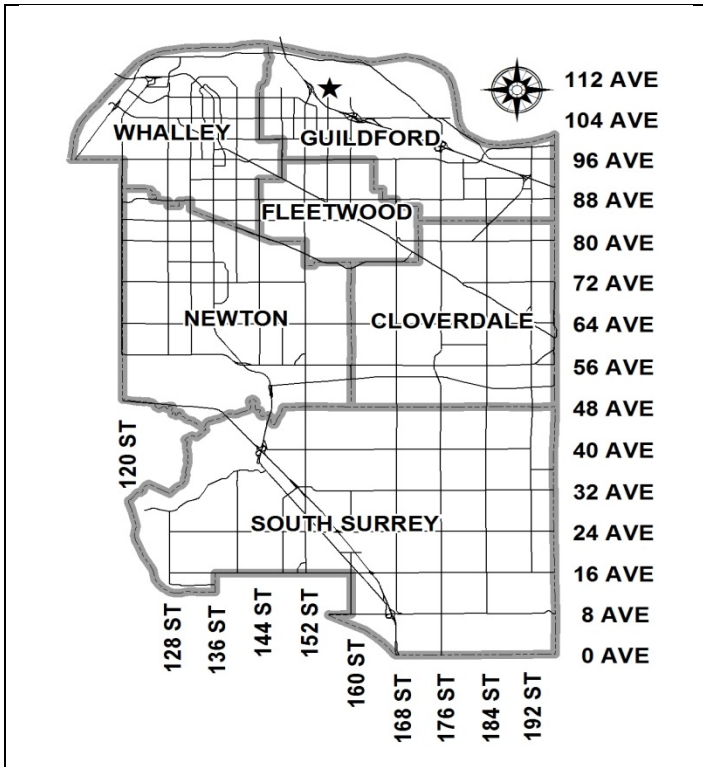


City of Surrey
PLANNING & DEVELOPMENT REPORT

File: 7915-0232-00

Planning Report Date: January 11, 2016



PROPOSAL:

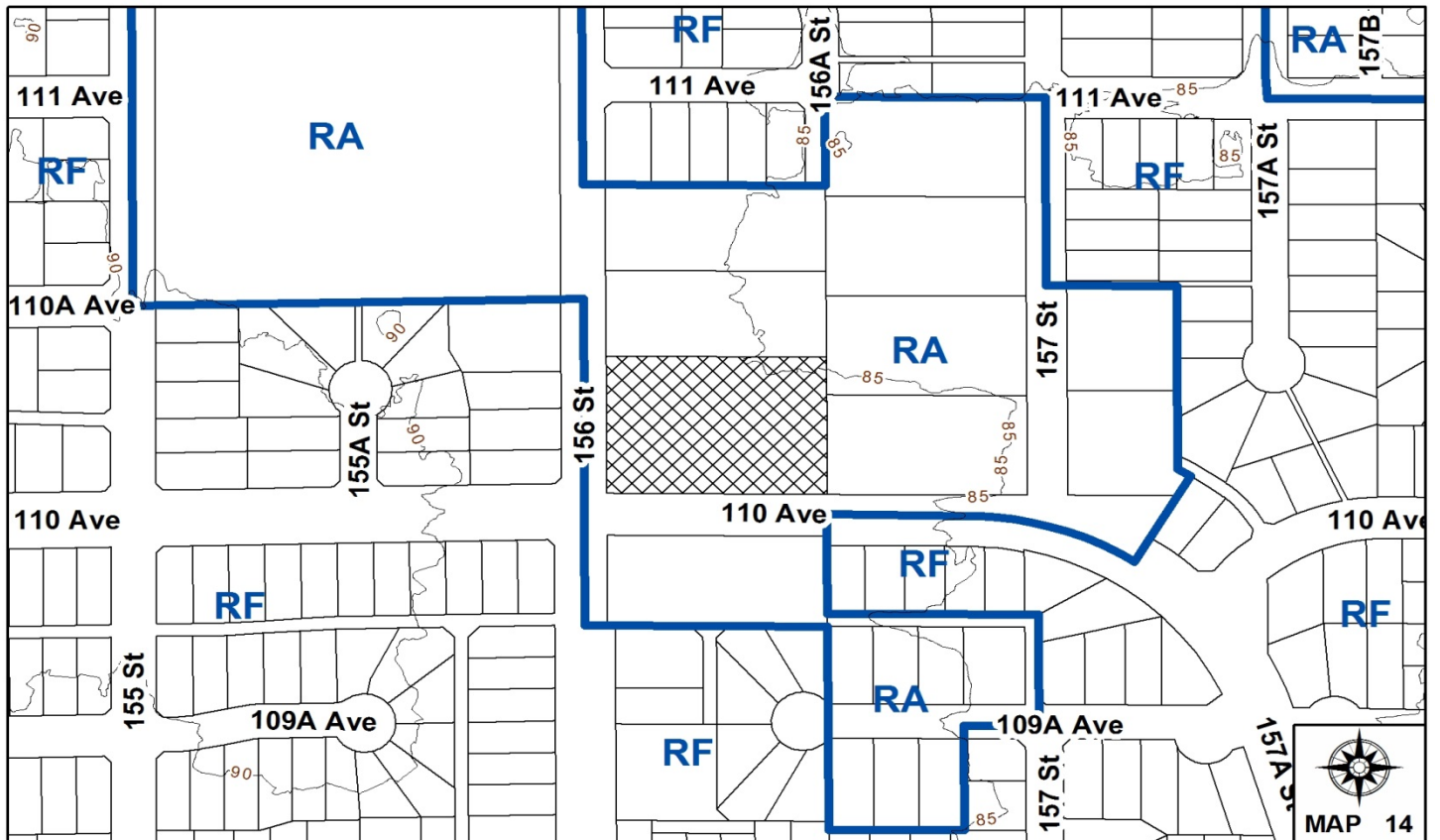
- **Rezoning** from RA to RF to allow subdivision into nine (9) single family lots.

LOCATION: 11030 - 156 Street

OWNER: 1048162 B.C. Ltd.

ZONING: RA

OCP DESIGNATION: Urban



RECOMMENDATION SUMMARY

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

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- None.

