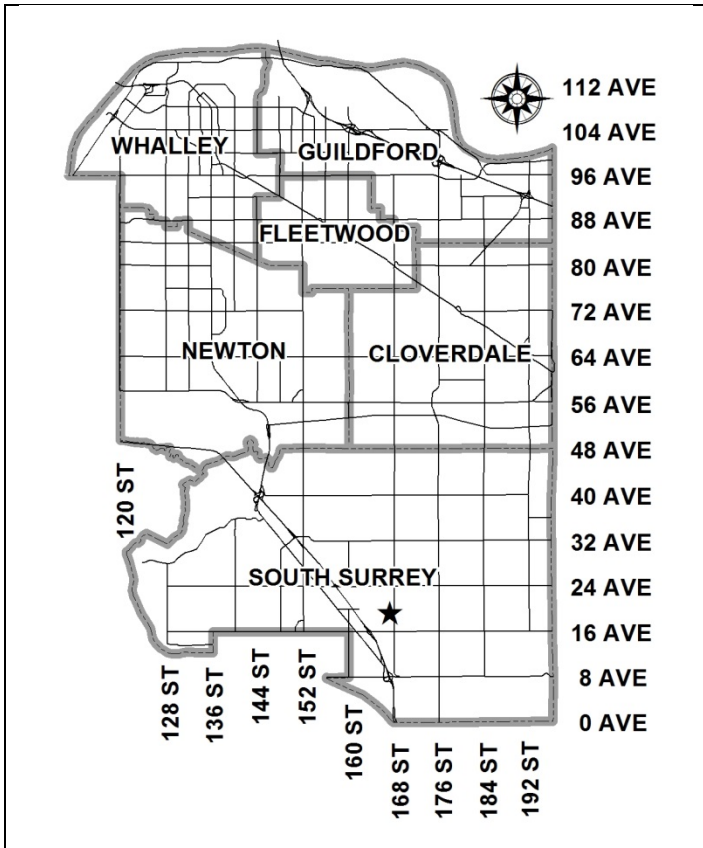


City of Surrey
PLANNING & DEVELOPMENT REPORT

File: 7917-0563-00

Planning Report Date: May 28, 2018



PROPOSAL:

- **Rezoning** from RA to RF-13 to allow subdivision into 14 single family lots.

LOCATION:

1913 - 168 Street
 1945 - 168 Street

ZONING:

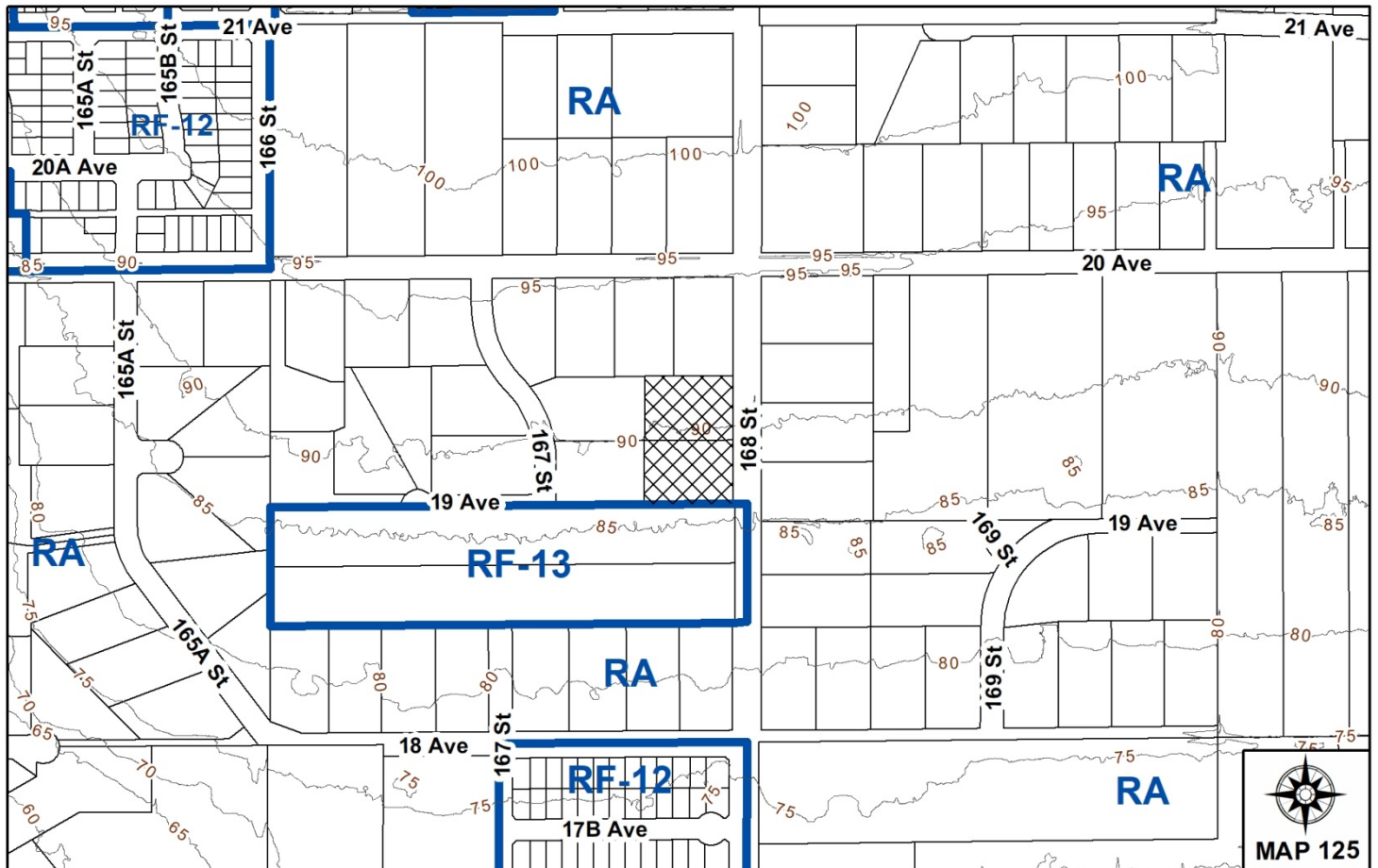
RA

OCP DESIGNATION:

Urban

NCP DESIGNATION:

Urban Transitional up to 8 u.p.a.,
 Buffer, and Drainage Corridor 5m



RECOMMENDATION SUMMARY

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

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- None.

RATIONALE OF RECOMMENDATION

- The proposal complies with the OCP Designation for the site.
- The proposal complies with the Sunnyside Heights Neighbourhood Concept Plan (NCP).

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 (13) Zone (RF-13)" 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) submission of a landscaping plan and landscaping cost estimate to the specifications and satisfaction of the Planning and Development Department for the landscape buffer requirement along 168 Street;
 - (e) the applicant satisfy the deficiency in tree replacement on the site, to the satisfaction of the Planning and Development Department;
 - (f) demolition of existing buildings and structures to the satisfaction of the Planning and Development Department;
 - (g) registration of a Section 219 Restrictive Covenant on proposed Lots 1 to 7 for increased setbacks from 168 Street, and installation and maintenance of a landscape buffer; and
 - (h) registration of a Section 219 Restrictive Covenant for "no build" on a portion of Lot 1 to facilitate future consolidation with the adjacent property to the north (16778 – 20 Avenue).

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 students at Pacific Heights Elementary School
4 students at Earl Marriott 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 late 2019.

Parks, Recreation & Culture: No Concerns.

