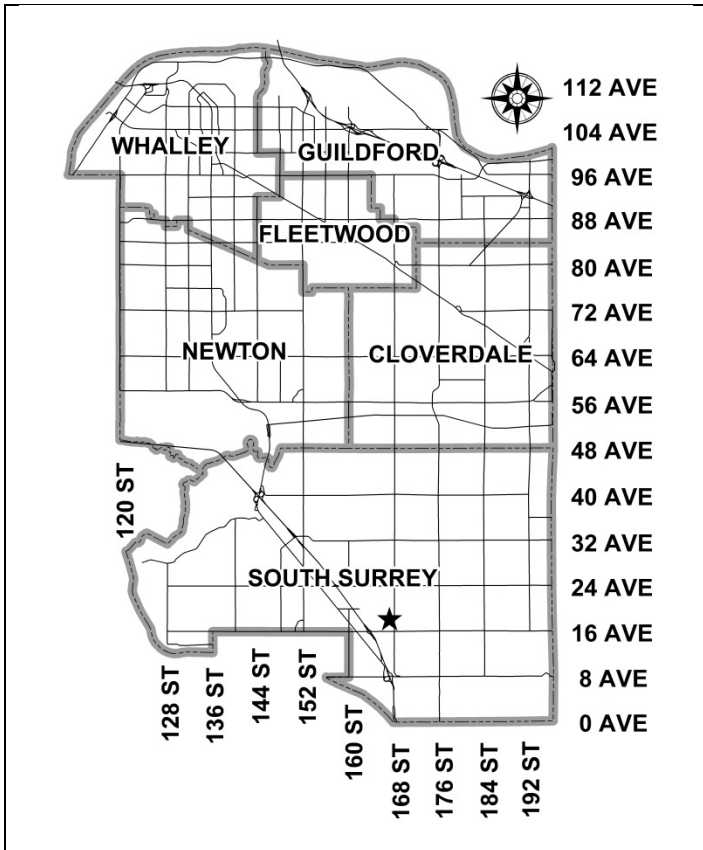


City of Surrey  
**PLANNING & DEVELOPMENT REPORT**

File: 7917-0601-00

Planning Report Date: April 23, 2018



**PROPOSAL:**

- **Rezoning** from RA to RF-13
- **NCP Amendment** from Low Density Residential 6- 10 u.p.a. to Medium Density Residential 10-15 u.p.a. and for changes to the road and drainage networks.

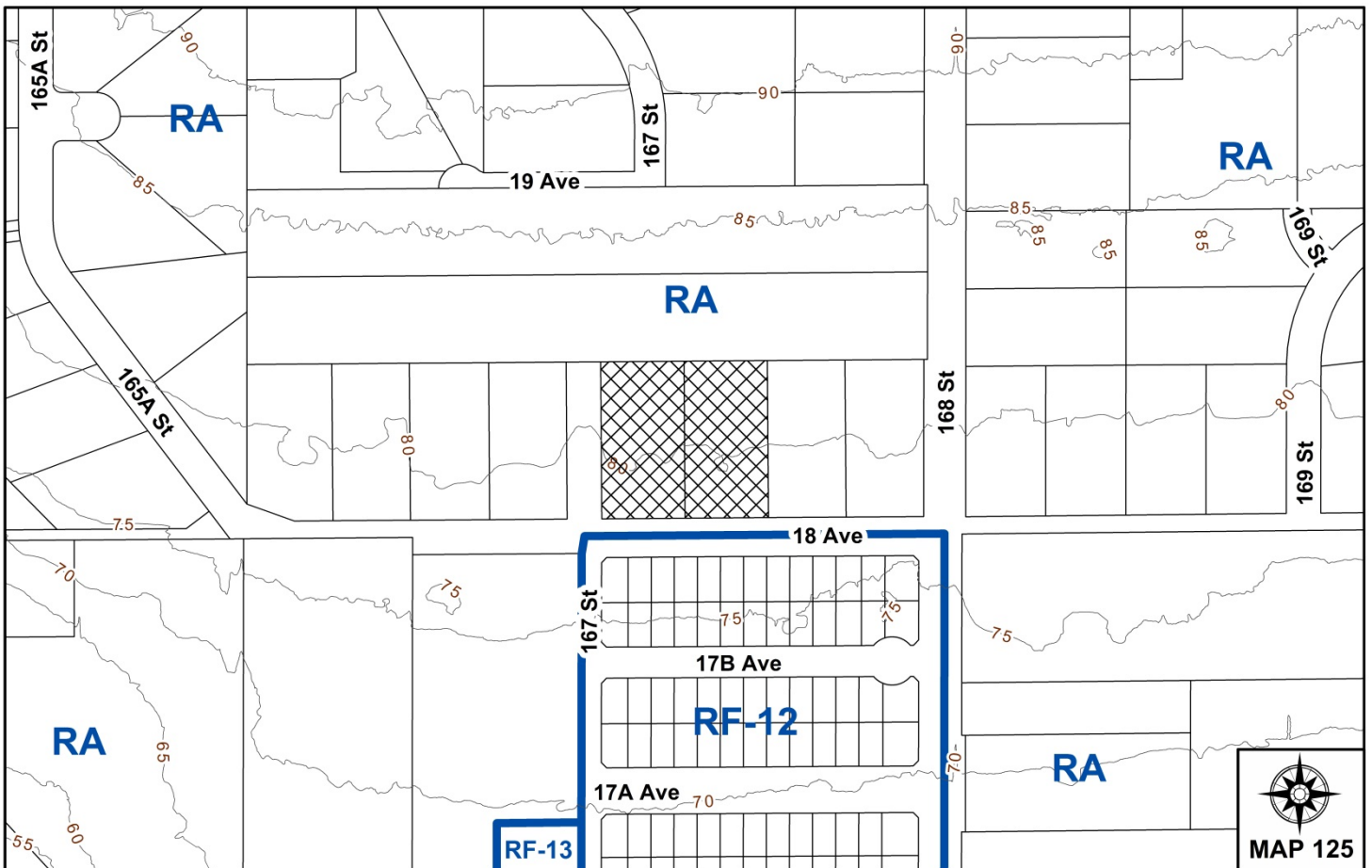
to allow subdivision into 20 single family lots.