RATIONALE OF RECOMMENDATION

- Complies with the Urban designation in the OCP.
- The proposed subdivision conforms to the City's infill policy.
- The proposed lots are similar in size with the existing RF lots in the neighbourhood.

RECOMMENDATION

The Planning & Development Department recommends that:

1. a By-law be introduced to rezone the subject site from "One-Acre Residential Zone (RA)" to "Single Family Residential Zone (RF)" 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; and
 - (e) demolition of existing buildings and structures 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:**

3 Elementary students at Dogwood Elementary School
1 Secondary student at Fraser Heights 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 Spring of 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 is required to address these concerns prior to final adoption of the Rezoning By-law.

SITE CHARACTERISTICS

Existing Land Use: 1.5-acre parcel with a single family dwelling, which will be demolished.

Adjacent Area:

Direction	Existing Use	OCP Designation	Existing Zone
North:	Acreage parcel with future subdivision potential.	Urban	RA
East:	Acreage parcel under Application No. 7915-0134-00 proposing six (6) RF lots (currently at Third Reading).	Urban	RA
South (Across 110 Avenue):	Single family dwellings.	Urban	RF
West (Across 156 Street):	Single family dwellings.	Urban	RF

DEVELOPMENT CONSIDERATIONSBackground

- The subject property is located at 11030 – 156 Street in Fraser Heights and is designated "Urban" in the Official Community Plan (OCP) and is zoned "One-Acre Residential Zone (RA)".
- The property is approximately 0.64 hectare (1.6 acre) in size and is currently occupied by a single family dwelling with a driveway access to 156 Street. The existing dwelling and structures on the property will be demolished as part of the subject development application.
- The applicant originally proposed to rezone the subject property from "One-Acre Residential Zone (RA)" to "Single Family Residential Zone (RF)" and to "Single Family Residential (12) Zone (RF-12)" in order to subdivide into four (4) single family RF lots and six (6) single family RF-12 lots. As a result of comments and concerns expressed by residents in the area (see Pre-Notification section of this report), the applicant revised the proposal to rezone and subdivide into nine (9) RF lots.

Current Proposal

- The applicant proposes to rezone the subject property from "One-Acre Residential Zone (RA)" to "Single Family Residential Zone (RF)" in order to subdivide into nine (9) single family lots.
- Proposed Lots 1 and 2 will front 156 Street, proposed Lots 3 to 7 will front 110 Avenue and proposed Lots 8 and 9 will front the new 156A Street, which will be dedicated and constructed for half its ultimate width along the east property line (see Road Dedication section of this report).

- Proposed Lots 1, 2, 8 and 9 are between 635 square metres (6,835 sq.ft.) and 640 square metres (6,890 sq.ft.) in size. Proposed Lots 3 to 7 are between 575 square metres (6,190 sq.ft.) and 600 square metres (6,460 sq.ft.) in size. The proposed lot widths range between 15 metres (50 ft.) and 18 metres (59 ft.).
- All proposed lots comply with the minimum 560 square metre (6,000 sq.ft.) size and 15-metre (50-ft.) width of the RF Zone.
- The proposed lot sizes and widths are comparable to the existing and proposed RF lots in the area. The owner of the property to the east (at 11019 - 157 Street), which is currently under Development Application No. 7915-0134-00 with rezoning at Third Reading, proposes six (6) RF lots of similar lot size and widths, while Development Application No. 7906-0494-00, at 10990 - 156 Street to the south of the subject site across 100 Avenue, also with rezoning at Third Reading, proposes RF lots with similar lot size and widths as well.
- The rezoning and subdivision of the subject site will follow the pattern established by the existing RF lots in the area.

Road Dedication

- The applicant is proposing to dedicate 1.94 metres (6.4 ft.) along the west and south property lines to complete 156 Street and 110 Avenue, respectively.
- The applicant originally proposed to dedicate 11.5 metres (38 ft.) along the entire east property line for the construction of a functional half road (156A Street), which will ultimately be 18 metres (59 ft.) wide. However, as a result of Development Application No. 7915-0134-00 for the abutting property to the east (11019 - 157 Street), which has the rezoning by-law currently sitting at Third Reading, staff asked both applicants to share the 18-metre (60 ft.) wide dedication (9.0 metres /30 feet from each property), and depending on which development application is completed first, to secure a temporary 2.5-metre (8 ft.) wide right-of-way (ROW) on the opposite property to ensure that the new portion of 156A Street is fully functional at 11.5 metres (38 ft.) in width. The equal sharing of the 18-metre (60 ft.) dedication also results in a better alignment with the existing 156A Street further to the north.
- Both applicants have agreed to share the road dedication of 9.0 metres (30 ft.) each and to provide the 2.5-metre (8-ft.) wide right-of-way (ROW) as requested. The applicant for the subject site has revised the subdivision layout, as shown in Appendix II, to include the road dedication of 9.0 metres (29 ft.) along the east property line. If the development application on the abutting property to the east (File No. 7915-0134-00 / 11019 - 157 Street) is completed before the subject development application (File No. 7915-0232-00 / 11030 - 156 Street), then the 2.5-metre (8-ft.) wide ROW will be provided on the subject site to ensure that 156A Street is fully functional at 11.5 metres (38 ft.) in width.
- Given that the rezoning on the abutting lot to the east (File No. 7915-0134-00 / 11019 - 157 Street) has already advanced to Third Reading, the applicant of the subject development application will likely need to provide the 2.5-metre (8-ft.) wide right-of-way (ROW) along the east property line of the subject site.

- Should either property owner subsequently oppose the ROW on their property, staff support a road dedication of 11.5 metres (38 ft.) on the property where its development application is completed first, to ensure that the road is fully functional. The proposed lots are large enough to accommodate this additional road dedication and still comply with the RF Zone if this scenario should occur.
- The road dedication of 9.0 metres (29 ft.) along the east property line of the subject site increases to 11.5 metres (38 ft.) from south to north in order to accommodate the functional half road (156A Street) in front of proposed Lots 8 and 9, given that the property to the north-east (11041 – 157 Street) is currently not under a development application.

