

City of Surrey  
**PLANNING & DEVELOPMENT REPORT**

File: 7918-0177-00

Planning Report Date: February 11, 2019

**PROPOSAL:**

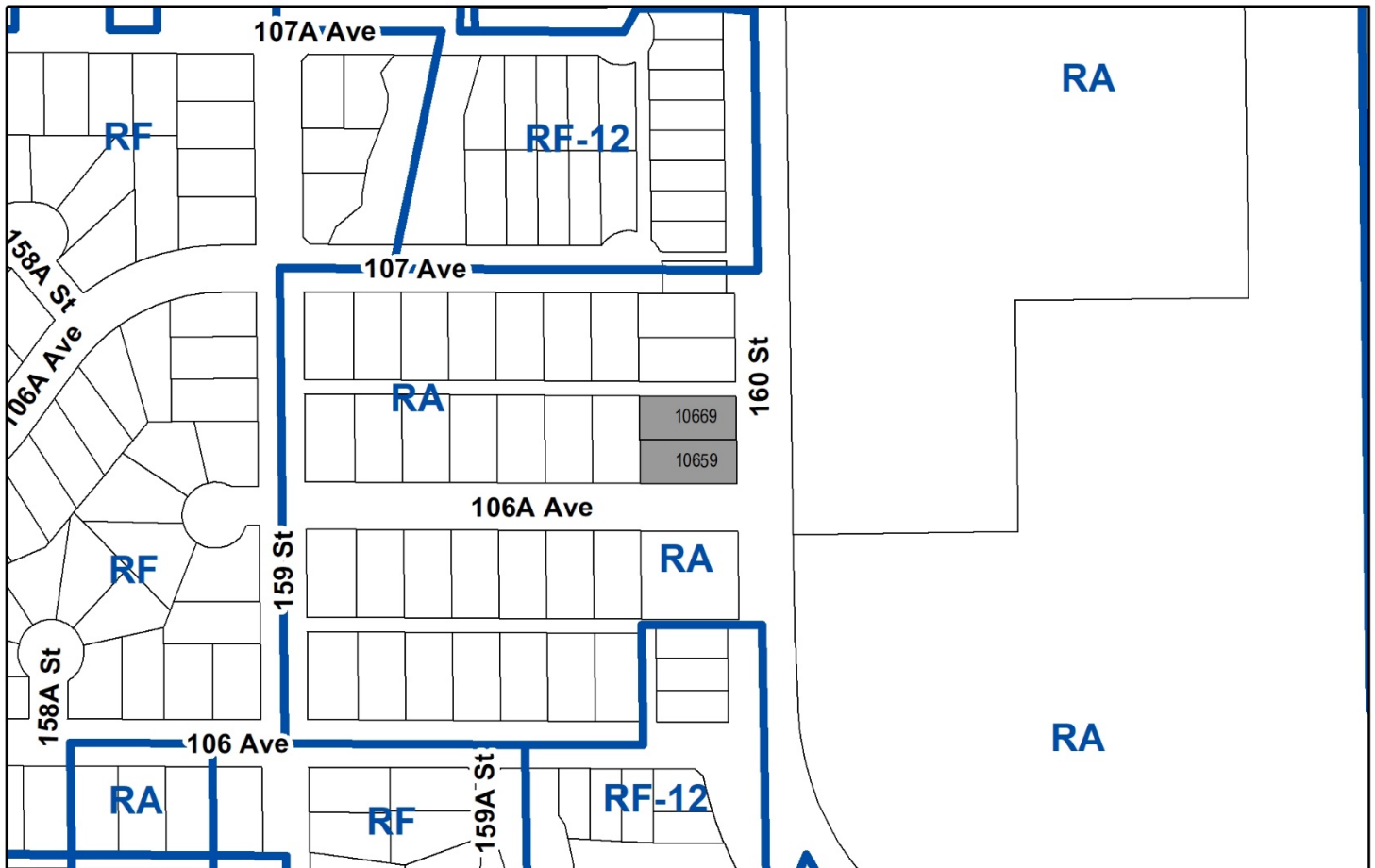
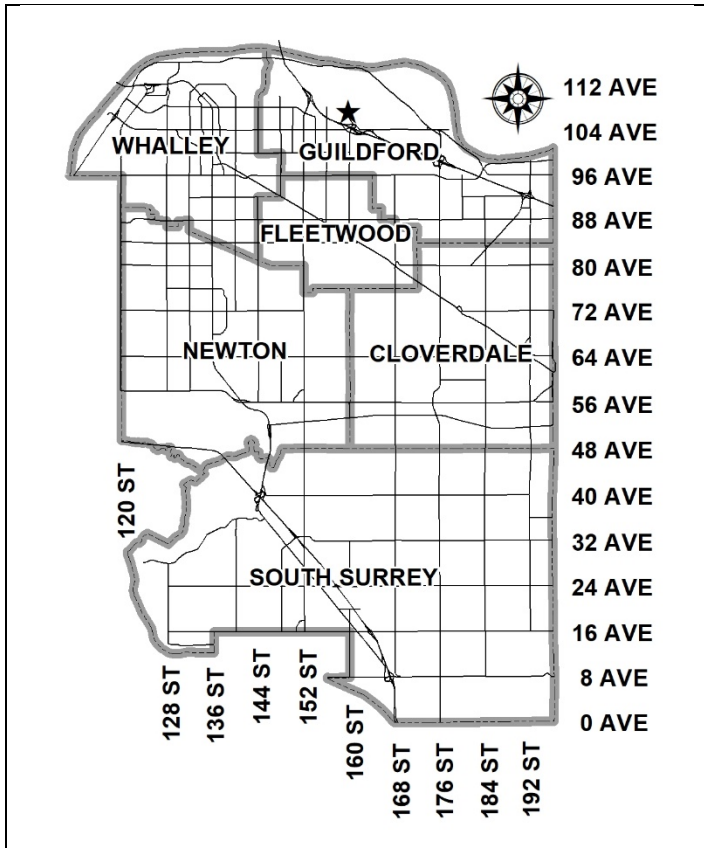
- **Rezoning** from RA to RF-13 to allow subdivision into three single family small lots.

**LOCATION:** 10669 – 160 Street

10659 – 160 Street

**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

- The proposal complies with the Urban Official Community Plan (OCP) designation.
- The proposed density and building form are appropriate for this part of Fraser Heights across from the Fraser Heights Park and Recreation Centre.
- The proposed RF-13 lots fronting 160 Street reflect the lot pattern proposed directly north of the subject property at 10683/10691 – 160 Street (Development Application No. 7918-0202-00). The application is currently pre-Council. The proposal is also consistent with existing RF-12 subdivisions to the south fronting 160 Street.
- To complete the subdivision, as proposed, the applicant will purchase the southerly 3 metre (10 ft.) wide portion of the existing unopened east-west lane located directly north of 10669 - 160 Street. The Engineering Department has deemed the unopened east-west lane as surplus and, therefore, it can be considered for consolidation with the subject site. The applicant will be required to dedicate and construct a re-aligned 6 metre (20 ft.) wide north-south lane that daylights to 106A Avenue in order to provide rear lane access for the proposed RF-13 lots fronting 160 Street.