SITE CHARACTERISTICS

Existing Land Use: Single Family Residential

Adjacent Area:

Direction	Existing Use	NCP Designation	Existing Zone
North:	Single Family Residential (Development Application No. 7916-0661-00 proposes rezoning from RA to RF-13 in order to subdivide into 7 lots. This application is pre-Council.)	Urban Transitional up to 8 u.p.a. and Buffer	RA
East (Across 168 Street):	Single Family Residential	Suburban Residential (1 to 2 u.p.a.) (Grandview Heights General Land Use Plan)	RA
South (Across 19 Avenue):	Recently approved RF-13 Single Family Residential Subdivision	Medium Density Residential 10-15 u.p.a. and Buffer	RF-13
West:	Single Family Residential	Low Density Residential 6-10 u.p.a. and Drainage Corridor 5m	RA

DEVELOPMENT CONSIDERATIONS

Background

- The subject property, located on 168 Street north of 19 Avenue, is designated Urban in the Official Community Plan (OCP) and Urban Transitional up to 8 u.p.a., Buffer, and Drainage Corridor 5m in the Sunnyside Heights Neighbourhood Concept Plan (NCP).

- The subject site is approximately 0.81 hectares (2 acres) in size and is zoned "One-Acre Residential Zone (RA)". There are two (2) existing single family dwellings on the site that will be demolished to accommodate the proposed development.

Current Proposal

- The applicant is proposing to rezone the site from "One-Acre Residential Zone (RA)" to "Single Family Residential (13) Zone (RF-13)" to facilitate subdivision into 14 lots.
- The proposed lots will range in size from 338 square metres (3,638 sq. ft.) to 404 square metres (4,350 sq. ft.), with one oversized lot (Lot 1), which has potential to subdivide further with lands to the north (16778 – 20 Avenue). A "no build" Section 219 Covenant will be registered on this lot to facilitate future consolidation with the adjacent lands.
- The proposed subdivision has a net density of 26.7 units per hectare (u.p.h.) or 10.8 units per acre (u.p.a.) and a gross density of 17 u.p.h. or 7 u.p.a., which is consistent with the Urban Transitional up to 8 u.p.a. designation in the Sunnyside Heights NCP. This designation allows up to 8 dwelling units per acre on a gross density basis.
- The intent of the Urban Transitional up to 8 u.p.a. designation is to provide a transition to the larger suburban lots on the east side of 168 Street and requires a 10 metre front yard setback that consists of 5 metres (16 ft.) for the Coast Meridian Greenway (multi-use pathway) and a landscape buffer, and a 5 metre (16 ft.) building setback from the edge of the landscape buffer. The multi-use pathway will be secured through a Statutory Right-of-Way and the landscape buffer through a Restrictive Covenant with a landscaping plan attached as a schedule. A maximum 1.2 metre (4 ft.) high fence will be required along the western edge of the landscape buffer.

Lot Grading and Building Scheme

- The applicant has retained Michael E. Tynan of Tynan Consulting Ltd. as the Design Consultant. The Design Consultant conducted a character study of the surrounding homes and based on the findings has proposed a set of building design guidelines. A summary is attached as Appendix V.
- A preliminary lot grading plan, submitted by Hub Engineering Inc., 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.

PRE-NOTIFICATION

- A development proposal sign was installed on April 12, 2018 and pre-notification letters were mailed on March 26, 2018 to the surrounding property owners within 100 metres (300 ft.) of the subject property. No comments have been received to date from area residents. One letter was received from the Little Campbell Watershed Society with the following comment:

- “All new high-density housing built east of the Highway 99 Corridor in the 15 to 24 Avenue locus be provided enough parkland for neighbourhood (walk-to-able) parks, thus relieving future pressure on the Fergus Biodiversity Preserve, the future of which will be linked to Fergus Creek health.”

(The subject application proposes low to moderate density single family development that is consistent with the RF-13 Zone and the Urban Transitional up to 8 u.p.a. designation in the Sunnyside Heights NCP. No plan amendments are proposed as part of the subject application.