**LOCATION:** 16711 - 18 Avenue  
 16739 - 18 Avenue

**ZONING:** RA

**OCP DESIGNATION:** Urban

**NCP DESIGNATION:** Low Density Residential (6 - 10 upa) and 5m Drainage Corridor



### RECOMMENDATION SUMMARY

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

### DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- The application proposes amendments to the Sunnyside Heights Neighbourhood Concept Plan (NCP) to redesignate the site from "Low Density Residential 6 – 10 .u.p.a" to "Medium Density Residential 10-15 u.p.a." and for changes to the roads and drainage networks.

### RATIONALE OF RECOMMENDATION

- The proposed development complies with the site's Urban designation in the Official Community Plan (OCP).
- The proposed density and building form are appropriate for this part of the Sunnyside Heights Neighbourhood Concept Plan area, and are consistent with the amendments introduced under Development Application No. 7916-0312-00 to the north, which received Third Reading on May 8, 2017, and with several other development applications located along the north side of 18 Avenue and both east and west of the subject site.

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) demolition of existing buildings and structures to the satisfaction of the Planning and Development Department; and
  - (e) the applicant satisfy the deficiency in tree replacement on the site, to the satisfaction of the Planning and Development Department.
3. Council pass a resolution to amend the Sunnyside Heights Neighbourhood Concept Plan to redesignate the land from Low Density 6 – 10 u.p.a. to Medium Density Residential 10-15 u.p.a. and for the changes to the local road and drainage networks when the project is considered for final adoption.

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:**

10 Elementary students at Pacific Heights Elementary School  
5 Secondary students at Earl Marriot 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 January, 2020.

Parks, Recreation & Culture: No concerns.

SITE CHARACTERISTICS

Existing Land Use: Single family residential dwellings and associated buildings on large urban lots.

Adjacent Area:

Direction	Existing Use	NCP Designation	Existing Zone
North:	Single Family Residential (Development Application No. 7916-0312-00 proposes rezoning to facilitate an RF-13 zone subdivision. Received 3 <sup>rd</sup> Reading on May 8, 2017.)	Low Density Residential 6 – 10 u.p.a. & 5 m Drainage Corridor	RA
East:	Single Family Residential (Development Application No. 7917-0180-00 proposes rezoning to facilitate subdivision into 9 single family lots. Received Third Reading on February 6, 2018.)	Urban Transitional Up to 8 u.p.a. & 5 m Drainage Corridor	RA
South (Across 18 Avenue):	Single Family Residential	Low Density Residential 6 -10 u.p.a.	RF-12
West (Across 167 Street):	Single Family Residential (Development Application No. 7915-0440-00 proposes rezoning to allow subdivision into 9 single family lots. Received Third Reading on June 12, 2017.)	Low Density Residential 6 – 10 upa	RA

JUSTIFICATION FOR PLAN AMENDMENT

- The subject property, located on 18 Avenue west of 168 Street, is designated Urban in the Official Community Plan (OCP) and Low Density Residential 6 – 10 u.p.a. and 5 metre Drainage Corridor in the Sunnyside Heights Neighbourhood Concept Plan (NCP).
- The proposal has a net density of 28 units per hectare (11.3 u.p.a.), which necessitates the need for the NCP amendment from "Low Density Residential 6 – 10 u.p.a." to "Medium Density Residential 10-15 u.p.a" and for changes to the road and drainage networks. The applicant is proposing the removal of two lanes, the introduction of an east-west road through the site (18A Avenue), and the removal of the east-west drainage corridor along 18 Avenue further necessitating the need for amendments to the NCP.

- The road pattern shown in the Sunnyside Heights NCP suggests that the site should be developed as "Single Family Residential Zone (RF)" lots with lanes and rear garages. The applicant is instead proposing removal of an east-west lane in order to achieve a more efficient layout with the wider Type II "Single Family Residential (13) Zone (RF-13)" lots with front-loaded garages. This concept is contingent to the introduction of the new east-west road 18A Avenue.
- The proposed amendments to the road network are consistent with amendments proposed by Development Application No. 7916-0312-00 to the north of the subject site which received Third Reading on May 8, 2017. Under this application, the NCP is being amended to remove the lanes and drainage corridor and to add an east-west road (18B Avenue) to facilitate subdivision into 71 RF-13 type lots.
- There are currently several other in stream development applications east and west of the subject site along the north side of 18 Avenue (Development Application Nos. 7915-0435-00, 7915-0439-00, 7915-0440-00, 7916-0490-00 and 7917-0180-00) which also proposes redesignation to Medium Density Residential 10-15 u.p.a., as well as the introduction of 18A Avenue and the removal of all of the associated lanes. These applications received Third Reading on June 12, 2017 (No. 7915-0435-00, 7915-0439-00 and 7915-0440-00) and February 6, 2018 (7917-0180-00 & 16-0490-00). The proposed amendments to the NCP allow for better vehicle and pedestrian circulation in this area and create a consistent road pattern that is complementary to the road network that was introduced under Development Application No. 7916-0312-00 to the north.

## DEVELOPMENT CONSIDERATION

### Background and Current Proposal

- The site is approximately 8,818 square metres (2.2 acre) in size and is zoned "One-Acre Residential Zone (RA)". There are existing single family dwellings on the property which will be demolished to accommodate the proposed development.
- The application proposes an amendment to the Sunnyside Heights Neighbourhood Concept Plan (NCP) to redesignate the site from "Low Density Residential 6 – 10 u.p.a." to "Medium Density Residential 10-15 u.p.a" and for changes to the local road and drainage networks and to rezone the site to "Single Family Residential (13) Zone (RF-13)" in order to permit subdivision into twenty (20) single family lots.
- The proposed lots range from 336 – 400 square metres (3,617 – 4,306 sq. ft.) in size and conform to the minimum subdivision requirements of the RF-13 Zone.
- The Engineering requirements associated with the NCP amendments including the proposed changes to the local road and drainage networks are summarized in Appendix III. The applicant is required to complete a detailed stormwater analysis to support removal of the drainage corridor, including continuous simulation to adequately address impacts to natural watercourses, and must implement the recommendations from this analysis. Should these requirements not be met, Engineering will not support the proposed NCP amendments.

### Lot Grading & Building Scheme

- The applicant retained Michael E. Tynan of Tynan Consulting Ltd. to conduct a character study of the surrounding homes and propose a set of Building Design Guidelines to maintain consistency with existing development.
- The Character Study involved reviewing a number of existing homes in the neighbourhood in order to establish suitable design guidelines for the proposed subdivision. The study found that most of the neighbouring homes can be classified as large, wide, low profile estate size bungalows. However, due to the large number of new applications for compact lot developments in the surrounding area, the future character of this area will not be defined by the existing housing stock. Rather than emulating the existing homes, the recommendation is to utilize compatible styles including "Neo-Traditional", "Neo-Heritage", and "West Coast Contemporary" styles. As such, the Building Scheme for the subject property will contain updated design standards appropriate for post-2016 RF-13 type lots.
- A preliminary lot grading plan, submitted by Hub Engineering Inc., dated December 20, 2017 and revised on April 4, 2018, has been reviewed by staff and found to be generally acceptable. The applicant proposes in-ground basements on all of the proposed lots. The feasibility of the in-ground basements will be confirmed once the City's Engineering Department has reviewed and accepted the applicant's final engineering drawings.

