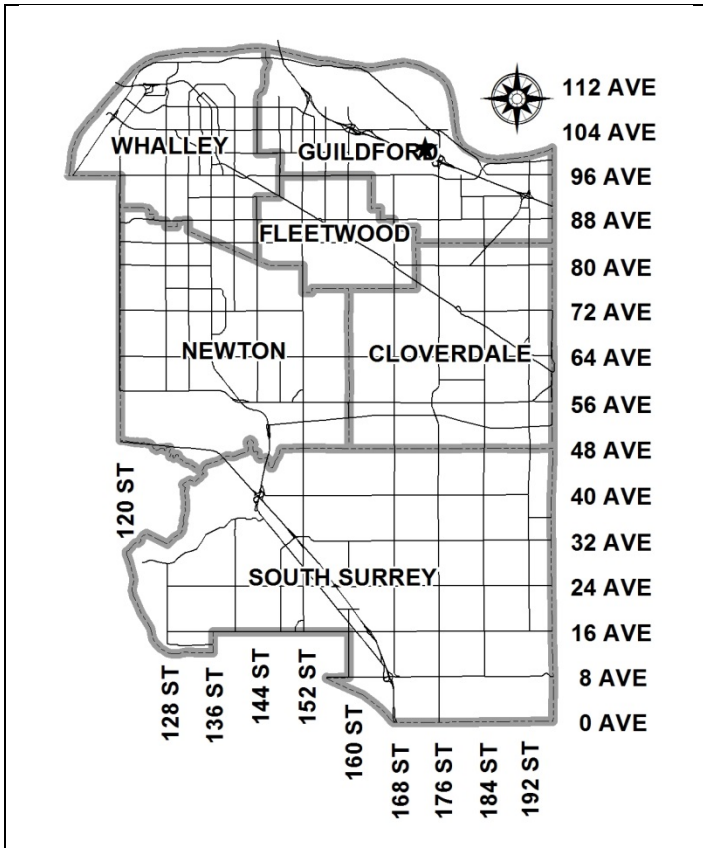


City of Surrey  
**PLANNING & DEVELOPMENT REPORT**

File: 7917-0478-00

Planning Report Date: April 23, 2018



**PROPOSAL:**

- **OCP Amendment** from Suburban to Urban
- **Rezoning** from RA to RF

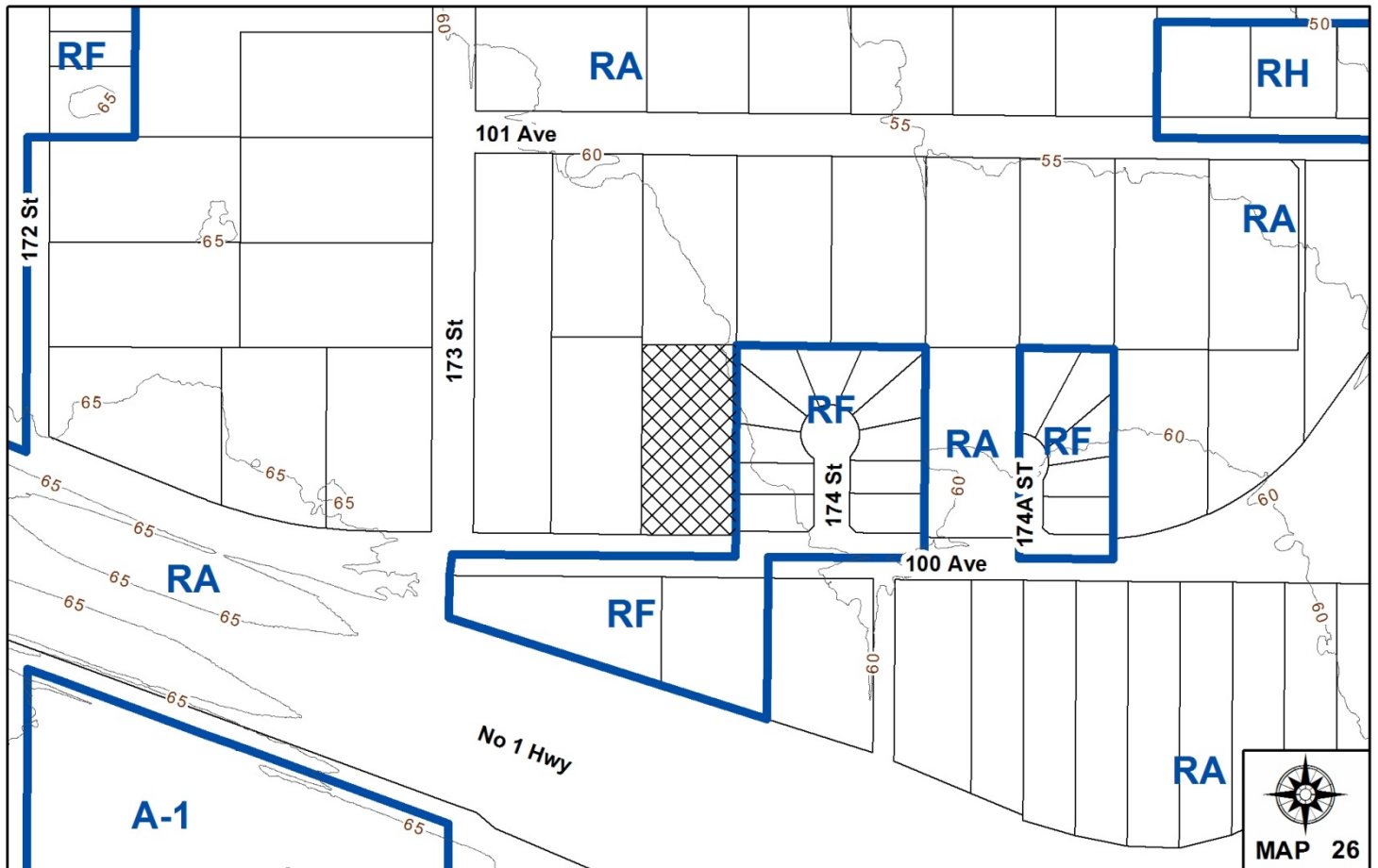
to allow subdivision into 5 single family lots

**LOCATION:** 17353 - 100 Avenue

**ZONING:** RA

**OCP DESIGNATION:** Suburban

**LAP DESIGNATION:** Single Family Residential 4-6 upa



RECOMMENDATION SUMMARY

- By-law Introduction and set date for Public Hearing for:
  - OCP Amendment; and
  - Rezoning.

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- None.

RATIONALE OF RECOMMENDATION

- Complies with the Single Family Residential 4 -6 upa designation in the Abbey Ridge Local Area Plan (LAP).
- The proposal is consistent with the adjacent RF Zoned lot pattern to the east, recently approved by Council.

## RECOMMENDATION

The Planning & Development Department recommends that:

1. a By-law be introduced to amend the OCP by redesignating the subject site from Suburban to Urban and a date be set for Public Hearing.
2. Council determine the opportunities for consultation with persons, organizations and authorities that are considered to be affected by the proposed amendment to the Official Community Plan, as described in the Report, to be appropriate to meet the requirement of Section 475 of the Local Government Act.
3. 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.
4. 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) approval from the Ministry of Transportation & Infrastructure;
  - (d) submission of a finalized tree survey and a statement regarding tree preservation to the satisfaction of the City Landscape Architect;
  - (e) demolition of existing buildings and structures to the satisfaction of the Planning and Development Department;
  - (f) registration of a Section 219 Restrictive Covenant for "no build" on a portion of proposed Lot 5 until future consolidation with the adjacent property to the west; (17333 - 100 Avenue); and
  - (g) the applicant satisfy the deficiency in tree replacement on the site, to the satisfaction of the Planning and Development Department.

## REFERRALS

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

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

3 Elementary students at Bothwell Elementary School  
 1 Secondary students 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 2019.

**Parks, Recreation & Culture:** Parks has no objections to the project.

**Ministry of Transportation & Infrastructure (MOTI):** Preliminary approval of the rezoning is granted by MOTI for 1 year.

**Kinder Morgan:** Kinder Morgan has no objections to the project.

SITE CHARACTERISTICS

Existing Land Use: Residential acreage parcel with an existing house and accessory structure, to be demolished.

