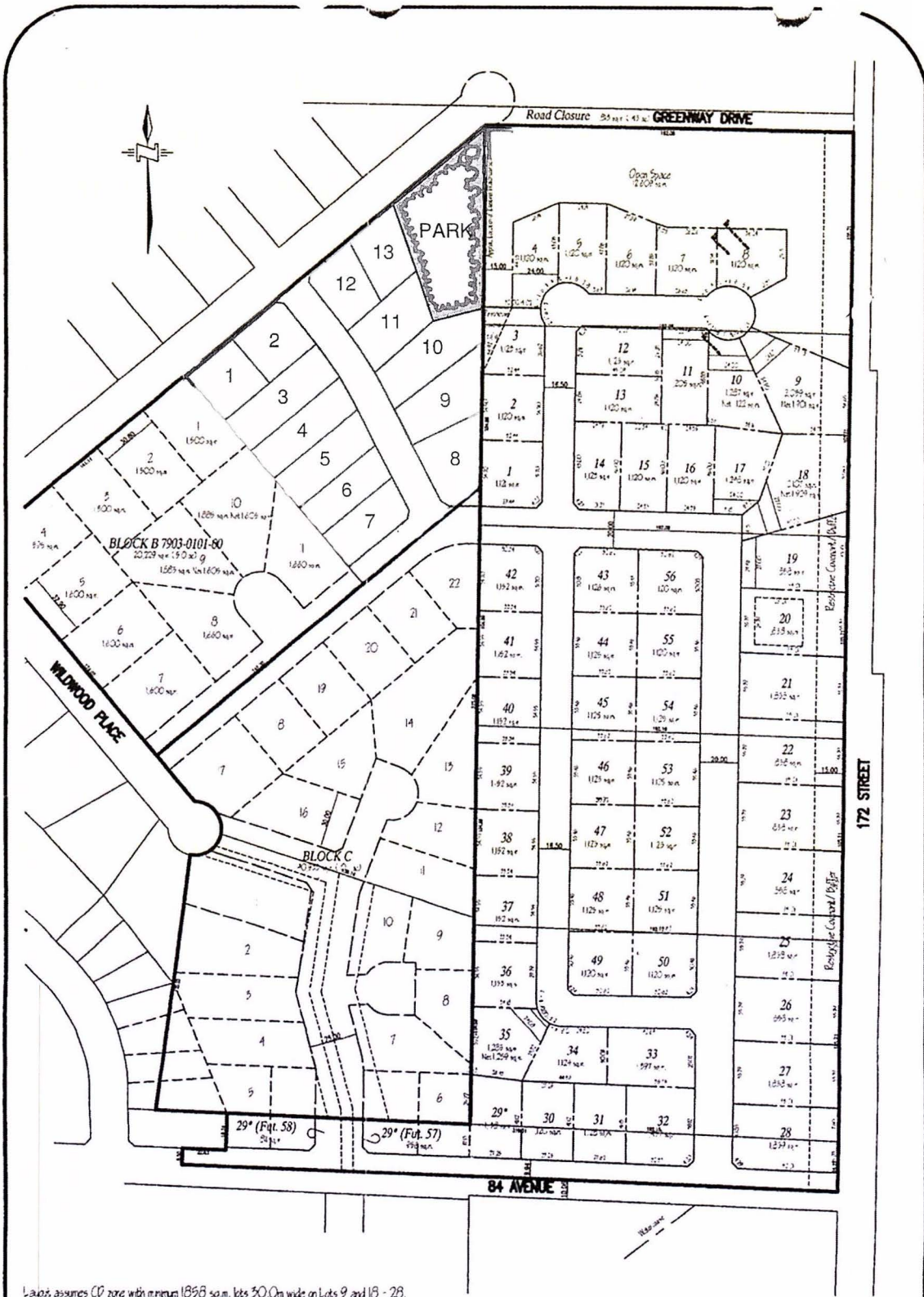
NOTES:

- PRELIMINARY LAYOUT ONLY, SUBJECT TO APPROVAL.
- AREAS AND DIMENSIONS ARE SUBJECT TO DETAILED SURVEY AND CALCULATION, AND MAY VARY.
- NOT TO BE USED FOR LEGAL TRANSACTIONS.

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 FAX (604) 596-8853

Sketch 13
 April 29 '04
 Revised May 31 '04

Scale: 1:2000
 Date: Sept. '03
 Drawn: 2111-02084



Layout assumes CD zone with minimum 1896 sq.m. lots 30.0m wide on Lots 9 and 18 - 28.
 Other Lots minimum 1120 sq.m. lots 24.0m wide 30.0m deep.
 Total Area approx. 109,832 sq.m. (2714 ac.)
 Open Space shown is approx. 12,609 (11.5%)
 Density shown with 58 future lots is 5.28 units/ha or 2.15 u/a.
 Survey and environmental review of watercourses and setbacks required.

NOTES:

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Sketch 13
 April 29 '04
 Revised May 31 '04

Scale: 1:2000
 Date: Sept. '03
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BUILDING GUIDELINES SUMMARY

Surrey Project no: 7915-0405-00
 Project Location: 17056 - Greenway Drive, Surrey, B.C.
 Design Consultant: Tynan Consulting Ltd., (Michael E. Tynan)

The draft Building Scheme proposed for this Project has been filed 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:

This area has a desirable, high quality suburban estate character, featuring large (3500 sq.ft and larger) "Traditional" and "Neo-Traditional" style Two Storey type homes with attractive, architecturally interesting massing designs and high quality exterior cladding and detailing elements. The homes are situated on half acre and half acre gross density lots landscaped to a high modern suburban standard. Overall, the homes provide desirable architectural and landscaping context for the subject site.

This relatively new growth area was built out over a time period spanning from the late 1990's to the early year 2000's. A majority of homes have floor area exceeding 3500 sq.ft. Home size distribution is: 2501 - 3000 sq.ft. (13%), 3001 - 3550 sq.ft. (20%), and over 3550 sq.ft. (67%). Styles found in this area include: "West Coast Traditional" (7%), "Craftsman Heritage" (13%), "Neo-Heritage" (7%), "Traditional English" (13%), and "Neo-Traditional" (60%). Home types include: 1 ½ Storey (7%), Two-Storey (93%).

Massing scale (front wall exposure) characteristics include: Low to mid-scale massing (13%), Mid-scale massing (7%), Mid-scale massing with proportionally consistent, well balanced massing design (47%), Mid to high scale massing (13%), and Mid-to-high scale massing with proportionally consistent, well balanced massing design (20%). The scale (height) range for front entrance structures include: One storey front entrance (40%), One storey front entrance veranda in heritage tradition (13%), 1 ½ storey front entrance (33%), and proportionally exaggerated 1 ½ storey high front entrance (non context) (13%).

The range of roof slopes found in this area is: 6:12 (5%), 7:12 (11%), 8:12 (21%), 9:12 (16%), 12:12 (26%), and greater than 12:12 (21%). Main roof forms (largest upper floor truss spans) include: main common hip roof (73%), and main common gable roof (27%). Feature roof projection types include: Common Hip (20%), Common Gable (70%), Dutch Hip (5%), and Carousel Hip (5%). Roof surfaces include: Shake profile asphalt shingles (27%), Concrete tile (shake profile) (67%), Cedar shingles (7%).

