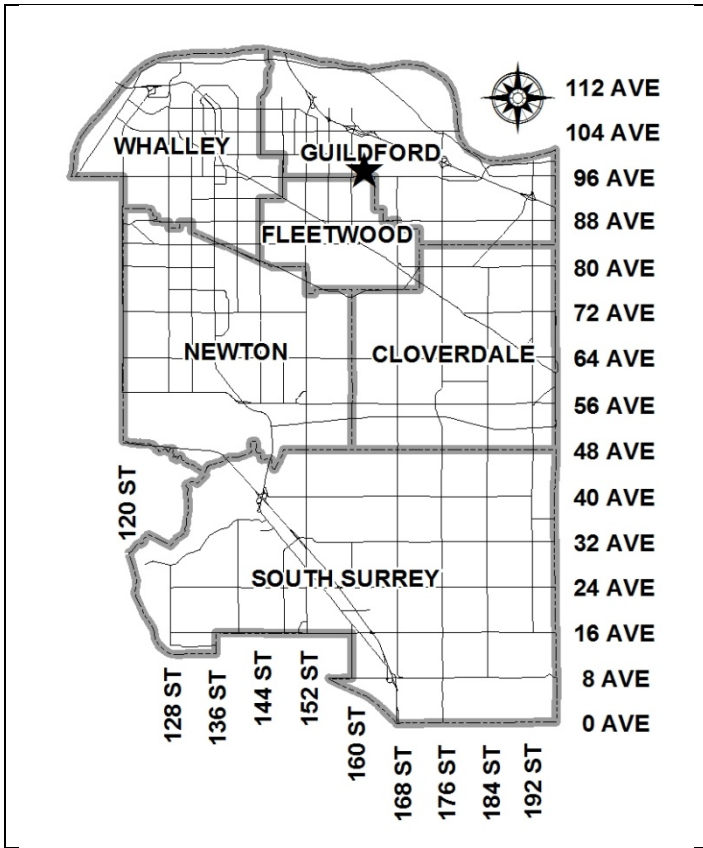


City of Surrey
PLANNING & DEVELOPMENT REPORT

File: 7912-0109-00

Planning Report Date: June 17, 2013



PROPOSAL:

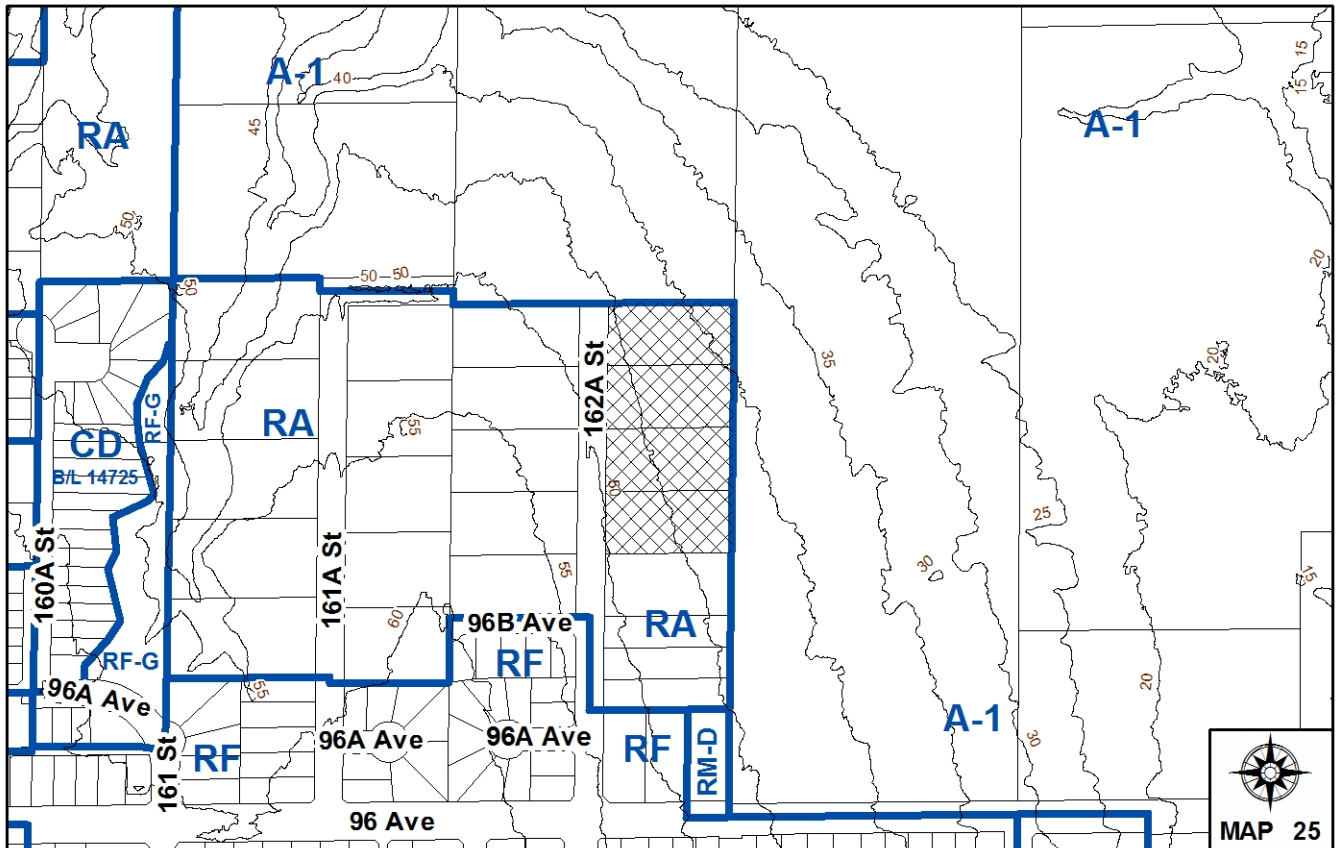
- **Rezoning** from RA to RF in order to allow subdivision into 20 single family lots.