The City recently acquired approximately 0.5 hectares (1.2 acres) of NCP designated park located between 17A and 17B Avenues, west of 167 Street through Development Application No. 7915-0443-00. Another approximately 1.2 hectares (3 acres) of NCP designated parkland between 17A Avenue and 18 Avenue is anticipated to be acquired through Development Application No. 7917-0506-00, which is currently pre-Council.

The subject site is not designated for park; however, approval of the development application is subject to payment of a 5% cash-in-lieu parkland contribution and the NCP amenity contributions on a per unit basis in keeping with the Sunnyside Heights NCP.)

TREES

- Jeff Ross, ISA Certified Arborist of Mike Fadum and Associates 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/Cottonwood	0	0	0
Deciduous Trees (excluding Alder and Cottonwood Trees)			
Apple	2	2	0
Beech	1	1	0
Birch, Paper	1	1	0
Cherry	3	3	0
Elm, Brandon	1	0	1
Fig, Common	2	2	0
Horse Chestnut	1	1	0
Linden, Little Leaf	1	1	0
Magnolia, Yellow Bird	3	0	3
Maple, Bigleaf	1	1	0
Mountain Ash	2	2	0
Oak, English	3	3	0
Walnut, English	1	1	0

Tree Species	Existing	Remove	Retain
Coniferous Trees			
Holly, Variegated English	1	1	0
Cedar, Deodar	2	1	1
Cedar, Western Red	1	1	0
Cedar, Yellow	1	0	1
Cypress, Threadleaf	1	1	0
Cypress, Sawara	2	2	0
Douglas-fir	4	3	1
False Cypress	1	1	0
Pine	1	1	0
Spruce, Colorado Blue	1	0	1
Spruce, Norway	2	2	0
Spruce, Serbian	1	1	0
Total (excluding Alder and Cottonwood Trees)	40	32	8
Total Replacement Trees Proposed (excluding Boulevard Street Trees)		41	
Total Retained and Replacement Trees		49	
Contribution to the Green City Fund		\$9,200	

- The Arborist Assessment states that there are a total of 40 protected trees on the site. There are no Alder and Cottonwood trees. It was determined that 8 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.
- For those trees that cannot be retained, the applicant will be required to plant trees on a 2 to 1 replacement ratio. This will require a total of 64 replacement trees on the site. Since only 41 replacement trees can be accommodated on the site (based on an average of 3 trees per lot), the deficit of 23 replacement trees will require a cash-in-lieu payment of \$9,200, representing \$400 per tree, to the Green City Fund, in accordance with the City's Tree Protection By-law.
- In summary, a total of 49 trees are proposed to be retained or replaced on the site with a contribution of \$9,200 to the Green City Fund.

SUSTAINABLE DEVELOPMENT CHECKLIST

The applicant prepared and submitted a sustainable development checklist for the subject site on December 6, 2017. 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 subject site is located on the west side of 168 Street, north of 19 Avenue in the Sunnyside Heights Neighbourhood Concept Plan (NCP) area. • The site is designated Urban in the Official Community Plan (OCP) and Urban Transitional up to 8 u.p.a. in the NCP.
2. Density & Diversity (B1-B7)	<ul style="list-style-type: none"> • The application proposes a net density of 26.7 units per hectare (u.p.h.) or 10.8 units per acre (u.p.a.) and gross density of 17 u.p.h. or 7 u.p.a.
3. Ecology & Stewardship (C1-C4)	<ul style="list-style-type: none"> • The proposed development incorporates the following Low Impact Development Standards (LIDS): <ul style="list-style-type: none"> ○ Absorbent soils equal or greater than 300 mm in depth ○ Roof downspout disconnection ○ On-lot infiltration trenches or sub-surface chambers ○ Vegetated swales/rain gardens/bio-swales ○ Dry swales ○ Sediment control devices
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"> • The site design incorporates the “eyes on the street” Crime Prevention Through Environmental Design “CPTED” principle.
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 April 12, 2018 and pre-notification letters were mailed on March 26, 2018 to the surrounding property owners. The development application is subject to a Public Hearing for the proposed rezoning.