PRE-NOTIFICATION

Pre-notification letters were sent on August 24, 2015, and staff received nine (9) e-mails from area residents, all of which expressed their objection to the six (6) RF-12 lots originally proposed. No objections were received regarding the proposed RF lots. Two (2) of the nine (9) residents followed-up with telephone calls as well, reiterating their concern for RF-12 lots in this area.

As a result of the comments and concerns that were expressed by area residents during the pre-notification process, the applicant revised their proposed subdivision layout to consist of RF lots only. No RF-12 lots are proposed.

Revised pre-notification letters were sent on October 16, 2015 informing area residents of the revised subdivision proposal, and staff received two (2) telephone calls. The callers expressed support for the proposal now that RF-12 lots were no longer proposed.

BUILDING DESIGN GUIDELINES

- Tynan Consulting Ltd. prepared the Neighbourhood Character Study and Building Scheme for the subject site. 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 guidelines propose year 2000 design standards, which include balanced massing of the front façade, modern design, and high trim and finishing standards similar to Neo-Traditional homes. A summary of the design guidelines is attached (Appendix V).

LOT GRADING

- A preliminary lot grading plan, submitted by WSP Canada Inc. dated October 2015 and revised on January 5, 2016, has been reviewed by staff and will require some minor revisions, as a result of additional fill proposed on the lots. The applicant has agreed to further revise the lot grading plans to ensure an appropriate grade transition between the subject site and the abutting property to the north (11050 - 156 Street).
- Due to the nature grade of the subject site, in-ground basements may be achievable on the lots fronting 110 Avenue (proposed Lots 3 to 7) with minimal fill. In order to provide an appropriate grade transition (with minimal fill) between the subject site and the abutting

property to the north (11050 - 156 Street), in-ground basements might not be achievable on proposed Lots 1, 2, 8 and 9.

- Revised lot grading plans and detailed engineering drawings are required however, in order to determine if in-ground basements can be achieved on any or all of the proposed lots.

TREES

- Glenn Murray, ISA Certified Arborist of Froggers Creek Tree Consultants Ltd. prepared an Arborist Assessment for the subject property. The table below provides a summary of the tree retention and removal by tree species:

Table 1: Summary of Tree Preservation by Tree Species:

Tree Species	Existing	Remove	Retain
Alder and Cottonwood Trees			
Alder	32	32	0
Cottonwood	3	3	0
Deciduous Trees (excluding Alder and Cottonwood Trees)			
Big Leaf Maple	4	4	0
Green Ash	3	2	1
Hawthorne	1	1	0
Native Cherry	23	23	0
Pacific Dogwood	3	1	2
Paper Birch	1	1	0
Red Oak	3	1	2
Sweetgum	2	1	1
Coniferous Trees			
Douglas Fir	7	7	0
Shore Pine	1	1	0
Spruce	1	1	0
Western Red Cedar	10	9	1
Total (excluding Alder and Cottonwood Trees)	59	52	7
Total Replacement Trees Proposed (excluding Boulevard Street Trees)		24	
Total Retained and Replacement Trees		31	
Contribution to the Green City Fund		\$27,300	

- The Arborist Assessment states that there are a total of 59 mature trees on the site, excluding Alder and Cottonwood trees. Thirty-five (35) existing trees, approximately 37% of the total trees on the site, are Alder and Cottonwood trees. It was determined that seven (7) 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 tree health.
- There are two (2) trees, currently proposed for removal, that are in moderate health and situated close to/within the proposed building footprint on proposed Lots 3 and 4. Staff will continue will to work with the applicant to determine if these trees can be retained, prior to final adoption of the Rezoning By-law.
- 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. Currently, this will require a total of 115 replacement trees on the site. Since only twenty-four (24) replacement trees can be accommodated on the site, the deficit of ninety-one (91) replacement trees will require a cash-in-lieu payment of \$27,300, representing \$300 per tree, to the Green City Fund, in accordance with the City's Tree Protection By-law.

SUSTAINABLE DEVELOPMENT CHECKLIST

The applicant prepared and submitted a sustainable development checklist for the subject site on July 16, 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 site is an urban infill lot, and the proposed subdivision is consistent with the OCP.
2. Density & Diversity (B1-B7)	<ul style="list-style-type: none"> • Secondary suites will be permitted
3. Ecology & Stewardship (C1-C4)	<ul style="list-style-type: none"> • Swales, roof downspout disconnections and absorbent soils will be incorporated into the development. • Recycling pickup will be available.
4. Sustainable Transport & Mobility (D1-D2)	<ul style="list-style-type: none"> • Transit service runs along 110 Avenue, with a transit stop within walking distance from the subject site.
5. Accessibility & Safety (E1-E3)	<ul style="list-style-type: none"> • Houses will be oriented towards the street.
6. Green Certification (F1)	<ul style="list-style-type: none"> • N/A
7. Education & Awareness (G1-G4)	<ul style="list-style-type: none"> • A Development Proposal Sign was installed on site, and pre-notification letters were mailed to area residents.

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. Building Design Guidelines Summary
- Appendix VI. Summary of Tree Survey and Tree Preservation

