

City of Surrey
PLANNING & DEVELOPMENT REPORT

File: 7910-0230-00

Planning Report Date: May 30, 2011

PROPOSAL:

- **NCP Amendment** from Townhouse Cluster (10-12 u.p.a.) to Small Lots
- **Rezoning** from RA to RF-12

in order to allow subdivision into approximately 8 small single family lots.

LOCATION:

18296 Fraser Highway

OWNERS:

Prabhdev Singh Khera et al

ZONING:

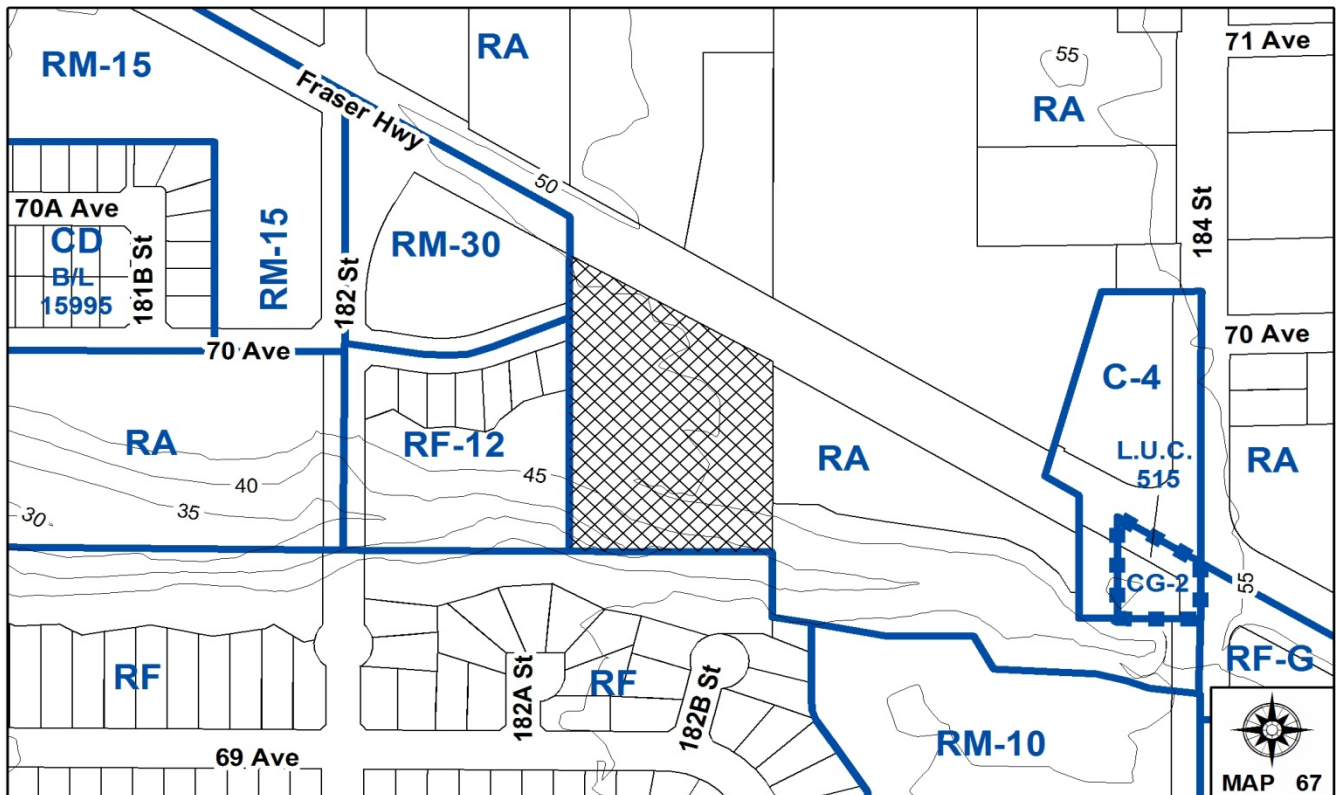
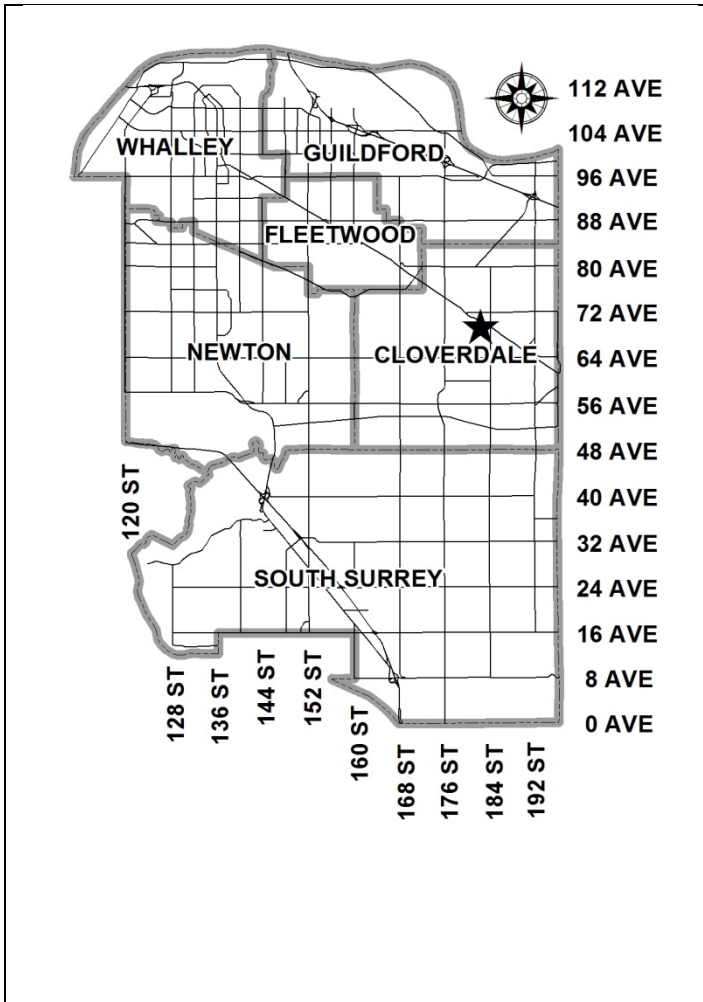
RA

OCP DESIGNATION:

Urban

NCP DESIGNATION:

Townhouse Cluster (10-12 u.p.a.),
 Creek Area



RECOMMENDATION SUMMARY

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

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- The proposal requires an amendment to the North Cloverdale West Neighbourhood Concept Plan (NCP) from Townhouse Cluster (10-12 u.p.a.) to Small Lots.

