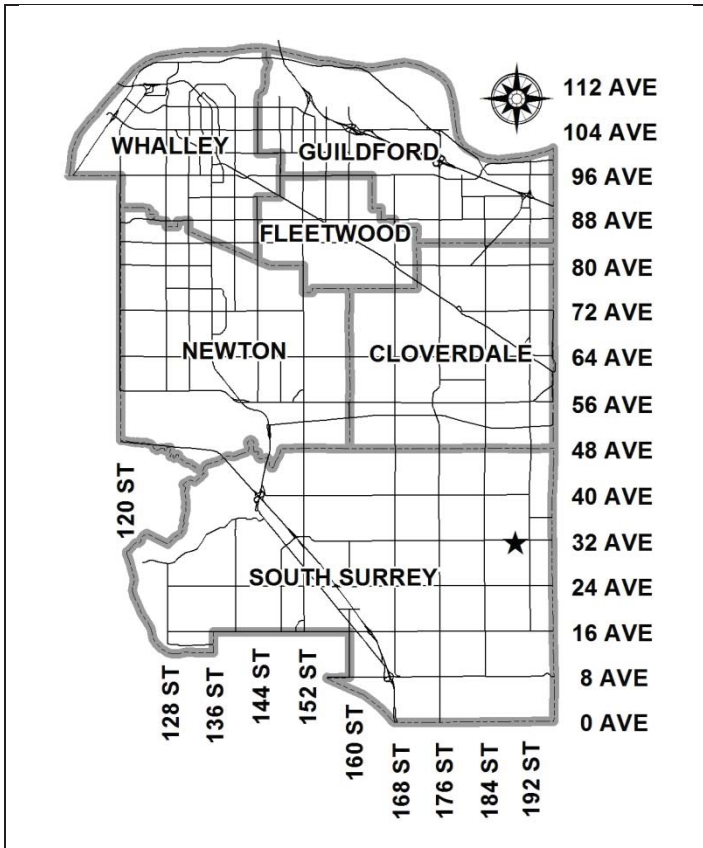


City of Surrey  
**PLANNING & DEVELOPMENT REPORT**

File: 7916-0332-00

Planning Report Date: April 24, 2017

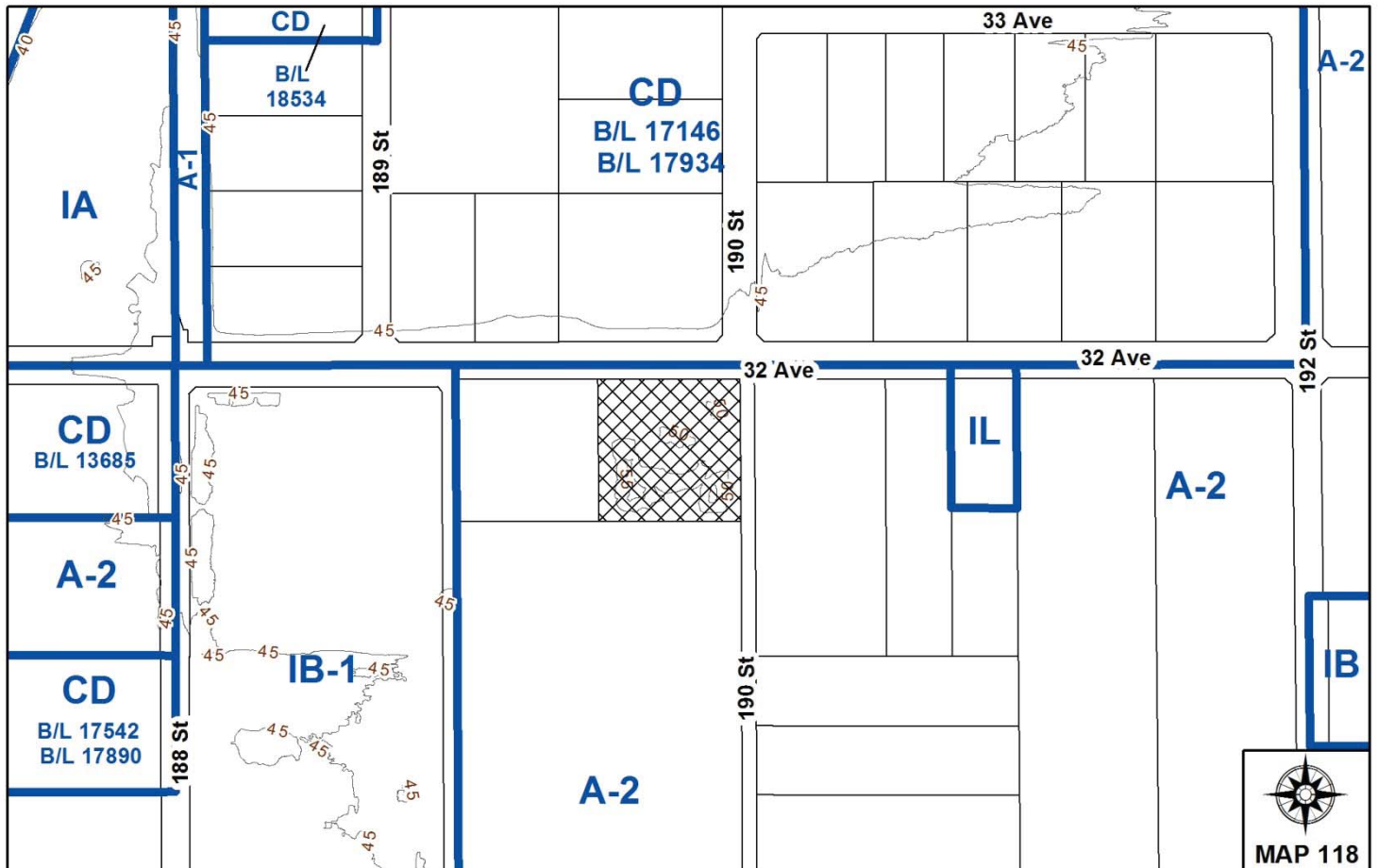


**PROPOSAL:**

- **Rezoning from A-2 to IB-1**
- **General Development Permit**

to allow for future light industrial or business park uses on the property.

**LOCATION:** 18992 - 32 Avenue  
**OWNER:** B & B Contracting Ltd.  
**ZONING:** A-2  
**OCP DESIGNATION:** Mixed Employment  
**LAP DESIGNATION:** Business Park (Office) and Landscaping Strips



RECOMMENDATION SUMMARY

- By-law Introduction and set date for Public Hearing for Rezoning.
- Approval to draft a General Development Permit.

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- None.

RATIONALE OF RECOMMENDATION

- The proposal complies with the site's "Mixed Employment" Official Community Plan (OCP) Designation.
- The proposed zoning and uses comply with the Campbell Heights Business Park Plan.

RECOMMENDATION

The Planning & Development Department recommends that:

1. a By-law be introduced to rezone the subject site from "Intensive Agricultural Zone (A-2)" to "Business Park 1 Zone (IB-1)" and a date be set for Public Hearing.
2. Council authorize staff to draft Development Permit No. 7916-0332-00 generally in accordance with the attached drawings (Appendix IV).
3. Council instruct staff to resolve the following issues prior to final adoption:
  - (a) ensure that all engineering requirements and issues including restrictive covenants, dedications, and rights-of-way where necessary, are addressed to the satisfaction of the General Manager, Engineering;
  - (b) submission of a finalized tree survey and a statement regarding tree preservation to the satisfaction of the City Landscape Architect;