original signed by Judith Robertson

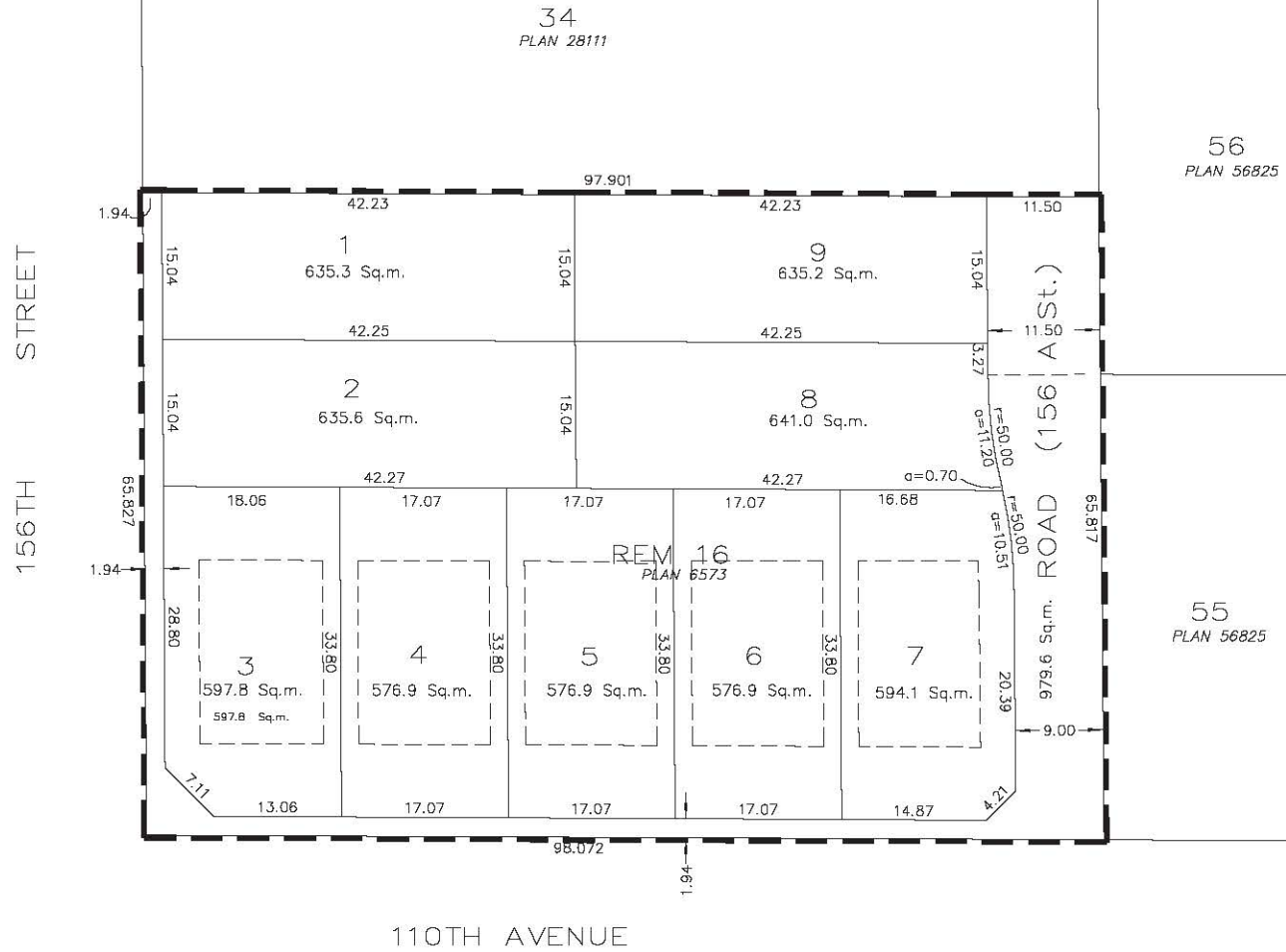
Jean Lamontagne
General Manager
Planning and Development

DN/dk

SUBDIVISION DATA SHEET

Proposed Zoning: RF

Requires Project Data	Proposed
GROSS SITE AREA	
Acres	1.6
Hectares	0.64
NUMBER OF LOTS	
Existing	1
Proposed	9
SIZE OF LOTS	
Range of lot widths (metres)	15.0 to 17.5 metres
Range of lot areas (square metres)	560 to 635 square metres
DENSITY	
Lots/Hectare & Lots/Acre (Gross)	10.9 lots/ha and 4.4 lots/ac
SITE COVERAGE (in % of gross site area)	
Maximum Coverage of Principal & Accessory Building	38%
Estimated Road, Lane & Driveway Coverage	22%
Total Site Coverage	60%
PARKLAND	
Area (square metres)	N/A
% of Gross Site	
	Required
PARKLAND	
5% money in lieu	YES
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



Preliminary Subdivision Plan

Surrey Project #7915-0232-00
11030 156 Street
Royale Properties Ltd.

WSP CANADA INC.
#300 - 65 RICHMOND STREET
NEW WESTMINSTER, B.C.
CANADA V3L 5P5
TEL. 604-525-4651 | FAX. 604-525-5715
www.wspgroup.com





INTER-OFFICE MEMO

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

FROM: **Development Services Manager, Engineering Department**

DATE: **December 23, 2015** PROJECT FILE: **7815-0232-00**

RE: **Engineering Requirements
Location: 11030 156 Street**

Property and Right-of-Way Requirements

- Dedicate 1.942 m along 110 Avenue for the ultimate 24.0 m Collector Road Standard.
- Dedicate 1.942 m along 56 Avenue for the ultimate 24.0 m Collector Road Standard.
- Dedicate a 5.0 m x 5.0 m corner cut at the intersection of 110 Avenue and 156 Street.
- Dedicate a 3.0 m x 3.0 m corner cut at the intersection of 110 Avenue and 156A Street.
- Dedicate 11.50 m for 156A Street for the Half Road Standard.
- Provide a 0.50 m Statutory Right-of-Way along the frontages of 110 Avenue, 156 Street, and 156A Street.

Works and Services

- Construct the boulevard including a 1.80 m concrete sidewalk and street lighting along the north side of 110 Avenue.
- Construct east half of 156 Street to the Collector standard.
- Construct the west half of 156A Street to the Half Road Standard.
- Construct a 6.0 m concrete driveway letdown to each lot.
- Construct storm, sanitary, and water mains along the development frontage of 110 Avenue and 156A Street.
- Provide on-site mitigation features to meet the requirements of the Upper Serpentine Integrated Stormwater Management Plan.
- Provide water, storm, and sanitary service connections to each lot.
- Register a restrictive covenant for right-in/right-out only access for lots 4-7.
- Register a restrictive covenant for driveway access to 156 Street only for lot 3.

A Servicing Agreement is required prior to Rezoning and Subdivision.


