

PROPOSAL:

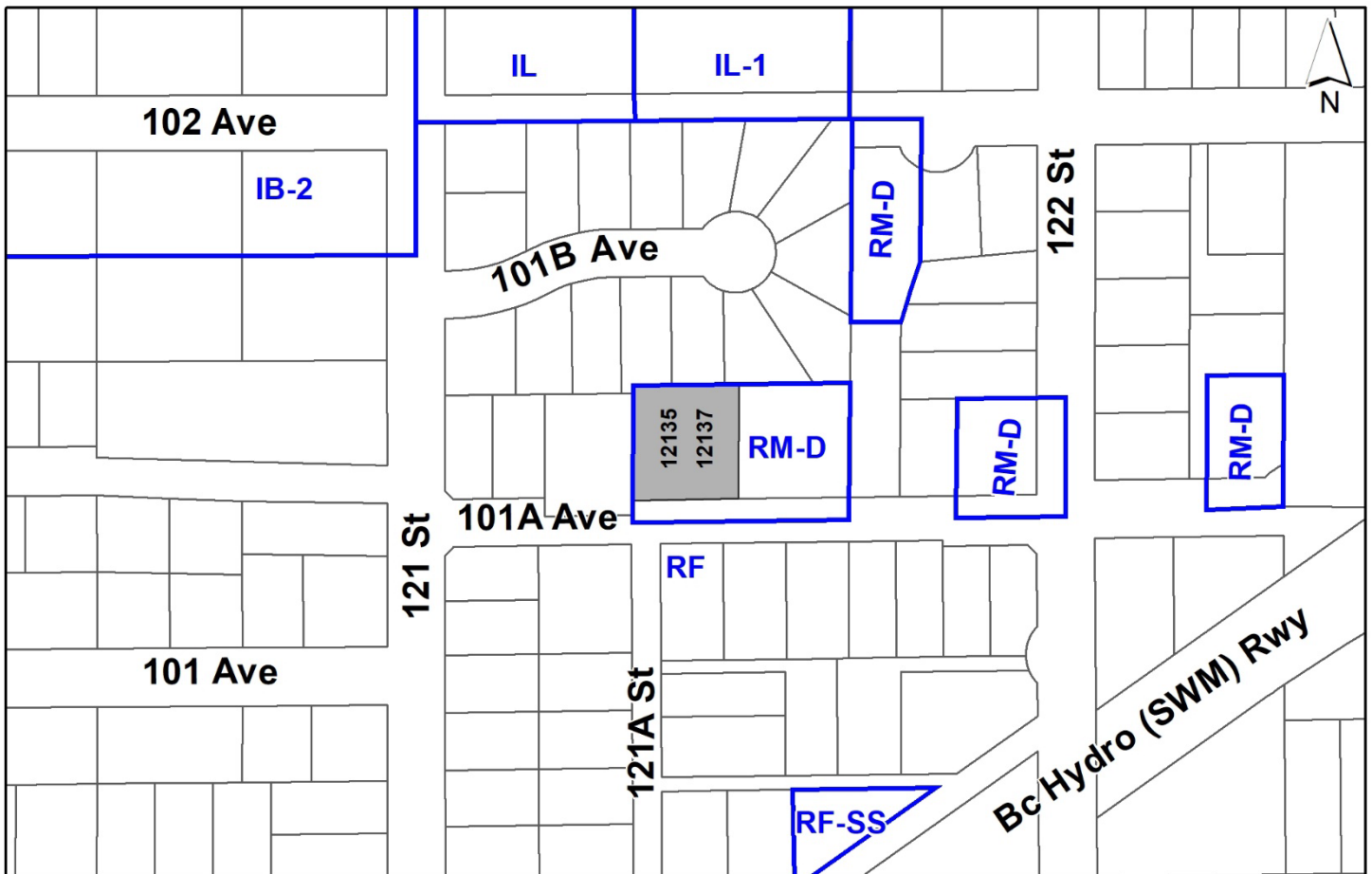
- **Rezoning** from RM-D to RF
- **Development Permit**

to allow subdivision into two single family residential lots.

LOCATION: 12135 - 101A Avenue
 (12137 - 101A Avenue)

ZONING: RM-D

OCP DESIGNATION: Urban



RECOMMENDATION SUMMARY

- Rezoning By-law to proceed to Public Notification. If supported the By-law will be brought forward for First, Second and Third Reading.
- Approval to draft Development Permit for Hazard Lands.

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- None.

RATIONALE OF RECOMMENDATION

- The proposal complies with the Urban designation in the Official Community Plan (OCP).
- The proposal complies with the General Urban designation in the Metro Vancouver Regional Growth Strategy (RGS).
- In accordance with the Council Procedure By-law (No. 15300), as amended, a public hearing is not required for the subject rezoning application. The proposed rezoning is in relation to a subdivision creating five or fewer new single-family residential lots. The proposed zoning and subdivision is consistent with the existing zoning and lot pattern in the immediately surrounding neighbourhood (to the satisfaction of the General Manager, Planning & Development). As such, Council is requested to endorse the Public Notification to proceed for the proposed Rezoning By-law. The Rezoning By-law will be presented to Council for consideration of First, Second, and Third Reading, after the required Public Notification is complete, with all comments received from the Public Notification presented to Council prior to consideration of the By-law readings.
- The proposed density and building form are appropriate for this part of Whalley.
- The proposal generally complies with the Development Permit requirements in the OCP for Hazard Lands (Steep Slopes).