RECOMMENDATION

The Planning & Development Department recommends that:

1. A By-law be introduced to rezone the subject site from "One-Acre Residential Zone (RA)" to "Single Family Residential (13) Zone (RF-13)" 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) approval from the Ministry of Transportation & Infrastructure;
  - (d) submission of a finalized tree survey and a statement regarding tree preservation to the satisfaction of the City Landscape Architect;
  - (e) demolition of existing buildings and structures to the satisfaction of the Planning and Development Department;
  - (f) the applicant satisfy the deficiency in tree replacement on the site, to the satisfaction of the Planning and Development Department;
  - (g) registration of a Section 219 Restrictive Covenant for increased setbacks along 160 Street for proposed Lot 1 to accommodate on-site tree preservation;
  - (h) 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;
  - (i) the applicant adequately address the City's needs with respect to the City's Affordable Housing Strategy, to the satisfaction of the General Manager, Planning & Development Services; and
  - (j) completion of the partial lane closure and acquisition of the southerly 3 metre (10 ft.) wide portion of the unopened east-west lane allowance directly north of 10669 – 160 Street.

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:**

1 Elementary student at Dogwood Elementary School  
0 Secondary students at Fraser Heights Secondary School

(Appendix IV)

The applicant has advised that the dwelling units in this project are expected to be constructed and ready for occupancy by Fall, 2020.

Parks, Recreation & Culture: Parks supports the application but has some concerns with the pressure the application will place on park amenities in the area. The applicant has agreed to a contribution of \$500, which represents a payment of \$500 per newly created lot, and Parks has accepted this amount to address these concerns.

Ministry of Transportation & Infrastructure (MOTI): Preliminary approval from MOTI is granted for one year.

SITE CHARACTERISTICS

Existing Land Use: Single family residential dwellings.

Adjacent Area:

Direction	Existing Use	OCP Designation	Existing Zone
North:	Single family residential lots under application for rezoning and subdivision into 3 RF-13 lots (Development Application No. 7918-0202-00). The application is pre-Council.	Urban	RA
East (Across 160 Street):	Fraser Heights Park playing fields and surface parking lot.	Urban	RA
West and South (Across 106A Avenue):	Single family residential	Urban	RA

## DEVELOPMENT CONSIDERATIONS

### Background

- The two subject properties are roughly 1,534 square metres (0.38 acre) in total area and located on the west side of 160 Street, just north of 106A Avenue. The properties are designated "Urban" in the Official Community Plan (OCP) and zoned "One-Acre Residential Zone (RA)".
- The applicant proposes a similar development pattern, with RF-13 lots fronting 160 Street, as that proposal on the adjacent northerly properties at 10683/10691 – 160 Street. The adjacent northerly properties are currently under application for rezoning to RF-13 and subdivision into 3 single family lots (Development Application No. 7918-0202-00). The application is currently pre-Council.
- In addition, there are several exiting RF-12 single family lots to the south of the subject site.

### Current Proposal

- The applicant is proposing to rezone the subject site from "One-Acre Residential Zone (RA)" to "Single Family Residential (13) Zone (RF-13)" in order to subdivide into 3 single family small lots.
- The proposed lots range in size from 394 square metres (4,241 sq. ft.) to 423 square metres (4,553 sq. ft.). The proposed lots meet the minimum area and dimensional requirements of the RF-13 Zone.
- To complete the subdivision, as proposed, the applicant will purchase the southerly 3 metre (10 ft.) wide portion of the existing unopened east-west lane located directly north of 10669 - 160 Street. The Engineering Department has deemed the unopened east-west lane as surplus and, therefore, it can be consolidated with the subject site.
- The proposed RF-13 lots fronting 160 Street are required to have vehicle access from a rear lane as 160 Street is an arterial road. As such, the applicant will dedicate and construct a new 6 metre (20 ft.) wide north-south lane that will outlet to 106A Avenue and provide direct rear access to the proposed lots. The existing driveway access points along 160 Street will be removed.

### Building Design Guidelines and Lot Grading

- The applicant retained Mike Tynan of Tynan Consulting Ltd. to prepare a Character Study and Building Design Guidelines for the subject property to maintain consistency with the existing single family dwellings in the surrounding neighbourhood.
- The Character Study involved reviewing a number of existing homes in the neighbourhood in order to establish suitable design guidelines for the proposed subdivision. The study found that the majority of existing older homes within the surrounding area do not provide an appropriate context for future re-development. As such, the Building Scheme for the subject property will reflect updated design standards common of modern RF-13 type lots (Appendix V).

- The preliminary Lot Grading Plan by CitiWest Consulting Ltd. was reviewed by City staff and considered generally acceptable. The Lot Grading Plan indicates in-ground basements are proposed for all 3 lots and that minimal amounts of fill are proposed in order to achieve in-ground basements.

### 106A Avenue Completion

- 106A Avenue currently terminates in a "dead end" that was constructed to a temporary standard with concrete blocks in place at the most easterly point of 106A Avenue. There is an existing 20.0m wide unconstructed road allowance from the current extent of 106A Avenue to 160 Street, along the southern frontage of the subject application.
- The City has planned to address the temporary condition of 106A Avenue by completing construction of the existing road allowance through future redevelopment.
- As per the City's Subdivision and Development By-Law No. 8830, the applicant is required to complete all road frontage to current City standards. Construction of the existing 106A Avenue road allowance fronting the subject site will provide a direct connection to 160 Street.
- The connection of 106A Avenue to 160 Street is consistent with principles in the City's Transportation Strategic Plan regarding increasing connectivity and providing a grid road network. Enhanced connectivity also allows for more even traffic distribution.
- Currently residents heavily rely upon the intersection of 160 Street and 108 Avenue, which is often busy and congested. Connecting 106A Avenue to 160 Street will allow for an additional access point to the neighbourhood not only improving traffic circulation but increasing safety in the event of an impasse elsewhere that may block emergency vehicles or resident vehicles.
- The completion of 106A Avenue will reduce the volume of turning movements occurring at the intersection of 160 Street and 108 Avenue. This intersection is heavily utilized by pedestrians, particularly students of Fraser Heights Secondary School. Less turning movements will decrease the potential for conflicts with pedestrians and increase safety.
- The proposed extension of 106A Avenue will be designed to a local road standard, which has a purpose to provide access to properties and provide connections within communities, and as such serve local traffic.

### Neighborhood Consultation

- The development proposal sign was installed on August 31, 2018 and pre-notification letters were mailed out on June 27, 2018. To date, Planning staff have received one response to the pre-notification letter.
- Transportation staff initiated an additional pre-notification package specifically to inform residents of the proposed 106A Avenue connection to 160 Street and requested feedback. Pre-paid postage envelopes and a response card were provided with each package.