Adjacent Area:

Direction	Existing Use	OCP/NCP Designation	Existing Zone
North:	Kinder Morgan ROW and single family dwelling on 1-acre lot.	Suburban in OCP, Suburban Residential 2 - 4 UPA Gross Panhandles in LAP	RA
East:	11 vacant single family lots under development.	Urban in OCP, Single Family Residential 4 - 6 in LAP	RF
South (Across 100 Avenue):	9 vacant single family lots under development.	Urban in OCP, Single Family Residential 4 - 6 in LAP	RF
West:	Single family dwelling on a 1-acre lot.	Suburban in OCP, Single Family Residential 4 - 6 in LAP	RA

## DEVELOPMENT CONSIDERATIONS

### Background

- The 0.41-hectare (1.0-acre) subject site is located on the north side of 100 Avenue in Fraser Heights within the area that comprises the Abbey Ridge Local Area Plan (LAP). The Abbey Ridge Plan area covers approximately 184 hectares (455 acres) of land north of Highway No. 1 and between the established Fraser Heights neighbourhood to the west and the Port Kells Industrial Area to the east.
- The subject site is designated "Suburban" in the Official Community Plan (OCP) and is zoned "One-Acre Residential Zone (RA)".
- The preferred land use designation for the subject site is Single Family Residential 4-6 UPA (units per acre) in the Abbey Ridge LAP.

### Current Proposal

- The proposal includes an OCP amendment to redesignate the subject site from Suburban to Urban (see Appendix IX) and rezoning from "One-Acre Residential Zone (RA)" to "Single Family Residential Zone (RF)" to permit five (5) single family lots (see Appendix II).
- All of the proposed new lots conform to the minimum requirements of the RF Zone, with lot areas ranging from 561 square metres (6,039 sq. ft.) to 645 square metres (6,943 sq. ft.), lot widths ranging from 15 metres (50 ft.) to 18.7 metres (61 ft.), and lot depths ranging from 33.4 metres (110 ft.) to 41.4 metres (136 ft.).
- A portion of proposed Lot 5 includes an area that is being reserved for consolidation with a future lot to the west when that property is redeveloped. The configuration of this future lot includes a small jog in the rear (north) property line. The applicant's Design Consultant has provided an analysis for the proposed consolidation lot and has confirmed that the lot can accommodate a reasonably-sized home with a functional floor plan without variances (Appendix VI).

### Road Dedication Requirements

- The applicant proposes to provide access to all proposed lots via a new cul-de-sac (173A Street). The applicant will be required to dedicate and construct half of the cul-de-sac through this application. When the property to the west (17333 – 100 Avenue) is developed, the remainder of the cul-de-sac will be required to be constructed.
- The applicant will also be required to construct 100 Avenue to the collector road standard and to register a 2.7-metre (9-ft.) wide statutory right-of-way for the multi-use pathway (MUP) along 100 Avenue.

### Neighbourhood Character Study and building Scheme

The applicant has retained Mike 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 of the study, which suggest that the older housing stock in the area does not provide suitable architectural context, has proposed a set of building design guidelines that recommend an updated design standard (Appendix V).

### Proposed Lot Grading

- Preliminary lot grading plans were prepared and submitted by Citiwest Consulting Ltd. The plans have been reviewed by staff and are acceptable.
- Basements are proposed for all lots. Final confirmation on whether in-ground basements are achievable will be determined once final Engineering drawings have been reviewed and accepted by the City's Engineering Department.

### PRE-NOTIFICATION

Pre-notification letters were sent out on February 27, 2018 to a total of 29 addresses and the development sign was installed on March 5, 2018. Staff have not received any responses to the pre-notification letters.

### JUSTIFICATION FOR PLAN AMENDMENT

The proposed Urban OCP designation is consistent with the intended land uses in the Abbey Ridge LAP.

### PUBLIC CONSULTATION PROCESS FOR OCP AMENDMENT

Pursuant to Section 475 of the Local Government Act, it was determined that it was not necessary to consult with any persons, organizations or authorities with respect to the proposed OCP amendment, other than those contacted as part of the pre-notification process.

### TREES

- Trevor Cox, MCIP, 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>			
Red Alder	8	8	0
Cottonwood	2	2	0

Tree Species	Existing	Remove	Retain
<b>Deciduous Trees</b> (excluding Alder and Cottonwood Trees)			
Paper Birch	3	3	0
Pacific Dogwood	1	1	0
Bigleaf Maple	3	3	0
<b>Coniferous Trees</b>			
Douglas Fir	3	3	0
Scot's Pine	1	1	0
Western Hemlock	3	3	0
Western Red Cedar	2	2	0
<b>Total (excluding Alder and Cottonwood Trees)</b>	<b>20</b>	<b>20</b>	<b>0</b>
<b>Additional Trees in the proposed Open Space / Riparian Area</b>	N/A	N/A	N/A
<b>Total Replacement Trees Proposed (excluding Boulevard Street Trees)</b>		<b>15</b>	
<b>Total Retained and Replacement Trees</b>		<b>15</b>	
<b>Contribution to the Green City Fund</b>		<b>\$14,000</b>	

- The Arborist Assessment states that there are a total of twenty (20) protected trees on the site, excluding Alder and Cottonwood trees. Ten (10) existing trees, approximately 33 % of the total trees on the site, are Alder and Cottonwood trees. 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.
- Due to grading issues, locations of building envelopes, and road construction, all of the on-site trees will be impacted.
- Five (5) of the proposed trees for removal are located on the neighbouring lot to the west, which also has development potential under the Abbey Ridge LAP. The applicant is in the process of obtaining permission to remove these off-site trees. Permission is expected to be granted; however, should permission not be granted for the removal of off-site trees, the applicant will be required to employ interim measures to retain these trees as they are anticipated to be required to be removed upon redevelopment of that neighbouring lot.
- For those trees that cannot be retained, the applicant will be required to plant trees on a 1 to 1 replacement ratio for Alder and Cottonwood trees, and a 2 to 1 replacement ratio for all other trees. This will require a total of fifty (50) replacement trees on the site. Since only fifteen (15) replacement trees can be accommodated on the site (based on an average of three (3) trees per lot), the deficit of thirty-five (35) replacement trees will require a cash-in-lieu payment of

\$14,000, representing \$400 per tree, to the Green City Fund, in accordance with the City's Tree Protection By-law.

- In summary, a total of fifteen (15) trees are proposed to be retained or replaced on the site with a contribution of \$14,000 to the Green City Fund.

### SUSTAINABLE DEVELOPMENT CHECKLIST

The applicant prepared and submitted a sustainable development checklist for the subject site on September 9, 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>• Within Abbey Ridge Local Area Plan area.</li> </ul>
2. Density & Diversity (B1-B7)	<ul style="list-style-type: none"> <li>• The development will include the potential for Secondary Suites.</li> <li>• The development will include the potential for private gardens.</li> </ul>
3. Ecology & Stewardship (C1-C4)	<ul style="list-style-type: none"> <li>• The development incorporates Low Impact Development Standards.</li> <li>• The development will compensate for impacts to site ecology by planting trees on and off site as well as by making a contribution to the Green City Fund.</li> <li>• The development contains provisions for composting, recycling, and organic waste pickup.</li> </ul>
4. Sustainable Transport & Mobility (D1-D2)	<ul style="list-style-type: none"> <li>• The development proposes sidewalks on the site and will include portions of a multi-use pathway along 100 Avenue.</li> </ul>
5. Accessibility & Safety (E1-E3)	<ul style="list-style-type: none"> <li>• The development incorporates CPTED principles, such as providing "eyes on the street".</li> <li>• The proposed single-family homes have the potential to house people from different age groups and life stages.</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>• The surrounding community was notified via a pre-notification letter and a Development Proposal Sign as required by the City.</li> <li>• A Public Hearing will be required as part of the rezoning process.</li> </ul>



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INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I.	Lot Owners, 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	Future Consolidation Lot Building Analysis
Appendix VII	Summary of Tree Survey and Tree Preservation
Appendix VIII	Abbey Ridge Local Area Plan
Appendix IX	OCP Redesignation Map
Appendix X	Aerial View of Site