RECOMMENDATION

The Planning & Development Department recommends that:

1. Council endorse the Public Notification to proceed for a By-law to rezone the subject site from “Duplex Residential Zone (RM-D)” to “Single Family Residential Zone (RF)”.
2. Council authorize staff to draft Development Permit No. 7922-0207-00 for Hazard Lands (Steep Slopes) generally in accordance with the attached drawings (Appendix I), and the accepted Geotechnical Report.
3. Council instruct staff to resolve the following issues prior to final adoption:
 - (a) ensure that all engineering requirements and issues including restrictive covenants, dedications, and rights-of-way where necessary, are addressed to the satisfaction of the General Manager, Engineering;
 - (b) submission of a subdivision layout to the satisfaction of the Approving Officer;
 - (c) submission of a finalized tree survey and a statement regarding tree preservation to the satisfaction of the City Landscape Architect;
 - (d) the applicant satisfy the deficiency in tree replacement on the site, to the satisfaction of the Planning and Development Department;
 - (e) submission of a finalized and peer-reviewed Geotechnical Report to the satisfaction of City staff;
 - (f) the applicant adequately address the City’s needs with respect to the City’s Affordable Housing Strategy, to the satisfaction of the General Manager, Planning & Development Services;
 - (g) demolition of existing buildings and structures to the satisfaction of the Planning and Development Department; and
 - (h) registration of a Section 219 Restrictive Covenant that requires the owner to develop the site in accordance with the conditions in the geotechnical report.

SITE CONTEXT & BACKGROUND

Direction	Existing Use	OCP Designation	Existing Zone
Subject Site	Existing duplex	Urban	RM-D
North:	Single family residential.	Urban	RF
East:	Existing duplex.	Urban	RM-D
South (across 101A Avenue):	Single family residential.	Urban	RF
West:	Single family residential.	Urban	RF

Context & Background

- The subject property is located at 12135 - 101A Avenue in the Whalley neighborhood and is approximately 0.145 hectares in size. The property is currently zoned “Duplex Residential Zone (RM-D)”.

DEVELOPMENT PROPOSAL**Planning Considerations**

- In order to accommodate the proposed single-family residential development consisting of two residential lots, the applicant proposes the following:
 - Rezoning from RM-D to RF;
 - Development Permit for Hazard Lands (DP₂); and
 - Subdivision into two residential lots.
- Specific details on the development proposal are provided in the table below:

	Proposed
Lot Area	
Gross Site Area:	1450 sq m
Road Dedication:	46 sq m
Undevelopable Area:	n/a
Net Site Area:	1404 sq m
Number of Lots:	2
Unit Density:	14.3 uph
Range of Lot Sizes	703 sq m
Range of Lot Widths	18.3 m
Range of Lot Depths	35.8 – 38.4 m

Referrals

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

School District: The School District has advised that there will be approximately two (2) school-age children generated by this development, of which the School District has provided the following expected student enrollment.

1 elementary student at Prince Charles Elementary School
1 secondary student at LA Matheson Secondary School

(Appendix III)

Note that the number of school-age children is greater than the expected enrollment due to students attending private schools, home school or different school districts.

The applicant has advised that the dwelling units in this project are expected to be constructed and ready for occupancy by autumn 2024.

Parks, Recreation & Culture: No concerns.

The closest active park is Robson Park and is 1.3-kilometres away, and the closest natural area is Robson Ravine and is 630-metres away.

Transportation Considerations

- Dedicate 1.261-metres along 101A Avenue.
- Construct the north side of 101A Avenue.

Sustainability Considerations

- The applicant has met all of the typical sustainable development criteria, as indicated in the Sustainable Development Checklist.

POLICY & BY-LAW CONSIDERATIONS

Regional Growth Strategy

- The subject site is designated as “General Urban” in the Metro Vancouver Regional Growth Strategy (RGS). The proposal complies with this designation which is intended for residential neighborhoods and centers.

Official Community Plan

Land Use Designation

- The site is designated 'Urban' in the Official Community Plan (OCP). The proposal complies with this designation.

Themes/Policies

The proposed development complies with the following OCP themes/policies:

- A1.3C – Accommodate urban land development according to the following order of growth management: serviced infill areas and redevelopment sites in appropriate locations within existing residential neighbourhoods, when developed compatibly with existing neighbourhood character.

(The proposed lots will provide a similar streetscape to the existing RF lots to the north and south of the site. The proposed design guidelines will ensure future dwellings are compatible with the character of the existing neighbourhood).

Zoning By-law

- The applicant proposes to rezone the subject site from "Duplex Residential Zone (RM-D)" to "Single Family Residential Zone (RF)".
- The table below provides an analysis of the development proposal in relation to the requirements of the Zoning By-law, including the "Single Family Residential Zone (RF)" and parking requirements.

RF Zone (Part 16)	Permitted and/or Required	Proposed
Unit Density:	14.8	14.3
Yards and Setbacks		
Front Yard:	7.5 m	7.5 m
Side Yards:	1.8 m	1.8 m
Rear Yard:	7.5 m	7.5 m
Lot Size		
Lot Size:	560 sq m	560 sq m
Lot Width:	15 m	15 m
Lot Depth:	28 m	28 m
Parking (Part 5)		
Number of Spaces	Required	Proposed
	3	3

Lot Grading and Building Scheme

- The applicant retained Tejeshwar Singh of Simplex Consultants Ltd. as the Design Consultant. The Design Consultant conducted a character study of the surrounding homes and based on the findings of the study, proposed a set of building design guidelines (Appendix IV).

- Styles recommended for this site include traditional west coast and neo-traditional.
- A preliminary lot grading plan, submitted by Terra Nobis Consulting Inc., and dated August 02, 2023, has been reviewed by staff and found to be generally acceptable. The applicant is currently proposing in-ground basements. 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.

Capital Projects Community Amenity Contributions (CACs)

- On December 16, 2019, Council approved the City's Community Amenity Contribution and Density Bonus Program Update (Corporate Report No. R224; 2019). The intent of that report was to introduce a new City-wide Community Amenity Contribution (CAC) and updated Density Bonus Policy to offset the impacts of growth from development and to provide additional funding for community capital projects identified in the City's Annual Five-Year Capital Financial Plan. A fee update has been approved in April 2023, under Corporate Report No.R037;2023.
- The proposed development will be subject to the Tier 1 Capital Plan Project CACs. The contribution will be payable at the rate applicable at the time of Final Subdivision Approval. The current rate is \$4,272 per new unit.
- The proposed development will not be subject to the Tier 2 Capital Plan Project CACs as the proposal complies with the densities in the OCP designation.