RATIONALE OF RECOMMENDATION

- Complies with OCP Designation.
- The proposed density and building form are appropriate for this part of Cloverdale due to constraints related to riparian setbacks.
- The proposal will facilitate the dedication of approximately 41% of the site for open space that accommodates North Creek.

RECOMMENDATION

The Planning & Development Department recommends that:

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 (12) Zone (RF-12)" (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, 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 shortfall in the number of required replacement trees;
 - (e) submission of a landscaping plan and landscaping cost estimate to the specifications and satisfaction of the City Landscape Architect; and
 - (f) resolution of NCP amenity contributions, to the satisfaction of the General Manager Parks, Recreation and Culture.
3. Council pass a resolution to amend the North Cloverdale West NCP to redesignate a portion of the land from Townhouse Cluster (10-12 u.p.a.) to Small Lots when the project is considered for final adoption.

REFERRALS

Engineering: The Engineering Department has no objection to the project as outlined in Appendix III.

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

3 Elementary students at Adams Road Elementary School
1 Secondary students at Lord Tweedsmuir Secondary School

(Appendix IV)

The applicant has advised that this project is expected to be developed in late 2011.

Parks, Recreation & Culture: The application should provide park amenity contributions as per the original NCP designation of 10-12 units per acre.

SITE CHARACTERISTICS

Existing Land Use: One single family dwelling that will be removed. North Creek runs through the southern portion of the lot.

Adjacent Area:

Direction	Existing Use	OCP/NCP Designation	Existing Zone
North (Across Fraser Highway):	Greenhouse, farm and single family dwelling.	Suburban in the OCP.	RA
East:	North half with five non-conforming buildings that contain motel units. South half encumbered by North Creek.	Townhouse Cluster (10-12 u.p.a.) and Creek Area in NCP.	RA
South:	Open space consisting of a small ravine and North Creek.	Creek Area in NCP.	RF
West:	Townhouses, single family dwellings and open space containing North Creek.	Townhouse (15 u.p.a.), Small Lots and Creek Area in NCP.	RM-30 and RF-12

JUSTIFICATION FOR PLAN AMENDMENT

- The approximate 1.2-hectare (2.96 acre) site is designated as Townhouse Cluster (10-12 u.p.a.) and Creek Area in the North Cloverdale West Neighbourhood Concept Plan (NCP).
- The applicant is proposing to redesignate the developable northern portion of the site from Townhouse Cluster (10-12 u.p.a.) to Small Lots to permit subdivision into 8 small single family lots. The proposed density will be 8.5 units per acre based on the developable area.
- As the proposed NCP amendment is below the designated density in the NCP, the applicant has agreed to compensate by paying NCP amenity contributions at the original designation of 10-12 units per acre (i.e. 11 x 1.76 acres = 19 units) in keeping with the North Cloverdale West NCP. This will be a condition of final adoption of the rezoning.
- The proposed NCP amendment is supportable as the red-coded North Creek that runs through the property significantly constrains the development of the subject property for townhouses as a 30-metre (100 ft.) creek setback is required for multi-family developments. A 15-metre (50 ft.) setback is required for single family developments.
- With the proposed 15-metre (50 ft.) setback from top of bank, lot depths of approximately 26.2 metres (86 ft.) to 44.9 metres (147 ft.) are proposed without any need for creek encroachments.

DEVELOPMENT CONSIDERATIONS

- The subject property is located at 18296 Fraser Highway in the North Cloverdale West Neighbourhood Concept Plan (NCP) area. It is designated Urban in the Official Community Plan (OCP), split-designated Townhouse Cluster (10-12 u.p.a.) and Creek Area in the NCP and is currently zoned One-Acre Residential (RA).
- The subject property is one of the last remaining undeveloped properties in this NCP area.
- The property contains a steep ravine and a red-coded creek along the south portion.
- The applicant has proposed an NCP amendment on the northern portion from Townhouse Cluster (10-12 u.p.a.) to Small Lots as well as a rezoning from One-Acre Residential Zone (RA) to Single Family Residential (12) Zone (RF-12) to permit subdivision into approximately 8 small single family lots and open space to be dedicated.
- The proposed lots range in size from 385 square metres (4,144 sq. ft.) to 597 square metres (6,426 sq. ft.) with lot depths of up to 44.9 metres (147 ft.), which comply with the RF-12 Zone.
- Access to the proposed lots will be from 70 Avenue, which will be extended from the west.
- The proposed 70 Avenue cul-de-sac will provide physical access to the property to the east when the property redevelops in the future.

Fraser Highway Buffering Requirements

- The North Cloverdale West NCP requires a buffer and multi-use pathway along the south side of Fraser Highway.
- This buffer will taper in width from 18.9 metres (62 ft.) to 9.3 metres (30.5 ft.) from west to east and will be accommodated within the 70 Avenue road right-of-way, similar to the landscaped portion of a frontage road.
- The buffer will be planted with sequoia trees and grass.
- The applicant has agreed to provide a cash contribution to provide for the maintenance by the City of this landscaped buffer area. A final estimate will be provided by Parks once an acceptable plan has been submitted by the applicant. The plan and the cash contribution for maintenance will be required prior to consideration of final adoption.

Protected Riparian Area

- The Class "A" fish-bearing North Creek traverses along the southern portion of the property.
- Approximately 41% (4,879 square metres/1.2 acres) of the subject site will be dedicated as open space for creek preservation purposes.

Proposed Design Guidelines and Lot Grading

- The applicant for the subject site 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 V).
- In-ground basements are proposed based on the lot grading that was provided by the applicant. Basements will be achieved with minimal cut or fill. A preliminary lot grading plan has been reviewed by staff and found to be generally acceptable.