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I.	Lot Owners and Action Summary (Confidential) 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 Ron Hintsche

Jean Lamontagne
General Manager
Planning and Development

APPENDIX I HAS BEEN
REMOVED AS IT CONTAINS
CONFIDENTIAL INFORMATION

SUBDIVISION DATA SHEET

Proposed Zoning: RF-13

Requires Project Data	Proposed
GROSS SITE AREA	
Acres	2.01
Hectares	0.81
NUMBER OF LOTS	
Existing	2
Proposed	14
SIZE OF LOTS	
Range of lot widths (metres)	12.3-13.4 m
Range of lot areas (square metres)	338-404 m ²
DENSITY	
Lots/Hectare & Lots/Acre (Gross)	17 u.p.h./7 u.p.a.
Lots/Hectare & Lots/Acre (Net)	26.7 u.p.h./10.8 u.p.a.
SITE COVERAGE (in % of gross site area)	
Maximum Coverage of Principal & Accessory Building	50%
Estimated Road, Lane & Driveway Coverage	30%
Total Site Coverage	80%
PARKLAND	
Area (square metres)	n/a
% of Gross Site	n/a
	Required
PARKLAND	
5% money in lieu	YES
TREE SURVEY/ASSESSMENT	YES
MODEL BUILDING SCHEME	YES
HERITAGE SITE Retention	YES/NO
FRASER HEALTH Approval	NO
DEV. VARIANCE PERMIT required	
Road Length/Standards	NO
Works and Services	NO
Building Retention	NO
Others	NO

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APPENDIX II

CLIENT:	PROJECT: 1945 & 1913 168 STREET		
DRAWING TITLE:	RESIDENTIAL SUBDIVISION		
PROJECT No.	17057	DATE:	MAY 2018
LEGAL:	SCALE:	MUNICIPAL PROJECT No:	
PRELIMINARY PLAN - SUBJECT TO APPROVAL(S) FROM FEDERAL, PROVINCIAL AND LOCAL AUTHORITIES			


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

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

FROM: **Development Engineer, Engineering Department**

DATE: **May 18, 2018** PROJECT FILE: **7817-0563-00**

RE: **Engineering Requirements
Location: 1913 & 1945 - 168 St**

REZONE/SUBDIVISION

Property and Right-of-Way Requirements

- dedicate 2.808 m for ultimate 15.0 m road allowance along 168 Street;
- dedicate 12.50 m for ultimate 25.0 m wide road allowance along 19 Avenue – a portion of this road dedication is intended for drainage corridor;
- dedicate 11.50 m wide half road along 167A Street;
- dedicate a 6.0 m wide residential lane;
- dedicate all corner cuts at road intersections;
- register 2.70 m Statutory Right-of-Way (SRW) for Multi-Use Pathway (MUP); and
- register 0.50 m SRWs along property frontage for sidewalk maintenance and inspection chambers.

Applicant is also advised that they are required to dedicate as road (without compensation) gazetted road for the westerly 10.058 meters of 168th Street from 18th Avenue to 20th Avenue.

Works and Services

- construct 4.0 m Multi-use Pathway along 168 Street;
- construct north side of 19 Avenue to current standards;
- construct 167 A Street to current standards; and
- construct all frontage mains and service connections required to service the development.

A Servicing Agreement is required prior to Rezone/Subdivision.



Tommy Buchmann, P.Eng.
Development Engineer

M51



Planning March 27, 2018

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.

Pacific Heights Elementary is currently over capacity. Rapid enrolment growth is expected to continue into the foreseeable future. As of September 2017, there are 6 portables on site used as enrolling spaces.

In December 2017, the Ministry of Education announced funding for design and construction of the following, in the Pacific Heights catchment:

- A 12 classroom addition at Pacific Heights elementary and
- A new 25 classroom school on Edgewood drive

Though the District has NOT gone thru any official process to determine catchment boundaries for the new elementary school on Edgewood Drive, this development is close enough to be likely considered in the new school's catchment. The school is targeted to open September 2020.