Affordable Housing Strategy

- On April 9, 2018, Council approved the City's Affordable Housing Strategy (Corporate Report No. R066; 2018) requiring that all new rezoning applications for residential development contribute \$1,000 per new unit to support the development of new affordable housing. The funds collected through the Affordable Housing Contribution will be used to purchase land for new affordable rental housing projects. A fee update has been approved in April 2023, under Corporate Report No.R037; 2023.
- The applicant will be required to contribute \$1,068 per new lot to support the development of new affordable housing.

PUBLIC ENGAGEMENT

- Pre-notification letters were sent on April 3, 2023, and the Development Proposal Signs were installed on March 29, 2023. Staff received no responses from people in the vicinity of the project.
- The subject development application was reviewed by the Whalley Community Advisory Association. The Whalley Community Advisory Association had no concerns with the project.

DEVELOPMENT PERMITS

Hazard Lands (Steep Slope) Development Permit Requirement

- The subject property falls within the Hazard Lands (Steep Slope) Development Permit Area (DPA) in the OCP, given that the site contains steep slopes in excess of 20% gradient. The Hazard Land (Steep Slope) Development Permit is required to protect developments from hazardous conditions.
- The subject property exhibits a gentle sloping terrain with an elevation difference from 30 to 37-metres across the southeast to the northwest tip of the property. Overall, the subject property follows a gently sloping terrain of 7 degrees for about 21 linear meters measured from the road frontage. Thereafter, the sloping terrain becomes more steepened with a slope angle of 25 degrees. There is a retaining wall along the north property line.
- A geotechnical report, prepared by Qiyang (Rick) Jiang, *P. Eng.*, of Tetron Engineering Ltd and dated July 20, 2023, was reviewed by staff and found to be generally acceptable to proceed. The report was reviewed by staff and found to generally conform to the OCP Development Permit guidelines for Hazard Lands. The applicant will be required to submit a peer review of the Geotechnical Report, with the potential for some modification of the content of the report still required (subject to the findings of the peer reviewer). The finalized geotechnical report will be incorporated into the Development Permit.
- The geotechnical report investigated issues related to slope stability and storm water drainage to determine the feasibility of redeveloping the site. Thereafter, the report proposes recommendations to ensure the ongoing stability of the slope.
- The consultant has determined that the development is feasible provided that the recommendations in their report are incorporated into the overall design of the site, including a rear geotechnical setback of 7.5-metres. No rock pit, shed, in-ground pool, hot tub, sprinkler system, nor material stockpiles are permitted within the geotechnical setback zone. No grading or slope disturbance is permitted. The final site grading shall prevent concentrated storm water from entering the natural slope.
- Registration of a Section 219 Restrictive Covenant that requires the owner to develop the site in accordance with the conditions in the geotechnical report is required as a condition of final adoption.
- At Building Permit stage, the Building Division will require Letters of Assurance from a geotechnical engineer to ensure that the building plans comply with the recommendations in the approved geotechnical report.

TREES

- Adrian Szabunio, ISA Certified Arborist of Woodridge Tree Consulting Arborist Ltd. prepared an Arborist Assessment for the subject property. The table below provides a summary of the proposed tree retention and removal by tree species:

Table 1: Summary of Proposed Tree Preservation by Tree Species:

Tree Species	Existing	Remove	Retain
Alder and Cottonwood Trees			
Alder	1	1	0
Deciduous Trees (excluding Alder and Cottonwood Trees)			
Plum	2	2	0
Cherry	4	4	0
Coniferous Trees			
Blue Sprue	1	0	1
Western Red Cedar	9	7	2
Deodar Cedar	1	1	0
Pine	1	1	0
Cypress	2	2	0
Total (excluding Alder and Cottonwood Trees)	20	17	3
Total Replacement Trees Proposed (excluding Boulevard Street Trees)		6	
Total Retained and Replacement Trees Proposed		9	
Estimated Contribution to the Green City Program		\$15,950	

- The Arborist Assessment states that there are a total of 20 mature trees on the site, excluding Alder and Cottonwood trees. One existing tree, approximately 4.7 % of the total trees on the site, is an Alder tree. The applicant proposes to retain 3 trees 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 and Cottonwood trees, and a 2 to 1 replacement ratio for all other trees. This will require a proposed total of 35 replacement trees on the site. Since the proposed 6 replacement trees can be accommodated on the site (based on an average of 3 trees per lot), the proposed deficit of 29 replacement trees will require an estimated cash-in-lieu payment of \$15,950, representing \$550 per tree to the Green City Program, in accordance with the City's Tree Protection By-law.
- In summary, a total of 9 trees are proposed to be retained and replaced on the site with an estimated contribution of \$15,950 to the Green City Program.

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

- Appendix I. Proposed Subdivision Layout
- Appendix II. Engineering Summary
- Appendix III. School District Comments
- Appendix IV. Building Design Guidelines Summary
- Appendix V. Summary of Tree Survey and Tree Preservation

approved by Ron Gill

Don Luymes
General Manager
Planning and Development

RO/ar



TERRA NOBIS CONSULTING INC.