*original signed by Ron Gill*

Jean Lamontagne  
General Manager  
Planning and Development

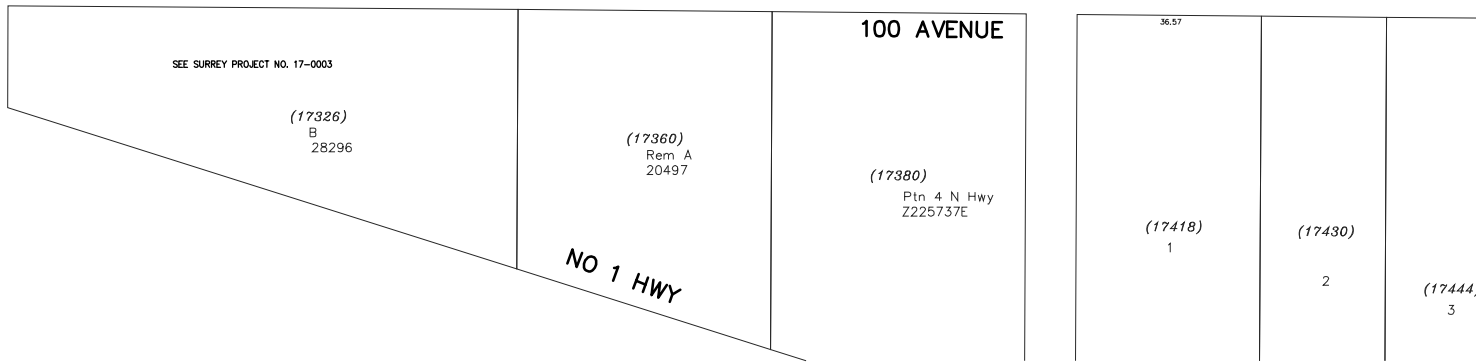
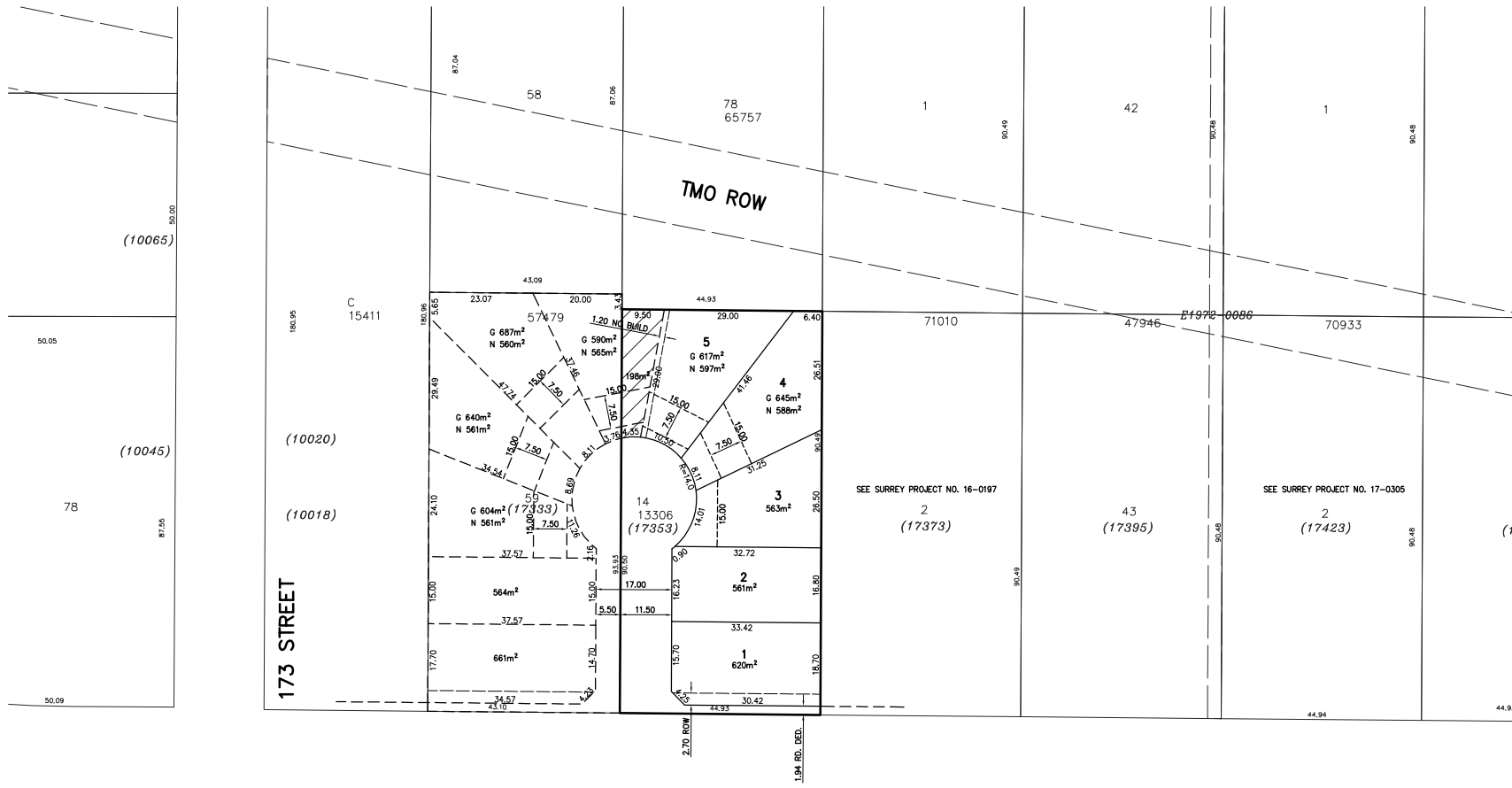
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APPENDIX I HAS BEEN  
REMOVED AS IT CONTAINS  
CONFIDENTIAL INFORMATION

## SUBDIVISION DATA SHEET

Proposed Zoning: RF

<b>Requires Project Data</b>	<b>Proposed</b>
<b>GROSS SITE AREA</b>	
Acres	1 acre
Hectares	0.41 hectare
<b>NUMBER OF LOTS</b>	
Existing	1
Proposed	5
<b>SIZE OF LOTS</b>	
Range of lot widths (metres)	15 metres – 18.7 metres
Range of lot areas (square metres)	561 m <sup>2</sup> – 645 m <sup>2</sup>
<b>DENSITY</b>	
Lots/Hectare & Lots/Acre (Gross)	12.3 lots/hectare & 5 lots/acre
Lots/Hectare & Lots/Acre (Net)	N/A
<b>SITE COVERAGE (in % of gross site area)</b>	
Maximum Coverage of Principal & Accessory Building	40%
Estimated Road, Lane & Driveway Coverage	21.7%
Total Site Coverage	61.7%
<b>PARKLAND</b>	
Area (square metres)	N/A
% of Gross Site	N/A
	<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



- NOTES:**
1. ALL DIMENSIONS ARE APPROXIMATE ONLY BASED ON MASTER PLANS.
  2. LAYOUT IS PRELIMINARY AND SUBJECT TO APPROVALS AND SURVEYS.
  3. EXISTING HOUSE TO BE REMOVED.
  4. NO BUILD COVENANT ON LOT 5 TO RESTRICT THE HOUSE TO THE EAST SIDE OF LOT

No	Date	Revision	Dr	Ch

**CitiWest Consulting Ltd.**  
 No.101-9030 KING GEORGE BLVD., SURREY, BC, V3V 7Y3  
 TELEPHONE 604-591-2213 FAX 604-591-5518  
 E-MAIL: office@citiwest.com



**QUALICO DEVELOPMENTS (VANCOUVER) INC.**  
 #310 5620 - 152 STREET, SURREY BC, V3S 3K2 PH: 778-571-2111

**PRELIMINARY LOT LAYOUT**  
 SUBDIVISION AT 17353 - 100 AVENUE, SURREY

Scale: 1:1000	Mun. Proj. No.	Dwg. No.
Drawn: EK	Mun. Dwg. No.	<b>A</b>
Designed: NP	Job No. 17-3486	Of
P.W. P.U.	Date SEP/17	Revision
Approved:		

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

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

**DATE: Mar 27, 2018** PROJECT FILE: **7817-0478-00**

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**RE: Engineering Requirements  
Location: 17353 - 100 Avenue**

**OCP AMENDMENT**

There are no engineering requirements relative to the OCP Amendment.