Tree Preservation and Replacement

- Glenn Murray of Froggers Creek Tree Consultants Ltd. prepared the Arborist Assessment for the subject property. The preliminary Arborist Assessment indicates that there are approximately 29 mature trees on developable portion of the property. The applicant's preliminary assessment proposes that 4 trees be retained and 25 trees be removed as they are located within building envelopes or are considered hazardous. 53 trees within the riparian protection area are to be retained.
- Based on review of the preliminary arborist report, the applicant will be able to retain a significant Weeping Willow, two Cottonwoods and a Red Alder. Submission of a finalized tree survey and a statement regarding tree preservation to the satisfaction of the City Landscape Architect is required prior to Final Adoption.
- Based on the Tree Protection By-law, the following table illustrates the trees proposed for retention and removal by species for the developable portion of the site:

Tree Species	Total Number of Trees	Total Proposed for Retention	Total Proposed for Removal
Lombardy Poplar	15	0	15
Cottonwood	4	2	2
Hazelnut	4	0	4
Weeping Willow	2	1	1
Cherry	1	0	1
English Walnut	1	0	1
Pear	1	0	1
Red Alder	1	1	0
TOTAL	29	4	25

- Approximately, 48 replacement trees are required. The report proposes a total of 26 replacement trees leaving a shortfall of 22 replacement trees. The applicant is required to contribute \$6,600 to the City Green Tree Fund as a result of the shortfall of 22 trees, based on \$300/per tree.

PRE-NOTIFICATION

Pre-notification letters were sent on November 2, 2010 and staff received two phone calls. The concerns are expressed as follows:

- Concerns about the creek area being protected.

(The caller was informed that the area within 15 metres (49 ft.) from top-of-bank, representing 41% of the subject site, will be protected and the applicant was not proposing any encroachment into this area.)

- Concerns about the inconsistencies of development along Fraser Highway and would like to see multi-family development continued rather than single family.

(The caller was informed that due to North Creek running through the site, significant constraints are placed on the feasibility of a multi-family project.)

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 Subdivision Layout and Survey Plan
Appendix III.	Engineering Summary
Appendix IV.	School District Comments
Appendix V.	Building Design Guidelines Summary
Appendix VI.	Summary of Tree Survey and Tree Preservation
Appendix VII.	Proposed NCP Redesignation Map

original signed by Judith Robertson

Jean Lamontagne
General Manager
Planning and Development

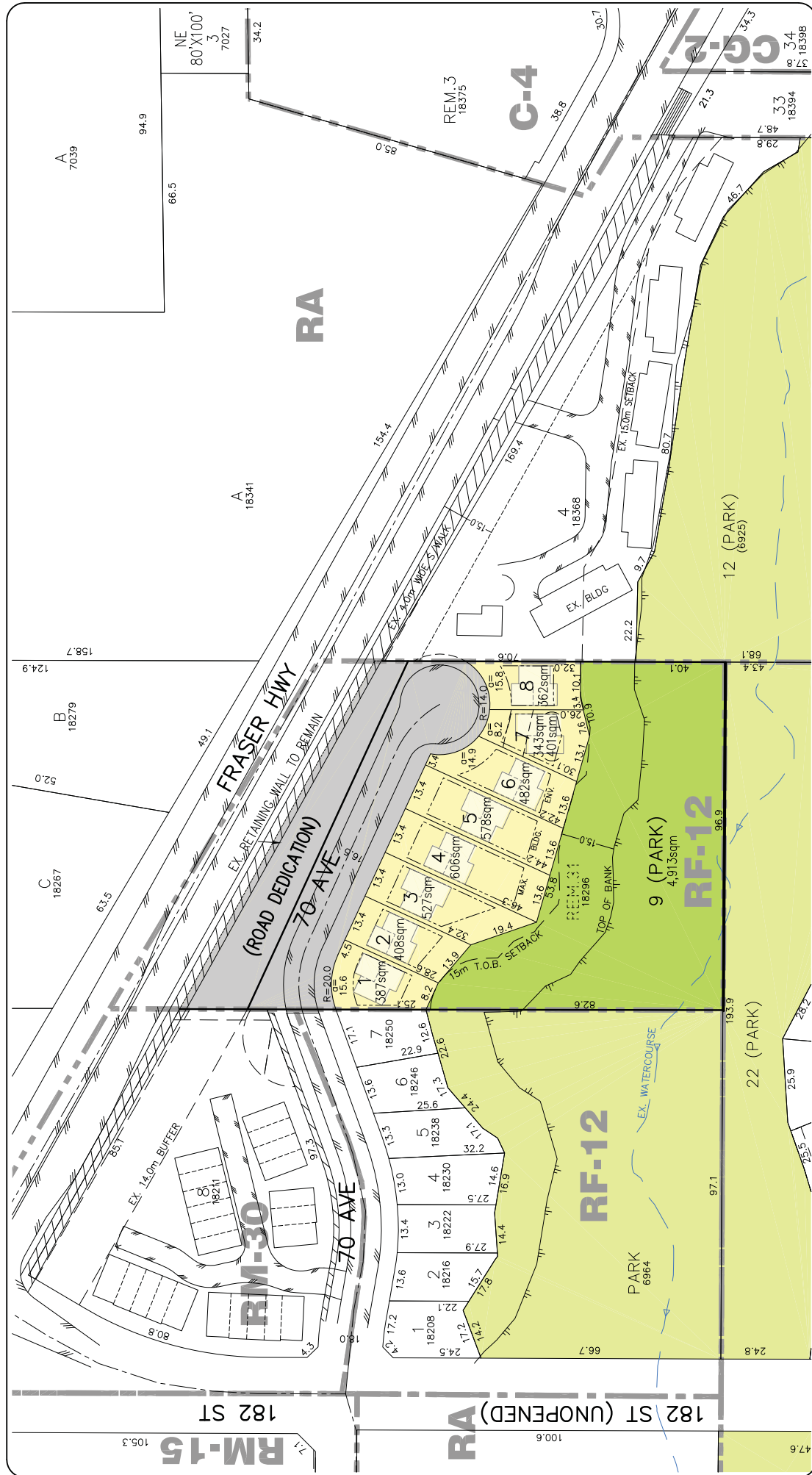
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. 5/27/11 11:16 AM

SUBDIVISION DATA SHEET

Proposed Zoning: RF-12

Requires Project Data	Proposed
GROSS SITE AREA	
Acres	2.976 ac
Hectares	1.2044 ha
NUMBER OF LOTS	
Existing	1
Proposed	8
SIZE OF LOTS	
Range of lot widths (metres)	13.4 m – 14.3 m
Range of lot areas (square metres)	3,84m ² – 597 m ²
DENSITY	
Lots/Hectare & Lots/Acre (Gross)	2.6 lots/ac 6.6 lots/ha
Lots/Hectare & Lots/Acre (Net)	8.5 lots/ac 21.1 lots/ha
SITE COVERAGE	
Maximum Coverage of Principal & Accessory Building	50%
Estimated Road, Lane & Driveway Coverage	15.7%
Total Site Coverage	31.6%
PARKLAND	
Area (square metres)	4,913 m ²
% of Gross Site	41%
Required	
PARKLAND	
5% money in lieu	NO
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