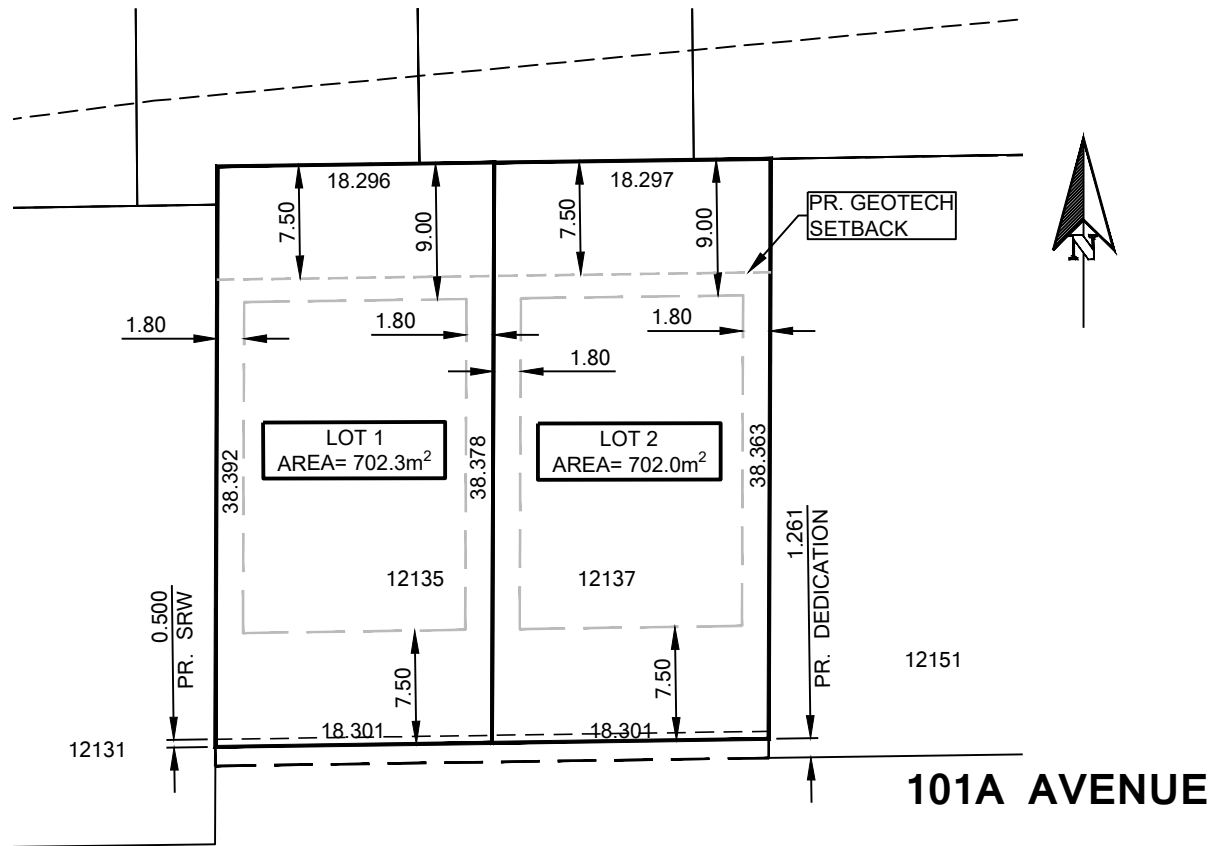
#203-15585 24 AVENUE
 SURREY, BC, V4A 2J4
 EMAIL: INFO@TERRANOBIS.COM
 PHONE: 604.946.3007



Appendix I

SURREY
 the future lives here

	EXISTING	PROPOSED
LOTS	1	2
ZONING	RM-D	RF
LOT SIZE	1450.4 m ²	LOT 1: 702.3 m ² LOT 2: 702.0 m ²
AVG. LOT WIDTH	36.59 m	LOT 1: 18.30 m LOT 2: 18.30 m
AVG. DEPTH	39.58 m	LOT 1: 38.38 m LOT 2: 38.37 m



PLAN
 SCALE: 1:500

I:\TERRA\Terra Nobis\2 - Projects\21078 - 12135 101A Avenue, Surrey - Subdivision application (Jaspreet)\Design\Drawings\21078 - Working.dwg [SITEPLAN] 8/02/2023 3:11PM

No	DATE	BY	CK	REVISIONS DESCRIPTION
2.	02 AUG 2023	JL	PG	ROAD DEDICATION UPDATE
1.	21 JUL 2023	JL	PG	GEOTECH SETBACK UPDATE
0.	31 MAY 2022	JL	PG	FOR APPLICATION

TITLE : SUBDIVISION LAYOUT
 12135 101A AVENUE, SURREY

JASPREET PANDHER
 EMAIL: RAJAPANDHER@GMAIL.COM

SCALE: 1:500

SEAL

NOT FOR CONSTRUCTION

DATE: 21 JUL 2023

21078

REV

1.

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

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

DATE: **July 31, 2023**

PROJECT FILE: **7822-0207-00**

RE: **Engineering Requirements
Location: 12135 101A Ave**

REZONE/SUBDIVISION

Property and Right-of-Way Requirements

- Dedicate 1.261-metres along 101A Ave.
- Register a 0.5-metre Statutory Right-of-Way (SRW) on 101A Ave.

Works and Services

- Construct north side of 101A Ave.
- Construct water, storm, sanitary service connections, and driveway letdowns for each lot.

A Servicing Agreement is required prior to Rezone/Subdivision.



Jeff Pang, P.Eng.
Development Services Manager

JC

Department: **Planning and Demographics**
Date: **February 27, 2023**
Report For: **City of Surrey**

Development Impact Analysis on Schools For:
Application #: **22 0207 00**

The proposed development of **2** Single Family with Suite units are estimated to have the following impact on elementary and secondary schools within the school regions.

School-aged children population projection	2
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Projected Number of Students From This Development In:	
Elementary School =	1
Secondary School =	1
Total Students =	2

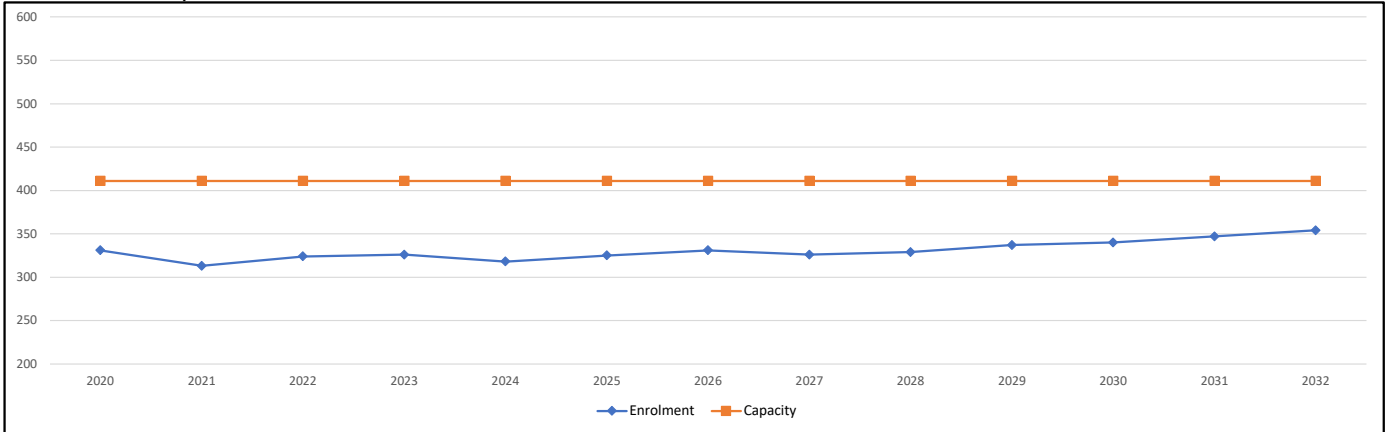
Current Enrolment and Capacities:	
Prince Charles Elementary	
Enrolment	324
Operating Capacity	411
# of Portables	0
L A Matheson Secondary	
Enrolment	1185
Operating Capacity	1400
# of Portables	1