**REZONE/SUBDIVISION**

***Property and Right-of-Way Requirements***

- Dedicate 1.942 m along 100 Avenue toward 24.0 m Collector Road allowance.
- Dedicate 11.5 m along 173A Street toward 17.0 m Limited Local Road allowance.
- Register 2.7 m statutory right-of-way (SRW) along 100 Avenue for multi-use path.
- Register 0.5 m SRW along 173A Street for inspection chambers and sidewalk maintenance.

***Works and Services***

- Construct the north side of 100 Avenue to Collector Road standard.
- Construct the east side of 173A Street to Limited Local Road standard, including 14.0 m cul-de-sac bulb.
- Construct drainage, sanitary, and water service mains to service the proposed development.
- Provide on-site stormwater mitigation as per Bon Accord-North Slope Integrated Stormwater Management Plan.
- Provide water, storm, and sanitary service connection to each lot.

A Servicing Agreement is required prior to Rezone and Subdivision.



Tommy Buchmann, P.Eng.  
Development Engineer

MB

# APPENDIX IV



Planning March 7, 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.

Ten-year enrolment projections at Bothwell Elementary currently show a trend of slow and steady growth. As of September 2017, their operating capacity was 66% and it is expected to grow to 149% by 2027. This growth is attributed to the increased density being considered along the bluff to the north of Highway 17 (South Fraser Perimeter Road). Because current and future enrolment demand can be accommodated by the school's existing capacity, no additions are being considered at this time.

Fraser Heights Secondary is currently operating at 117% capacity. As it serves all the elementary schools located to the north of Highway 1, consideration is being given to submit as part of a future capital plan an addition to the secondary school to support this growth.

**THE IMPACT ON SCHOOLS**

APPLICATION #: 17 0478 00

**SUMMARY**

The proposed 5 Single family with suites are estimated to have the following impact on the following schools:

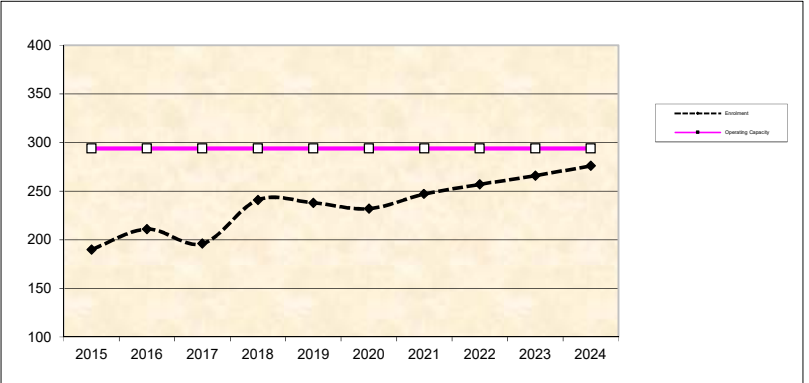
**Projected # of students for this development:**

Elementary Students:	3
Secondary Students:	1

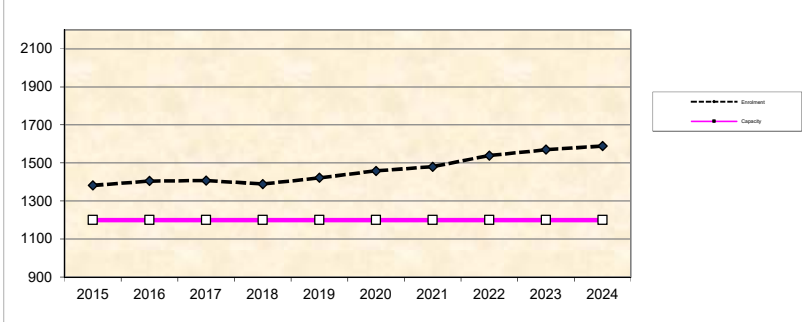
September 2017 Enrolment/School Capacity

<b>Bothwell Elementary</b>	
Enrolment (K/1-7):	23 K + 173
Operating Capacity (K/1-7)	38 K + 256
<b>Fraser Heights Secondary</b>	
Enrolment (8-12):	1408
Capacity (8-12):	1200

**Bothwell Elementary**



**Fraser Heights 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: 7917-0478-00  
 Project Location: 17353 - 100 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:

This area was built out over a time period spanning from the 1950's to the 1970's. The age distribution from oldest to newest is: 1950's (21%), 1960's (21%), and 1970's (57%). All homes in this area have a floor area in the 1000 - 2500 sq.ft. size range. Home size distribution is: under 1000 sq.ft. (14%), 1000 - 1500 sq.ft. (36%), 1501 - 2000 sq.ft. (14%), and 2001 - 2500 sq.ft. (36%). Styles found in this area include: "Old Urban" (57%), "West Coast Traditional (Heritage emulation)" (7%), "West Coast Traditional" (21%), and "Rural Heritage" (14%). Home types include: Bungalow (50%), 1 ½ Storey (7%), Basement Entry (14%), and Cathedral Entry (29%).

Massing scale (front wall exposure) characteristics include: Low mass structure (50%), Mid-scale massing (14%), Mid to high scale massing (14%), Mid-to-high scale massing with proportionally consistent, well balanced massing design (7%), and high scale, box-like massing (14%). The scale (height) range for front entrance structures include: one storey front entrance (71%), one storey front entrance veranda in heritage tradition (14%), and 1½ storey front entrance (14%).

The range of roof slopes found in this area is: 1:12 (7%), 3:12 (7%), 4:12 (29%), 5:12 (36%), 6:12 (14%), and 7:12 (7%). Main roof forms (largest upper floor truss spans) include: main common hip roof (7%), main common gable roof (86%), and shed roof (7%). Feature roof projection types include: none (47%), Common Hip (7%), Common Gable (33%), and Shed roof (13%). Roof surfaces include: Tar and gravel (7%), Roll roofing (7%), Interlocking tab type asphalt shingles (14%), Rectangular profile type asphalt shingles (36%), Shake profile asphalt shingles (29%), and Cedar shingles (7%).

Main wall cladding materials include: horizontal cedar siding (29%), horizontal Waney edge cedar siding (14%), vertical channel cedar siding (7%), aluminum siding (21%), horizontal vinyl siding (14%), vertical vinyl siding (7%), and stucco cladding (7%). Feature wall trim materials used on the front facade include: No feature veneer (50%), Brick feature veneer (36%), Stone feature veneer (7%), and Horizontal cedar accent (7%). Wall cladding and trim colours include: Neutral (38%), Natural (52%), and Primary derivative (10%).

Covered parking configurations include: No covered parking (33%), Single carport (20%), Double carport (13%), Single vehicle garage (20%), and Double garage (13%). Driveway surfaces include: gravel (21%), and asphalt (79%).

A variety of landscaping standards are evident, ranging from "primarily natural state" to "average modern urban" (14%). Overall, landscapes are not considered contextually relevant to a post year 2016 RF zone development.

Although the existing homes and landscapes do not provide suitable context for a year 2016 RF zone development, there are numerous new developments surrounding the subject site that have, or will soon have, building schemes registered with modern (post year 2015) regulations that will shape the future form and character of this area in a significant way. West of the subject site is Surrey project 13-0193-00 containing 12 RF zone lots, project 16-0197-00 is adjacent to the east side of the subject site, containing 10 RF zone lots, project 16-0200-00 is one lot east of 16-0197-00 containing 5 RF zone lots, and project 17-0003-00 is due south of the subject site containing 9 RF zone lots.