### PRE-NOTIFICATION

Pre-notification letters were sent on January 8, 2018 and a development proposal sign was installed on the subject site on March 26, 2018. To date, staff have received one comment from Little Campbell Watershed Society regarding this proposal. Concerns regarding future pressure on the Fergus biodiversity preserve were raised, and that enough space be provided for neighbourhood parks to relieve pressure on existing parks in the area. Furthermore, the society also had concerns about the removal of the drainage corridors along 18 Avenue, and removal of all native vegetation on the site.

*(In response to the concerns, it was articulated that the Sunnyside Heights NCP had been recently amended to support higher density. City staff initiated a planning process to review infrastructure capacity, road network and amenity needs for the urban densities proposed for the southern portion of this NCP which includes the subject site. As part of the NCP Amendment, staff reviewed the sewer, streets and drainage infrastructure, as well as parkland needs that would result from higher development densities in the area.*

*The subject application is proposing infiltration galleries for drainage.)*

TREES

- Max Rathurn, ISA Certified Arborist of Diamond Head Consulting 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
<b>Alder and Cottonwood Trees</b>			
Alder	1	1	0
<b>Deciduous Trees (excluding Alder and Cottonwood Trees)</b>			
Arbutus	1	1	0
Bitter Cherry	1	1	0
Goldenchain Tree	1	1	0
Japanese Flowering Cherry	3	3	0
Maple (Japanese)	3	3	0
Maple (Norway)	2	2	0
Willow	1	1	0
Purple Plum	2	2	0
Pear	1	1	0
<b>Coniferous Trees</b>			
Blue Spruce	1	1	0
Cypress sp.	3	3	0
Deodar Cedar	1	1	0
Douglas-fir	2	2	0
Easter White Cedar	3	3	0
Norway Spruce	1	1	0
Sawara Cypress	3	3	0
Western Red Cedar	3	3	0
Lawson Cypress	5	5	0
<b>Total (excluding Alder and Cottonwood Trees)</b>	<b>37</b>	<b>37</b>	<b>0</b>
<b>Total Replacement Trees Proposed (excluding Boulevard Street Trees)</b>		<b>23</b>	
<b>Total Retained and Replacement Trees</b>		<b>23</b>	
<b>Contribution to the Green City Fund</b>		<b>\$20,800</b>	

- The Arborist Assessment states that there are a total of 37 protected trees on the site, excluding Alder and Cottonwood trees. 1 existing tree, approximately 3 % of the total trees on the site is Alder. It was determined that no 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 1 to 1 replacement ratio for Alder trees, and a 2 to 1 replacement ratio for all other trees. This will require a total of 75 replacement trees on the site. Since only 23 replacement trees can be accommodated on the site, the deficit of 52 replacement trees will require a cash-in-lieu payment of \$20,800, representing \$400 per tree, to the Green City Fund, in accordance with the City's Tree Protection By-law.
- In addition to the replacement trees, boulevard street trees will be planted on 18 Avenue. This will be determined by the Engineering Department during the servicing design review process.
- In summary, no trees are proposed to be retained or replaced on the site with a contribution of \$20,800 to the Green City Fund.

### SUSTAINABLE DEVELOPMENT CHECKLIST

The applicant prepared and submitted a sustainable development checklist for the subject site on April 12, 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.

<b>Sustainability Criteria</b>	<b>Sustainable Development Features Summary</b>
1. Site Context & Location (A1-A2)	<ul style="list-style-type: none"> <li>• The subject site is located on the north side of 18 Avenue, west of 168 Street in the Sunnyside Heights Neighbourhood Concept Plan (NCP) area.</li> <li>• The site is designated Urban in the Official Community Plan (OCP) and Low Density Residential 6 – 10 u.p.a. in the NCP.</li> </ul>
2. Density & Diversity (B1-B7)	<ul style="list-style-type: none"> <li>• The application proposes a net density of 28 units per hectare (u.p.h.) or 11.3 units per acre (u.p.a.)</li> </ul>
3. Ecology & Stewardship (C1-C4)	<ul style="list-style-type: none"> <li>• The proposed development contains provisions for recycling and waste collection.</li> </ul>
4. Sustainable Transport & Mobility (D1-D2)	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
5. Accessibility & Safety (E1-E3)	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
6. Green Certification (F1)	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
7. Education & Awareness (G1-G4)	<ul style="list-style-type: none"> <li>• Pre-notification letters were sent on January 8, 2018 and a development proposal sign was installed on the subject site on March 26, 2018.</li> <li>• The application will be subject to a Public Hearing for the proposed rezoning, should Council support the subject application.</li> </ul>



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. Site Plan
- Appendix III. Engineering Summary
- Appendix IV. School District Comments
- Appendix V. Building Design Guidelines Summary
- Appendix VI. Summary of Tree Survey and Tree Preservation
- Appendix VII. Tree Preservation, Removal and Replacement Plans
- Appendix VIII. Neighbourhood Concept Plan Amendment Map