  - (c) resolution of all urban design issues to the satisfaction of the Planning and Development Department;
  - (d) registration of a Section 219 Restrictive Covenant to adequately address the City's needs with respect to public art, to the satisfaction of the General Manager Parks, Recreation and Culture;
  - (e) the applicant satisfy the deficiency in tree replacement on the site, to the satisfaction of the Planning and Development Department; and
  - (f) registration of a Section 219 Restrictive Covenant to prohibit any use that requires a Metro Vancouver air quality permit from locating on the site.

REFERRALS

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

SITE CHARACTERISTICS

Existing Land Use: Vacant lot cleared of vegetation

Adjacent Area:

<b>Direction</b>	<b>Existing Use</b>	<b>OCP/LAP Designation</b>	<b>Existing Zone</b>
North (Across 32 Avenue):	Vacant lot (Development Application No. 7914-0358-00 received Final Approval November 7, 2016)	Mixed Employment/ Business Park and Landscaping Strips	CD (By-law Nos. 17146/17934)
East (Across 190 Street):	Residential/agricultural uses	Mixed Employment/ Business Park (Office), Business Park, and Landscaping Strips	A-2
South	Agricultural use with residence and large scale greenhouse operations	Mixed Employment/ Business Park	A-2
West	Single family dwelling and accessory structures on a large agricultural lot	Mixed Employment/ Business Park (Office), Business Park, and Landscaping Strips	A-2

DEVELOPMENT CONSIDERATIONSContext

- The subject property is 1.0 hectares (2.5 acres) in size. It is located at 32 Avenue and 190 Street in the Campbell Heights area and is designated "Mixed Employment" in the Official Community Plan (OCP). The Campbell Heights Land Use Plan designates the majority of the property for "Business Park (Office)" with an area along the north boundary designated "Landscaping Strips".

