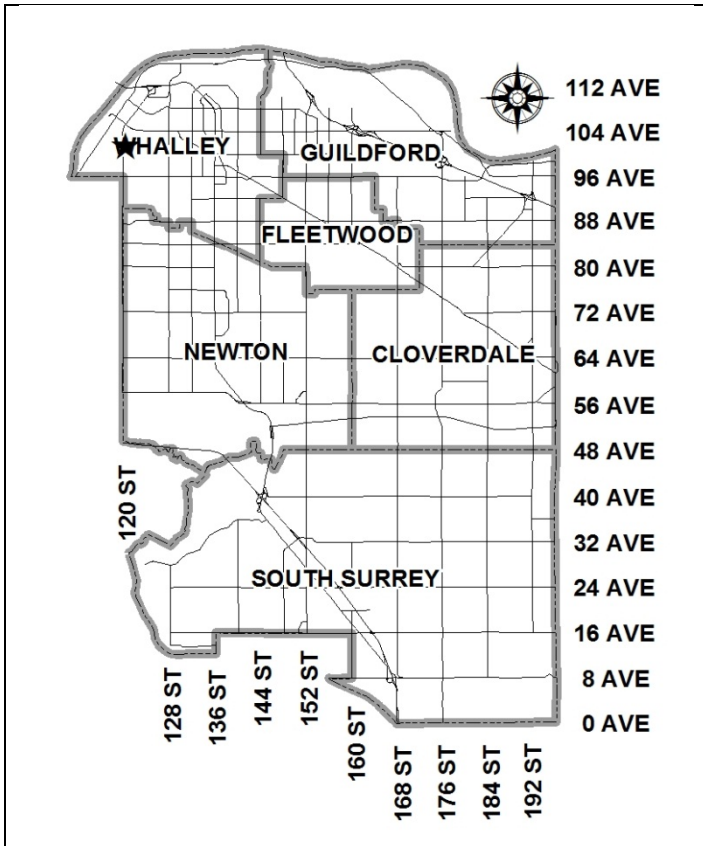


City of Surrey
PLANNING & DEVELOPMENT REPORT

File: 7913-0202-00

Planning Report Date: June 23, 2014



PROPOSAL:

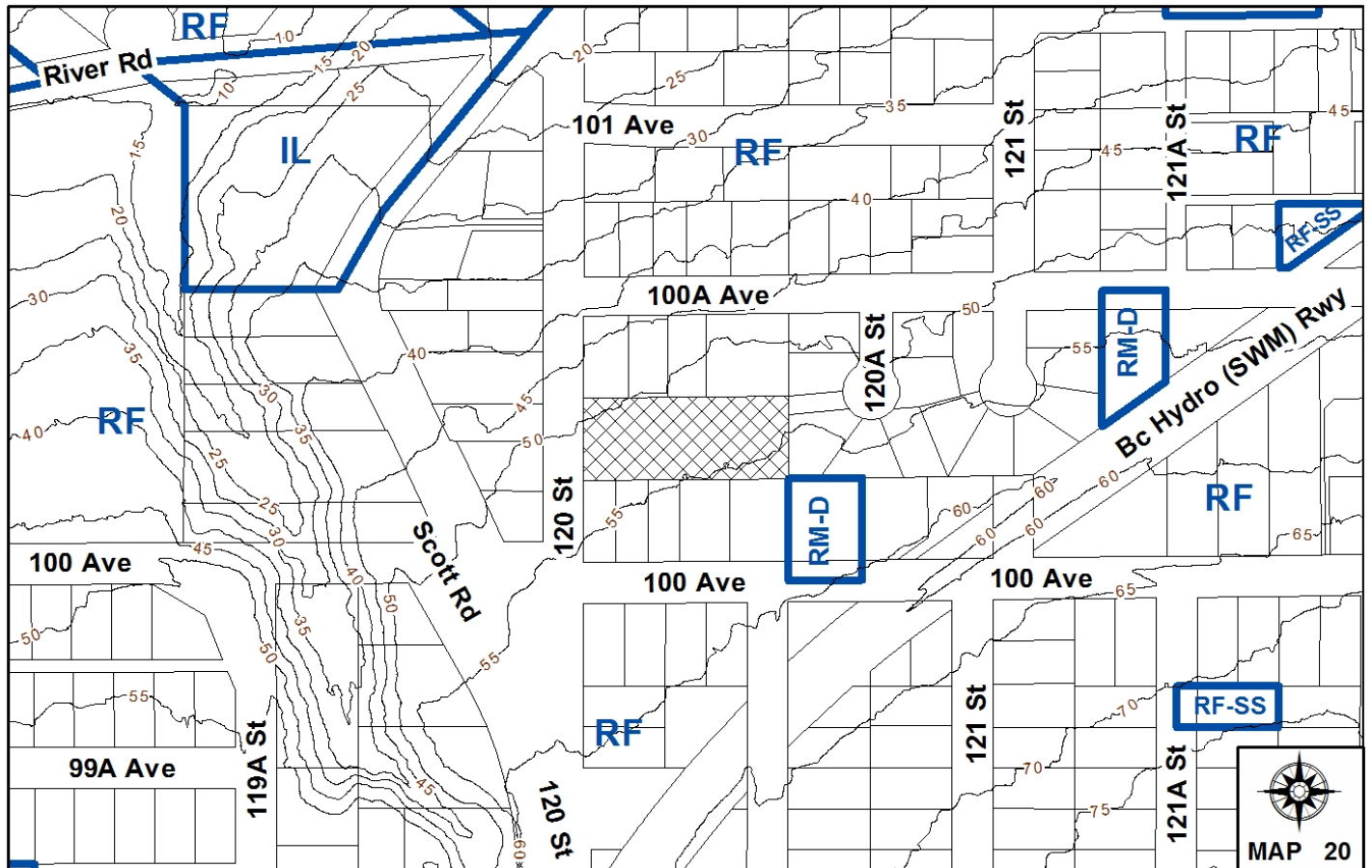
- **Rezoning** from RF to RF-12 in order to allow subdivision into 7 single family small lots.

LOCATION: 10032 - 120 Street

OWNER: Hansraj Chahal

ZONING: RF

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 OCP Designation.
- The proposed small lot density is appropriate due to the site's unique, isolated situation and its proximity to Scott Road, which is a Frequent Transit Network.
- Building design guidelines have been developed to ensure the new homes will complement and enhance the character of the neighbourhood.
- Applicant has developed a concept to show how properties to the north can develop in the future.

RECOMMENDATION

The Planning & Development Department recommends that:

1. a By-law be introduced to rezone the subject site from "Single Family Residential Zone (RF)" (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, 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) construction of a 4.5-metre (15 ft.) wide walkway on the adjacent City-owned lot to the east at 10029 – 120A Street;
 - (f) demolition of existing buildings and structures to the satisfaction of the Planning and Development Department; and
 - (g) the applicant address the shortfall in replacement trees, to the satisfaction of the Planning and Development Department.