- This additional pre-notification package was distributed to all residents within the northern boundary of 108 Avenue, eastern boundary of 160 Street, southern boundary of Highway 1, and western boundary of 158 Street. This area is broader than the typical boundary for pre-notification and was chosen by Staff to ensure residents that would be directly affected by this connection and residents that would benefit from it would have the opportunity to comment.
- A total of 62 resident responses were received, with 31 in support of the connection and 32 in opposition.
- The concerns of residents in opposition to the connection of 106A Avenue to 160 Street include increased volume of traffic along 106A Avenue, speeding, and pedestrian safety.
- Comments from residents in support of the connection of 106A Avenue to 160 Street include notes regarding better distribution of traffic, improving the level of service at the 108 Avenue and 160 Street intersection, and easing traffic congestion and improving safety around Fraser Heights Secondary School.
- Key stakeholders in the Community were also contacted to provide further input on the potential connection:

#### The Fraser Heights Community Association

- Do not see any distinct advantage to having the intersection of 106A Avenue and 160 Street completed.
- Aware of the City's reasoning for completion of 106A Avenue, in which case would support only a right in-right out with pedestrian and cyclist connectivity, but a physical blockade preventing vehicle traffic.
- If, at a future date, it is determined that vehicular traffic should be permitted, the physical blockade could be removed.

#### Fraser Heights Secondary School

- Support the connection of 106A Avenue to 160 Street as this will reduce the total volume of turning movements occurring at the intersection of 160 Street and 108 Avenue.
- Currently the intersection of 160 Street and 108 Avenue is heavily utilized by pedestrians, particularly students of Fraser Heights Secondary School. Reducing the volume of turning movements will also reduce the potential of pedestrian conflicts within the intersection.

#### Surrey School District

- Support any improvements to pedestrian safety at the intersection of 108 Avenue and 160 Street for students attending Fraser Heights Secondary School.
- The connection may change pedestrian behavior in the area, and this should be monitored in the future to determine whether a designated pedestrian crossing is warranted at 106A Avenue.

### Considerations & Staff Recommended Approach

Staff recommend that the unconstructed road allowance of 106A Avenue be constructed and provide a vehicular connection to 160 Street with the following provisions:

- Construction of 106A Avenue to a through local road standard; and
- Movements to be restricted to right in-right out only. A delta median will be constructed on 160 Street to physically deter vehicles from turning left in or left out.

With consideration of resident concerns, Staff commit to the following process for the 12 months after completion and opening of the road connection:

- Install signage at 106A Avenue and 160 Street with a designated contact to ensure residents can continue providing feedback on the connection.
- Monitor and gather data for the intersection of 108 Avenue and 160 Street and 106A Avenue and 160 Street.
- Evaluate the provision of a left in movement from 160 Street to 106A Avenue as many residents in support of the connection identified the desire for this to be accommodated.
- Consider the closure of 106A Avenue to vehicle traffic from 160 Street with the implementation of locking post bollards or a vehicle gate, should there be issues with the operation of the connection.
- Complete analysis to explore whether traffic calming along 106A Avenue or additional pedestrian infrastructure is warranted.
- Initiate further consultation with the neighbourhood through an open house presentation and stakeholder engagement.
- Submit a Corporate Report to Council with findings from the above mentioned 12 months after completion of the road.

### TREES

- Corey Plester, ISA Certified Arborist of Mike Fadum and Associates Ltd. prepared an Arborist Assessment for the subject property. The table below provides a summary of the tree retention and removal by tree species:

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

Tree Species	Existing	Remove	Retain
<b>Alder and Cottonwood Trees</b>			
Alder/Cottonwood	16	16	0
<b>Deciduous Trees (excluding Alder and Cottonwood Trees)</b>			
Black Locust	1	1	0



Tree Species	Existing	Remove	Retain
Common Hawthorn	1	1	0
Willow	2	2	0
<b>Coniferous Trees</b>			
Scots Pine	1	0	1
Douglas-fir	2	2	0
Western Red Cedar	17	17	0
<b>Total (excluding Alder and Cottonwood Trees)</b>	<b>24</b>	<b>23</b>	<b>1</b>
<b>Total Replacement Trees Proposed (excluding Boulevard Street Trees)</b>			
		<b>4</b>	
<b>Total Retained and Replacement Trees</b>			
		<b>5</b>	
<b>Contribution to the Green City Fund</b>			
		<b>\$23,200</b>	

- The Arborist Assessment states that there are a total of 24 protected trees on the site, excluding Alder and Cottonwood trees. 16 existing trees, approximately 67% of the total trees on the site, are Alder and Cottonwood trees. It was determined that 1 tree 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.
- The proposed front yard setback for Lot 1 will need to be increased in order to maximize tree preservation on the site. A No-Build restrictive covenant will be required to identify the tree preservation area.
- 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 62 replacement trees on the site. Since only 4 replacement trees can be accommodated on the site (based on an average of 1 tree per interior lot and 2 trees per corner lot), the deficit of 58 replacement trees will require a cash-in-lieu payment of \$23,200, representing \$400 per tree, to the Green City Fund, in accordance with the City's Tree Protection By-law.
- In summary, a total of 1 tree is proposed to be retained and 4 replaced on the site with a contribution of \$23,200 to the Green City Fund.

#### Affordable Housing Strategy

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

- As a condition of Final Adoption of the Rezoning By-law, the applicant will be required to provide a \$1,000 per unit contribution to the Affordable Housing Reserve Fund, totaling \$3,000 for the three (3) proposed lots.

### PRE-NOTIFICATION

The development proposal sign was installed on August 31, 2018 and pre-notification letters were mailed out on June 27, 2018. To date, staff have received one response to the pre-notification letter:

- The Fraser Heights Community Association contacted staff to ask for clarification about the maximum permitted floor area under the RF-13 Zone. The Community Association had no further comments. At present, the Engineering Department – Transportation Division is following-up with the Community Association to discuss the potential of opening 106A Avenue to vehicle traffic from 160 Street.

### SUSTAINABLE DEVELOPMENT CHECKLIST

The applicant prepared and submitted a sustainable development checklist for the subject site on April 30, 2018. The table below summarizes the applicable development features of the proposal based on the seven (7) criteria listed in the Surrey Sustainable Development Checklist.