Main wall cladding materials include: Horizontal cedar siding (27%), Vertical Board and Batten cedar siding (7%), Horizontal vinyl siding (13%), and Stucco cladding (53%). Feature wall trim materials used on the front facade include: No feature veneer (4%), Brick feature veneer (13%), Stone feature veneer (50%), Wood wall shingles accent (13%), Vertical board and batten cedar accent (8%), and Tudor style battens over stucco accent (13%). Wall cladding and trim colours include: Neutral (26%), Natural (65%), and Primary derivative (9%).

Covered parking configurations include: Double garage (27%), and Triple garage (73%).

A variety of landscaping standards are evident, ranging from an average modern suburban landscape standard to an extraordinary suburban-estate landscape standard (13%). Driveway surfaces include: Broom finish or smooth concrete (19%), Exposed aggregate (69%), interlocking masonry pavers (13%).

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

- 1) **Context Homes:** 87 percent of existing neighbouring homes provide suitable architectural context for use at the subject site (and therefore 13 percent of homes are considered 'non-context'). Context homes include: 17005 - Greenway Drive, 17025 - Greenway Drive, 17045 - Greenway Drive, 17065 - Greenway Drive, 17105 - Greenway Drive, 17119 - Greenway Drive, 17038 - Greenway Drive, 17010 - Greenway Drive, 16998 - Greenway Drive, 17033 - 58A Avenue, 17045 - 58A Avenue, 17055 - 58A Avenue, and 17069 - 58A Avenue. These homes meet new massing design standards in which various projections on the front of the home are proportionally consistent with one another, are well balanced across the façade, are visually pleasing, and are architecturally interesting. These new homes provide an appropriate standard for future development in this area, and emulating the standards found on these homes will reinforce the desirable emerging trend. Therefore, new homes should be consistent in theme, representation and character with context homes identified above.
- 2) **Style Character :** Surrounding homes exhibit a suburban-estate style character, and architecturally interesting massing design. Styles suited for this objective include "Traditional" (including English Country, English Tudor, English Manor, Cape Cod and other sub-styles that impart a formal, stately character), Classical Heritage, Neo-Heritage, and estate quality manifestations of the Neo-Traditional style. Note that style range is not restricted in the building scheme. However, the consultant refers to the character study style recommendations when reviewing plans for meeting style-character intent.
- 3) **Home Types :** All surrounding homes are either Two-Storey type, or 1 ½ Storey type, and it is expected that all new homes constructed at the subject site will be one of these two types. However, home types (Two-Storey, Bungalow, Basement Entry, Split Level, etc..) are no longer regulated in the building scheme.
- 4) **Massing Designs :** Massing designs should meet new standards for suburban (RH and RH(G)) zoned subdivisions. New homes should exhibit "mid-scale" massing. Various elements and projections on the front of the home should be interesting architecturally, and should be in pleasing natural proportions to one another. These elements and projections should be located so as to create balance across the façade.
- 5) **Front Entrance Design :** Front entrance porticos range from one to 1 ½ storeys in height. The recommendation is to limit the range of entrance portico heights to between one storey and 1 ½ storeys to ensure there is not proportional overstatement of this one element.
- 6) **Exterior Wall Cladding :** This is an estate home area in which high value homes have been constructed with high quality cladding materials. Vinyl is a low cost utility cladding material that is well suited to areas where affordability is an objective. This is not the case here, as all lots and new homes will be of high value and estate quality. Vinyl therefore is not recommended, even though two estate sized homes in this area have vinyl siding.
- 7) **Roof surface :** A wide range of roof surfacing materials have been used in this area including cedar shingles, concrete roof tiles, and shake profile asphalt shingles. The roof surface is not a uniquely recognizable characteristic of this area and so flexibility in roof surface materials is warranted. The recommendation is to permit cedar shingles, shake profile concrete roof tiles, shake profile asphalt shingles with a raised ridge cap, and new environmentally sustainable roof products that have a strong shake profile.
- 8) **Roof Slope :** Roof slopes of 8:12 or higher have been used on context homes. This is a suitable minimum roof slope given the objectives of ensuring continuity with context homes and to ensure that homes appear style-authentic within the proposed style range.

Streetscape: This is a suburban estate area in which 15 - 20 year old "Traditional" and "Neo-Traditional" suburban estate sized (3500 sq.ft. plus) Two Storey type homes are situated on half acre and half acre gross density sized lots landscaped to standards ranging from average to extraordinary. The homes have well balanced, proportionally

consistent mid-scale massing designs that provide desirable context. Roof surface and wall cladding materials meet high modern standards and should also be used as context.

2. Proposed Design Guidelines

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

- the new homes are constructed to a high architectural standard, meeting or exceeding standards found in most executive-estate quality subdivisions in the City of Surrey. New homes are readily identifiable as one of the following styles: “Traditional” (including English Country, English Tudor, English Manor, Cape Cod and other sub-styles that impart a formal, stately character), Classical Heritage, Neo-Heritage, and estate quality manifestations of the Neo-Traditional style.
- a new single family dwelling *constructed* on any *lot* meets year 2000's design standards, which include the proportionally correct allotment of mass between various street facing elements, the overall balanced distribution of mass within the front facade, readily recognizable style-authentic design, and a high trim and detailing standard used specifically to reinforce the style objectives stated above.
- trim elements will include several of the following: furred out wood posts, articulated wood post bases, wood braces and brackets, louvered wood vents, bold wood window and door trim, highly detailed gable ends, wood dentil details, stone or brick feature accents, covered entrance verandas and other style-specific elements, all used to reinforce the style (i.e. not just decorative).
- the development is internally consistent in theme, representation, and character.
- the entrance element will be limited in height (relative dominance) to 1 to 1 ½ storeys.

2.2 Proposed Design Solutions:

Interfacing Treatment with existing dwellings)

Strong relationship with neighbouring “context homes” including 17005 - Greenway Drive, 17025 - Greenway Drive, 17045 - Greenway Drive, 17065 - Greenway Drive, 17105 - Greenway Drive, 17119 - Greenway Drive, 17038 - Greenway Drive, 17010 - Greenway Drive, 16998 - Greenway Drive, 17033 - 58A Avenue, 17045 - 58A Avenue, 17055 - 58A Avenue, and 17069 - 58A Avenue. Homes will be in a compatible style range (note however that style range is not specifically regulated in the building scheme). New homes will have similar or better massing designs (equal or lesser massing scale, consistent proportionality between various elements, and balance of volume across the façade). New homes will have similar roof types, roof slope and roofing materials. Wall cladding, feature veneers and trim treatments will meet or exceed standards found on the aforesaid context homes.

Exterior Materials/Colours:

Stucco, Cedar, Hardiplank, Brick, and Stone. Vinyl siding not permitted on exterior walls.

“Natural” colours such as browns, greens, clays, and other earth-tones, and “Neutral” colours such as grey, white, and cream are permitted. “Primary” colours in subdued tones such as navy blue and colonial red can be considered providing neutral trim colours are used, and a comprehensive colour scheme is approved by the consultant. “Warm” colours such as pink, rose, peach, salmon are not permitted. Trim colours: Shade variation of main colour, complementary, neutral, or subdued contrast only.