*original signed by Ron Hintsche*

Jean Lamontagne  
General Manager  
Planning and Development

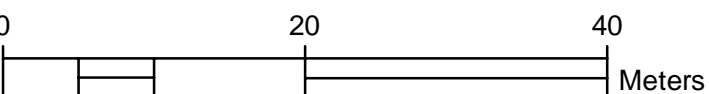
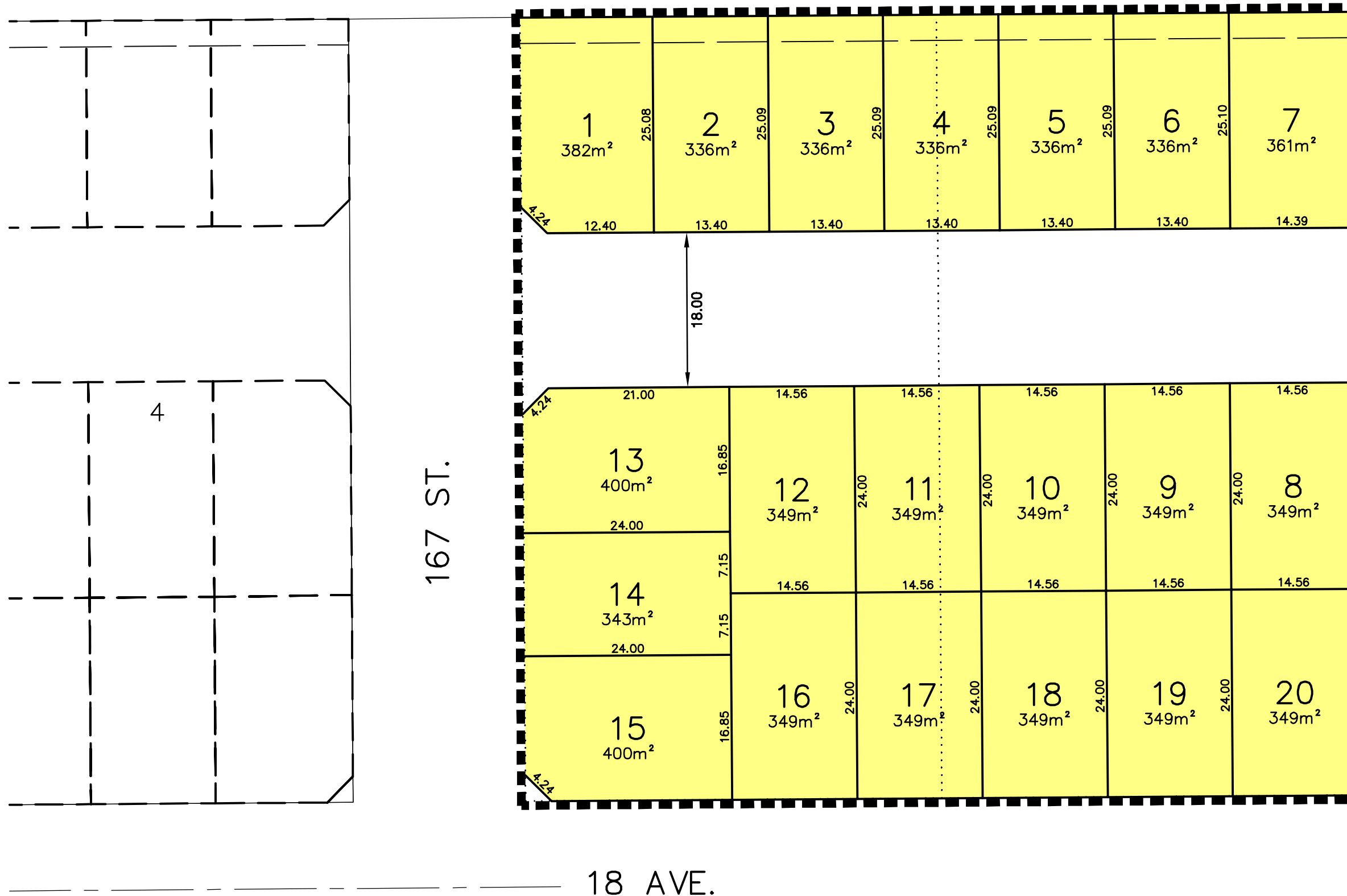
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APPENDIX I HAS BEEN  
REMOVED AS IT CONTAINS  
CONFIDENTIAL INFORMATION

## SUBDIVISION DATA SHEET

Proposed Zoning: RF-13

<b>Requires Project Data</b>	<b>Proposed</b>
<b>GROSS SITE AREA</b>	
Acres	2.2 acres
Hectares	0.89 hectares
<b>NUMBER OF LOTS</b>	
Existing	2
Proposed	20
<b>SIZE OF LOTS</b>	
Range of lot widths (metres)	13.8 – 16.8 metres
Range of lot areas (square metres)	336 – 400 square metres
<b>DENSITY</b>	
Lots/Hectare & Lots/Acre (Gross)	23 units per hectares/9.1 units per acre
Lots/Hectare & Lots/Acre (Net)	28 units per hectare/11.3 units per acre
<b>SITE COVERAGE (in % of gross site area)</b>	
Maximum Coverage of Principal & Accessory Building	50%
Estimated Road, Lane & Driveway Coverage	10%
Total Site Coverage	60%
<b>PARKLAND</b>	N/A
Area (square metres)	
% of Gross Site	
	<b>Required</b>
<b>PARKLAND</b>	
5% money in lieu	YES
<b>TREE SURVEY/ASSESSMENT</b>	YES
<b>MODEL BUILDING SCHEME</b>	YES
<b>HERITAGE SITE Retention</b>	NO
<b>FRASER HEALTH Approval</b>	NO
<b>DEV. VARIANCE PERMIT required</b>	
Road Length/Standards	NO
Works and Services	NO
Building Retention	NO
Others	NO



### SUBDIVISION CONCEPT PLAN

16711 & 16739 18 AVENUE  
ASPEN DEVELOPMENTS



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

## INTER-OFFICE MEMO

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

FROM: **Development Engineer, Engineering Department**

DATE: **Mar 28, 2018** PROJECT FILE: **7817-0601-00**

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RE: **Engineering Requirements**  
**Location: 16711 18 Ave**

**NCP AMENDMENT**

The following issues are to be addressed as a condition of the NCP Amendment:

***The applicant will be required to provide detailed stormwater analysis to support the removal of the required drainage corridor and the proposed lot variance, including continuous simulation to adequately address impacts to natural watercourses is required. Recommendations from this analysis must be implemented.***

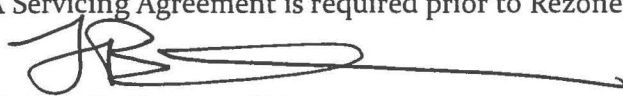
**REZONE/SUBDIVISION*****Property and Right-of-Way Requirements***

- No dedications are required on 18 Avenue and 167 Street.
- Dedicate 18.0 metres on 18A Avenue for ultimate 18.0 m Local Road allowance.
- Dedicate a 3.0-metre x 3.0-metre corner cuts at 167 Street/18A Ave and 167 Street/18Ave.
- Register 0.5 m statutory rights-of-ways along 167 Street, 18 Avenue and 18A Avenue for service connections and maintenance access to sidewalk.