H.Y. DWG. No. E:\PROJECTS\103094\PLANNING\ALT02C.DWG
 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

PROPOSED SUBDIVISION LAYOUT

File No: 7910-0230-00
 MAP #: 067
 EXIST. ZONE: RA
 PROP. ZONE: RF-12

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



CIVIC ADDRESS: #18296 FRASER HWY., SURREY, BC
 LEGAL: LOT 31, SECTION 17, TOWNSHIP 8, N.W.D., PLAN 1510

GROSS SITE AREA: 12,044sqm (2.97ac)
 PARK DEDICATION: 4,913sqm (40.79%)
 NOTE: PROPOSED BUILDING FOOTPRINTS ARE
 SHOWN FOR ILLUSTRATIVE PURPOSES ONLY
 NOTE: ALL EXISTING ON-SITE STRUCTURES ARE
 TO BE REMOVED UNLESS NOTED OTHERWISE



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

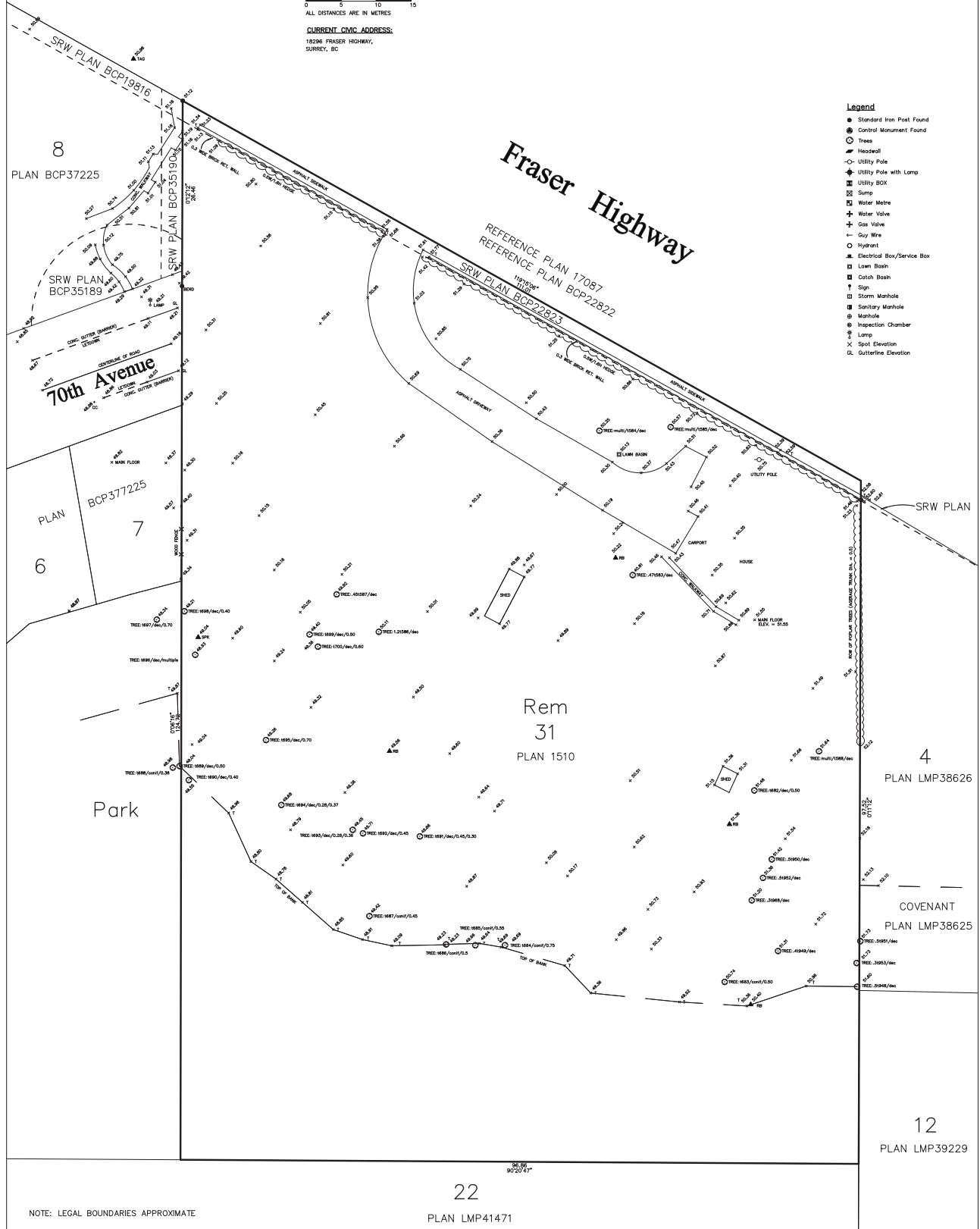
H.Y.#: 103094 ALTERNATIVE#02C DATE: 03 MAY/11 SCALE : 1:1000

TOPOGRAPHIC SITE PLAN OF LOT 31 EXCEPT:
 FIRSTLY: PART (0.042 ACRES) ON STATUTORY RIGHT OF WAY PLAN 17087,
 SECONDLY: PART DEDICATED ROAD ON PLAN BCP22822,
 SECTION 17 TOWNSHIP 8 NEW WESTMINSTER DISTRICT PLAN 1510
 TOGETHER WITH PARCEL "4" SHOWN GREEN ON 4500

Scale 1 : 250
 0 5 10 15
 ALL DISTANCES ARE IN METRES

CURRENT C.M.C. ADDRESS:
 18296 FRASER HIGHWAY,
 SURREY, BC

- Legend**
- Standard Iron Post Found
 - Control Monument Found
 - Tree
 - ✦ Headwall
 - Utility Pole
 - ✦ Utility Pole with Lamp
 - Utility BOX
 - Sump
 - Water Metre
 - ✦ Water Valve
 - ✦ Gas Valve
 - Guy Wire
 - Hydrant
 - Electrical Box/Service Box
 - Lawn Basin
 - Catch Basin
 - ✦ Sign
 - Storm Manhole
 - Sanitary Manhole
 - Manhole
 - Inspection Chamber
 - ✦ Lamp
 - ✦ Spot Elevation
 - GL Gutterline Elevation



NOTE: LEGAL BOUNDARIES APPROXIMATE

22
 PLAN LMP41471



BCCS 92G.017
 FIELD SURVEY WAS COMPLETED ON JULY 27, 2010

ELEVATION DERIVATION
 Elevations derived from
 City of Surrey Monument 8779
 Located at the intersection of
 72 Avenue and 184 Street
 (Inv. = 55.462m (1998))

DATE OF FIELD SURVEY
 JULY 29, 2010
 EUGENE WONG B.C.L.S.