LOCATION: 9702, 9722, 9734 and 9774 - 162A Street

OWNERS: Various owners

ZONING: RA

OCP DESIGNATION: Urban



RECOMMENDATION SUMMARY

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

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- None.

RATIONALE OF RECOMMENDATION

- Complies with Urban designation in OCP.
- The proposed density is appropriate for this part of Guildford.

RECOMMENDATION

1. a By-law be introduced to rezone the subject site from "One-Acre Residential Zone (RA)" (By-law No. 12000) to "Single Family Residential Zone (RF)" (By-law No. 12000) and a date be set for Public Hearing.
2. Council instruct staff to resolve the following issues prior to final adoption:
 - (a) ensure that all engineering requirements and issues including restrictive covenants, dedications, and rights-of-way where necessary, are addressed to the satisfaction of the General Manager, Engineering;
 - (b) submission of a subdivision layout to the satisfaction of the Approving Officer;
 - (c) submission of a finalized tree survey and a statement regarding tree preservation to the satisfaction of the City Landscape Architect;
 - (d) the applicant address the concern that the development will place additional pressure on existing park facilities to the satisfaction of the General Manager, Parks, Recreation and Culture;
 - (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 9702 – 162A Street until future consolidation with the adjacent property to the south at 9678 – 162A Street; and
 - (g) the applicant address the deficiency in tree replacement on the site, to the satisfaction of the City Landscape Architect.

REFERRALS

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

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

10 Elementary students at Serpentine Heights Elementary School
5 Secondary students at North Surrey Secondary School

(Appendix V)

The applicant has advised that the dwelling units in this project are expected to be constructed and ready for occupancy by May 2015.

Parks, Recreation & Culture: Parks has some concerns about the pressure this project will place on existing parks, recreation and culture facilities in the area.

SITE CHARACTERISTICS

Existing Land Use: Single family dwellings, which will be removed.

Adjacent Area:

Direction	Existing Use	OCP Designation	Existing Zone
North:	Tynehead Regional Park	Conservation	A-1
East:	Tynehead Regional Park	Conservation	A-1
South:	Single family dwelling on 1-acre lot (under application No. 7912-0110-00)	Urban	RA
West (Across 162A Street):	Single family dwellings on 1-acre lots (under application No. 7912-0108-00)	Urban	RA

DEVELOPMENT CONSIDERATIONSBackground

- The area north of 96 Avenue and east of 161 Street, bordered on the north and east by Tynehead Regional Park, is commonly referred to, for planning purposes, as the Tynehead Pocket.
- Although the Tynehead Pocket is currently characterized by suburban acreage lots, the area is currently in the process of being redeveloped into urban-sized, single family lots.
- The extreme southern portion of the Tynehead Pocket, along the north side of 96 Avenue between 96B Avenue and 96 Avenue, has already been rezoned and redeveloped from 3 RA-zoned acreage lots into 16 single family, RF-zoned, lots under Development Application No. 7903-0405-00, which was given Final Adoption in 2006 (Appendix II).
- The lot to the south-west, at 9683 – 162A Street, is currently the subject of a land development application (Application No. 7906-0280-00) that proposes to rezone the lot from RA to RF in order to allow subdivision into 6 single family lots (Appendix II). The rezoning by-law associated with this development application (By-law No. 17012) was granted Third Reading on November 19, 2007.
- However, during the Servicing Agreement review process for this 6-lot proposal, a number of complex drainage and erosion issues in the area were identified. As a result, Application No. 7906-0280-00 was placed on hold until a comprehensive servicing strategy could be developed for the area to address these issues.
- In response to the servicing issues identified under Application No. 7906-0280-00, the City engaged H.Y. Engineering Ltd. to conduct a study of the area. H.Y. Engineering submitted their findings and recommendations to the City in September, 2013, in a report entitled the

Tynehead Pocket Servicing Strategy.

- The Tynehead Pocket Servicing Strategy identified that the principal issues within the study are the impacts of storm water runoff from any proposed development within the catchment area, the location of the storm sewer and sanitary sewer discharge points, and the mitigation of the impacts of development on the adjoining Tynehead Regional Park that falls under the jurisdiction of Metro Vancouver.
- The report, which recommends a servicing and road layout concept for the Tynehead Pocket that addresses these issues, has been reviewed by the City and Metro Vancouver and found generally acceptable.
- As the Tynehead Pocket Servicing Strategy has identified how the servicing constraints within the Tynehead Pocket area can be resolved, the opportunity now exists for redevelopment of the entire Tynehead Pocket area.
- Due to the high cost of servicing, the area will likely need to be developed concurrently, however, in general it will be serviced from east to west.
- As a result, all of the property owners within the Tynehead Pocket area, with the exception of the property owners on the west side of 161A Street, have agreed to jointly redevelop their properties and have submitted 4, separate land development applications (7912-0107-00, 7912-0108-00, 7912-0109-00, and 7912-0110-00) that are intended to be reviewed, and processed, concurrently (Appendix II).
- Collectively, these four applications propose to rezone a large portion of the Tynehead Pocket area (approximately 6.61 hectares/16 acres) from RA to RF in order to create approximately 85, RF-zoned, single family lots.

Current Proposal

- The lots within the subject application, at 9702, 9722, 9734 and 9774 - 162A Street, are located on the east side of 162A Street and north of 96B Avenue and have a combined area of 1.6 hectares (4.0 acres).
- The subject site is designated Urban in the Official Community Plan (OCP) and is currently zoned "One-Acre Residential Zone (RA)".
- The applicant proposes to rezone the site to "Single Family Residential Zone (RF)" to allow subdivision into approximately 20 single family lots (Appendix III).
- The concept plan prepared for the Tynehead Pocket area retains the two access points to and from 96 Avenue, consisting of a non-signalized intersection at 161A Street and a signalized intersection at 162A Street. To improve connectivity and due to the high traffic volumes along 96 Avenue, the concept plan indicates a grid road system that connects 161A Street and 162A Street at two points further to the north with the creation of 97A Avenue and 97B Avenue. These connections will allow residents in the western portion of this neighbourhood to access the signalized intersection at 162A Street and 96 Avenue.