Summary of Impact and Commentary
The following tables illustrate the historical, current and future enrolment projections including current/approved ministry operating capacity for the elementary and secondary schools serving the proposed development.

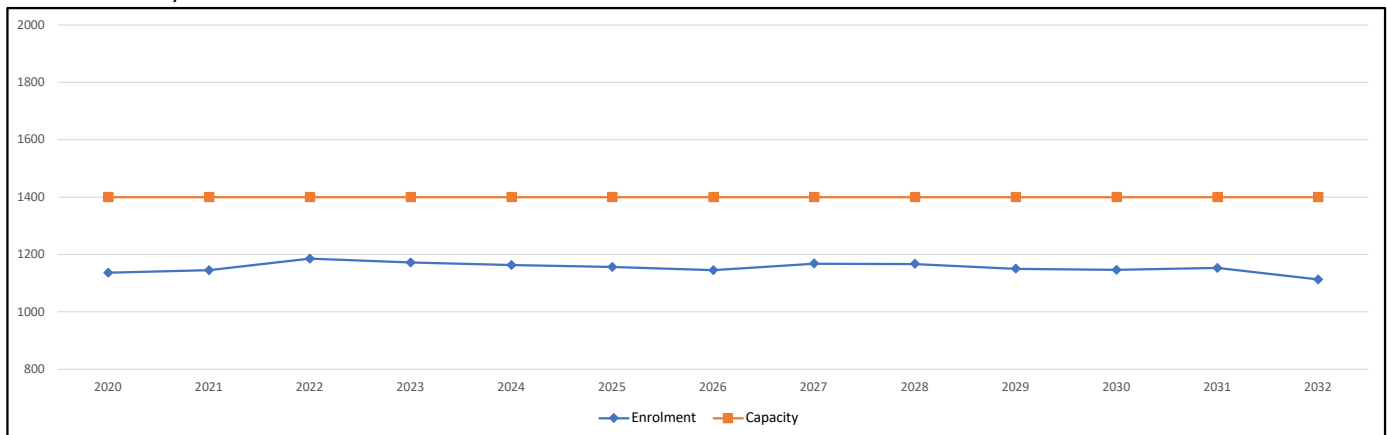
Prince Charles Elementary serves a residential area that sits on top of an escarpment which overlooks a portion of the industrial area along the Fraser River. The 10 year projections indicate there will be growth in the catchment. However, the school is currently operating under capacity and will be able to accommodate all the growth within its current capacity. There are no capital expansion project requests for this school.

As of September 2021, LA Matheson Secondary is currently operating at 81%. There are no capital expansion project requests for this school.

Prince Charles Elementary



L A Matheson Secondary



Population: The projected population of children aged 0-17 impacted by the development.
Enrolment: The number of students projected to attend the Surrey School District ONLY.

BUILDING GUIDELINES SUMMARY

Surrey Project #: 7922-0207-00
 Project Location: 12135 101A Avenue, Surrey, B.C.
 Design Consultant: Simplex Consultants Ltd., (Tejeshwar Singh, b.t.arch, ASCT, CRD, at.aibc)

This building scheme draft is proposed for the above noted project and has been filed with the City Clerk. Below is the Residential Character Study and the Design Guidelines summary which highlights the important features and forms 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:

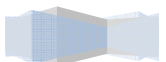
The area surrounding the subject property consists of homes built recently along with a handful of older homes built about 35-40 years ago. The style of the homes in the area "traditional west coast" and "neo-traditional" which range from 2500sf up to 5000 sf.

Homes in the neighborhood include the following:

- The context homes surrounding the property which are recently built are of "traditional west coast" style homes with mid-scale massing characteristics. These homes have various roof pitches from 6:12 up to 10:12. Roof surfaces are asphalt shingles and the cladding is hardi with stone or brick accents. These newer homes can be used as context homes.
- There are some older "neo-traditional" style homes that are approximately 35-40 year old with roof pitches of 4:12 up to 8:12. These homes are comprised of simple rectangular shapes with low-slope common gable roofs, covered with interlocking tab type asphalt shingle roof surfaces. The homes are clad with mainly siding or stucco.

1.2 Features of the Existing and Surrounding Dwelling Homes Significant to the Proposed Building Scheme:

- 1) Context styles of homes for the proposed building scheme are "neo-traditional".
- 2) All context homes are 2 and 3 storey homes.
- 3) Front entrances are 1 storey in height.
- 4) Massing: Old homes are mostly traditional west coast or ranchers context.
- 5) Exterior cladding: variation of wall cladding materials allows for a wide range of selection for cladding.



- 6) Roof surface: variation of roofing materials allows for a wide range of selection for roofing.
- 7) Roof pitch is a minimum 4:12 for the newer context homes.

Dwelling Types/Locations: 2 and 3 storey split levels.

Exterior Treatment /Materials: Context homes are clad in stucco, or vinyl siding, and have a stone or brick accent veneer.

Roof Pitch and Materials: A variety of roofing products have been used, and a variety could be permitted.

Window/Door Details: Rectangle or arched.