<b>Sustainability Criteria</b>	<b>Sustainable Development Features Summary</b>
1. Site Context & Location (A1-A2)	<ul style="list-style-type: none"> <li>• The subject site is located within an urban infill area.</li> <li>• The proposal complies with the OCP designation.</li> </ul>
2. Density & Diversity (B1-B7)	<ul style="list-style-type: none"> <li>• The proposed single family dwellings may include secondary suites that provide for greater housing choice.</li> </ul>
3. Ecology & Stewardship (C1-C4)	<ul style="list-style-type: none"> <li>• The proposal includes low-impact development standards (LIDS) in the form of: [1] absorbent soils; [2] roof downspout disconnection; [3] on-lot infiltration trenches or sub-surface chambers; [4] perforated pipe systems; and [5] sediment control devices.</li> <li>• The applicant will provide compensation for on-site tree removal.</li> </ul>
4. Sustainable Transport & Mobility (D1-D2)	<ul style="list-style-type: none"> <li>• The proposed dwellings are connected to pedestrian sidewalks.</li> </ul>
5. Accessibility & Safety (E1-E3)	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
6. Green Certification (F1)	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
7. Education & Awareness (G1-G4)	<ul style="list-style-type: none"> <li>• Information regarding the proposed rezoning and subdivision is provided to adjacent property owners through the standard pre-notification process.</li> </ul>

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

- Appendix I. Lot Owners and Action Summary (Confidential) and Project Data Sheets
- Appendix II. Proposed Subdivision Layout
- Appendix III. Engineering Summary
- Appendix IV. School District Comments
- Appendix V. Building Design Guidelines Summary
- Appendix VI. Summary of Tree Survey and Tree Preservation

*original signed by Ron Gill*

Jean Lamontagne  
General Manager  
Planning and Development

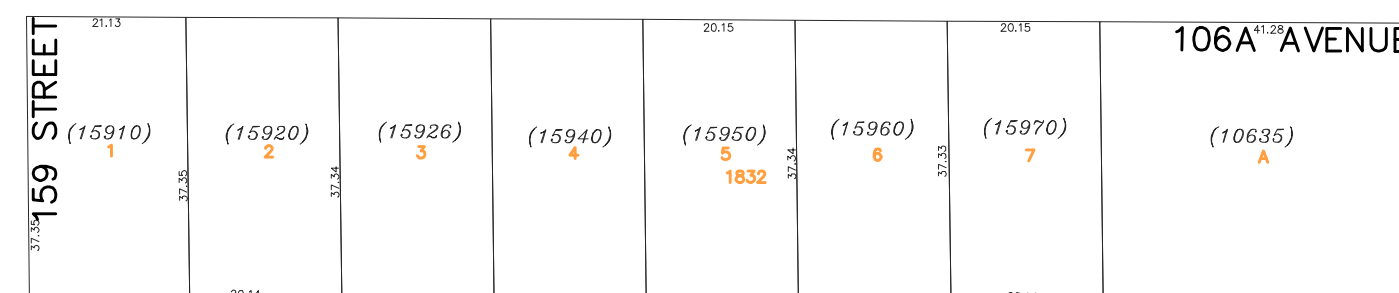
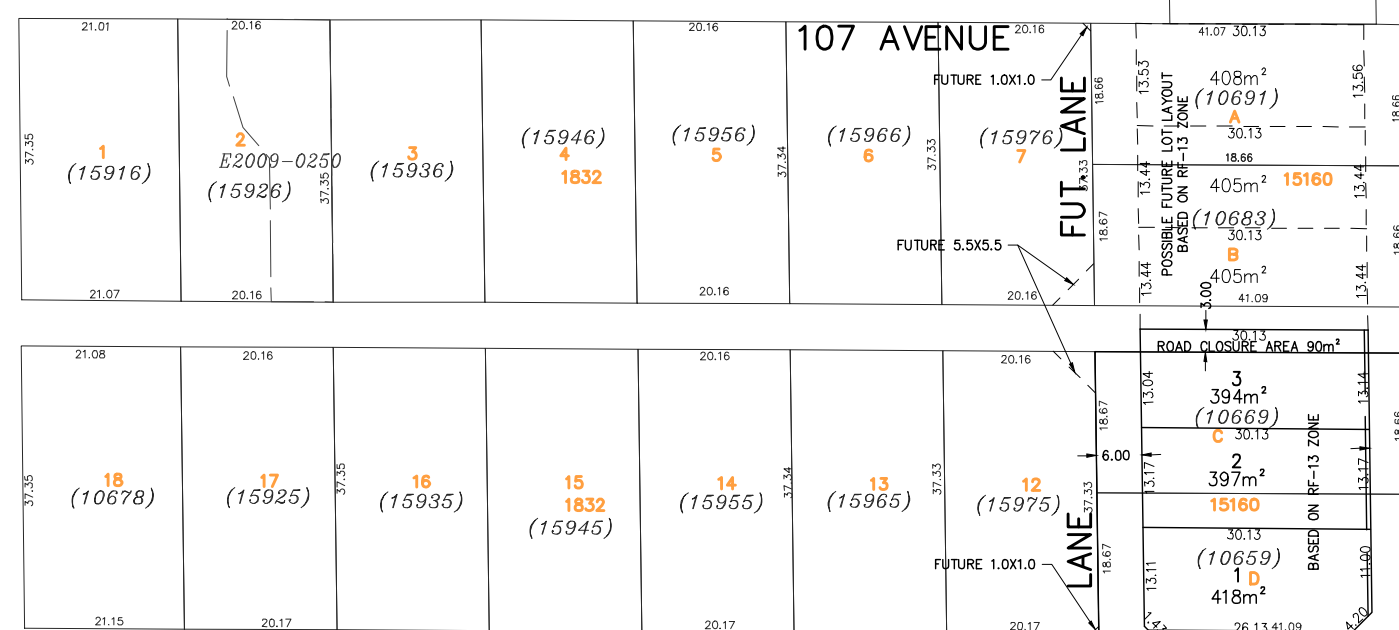
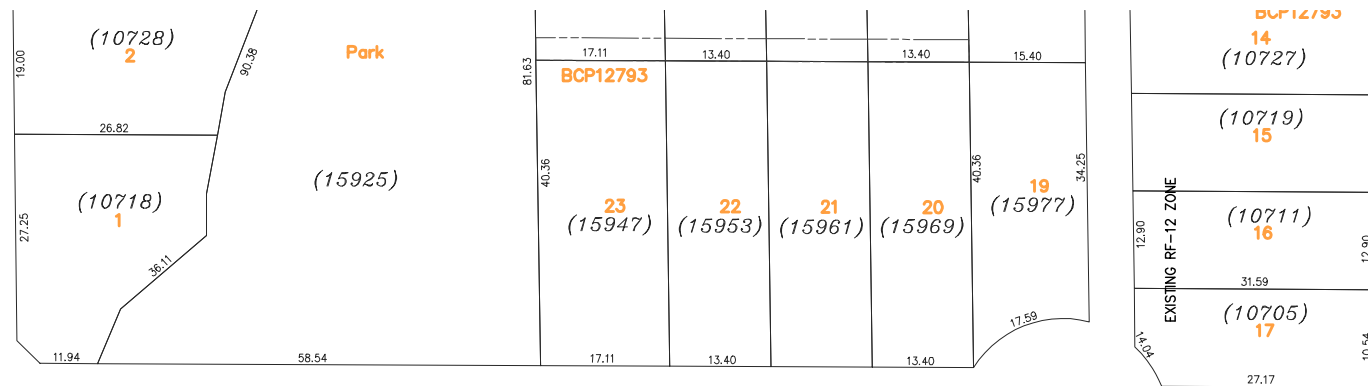
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APPENDIX I HAS BEEN  
REMOVED AS IT CONTAINS  
CONFIDENTIAL INFORMATION