- The concept plan also proposes the creation of 163 Street on the eastern edge of the site and east/west connections at 96B Avenue and 97B Avenue.
- As part of the proposal, the applicant will be required to dedicate and construct portions of 97B Avenue and 163 Street.
- All of the proposed lots meet or exceed the minimum lot size and dimensional requirements of the RF Zone. Lot widths range from 15.7 metres (52 ft.) to 18.2 metres (60 ft.), lot depths range from 31.1 metres (102 ft.) to 35.7 metres (117 ft.), and lot areas range from 560 square metres (6,027 sq. ft.) to 564 square metres (6,071 sq. ft.).
- A no-build restrictive covenant will be required over the southern 405 square metres (4,359 sq. ft.) of the site until such time that it can be consolidated with the lot to the south, at 9678 – 162A Street, which is under development application No. 7912-0110-00 and 2 additional RF-zoned lots can be created

Building Design Guidelines and Lot Grading

- 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, proposed a set of building design guidelines (Appendix VI).
- A preliminary lot grading plan submitted by H.Y. Engineering has been reviewed by staff and found to be generally acceptable. The consultant has confirmed that in-ground basements can be achieved on all proposed lots.

Trees

- The applicant submitted an Arborist Report and Tree Retention / Replacement Plan prepared by Froggers Creek Tree Consultants (Tree Summary in Appendix VII). The report and plans have been reviewed on a preliminary basis by City staff and the applicant will resolve any issues prior to consideration of Final Adoption.
- The chart below provides a summary of the tree retention and removal by species:

TREE CHART	ON-SITE TREES			OFF-SITE TREES		
	Total Trees	Retention	Removal	Total Trees	Retention	Removal
Big Leaf Maple	21	1	20	0	0	0
Cottonwood	1	0	1	0	0	0
Cherry	8	0	8	0	0	0
Crimson King Maple	1	0	1	0	0	0
Douglas Fir	15	0	15	10	0	10
Mountain Ash	1	0	1	0	0	0
Norway Spruce	2	0	2	0	0	0
Red Alder	19	0	19	1	0	1
Scot Pine	1	0	1	0	0	0
Sitka Spruce	0	0	0	2	0	2
Tulip Tree	1	0	1	0	0	0
Western Hemlock	6	0	6	4	0	4

TREE CHART	ON-SITE TREES			OFF-SITE TREES		
	Tree Species	Total Trees	Retention	Removal	Total Trees	Retention
Western Red Cedar	30	0	30	2	0	2
Willow	1	0	1	0	0	0
TOTAL	107	1	106	19	0	19

- The report identifies one hundred and seven (107) trees on the subject site with an additional nineteen (19) trees that are affected on the abutting properties to the north, south and west. A total of one (1) on-site tree is proposed to be retained, while one hundred and six (106) on-site trees are proposed for removal.
- The report also proposes the removal of all nineteen (19) off-site trees. The applicant must obtain written permission from the neighbouring property owners prior to consideration of Final Adoption.
- The applicant is proposing 62 replacement trees for an average of 3 trees per lot and will be required to pay cash-in-lieu for the 167-tree deficit.

PRE-NOTIFICATION

Pre-notification letters were sent out on October 17, 2012 and a development proposal sign was posted. Staff received no responses.

SUSTAINABLE DEVELOPMENT CHECKLIST

The applicant prepared and submitted a sustainable development checklist for the subject site on July 6, 2012. The table that follows summarizes the applicable development features of the proposal based on the seven (7) criteria listed in the Surrey Sustainable Development Checklist.

Sustainability Criteria	Sustainable Development Features Summary
1. Site Context & Location (A1-A2)	• Located within an urban infill area and is close to existing amenities, including schools and parks.
2. Density & Diversity (B1-B7)	• Contains a range of lot sizes. • Each lot will have private backyard space suitable for gardens.
3. Ecology & Stewardship (C1-C4)	• N/A
4. Sustainable Transport & Mobility (D1-D2)	• N/A
5. Accessibility & Safety (E1-E3)	• Homes oriented towards the street to create “eyes on the street”.

Sustainability Criteria	Sustainable Development Features Summary
6. Green Certification (F1)	• N/A
7. Education & Awareness (G1-G4)	• Pre-notification letters were sent out to the surrounding homes.

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I.	Lot Owners, Action Summary and Project Data Sheets
Appendix II.	Proposed Concept Tynehead Pocket Area
Appendix III.	Proposed Subdivision Layout
Appendix IV.	Engineering Summary
Appendix V.	School District Comments
Appendix VI.	Building Design Guidelines Summary
Appendix VII.	Summary of Tree Survey and Tree Preservation

INFORMATION AVAILABLE ON FILE

- Tynehead Area Servicing Study – Final Report

original signed by Judith Robertson

Jean Lamontagne
General Manager
Planning and Development

LM/da

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SUBDIVISION DATA SHEET

Proposed Zoning: RF

Requires Project Data	Proposed
GROSS SITE AREA	
Acres	4.0 acres
Hectares	1.1914 hectares
NUMBER OF LOTS	
Existing	4
Proposed	20
SIZE OF LOTS	
Range of lot widths (metres)	15.7 metres to 18.2 metres
Range of lot areas (square metres)	560 m ² to 564 m ²
DENSITY	
Lots/Hectare & Lots/Acre (Gross)	13.0 lots/ha & 5.3 lots/acre
Lots/Hectare & Lots/Acre (Net)	17.6 lots/ha & 7.2 lots/acre
SITE COVERAGE (in % of gross site area)	
Maximum Coverage of Principal & Accessory Building	29.5%
Estimated Road, Lane & Driveway Coverage	33.3%
Total Site Coverage	62.8%
PARKLAND	
Area (square metres)	n/a
% of Gross Site	
Required	
PARKLAND	
5% money in lieu	YES
TREE SURVEY/ASSESSMENT	
	YES
MODEL BUILDING SCHEME	
	YES
HERITAGE SITE Retention	
	NO
BOUNDARY HEALTH Approval	
	NO
DEV. VARIANCE PERMIT required	
Road Length/Standards	NO
Works and Services	NO
Building Retention	NO
Others	NO