Streetscape: The neighborhood is fairly new with a similar character within each dwelling. Homes include West Coast Modern style 2 and 3 storey homes that meet modern massing design, modern trim and detailing standards, and modern roofing and construction materials standards. Landscapes range from "modest old urban" to "moderate modern urban".

2. Proposed Design Guidelines

2.1 Proposed Design Solutions:

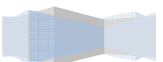
Dwelling Types/Location: 2 storey or 3 storey split levels.

Interfacing Treatment with existing dwellings Strong relationship with neighboring "context homes" including new homes will be of a similar home type and size. Similar massing characteristics, roof types, roof pitches, roofing materials, and siding materials.

Restrictions on Dwellings No basement entry homes.

Exterior Materials: Stucco, Vinyl, Hardiplank, Brick, and Stone.

Colours: "Natural" colours such as browns, greens, clays, and other earth-tones, and "Neutral" colors such as grey, white, and cream are permitted. "Primary" colors in subdued tones such as navy blue, or forest green can be considered as approved by the consultant. Colours such as pink, rose, peach, salmon are not permitted.

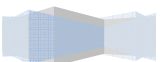


- Roof Pitch:** Minimum roof pitch must be 4:12. Flat roofs are permitted as accent roofs.
- Roof Materials:** Shake profile concrete roof tiles, and shake profile asphalt shingles with a raised ridge caps are permitted in Grey, Brown, or Black.
- In-ground basements:** Permitted subject to determination that service invert locations are sufficiently below grade. Basements will appear underground from the front.
- Landscaping:** Landscaping: Moderate modern urban standard: minimum 25 shrubs of a minimum 3 gallon pot size. Sod from street to face of home. Driveways: exposed aggregate, interlocking masonry pavers, stamped concrete, or "broom" or "brush-finished" concrete.
- Tree Planting Deposit:** **\$1,000** (to developer)
 – 50% will be refunded after inspection by developer
 - Remaining 50% one year after completion of construction
- Compliance Deposit:** **\$5,000** (to developer)

Summary prepared and submitted by: Simplex Consultants Ltd.
 Date: January 27, 2023

Reviewed and Approved by: Tejeshwar Singh, b.t.arch, ASCT, CRD, at.aibc

 Date: January 27, 2023



Tree Preservation Summary

Surrey Project No:

Address: 12135 101A Avenue, Surrey

Registered Arborist: Woodridge Tree Consulting Arborists Ltd., Adrian Szabunio PR 5079A

On-Site Trees	Number of Trees	Off-Site Trees	Number of Trees
Protected Trees Identified *	21	Protected Trees Identified	1
Protected Trees to be Removed	18	Protected Trees to be Removed	1
Protected Trees to be Retained (excluding trees within proposed open space or riparian areas)	3	Protected Trees to be Retained	0
Total Replacement Trees Required:		Total Replacement Trees Required:	
<ul style="list-style-type: none"> - Alder & Cottonwoods to be removed (1:1) 1 X one (1) = 1 - All other species to be removed (2:1) 17 X two (2) = 34 	35	<ul style="list-style-type: none"> - Alder & Cottonwoods to be removed (1:1) 0 X one (1) = 0 - All other species to be removed (2:1) 1 X two (2) = 2 	2
Replacement Trees Proposed	6	Replacement Trees Proposed	0
Replacement Trees in Deficit	29	Replacement Trees in Deficit	2
Protected Trees to be Retained in Proposed Open Space or Riparian Areas	0		
*on-site and shared trees, including trees within boulevards and proposed streets and lanes, but excluding trees in proposed open space or riparian areas			

Summary, report and plan prepared and submitted by:



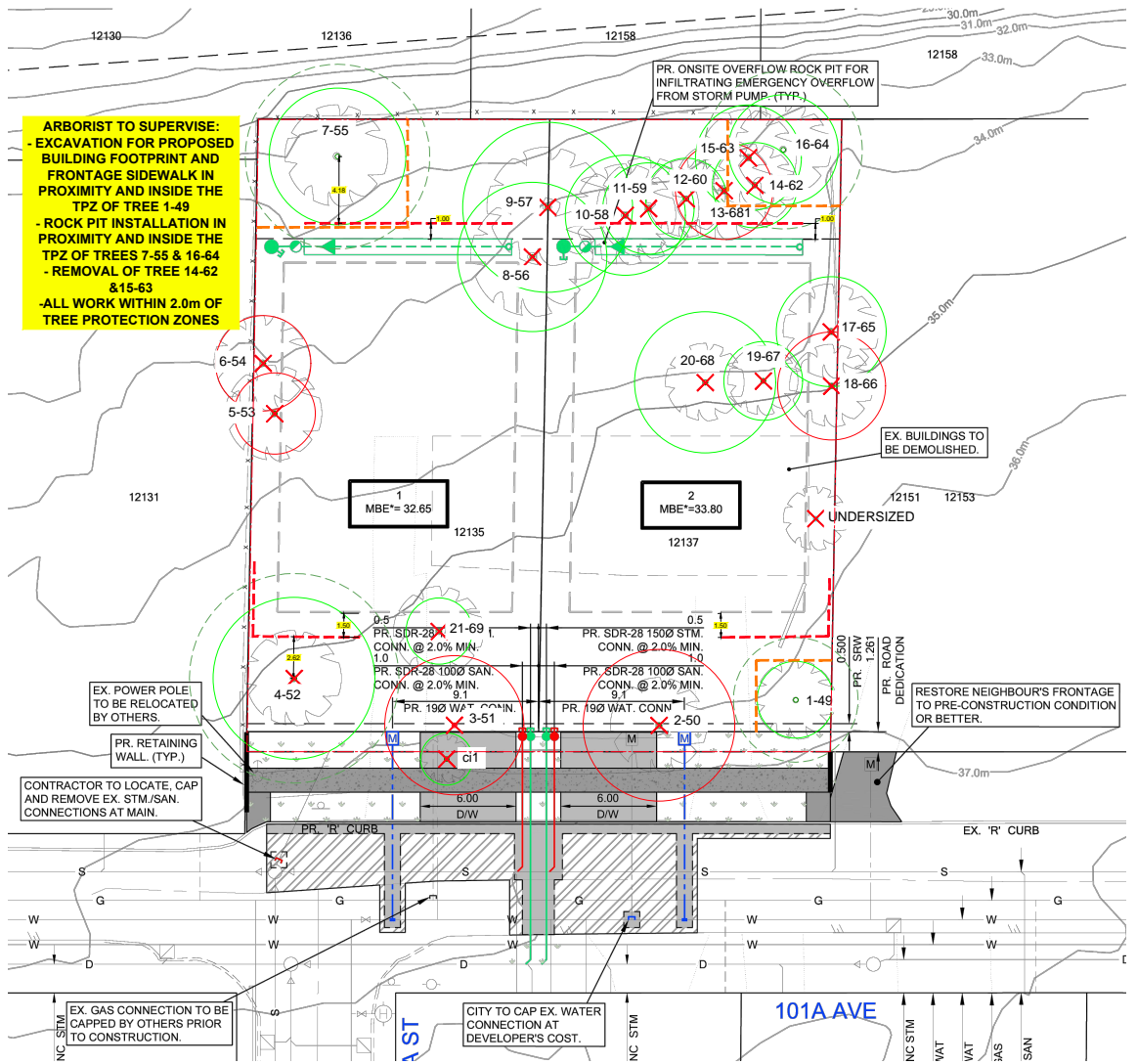
(Signature of Arborist)