To relieve the pressure at Earl Marriot, a new 1500 capacity high school located on 26th Ave next to the existing Pacific Heights Elementary is currently in design and construction; and is also targeted to open for September 2020. This new high school has been officially named Grandview Heights Secondary.

THE IMPACT ON SCHOOLS

APPLICATION #: 17 0563 00

SUMMARY

The proposed 14 Single family with suites are estimated to have the following impact on the following schools:

Projected # of students for this development:

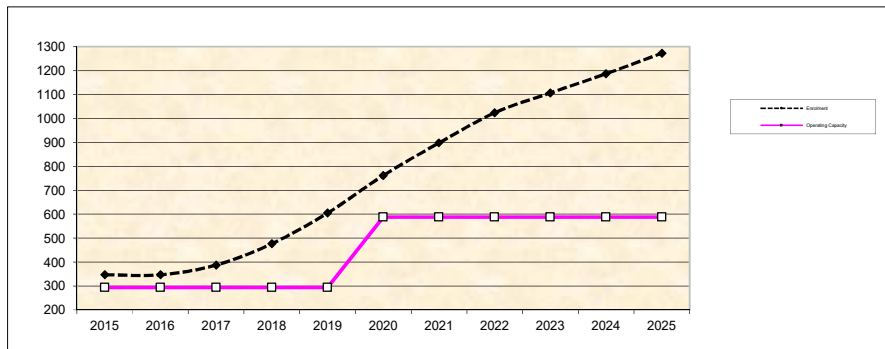
Elementary Students:	7
Secondary Students:	4

September 2017 Enrolment/School Capacity

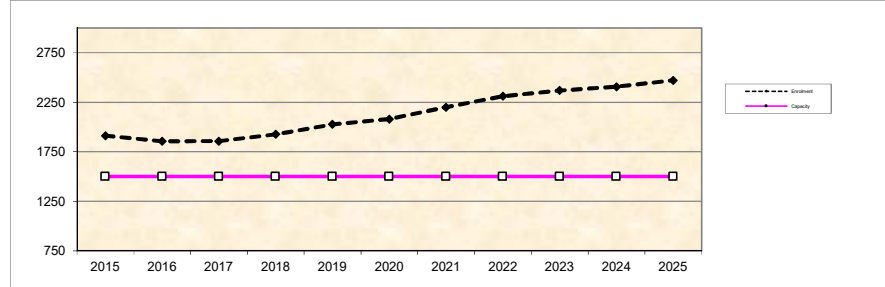
Pacific Heights Elementary	
Enrolment (K/1-7):	51 K + 337
Operating Capacity (K/1-7)	38 K + 256
Addition Operating Capacity (K/1-7) 2020	76 K + 512

Earl Marriot Secondary	
Enrolment (8-12):	1857
Capacity (8-12):	1500

Pacific Heights Elementary



Earl Marriot Secondary



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

BUILDING GUIDELINES SUMMARY

Surrey Project no: 17-0563-00
Project Location: 1913 and 1945 - 168 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:

The subject site is located within an old rural / suburban RA zone development area which is now the subject of dozens of compact/urban lot applications that will completely transform the character of the area. This area is therefore in rapid transition from an old suburban to a modern compact/urban character. The result will be that most of the existing homes will eventually be replaced with numerous homes on small lots, and so the existing character will be replaced entirely by a new modern urban character.

Homes in the immediate area include a variety of old urban / suburban structures including Basement Entry homes with high scale box-like massing characteristics, 50-60 year old Bungalows of which some are in tear-down condition, a 40 - 50 year old 900 sq.ft. agricultural structure with Gambrel roof, a 35 year old 3500+ sq.ft. Tudor style Two-Storey, a 40-50 year old Colonial style Two-Storey, and a 40 year old 3500+ sq.ft. Rural Heritage Two-Storey with five street facing dormers and a Gambrel roof.