## SUBDIVISION DATA SHEET

Proposed Zoning: RF-13

<b>Requires Project Data</b>	<b>Proposed</b>
<b>GROSS SITE AREA</b>	
Acres	0.4012
Hectares	0.1624
<b>NUMBER OF LOTS</b>	
Existing	2
Proposed	3
<b>SIZE OF LOTS</b>	
Range of lot widths (metres)	13.14 m. to 14 m.
Range of lot areas (square metres)	394 sq. m. to 423 sq. m.
<b>DENSITY</b>	
Lots/Hectare & Lots/Acre (Gross)	18.47 u.p.ha./7.47 u.p.a.
Lots/Hectare & Lots/Acre (Net)	24.71 u.p.ha./10 u.p.a.
<b>SITE COVERAGE (in % of gross site area)</b>	
Maximum Coverage of Principal & Accessory Building	50%
Estimated Road, Lane & Driveway Coverage	26.5%
Total Site Coverage	76.5%
<b>PARKLAND</b>	
Area (square metres)	N/A
% of Gross Site	N/A
	<b>Required</b>
<b>PARKLAND</b>	
5% money in lieu	NO
<b>TREE SURVEY/ASSESSMENT</b>	YES
<b>MODEL BUILDING SCHEME</b>	YES
<b>HERITAGE SITE Retention</b>	NO
<b>FRASER HEALTH Approval</b>	NO
<b>DEV. VARIANCE PERMIT required</b>	
Road Length/Standards	NO
Works and Services	NO
Building Retention	NO
Others	NO



160 STREET

98.00

- NOTES:**
1. ALL DIMENSIONS ARE APPROXIMATE ONLY BASED ON MASTER PLANS.
  2. LAYOUT IS PRELIMINARY AND SUBJECT TO APPROVALS AND SURVEYS.
  3. EXISTING HOUSES TO BE REMOVED.

No	Date	Revision	Dr	Ch

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



DHAP DEVELOPMENT LTD.  
 7018 - 195 STREET, SURREY, BC, V4N 5Z2 EMAIL: KAL.DHALIWAL@PERA.CA  
**PRELIMINARY LOT LAYOUT**  
 SUBDIVISION AT 10659/10669 - 160 STREET, SURREY, BC

Scale: 1:1000	Mun. Proj. No. 7918-0177-00	Dwg. No. A
Drawn: EK	Mun. Dwg. No.	
Designed: NP	Job No. 18-3635	Of
P.W. P.U.	Date APR/2018	Revision
Approved:		

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

FROM: **Development Engineer, Engineering Department**

DATE: **Feb 04, 2019** PROJECT FILE: **7818-0177-00**

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RE: **Engineering Requirements  
Location: 10659 - 160 Street**

### REZONE/SUBDIVISION

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

- Dedicate 4.942m along 160 Street for the ultimate 30.0m arterial road standard.
- Dedicate 3.0m x 3.0m corner cut at the intersection of 160 Street and 106A Avenue.
- Dedicate 6.0m Lane for a total of ultimate dedication of 6.0m.
- Dedicate 1.0m x 1.0m corner cut at the intersection of the Lane and 106A Avenue.
- Provide 0.5m wide statutory rights-of-way along the site frontages.

#### *Works and Services*

- Construct 106A Avenue to a half road standard, including road drainage.
- Construct lane to City standards.
- Complete drainage catchment analysis to determine capacities. Address downstream constraints, if identified.
- Construct sanitary main and storm main long the lane.
- Construct sanitary main along 106A Avenue.
- Construct 200mm water main along 106A Avenue site frontage.
- Provide each lot with meted water, storm and sanitary service connections.
- Register applicable legal documents as determined through detailed design.
- Secure off-site working easement and tree cutting permit, if applicable.

A Servicing Agreement is required prior to Rezone/Subdivision.



Tommy Buchmann, P.Eng.  
Acting Development Services Manager

HB4



Planning October 9, 2018

**THE IMPACT ON SCHOOLS**

APPLICATION #: 18 0177 00

**SUMMARY**

The proposed 3 single family lots are estimated to have the following impact on the following schools:

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

Elementary Students:	1
Secondary Students:	0

**September 2018 Enrolment/School Capacity**

<b>Dogwood Elementary</b>	
Enrolment (K/1-7):	42 K + 352
Operating Capacity (K/1-7)	38 K + 419
<b>Fraser Heights Secondary</b>	
Enrolment (8-12):	1340
Capacity (8-12):	1200

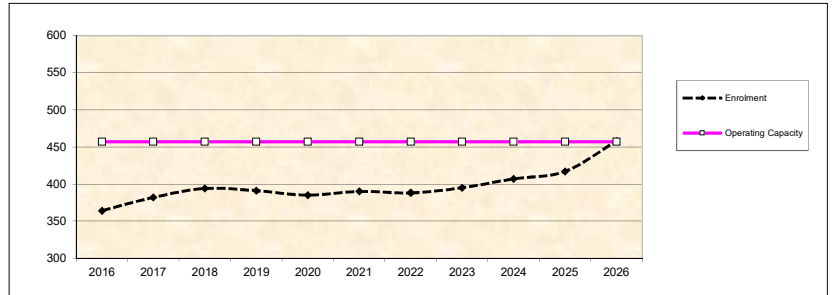
**School Enrolment Projections and Planning Update:**

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

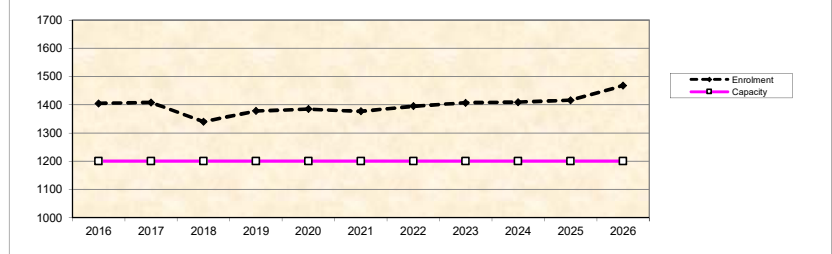
Dogwood Elementary has for the last 10 years been under capacity and it is projected over the next 10 years not to change. Prior to 2010, a boundary change was adopted to move families in the Erma Stephenson catchment into the Dogwood catchment to utilize the surplus classroom space. With most of the catchment built out and only a few sites in development for infill projects, the enrolment in this school is stable. Therefore, there are no plans to expand the school in coming years.

In 2014, a 200 capacity addition was added to Fraser Heights Secondary; but even with the addition the school is currently operating at 117% capacity. The 10 year enrolment projections are showing this growth will continue. As part of the 2019/2020 Five Year Capital Plan, the District has requested a 300 capacity addition for the school.