H.Y. Associates Land Surveying Ltd.
 British Columbia Land Surveyors
 8020, 9100 - 9100 Street
 Surrey, B.C. V9R 4E7
 Tel: 604-818-1118 Fax: 604-877-1727
 File: 10504618
 Dwg: 105004_T02.DWG

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

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

DATE: **May 3, 2011** PROJECT FILE: **7810-0230-00**

RE: **Engineering Requirements
Location: 18296 Fraser Hwy.**

NCP AMENDMENT

There are no engineering requirements relative to the NCP Amendment.

REZONE/SUBDIVISION

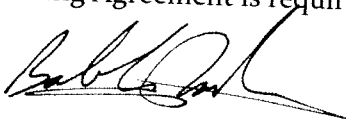
Property and Right-of-Way Requirements

- dedicate 2.5 metres along Fraser Hwy.;
- dedicate 16.5 metres for 70 Avenue as a modified Through Local road standard, including a majority of the 14.0-metre radius cul-de-sac bulb; and
- dedicate lands between Fraser Hwy. and 70 Avenue as road.

Works and Services

- construct 70 Avenue to a 16.5-metre modified Through Local road standard;
- extend storm, sanitary, and water mains along 70 Avenue;
- review and update sewer calculations prepared for this catchment to confirm capacity; and upgrade system as required, based on capacity review.

A Servicing Agreement is required prior to Rezone/Subdivision.



Bob Ambardar, P.Eng.
Development Project Engineer

SSA



SCHOOL DISTRICT #36 (SURREY)

Wednesday, March 30, 2011
Planning

THE IMPACT ON SCHOOLS

APPLICATION #: 10 0230 00

SUMMARY

The proposed 8 Single family lots are estimated to have the following impact on the following schools:

Projected # of students for this development:

Elementary Students:	3
Secondary Students:	1

September 2010 Enrolment/School Capacity

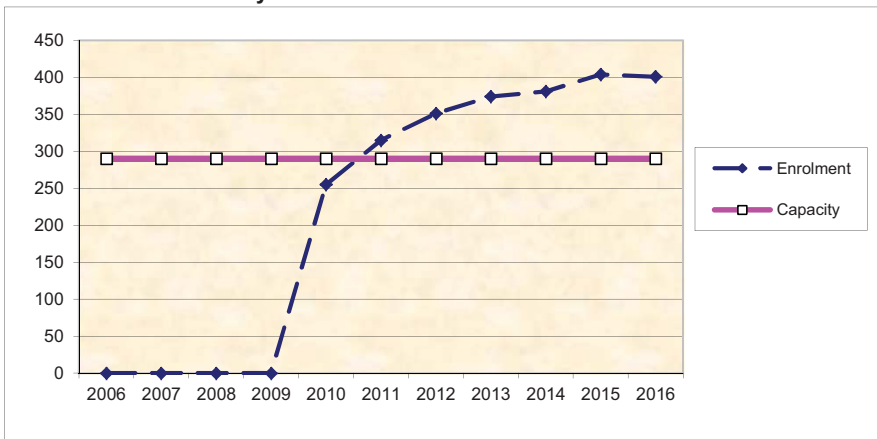
Adams Road Elementary	
Enrolment (K/1-7):	40 K + 215
Capacity (K/1-7):	40 K + 250
Lord Tweedsmuir Secondary	
Enrolment (8-12):	1711
Nominal Capacity (8-12):	1400
Functional Capacity*(8-12):	1512

School Enrolment Projections and Planning Update:

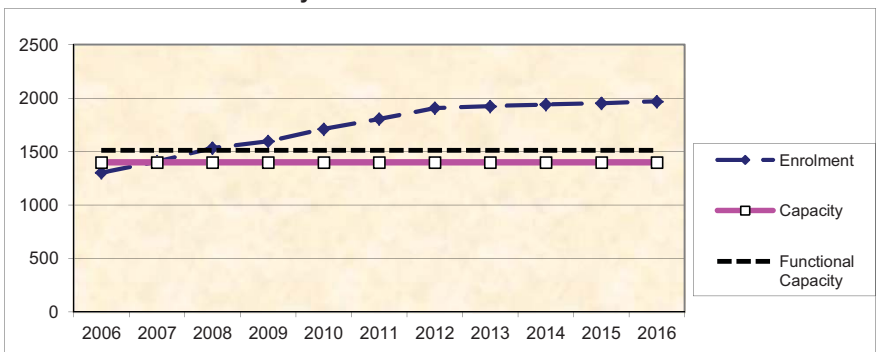
The following tables illustrate the enrolment projections (with current/approved ministry capacity) for the elementary and secondary schools serving the proposed development.

A new elementary school (Adams Road Elementary Site #153) serving this neighbourhood opened in 2010-2011. The school's capacity, shown in the table below, is adjusted to full day Kindergarten implementation (reduction of Kindergarten by 40 seats-only 2 Kindergarten rooms-must accommodate two full day instead of four half day divisions)-this contributed to the school filling to capacity much faster. Overcrowding at Don Christian Elementary has been eliminated with enrolment moves to the new school. The school district is also in the process of assembling land for a proposed future secondary school in North Clayton Area (new school is proposed in year four in the 2010-2014 Five Year Capital Plan). The construction of a new secondary school is subject to future capital project approval by the Province. The proposed development will not have an impact on these projections, which are based on the residential buildout of the Land Use designations in the NCP.

Adams Road Elementary



Lord Tweedsmuir 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: 7910-0230-00
Project Location: 18296 – Fraser Highway, Surrey, B.C.
Design Consultant: Tynan Consulting Ltd., (Michael E. Tynan)

The draft Building Scheme proposed for this Project has been filed with the City Clerk. The following is a summary of the Residential Character Study and the Design Guidelines which highlight the important features and form the basis of the draft Building Scheme.

1. Residential Character

1.1 General Description of the Existing and/or Emerging Residential Character of the Subject Site:

The subject site is located in a new growth area. A majority of structures are less than 10 years old. Only the "site home" is older. The site home, a small simple, old urban Bungalow is approximately 70 years old. This home, which is to be demolished, does not provide suitable architectural context for a year 2011 development.