None of the homes above are objectionable (except the tear-downs), but none can be considered context homes for a new RF-13 development. Many are at or near the end of their service life and are likely to be replaced in the foreseeable future. Context for the subject site therefore, should be derived from the building scheme regulations of dozens of new applications in the area, most of which are designed to accommodate post year 2016 compact/urban lot homes. The style range anticipated in these guidelines includes the now common "Neo-Traditional" and "Neo-Heritage" homes constructed throughout Surrey over the past 20 years, and also compatible forms of "West Coast Contemporary" designs, which will define this area well into the future. This style range will result in more variety than is found in many compact/urban subdivisions constructed in the past 20 years, a result of greater variation in roof slopes and a greater variety roof types, and wall and cladding materials. Given the location within Surrey, standards have been established at a high level (for example, vinyl siding is not permitted). It is likely that more than 95 percent of these homes will be Two-Storey type of a 2700 - 2850 sq.ft. size.

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

- 1) **Context Homes:** The housing stock in the area surrounding the subject site does not provide suitable architectural context for a post year 2016 compact modern urban development. Therefore existing homes will not be emulated. Rather, a new modern urban character is proposed. Massing scale, massing designs, roof designs, construction materials, and trim and detailing elements will be similar to those used in most post year 2016 compact/urban zone developments in South Surrey, especially those within several blocks surrounding the subject site.
- 2) **Style Character :** Most neighbouring homes can be classified as old suburban homes that have massing designs and exterior trim and detailing standards that do not meet standards for compact/urban lot developments. Rather than emulating the existing homes, the recommendation is to utilize styles including "Neo-Traditional", "Neo-Heritage", "West Coast Contemporary" and compatible hybrid styles. Note that style range is not specifically restricted in the building scheme. However, the consultant refers to the character study when reviewing plans for meeting style-character intent.
- 3) **Home Types :** Most surrounding homes are either Two-Storey, Basement Entry, or Bungalow type. It is expected however that all new homes constructed at the subject site will be Two-Storey type. 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 compact/urban 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 :** Building schemes in most new applications in this area have a maximum front entrance height of 1 ½ storeys, which is suitable for the proposed RF-13 homes.
- 6) **Exterior Wall Cladding :** Building schemes for all new applications prohibit the use of vinyl siding. 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 quality. Vinyl therefore, is not recommended.
- 7) **Roof surface :** Existing homes have either cedar shingle or shake profile asphalt shingle, or tar and gravel roof surfaces. However, the building schemes for surrounding developments permit only shake profile asphalt shingles, environmentally sustainable roof products in a shake profile, membrane roofs where required by BC building code, and metal for feature areas only.
- 8) **Roof Slope :** Roof slopes range from 4:12 to 12:12 on existing homes.

Streetscape: The subject site is located in an old growth RA zoned area with a rural/suburban character. Most homes are 40-50 year old 1400 - 4000 sq.ft. Bungalows, Basement Entry, or Two-Storey type dwellings situated on large lots, and most will be demolished. The future streetscape implied by new surrounding developments will result in modern compact/urban "Neo-Traditional", "Neo-Heritage", "West Coast Contemporary" and compatible style homes with desirable mid-scale massing characteristics and high quality finishing materials situated on lots that are mostly 12m to 13.4m in width, that are landscaped to a high modern urban standard.

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”, “Neo-Heritage”, “West Coast Contemporary”, or compatible styles as determined by the design *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 2016'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 ½ storeys.

2.2 Proposed Design Solutions:

Interfacing Treatment with existing dwellings)

Existing neighbouring homes do not provide suitable context for the proposed compact type homes at the subject site because the existing homes are large, wide Two-Storeys or Bungalows, or box-like Basement Entry homes situated on acreages that do not relate to the proposed small lot modern urban context of numerous new applications in this area. Interfacing treatments are therefore not contemplated. Rather, massing design, construction materials, and trim element treatments will meet or exceed standards commonly found in compact lot developments constructed in South Surrey subsequent to the year 2016.