July 31, 2023

Date

Summary of Tree Preservation by Tree Species:

Tree Species	Existing	Remove	Retain
Alder and Cottonwood Trees			
Alder	1	1	0
Deciduous Trees (excluding Alder and Cottonwood Trees)			
Plum	2	2	0
Cherry	4	4	0
Coniferous Trees			
Blue Spruce	1	0	1
Western Red Cedar	9	7	2
Deodar Cedar	1	1	0
Pine	1	1	0
Cypress	2	2	0
Total (excluding Alder and Cottonwood Trees)	20	17	3
Total Replacement Trees Proposed (excluding Boulevard Street Trees)			
Total Retained and Replacement Trees			



ARBORIST TO SUPERVISE:
 - EXCAVATION FOR PROPOSED BUILDING FOOTPRINT AND FRONTAGE SIDEWALK IN PROXIMITY AND INSIDE THE TPZ OF TREE 1-49
 - ROCK PIT INSTALLATION IN PROXIMITY AND INSIDE THE TPZ OF TREES 7-55 & 16-64
 - REMOVAL OF TREE 14-62 & 15-63
 - ALL WORK WITHIN 2.0m OF TREE PROTECTION ZONES

PR. ON SITE OVERFLOW ROCK PIT FOR INFILTRATING EMERGENCY OVERFLOW FROM STORM PUMP (TYP.)

EX. BUILDINGS TO BE DEMOLISHED.

UNDERSIZED

PR. ROAD DEDICATION

RESTORE NEIGHBOUR'S FRONTAGE TO PRE-CONSTRUCTION CONDITION OR BETTER.

101A AVE



LEGEND

- = Tree Location
- (red) = Non Surveyed Tree
- (green) = Undersize Tree
- ✗ = Remove Tree
- (green) = Tree Barrier
- - - = No Build Zone
- - - (dashed) = Assumed Excavation
- ⊕ = Replacement tree

NOTES:
 - UNDERSIZE TREES ARE LESS THAN 30cm DBH
 - RED TPZ INDICATES POOR RETENTION SUITABILITY. ALL OTHERS ARE GOOD OR MODERATE

Tree Protection Barriers



Tree Protection Bylaw, 2006, No. 16100
 Tree protection barriers are required as a condition of all Building Permits, Demolition Permits, Development Permits, Development Variance Permits and Subdivisions.

Tree protection barriers must be installed to protect trees from damage during construction. Damage may occur to tree trunks, branches and roots.

Permits will not be issued until tree protection barriers have been installed. Barriers must be inspected and approved by a City Arborist.

WHAT TREES NEED A TREE PROTECTION BARRIER?

- All Bylaw Protected Trees that are being retained on your property.
- All Bylaw Protected Trees on adjacent property within 4m of the property line.
- All trees located on the City Boulevard, Parkland or City land within 4m of the property line.

Bylaw Protected trees are defined as:

1. Trees greater than 30cm diameter at breast height
2. Trees of any size that:
 - a. Were planted as a replacement tree
 - b. Are located within an Environmentally Sensitive Area
 - c. Are listed as a Significant or Heritage Tree in the Tree Protection Bylaw
 - d. Are being used by a raptor, heron or osprey
 - e. Are one of the following: Ashburn, Garry Oak, Coast redwood, Dawn redwood, Giant redwood or Ginkgo
3. Any tree located on City Property

HOW DO I INSTALL A TREE PROTECTION BARRIER?

Tree protection barriers must be built to the following specifications:

Materials:

- 2x4s for framing (vertical posts, top and bottom rails, and cross-bracing)
- Plastic mesh screening

Dimensions:

- 1.2m in height
- Maximum 3.7m spacing between vertical posts

Barrier Size:

- Barriers must be built a minimum distance of six (6) times the tree diameter.
- Barrier size = 6x diameter of tree