Roof Pitch: Minimum 8:12, with exceptions to prevent roof ridges from becoming too high (overshadowing of neighbouring lots), to allow for veranda roofs that do not cover upper floor windows, to allow for artistic expression in feature roofs, and to provide a path for exceptional designs with lower slope roofs to be approved subject to consultant approval.

Roof Materials/Colours: Cedar shingles, shake profile concrete roof tiles, shake profile asphalt shingles with a raised ridge cap, and new environmentally sustainable roofing products should be permitted, providing that the aesthetic properties of the new materials are equal to or better than that of the traditional roofing products. Greys, black, or browns only.

In-ground basements: Permitted, subject to determination that service invert locations are sufficiently below grade. Basements will appear underground from the front.

Treatment of Corner Lots: Significant, readily identifiable architectural features are provided on both the front and flanking street sides of the dwelling, resulting in a home that architecturally addresses both streets. One-storey elements on the new home shall comprise a minimum of 40 percent of the width of the front and flanking street elevations of the single family dwelling. The upper floor is set back a minimum of 0.9 metres [3'- 0"] from the one-storey elements.

Landscaping: *High modern suburban urban standard:* Tree planting as specified on Tree Replacement Plan plus minimum 40 shrubs of a minimum 3 gallon pot size. Corner lots shall have an additional 20 shrubs of a minimum 3 gallon pot size, planted in the flanking street sideyard. Sod from street to face of home. Driveways: exposed aggregate, interlocking masonry pavers, or stamped concrete.

Compliance Deposit: \$5,000.00

Summary prepared and submitted by: Tynan Consulting Ltd. **Date:** December 10, 2015

Reviewed and Approved by:  **Date:** December 10, 2015

TREE PRESERVATION SUMMARY

Surrey Project No.: 7915 0405 00
 Project Address: 17056 Greenway Drive, Surrey, BC
 Consulting Arborist: Nick McMahon

ON-SITE TREES:	QUANTITY OF TREES
Total Bylaw Protected Trees Identified (on-site and shared trees, including trees within boulevards and proposed streets and lanes, excluding Park and ESA dedications)	39
Bylaw Protected Trees to be Removed	35
Bylaw Protected Trees to be Retained (excludes trees in Park dedication areas and ESA's)	4
Replacement Trees Required:	
Alder and Cottonwood at 1:1 ratio: 10 times 1 = 10	
All Other Bylaw Protected Trees at 2:1 ratio: 25 times 2 = 50	
TOTAL:	60
Replacement Trees Proposed	60
Replacement Trees in Deficit	0
Protected Trees Retained in Proposed Open Space/ Riparian Areas	0

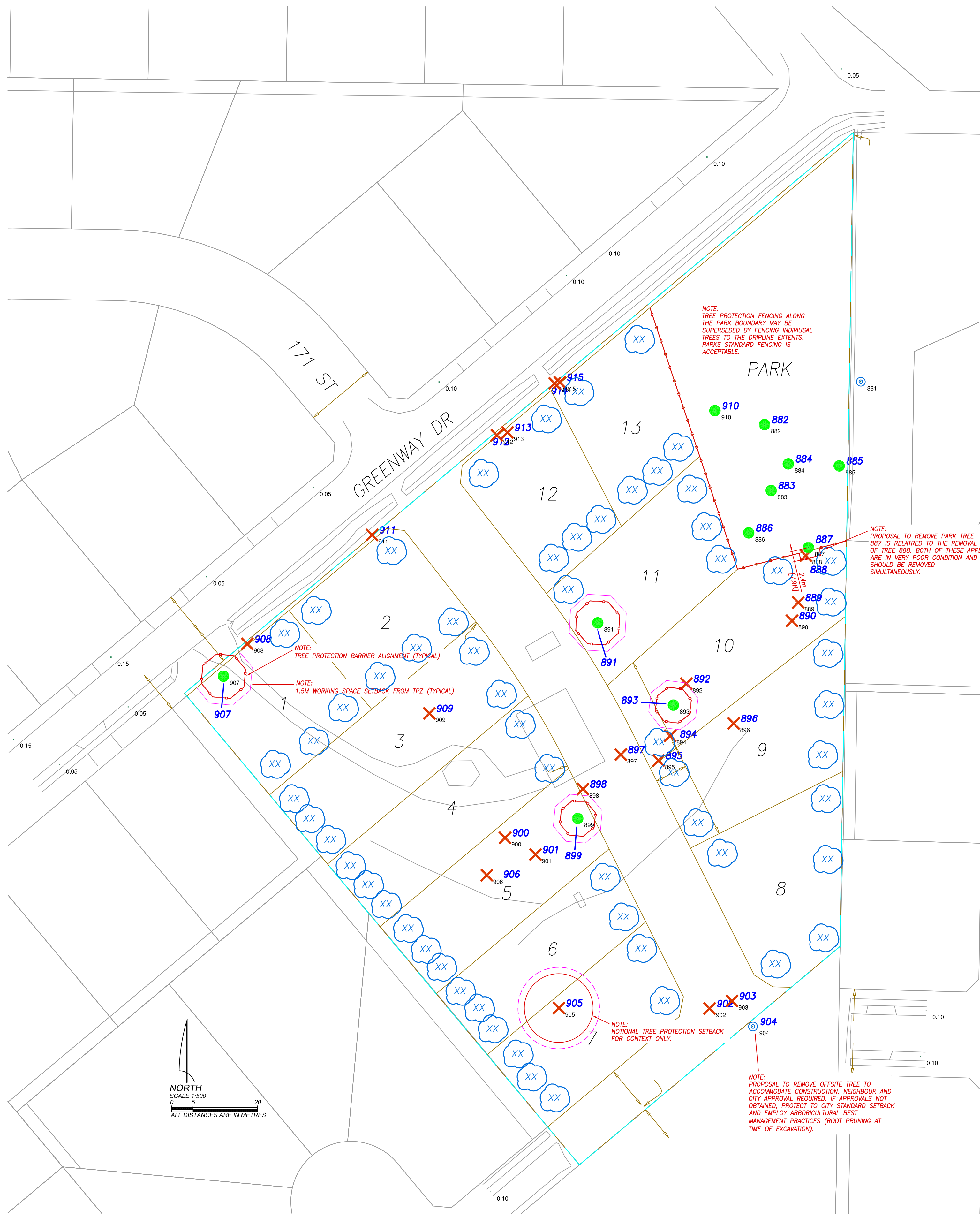
OFF-SITE TREES:	QUANTITY OF TREES
Bylaw Protected Off-Site Trees to be Removed	1
Replacement Trees Required:	
Alder and Cottonwood at 1:1 ratio: 0 times 1 = 0	
All Other Bylaw Protected Trees at 2:1 ratio: 1 times 2 = 2	
TOTAL:	2
Replacement Trees Proposed	0
Replacement Trees in Deficit	2

This summary and the referenced documents are prepared and submitted by:

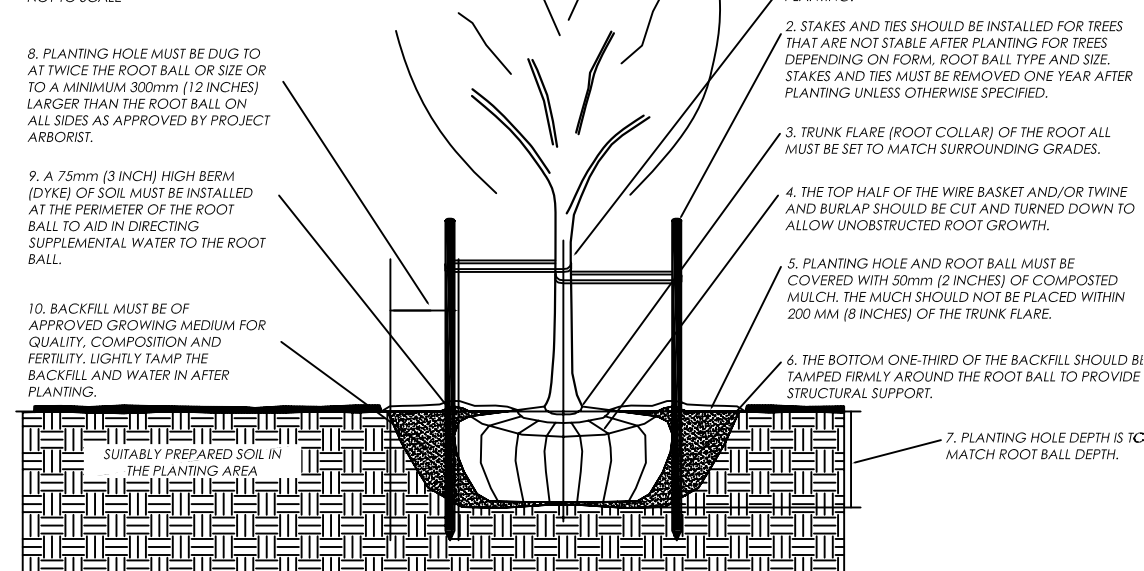


Nick McMahon, Consulting Arborist Dated: May 19, 2016

Direct: 604 812 2986
 Email: nick@aclgroup.ca



TREE PLANTING DETAIL



SUGGESTED PLANT LIST: REPLACEMENT TREES

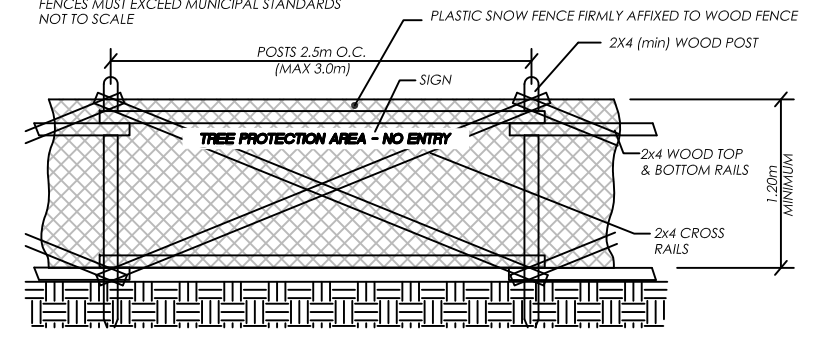
Please use botanical name when ordering. Size: H=height, DBH=diameter, R=radius, S=spread. Current arboricultural best management practices and BCSA/ARIMA standards apply to quality, root ball, health, form, handling, storage, and planting.

CODE	QTY	SIZE	BOTANICAL NAME	COMMON NAME
EVERGREEN - LARGE SCALE				
NL	50m	3.5m	Acer glaberrimus	Norway maple
AR	50m	3.5m	Acer rubrum	Red maple
AS	50m	3.5m	Acer saccharum	Sugar maple
CS	50m	3.5m	Carolina spruce	Western white pine
CI	50m	3.5m	Coniopholis perennans	Eastern white pine
FS	50m	3.5m	Fagus sylvatica	European beech
FP	50m	3.5m	Fraxinus pennsylvanica	White ash
IS	50m	3.5m	Quercus coccinea	Scarlet oak
OS	50m	3.5m	Quercus prinus	Pin oak
QU	50m	3.5m	Quercus rubra	Red oak
EVERGREEN - MEDIUM SCALE				
AG	50m	3.5m	Acer glaberrimus	Paperbark maple
AS	50m	3.5m	Acer saccharum	Bowling maple
ASB	50m	3.5m	Acer rubrum 'Red Sunset'	Red Sunset maple
AB	50m	3.5m	Acer fraxinifolium	Sweetbark maple
AR	50m	3.5m	Abies balsamea	Pacific redwood
CB	50m	3.5m	Carpinus betulus 'Fastigiata'	European hornbeam
CI	50m	3.5m	Coniopholis perennans	Southern white pine
CS	50m	3.5m	Carolinian spruce	Purple fir
SI	50m	3.5m	David's linden	Downy birch
FB	50m	3.5m	Fagus sylvatica 'Femina'	Weymouth European beech
FP	50m	3.5m	Fraxinus pennsylvanica	Kenya coffeeberry
MS	3.5m	3.5m	Magnolia soulangiana	Sweet magnolia
PT	50m	3.5m	Pinus taeda	Eastern white pine
PR	50m	3.5m	Prunus serotina 'Variegata'	Japanese flowering cherry
SP	50m	3.5m	Styrax japonicus	Japanese Stewartia
ZS	50m	3.5m	Zelkova serrata	Japanese zelkova
EVERGREEN - SMALL SCALE				
AP	50m	3.5m	Acer palmatum	Japanese maple
AU	50m	3.5m	Abies undulata	Swainson's tree
CC	50m	3.5m	Cercis canadensis	Redbud
CE	50m	3.5m	Cornus alba	Spice dogwood
CL	50m	3.5m	Catalpa x lewisii	Laville Hawthorne
MS	50m	3.5m	Magnolia soulangiana	Southern magnolia evergreen
MST	50m	3.5m	Magnolia stellata	Star magnolia
PAR	50m	3.5m	Prunus serrulata 'Kasho'	Sweet cherry
PI	50m	3.5m	Pinus yunnanensis	Yunnan white pine
SI	50m	3.5m	Styrax japonicus	Japanese snowbell
EVERGREEN - LARGE SCALE				
CD	50m	3.5m	Calodendrum decursum	California incense cedar
CA	50m	3.5m	Cedrus atlantica	Atlas cedar
CB	3.5m	3.5m	Cedrus brodiaei	Douglas cedar
ON	50m	3.5m	Chamaecyparis nootkatensis	Yellow cedar
CL	3.5m	3.5m	Cupressus x leylandii	Leyland cypress
GB	3.5m	3.5m	Ginkgo biloba	Maidenhair tree
LD	3.5m	3.5m	Larix laricina	Western larch
MS	3.5m	3.5m	Metrosideros polymorpha	Downy birch
PAO	3.5m	3.5m	Pinus monticola	Western white pine
PM	3.5m	3.5m	Podocarpus nelsonii	Driftwood
SS	3.5m	3.5m	Sequoia sempervirens	Coast redwood
SG	3.5m	3.5m	Sequoiadendron giganteum	Giant sequoia
TP	3.5m	3.5m	Thuja plicata	Western redcedar
EVERGREEN - MEDIUM SCALE				
AL	50m	3.5m	Abies lasiocarpa	Subalpine fir
CM	50m	3.5m	Chamaecyparis nootkatensis 'Pendula'	Weeping yellow cedar
CO	50m	3.5m	Chamaecyparis obtusa	Heard cypress
CP	50m	3.5m	Chamaecyparis parvifera	Sawara cypress
GM	50m	3.5m	Ginkgo biloba 'Mayer'	Major ginkgo
PAC	50m	3.5m	Pinus contorta 'Cupressin'	Columnar Norway spruce
TO	50m	3.5m	Thuja occidentalis	Eastern white cedar
AF	50m	3.5m	Abies fraseri	Fraser fir
EVERGREEN - SMALL SCALE				
APC	50m	3.5m	Abies procera 'Glauca'	Noble fir
PO	50m	3.5m	Pinus strobus	Scotch spruce