REFERRALS

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

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

2 Elementary students at Prince Charles Elementary School
1 Secondary student at L. A. Matheson Secondary School

(Appendix IV)

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

Parks, Recreation & Culture:

Parks have some concerns about the pressure this project will place on existing Parks, Recreation and Culture facilities in the neighbourhood.

SITE CHARACTERISTICS

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

Adjacent Area:

| Direction | Existing Use | OCP Designation | Existing Zone |
|---------------------------|--|-----------------|---------------|
| North: | Single family dwellings and vacant lot. | Urban | RF |
| East: | Single family dwellings and vacant city owned lot. | Urban | RF |
| South: | Single family dwellings. | Urban | RF |
| West (Across 120 Street): | Single family dwellings. | Urban | RF |

DEVELOPMENT CONSIDERATIONS

- The 4,066-square metre (1 ac.) subject site is located at 10032 – 120 Street in Whalley. The site is currently zoned "Single Family Residential Zone (RF)" and is designated Urban in the Official Community Plan.
- The area slopes downward to the north with an approximate 12% slope along the 40-metre (131 ft.) lot frontage. The steepness increases to a very steep 15% as you move further north of the site. The site slopes approximately 10% upward as you move east along the site.
- The applicant proposes rezoning the subject site from RF to RF-12, in order to subdivide the site into seven (7) single family small lots.
- All seven lots exceed the minimum area, width and depth requirements of the RF-12 Zone.
- The existing single family dwelling and accessory structures will be removed.
- The City-owned lot at 10029 – 120A Street to the immediate east of the site will be converted to a 4.5-metre (15 ft.) wide walkway. The owner of the neighbouring property at 10023 – 120A Street has expressed interest in acquiring the remnant portion of the City lot.
- The proposed 4.5-metre (15 ft.) wide walkway combined with the new cul-de-sac will be constructed as part of the proposed subdivision. The proposed walkway will provide an alternate route for pedestrians and cyclists to avoid the steepest portion of 120 Street to the north of the development.

- The proposed half-road is 11.5 metres (38 ft.) wide. The remaining dedication will be required from properties to the north as redevelopment occurs. The applicant has provided a concept plan (including cross sections) for how the properties to the north can redevelop with RE-12 lots in the future (Appendix VIII). To mitigate the impact of double fronting lots, the concept's homes front 100A Avenue with garages/accessory buildings fronting the new road.
- As the proposed road is located between 100 Avenue and 100A Avenue, the standard numbering system in Surrey cannot apply; as such the proposed name of the road is Parson Place which is named after the Parson family who were former historic owners of the property. Engineering is currently working on a policy to deal with the naming of roads that do not comply with the standard numbering system. The proposed road name complies with the proposed policy.
- The resident of the property to the north at 12016 – 100A Avenue currently uses an access easement through the adjacent lot to the west (10044 – 120 Street) to enable parking their vehicles on the south side of their home. The proposed new road will allow direct driveway access to 12016 – 100A Avenue.
- The proposed new lots are located within 200 metres (656 ft.) and 350 metres (1,150 ft.) of bus stops along Scott Road, which have been designated as part of the existing Frequent Transit Network.

Design Guidelines and Lot Grading

- The applicant retained 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 for all proposed lots (Appendix V).
- A preliminary lot grading plan was submitted by Hunter Laird Engineering Ltd. and reviewed by staff and was determined to be adequate. Based on the proposed grading, basements can be achieved on all proposed lots with minimal fill.
- The applicant also provided a concept for the double-fronting properties to the north, which includes cross-sections, building envelope locations and proposed grading (Appendix VIII). Future homes on the properties to the north will have main floor garages fronting the new road.

PRE-NOTIFICATION

Pre-notification letters were mailed on March 18, 2014 and a development sign was installed on April 16, 2014. Staff received comments from one resident, which is summarized below (staff comments are in *italics*):

- A neighbourhood resident requested that a pathway be included connecting 120A Street cul-de-sac to the proposed cul-de-sac.

(A walkway has been included as part of the proposed layout which will allow for an alternate route for pedestrians/cyclists to avoid the steepest portion of 120 Street).

- A neighbourhood resident wanted tree preservation to allow for animal habitat.

(The proposed location of the road and building envelopes did not allow for tree retention. Staff explored retaining two large cedars along 120 Street (see Appendix VII) but the trees were too large and would have compromised the dwelling envelopes.)

- A neighbourhood resident had concerns that during construction of the subdivision and related houses their home and lot would not be damaged.

(It was explained to the resident that the developer would not be able to access the lands of neighbouring lots or construct any works on neighbouring properties without the owner's permission. Geotechnical reports would be required prior to approval of the road construction to ensure the stability of the lands.)

TREES

- Trevor Cox, ISA Certified Arborist of Diamond Head Consulting Ltd. prepared an Arborist Assessment for the subject property. The table below provides a summary of the tree retention and removal by tree species:

Table 1: Summary of Tree Preservation by Tree Species:

| Tree Species | Existing | Remove | Retain |
|--|-----------|----------------|----------|
| Alder and Cottonwood Trees | | | |
| Alder | 1 | 1 | |
| Cottonwood | 0 | 0 | |
| Deciduous Trees (excluding Alder and Cottonwood Trees) | | | |
| Bitter Cherry | 2 | 2 | 0 |
| Cherry Plum | 1 | 1 | 0 |
| Laburnum | 1 | 1 | 0 |
| Mountain Ash | 2 | 2 | 0 |
| Coniferous Trees | | | |
| Black Pine | 1 | 1 | 0 |
| Douglas Fir | 2 | 2 | 0 |
| Sitka Spruce | 3 | 3 | 0 |
| Western Hemlock | 1 | 1 | 0 |
| Western Red Cedar | 8 | 8 | 0 |
| Total (excluding Alder and Cottonwood Trees) | 21 | 21 | 0 |
| Total Replacement Trees Proposed (excluding Boulevard Street Trees) | | 21 | |
| Total Retained and Replacement Trees | | 21 | |
| Contribution to the Green City Fund | | \$6,900 | |

- The Arborist Assessment states that there are a total of 21 protected trees on the site, excluding Alder and Cottonwood trees. One existing tree, approximately 5% of the total trees

on the site, is an Alder tree. It was determined that no trees can be retained as part of this development proposal. The proposed tree retention was assessed taking into consideration the location of services, building footprints, road dedication and proposed lot grading.

- Staff explored the preservation of two Western Red Cedars trees along 120 Street however, it was not possible to retain either of these trees due to the large tree protection zones and the location of services and driveways (see Appendix VII for footprint analysis).
- For those trees that cannot be retained, the applicant will be required to plant trees on a 1 to 1 replacement ratio for Alder and Cottonwood trees, and a 2 to 1 replacement ratio for all other trees. This will require a total of 42 replacement trees on the site. Since only 21 replacement trees can be accommodated on the site (based on an average of 3 trees per lot), the deficit of 21 replacement trees will require a cash-in-lieu payment of \$6,900, representing \$300 per tree, to the Green City Fund, in accordance with the City's Tree Protection By-law.
- In addition to the replacement trees, boulevard street trees will be planted on the new road. The number of street trees will be determined at the servicing agreement stage by the Engineering Department.
- In summary, a total of 21 trees are proposed to be replaced on the site with a contribution of \$6,900 to the Green City Fund.