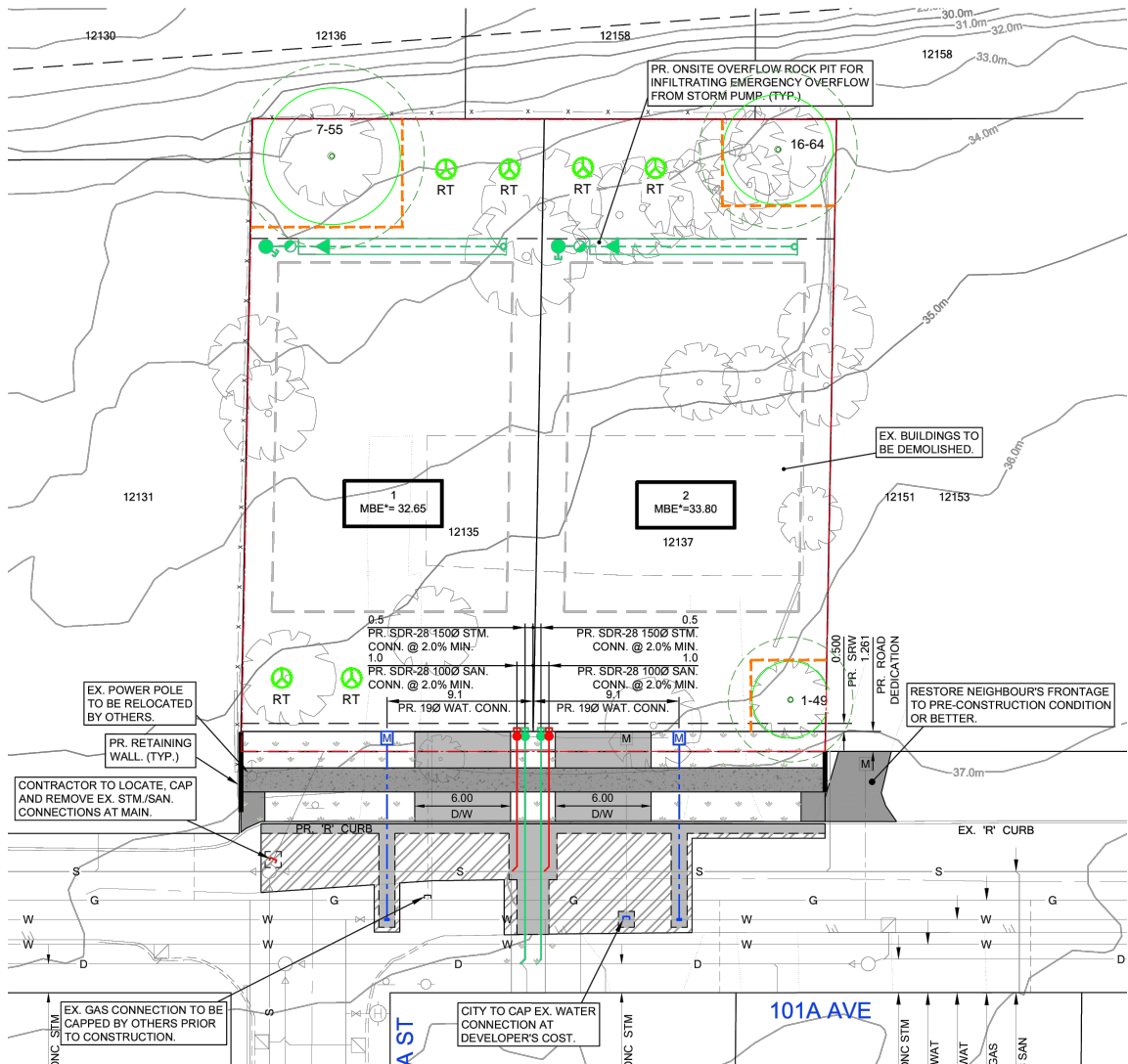
Trunk Diameter (DBH) (measured at 1.4m from the ground)	Tree Protection Barriers (minimum fence from tree)
20 cm	1.2 m
25 cm	1.5 m
30 cm	1.8 m
35 cm	2.1 m
40 cm	2.4 m
45 cm	2.7 m
50 cm	3.0 m
55 cm	3.3 m
60 cm	3.6 m
75 cm	4.5 m
90 cm	5.4 m
100 cm	6.0 m



TREE PLAN FOR DEVELOPMENT AT
 12135 101A AVENUE,
 SURREY

SCALE: 1:300
 DATE: AUGUST 8, 2023
 DRAWN BY: AS





Replacement Trees

New Protection Rules, 2006, No. 1033
 Responsibility for the protection of trees is shared between the owner and the contractor. The contractor is responsible for the protection of trees on the site. The owner is responsible for the protection of trees on the site.

REPLACEMENT TREE INSPECTORS
 The contractor is responsible for the protection of trees on the site. The owner is responsible for the protection of trees on the site.

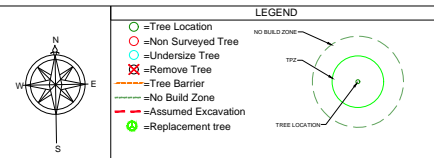
TREE SELECTION GUIDELINES
 1. Select the tree size for the site.
 2. Select the tree species for the site.
 3. Select the tree location for the site.

LOCATION OF REPLACEMENT TREES:
 1. In the same location as the existing tree.
 2. In the same location as the existing tree.
 3. In the same location as the existing tree.

SECURITY REPAIRS:
 The contractor is responsible for the protection of trees on the site. The owner is responsible for the protection of trees on the site.

Recommended Replacement Trees

TREES LESS THAN 10 METERS TALL	Medium density	Open canopy
1. Dogwood	1. Dogwood	1. Dogwood
2. Norway Spruce	2. Norway Spruce	2. Norway Spruce
3. Red Pine	3. Red Pine	3. Red Pine
4. Spruce	4. Spruce	4. Spruce
5. Fir	5. Fir	5. Fir
6. Juniper	6. Juniper	6. Juniper
7. Cedar	7. Cedar	7. Cedar
8. Cypress	8. Cypress	8. Cypress
9. Yew	9. Yew	9. Yew
10. Hemlock	10. Hemlock	10. Hemlock
11. Larch	11. Larch	11. Larch
12. Fir	12. Fir	12. Fir
13. Spruce	13. Spruce	13. Spruce
14. Fir	14. Fir	14. Fir
15. Spruce	15. Spruce	15. Spruce
16. Fir	16. Fir	16. Fir
17. Spruce	17. Spruce	17. Spruce
18. Fir	18. Fir	18. Fir
19. Spruce	19. Spruce	19. Spruce
20. Fir	20. Fir	20. Fir



NOTES:
 - UNDERSIZE TREES ARE LESS THAN 30cm DBH
 - RED TPZ INDICATES POOR RETENTION SUITABILITY. ALL OTHERS ARE GOOD OR MODERATE

TREE REPLACEMENT PLAN FOR DEVELOPMENT AT

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WOODRIDGE TREE CONSULTING ARBORISTS LTD.