Exterior Materials/Colours:

Stucco, Cedar, Fibre-Cement Board, 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, colonial red, or forest green are permitted only if accompanied by substantial neutral colour elements as approved by the design 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 6:12, 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:** Only shake profile asphalt shingles with a raised ridge cap and new environmentally sustainable roofing products providing that aesthetic properties of the new materials are equal to or better than the traditional roofing products. Greys, browns, or black only. Membrane roofs permitted where required by B.C. Building Code. Feature metal roofs permitted if approved by the consultant.
- In-ground basements:** In-ground basements are subject to determination that service invert locations are sufficiently below grade to permit a minimum 50 percent in-ground basement to be achieved. If achievable, 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 33 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 28 shrubs on the three RF corner lots, and 18 shrubs on the interior lots. Driveways: exposed aggregate, interlocking masonry pavers, stamped concrete, or coloured concrete in dark earth tones or medium to dark grey only. Broom finish concrete permitted only where the driveway directly access a rear lane. Asphalt, and gravel not permitted.

Compliance Deposit: \$5,000.00

Summary prepared and submitted by: Tynan Consulting Ltd. **Date:** May 23, 2018

Reviewed and Approved by:  **Date:** May 23, 2018

MIKE FADUM AND ASSOCIATES LTD.
VEGETATION CONSULTANTS

Tree Preservation Summary

Surrey Project No: TBD

Address: 1913 / 1945 - 168 St

Registered Arborist: Jeff Ross #PN-7991A

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)	40
Protected Trees to be Removed	32
Protected Trees to be Retained (excluding trees within proposed open space or riparian areas)	8
Total Replacement Trees Required: <ul style="list-style-type: none"> - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio 0 X one (1) = 0 - All other Trees Requiring 2 to 1 Replacement Ratio 32 X two (2) = 64 	64
Replacement Trees Proposed	41
Replacement Trees in Deficit	23
Protected Trees to be Retained in Proposed [Open Space / Riparian Areas]	NA

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

Summary report and plan prepared and submitted by: Mike Fadum and Associates Ltd.

Signature of Arborist:

Date: April 10, 2018



Mike Fadum and Associates Ltd.
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Table 1: Summary of Tree Preservation by Tree Species:

Tree Species	Existing	Remove	Retain
Alder and Cottonwood Trees			
Alder/Cottonwood	0	0	0
Deciduous Trees (excluding Alder and Cottonwood Trees)			
Apple	2	2	0
Beech	1	1	0
Birch, Paper	1	1	0
Cherry	3	3	0
Elm, Brandon	1	0	1
Fig, Common	2	2	0
Horse Chestnut	1	1	0
Linden, Little Leaf	1	1	0
Magnolia, Yellow Bird	3	0	3
Maple, Bigleaf	1	1	0
Mountain Ash	2	2	0
Oak, English	3	3	0
Walnut, English	1	1	0
Evergreen Trees			
Holly, Variegated English	1	1	0
Coniferous Trees			
Cedar, Deodar	2	1	1
Cedar, Western Red	1	1	0
Cedar, Yellow	1	0	1
Cypress, Threadleaf	1	1	0
Cypress, Sawara	2	2	0
Douglas-fir	4	3	1
False Cypress	1	1	0
Pine	1	1	0
Spruce, Colorado Blue	1	0	1
Spruce, Norway	2	2	0
Spruce, Serbian	1	1	0
Total	40	32	8
Additional Trees in the proposed Open Space / Riparian Area	NA	NA	NA
Total Replacement Trees Proposed (excluding Boulevard Street Trees)		41	
Total Retained and Replacement Trees		49	

***TOTALS DO NOT INCLUDE OFFSITE TREES**