TREE PLANTING GUIDELINES:

- 1. CONCEPTUAL DESIGN:** This drawing represents a conceptual schematic of replacement tree planting recommendations in context to municipal requirements, selection of species and the siting of trees must conform to the municipal standards.
- 2. SITING:** Additionally, trees shall be planted at least 2.0 m from any property line and at least 3.0 m from any roads, lanes, catch basins, down drains and other infrastructure, and at a minimum setbacks from buildings as follows: 4.0 m for small category, 4.0 m for medium category and 5.0 m for large category trees.
- 3. SITE PREPARATION:** On disturbed sites, construction sites the subsoil and planting site to be planted shall be amended such that the soil is evenly compacted, free of debris, and composed of interior composition from the site preparation construction activities. In those cases, subsoil renovation and amendment, and/or the placement of existing soil with suitable growing medium or at least 600mm depth with a 1:1 ratio of soil to growing medium for each tree will be required.
- 4. STANDARDS:** Replacement trees are to conform to Current IC Landscaping Standards as published and updated from time to time by BCSA/ARIMA in regards to specifications for quality, selection, site preparation, handling, planting methods, staking and establishment maintenance.
- 5. ALTERNATES:** The species choices are for consideration only. If alternate species are desired by the owner, the species must conform to the municipal standards, and should conform to a comparable size and form of the tree species that are specifically specified for that location in a small, medium or large category (standard or normal (wide) spreading crown).
- 6. LANDSCAPE SURFACE FINISHING:** The planting hole surrounding the base of planted trees is to be finished as a planting bed with shale and/or herbaceous ground cover (i.e. not grass lawn) to complement the trees. If trees are planted within a lawn area, the grass should be excluded from a much circle of at least 1.0 m radius around each tree trunk and finished with a 25 mm depth (3 inch) depth of 15 mm minimum (1/2 inch minimum) composted bark mulch. Hand weeding is favoured over string trimmers and mowers due to the potential for those mechanical devices to damage the trunk and roots of mature trees.
- 7. WATERING:** Most tree species and root landscape conditions will not require permanent irrigation after establishment. However, interim watering of the root balls will be required for at least one growing season after planting. This should be completed by hand watering (from an on-site hose tap) or by: Trickle delivery, watering body device, or a temporary interim irrigation system. The watering schedule should be designed to suit the weather conditions, or weather change, and in response to monitoring the root ball moisture. On a consistent basis, we recommend watering intervals as follows:
 - Intermittent other than 3 days later: Once per week may reduce to once every 2 weeks in sustained heavy rainfall conditions.
 - February 1 to March 15: Every two weeks
 - March 16 to June 30: Once per week (may increase to twice per week in drought conditions)
 - July 1 to Aug 31: Every two weeks
- 8. STAKING:** Stakes are to be installed as per IC Landscaping Standards and/or as directed by the project arborist. All stakes and related hardware must be removed after a one year establishment period, unless otherwise required for a larger term or as directed by the project arborist.
- 9. MAINTENANCE:** Maintenance during the establishment period and all future tree maintenance for the life of the tree, should include the following:
 - Pruning: Pruning should be performed within the first few years. The trees should not be topped or headed back in any pruning event. All pruning cuts should be made to proper arboricultural standards. It is recommended that any assessment or treatment of trees be undertaken by a tree service contractor employing qualified & Certified Arborists with compliance to ANSI A300 Pruning Standards.

TREE PROTECTION FENCE DETAIL - SAMPLE



TREE PROTECTION GUIDELINES:

- 1. TREE PROTECTION EDGE DETAILS:** The Tree Protection Zone (TPZ) alignment is established as directed by this office to provide a suitable setback to ensure adequate root protection to maintain tree health and tree stability. These alignments are based on site and tree conditions as determined by the project arborist and they supersede any other tree protection setbacks provided by others (including setbacks derived from municipal guidelines), and may be conditional to certain mitigation measures being undertaken (i.e. root pruning, compensatory treatment to maintain root ball volume, etc.). Tree protection guidelines also apply to the overhead portions of the tree itself.
- 2. TREE PROTECTION FENCE (TPZF):** Barriers must be erected at the specified alignment and setbacks, maintained in good condition until the project reaches substantial completion, and the restrictions and guidelines implemented as detailed herein through to the completion of the landscaping phase. The material and installation of the fence must meet or exceed the municipal standards. Signs stating "TREE PROTECTION ZONE - NO ENTRY" must be placed on the tree protection fence at a suitable frequency along the direction of the project arborist. Arborists will install signs in cases that are required to provide field services for compliance during construction. The owner, contractor, sub-contractor and trades shall be made aware of the restrictions therein, and consult with this office for any access. If required, tree protection fencing must be inspected and approved by the municipality and/or the project arborist prior to commencement of any construction work.
- 3. SURVEY OF FENCES:** If any tree protection fences are adjacent with or within close proximity to a restrictive covenant, a property line, and/or an environmentally sensitive or protected area, the contractor must undertake a survey of the location of those property lines such that the tree protection fences can be installed as specified accordingly.
- 4. TREE PROTECTION AND LAND CLEARING OPERATIONS:** If large scale land clearing areas contain a TPZ and/or trees with thinning treatments required in new forest edge interfaces along the perimeter of the land clearing areas, and/or when certain trees within a TPZ are specified for removal, it is strongly recommended that the land clearing contractor should coordinate with the project arborist in advance to review their work plan and to identify retained trees and the protection measures for them, as well as during the clearing process to improve compliance and to assess new forest edges and provide tree future risk mitigation prescriptions. For remedial purposes, prescriptions should be required to provide unit to costs for the following treatments (including disposal of waste) in the forest interface zones:
 - Removal of defective trees in size categories of small (dbh up to 20 cm dbh), medium (dbh 21 cm to 45 cm), large (dbh 46 to 75 cm) and very large (76 cm dbh and greater), and
 - Pruning services (if any).
 Note that appropriate leaving chips or large woody debris created by the waste of these operations on the site will be investigated with affected property owners upon request. In certain cases, and subject to municipal approval, interim tree protection measures instead of standard tree protection fence installation may be acceptable, such as but not limited to:
 - Retaining the services of the project arborist to attend and direct the compliance to protection measures during the clearing scope that is in proximity to the TPZ, or
 - Installing alternative demarcation of the TPZ such as survey stakes, painting lines on the ground, and/or placing rope and flagging.
- 5. TREE PROTECTION COVENANTS:** Any construction-related work or activities within or directly adjacent to a TPZ requires advance approval and the on-site direction of the project arborist. The trunks, branches, foliage and roots of retained trees, as well as the soil within the tree protection zones, must not be damaged by construction activities. Except as approved and directed by the project arborist, activities within and access to the TPZ are restricted during the site preparation, construction and landscaping installation phases of the project as follows:
 - Restricted low impact methods for the removal of trees and stumps within or adjacent to TPZ.
 - No soil disturbance, including trenching for underground services or utilities, lifting of organic soil for hard landscape installation, excavation for building foundations, fit placement or trenching for irrigation or canal installation.
 - No storage or transport of soil, soil, construction materials, waste materials, etc.
 - No waste or washing of concrete, sludge, diesel, paint, or other materials that may adversely impact the soil or roots.
 - No passage or operation of vehicles or equipment.
 - No placement of temporary structures or services.
 - No affixing lights, signs, cables or any other device to retained trees.
 - No unauthorized pruning or cutting of retained trees. Any pruning or other treatment of a retained tree must be completed by a qualified arborist or tree service firm employing SA Certified Arborists and in conformance with ANSI A300 Standards, and/or under the direction of the Project Arborist from this office, and
 - Any excavations adjacent to the TPZ will require the attendance of the project arborist and root pruning to be undertaken as necessary.
 The use of aerial lifts, cranes or other overhead equipment is restricted in proximity to retained trees and should be planned with the site and height of the crown of the tree being accessed. It is recognized that certain unpredictable construction conflicts with a TPZ may arise that could interfere with the protection of the selected trees, however any encroachment into a TPZ and/or changes to the tree retention scheme are subject to approval in advance by the project arborist and the municipality. Certain TPZ restrictions or guidelines noted herein may be waived if they are considered by the project arborist to be desirable impacts, and/or if the impacts to the trees can be successfully mitigated by implementing specific measures, protection systems, compensatory treatments, and/or follow-up work as specified and directed by this office.
- 6. LANDSCAPING:** The landscaping phase when retained trees can be severely damaged. The operation of equipment, the placement of growing medium, grading and subsoil preparation for hard landscape features, i.e. sidewalks and patios, site preparation retaining walls and footing, excavation for fences, signs and other landscape features, digging of planting holes for new plants and trees, the digging of trenches for irrigation, drainage and lighting, and the placement of cut and other retaining works, all have a very high