## 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 zone development. Massing scale, massing designs, roof designs, construction materials, and trim and detailing elements have improved significantly since most homes in this area were constructed. It is more sensible therefore, to use updated standards that result in reasonable compatibility with the older homes and also result in standards that improve over time, than it is to specifically emulate the older homes by building to the older standards. Therefore building scheme regulations context from the surrounding developments described above will be used as context for subject site regulations, rather than using attributes of the existing older housing stock.
- 2) **Style Character :** Most neighbouring homes can be classified as old urban homes that have massing designs and exterior trim and detailing standards that do not meet modern standards. House style is not an easy recognizable trait suitable for emulation. Note that style range is not specifically restricted in the building scheme.
- 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 1 ½ storeys in height. The recommendation is to limit the range of entrance portico heights to between one storey and 1½ 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, aluminum, stucco, brick, and stone. Reasonable flexibility should therefore be permitted, including the use of vinyl siding, provided the overall quality of wall cladding materials meets or exceeds common standards for post 2016 RF zone developments.
- 7) **Roof surface :** A wide range of roof surfacing materials have been used in this area including cedar shingles, asphalt shingles, tar and gravel, roll roofing, metal. 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 :** The recommendation is to set the minimum roof slope at 6:12. Steeper slopes will be encouraged, especially on street facing roof projections. However, a relatively low 6:12 slope may be required to meet maximum height as specified in the RF bylaw. A provision is also recommended to allow slopes less than 6:12 where it is determined by the consultant that the design is of such high architectural integrity that the roof slope reduction can be justified, or 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 area surrounding the development site is typical of many 1950's - 1970's old growth areas. Housing forms are small simple Bungalows, many with single mass roofs, or are Basement Entry or Cathedral Entry forms which appear high mass due to the economical practice of positioning the upper floor directly above the floor below thus exposing most or all of the upper floor to street views. Roof slopes range from 1:12 to 7:12. Most roofs are surfaced with asphalt shingles, but roll roofing, tar and gravel, and cedar shakes have also been used. Walls are clad in vinyl, cedar, or stucco. Masonry accents have been used on less than half of the homes. Trim and detailing standards are modest. Landscape standards are also modest. The future streetscape is best envisioned by reviewing building scheme regulations for the aforesaid four nearby context sites.

## 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", "Contemporary", or compatible style 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 type homes at the subject site. Interfacing treatments are therefore not contemplated. Rather, massing design, construction materials, and trim element treatments will meet or exceed standards commonly found in RF developments constructed in Surrey subsequent to the year 2016. The regulations will be consistent with recently approved numerous nearby sites including Surrey projects 13-0193-00, 16-0197-00, 16-0200-00, 17-0003-00.

- Exterior Materials/Colours:** Stucco, Cedar, Vinyl, Fibre-Cement Board, Brick, and Stone.
- “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:** 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:** 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. Membrane roofs permitted where required by B.C. Building Code.
- 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 Lot:** 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. The corner lot 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, stamped concrete, or coloured concrete in dark earth tones or medium to dark grey only.

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

**Summary prepared and submitted by:** Tynan Consulting Ltd. Date: Nov. 9, 2017

**Reviewed and Approved by:**



Date: November 9, 2017

# APPENDIX VI

**Project :** 17-0478-00  
**Lot number** shared

**Zoning:** RF  
**Lot size:** 589.9

**ZONING BYLAW :**

Maximum Lot coverage:  
 Max. Floor Area

m2	sq.ft	% lot
232.17	2,499	39.4
346.47	3,729	58.7

**LOT COVERAGE:**

Main Floor area including Garage area  
 Front Porch / Veranda area  
 Rear Deck area

m2	sq.ft	%cov
211.61	2,278	94.6
4.09	44	1.8
8.00	86	3.6
<b>223.70</b>	<b>2,408</b>	100.0

**Total achievable LOT COVERAGE**

\*\*\* Maximum lot coverage not achieved by :

**-8.47      -91**

**FLOOR AREA (incl garage)**

Minimum main floor footprint req'd to achieve max home  
 Largest main floor footprint achievable given setbacks

m2	sq.ft
192.48	2,072
211.61	2,278
<b>19.13</b>	<b>206</b>

**Surplus achievable footprint area =**

**Plan illustrated :**

Main floor area including any garage at main floor level  
 Upper floor area (largest possible given main floor size))

m2	sq.ft	%area
211.61	2,278	61.1
134.86	1,452	38.9
<b>346.47</b>	<b>3,729</b>	100.0
19.00	205	0.64

**Total floor area incl. Garage and excl. Basement**

(assumed area open to below) =

\*\*\* Maximum floor area achieved.

**Comments :**

Note: This information is not to be used for legal agreements of any kind unless such use is approved in writing by Tynan Consulting Ltd. Values herein to be verified by owner and/or owner's designer prior to use.

20.00

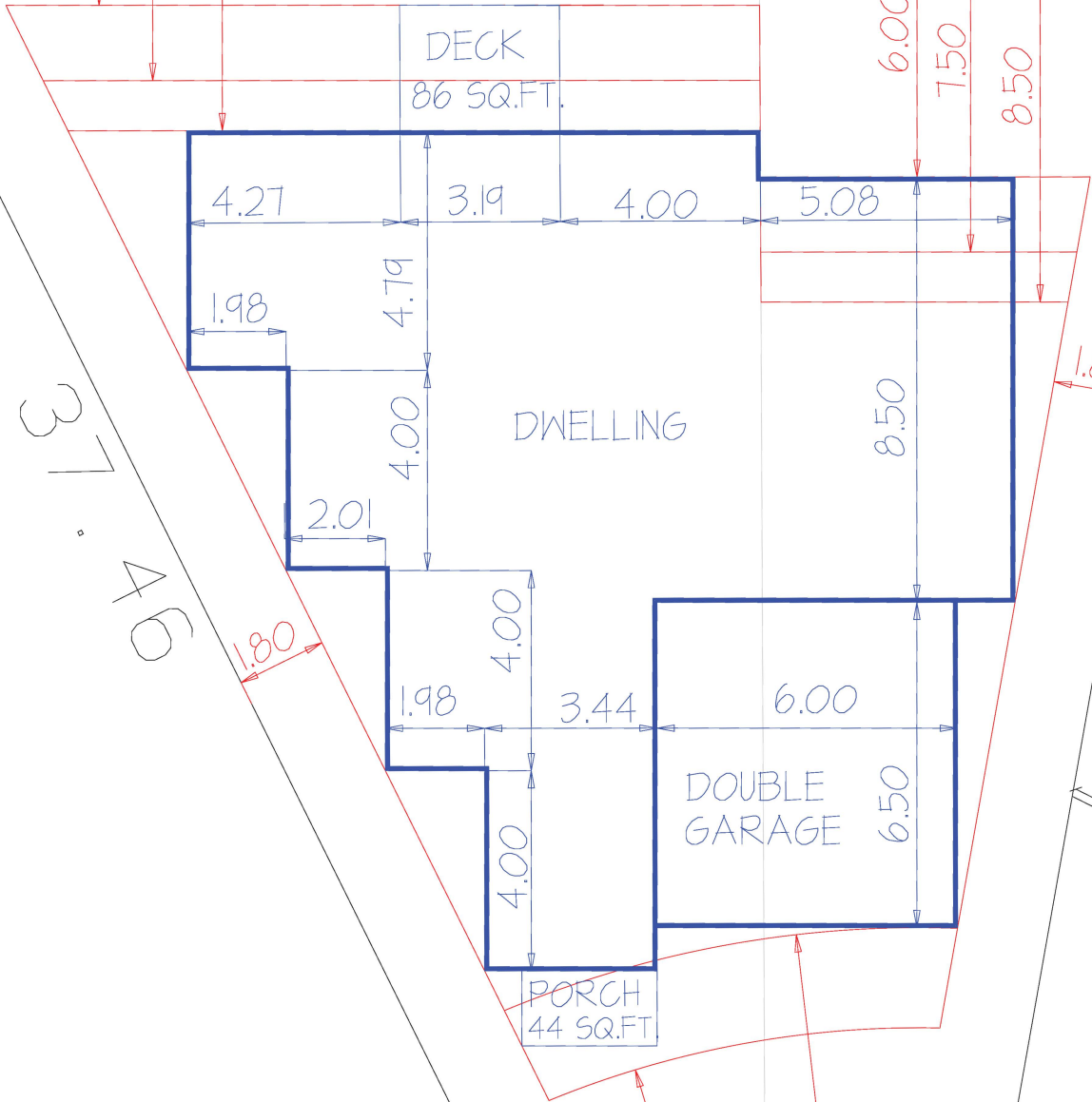
3.43

LOT AREA :  
589.9 m<sup>2</sup>

3.9.50

6.00  
7.50  
8.50

6.00  
7.50  
8.50



3.9.50

29.00

5.50  
7.50

00.11

Table 4. Tree Preservation Summary.