SUSTAINABLE DEVELOPMENT CHECKLIST

The applicant prepared and submitted a sustainable development checklist for the subject site on June 4, 2014. The table below 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) | <ul style="list-style-type: none"> • The site is located in in the existing Cedar Hills neighbourhood. • Close proximity to City Centre and Scott Road Skytrain Station • Near high frequency transit route |
| 2. Density & Diversity (B1-B7) | <ul style="list-style-type: none"> • The proposal is consistent with draft OCP objectives by introducing a small lot housing type in close proximity to transit. |
| 3. Ecology & Stewardship (C1-C4) | <ul style="list-style-type: none"> • Dry swales and sediment control devices will be considered in the rain water management |
| 4. Sustainable Transport & Mobility (D1-D2) | <ul style="list-style-type: none"> • Site is located within walking distance of the Scott Road Frequent Transit Network with frequent buses to Scott Road Skytrain Station. |
| 5. Accessibility & Safety (E1-E3) | <ul style="list-style-type: none"> • Homes oriented towards the street to create "eyes on the street." • Walkway allows for pedestrians/cyclists to avoid steep portion of 120 Street. |
| 6. Green Certification (F1) | <ul style="list-style-type: none"> • N/A |
| 7. Education & | <ul style="list-style-type: none"> • A development sign and public notification have occurred as part of |

| Sustainability Criteria | Sustainable Development Features Summary |
|--------------------------------|---|
| Awareness (G1-G4) | the development application review process. |

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
- 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. Building Envelopes Analysis if Significant Trees Along 120 Street are Retained
- Appendix VIII. Concept Plan for Remainder of Block

original signed by Judith Robertson

Jean Lamontagne
General Manager
Planning and Development

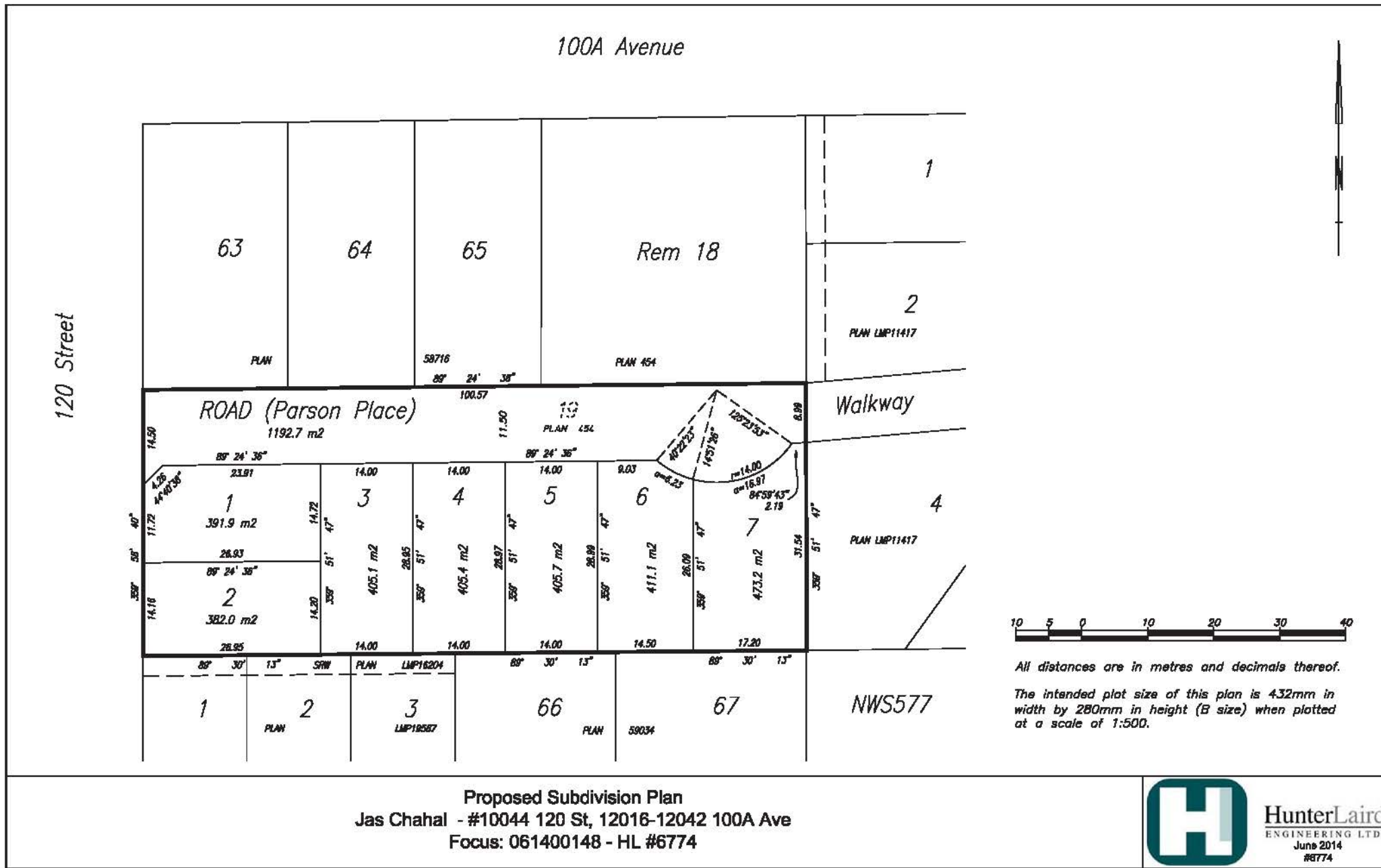
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SUBDIVISION DATA SHEET

Proposed Zoning: RF-12

| Requires Project Data | Proposed |
|--|---------------------------------------|
| GROSS SITE AREA | |
| Acres | 1 acre |
| Hectares | .4066 HA |
| NUMBER OF LOTS | |
| Existing | 1 |
| Proposed | 7 |
| SIZE OF LOTS | |
| Range of lot widths (metres) | 14 m to 17.5 m |
| Range of lot areas (square metres) | 375sqm to 477sqm |
| DENSITY | |
| Lots/Hectare & Lots/Acre (Gross) | 17.2 units per Ha or 7 units per Acre |
| Lots/Hectare & Lots/Acre (Net) | 24 units per Ha or 10 units per Acre |
| SITE COVERAGE (in % of gross site area) | |
| Maximum Coverage of Principal & Accessory Building | 50% |
| Estimated Road, Lane & Driveway Coverage | 12% |
| Total Site Coverage | 62% |
| PARKLAND | |
| Area (square metres) | n/a |
| % of Gross Site | n/a |
| 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 |



Proposed Subdivision Plan
Jas Chahal - #10044 120 St, 12016-12042 100A Ave
Focus: 061400148 - HL #6774





Planning

April-22-14

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 the elementary school and no new capital projects identified for the secondary school. Space utilization options are being considered to reduce capacity shortfall at Kwantlen Park Secondary and space surplus at LA Matheson Secondary. The proposed development will not have an impact on these projections.