Current Proposal

- The applicant proposes to rezone the property from "Intensive Agricultural Zone (A-2)" to "Business Park 1 Zone (IB-1)" in order to allow the creation of a business park development.
- A General Development Permit (DP) for form and character is proposed to establish guidelines and design standards to achieve high quality developments and includes parameters for the detailed site, building and landscape design of the lands (Appendix II). A detailed development permit is not proposed at this time.
- Access to the site is proposed from 190 Street only.

### General Development Permit for Form and Character

- The proposed General Development Permit (DP) was drafted based on the Official Community Plan (OCP) Guidelines for industrial developments and the Campbell Heights LAP Design Guidelines (Appendix IV). It will be used to guide future development on the subject site. A future detailed DP will be needed for the ultimate development on the site and the Generalized DP establishes the guidelines to evaluate the future DP. The following specific areas are detailed in the General DP:
  - Site design, form and architectural character;
  - Landscaping;
  - Transportation;
  - Signage;
  - Environment and Sustainability; and
  - Crime Prevention Through Environmental Design (CPTED).
- The proposed form of development is consistent with the existing development in the Campbell Heights area in terms of quality, building siting, and design character.

### Air Emissions

- At the April 3, 2017 Regular Council –Land Use meeting, Council instructed staff to review the City’s business park zones and subsequently provide a report regarding the Metro Vancouver air emissions permitting process.
- Because the review of the business park zones has not been completed, staff are recommending that the applicant register a restrictive covenant to prohibit any business that requires a Metro Vancouver air quality permit from locating on the site.
- If any applicable amendments to the business park zones are completed before the subject application receives final approval, the requirement for the restrictive covenant may no longer apply.

### DESIGN PROPOSAL AND REVIEW

- The design guidelines provided by the applicant (Appendix IV) have been reviewed by staff and found to be acceptable.

### PRE-NOTIFICATION

- Pre-notification letters were sent on September 15, 2016 to 26 properties within 100 metres (328 ft.) of the site, as well as the Little Campbell Watershed Society. A development proposal

sign was erected on April 4, 2017. Staff have not received any responses to the public notification.

## TREES

- Vanessa Melney, 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>Coniferous Trees</b>			
Douglas Fir	26	13	13
Pine	1	1	0
<b>Total (excluding Alder and Cottonwood Trees)</b>	<b>27</b>	<b>14</b>	<b>13</b>
<b>Total Replacement Trees Proposed (excluding Boulevard Street Trees)</b>		<b>0</b>	
<b>Total Retained and Replacement Trees</b>		<b>13</b>	
<b>Contribution to the Green City Fund</b>		<b>\$11,200.00</b>	

- The Arborist Assessment states that there are a total of 27 protected trees on the property. 18 trees are located within the road dedication area and 9 trees are on the development site. The 9 on-site trees will be retained as part of the current application and will be reviewed in further detail as part of the future detailed Development Permit.
- Staff have worked with the applicant to retain some trees within the 32 Avenue road dedication. The applicant is required to dedicate approximately 5.0 metres (16 feet) from the northern side of the property for 32 Avenue construction and proposes to dedicate an additional 2.5 metres (8.2 feet) in the northeast corner to allow for retention of four trees. An additional two trees in this area may be retained pending further review at detailed servicing stage.
- The additional dedication is required in order to shift the sidewalk alignment to the south side of the trees. Alternative sidewalk designs will be considered to maximize the viability of the retained trees.
- Where the additional dedication is taken, the 6.0 metre (19.7 foot) landscaping setback can be reduced to accommodate the sidewalk re-alignment. A Development Variance Permit will be required at the detailed Development Permit stage to allow for the reduced landscaping width.

- For those trees that cannot be retained, the applicant will be required to plant trees on a 2 to 1 replacement ratio. This will require a total of 28 replacement trees on the site. There are no replacement trees proposed at this time, and therefore, the deficit of 28 replacement trees will require a cash-in-lieu payment in the range of \$11,200, representing \$400 per tree, to the Green City Fund, in accordance with the City's Tree Protection By-law.
- In summary, a total of 13 trees are proposed to be retained or replaced on the site with a contribution of \$11,200 to the Green City Fund.