TREE PRESERVATION SUMMARY	
Surrey Project No:	Unknown
Address:	17353 100 Ave Surrey, BC
Registered Arborist:	Max Rathburn ISA Certified Arborist (PN-0599A) 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>29</b>
<b>Protected Trees to be Removed</b>	<b>29</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 $\frac{9}{9} \times \text{one (1)} = 9$	<b>49</b>
- All other Trees Requiring 2 to 1 Replacement Ratio $20 \times \text{two (2)} = 40$	
<b>Replacement Trees Proposed</b>	<b>15</b>
<b>Replacement Trees in Deficit</b>	<b>34</b>
<b>Protected Trees to be Retained in Proposed [Open Space / Riparian Areas]</b>	<b>N/A</b>
Off-Site Trees	Number of Trees
<b>Protected Off-Site Trees to be Removed</b>	<b>6</b>
<b>Total Replacement Trees Required:</b>	
- Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio $\frac{2}{2} \times \text{one (1)} = 2$	<b>8</b>
- All other Trees Requiring 2 to 1 Replacement Ratio $4 \times \text{two (2)} = 8$	
<b>Replacement Trees Proposed</b>	<b>0</b>
<b>Replacement Trees in Deficit</b>	<b>8</b>

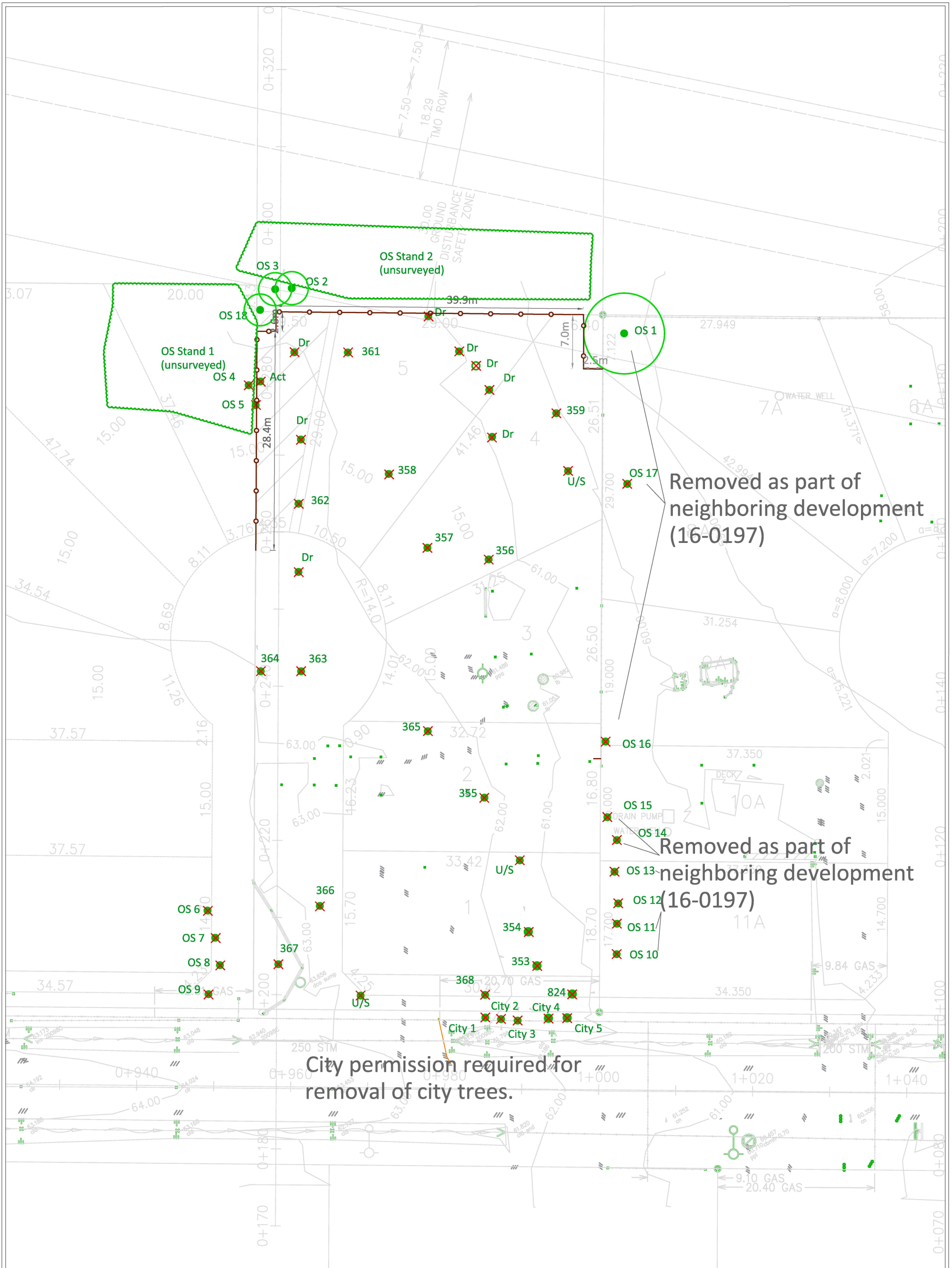
Summary prepared and submitted by:



18/01/2018

Arborist

Date



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

REFERENCE DRAWINGS  
 1. Base Survey by: Citiwest Consulting LTD.

- NOTES
- 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.
  - 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.
  - 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. (1/3 the trees diameter was added to the graphical tree protection circles to accommodate the survey point being in the center of the tree)
  - Any construction activities or grade changes within the Root Protection Zone must be approved by the project arborist.
  - 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).
  - 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.



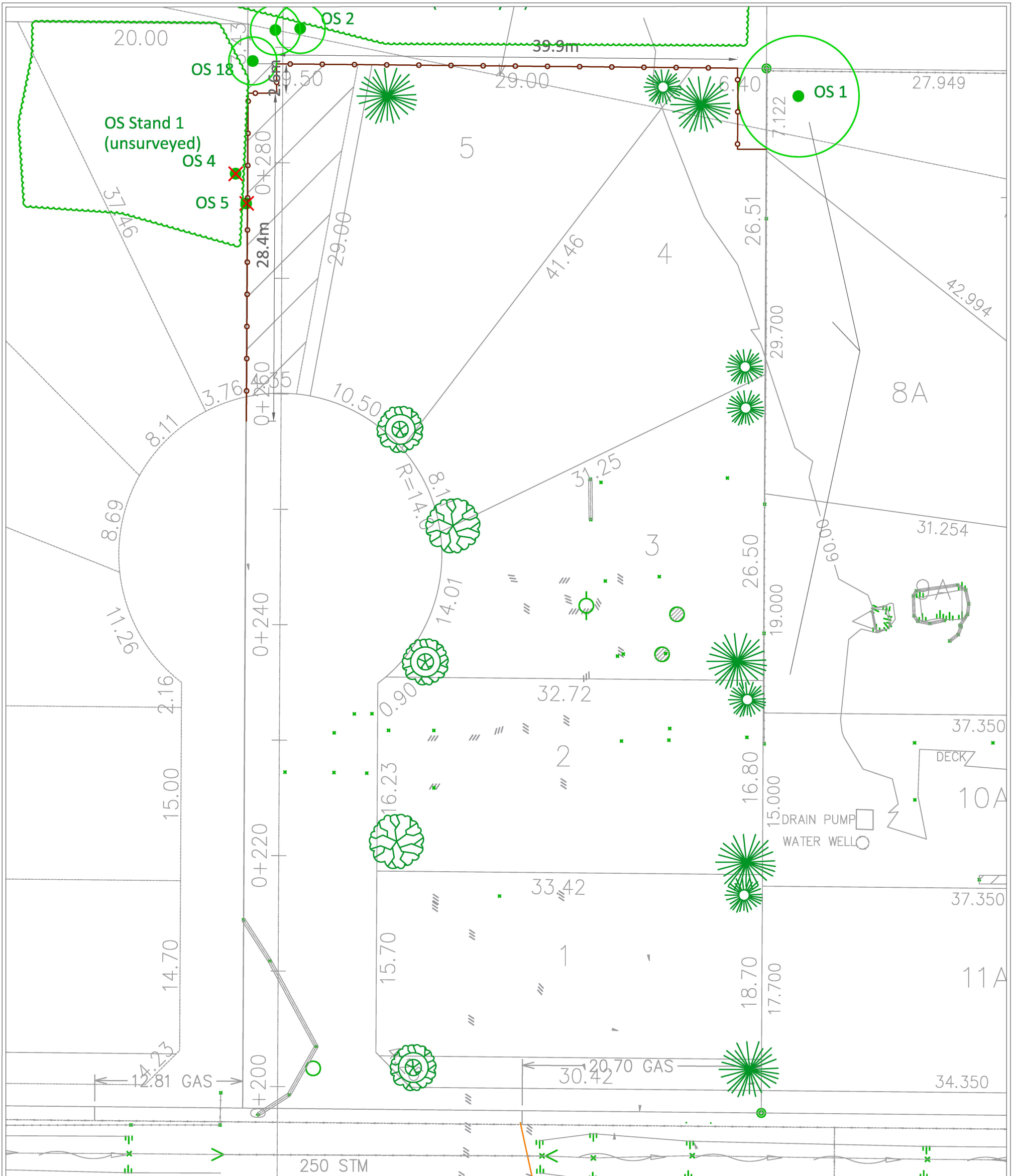
3551 COMMERCIAL STREET  
 VANCOUVER BC | V5N 4E8  
 T 604.733.4886 | F 604.733.4879