**Dogwood Elementary**



**Fraser Heights Secondary**



\* Nominal Capacity is estimated by multiplying the number of enrolling spaces by 25 students.  
Maximum operating capacity is estimated by multiplying the number of enrolling spaces by 27 students.



## BUILDING GUIDELINES SUMMARY

Surrey Project no: 18-0177-00  
Project Location: 10659 and 10669 - 160 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:

The subject site is located within an old growth area in recent transition to a modern urban character. Forty five percent of existing homes within the survey area are classified as "old urban" or "West Coast Traditional" style homes from the late 1950's to the early 1970's. There is one 2400 sq.ft. "West Coast Traditional Split Level home with 4:12 common hip roof with asphalt shingle surface, that is clad in swirled white stucco with an antique brick veneer. All the other older homes are small, simple rectangular Bungalows ranging in size from 700 to 1000 sq.ft. None of these homes provide suitable architectural context for a year 2018 RF-13 zone development.

Fifty five percent of homes are classified as modern urban homes, all of which can be further classified as "Neo-Traditional", "Neo-Heritage", and "West Coast Contemporary" style Two-Storey type homes. These new to 10 year old homes are all designed to a modern standard with well balanced, consistently proportioned, architecturally interesting, mid-scale massing characteristics. These homes have roof slopes ranging from 7:12 to 20:12, though most are at 8:12. Roofs are main common hip or common gable forms with a shake profile asphalt shingle roof surface. Gable ends are articulated with shingles or other wood detailing. Homes are clad with vinyl, stucco, or Hardiplank (or other fibre cement board) and more than half of these homes have a significant stone feature accent. All of these newer homes can be considered suitable "context homes".

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

- 1) **Context Homes:** More than half of the homes in this area can be considered to provide acceptable architectural context for the subject site. These homes meet new massing design standards in which various projections on the front of the home are proportionally consistent with one another, are well balanced across the façade, are visually pleasing, and are architecturally interesting. These new homes provide an appropriate standard for future development in this area, and emulating the standards found on these homes will reinforce the desirable emerging trend.

- 2) **Style Character** : There are a mix of old urban and modern urban styles in this neighbourhood. Preferred styles for this site include "Neo-Traditional", "Neo-Heritage", and compatible styles including compatible manifestations of the "West Coast Contemporary" style as determined by the consultant that provide a style bridge between the old urban and modern urban homes. 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 are a wide range of home types evident, and so some flexibility is justified. Home type (Two-Storey, Bungalow, Basement Entry, Split Level, etc..) will not be regulated in the building scheme.
- 4) **Massing Designs** : Massing designs should meet new standards for RF-13 zoned subdivisions. New homes should exhibit "mid-scale" massing. Various elements and projections on the front of the home should be interesting architecturally, and should be in pleasing natural proportions to one another. These elements and projections should be located so as to create balance across the façade.
- 5) **Front Entrance Design** : Front entrance porticos range from one to 1 ½ storeys in height. The recommendation is to limit the range of entrance portico heights to between one storey and 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, fibre cement board, brick, and stone. Reasonable flexibility should therefore be permitted, including the use of vinyl siding, provided the overall quality of wall cladding materials meets or exceeds common standards for post year 2017 developments.
- 7) **Roof surface** : Roof surfacing materials used in this area include shake profile concrete roof tiles, and asphalt shingles in a variety of profiles. 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. Where required by the BC Building Code for lower slope applications membrane roofing products can be permitted subject to consultant approval. Small decorative metal roofs should also be permitted.
- 8) **Roof Slope** : The recommendation is to set the minimum roof slope at 6:12. Steeper slopes will be encouraged, especially on street facing roof projections. However, a relatively low 6:12 slope may be required to meet maximum height as specified in the RF-13 bylaw. A provision is also recommended to allow slopes less than 6:12 where it is determined by the consultant that the design is of such high architectural integrity that the roof slope reduction can be justified, or that lower slopes are needed on feature projections or at the front entrance veranda to ensure upper floor windows can be installed without interference with the roof structure below.

**Streetscape:** There is a stark dichotomy between the 45-60 year old small (700-1000 sq.ft.) "Old Urban" and "West Coast Traditional" simple low mass Bungalows (and one Split Level), and the new (less than 10 years old) 2800 sq.ft. "Neo-Traditional", "Neo-Heritage", and "West Coast Contemporary" Two-Storey homes. The new homes, representing 55% of the housing stock in this area, have well balanced, consistently proportioned, architecturally interesting, mid-scale massing characteristics. These homes have roof slopes ranging from 7:12 to 20:12, though most are at 8:12. Roofs are main common hip or common gable forms with a shake profile asphalt shingle roof surface. Gable ends are articulated with shingles or other wood detailing. Homes are clad with vinyl, stucco, or Hardiplank (or other fibre cement board) and more than half of these homes have a significant stone feature accent. All of these newer homes can be considered suitable "context homes"

## 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: "Traditional", "Heritage", "Neo-Traditional", "Neo-Heritage", compatible forms of "West Coast Contemporary", or other compatible styles with appropriate transitions in massing and character, as determined by the design *consultant*. Note that the proposed style range is not contained within the building scheme, but is contained within the residential character study which forms the basis for interpreting building scheme regulations.
- a new single family dwelling *constructed* on any *lot* meets year 2017'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" including 10711, 10705, 10699, 10625, 10617, and 10605 - 160 Street. Homes will therefore be in a compatible style range, including "Neo-Traditional", "Neo-Heritage" and "West Coast Contemporary" styles (note however that style range is not specifically regulated in the building scheme). New homes will have similar or better massing designs (equal or lesser massing scale, consistent proportionality between various elements, and balance of volume across the façade). New homes will have similar roofing materials. Wall cladding, feature veneers and trim treatments will meet or exceed standards found on the aforesaid context homes.

#### **Exterior Materials/Colours:**

Stucco, Cedar, Vinyl, Fibre-Cement Board, Brick, and Stone.

"Natural" colours such as browns, greens, clays, and other earth-tones, and "Neutral" colours such as grey, white, and cream are permitted. "Primary" colours in subdued tones such as navy blue, colonial red, or forest green can be considered providing neutral trim colours are used, and a comprehensive colour scheme is approved by the consultant. "Warm" colours such as pink, rose, peach, salmon are not permitted. Trim colours: Shade variation of main colour, complementary, neutral, or subdued contrast only.

**Roof Pitch:** Minimum 6:12, with exceptions to prevent roof ridges from becoming too high (overshadowing of neighbouring lots), to allow for veranda roofs that do not cover upper floor windows, to allow for artistic expression in feature roofs, and to provide a path for exceptional designs with lower slope roofs to be approved subject to consultant approval.