***Works and Services***

- Construct north side of 18 Avenue to Local Road standard with 10.5 m pavement width.
- Construct east side of 167 Street to Local Road standard with 10.5 m pavement width.
- Construct 18A Avenue to Local Road standard with 8.5 m pavement width.
- Construct water, sanitary, and storm systems to service the proposed lots and frontage roads; extend the services to tie-in with the existing systems.
- Provide onsite and offsite sustainable drainage works to meet the NCP and ISMP requirements.
- Pay Sanitary and Drainage Latecomer charges, projects 58/5915-0084-00 and 58/5915-0439-00; Sanitary DWA charge, project 8515-0293-00-1 and Local Area Service Charge - Fergus Sanitary Pump Station and Forcemain (Project #4706-453) Bylaw, 2016, No. 18601
- Pay 100% cash of Sanitary DCCs, relative to DCC Frontender Agreement #8215-0293-00-1

A Servicing Agreement is required prior to Rezone/Subdivision.



Tommy Buchmann, P.Eng.  
Development Engineer  
IK1

NOTE: Detailed Land Development Engineering Review available on file



Planning April 4, 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 0601 00

**SUMMARY**

The proposed 20 Single family with suites are estimated to have th on the following schools:

**Projected # of students for this development:**

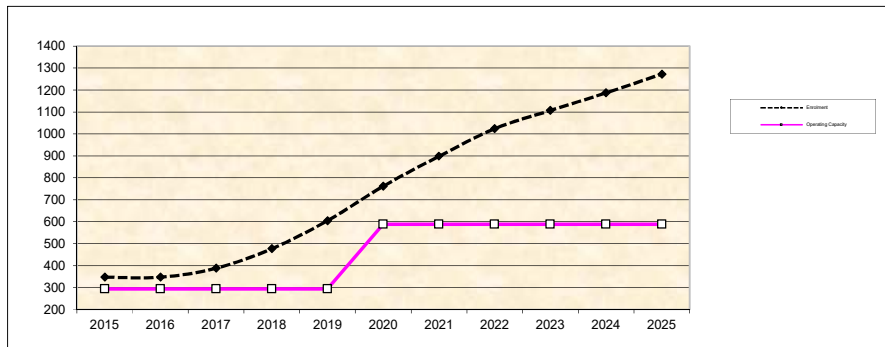
Elementary Students:	10
Secondary Students:	5

September 2017 Enrolment/School Capacity

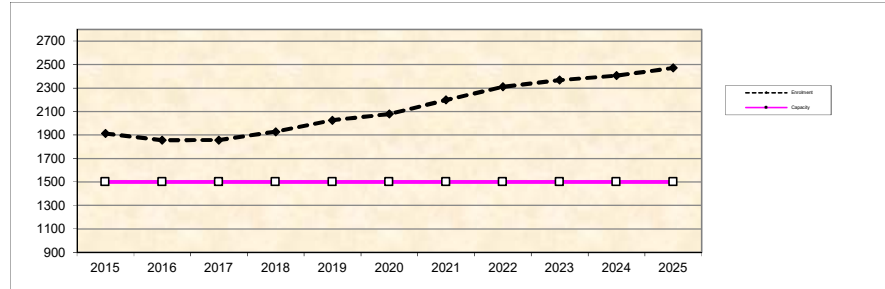
<b>Pacific Heights Elementary</b>	
Enrolment (K/1-7):	51 K + 337
Operating Capacity (K/1-7)	38 K + 256
Addition Operating Capacity (K/1-7) 2020	76 K + 512

<b>Earl Marriot Secondary</b>	
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: 17-0601-00  
Project Location: 16711 and 16739 - 18 Avenue, 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 (1980's / 1990's) rural / suburban RA zone development area bounded by 16 Avenue to the south, 20 Avenue to the north, 165A Street to the west and 168 Street to the east. Most homes in the surrounding neighbourhood are large, wide, low profile estate-size Bungalows situated on large RA zoned lots. There are also a few Two-Storey and Basement Entry homes with mid to high scale massing characteristics. Roofs slopes range from 5:12 to 12:12 and roofs are surfaced with either cedar shingles or shake profile asphalt shingles. Cedar and brick are common wall cladding materials and the colour range is limited to neutral and natural hues. The homes and yards are well kept.

However, due to the large number of new applications for compact lot developments in the surrounding area (15-0084-00 - 104 lots to the south, 16-0312-00 - 71 lots to the north, 150443 - 18 lots to the southwest, and several new applications in the 16600 and 16700 blocks on the north side of 18 Avenue west and east of the subject site. The future character of this area will not be defined by the existing housing stock. Rather, the future character of this area will be defined by hundreds of modern compact lot homes mostly in RF-13 and RF-10 zones. The attributes of the existing homes therefore, will not be used as context for the subject site.

### 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 RF-13 zone development. The existing homes and yards are desirable, but building forms suitable for RF-13 developments are necessarily incompatible with large estate Bungalows. Massing scale, massing designs, roof designs, construction materials, and trim and detailing elements will be similar to those used in most post 2016 compact zone developments, and therefore the existing homes will not be emulated. Rather, regulations context is available from the building schemes of nearby new developments described above.
- 2) **Style Character :** Most neighbouring homes can be classified as old suburban homes that have massing designs that are not suitable for compact lot developments. Rather than emulating the existing homes, the recommendation is to utilize styles including

“Neo-Traditional”, “Neo-Heritage”, and “West Coast Contemporary” 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 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 RF-13 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. Designs should be similar in theme, representation and character to the aforementioned nearby new developments.
- 5) **Front Entrance Design** : 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 area in which the 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** : It is expected that most new homes in new developments in the surrounding area will have asphalt shingle roofs, and for continuity, asphalt shingles are recommended. A single cedar shingle or concrete tile roof would stand out as inconsistent due the large difference in textures (thickness) between asphalt shingles and cedar shingles or concrete tiles, and so these products are not recommended. However, where opportunities arise to introduce new environmentally sustainable products, they should be embraced. To ensure consistency of character, only shake profile asphalt shingles and shake profile sustainable products are recommended. Where required by the BC Building Code for lower slope applications membrane roofing products can also be permitted subject to consultant approval. Small decorative metal roofs should also be permitted.
- 8) **Roof Slope** : Similar to other projects in this area, the recommendation is to set the minimum roof slope at either flat to 3:12 to accommodate West Coast Contemporary designs, or between 6:12 and 12:12 for the expected Neo-Traditional and Neo-Heritage designs. A provision is also recommended to allow slopes less than 6:12 where it is determined by the consultant that lower slopes are needed on feature projections or at the front entrance veranda to ensure adequate depth upper floor windows can be installed without interference with the roof structure below.