 Rémi Dubé, P.Eng.
 Development Services Manager

CE

NOTE: Detailed Land Development Engineering Review available on file



Monday, January 04, 2016
 Planning

THE IMPACT ON SCHOOLS

APPLICATION #: 15 0232 00

SUMMARY

The proposed 9 single family lots are estimated to have the following impact on the following schools:

Projected # of students for this development:

Elementary Students:	3
Secondary Students:	1

September 2015 Enrolment/School Capacity

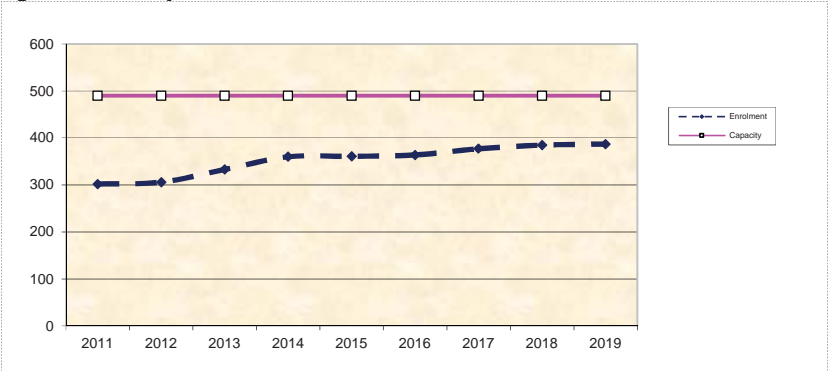
Dogwood Elementary	
Enrolment (K/1-7):	36 K + 325
Capacity (K/1-7):	40 K + 450
Fraser Heights Secondary	
Enrolment (8-12):	1382
Nominal Capacity (8-12):	1250
Functional Capacity*(8-12):	1350

School Enrolment Projections and Planning Update:

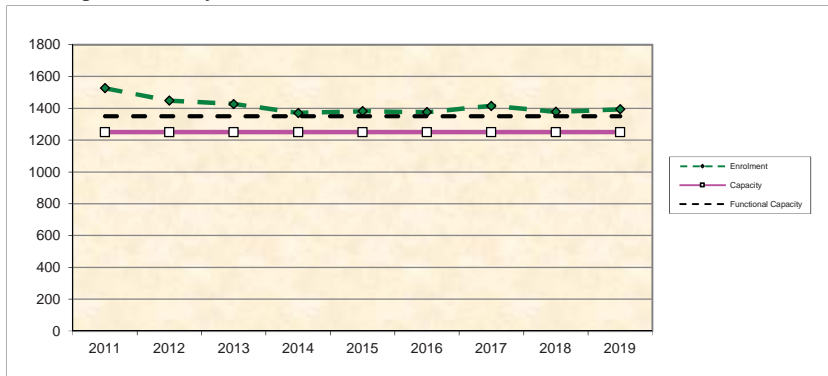
The following tables illustrate the enrolment projections (with current/approved ministry capacity) for the elementary and secondary schools serving the proposed development.

Dogwood Elementary is below capacity and has room for enrolment growth. The addition to Fraser Heights Secondary, completed in April 2014, increased the school capacity from 1000 to 1200 + Neighbourhood Learning Centre (which provides additional functional instructional space), to help reduce overcrowding at the school. The proposed residential development will not have a significant impact on projections.

Dogwood Elementary



Fraser Heights 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.

BUILDING GUIDELINES SUMMARY

Surrey Project no: 7915-0232-00
 Project Location: 11030 - 156 Street, 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 was built out over a time period spanning from the 1960's to the 1990's, during a period (late 1980's and early 1990's) when large (3500 sq.ft. "Modern California Stucco" Two-Storey homes with two storey high entrances, low slope concrete tile roofs, and all-stucco exteriors were popular. This type of home, mixed with old urban homes, best describes the character of the housing stock in this area.

The age distribution from oldest to newest is: 1960's (20%), 1970's (7%), 1980's (13%), and 1990's (60%). A majority of homes in this area have a floor area in the 3001 - 3550 sq.ft. size range. Home size distribution is: 1501 - 2000 sq.ft. (20%), 2001 - 2500 sq.ft. (7%), 2501 - 3000 sq.ft. (20%), 3001 - 3550 sq.ft. (53%). Styles found in this area include: "Old Urban" (27%), "West Coast Modern" (7%), "Modern California Stucco" (53%), and "Neo-Traditional" (13%). Home types include: Bungalow (7%), Bungalow with above-ground basement (7%), 1 ½ Storey (7%), Basement Entry (13%), and Two-Storey (67%).

Massing scale (front wall exposure) characteristics include: Low mass structure (7%), Mid-scale massing (7%), Mid to high scale massing (27%), Mid-to-high scale massing with proportionally consistent, well balanced massing design (13%), High scale massing (33%), and high scale, box-like massing (13%). The scale (height) range for front entrance structures include: One storey front entrance (40%), 1 ½ storey front entrance (27%), Two storey front entrance (non context) (33%).

The range of roof slopes found in this area is: 3:12 (7%), 5:12 (53%), 6:12 (20%), 7:12 (7%), 8:12 (7%), and 9:12 (7%). 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: None (10%), Common Hip (55%), and Common Gable (35%). Roof surfaces include: Rectangular profile type asphalt shingles (27%), Shake profile asphalt shingles (13%), Concrete tile (rounded Spanish profile) (20%), Concrete tile (Double Roman profile) (7%), and Cedar shingles (33%).

Main wall cladding materials include: Horizontal cedar siding (6%), Vertical channel cedar siding (6%), and Stucco cladding (88%). Feature wall trim materials used on the front facade include: No feature veneer (67%), Brick feature veneer (20%), and Horizontal cedar accent (13%). Wall cladding and trim colours include: Neutral (32%), Natural (58%), and Warm (11%).

Covered parking configurations include: Single carport (7%), Single vehicle garage (7%), Double garage (27%), Triple garage (7%), Rear garage (53%).

A variety of landscaping standards are evident, ranging from "Old urban landscape standard featuring sod and a few shrubs" to "above average modern urban landscape standard featuring numerous shrub plantings". Driveway surfaces include: Asphalt (27%), Exposed aggregate (13%), Interlocking masonry pavers (7%), and Rear driveway (53%).