PLAN NOTES:
This plan is based on drawings supplied by the project Surveyor (BCS), Engineer (P ENG) and/or Design Professionals and is provided for information only. It is not intended to be used for the planning and approval of the management of existing trees. This plan does not warrant or certify the accuracy of locations or features or dimensions. Please refer to the original drawings from those professionals for those purposes.

- LEGEND:**
- XX denotes TAG NUMBER or ID REFERENCE.
 - AC denotes ALDER or COTONWOOD TREE (untagged).
 - denotes DRIPLINE (spread of the branches and foliage) of the tree.
 - denotes RETENTION tree (proposed).
 - ✗ denotes REMOVAL tree (proposed).
 - ⊕ denotes HIGH RISK REMOVAL tree (proposed).
 - ⊙ denotes OFF-SITE tree (to be protected and/or owner contacted as noted).
 - ⊕ denotes NON-BY-LAW underside tree (as measured by project arborist).
 - ⊕ denotes SITE or STUDY AREA BOUNDARY.
 - denotes TREE PROTECTION ZONE (TPZ) setback alignment as specified by project arborist.
 - XX denotes REPLACEMENT TREE proposed (conceptual location - see plant list for details).

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SUITE 145 - 12051 HORSESHOE WAY, RICHMOND, BC V7A 4V4 p 604 275 3484

1	MAY 17, 2016	PARK TREE PROTECTION
0	DEC 17, 2015	INITIAL SUBMISSION
REV #1	DATE	COMMENTS

TREE MANAGEMENT DRAWING

PROJECT: PROPOSED SUBDIVISION
 ADDRESS: 17056 GREENWAY DR SURREY BC
 CLIENT: GREENWAY DRIVE DEVELOPMENTS LTD
 ACL FILE: 15412 SHEET: 1 OF 1

CITY OF SURREY

BYLAW NO. _____

A by-law to amend Surrey Zoning By-law, 1993, No. 12000, as amended
.....

THE CITY COUNCIL of the City of Surrey ENACTS AS FOLLOWS:

- 1. Surrey Zoning By-law, 1993, No. 12000, as amended, is hereby further amended, pursuant to the provisions of Section 479 of the Local Government Act, R.S.B.C. 2015 c. 1, as amended by changing the classification of the following parcels of land, presently shown upon the maps designated as the Zoning Maps and marked as Schedule "A" of Surrey Zoning By-law, 1993, No. 12000, as amended as follows:

FROM: GENERAL AGRICULTURAL ZONE (A-1)
 TO: COMPREHENSIVE DEVELOPMENT ZONE (CD)

Parcel Identifier: 006-709-915
 Lot 11 Section 30 Township 8 Plan 32014 New Westminster District
 17056 Greenway Drive

(hereinafter referred to as the "*Lands*")

- 2. The following regulations shall apply to the *Lands*:

A. Intent

This Comprehensive Development Zone is intended to accommodate and regulate the development of *single family dwellings* on small *suburban lots* with substantial public *open space* set aside within the *Lands*.

The *Lands* are divided into Blocks A, B, B₁ and C as shown on the Survey Plan attached hereto and forming part of this Bylaw as Schedule A, certified correct by G. A. Hol, B.C.L.S., on the 5th day of July, 2016.

B. Permitted Uses

The *Lands* and *structures* shall be used for the following uses only, or for a combination of such uses:

1. One *single family dwelling* which may contain 1 *secondary suite*.
2. *Accessory uses* including the following:
 - (a) *Bed and breakfast* use in accordance with Section B.2, Part 4 General Provisions, of Surrey Zoning By-law, 1993, No. 12000, as amended; and
 - (b) The keeping of *boarders* or *lodgers* in accordance with Section B.2, Part 4 General Provisions, of Surrey Zoning By-law, 1993, No. 12000, as amended.

C. Lot Area

Not applicable to this Zone.

D. Density

1. For the purpose of subdivision, the maximum *unit density* shall not exceed 3.95 *dwelling units* per hectare [1.6 u.p.a.].
2. The maximum *unit density* may be increased from 3.95 *dwelling units* per hectare [1.6 u.p.a.] to 6.5 *dwelling units* per hectare [2.6 u.p.g.a.] calculated on the basis of the entire *Lands*, provided that:
 - (a) *Open space* in an amount not less than 15% of the *lot* area is preserved in its natural state or retained for park and recreational purposes;
 - (b) The said *open space* shall augment an existing park; and
 - (c) The said *open space* shall be accessible by the public from a *highway*.
3. *Undevelopable areas* may be included in the *open space* set aside in Subsection D.2(a), however, this *undevelopable area* shall be discounted by 50%.
4. For *building* construction within a *lot*:
 - (a) For the purpose of this Section and notwithstanding the definition of *floor area ratio* in Part 1 Definitions of Surrey Zoning By-law, 1993, No. 12000, as amended, all covered areas used for parking shall be included in the calculation of *floor area ratio* unless the

covered parking is located within the *basement*;

(b) For *lots* within Blocks A and C:

- i. The *floor area ratio* shall not exceed 0.38, provided that, of the resulting allowable floor area, 45 square metres [480 sq. ft.] shall be reserved for use only as a garage or carport, and 10 square metres [105 sq.ft.] shall be reserved for use only as *accessory buildings* and *structures*; and
- ii. Notwithstanding Sub-section D.3(a)i of this Zone, the maximum *principal building* size, inclusive of a garage or carport, shall be 358 square metres [3,853 sq.ft.]; and

(c) For *lots* within Blocks B and B₁:

- i. The *floor area ratio* shall not exceed 0.32, provided that, of the resulting allowable floor area, 45 square metres [480 sq.ft.] shall be reserved for use only as a garage or carport, and 10 square metres [105 sq.ft.] shall be reserved for use only as *accessory buildings* and *structures*.