**Streetscape:** The streetscape in the area surrounding the subject site has an old rural/suburban character. Most homes are large, well kept 25 - 35 year old Bungalows situated on acreages. The future streetscape will be defined by almost entirely by building scheme regulations in the numerous new developments surrounding the subject site.



## 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 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 RF-13 type homes at the subject site because the existing homes are large Bungalows 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 RF-13 (and RF-12) developments constructed in Surrey subsequent to the year 2016, and will meet or exceed standards implied by building scheme regulations on the numerous new developments in this area.

#### 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 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:

Either flat to 3:12 to accommodate West Coast Contemporary style homes, or 6:12 to 12:12 to accommodate the expected Neo-Traditional and Neo-Heritage homes, 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. Metal roofs over small feature areas also permitted if integral to the design.

**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 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 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 a minimum of 30 shrubs of a minimum 3 gallon pot size, of which not less than 12 are planted in the flanking street sideyard. Sod from street to face of home. Driveways: exposed aggregate, interlocking masonry pavers, stamped concrete, or coloured concrete in dark earth tones or medium to dark grey only. Broom finish concrete is not permitted.

**Compliance Deposit:** \$5,000.00

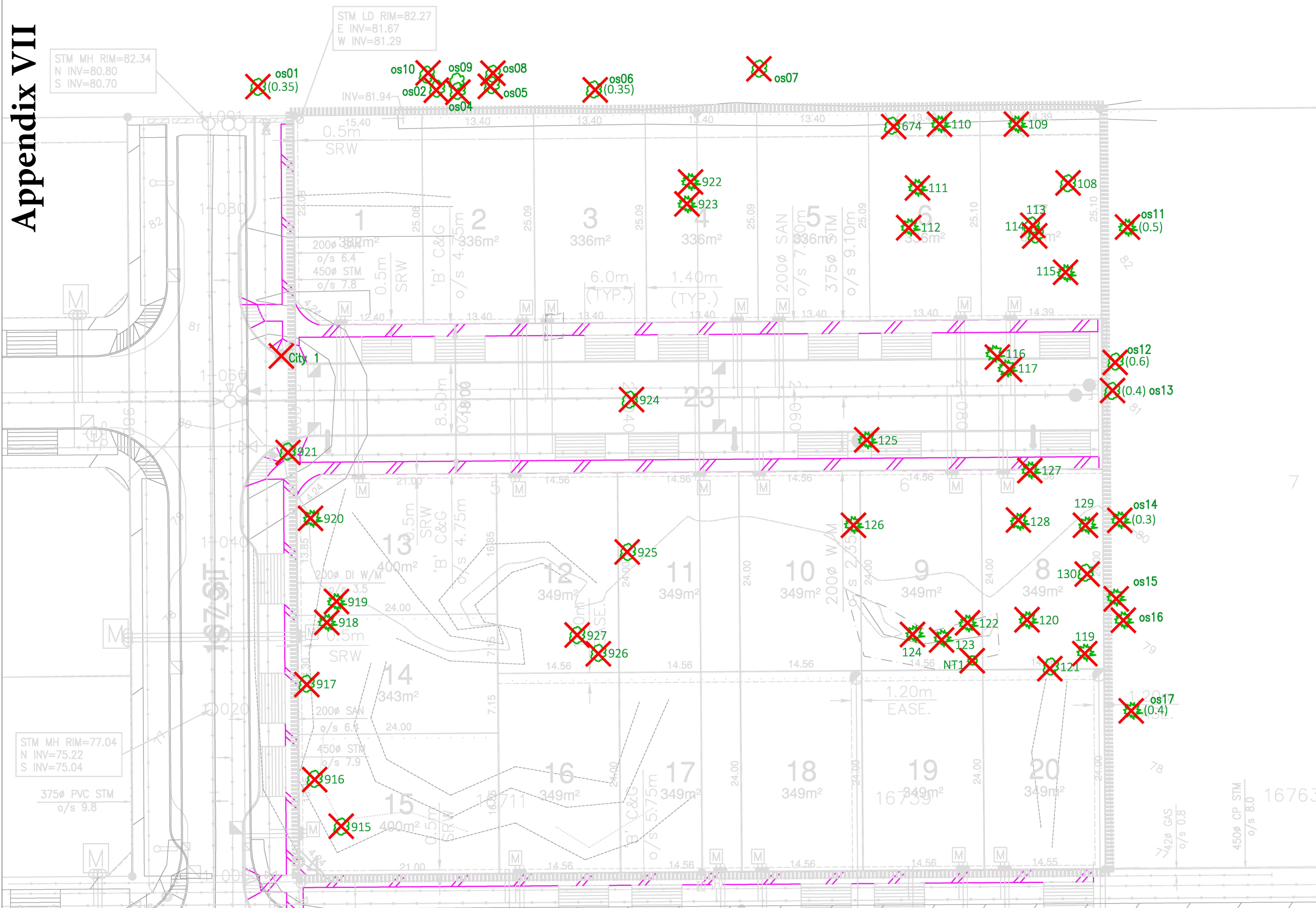
**Summary prepared and submitted by:** Tynan Consulting Ltd.      **Date:** March 6, 2018

**Reviewed and Approved by:**       **Date:** March 6, 2018

Table 1. Tree Preservation Summary.

TREE PRESERVATION SUMMARY	
Address:	16711 18 <sup>th</sup> Ave Surrey, BC / 16739 18th Avenue Surrey, BC
Registered Arborist:	Max Rathburn ISA Certified Arborist (PN0599A) ISA Qualified Tree Risk Assessor (TRAQ) BC Parks Wildlife and Danger Tree Assessor
On-Site Trees	Number of Trees
<b>Protected Trees Identified</b> (on-site and shared trees, including trees within boulevards and proposed streets and lanes, but excluding trees in proposed open space or riparian areas)	<b>38</b>
<b>Protected Trees to be Removed</b>	<b>38</b>
<b>Protected Trees to be Retained</b> (excluding trees within proposed open space or riparian areas)	<b>0</b>
<b>Total Replacement Trees Required:</b> - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio $\frac{1}{1} \times \text{one (1)} = 1$ - All other Trees Requiring 2 to 1 Replacement Ratio $37 \times \text{two (2)} = 74$	<b>75</b>
<b>Replacement Trees Proposed</b>	<b>23</b>
<b>Replacement Trees in Deficit</b>	<b>52</b>
<b>Protected Trees to be Retained in Proposed [Open Space / Riparian Areas]</b>	
Off-Site Trees	Number of Trees
<b>Protected Off-Site Trees to be Removed</b>	<b>17</b>
<b>Total Replacement Trees Required:</b> - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio $\frac{11}{1} \times \text{one (1)} = 11$ - All other Trees Requiring 2 to 1 Replacement Ratio $6 \times \text{two (2)} = 12$	<b>23</b>
<b>Replacement Trees Proposed</b>	<b>0</b>
<b>Replacement Trees in Deficit</b>	<b>23</b>