Planning & Development Department
 14245 - 56 Avenue, Surrey,
 British Columbia, Canada V3W 1K2
 Tel. (604) 591-4441 Fax. (604) 591-2507

SURREY
 CITY OF PARKS

PROPOSED SUBDIVISION LAYOUT

APPENDIX II

File No: 79 -0 -00
 MAP #: 025
 EXIST. ZONE: RA
 PROP. ZONE: RF



CIVIC ADDRESS: XXXX
 LEGAL: XXXX



* #200-9128-152nd. ST. Surrey, BC V3R 4E7 • TEL 604-583-1616
 * Website: www.hyengineering.com * FAX 604-583-1737

GROSS SITE AREA: 62,654sqm (15.48ac) [85 LOTS - 5.5upa]
AREA 1 20,220sqm (5.00ac) [30 LOTS - 6.0upa]
AREA 2 16,171sqm (4.00ac) [23 LOTS - 5.8upa]
AREA 3 16,170sqm (4.00ac) [20 LOTS - 5.0upa]
AREA 4 10,094sqm (2.49ac) [12 LOTS - 4.8upa]

NOTE: PROPOSED BUILDING FOOTPRINTS ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY

NOTE: ALL EXISTING ONSITE STRUCTURES ARE TO BE REMOVED UNLESS NOTED OTHERWISE

H.Y.#:092934A | ALTERNATIVE#06A | DATE: 10 JUN/13 | SCALE: 1:1250

Please dimension lot frontages & areas, name existing roads and indicate north
 Preferred scales: 1:500, 1:1000, 1:2500, 1:10,000 Metric
 Larger format drawings may be attached as required

H.Y. DWG. No. E:\PROJECTS\092934A\PLANNING\AL106A.DWG



Planning & Development Department
 14245 - 56 Avenue, Surrey,
 British Columbia, Canada V3W 1K2
 Tel. (604) 591-4441 Fax. (604) 591-2507

PROPOSED SUBDIVISION LAYOUT

APPENDIX III

File No: 79 -0 -00
 MAP #: 025
 EXIST. ZONE: RA
 PROP. ZONE: RF



CIVIC ADDRESS: 9702/22/34/74 - 162A ST., SURREY, BC
 LEGAL: LOTS 10,11,14&15, SECTION 35, BLOCK 5 NORTH, RANGE 1 WEST, N.W.D., PLAN 10458



H.Y. ENGINEERING LTD.
 #200-8128-152nd. ST. Surrey, BC V3R 4E7 • TEL 604-583-1616
 Website: www.hyengineering.com • FAX 604-583-1737

H.Y. #: D92934A-B3 ALTERNATIVE #06A DATE: 10 JUN/13 SCALE: 1:1000

Please dimension lot frontages & areas, name existing roads and indicate north
 Preferred scales: 1:500, 1:1000, 1:2500, 1:10,000 Metric
 Larger format drawings may be attached as required

H.Y. ENG. No. E:\PROJECTS\092934A\B3\PLANNING\AL 06A-03.DWG

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

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

DATE: **June 7, 2013** PROJECT FILE: **7812-0109-00**

RE: **Engineering Requirements
Location: 9702, 9722, 9734 & 9774 - 162A St**

REZONE/SUBDIVISION

Property and Right-of-Way Requirements

- dedicate a 16.5 metre wide road right-of-way for 97B Avenue with 3.0 metre x 3.0 metre corner cuts at the intersection with 162A Street and 163 Street
- dedicate a 19.0 metre wide road right-of-way for 163 Street
- provide a 0.500 metre wide statutory right of way on road frontages along created lots

Works and Services

- construct the east side of 162A Street to a 4.25 metre wide half road complete with full urban features
- construct an 8.0 metre wide road on 97B Avenue and 163 Street complete with full urban features
- extend an adequately sized storm sewer, sanitary sewer and watermain to provide services to each proposed lot
- construct a Multi-Use Pathway along east edge of development or within Tynehead Park based on discussions with Metro Parks staff
- provide community detention and on-site stormwater management features for the proposed development in accordance with the Tynehead Pocket Servicing Strategy Report

A Servicing Agreement is required prior to Rezone/Subdivision.



Rémi Dubé, P.Eng.
Development Services Manager

RWB



Thursday, December 06, 2012
Planning

THE IMPACT ON SCHOOLS

APPLICATION #: 12 0109 00

SUMMARY

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

Projected # of students for this development:

Elementary Students:	10
Secondary Students:	5

September 2012 Enrolment/School Capacity

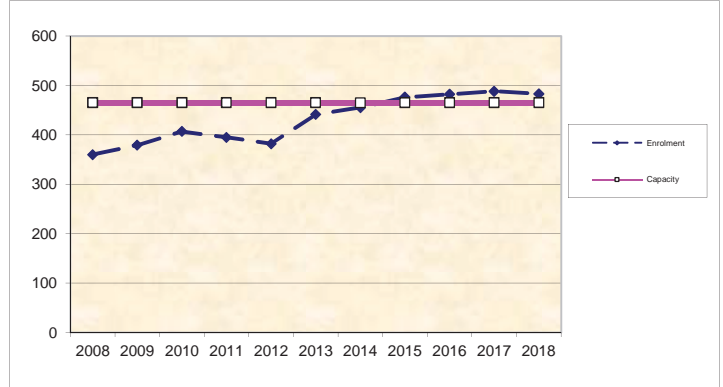
Serpentine Heights Elementary	
Enrolment (K/1-7):	42 K + 340
Capacity (K/1-7):	40 K + 425
North Surrey Secondary	
Enrolment (8-12):	1507
Nominal Capacity (8-12):	1175
Functional Capacity*(8-12):	1269