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

- 1) **Context Homes:** 20 percent of existing neighbouring homes provide suitable architectural context for use at the subject site (and therefore 80 percent of homes are considered 'non-context'). Context homes include: 15700 - 110 Avenue, 15577 - 110 Avenue, and 11019 - 156 Street. However, massing design, construction materials, and trim and detailing standards for new homes constructed in RF zone subdivisions now exceed standards evident on the context homes. The recommendation therefore is to adopt standards commonly found in post year 2010 RF zoned subdivisions, rather than to specifically emulate the aforesaid context homes.
- 2) **Style Character :** There are a mix of old urban and modern urban styles in this neighbourhood, with the dominant style being "Modern California Stucco". Preferred styles for this site include "Neo-Traditional" and compatible styles (rather than more "Modern California Stucco" homes.) Note that style range is not restricted in the building scheme. However, the consultant refers to the character study when reviewing plans for meeting style-character intent.
- 3) **Home Types :** There are a wide range of home types evident, and so some flexibility is justified. Home type (Two-Storey, Bungalow, Basement Entry, Split Level, etc..) will not be regulated in the building scheme.
- 4) **Massing Designs :** Massing designs should meet new standards for RF 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 two storeys in height. The recommendation however 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 :** A wide range of cladding materials have been used in this area, including Vinyl, cedar, stucco, fibre cement board, brick, and stone, with stucco being dominant. Reasonable flexibility should therefore be permitted, including the use of vinyl siding (vinyl should not be used on the front or flanking street facades), provided the overall quality of wall cladding materials meets or exceeds common standards for post 2010 RF zone developments.
- 7) **Roof surface :** A wide range of roof surfacing materials have been used in this area including cedar shingles, concrete roof tiles, and 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 7:12 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: Homes in this area include low mass Bungalows, Two-Storey homes with acceptable massing designs, two 1 ½ Storey type homes with desirable massing designs, and box-like Basement Entry homes. The other two thirds of homes were constructed in a strong growth phase in the late 1980's and early 1990's. These homes are 3500 sq.ft. "Modern California Stucco" Two-Storey type. These homes generally have a larger exposed wall mass at the front than post year 2000 RF zone homes. Entrance portico height ranges from 1½ to two storeys (exaggerated front entrance heights are characteristic). Homes are clad in stucco only, with stucco relief features rather than feature wood or masonry areas. Stucco colours are in natural and neutral hues only. Roof slopes are 5:12 or 6:12, and there are a variety of roof surface materials including concrete tiles, cedar shakes, and asphalt shingles. There is a wide range of landscape standards.

2. Proposed Design Guidelines

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

- the new homes are readily identifiable as one of the following styles: "Neo-Traditional" or compatible styles as determined by the consultant. Note that the proposed style range is not contained within the building scheme, but is contained within the residential character study which forms the basis for interpreting building scheme regulations.
- 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)

There are homes in this area 15700 - 110 Avenue, 15577 - 110 Avenue, and 11019 - 156 Street, that could be considered to provide acceptable architectural context. However, massing design, construction materials, and trim and detailing standards for new homes constructed in most new (post year 2010) RF zone subdivisions now exceed standards evident on the context homes. The recommendation therefore is to adopt standards

commonly found in post year 2010 RF zoned subdivisions, rather than to specifically emulate the aforesaid two context homes.

Exterior Materials/Colours: Stucco, Cedar, Hardiplank, Brick, and Stone. Vinyl siding not permitted on exterior walls on the front façade or on the flanking street side of a corner lot home.

“Natural” colours such as browns, greens, clays, and other earth-tones, and “Neutral” colours such as grey, white, and cream are permitted. Primary colours are not recommended for this development, except on trim elements, subject to consultant approval. “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 7:12.

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: *Moderate modern urban standard:* Tree planting as specified on Tree Replacement Plan plus minimum 20 shrubs of a minimum 3 gallon pot size. Corner lots shall have an additional 10 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: \$10,000.00

Summary prepared and submitted by: Tynan Consulting Ltd. Date: Nov 23, 2015

Reviewed and Approved by:  Date: Nov 23, 2015

Tree Preservation Summary

Surrey Project No:

Address: 11030 156TH Street, Surrey BC

Registered Arborist: Glenn Murray

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)	94
Protected Trees to be Removed	87
Protected Trees to be Retained (excluding trees within proposed open space or riparian areas)	7
Total Replacement Trees Required: <ul style="list-style-type: none"> - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio $\underline{\quad 35 \quad} \times \text{one (1)} = 35$ - All other Trees Requiring 2 to 1 Replacement Ratio $\underline{\quad 52 \quad} \times \text{two (2)} = 104$ 	139
Replacement Trees Proposed	24
Replacement Trees in Deficit	115
Protected Trees to be Retained in Proposed [Open Space / Riparian Areas]	

Off-Site Trees	Number of Trees
Protected Off-Site Trees to be Removed	0
Total Replacement Trees Required: <ul style="list-style-type: none"> - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio $\underline{\quad 0 \quad} \times \text{one (1)} = 0$ - All other Trees Requiring 2 to 1 Replacement Ratio $\underline{\quad 0 \quad} \times \text{two (2)} = 0$ 	0
Replacement Trees Proposed	0
Replacement Trees in Deficit	0

Summary, report and plan prepared and submitted by:

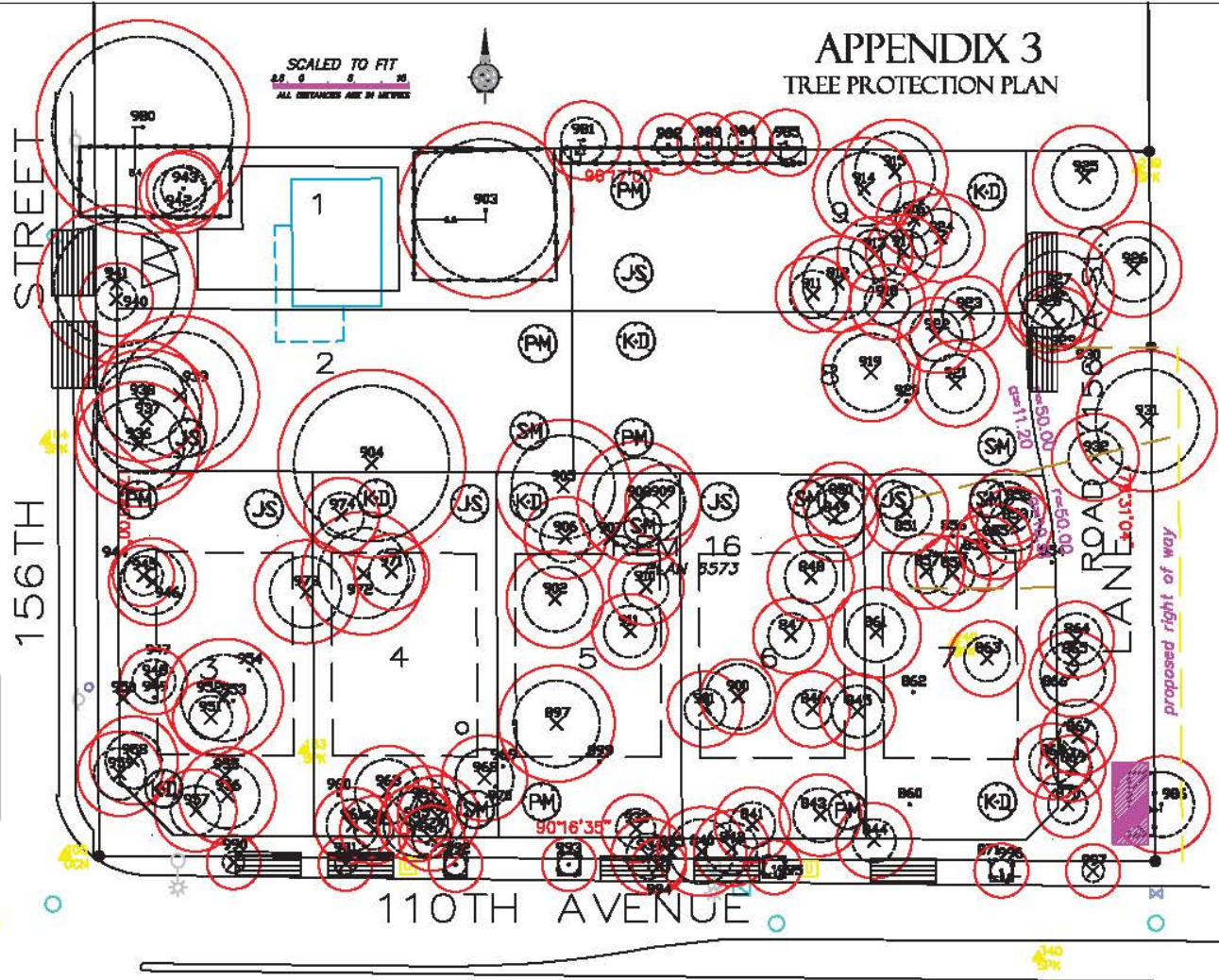


(Signature of Arborist)