North of the site is a new RM-30 zoned multifamily site that has recently been completed. There are several structures, each containing three dwelling units. Each dwelling unit is comprised of three storeys. The massing design overall is aesthetically pleasing and can be used to provide some architectural context for the subject site. Each dwelling unit is identifiable, and units are designed to appear as a coherent single structure. The structures can be identified as "Neo-Traditional" style. Multiple roof slopes have been used on the main common hip roof and several street facing feature common gable projections. Roofs are surfaced with shake profile asphalt shingles. Walls are clad in vinyl siding with large feature areas comprised of 1x3 wood battens over 1x10 vertical cedar boards. Colour schemes are bold and include dark colonial red and navy blue used in combination with neutral colours. Bold window trim, shutters, and horizontal trim bands are some of the trim and detailing elements. Landscapes are fully developed and standards are high.

There are seven new homes in the 18200 block on the south side of 70 Avenue, which is the road leading to the subject site. These homes are very consistent in theme, representation, and character, and all provide excellent architectural context for the subject site. These homes can all be classified as "Neo-Traditional" or "Neo-Heritage" styles. Massing designs are mid-scale, with a significant portion of the upper floor concealed by a roof system extending up from the floor below. Street facing projections are in expected proportions (there are no out-of-scale elements on the front), and the designs overall exhibit good balance. Front entrance porticos are one storey in height, but an important component on each of the homes. Some of the homes have a covered entry veranda. The main roof forms are common hip or common gable, with several street facing common gable projections. All roofs are surfaced in grey/black shake profile asphalt shingles with a raised ridge cap. Homes are clad in vinyl on the sides and rear, and horizontal Hardiplank on the front. Vertical wood battens over Hardipanel has been used in the gable ends of several homes. Yards are landscaped to a moderate to high standard. Driveways are constructed from exposed aggregate concrete. These homes provide desirable context.

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

- 1) Context Homes : New homes in the 18200 block on the south side of 70 Avenue provide good architectural context for the subject site.
- 2) Style Character : Context homes can all be identified as “Neo-Traditional” and “Neo-Heritage” styles.
- 3) Home Types : All context homes are Two-Storey type.
- 4) Massing Designs : Surrounding new context homes provide desirable massing context. The homes are well balanced and correctly proportioned, and can be emulated at the subject site.
- 5) Front Entrance Design : All homes have a one storey high front entrance veranda or have a one storey high porch. However, the front entrance portico is a significant architectural feature on these homes, even though the element is only one storey in height.
- 6) Exterior Wall Cladding : Vinyl has been used in this area on the sides and rear of all of the context homes. Most of the homes have horizontal Hardiplank siding on the front. Some of the homes have 1x4 wood battens over Hardipanel in gable ends.
- 7) Roof surface : Only grey or black shake profile asphalt shingles have been used all homes. The recommendation is to require the use of black or grey asphalt shingles to ensure reasonable continuity along a street in which all home have a shake profile asphalt shingle roof surface.
- 8) Roof Slope : Roof pitch 8:12 or higher on most new homes (most homes have a 12:12 roof slope)

Exterior Treatment /Materials:

Context homes are clad in vinyl with horizontal Hardiplank siding on street facing elevations. Hardipanel with 1x4 vertical wood battens has been used in gable ends on some homes. Masonry accents have not been used.

Roof Pitch and Materials: All homes at context site have a shake profile asphalt shingle roof.

Window/Door Details: Rectangular dominant.

Streetscape:

North of the subject site is a new RM-30 zoned multifamily site constructed to a high modern standard. The three storey high units are grouped in clusters of 3 dwelling units. Colours are bold. West of the subject site, and located on the same road (70 Avenue) as the subject site are seven new 2800 sq.ft (including garage), "Neo-Traditional" or "Neo-Heritage" style Two-Storey type homes. The homes have desirable, mid-scale massing characteristics. Roofs are steeply sloped, and surfaced with asphalt shingles. Street facing walls are clad in horizontal Hardiplank. Landscape standards are high. These homes provide desirable dwelling and landscape context for the subject site.

2. Proposed Design Guidelines

2.1 Specific Residential Character and Design Elements these Guidelines Attempt to Preserve and/or Create:

- the new homes are readily identifiable as one of the following styles: “Neo-Traditional”, or “Neo-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)

Strong relationship with neighbouring “context homes” in the 18200 block of 70 Avenue. Therefore, homes should be “Neo-Traditional” and “Neo-Heritage” styles only. New homes should have similar massing characteristics to the context homes. Similar roof types, roof pitch, similar roofing materials. Similar siding materials.

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 derivative” 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 8:12.

Roof Materials/Colours:

Shake profile asphalt shingles with a raised ridge cap only. Recommended colours; grey or black.

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:

Not applicable - there are no corner lots

Landscaping:

Moderate modern urban standard: Tree planting as specified on Tree Replacement Plan plus minimum 17 shrubs of a minimum 3 gallon pot size. 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: April 22, 2011

Reviewed and Approved by:  Date: April 22, 2011

TREE PRESERVATION SUMMARY

Surrey Project No:

Project Location: 18296 Fraser Hwy, 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 is a large lot with a creek area along the south portion of the property. There is a single house located on the site. There are very few trees within the developable portion of the site. Most of the trees are located on the south half of the property.

2. Summary of Proposed Tree Removal and Replacement:

- The summary will be available before final adoption.

A	Number of Protected Trees Identified	29
B	Number of Protected Trees assessed as Hazardous	0
C	Number of Protected Trees to be Removed	25
D	Number of Protected Trees to be Retained	4
E	Number of Replacement Trees Required (C-B) X 2 or (I) X 3	48
F	Number of Replacement Trees Proposed	26
G	Number of Replacement Trees in Deficit (E-F)	22
H	Number of Retained and Replacement Trees on Site (D+F+3)	30
I	Number of Lots Proposed in the Project	8
J	Average Number of Trees per Lot (H/I)	3.8

3. Tree Protection and Tree Replacement Plans

- The Tree Protection Plan is attached.