School Enrolment Projections and Planning Update:

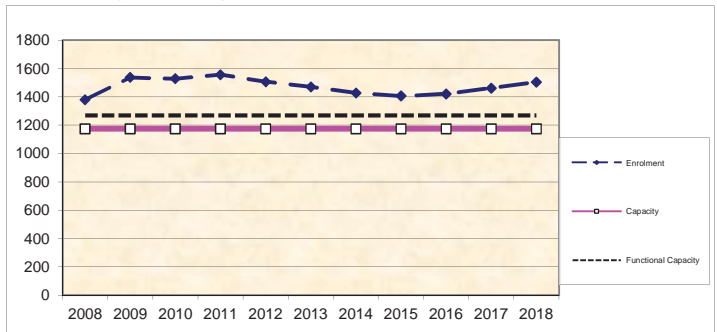
The following tables illustrate the enrolment projections (with current/approved ministry capacity) for the elementary and secondary schools serving the proposed development.

There are no new capital projects proposed at Serpentine Heights Elementary School and no new capital projects identified for North Surrey Secondary School. The enrolment growth shown in the tables below including buildout estimates for the area being developed. However, the projections for Serpentine Heights does not include the potential growth from future South Port Kells - Tynehead NCP development East of 168th Ave as the timing of service extensions and timing of new housing development is somewhat speculative for that area. The school district has identified a future elementary school site acquisition proposal in the Tynehead NCP Area in the East half of Serpentine Heights school catchment, but funding is not likely for a number of years for this project (subject to actual growth trends). The School District has submitted a request for funding for the new North Clayton Area Secondary School as its #1 priority in the 2012-2016 Five Year Capital Plan. It is anticipated that there would be a secondary enrolment move of the area East of 168th Street in North Surrey Secondary School's catchment to the proposed new North Clayton Area Secondary School when it opens. If the Ministry announces the approval of capital project funding for new school construction (funding year would be in year three of the capital plan 2014) it could still take at least two years (possibly longer) for the new secondary school to be completed and opened. The new North Clayton Area Secondary is much needed as it would relieve overcrowding and reduce portables at three existing secondary schools, including Lord Tweedsmuir, Clayton Heights and North Surrey, with enrolment moves from all three schools.

Serpentine Heights Elementary



North Surrey Secondary



*Functional Capacity at secondary schools is based on space utilization estimate of 27 students per instructional space. The number of instructional spaces is estimated by dividing nominal facility capacity (Ministry capacity) by 25.

BUILDING GUIDELINES SUMMARY

Surrey Project no: 7912-0109-00
 Project Location: 9702, 9722, 9734, and 9774 - 162A St. Surrey.
 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 in an old growth area that was built out over a time period spanning from the pre-1950's to the post year 2000's, and as a result, there are a wide variety of home types, styles, and sizes. The age distribution from oldest to newest is: more than 60 years old (7%), 60 years old (27%), 50 years old (27%), 40 years old (13%), 20 years old (7%), 10 years old (20%). Most homes are in the 1000-1500 sq.ft. size range. Home size distribution in this area is as follows: under 1000 sq.ft. (13%), 1000-1500 sq.ft. (33%), 1501-2000 sq.ft. (13%), 2001-2500 sq.ft. (7%), 2501-3000 sq.ft. (27%), 3001-3550 sq.ft. (7%). Styles found in this area include: "Old Urban" (67%), "West Coast Traditional" (7%), "West Coast Modern" (7%), and "Neo-Traditional" (20%). Home types include: Bungalow (40%), Bungalow with above-ground basement (7%), Split Level (7%), Basement Entry (7%), Two-Storey (33%), DUPLEX - Basement Entry (7%).

The massing scale found on neighbouring homes ranges from simple, small, low mass structures to high scale structures. The massing scale distribution is: simple, small, low mass structures (13%), low mass structures (27%), low to mid-scale structures (7%), mid-scale structures (13%), mid-to-high-scale structures (13%), high scale structures (13%), high scale structures with box-like massing (13%). The scale range for the front entrance element is: one storey (86%), 1½ storey front entrance (14%).

Most homes have a low slope roof. Roof slopes include: low slope (flat to 5:12) = (54)%, moderate slope (6:12 to 7:12) = (14)%, steeply sloped (8:12 and steeper) = (34)%. Main roof forms (largest truss spans) include: common hip (19%), common gable (75%), and flat (6%). Feature roof projection types include: none (10%), common hip (10%), common gable (80%). Roof surfaces include: interlocking tab type asphalt shingles (46%), rectangular profile type asphalt shingles (15%), shake profile asphalt shingles (31%), concrete tile (shake profile) (8%).

Main wall cladding materials include: horizontal cedar siding (13%), vertical channel cedar siding (13%), horizontal vinyl siding (40%), stucco cladding (33%). Feature veneers on the front façade include: no feature veneer (11%), brick (6%), stone (22%), wood wall shingles (11%), horizontal cedar (17%), vertical board and batten cedar (6%), horizontal Hardiplank (17%), 1x4 vertical battens over Hardipanel (11%). Wall cladding and trim colours include: Neutral (white, cream, grey, black) (52%), Natural (earth tones) (43%), Primary derivative (red, blue, yellow) (5%).

Covered parking configurations include : No covered parking (17%), Single carport (8%), Single vehicle garage (25%), Double garage (42%), Rear garage (8%).

A variety of landscaping standards are evident ranging from "natural state" to "above-average modern urban". Driveway surfaces include: gravel (50%), asphalt (25%), exposed aggregate (25%).

Thirteen percent of homes can be considered 'context homes' (as identified in the residential character study), providing suitable architectural context for the subject site. Eight seven percent of homes can be considered 'non-context', and are not recommended for emulation.