**Roof Materials/Colours:** Cedar shingles, shake profile concrete roof tiles, shake profile asphalt shingles with a raised ridge cap, and new environmentally sustainable roofing products should be permitted, providing that the aesthetic properties of the new materials are equal to or better than that of the traditional roofing products. Greys, black, or browns only. Membrane roofs permitted where required by B.C. Building Code, and small metal feature roofs also permitted.

**In-ground basements:** In-ground basements are subject to determination that service invert locations are sufficiently below grade to permit a minimum 50 percent in-ground basement to be achieved. If achievable, 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, stamped concrete, or coloured concrete in dark earth tones or medium to dark grey only. Broom finish concrete is permitted only where the driveway directly connects the lane to the garage slab at the rear side of the dwelling.

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

**Summary prepared and submitted by:** Tynan Consulting Ltd.      **Date:** June 21, 2018

**Reviewed and Approved by:**       **Date:** June 21, 2018

### Tree Preservation Summary

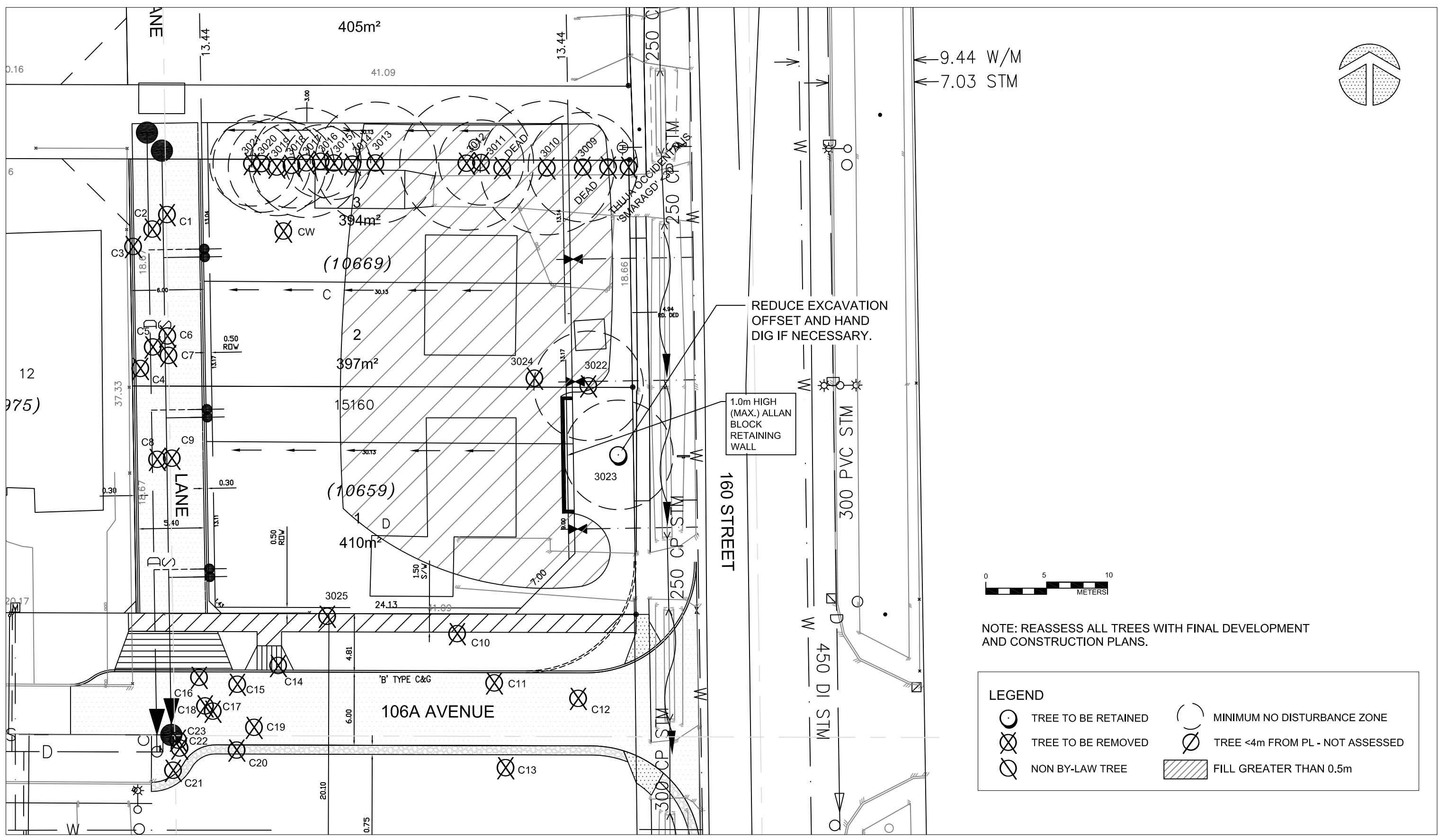
Surrey Project No: 18-0177-00  
Address: 10659 / 10669 - 160 Street  
Registered Arborist: Corey Plester #PN-8523A

On-Site Trees	Number of Trees
<b>Protected Trees Identified</b> (on-site and shared trees, including trees within boulevards and proposed streets and lanes, but excluding trees in proposed open space or riparian areas)	40
<b>Protected Trees to be Removed</b>	39
<b>Protected Trees to be Retained</b> (excluding trees within proposed open space or riparian areas)	1
<b>Total Replacement Trees Required:</b>  - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio 16 X one (1) = <u>16</u>  - All other Trees Requiring 2 to 1 Replacement Ratio 23 X two (2) = <u>46</u>	62
<b>Replacement Trees Proposed</b>	4
<b>Replacement Trees in Deficit</b>	58
<b>Protected Trees to be Retained in Proposed [Open Space / Riparian Areas]</b>	NA

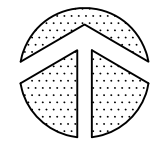
Off-Site Trees	Number of Trees
<b>Protected Off-Site Trees to be Removed</b>	0
<b>Total Replacement Trees Required:</b>  - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio 0 X one (1) = 0  - All other Trees Requiring 2 to 1 Replacement Ratio 0 X two (2) = 0	0
<b>Replacement Trees Proposed</b>	NA
<b>Replacement Trees in Deficit</b>	NA

Summary report and plan prepared and submitted by: Mike Fadum and Associates Ltd.	
Signature of Arborist:	Date: August 23, 2018



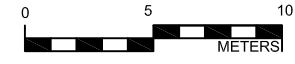


← 9.44 W/M  
← 7.03 STM



REDUCE EXCAVATION  
OFFSET AND HAND  
DIG IF NECESSARY.

1.0m HIGH  
(MAX.) ALLAN  
BLOCK  
RETAINING  
WALL



NOTE: REASSESS ALL TREES WITH FINAL DEVELOPMENT  
AND CONSTRUCTION PLANS.