Nov 3/2015

Date

APPENDIX 3 TREE PROTECTION PLAN



TREE INVENTORY											
#	Type	Action	DBH	MPZ	NBZ	#	Type	Action	DBH	MPZ	NBZ
940	Cottonwood	Remove	50cm	3.0m	4.5m	926	Native Cherry	Remove	40cm	2.4m	3.9m
941	Big Leaf Maple	Remove	35cm	2.1m	3.6m	929	Native Cherry	Remove	40cm	2.4m	3.9m
942	Cottonwood	Remove	40cm	2.4m	3.9m	931	Native Cherry	Remove	80cm	4.8m	6.3m
943	Native Cherry	Remove	35/35cm	2.5m	4.0m	932	Native Cherry	Remove	35/35cm	2.5m	4.0m
944	Big Leaf Maple	Remove	20/20/20	2.0m	3.5m	933	Native Cherry	Remove	30cm	1.8m	3.3m
945	Native Cherry	Remove	40cm	2.4m	3.9m	934	Cottonwood	Remove	35cm	2.1m	3.6m
946	Red Alder	Remove	30cm	1.8m	3.3m	936	Western Redcedar	Remove	71cm	4.3m	5.8m
947	Red Alder	Remove	35cm	2.1m	3.6m	937	Western Redcedar	Remove	60/60cm	5.0m	6.5m
948	Red Alder	Remove	40cm	2.4m	3.9m	938	Western Redcedar	Remove	30cm	1.8m	3.3m
949	Red Alder	Remove	45cm	2.7m	4.2m	939	Western Redcedar	Remove	97cm	5.9m	7.3m
950	Red Alder	Remove	35cm	2.1m	3.6m	940	Douglas Fir	Remove	32cm	1.9m	3.4m
951	Red Alder	Remove	40cm	2.4m	3.9m	941	Western Redcedar	Remove	96cm	5.8m	7.3m
952	Red Alder	Remove	40cm	2.4m	3.9m	942	Pacific Dogwood	Retain	40cm	2.4m	3.9m
953	Red Alder	Remove	40cm	2.4m	3.9m	943	Pacific Dogwood	Retain	35cm	2.1m	3.6m
954	Red Alder	Remove	50cm	3.0m	4.5m	945	Native Cherry	Remove	18/18cm	1.8m	3.3m
955	Red Alder	Remove	35cm	2.1m	3.6m	946	Native Cherry	Remove	40/30cm	3.0m	4.5m
956	Red Alder	Remove	45cm	2.7m	4.2m	948	Red Alder	Remove	34cm	2.0m	3.5m
957	Red Alder	Remove	35cm	2.1m	3.6m	951	Paper Birch	Remove	29/18cm	1.8m	3.3m
958	Native Cherry	Remove	40cm	2.4m	3.9m	952	Western Redcedar	Remove	50/30cm	4.0m	5.5m
959	Big Leaf Maple	Remove	50cm	3.0m	4.5m	956	Western Redcedar	Remove	50cm	3.0m	4.5m
967	Native Cherry	Remove	30cm	1.8m	3.3m	957	Douglas Fir	Remove	30cm	2.3m	3.8m
968	Hawthorne	Remove	35cm	2.1m	3.6m	958	Douglas Fir	Remove	44cm	2.6m	4.1m
969	Native Cherry	Remove	30cm	1.8m	3.3m	959	Pacific Dogwood	Remove	25/20/15	2.4m	3.9m
970	Native Cherry	Remove	30cm	1.8m	3.3m	961	Red Alder	Remove	40cm	2.4m	3.9m
971	Red Alder	Remove	40/40/40	4.0m	5.5m	962	Native Cherry	Remove	20/13cm	1.8m	3.3m
972	Red Alder	Remove	50cm	3.0m	4.5m	963	Native Cherry	Remove	50cm	3.0m	4.5m
973	Douglas Fir	Remove	32cm	1.9m	3.4m	964	Native Cherry	Remove	40cm	2.4m	3.9m
974	Douglas Fir	Remove	50cm	3.0m	4.5m	965	Native Cherry	Remove	30cm	1.8m	3.3m
975	Western Redcedar	Retain	110cm	6.6m	8.1m	966	Native Cherry	Remove	45cm	2.7m	4.2m
976	Western Redcedar	Remove	120cm	7.2m	8.7m	967	Native Cherry	Remove	30cm	1.8m	3.3m
977	Big Leaf Maple	Remove	80cm	4.8m	6.3m	968	Red Alder	Remove	45cm	2.7m	4.2m
978	Red Alder	Remove	38cm	2.3m	3.8m	971	Shore Pine	Remove	35cm	2.1m	3.6m
979	Red Alder	Remove	70cm	4.2m	5.7m	972	Douglas Fir	Remove	70cm	4.2m	5.7m
980	Native Cherry	Remove	35cm	2.1m	3.6m	973	Western Redcedar	Remove	55cm	3.3m	4.8m
981	Red Alder	Remove	40cm	2.4m	3.9m	974	Spruce	Remove	35cm	2.1m	3.6m
982	Native Cherry	Remove	35cm	2.2m	3.7m	980	Western Redcedar	Retain	140cm	8.4m	9.9m
983	Red Alder	Remove	45/30cm	3.3m	4.8m	981	Red Alder	Retain	35cm	2.1m	3.6m
984	Red Alder	Remove	38cm	2.3m	3.8m	982	Blue Spruce	Retain	20cm	1.2m	2.7m
985	Blue Spruce	Remove	35cm	3.4m	4.9m	983	Blue Spruce	Retain	22cm	1.3m	2.8m
986	Blue Spruce	Remove	60cm	3.7m	5.2m	984	Blue Spruce	Retain	32cm	1.9m	3.4m
987	Native Cherry	Remove	30cm	1.8m	3.3m	985	Blue Spruce	Retain	25cm	1.5m	3.0m
988	Red Alder	Remove	35cm	2.1m	3.6m	986	Douglas Fir	Retain	50cm	3.0m	4.5m
989	Red Alder	Remove	35cm	2.1m	3.6m	990	Green Ash	Remove	10cm	1.0m	2.5m
990	Red Alder	Remove	60cm	3.6m	5.1m	991	Green Ash	Remove	10cm	1.0m	2.5m
991	Red Alder	Remove	45cm	2.7m	4.2m	992	Green Ash	Retain	8cm	1.0m	2.5m
992	Red Alder	Remove	40cm	2.4m	3.9m	993	Red Oak	Retain	10cm	1.0m	2.5m
993	Red Alder	Remove	40cm	2.4m	3.9m	994	Red Oak	Retain	10cm	1.0m	2.5m
994	Red Alder	Remove	45cm	2.7m	4.2m	995	Red Oak	Retain	5cm	1.0m	2.5m
995	Red Alder	Remove	50cm	3.0m	4.5m	996	Sweetgum	Retain	8cm	1.0m	2.5m
996	Native Cherry	Remove	50cm	3.0m	4.5m	997	Sweetgum	Remove	8cm	1.0m	2.5m
997	Red Alder	Remove	60cm	3.6m	5.1m						

NOTES:
PLANTS IN THE PLANT LIST ARE SPECIFIED ACCORDING TO THE LANDSCAPE CANADA GUIDE SPECIFICATIONS FOR NURSERY STOCK AND THE BCNTA STANDARD FOR CONTAINER GROWN PLANTS.
ALL LANDSCAPING AND LANDSCAPE MATERIALS CONFORM TO THE LATEST EDITION OF THE BCNTA/BCSLA "LANDSCAPE STANDARDS".

REPLACEMENT TREES			
QTY	Type	Size	
6	Kousa Dogwood	6cm	(KD)
6	Paperbark Maple	6cm	(PM)
6	Japanese Snowbell	6cm	(JS)
6	Saucer Magnolia	6cm	(SM)

LEGEND

TREE PROPOSED FOR RETENTION: Circle with tree code (e.g., 980)

TREE PROPOSED FOR REMOVAL: Circle with 'X' (e.g., 897)

AREAS REQUIRING ARBORIST SUPERVISION: Hatched area (e.g., 986)

Undersized Tree Surveyed: Circle with tree code (e.g., 860)

PROTECTION ZONE (MPZ) FENCING DIMENSIONS IN METRES: Circle with dimension (e.g., 3.0)

PROTECTION FENCING: Dashed line

NO FOUNDATION ZONE (NFZ): Dotted line

Undersized Trees					
#	Type	DBH	#	Type	DBH
944	Dogwood	27cm	950	Paper Birch	29cm
858	Maple	27cm	953	Paper Birch	27cm
871	Cottonwood	27cm	855	Red Alder	25cm
935	Cottonwood	27cm	862	Red Alder	29cm
856	Cherry	26cm	920	Red Alder	29cm
857	Cherry	27cm	947	Red Alder	22cm
860	Cherry	26cm	990	Red Alder	25cm
865	Cherry	27cm	999	Red Alder	27cm
899	Cherry	27cm	970	Red Alder	28cm
907	Cherry	28cm	949	Redcedar	29cm
930	Cherry	29cm	954	Redcedar	24cm
955	Cherry	25cm			

Froggers Creek Tree Consultants Ltd
7783 McFraser Avenue Burnaby BC V5J 6H4
Telephone: 604-221-8028 Fax: 604-437-0870

11020 188th Street, Surrey

TREE PROTECTION PLAN
THE DRAWING PLOTS ALL TREES, PROPOSED FOR RETENTION, REMOVAL, THEIR CANOPIES, PROTECTION ZONES, PROTECTION FENCING AND REPLACEMENT TREES IN RELATION TO PROPOSED LAYOUT

Drawn by: [Signature]
November 3, 2016