THE IMPACT ON SCHOOLS

APPLICATION #: 13 0202 00

SUMMARY

The proposed 7 single family lots are estimated to have the following impact on the following schools:

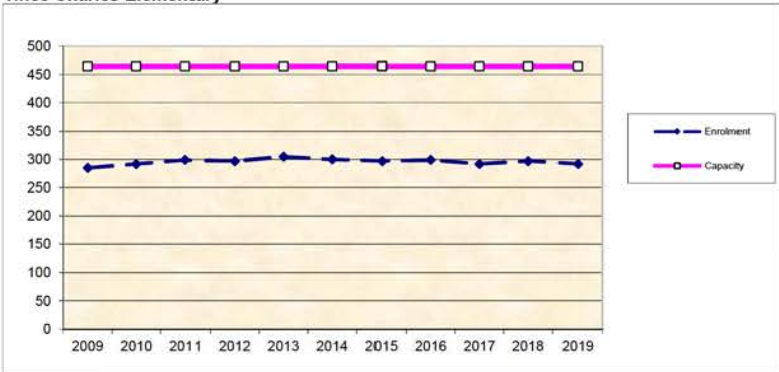
Projected # of students for this development:

| | |
|----------------------|---|
| Elementary Students: | 2 |
| Secondary Students: | 1 |

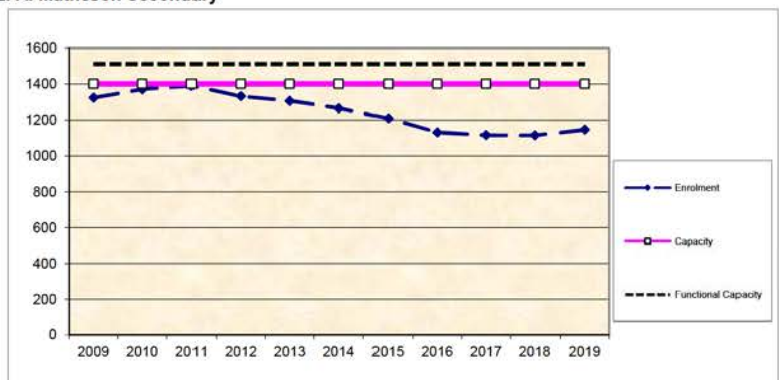
September 2013 Enrolment/School Capacity

| | |
|----------------------------------|------------|
| Prince Charles Elementary | |
| Enrolment (K/1-7): | 41 K + 264 |
| Capacity (K/1-7): | 40 K + 425 |
| L. A. Matheson Secondary | |
| Enrolment (8-12): | 1306 |
| Nominal Capacity (8-12): | 1400 |
| Functional Capacity*(8-12): | 1512 |

Prince Charles Elementary



L. A. Matheson 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: 7913-0202-00
 Project Location: 10032 - 120 Street, Surrey, B.C.
 Design Consultant: Tynan Consulting Ltd., (Michael E. Tynan)

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

1. Residential Character

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

This area was built out over a time period spanning more than 70 years, resulting in a neighbourhood that is now best classified as a "varied character area" (no single recognizable theme). The age distribution from oldest to newest is: Pre-1950's (20%), 1950's (20%), 1960's (10%), 1970's (10%), 1980's (10%), 1990's (10%), and 2000's (20%). A majority of homes in this area have a floor area in the under 1000 sq.ft. size range. Home size distribution is: Under 1000 sq.ft. (30%), 1000 - 1500 sq.ft. (10%), 1501 - 2000 sq.ft. (10%), 2001 - 2500 sq.ft. (10%), 2501 - 3000 sq.ft. (20%), and over 3550 sq.ft. (20%). Styles found in this area include: "Old Urban" (40%), "Old BC Heritage" (20%), "West Coast Modern" (10%), "Modern California Stucco" (10%), and "Neo-Traditional" (20%). Home types include: Bungalow (30%), Basement Entry (10%), Two-Storey (30%), DUPLEX - Bungalow (10%), DUPLEX - Basement Entry (10%), and 1 ½ Storey (10%).

Massing scale (front wall exposure) characteristics include: Low mass structure (40%), Mid-scale massing (20%), Mid to high scale massing (10%), and High scale massing (30%). The scale (height) range for front entrance structures include: One storey front entrance (80%), 1½ storey front entrance (10%), and a proportionally exaggerated 2½ storey front entrance (10%).

The range of roof slopes found in this area is: 4:12 (20%), 5:12 (30%), 6:12 (10%), 7:12 (30%), and 12:12 (10%). Main roof forms (largest upper floor truss spans) include: Main common hip roof (40%), Main common gable roof (50%), and Main Dutch hip roof (10%). Feature roof projection types include: None (27%), Common Hip (27%), Common Gable (27%), Dutch Hip (13%), and Shed roof (7%). Roof surfaces include: Interlocking tab type asphalt shingles (20%), Shake profile asphalt shingles (60%), Concrete tile (rounded Spanish profile) (10%), and Concrete tile (shake profile) (10%).

Main wall cladding materials include: Horizontal cedar siding (10%), Vertical channel cedar siding (10%), Horizontal vinyl siding (40%), and Stucco cladding (40%). Feature wall trim materials used on the front facade include: No feature veneer (50%), Stone feature veneer (20%), Horizontal cedar accent (20%), and Horizontal Hardiplank accent (10%). Wall cladding and trim colours include: Neutral (62%), Natural (15%), and Primary derivative (Heritage palette) (25%).

Covered parking configurations include: No covered parking (40%) and Double garage (60%). A variety of landscaping standards are evident, including: Old urban landscape standard features sod and a few shrubs (10%), Old urban landscape standard with several mature shrubs and trees (50%), and Modest, modern urban landscape standard with sod and a few shrubs only (40%). Driveway surfaces include: Gravel driveway (30%), Asphalt driveway (20%), Broom finish or smooth concrete driveway (20%), exposed aggregate driveway (30%).