Drawing title: Tree Retention and Removal Plan  
 Project address: 17353 100 Avenue  
 Client: Qualico Developments

Drawing No: 003  
 Date: 2018/01/12  
 Drawn by: MR  
 Page Size: TABLOID 11"x17"

Page #  
 1 of 1





PLANT LIST

KEY	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	SPACING	COMMENTS
	Cornus 'Eddies White Wonder'	Dogwood	03	6 cm. cal	As shown	B. & B.
	Cercidiphyllum japonicum	Katsura	02	6 cm. cal	As shown	B. & B.
	Acer griseum	Paperbark maple	0	6 cm. cal	As shown	B. & B.
	Picea omorika	Serbian spruce	05	3.0 meters	As shown	B. & B.
	Chamaecyparis nootkatensis 'pendula'	Weeping Nootka Cedar	05	3.0 meters	As shown	B. & B.

TOTAL TREES TO BE PLANTED: 15

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

PLANTING STANDARDS

All planting works should be done in accordance with the current edition of Canadian Landscape Standards.

Tree Replacement symbols are not shown to scale, and the tree may not be planted in the exact location shown.



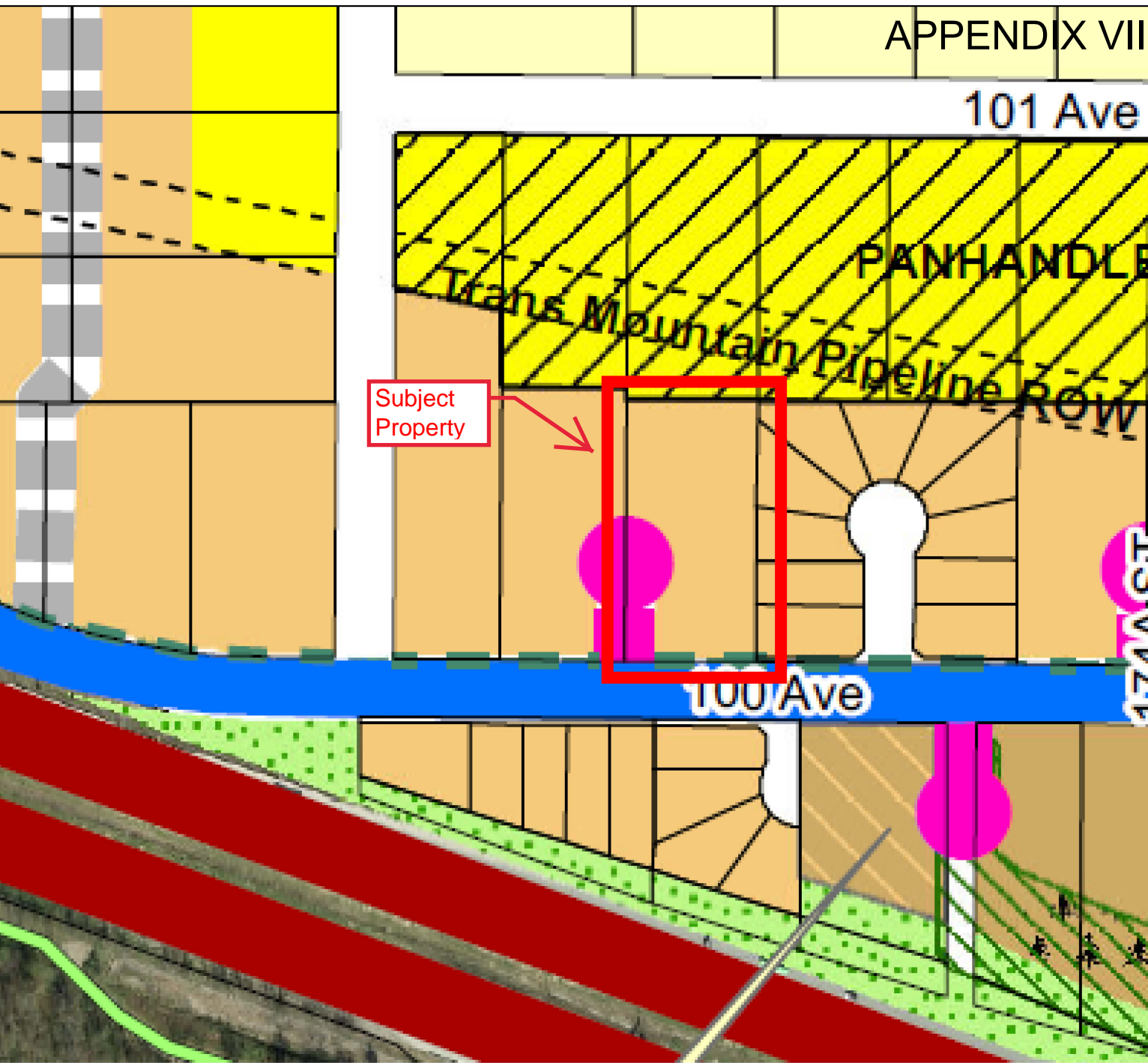
3551 COMMERCIAL STREET  
VANCOUVER BC | V5N 4E8  
T 604.733.4886 | F 604.733.4879

Drawing title: Tree Replacement Plan  
Project address: 17353 100 Avenue  
Client: Qualico Developments

Drawing No: 001  
Date: 2018/01/12  
Drawn by: MR  
Page Size: TABLOID 11"x17"

Page #  
1 of 1

101 Ave



**LEGEND**

**Land Use Designations**

- Acreage Residential 1-2 UPA
- Suburban Residential 2-4 UPA Gross
- Urban Transition 4-5 UPA
- Low Density Cluster 4-6 UPA Gross
- Single Family Residential 4-6 UPA
- Medium Density Cluster 10-12 UPA Gross
- Urban Residential 8-10 UPA Transition
- Urban Residential 8-10 UPA
- Low Density Townhouse 12-15 UPA Gross Transition
- Low Density Townhouse 12-15 UPA Gross
- High Density Multiple Residential 30-45 UPA
- Neighbourhood Commercial
- Industrial
- Institutional
- Existing Natural Area
- Future Natural Area
- Existing Neighbourhood Park
- Future Neighbourhood Park
- Landscape Buffer
- Storm Water Pond
- Wet Land
- Tree Retention Area

**Transportation Network**

- Proposed City Greenway
- Railway
- Signalized Intersection
- Cul De Sac
- Flex Cul De Sac
- Provincial Highway
- Arterial 30m
- Collector 24m
- Future Collector 24m
- Proposed Local 20m
- Proposed Flex Local Road
- Proposed Local Lane 6m
- Proposed Greenways 4m
- In Service Greenways 4m

**Utilities & Other**

- SanitaryTrunkSewer\_ROW\_10m\_AbbyRidge
- SanitaryTrunkSewer\_AbbyRidge
- Significant Tree Stand
- Trans Mountain Pipeline ROW (18.6m)
- Stream Class A
- Stream Class B
- Buffer of Fishclass A and AO 30m
- Buffer of Fishclass B 15m