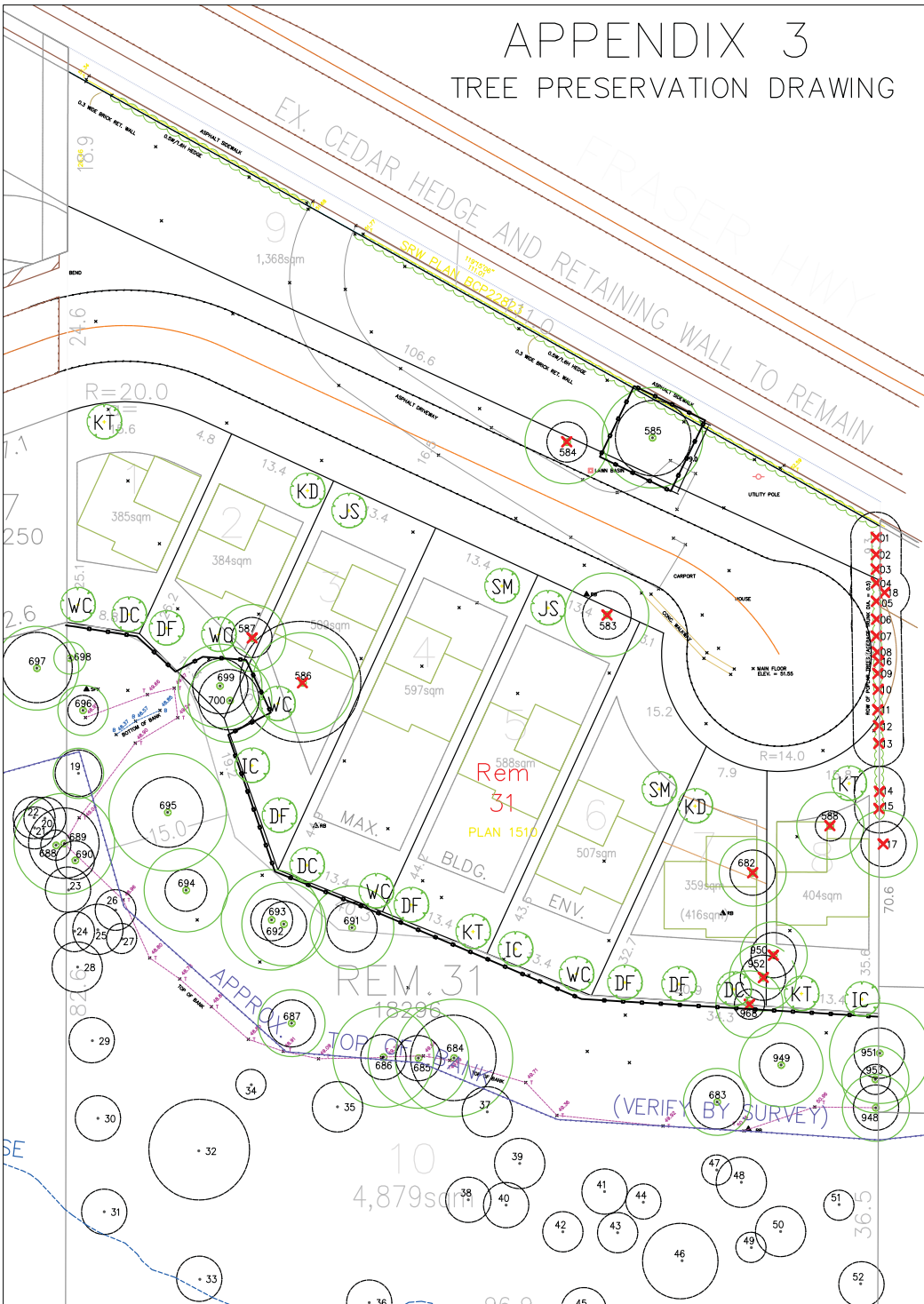


Dated: May 18, 2011

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 PRESERVATION DRAWING

#	Type	dbh	MPZ
1	L. Poplar	55cm	3.3m
2	L. Poplar	50cm	3.0m
3	L. Poplar	45cm	2.7m
4	L. Poplar	55cm	3.3m
5	L. Poplar	60cm	3.6m
6	L. Poplar	45cm	2.7m
7	L. Poplar	45cm	2.7m
8	L. Poplar	50cm	3.0m
9	L. Poplar	40cm	2.4m
10	L. Poplar	48cm	2.9m
11	L. Poplar	40cm	2.4m
12	L. Poplar	45cm	2.7m
13	L. Poplar	70cm	4.2m
14	L. Poplar	49cm	2.9m
15	L. Poplar	68cm	4.1m
16	Cherry	30cm	1.8m
17	Cherry	40/30	2.7m
18	L. Poplar	50cm	3.0m
19	Cedar	45cm	2.7m
20	Cedar	45cm	2.7m
21	Cedar	40cm	2.4m
22	BL Maple	40cm	2.4m
23	Cedar	45cm	2.7m
24	BL Maple	40cm	2.4m
25	BL Maple	50cm	3.0m
26	Cedar	45cm	2.7m
27	BL Maple	30cm	1.8m
28	BL Maple	50cm	3.0m
29	BL Maple	45cm	2.7m
30	BL Maple	45cm	2.7m
31	Alder	45cm	2.7m
32	BL Maple	100cm	6.0m
33	Alder	45cm	2.7m
34	BL Maple	30cm	1.8m
35	BL Maple	50cm	3.0m
36	BL Maple	45cm	2.7m
37	BL Maple	50cm	3.0m
38	BL Maple	45cm	2.7m
39	BL Maple	50cm	3.0m
40	BL Maple	45cm	2.7m
41	BL Maple	45cm	2.7m
42	BL Maple	38cm	2.3m
43	BL Maple	40cm	2.4m
44	BL Maple	35cm	2.1m
45	BL Maple	45cm	2.7m
46	BL Maple	75cm	4.5m
47	Cedar	30cm	1.8m
48	BL Maple	50cm	3.0m
49	Cedar	30cm	1.8m
50	BL Maple	50cm	3.0m
51	BL Maple	30cm	1.8m
52	D. Fir	45cm	2.7m
53	Cottonwood	110cm	6.6m
583	Walnut	49cm	2.9m
584	Willow	40cm	2.4m
585	Willow	75cm	4.5m
586	Cottonwood	120cm	7.2m
587	Cottonwood	40cm	2.4m
588	Hazelnut	30cm	1.8m
682	Pear	45cm	2.7m
683	Hemlock	53cm	3.2m
684	D. Fir	85cm	5.1m
685	Hemlock	45cm	2.7m
686	Hemlock	45cm	2.7m
687	Hemlock	48cm	2.8m
688	Cedar	30cm	1.8m
689	BL Maple	70cm	4.2m
690	BL Maple	38cm	2.3m
691	Alder	45/30	3.0m
692	Alder	45cm	2.7m