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

- 1) **Context Homes:** There are only two homes in this area that could be considered to provide acceptable architectural context (homes at 12009 - 100A Avenue and 12005 - 100A Avenue). However, massing design, construction materials, and trim and detailing standards for new homes constructed in RF-12 zone subdivisions now exceed standards evident on the context homes. The recommendation therefore is to adopt standards commonly found in post year 2010 RF-12 zoned subdivisions, rather than to emulate the aforesaid context homes.
- 2) **Style Character:** There is a mix of old urban, old BC Heritage, and modern urban styles in this neighbourhood. Preferred styles for this site include "Neo-Traditional" and "Neo-Heritage", as these styles are an ideal bridge between old urban and modern urban. Note that style range is not restricted in the building scheme. However, the consultant refers to the character study when reviewing plans for meeting style-character intent.
- 3) **Home Types:** There is a wide range of home types evident, and so some flexibility is justified. Home type (Two-Storey, Bungalow, Basement Entry, Split Level, etcis.) will not be regulated in the building scheme.
- 4) **Massing Designs:** Massing designs should meet new standards for RF-12 zoned subdivisions. New homes should exhibit "mid-scale" massing. Various elements and projections on the front of the home should be interesting architecturally, and should be in pleasing natural proportions to one another. These elements and projections should be located so as to create balance across the façade.
- 5) **Front Entrance Design:** Front entrance porticos range from one to 2 ½ storeys in height. The recommendation however is to limit the range of entrance portico heights to between one storey and 1 ½ storeys to ensure there is not proportional overstatement of this one element.
- 6) **Exterior Wall Cladding:** A wide range of cladding materials have been used in this area, including Vinyl, cedar, stucco, brick, and stone. Reasonable flexibility should therefore be permitted, including the use of vinyl siding, provided the overall quality of wall cladding materials meets or exceeds standards for post 2010 developments.
- 7) **Roof surface:** A wide range of roof surfacing materials have been used in this area including cedar shingles, concrete roof tiles, and asphalt shingles. The roof surface is not a uniquely recognizable characteristic of this area and so flexibility in roof surface materials is warranted. The recommendation is to permit cedar shingles, shake profile concrete roof tiles, shake profile asphalt shingles with a raised ridge cap, and new environmentally sustainable roof products that have a strong shake profile.
- 8) **Roof Slope:** A significant number of neighbouring homes have low slope roofs that are not well suited to the proposed style range. Emulation of the low slope roof characteristic is therefore not recommended. Roofs slopes of 7:12 or higher are recommended, with standard exceptions to allow lower slopes at verandas (so front windows at the upper floor can be of sufficient depth) and to ensure that roofs are not overly high, resulting in over-shadowing of neighbouring lots, or resulting in view corridor blockage.

Streetscape: The area surrounding the subject site contains a wide variety of single-family residential homes developed over a 70 year (plus) period. Homes include 70 year old, 700 sq.ft. Bungalows, old BC Heritage 1½ Storey type, old urban Bungalows, old urban Basement Entry type, and two modern "Neo-Traditional" Two-Storey type that provide suitable context. There are significant differences in massing design standards, and a wide range of exterior construction materials. Landscaping standards range from "modest old urban" to modest modern urban landscaping". The area is considered a "varied character area".

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". Note that the proposed style range is not contained within the building scheme, but is contained within the residential character study that 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)

There are two homes in this area (12005 – 100A Avenue and 12009 – 100A Avenue) that could be considered to provide acceptable architectural context. However, massing design, construction materials, and trim and detailing standards for new homes constructed in most new (post year 2010) RF-12 zone subdivisions now exceed standards evident on the context homes. The recommendation therefore is to adopt standards commonly found in post year 2010 RF-12 zoned subdivisions, rather than to specifically emulate the aforesaid two context 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 are not recommended for this development. "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, shake profile asphalt shingles with a raised ridge cap, and new environmentally sustainable roofing products should be permitted, providing that the aesthetic properties of the new materials are equal to or better than that of the traditional roofing products. Greys, black, or browns only.
- 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 10 shrubs of a minimum 3 gallon pot size, planted in the flanking street sideyard. Sod from street to face of home. Driveways: exposed aggregate, interlocking masonry pavers, or stamped concrete.

The findings reported in this study will form the basis for the content and regulations contained within the building design guidelines.

Compliance Deposit: \$5,000.00

Summary prepared and submitted by: Tynan Consulting Ltd. **Date:** May 18, 2014

Reviewed and Approved by:



Date: May 18, 2014

Table 4. Tree Preservation Summary

| TREE PRESERVATION SUMMARY | |
|---|---|
| Surrey Project No: | 7913-0202-00 |
| Address: | 10032 - 120th Street |
| Registered Arborist: | Trevor Cox, MCIP ISA Certified Arborist (PN1920A) Certified Tree Risk Assessor (43) BC Parks Wildlife and Danger Tree Assessor |
| On-Site Trees | Number of Trees |
| Protected Trees Identified (on-site and shared trees, including trees within boulevards and proposed streets and lanes, but excluding trees in proposed open space or riparian areas) | 22 |
| Protected Trees to be Removed | 22 |
| Protected Trees to be Retained (excluding trees within proposed open space or riparian areas) | 0 |
| Total Replacement Trees Required: | |
| - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio <u>1</u> X one (1) = 1 | 41 |
| - All other Trees Requiring 2 to 1 Replacement Ratio 20 X two (2) = 40 | |
| Replacement Trees Proposed | 21 |
| Replacement Trees in Deficit | 20 |
| Protected Trees to be Retained in Proposed [Open Space / Riparian Areas] | - |
| Off-Site Trees | Number of Trees |
| Protected Off-Site Trees to be Removed | |
| Total Replacement Trees Required: | |
| - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio <u>0</u> X one (1) = 0 | 8 |
| - All other Trees Requiring 2 to 1 Replacement Ratio 4 X two (2) = 8 | |
| Replacement Trees Proposed | 0 |
| Replacement Trees in Deficit | 8 |

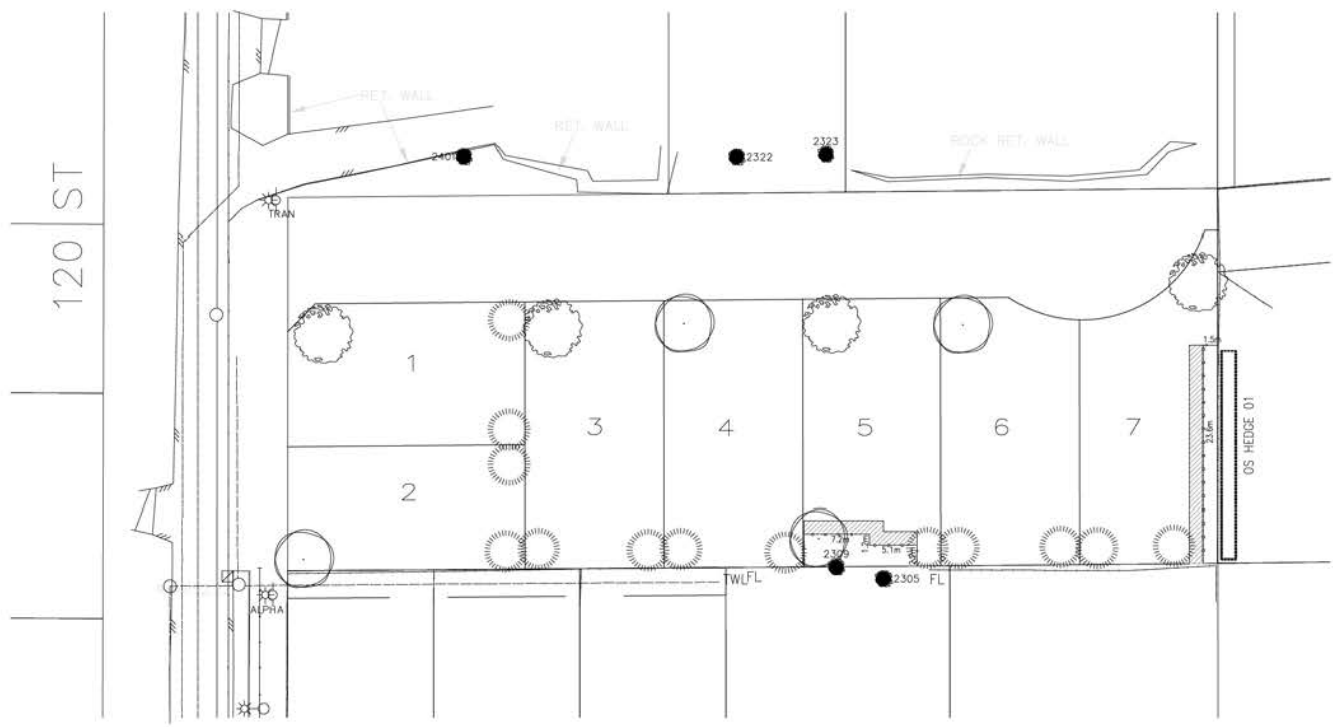
Summary prepared and
submitted by:

Arborist



MAY 23, 2014

Date



LEGEND

- = TREES TO BE RETAINED
- / = TREES TO BE REMOVED
- = PROTECTION BARRIER
- ▨ = NO-BUILD ZONE

| | | |
|---------|------------------------|-----|
| city of | city of surrey request | 1 |
| REV | REVISIONS | NO. |

C.KAVOLINAS & ASSOCIATES INC.
 BCSLA CSLA
 2462 JONDAL COURT
 ABOTSFORD, B.C.
 V3C 3K8
 PHONE (604) 897-2376

SLURP
 MR. DEXTER HRABE
 HUNTER LAND ENGINEERING
 SUITE #300
 85 RICHMOND STREET
 NEW WESTMINSTER, B.C.
 V3C 4P5
 604 525 4651

TITLE
 PLAN VIEW
 TREE LOCATION PLAN
 TREE REPLACEMENT PLAN
 7 LOT SUBDIVISION
 10052 - 120 STREET
 SURREY, B.C.

REPLACEMENT TREE LIST

| KEY | BOTANICAL NAME | COMMON NAME | QTY. | SIZE | SPACING | REMARKS |
|-----|---------------------------|-----------------------|------|-------------|----------|---------|
| | CORNUS FLORIDA 'RUBRUM' | RED FLOWERING DOGWOOD | 4 | 6 CM. CAL. | AS SHOWN | B. & B. |
| | ACER PALMATUM 'BLOODGOOD' | BLOODGOOD JAP. MAPLE | 4 | 3.00 METERS | AS SHOWN | B. & B. |
| | PICEA OMORICA | SERBIAN SPRUCE | 13 | 3.00 METERS | AS SHOWN | B. & B. |

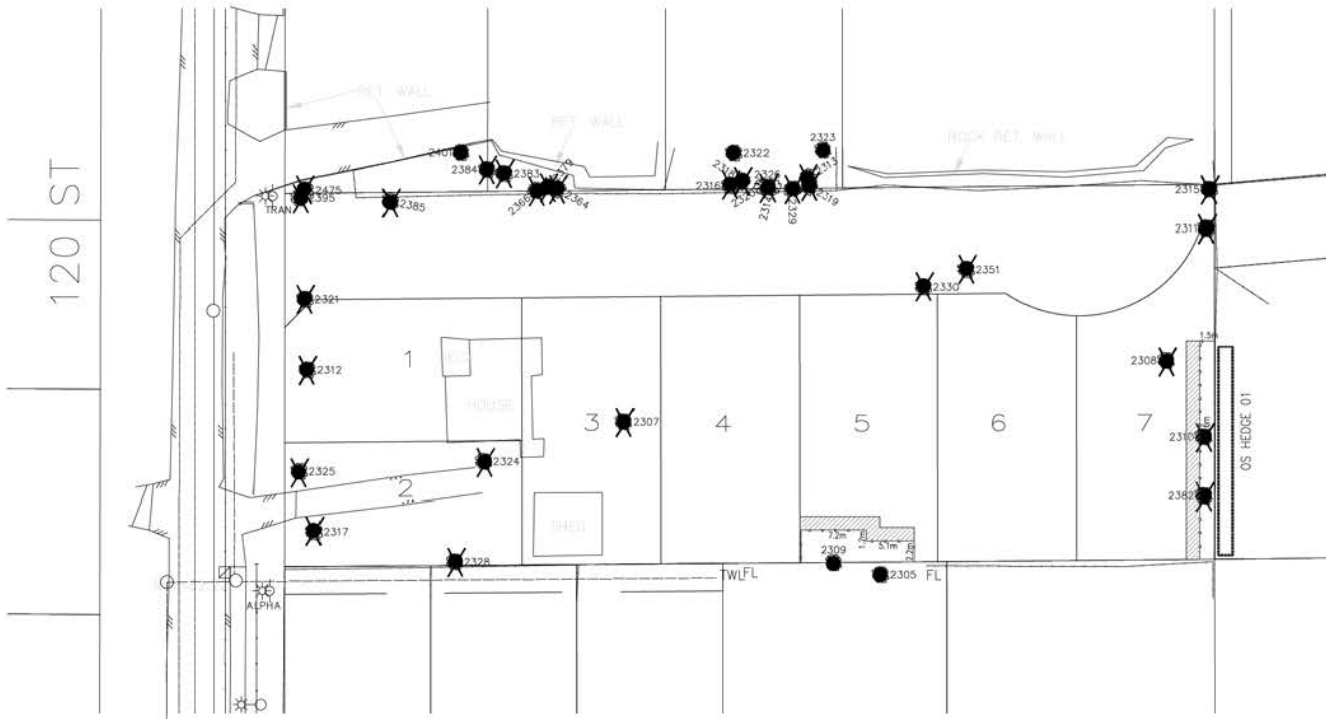
PLANTS IN THE PLANT LIST ARE SPECIFIED ACCORDING TO THE LANDSCAPE CANADA GUIDE SPECIFICATIONS FOR NURSERY STOCK AND THE BCNTA STANDARD FOR CONTAINER GROWN PLANTS.

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

ALL ASPECTS OF THIS PLAN AND THE WORK THAT IT REFERS TO OR SUGGESTS MUST CONFORM TO THE CITY OF SURREY'S TREE PRESERVATION BY-LAW #16100

| | |
|--------|----------|
| SCALE | DATE |
| 1:250 | NOV/13 |
| DRAWN | CHKD |
| DATE | DATE |
| APPROV | AS BUILT |

| | |
|---------|-------------|
| PRINTED | JOB No. |
| | DRIVING No. |
| | TR-2 |



LEGEND

- = TREES TO BE RETAINED
- ⊗ = TREES TO BE REMOVED
- = PROTECTION BARRIER
- ▨ = NO-BUILD ZONE

| | | | |
|--------|-----------------------|----|-----|
| DATE | REVISED | BY | NO. |
| may/14 | city of surry request | | 1 |
| | REVISIONS | | |

C.KAVOLINAS & ASSOCIATES INC.
 BCIA CSA
 2482 JONGAL COURT
 ABOTTSFORD, B.C.
 V2C 3E8
 PHONE (604) 857-2376

CLIENT
 MR. DEXTER HIRSH
 HUNTER LARD ENGINEERING
 SUITE #300
 65 RICHMOND STREET
 NEW WESTMINSTER, B.C.
 V3L 5P5
 604 525 4651

TITLE
 PLAN VIEW
 TREE LOCATION PLAN
 TREE RETENTION PLAN
 7 LOT SUBDIVISION
 10032 - 120 STREET
 SURREY, B.C.