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

- 1) **Context Homes:** Two homes in the surrounding area have balanced, proportionally correct massing designs that could be used for architectural context for the subject site. These homes are located at: 9651 - 162A Street, and 9659 - 162A Street. However, although these homes have desirable characteristics, none meet common post year 2010's standards for RF zone subdivisions for massing design, construction materials, and trim and detailing components. The recommendation therefore is to employ new design standards rather than to emulate existing homes, including the aforesaid context homes.
- 2) **Style Character:** Due to the wide range of styles found in this neighbourhood, the style character is best described as "varied". The recommendation is to narrow the style range to "Neo-Traditional", "Traditional", "Neo-Heritage", and "Heritage" styles to create a more recognizable neighbourhood character; one which is compatible with the existing style character.
- 3) **Home Types :** There are a wide range of home types in this area including Bungalows, Basement Entry, Cathedral Entry, and Two-Storey. Home type however, is no longer regulated in the building scheme. The expectation is that most homes will be Two-Storey type with an in-ground basement.
- 4) **Massing Designs :** Only a few surrounding homes provide desirable massing context. As previously stated however, the recommendation is to use common post year 2010 design standards for RF lots, at the subject site.
- 5) **Front Entrance Design :** Front entrance porticos range from one to 1 ½ storeys in height. A 1 ½ storey front entrance is an appropriately scaled element for the expected 2900 sq.ft. homes on most lots. The recommended range therefore is from one to 1 ½ storeys.
- 6) **Exterior Wall Cladding :** A wide variety of wall cladding materials have been used in this area and so some flexibility is justified.
- 7) **Roof surface :** A wide variety of roof surface materials have been used and a wide variety can be justified.
- 8) **Roof Slope :** Fifty four percent of neighbouring homes have a roof slope of 5:12 or less, which does not meet modern standards. The recommendation is to adopt a common standard for RF zone lots, which is a minimum slope of 7:12.

Window/Door Details: Rectangular dominant.

Streetscape: This old growth area has a diverse housing stock constructed over a 50 year period. Homes include small simple Bungalows, and a variety of other home types including Basement Entry, Cathedral Entry, Two-Storey, and 1 ½ Storey. There are a wide range of home sizes and styles, and a wide range of construction and roofing materials. Landscaping designs range from sod and a few shrubs to "well landscaped modern urban".

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", "Traditional", or "Heritage". Note that the proposed style range is not contained within the building scheme, but is contained within the residential character study which forms the basis for interpreting building scheme regulations.
- a new single family dwelling *constructed* on any *lot* meets year 2000's design standards, which include the proportionally correct allotment of mass between various street facing elements, the overall balanced distribution of mass within the front facade, readily recognizable style-authentic design, and a high trim and detailing standard used specifically to reinforce the style objectives stated above.
- trim elements will include several of the following: furred out wood posts, articulated wood post bases, wood braces and brackets, louvered wood vents, bold wood window and door trim, highly detailed gable ends, wood dentil details, stone or brick feature accents, covered entrance verandas and other style-specific elements, all used to reinforce the style (i.e. not just decorative).
- the development is internally consistent in theme, representation, and character.
- the entrance element will be limited in height (relative dominance) to 1 to 1 ½ storeys.

2.2 Proposed Design Solutions:

Interfacing Treatment with existing dwellings)

Two existing neighbouring homes provide suitable context for the proposed RF zone homes. However, although these homes desirable, they do not meet the higher design standards typically found on homes in new RF zone subdivisions constructed subsequent to the year 2010. Specific interfacing treatments are therefore not contemplated. Rather, new homes should meet common post year 2010's standards for RF zone homes.

Exterior Materials/Colours:

Stucco, Cedar, Vinyl, Hardiplank, 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 7:12.
- Roof Materials/Colours:** Cedar shingles, shake profile concrete roof tiles, and 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 that of the traditional roofing products. Grey, black, or brown only.
- In-ground basements:** Permitted, subject to determination that service invert locations are sufficiently below grade. Basements will appear underground from the front.
- Treatment of Corner Lots:** Significant, readily identifiable architectural features are provided on both the front and flanking street sides of the dwelling, resulting in a home that architecturally addresses both streets. One-storey elements on the new home shall comprise a minimum of 40 percent of the width of the front and flanking street elevations of the single family dwelling. The upper floor is set back a minimum of 0.9 metres [3'- 0"] from the one-storey elements.
- Landscaping:** *Moderate modern urban standard:* Tree planting as specified on Tree Replacement Plan plus minimum 17 shrubs of a minimum 3 gallon pot size. Corner lots shall have an additional 8 shrubs of a minimum 3 gallon pot size, planted in the flanking street sideyard. Sod from street to face of home. Driveways: exposed aggregate, interlocking masonry pavers, or stamped concrete.

Compliance Deposit: \$5,000.00

Summary prepared and submitted by: Tynan Consulting Ltd. **Date:** August 28, 2012

Reviewed and Approved by:  **Date:** August 28, 2012

TREE PRESERVATION SUMMARY

Surrey Project No:

Project Location: 9702-9774 162A Street Surrey BC

Project Arborist: Glenn Murray for Froggers Creek Tree Consultants Ltd.
I.S.A. Certification # PN-0795B

NOTE: A detailed assessment of the existing trees, submitted by the Arborist, is on file. The following is a summary of the Tree Assessment Report for quick reference.

1. General assessment of the site and tree resource:

The site has 4 very large lots with the trees scattered around the property. The lots are moderately treed. There are a total of 126 "Protected Trees" inventoried with 107 of them onsite. The trees are in mixed condition, most of the trees are native and have not been planted. Many of the trees have structural issues.

2. Summary of Proposed Tree Removal and Replacement:

- The summary will be available before final adoption.