E. Lot Coverage

1. Blocks A and C: The *lot coverage* shall not exceed 28%.
2. Blocks B and B₁: The *lot coverage* shall not exceed 25%.

F. Yards and Setbacks

Buildings and *structures* shall be sited in accordance with the following minimum *setbacks*:

1. Block A:

	<i>Setback</i>	<i>Front</i> <i>Yard</i>	<i>Rear</i> <i>Yard</i>	<i>Side</i> <i>Yard</i>	<i>Side</i> <i>Yard on</i> <i>Flanking</i> <i>Street</i>
Use					
<i>Principal Building</i>		7.5 m. [25 ft.]	7.5 m. [25 ft.]	3.0 m. [10 ft.]	7.5 m. [25 ft.]
<i>Accessory Buildings</i> <i>and Structures</i>		18.0 m. [60 ft.]	1.8 m. [6 ft.]	1.0 m. [3 ft.]	7.5 m. [25 ft.]

Measurements to be determined as per Part 1 Definitions of Surrey Zoning By-law, 1993, No. 12000, as amended.

2. Block B:

Setback	<i>Front Yard</i>	<i>Rear Yard</i>	<i>Side Yard</i>	<i>Side Yard on Flanking Street</i>
Use				
<i>Principal Building</i>	7.5 m. [25 ft.]	7.5 m. [25 ft.]	3.0 m. [10 ft.]	7.5 m. [25 ft.]
<i>Accessory Buildings and Structures</i>	18.0 m. [60 ft.]	1.8 m. [6 ft.]	1.0 m. [3 ft.]	7.5 m. [25 ft.]

Measurements to be determined as per Part 1 Definitions of Surrey Zoning By-law, 1993, No. 12000, as amended.

2. Block B1:

Setback	<i>Front Yard</i>	<i>Rear Yard</i>	<i>Side Yard</i>	<i>Side Yard on Flanking Street</i>
Use				
<i>Principal Building</i>	7.5 m. [25 ft.]	10.0 m. [33 ft.]	3.0 m. [10 ft.]	7.5 m. [25 ft.]
<i>Accessory Buildings and Structures</i>	18.0 m. [60 ft.]	1.8 m. [6 ft.]	1.0 m. [3 ft.]	7.5 m. [25 ft.]

Measurements to be determined as per Part 1 Definitions of Surrey Zoning By-law, 1993, No. 12000, as amended.

3. Block C:

Setback	<i>Front Yard</i>	<i>Rear Yard</i>	<i>Side Yard</i>	<i>Side Yard on Flanking Street</i>
Use				
<i>Principal Building</i>	7.5 m. [25 ft.]	10.0 m. [33 ft.]	3.0 m. [10 ft.]	5.5 m. [18 ft.]
<i>Accessory Buildings and Structures</i>	18.0 m. [60 ft.]	1.8 m. [6 ft.]	1.0 m. [3 ft.]	5.5 m. [18 ft.]

Measurements to be determined as per Part 1 Definitions of Surrey Zoning By-law, 1993, No. 12000, as amended.

G. Height of Buildings

Measurements to be determined as per Part 1 Definitions of Surrey Zoning By-law, 1993, No. 12000, as amended.

1. *Principal buildings*: The *building height* shall not exceed 9.0 metres [30 ft.].
2. *Accessory buildings and structures*: The *building height* shall not exceed 4 metres [13 ft.] except that where the roof slope and construction materials of an *accessory building* are the same as that of the *principal building*, the *building height* of the *accessory building* may be increased to 5 metres [16.5 ft.].

H. Off-Street Parking

1. Resident and visitor *parking spaces* shall be provided as stated in Table C.1, Part 5 Off-Street Parking and Loading/Unloading of Surrey Zoning By-law, 1993, No. 12000, as amended.
2. Outside parking or storage of *campers*, boats and *vehicles* including cars, trucks and *house trailers* ancillary to the residential use, shall be limited to:
 - (a) A maximum of 3 cars or trucks;
 - (b) *House trailer, camper* or boat provided that the combined total shall not exceed 1; and
 - (c) The total amount permitted under Sub-sections H.2(a) and (b) shall not exceed 4.
3. No outside parking or storage of a *house trailer* or boat is permitted within the *front yard setback*, or within the required *side yards* adjacent the *dwelling*, or within 1 metre [3 ft.] of the *side lot line*, except on *lots* which have no vehicular access to the *rear yard* or where access is not feasible through modification of *landscaping* or fencing or both, either 1 *house trailer* or 1 boat may be parked in the front *driveway* or to the side of the front *driveway* or in the *side yard*, but no closer than 1 metre [3 ft.] to a *side lot line* nor within 1 metre [3 ft.] of the *front lot line* subject to the residential parking requirements stated in Part 5 Off-Street Parking and Loading/Unloading of Surrey Zoning By-law, 1993, No. 12000, as amended.

I. Landscaping

1. The parking or storage of *house trailers* or boats shall be adequately screened by compact evergreen trees or shrubs at least 1.8 metres [6 ft.] in height and located between the said *house trailer* or boat and any point on the *lot line* within 7.5 metres [25 ft.] of the said *house trailer* or boat, in order to obscure the view from the abutting *lot* or street, except:

- (a) On a *corner lot*, this required landscape screening shall not be located in an area bounded by the intersecting *lot lines* at a street corner and a straight line joining points 9 metres [30 ft.] along the said *lot lines* from the point of intersection of the 2 *lot lines*;
 - (b) Where the *driveway* or the parking area is used for parking or storage of a *house trailer* or boat, the landscape screen is not required within the said *driveway*; and
 - (c) In the case of *rear yards*, this screening requirement may be provided by a 1.8 metre [6 ft.] high solid fence.
2. The *open space* set aside pursuant to Section D.2 of this Zone, shall be improved with a basic level of *landscaping* work including brushing and seeding of the ground, limbing of low branches on trees and providing and constructing paths for public passage, wherever appropriate.

J. Special Regulations

1. A *secondary suite* shall:
- (a) Not exceed 90 square metres [968 sq.ft.] in floor area; and
 - (b) Occupy less than 40% of the habitable floor area of the *building*.

K. Subdivision

Lots created through subdivision in this Zone shall conform to the following minimum standards:

1. Blocks A and C:

Lot Size	Lot Width	Lot Depth
930 sq. m. [10,010 sq. ft.]	18.5 metres [61 ft.]	30 metres [98 ft.]

Dimensions shall be measured in accordance with Section E.21, Part 4 General Provisions, of Surrey Zoning By-law, 1993, No. 12000, as amended.

2. Blocks B and B1:

Lot Size	Lot Width	Lot Depth
1,120 sq. m. [12,056 sq. ft.]	18.5 metres [61 ft.]	30 metres [98 ft.]

Dimensions shall be measured in accordance with Section E.21, Part 4 General Provisions, of Surrey Zoning By-law, 1993, No. 12000, as amended.