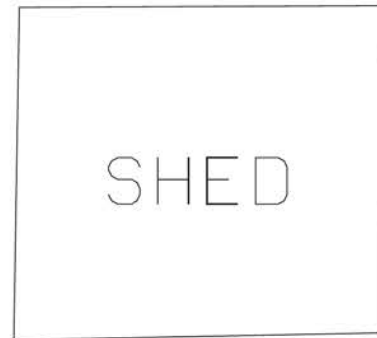
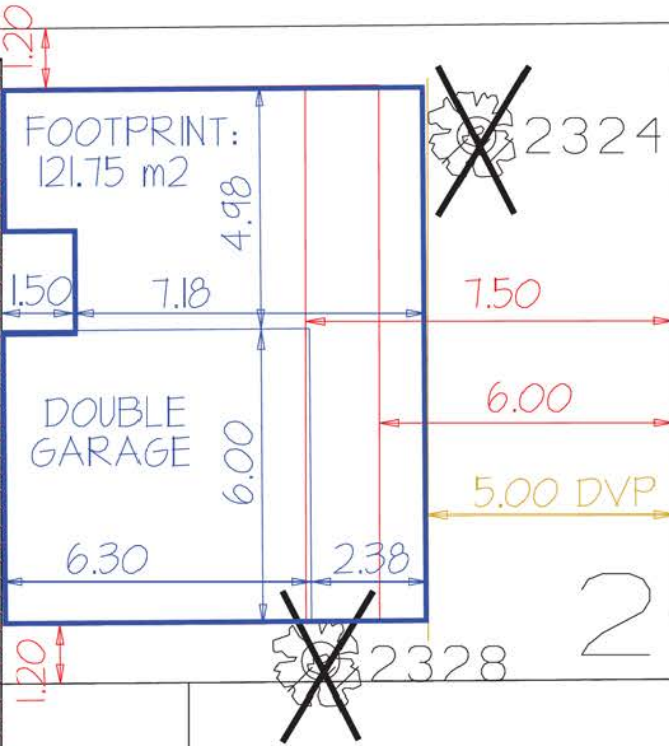
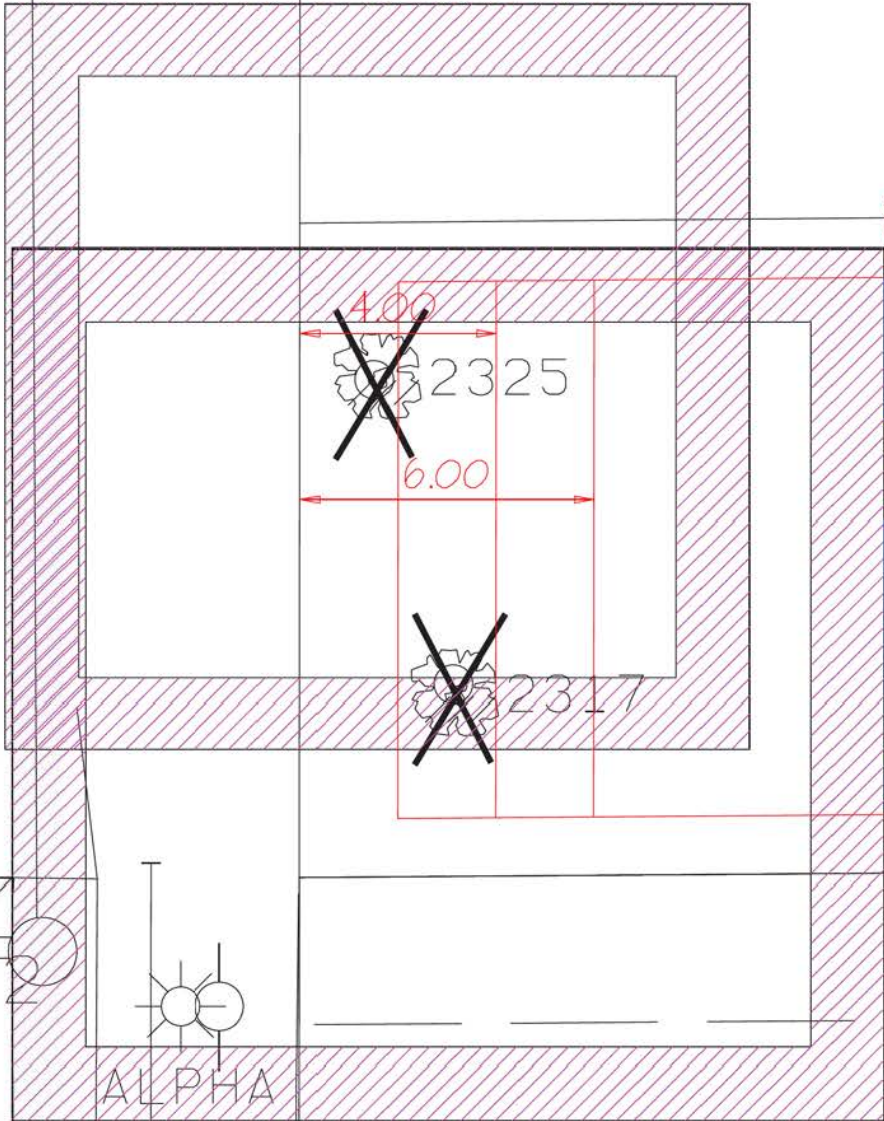
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|----------|--------|
| SCALE | DATE |
| 1:250 | NOV/13 |
| DRAWN | DATE |
| DWD | DWD |
| ENGINEER | DATE |
| MR. BULL | |