A	Number of Protected Trees Identified	126
B	Number of Protected Trees assessed as Hazardous	0
C	Number of Protected Trees to be Removed	125
D	Number of Protected Trees to be Retained	1
E	Number of Replacement Trees Required (C-B) X 2 or (I) X 3	229
F	Number of Replacement Trees Proposed	62
G	Number of Replacement Trees in Deficit (E-F)	167
H	Number of Retained and Replacement Trees on Site (D+F+3)	63
I	Number of Lots Proposed in the Project	14
J	Average Number of Trees per Lot (H/I)	3.0

3. Tree Protection and Tree Replacement Plans

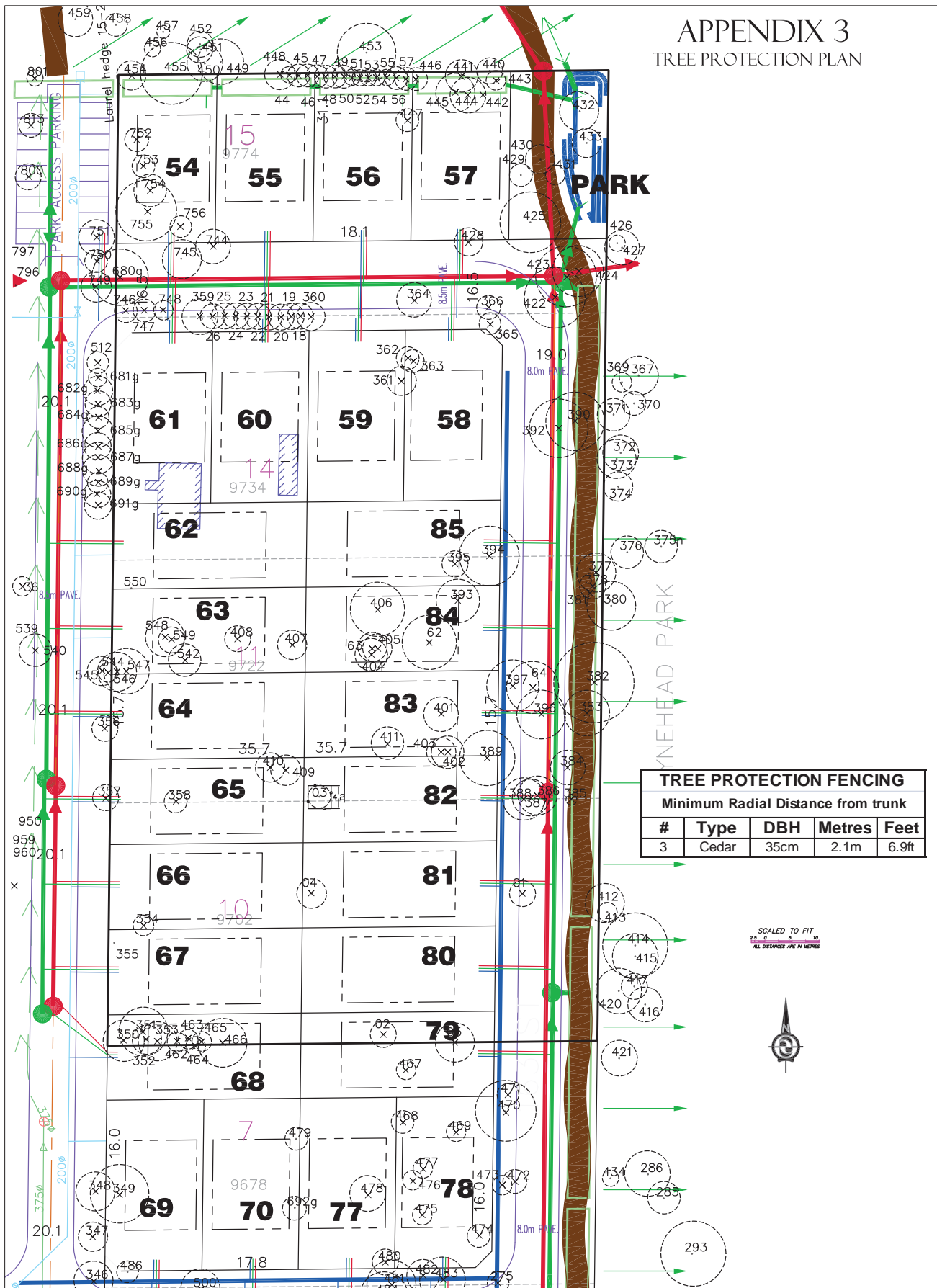
- The Tree Protection Plan is attached.



Dated: May 29, 2013

Glenn Murray – Board Certified Master Arborist
I.S.A. Certification # PN-0795B
Certified Tree Risk Assessor #0049
Froggers Creek Tree Consultants Ltd.

APPENDIX 3 TREE PROTECTION PLAN



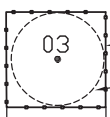
TREE PROTECTION FENCING				
Minimum Radial Distance from trunk				
#	Type	DBH	Metres	Feet
3	Cedar	35cm	2.1m	6.9ft

SCALED TO FIT
0 5 10
ALL DISTANCES ARE IN METRES



LEGEND

TREE PROPOSED FOR RETENTION



PROTECTION FENCING
MINIMUM PROTECTION ZONE (MPZ)
FENCING DIMENSIONS IN METRES

CANOPY is not shown

TREE PROPOSED FOR REMOVAL



UNDERSIZED TREE



NOTES:
1. SITE LAYOUT INFORMATION AND TREE SURVEY DATA PER SUPPLIED DRAWING

2. REFER TO ATTACHED TREE PROTECTION REPORT FOR INFORMATION CONCERNING TREE SPECIES, STEM DIAMETER, HEIGHT, CANOPY SPREAD AND CONDITION.