L. Other Regulations

In addition to all statutes, bylaws, orders, regulations or agreements, the following are applicable, however, in the event that there is a conflict with the provisions in this Comprehensive Development Zone and other provisions in Surrey Zoning By-law, 1993, No. 12000, as amended, the provisions in this Comprehensive Development Zone shall take precedence:

1. Definitions are as set out in Part 1 Definitions of Surrey Zoning By-law, 1993, No. 12000, as amended.
2. Prior to any use, the *Lands* must be serviced as set out in Part 2 Uses Limited, of Surrey Zoning By-law, 1993, No. 12000, as amended and in accordance with the servicing requirements for the RH-G Zone as set forth in the Surrey Subdivision and Development By-law, 1986, No. 8830, as amended.
3. General provisions are as set out in Part 4 General Provisions of Surrey Zoning By-law, 1993, No. 12000, as amended.
4. Additional off-street parking requirements are as set out in Part 5 Off-Street Parking and Loading/Unloading of Surrey Zoning By-law, 1993, No. 12000, as amended.
5. Sign regulations are as set out in Surrey Sign By-law, 1999, No. 13656, as amended.
6. Special *building setbacks* are as set out in Part 7 Special Building Setbacks, of Surrey Zoning By-law, 1993, No. 12000, as amended.
7. Subdivisions shall be subject to the applicable Surrey Development Cost Charge Bylaw, 2014, No. 18148, as may be amended or replaced from time to time, and the development cost charges shall be based on the RH-G Zone.
8. *Building* permits shall be subject to the Surrey Building By-law, 2012, No. 17850, as amended.
9. Tree regulations are set out in Surrey Tree Protection Bylaw, 2006, No. 16100, as amended.
10. Development permits may be required in accordance with the Surrey *Official Community Plan* By-law, 2013, No. 18020, as amended.

3. This By-law shall be cited for all purposes as "Surrey Zoning By-law, 1993, No. 12000, Amendment By-law, _____, No. _____."

PASSED FIRST READING on the _____ th day of _____, 20 .

PASSED SECOND READING on the _____ th day of _____, 20 .

PUBLIC HEARING HELD thereon on the _____ th day of _____, 20 .

PASSED THIRD READING on the _____ th day of _____, 20 .

RECONSIDERED AND FINALLY ADOPTED, signed by the Mayor and Clerk, and sealed with the Corporate Seal on the _____ th day of _____, 20 .

_____ MAYOR

_____ CLERK

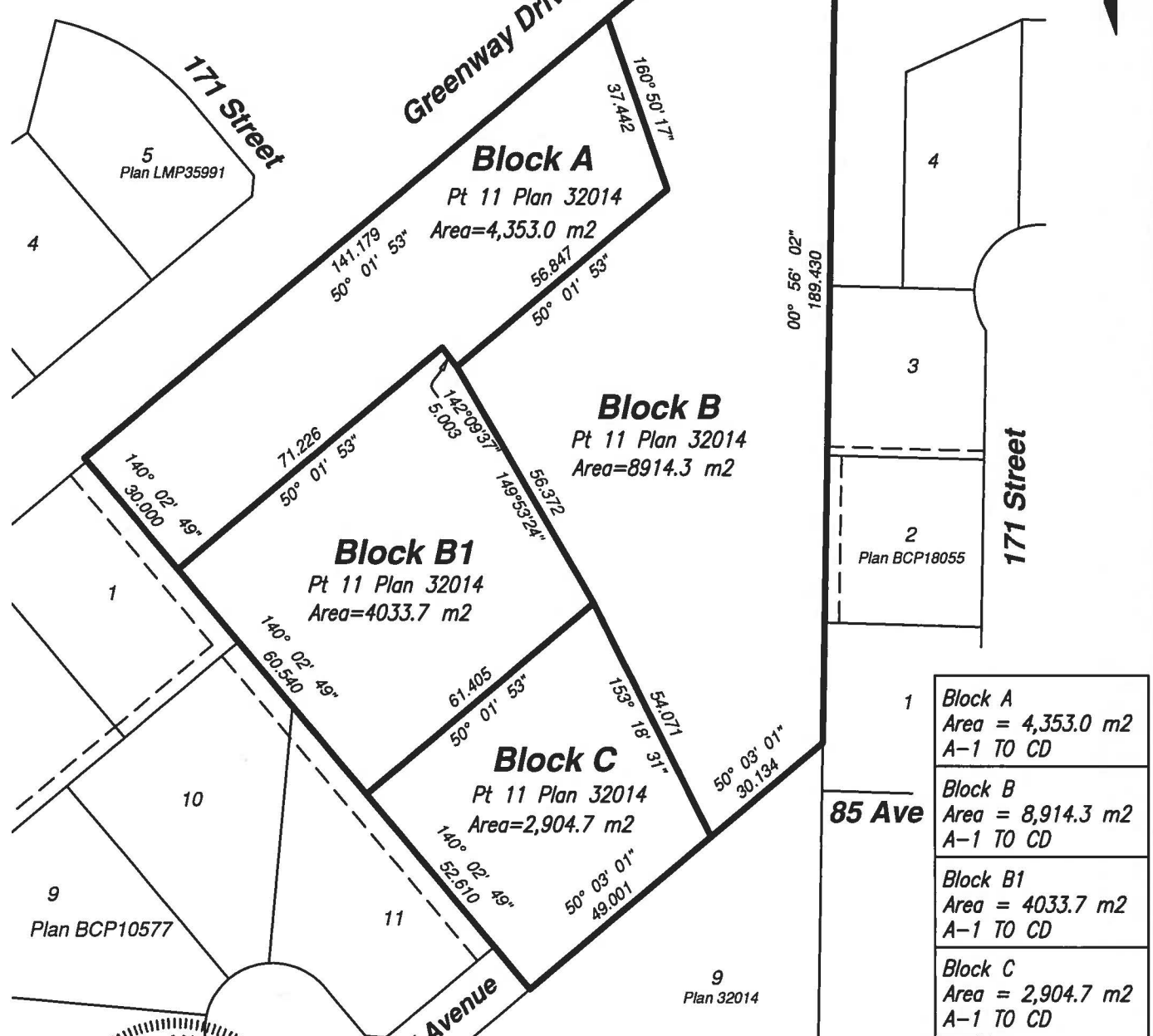
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BLOCK SURVEY PLAN TO ACCOMPANY CITY OF SURREY REZONING BYLAW NO. _ _ _ OF LOT 11 SECTION 30 TOWNSHIP 8 NEW WESTMINSTER DISTRICT PLAN 32014



All distances are in metres and decimals thereof.

The intended plot size of this plan is 280mm in width by 216mm in height (A size) when plotted at a scale of 1:1250.



1	Block A Area = 4,353.0 m2 A-1 TO CD
1	Block B Area = 8,914.3 m2 A-1 TO CD
1	Block B1 Area = 4,033.7 m2 A-1 TO CD
1	Block C Area = 2,904.7 m2 A-1 TO CD

2016/07/05 - 10:04 S:\Southern BC_MSD\10054997\CAD\Working\10054997 SDZN01 R02.dwg

Certified Correct this 5th day of July 2016.



G.A. Hol B.C.L.S.

WSP Surveys (BC) Limited Partnership
300-65 Richmond St, New Westminister, BC

PROJECT REF./DRAWING No.
010054997 SDZN01 R02