# Appendix VII



- LEGEND**
- CRITICAL ROOT ZONE
  - NO-BUILD ZONE
  - TREE PROTECTION ZONE AND FENCING
  - TREE TO BE RETAINED
  - UN-SURVEYED TREE
  - ✕ TREE TO BE REMOVED

- NOTES**
1. The location of un-surveyed trees on this plan is approximate. Their location and ownership cannot be confirmed without being surveyed by a Registered BC Land Surveyor.
  2. All tree protection fencing must be built to the relevant municipal bylaw specifications. The dimensions shown are from the outer edge of the stem of the tree.
  3. The tree protection zone shown is a graphical representation of the critical root zone, measured from the outer edge of the stem of the tree. (½ the trees diameter was added to the graphical tree protection circles to accommodate the survey point being in the center of the tree)
  4. Any construction activities or grade changes within the Root Protection Zone must be approved by the project arborist.
  5. This plan is based on a topographic and tree location survey provided by the owners' Registered British Columbia Land Surveyor (BCLS) and layout drawings provide by the owners' Engineer (P Eng).
  6. This plan is provided for context only, and is not certified as to the accuracy of the location of features or dimensions that are shown on this plan. Please refer to the original survey plan and engineering plans.

**REFERENCE DRAWINGS**

1. Base Survey by:

**SCALE**

0  25 m

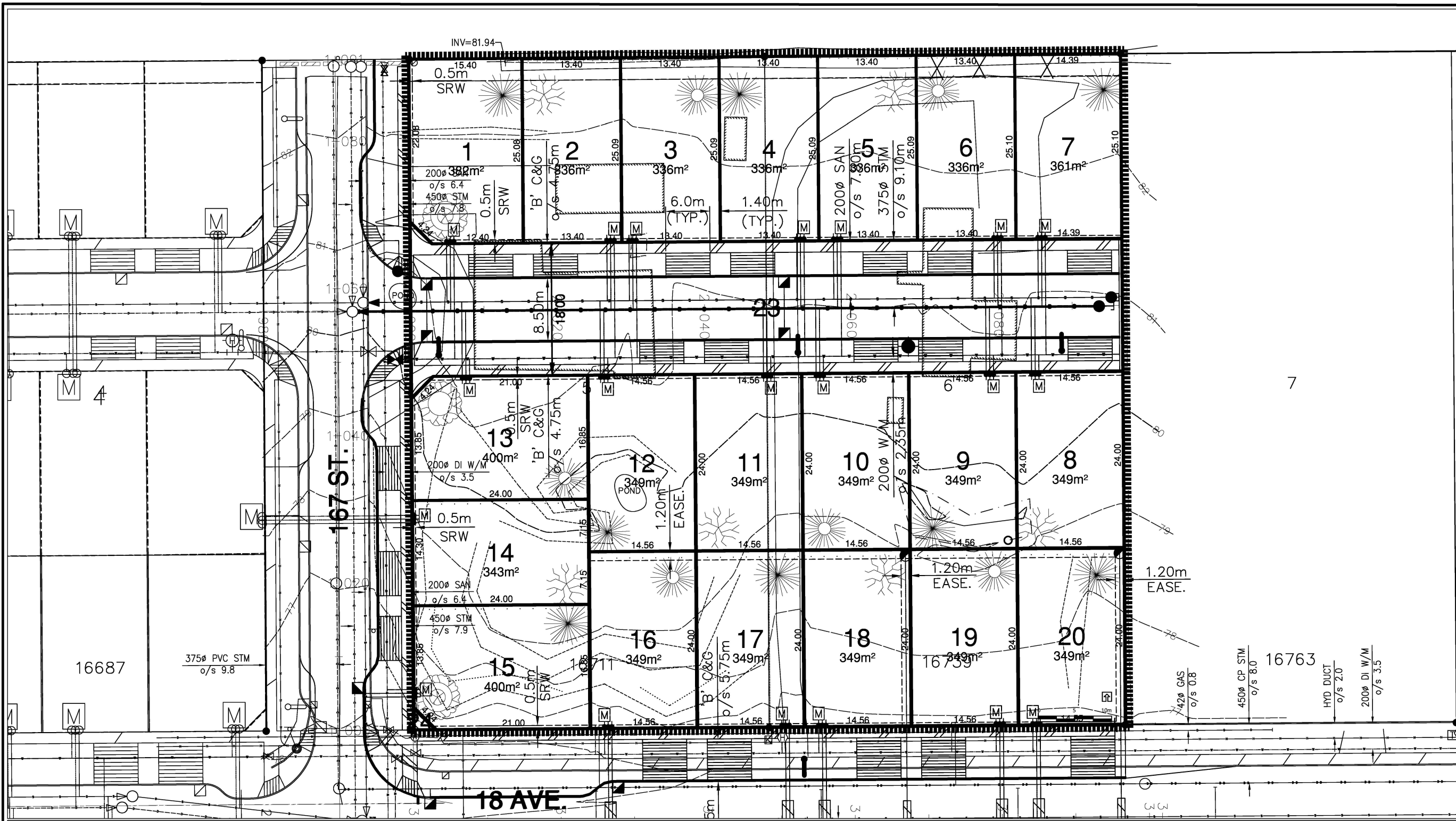


3559 COMMERCIAL STREET  
VANCOUVER BC | V5N 4E8  
T 604.733.4886 | F 604.733.4879

Drawing title: Tree Retention and Removal Plan  
Project address: 16711 18th Ave and 16739 18th Avenue Surrey, BC  
Client: Aspen Development c/o WSP

Drawing No: 001  
Date: 2018/04/5  
Drawn by: MR  
Page Size: TABLOID 11"x17"