| | |
|-------------|---------|
| PRINTED | JOB No. |
| | TR-1 |
| DRAWING No. | |

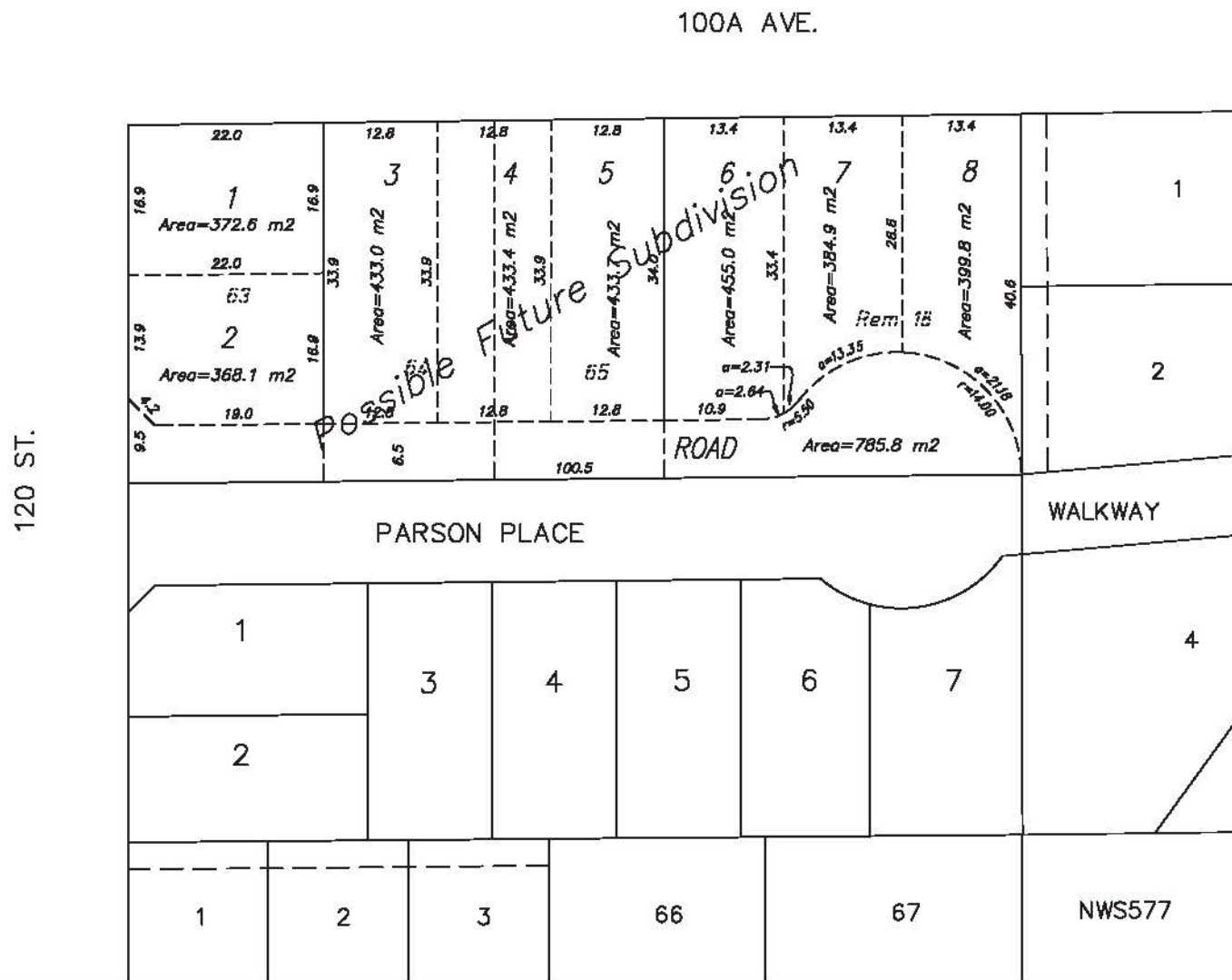
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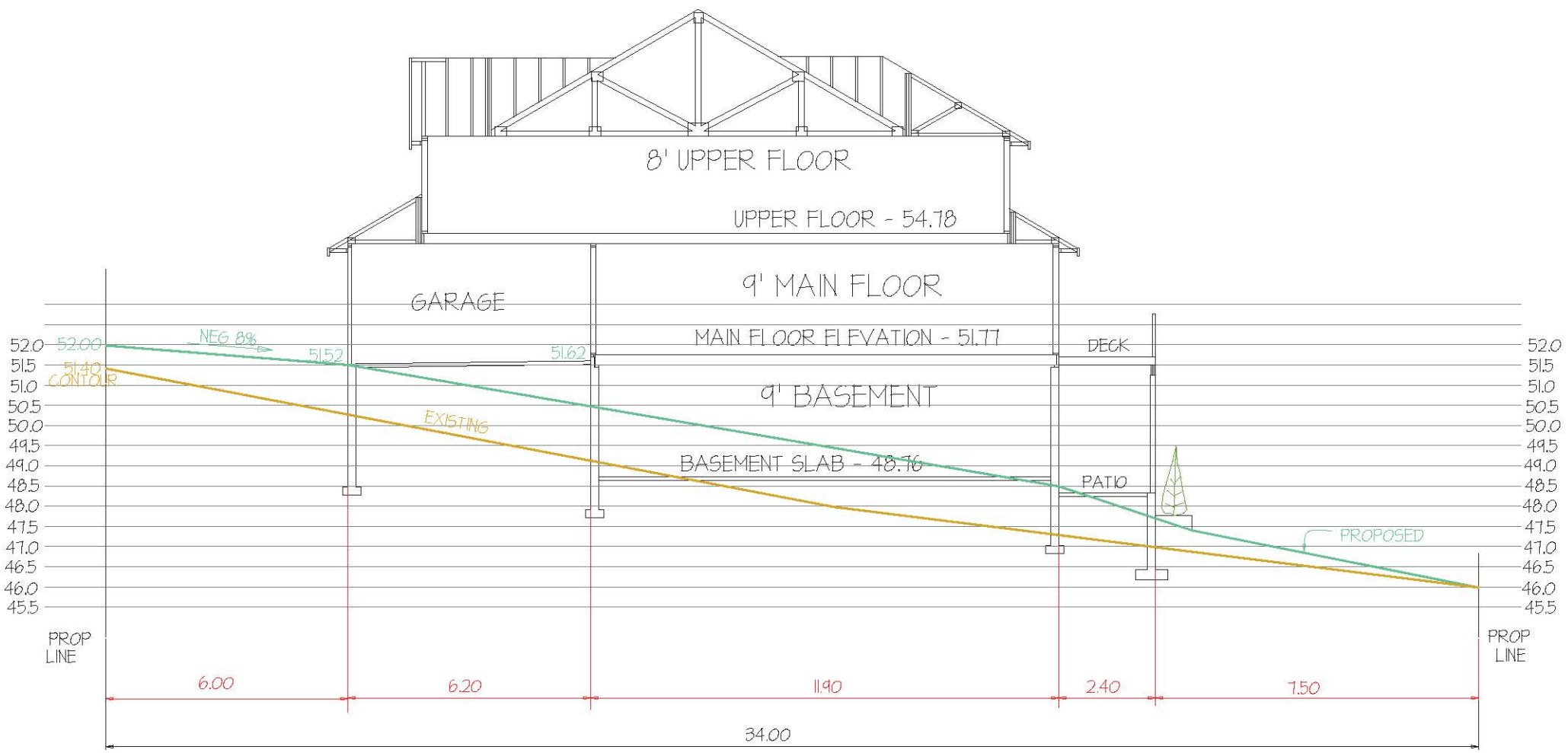
3



2



Concept Plan
 Jas Chahal - #10044 120 St, 12016-12042 100A Ave
 Focus: 061400148 - HL #6774



SECTION A-A