LEGEND			
	TREE TO BE RETAINED		MINIMUM NO DISTURBANCE ZONE
	TREE TO BE REMOVED		TREE <4m FROM PL - NOT ASSESSED
	NON BY-LAW TREE		FILL GREATER THAN 0.5m

STAMP	NO.	DATE	BY	REVISION
	1	AUG22/18	MK	UPDATED SURVEY & GRADING PLAN

**MIKE FADUM AND ASSOCIATES LTD.**  
**VEGETATION CONSULTANTS**

#105, 8277 129 St.  
Surrey, British Columbia  
V3W 0A6  
Ph: (778) 593-0300  
Fax: (778) 593-0302  
Email: [mfadum@fadum.ca](mailto:mfadum@fadum.ca)

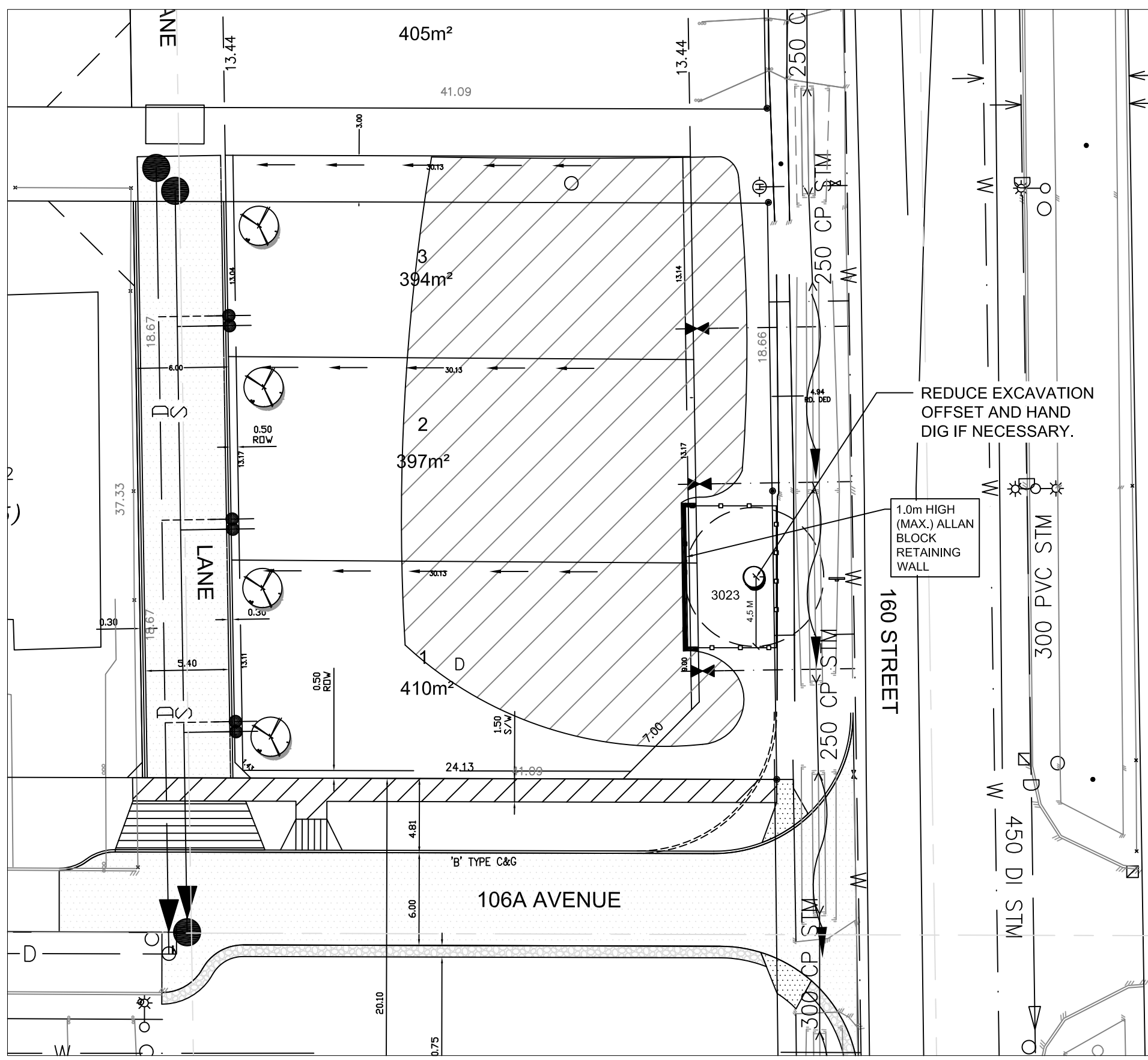
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PROJECT TITLE  
**10659 & 10669  
160 STREET  
SURREY, B.C.**

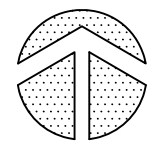
SHEET TITLE  
**T1 - TREE REMOVAL AND  
PRESERVATION PLAN**  
CLIENT

DRAWN  
MK  
SCALE  
AS SHOWN  
DATE  
JULY 4, 2018

**T-1**  
SHEET 1 OF 2

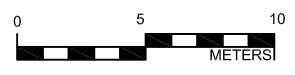


← 9.44 W/M  
← 7.03 STM



REDUCE EXCAVATION  
OFFSET AND HAND  
DIG IF NECESSARY.

1.0m HIGH  
(MAX.) ALLAN  
BLOCK  
RETAINING  
WALL



NOTE: REASSESS ALL TREES WITH FINAL DEVELOPMENT  
AND CONSTRUCTION PLANS.

NOTE: NON BY-LAW TREES HAVE BEEN  
REMOVED FROM THE PLANS.

NOTE: TREE PROTECTION FENCING TO BE MEASURED FROM THE  
OUTER EDGE OF TREE TRUNK AND SHALL BE CONSTRUCTED TO  
MUNICIPAL STANDARDS.  
REASSESS TREES WITH LOT GRADING PLANS.

NOTE: REPLACEMENT TREES SHALL CONFORM TO CNLA LANDSCAPE  
STANDARDS.  
SPECIES AND LOCATIONS TO BE DETERMINED AT LANDSCAPE STAGE.  
REPLACEMENT TREES TO BE MIN. 3m FROM FOUNDATIONS AND MIN. 1m  
FROM PROPERTY LINES.

**LEGEND**

- TREE TO BE RETAINED
- MINIMUM NO DISTURBANCE ZONE
- TREE PROTECTION FENCING
- DECIDUOUS REPLACEMENT TREE (5CM DIA) MINIMUM
- FILL GREATER THAN 0.5m

NO.	DATE	BY	REVISION
1	AUG22/18	MK	UPDATED SURVEY & GRADING PLAN

**MIKE FADUM AND ASSOCIATES LTD.**  
**VEGETATION CONSULTANTS**

#105, 8277 129 St.  
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PROJECT TITLE  
**10659 & 10669  
160 STREET  
SURREY, B.C.**

SHEET TITLE  
**T2 - TREE PROTECTION  
PLAN**

DRAWN  
MK  
SCALE  
AS SHOWN  
DATE  
JULY 4, 2018

**T-2**  
SHEET 2 OF 2