Page #  
1 of 1



- LEGEND**
- TREE PROTECTION ZONE
  - TREE PROTECTION FENCE
  - TREE TO BE RETAINED
  - UN-SURVEYED TREE

- NOTES**
1. The location of un-surveyed trees on this plan is approximate. Their location and ownership cannot be confirmed without being surveyed by a Registered BC Land Surveyor.
  2. All tree protection fencing must be built to the relevant municipal bylaw specifications. The dimensions shown are from the outer edge of the stem of the tree.
  3. The tree protection zone shown is a graphical representation of the critical root zone, measured from the outer edge of the stem of the tree. (½ the trees diameter was added to the graphical tree protection circles to accommodate the survey point being in the center of the tree)
  4. Any construction activities or grade changes within the tree protection zone must be approved by the project arborist.
  5. This plan is based on a topographic and tree location survey provided by the owners' Registered British Columbia Land Surveyor (BCLS) and layout drawings provide by the owners' Engineer (P Eng).
  6. This plan is provided for context only, and is not certified as to the accuracy of the location of features or dimensions that are shown on this plan. Please refer to the original survey plan and engineering plans.
  7. **PLANTING STANDARDS:** All planting works should be done in accordance with the current edition of Canadian Landscape Standards.
  8. Tree Replacement symbols are not shown to scale, and the tree may not be planted in the exact location shown.

**PLANT LIST**

KEY	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	SPACING	COMMENTS
⊗	Cornus 'Eddies White Wonder'	Dogwood	2	6 cm. cal	As shown	B. & B.
⊗	Cercidiphyllum japonicum	Katsura	0	6 cm. cal	As shown	B. & B.
⊗	Magnolia 'galaxy'	Galaxy Magnolia	1	6 cm. cal	As shown	B. & B.
⊗	Acer x freemanii 'autum blaze'	Autumn Blaze Maple	6	6 cm. cal	As shown	B. & B.
⊗	Picea omorika	Serbian spruce	8	3.0 meters	As shown	B. & B.
⊗	Chamaecyparis nootkatensis 'pendula'	Weeping Nootka Cedar	6	3.0 meters	As shown	B. & B.
TOTAL REPLACEMENT TREES =			23			

**REFERENCE DRAWINGS**

1. Base Survey by:

**SCALE**

0 25 m

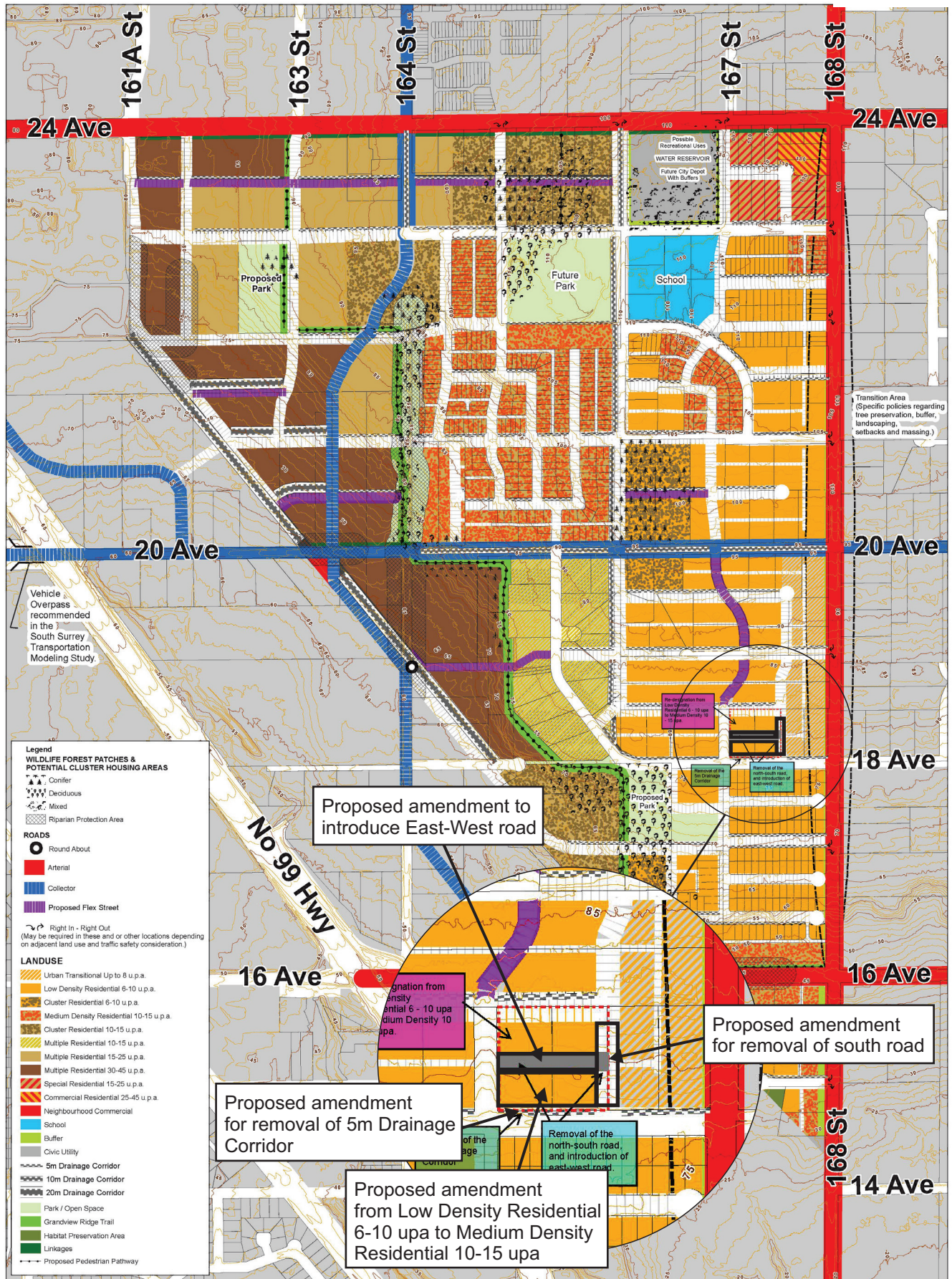


3559 COMMERCIAL STREET  
VANCOUVER BC | V5N 4E8  
T 604.733.4886 | F 604.733.4879

Drawing title: Tree Replacement Plan  
Project address: 16711 - 16739 18th Avenue, Surrey BC  
Client: Aspen Development

Drawing No: 002  
Date: 2018/02/19  
Drawn by: KW  
Page Size: TABLOID 11"x17"

**Page #**  
1 of 1



**Grandview Heights NCP Area #2 (Sunnyside Heights)**

City of Surrey Planning & Development Department

Stage 1 Approved By Council: July 26, 2007  
 Stage 2 Approved By Council Nov. 15, 2010  
 Last Amended 17 January 2018