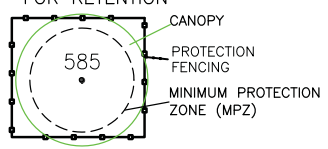


Tree Protection Fencing Distance From Tree

#	Type	In Metres	In Feet
585	Weeping Willow	4.5m	14'9"
699	Cottonwood	3.3m	10'10"
700	Cottonwood	3.6m	11'10"

LEGEND

TREE PROPOSED FOR RETENTION



TREE PROPOSED FOR REMOVAL



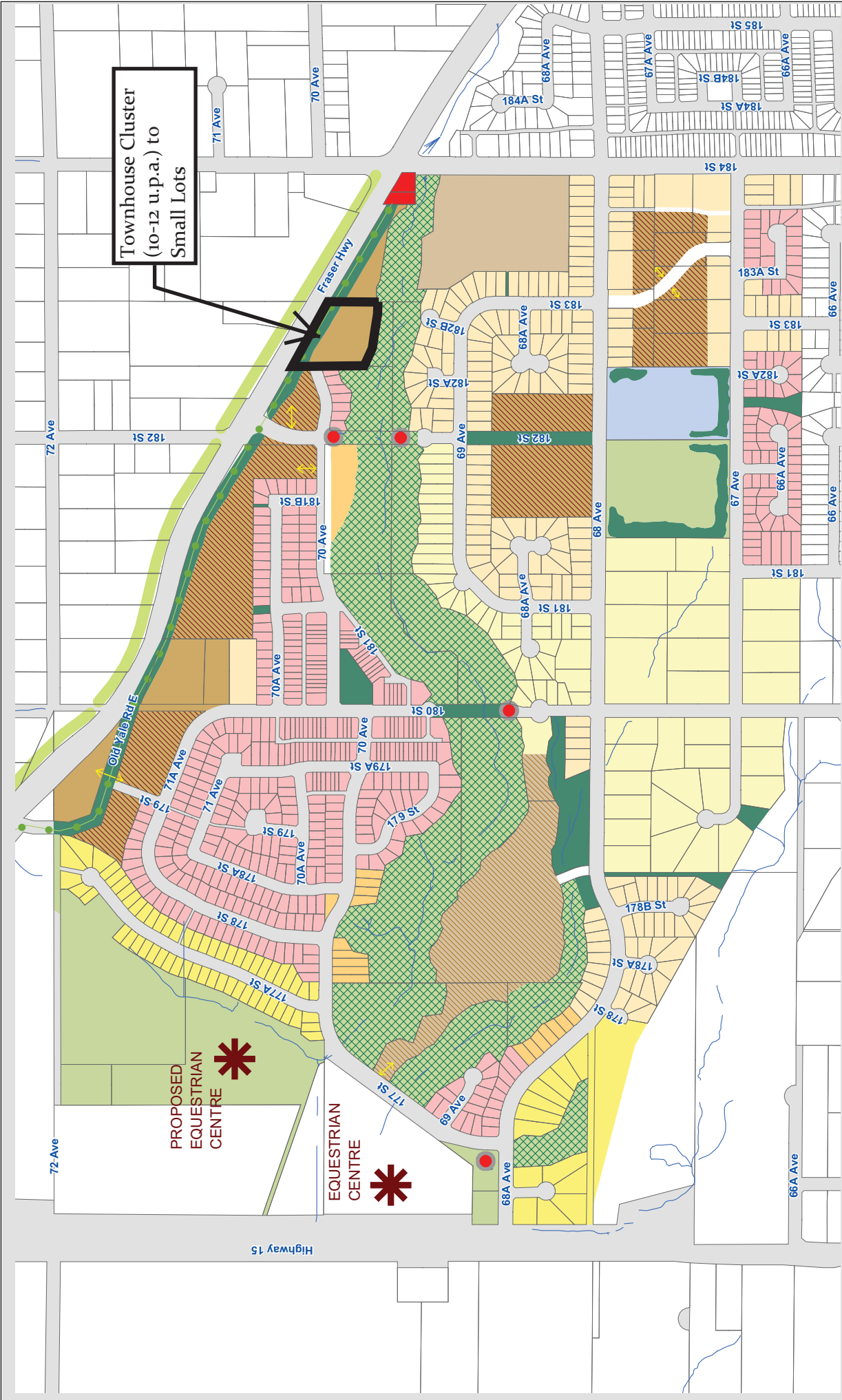
REPLACEMENT TREES

Number	Type	Size
5	Douglas Fir	3 metres
5	Western Red Cedar	3 metres
4	Katsura Tree	6cm
3	Deodar Cedar	3 metres
3	Incense Cedar	6cm
2	Japanese Snowbell	6cm
2	Chinese Dogwood	6cm
2	Saucer Magnolia	6cm
21	Total	

- 18296 Fraser Hwy, Surrey, BC V4A 1H4
- 7763 McGregor Avenue Burnaby BC V5J 4H4
- Telephone: 604-721-6002 Fax: 604-437-0970

Froglers Creek Tree Consultants Ltd
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 18296 FRASER HWY, SURREY MAY 18, 2011
TREE PROTECTION DRAWING
 THE DRAWING PLOTS ALL TREES, PROPOSED FOR RETENTION, REMOVAL, THEIR CANOPIES, MINIMUM PROTECTION ZONES (MPZs), REPLACEMENT TREES, PROTECTION FENCING AND EXACT DIMENSIONS IN RELATION TO PROPOSED LAYOUT

Townhouse Cluster
(10-12 u.p.a.) to
Small Lots



	Existing Homes		Commercial		Open Space/Linear Park/Buffer
	Half Acre Cluster (2 u.p.a.)		Creek Area		Park
	Single Family Residential		Access Points		Elementary School
	Single Family Cluster (6 u.p.a.)		View Points		Landscaped Buffer & Multi Use Pathway
	Small Lots		Creeks		
	Townhouse (9 u.p.a.)				
	Townhouse Cluster (10 u.p.a.)				
	Townhouse Cluster (10-12 u.p.a.)				
	Townhouse Cluster (15 u.p.a.)				



NORTH CLOVERDALE WEST LAND USE PLAN

CITY OF SURREY - PLANNING & DEVELOPMENT DEPARTMENT
 PHASE II Adopted by Council July 8, 1996 Amended June 25, 2007, June 16, 2008, July 27, 2009, March 22, 2010, June 7, 2010, July 26, 2010

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