3. PROPOSED TREE REMOVAL AND RETENTION REFLECTS PRELIMINARY DRIVEWAY AND SERVICE CORRIDOR ALIGNMENT CONSIDERATIONS.

4. ALL MEASUREMENTS ARE METRIC

Froggers Creek
Tree Consultants Ltd

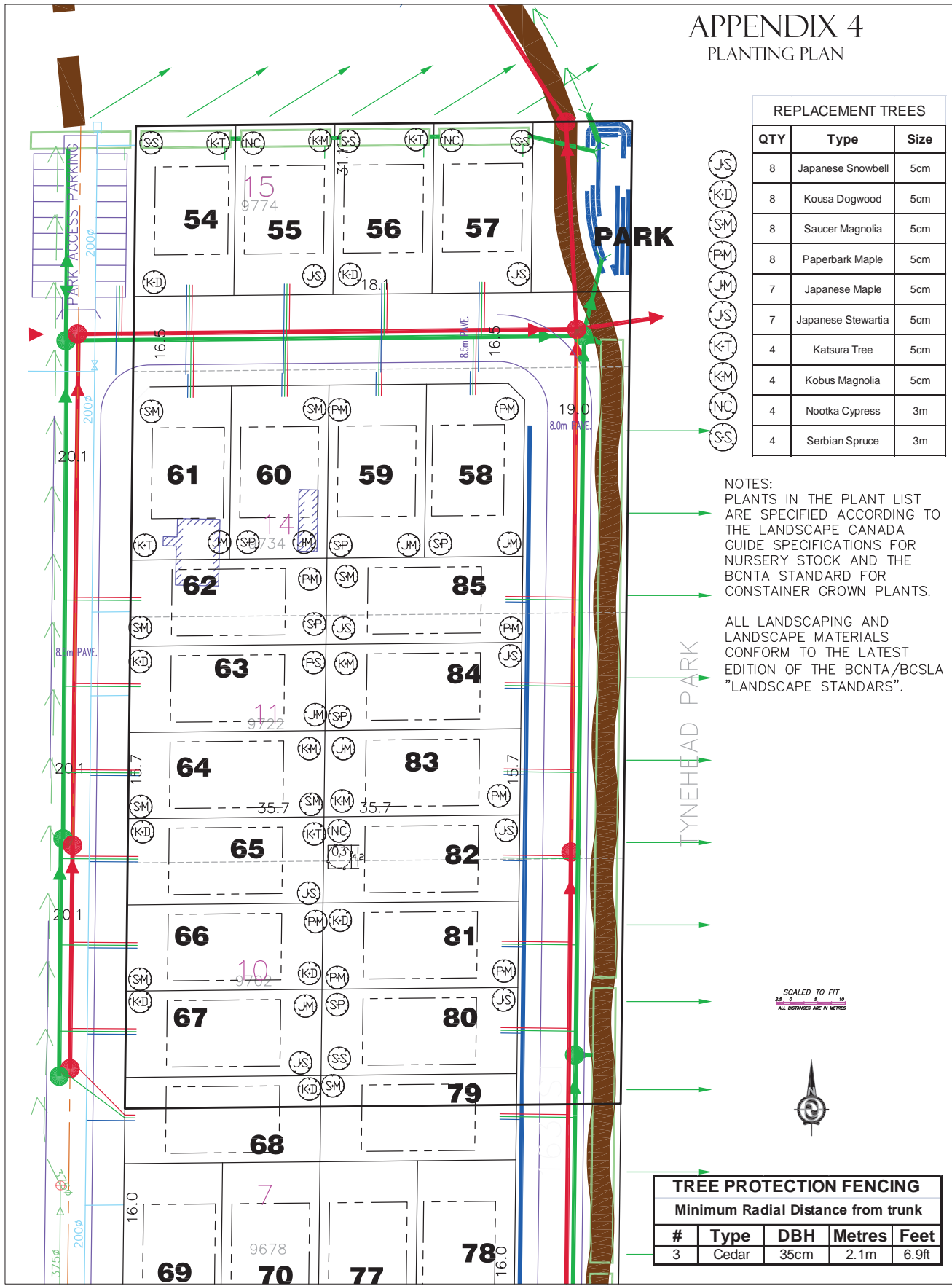
7763 McGregor Avenue Burnaby BC V5J 4H4
Telephone: 604-721-6002 Fax: 604-437-0970

9702-9774 162A Street

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

May 21, 2013

APPENDIX 4 PLANTING PLAN



REPLACEMENT TREES		
QTY	Type	Size
8	Japanese Snowbell	5cm
8	Kousa Dogwood	5cm
8	Saucer Magnolia	5cm
8	Paperbark Maple	5cm
7	Japanese Maple	5cm
7	Japanese Stewartia	5cm
4	Katsura Tree	5cm
4	Kobus Magnolia	5cm
4	Nootka Cypress	3m
4	Serbian Spruce	3m

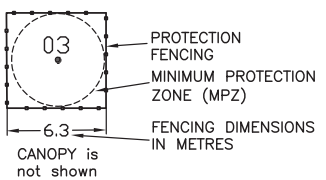
NOTES:
PLANTS IN THE PLANT LIST ARE SPECIFIED ACCORDING TO THE LANDSCAPE CANADA GUIDE SPECIFICATIONS FOR NURSERY STOCK AND THE BCNTA STANDARD FOR CONTAINER GROWN PLANTS.

ALL LANDSCAPING AND LANDSCAPE MATERIALS CONFORM TO THE LATEST EDITION OF THE BCNTA/BCSLA "LANDSCAPE STANDARDS".

TREE PROTECTION FENCING				
Minimum Radial Distance from trunk				
#	Type	DBH	Metres	Feet
3	Cedar	35cm	2.1m	6.9ft

LEGEND

TREE PROPOSED FOR RETENTION



- NOTES:
1. SITE LAYOUT INFORMATION AND TREE SURVEY DATA PER SUPPLIED DRAWING
 2. REFER TO ATTACHED TREE PROTECTION REPORT FOR INFORMATION CONCERNING TREE SPECIES, STEM DIAMETER, HEIGHT, CANOPY SPREAD AND CONDITION.
 3. PROPOSED TREE REMOVAL AND RETENTION REFLECTS PRELIMINARY DRIVEWAY AND SERVICE CORRIDOR ALIGNMENT CONSIDERATIONS.
 4. ALL MEASUREMENTS ARE METRIC

Froggers Creek
Tree Consultants Ltd

7763 McGregor Avenue Burnaby BC V5J 4H4
Telephone: 604-721-6002 Fax: 604-437-0970

9702-9774 162A Street

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

May 21, 2013