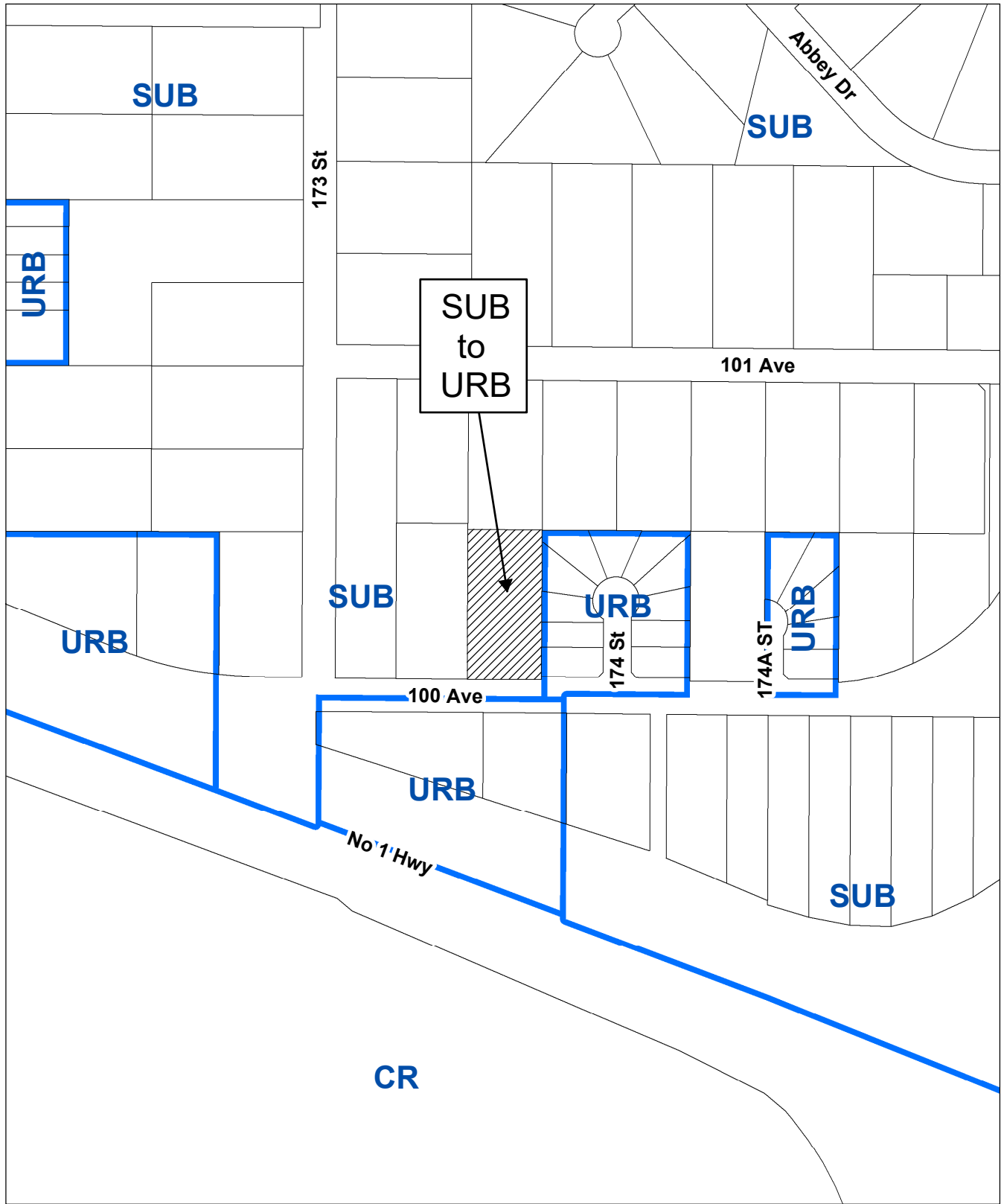
**Abbey Ridge**

**Stage 2 - Land Use Concept Plan**

*\*\* Not to Scale*



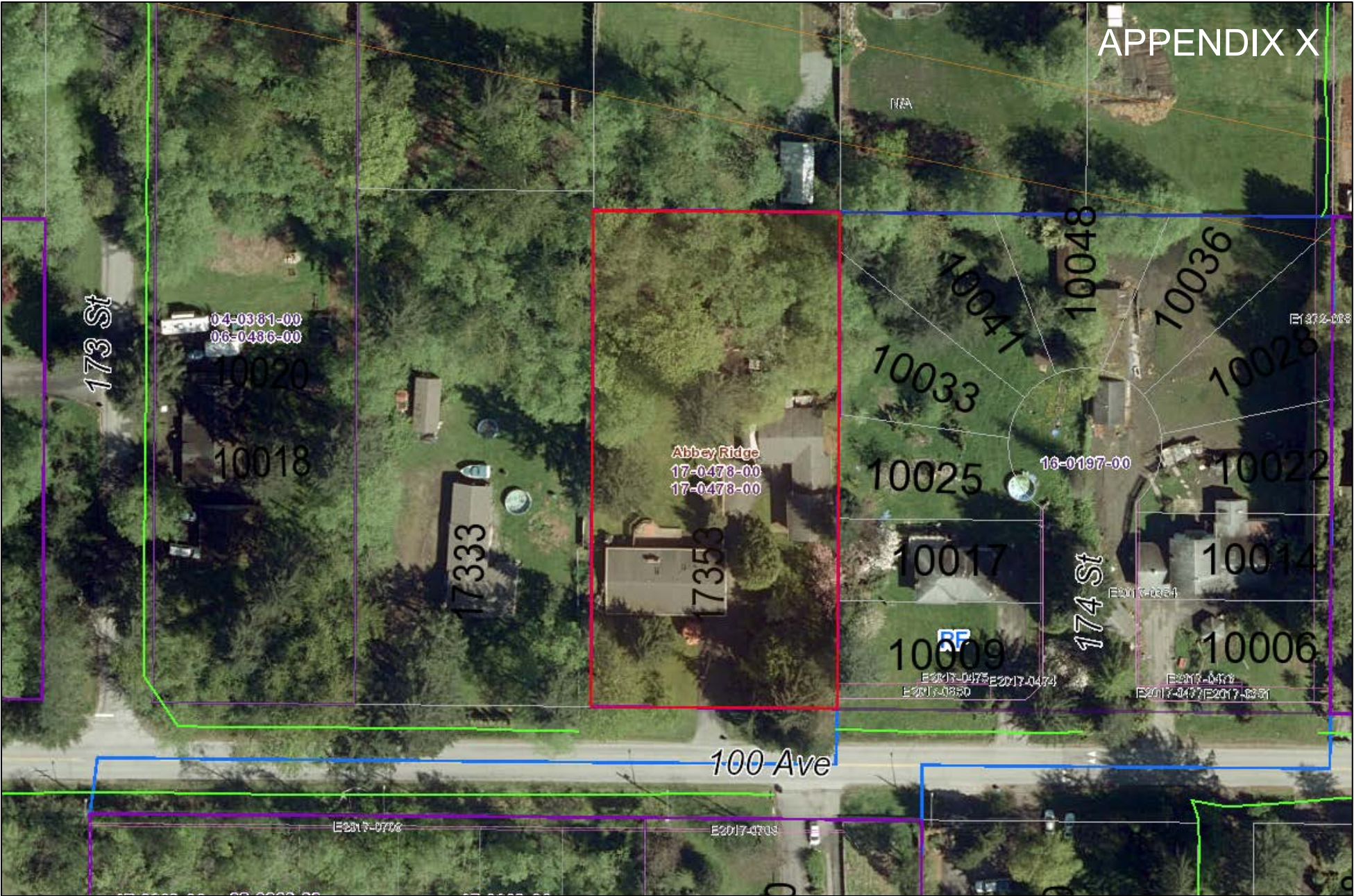
APPENDIX IX



OCP Amendment 7917-0478-00

Proposed amendment from Suburban to Urban





**7917-0478-00**  
**17353 - 100 Avenue**  
**Aerial View of Site**