### SUSTAINABLE DEVELOPMENT CHECKLIST

The applicant prepared and submitted a sustainable development checklist for the subject site on April 4, 2017. 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"> <li>• The subject property is located within the Campbell Heights Local Area Plan (LAP), and is designated "Business Park (Office)" and "Landscaping Strips".</li> <li>• The proposed development meets the intent of the OCP and the LAP as the site is intended for business park or light industrial uses in the Campbell Heights LAP.</li> </ul>
2. Density & Diversity (B1-B7)	<ul style="list-style-type: none"> <li>• Permitted Gross Density: 1.00 FAR (based on the proposed IB-1 zoning)</li> </ul>
3. Ecology & Stewardship (C1-C4)	<ul style="list-style-type: none"> <li>• Proposed development will incorporate rain water management design considerations, including absorbent soils, bio-swales, dry swales, natural landscaping, and permeable pavement/surfaces.</li> <li>• As per the Campbell Heights LAP requirements, the development will provide extensive green space, including high quality landscaping design and treatment.</li> </ul>
4. Sustainable Transport & Mobility (D1-D2)	<ul style="list-style-type: none"> <li>• Approximately 187 metres of sidewalks are proposed on site.</li> <li>• Bike racks will be provided as part of the ultimate development of the site.</li> </ul>
5. Accessibility & Safety (E1-E3)	<ul style="list-style-type: none"> <li>• The development will provide an outdoor gathering space.</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>• N/A</li> </ul>

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.	Site Plan
Appendix III.	Engineering Summary
Appendix IV	General Development Permit
Appendix V	Summary of Tree Survey and Tree Preservation

*Original signed by Ron Hintsche*

Jean Lamontagne  
General Manager  
Planning and Development

MJ/da





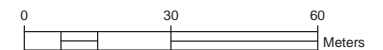
## DEVELOPMENT DATA SHEET

Proposed Zoning: IB-1

Requires Project Data	Proposed
<b>GROSS SITE AREA</b>	
Acres	2.5 acres
Hectares	1.01 hectares
<b>NUMBER OF LOTS</b>	
Existing	1
Proposed	1
<b>SIZE OF LOTS</b>	
Range of lot widths (metres)	88 metres
Range of lot areas (hectares)	8,585 m <sup>2</sup>
<b>DENSITY</b>	
Lots/Hectare & Lots/Acre (Gross)	N/A
Lots/Hectare & Lots/Acre (Net)	N/A
<b>SITE COVERAGE (in % of gross site area)</b>	
Maximum Coverage of Principal & Accessory Building	60%
Estimated Road, Lane & Driveway Coverage	5%
Total Site Coverage	65%
<b>PARKLAND</b>	
Area (hectares)	0
% of Site	0%
<b>Required</b>	
<b>PARKLAND</b>	
5% money in lieu	NO
<b>TREE SURVEY/ASSESSMENT</b>	
	YES
<b>MODEL BUILDING SCHEME</b>	
	NO
<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

Campbell Hts Industrial  
Rezoning and Development Permit  
18992 32 Ave, Surrey, BC

**PROPOSED PLAN**



LEGAL DESCRIPTION  
SECTION 21 TOWNSHIP 7 NWD  
LEGAL SUBDIVISION 15, E1/2 PCL A  
(REF PL 5278).

PID: 013-239-619

GROSS SITE AREA  
1.01 hectares / 2.50 acres (approx.)  
  
NET SITE AREA  
0.83 hectares / 2.07 acres (approx.)

EXISTING DESIGNATIONS  
Zoning: A-2  
LAP: Business Park (Office)  
OCP: Mixed Employment

PROPOSED DESIGNATIONS  
Zoning: IB-1  
LAP: Business Park (Office)  
OCP: Mixed Employment

LOT YIELD  
Existing Number of Lots: 1  
Proposed Number of Lots: 1



Scale: 1:1000



Project No.: 16-451  
Date: 19 / 04 / 2017

Drawing  
**1**

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

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

**DATE: April 19, 2017**                      **PROJECT FILE: 7816-0332-00**

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**RE: Engineering Requirements (Commercial/Industrial)  
Location: 18992-32 Avenue**

**REZONE**

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

- dedicate 4.942 metre on 32 Avenue for the ultimate 30 m Arterial Rd. with an additional 2.5 metre at the eastern end of the site for tree retention.
- dedicate 12.00 metres on 190 Street toward an ultimate 24 m Collector Rd.
- dedicate 6.0m x 6.0m corner cut at the intersection of 32 Avenue and 190 Street.
- provide 0.5 metre statutory right-of-way on 32 Avenue and 190 Street for maintenance of City infrastructure

***Works and Services***

- construct 190 Street to a collector standard. Driveway access must be from 190 Street.
- construct a sidewalk along 32 Ave. subject to City funding.
- construct sanitary sewer, storm sewer and water main on 190 Street.
- complete a detailed stormwater management review consistent with the Erikson/Burrows Integrated Stormwater Management Plan and provide on-site stormwater management measures as required.
- provide service connections to the lot.

A Servicing Agreement is required prior to Rezone/Subdivision.

**DEVELOPMENT PERMIT**

There are no engineering requirements, beyond those listed above, relative to issuance of the Generalized Development Permit. Further requirements may arise through the Detailed Development Permit and Building Permit review stage.



Rémi Dubé, P.Eng.  
Development Services Manager

LR1



**Building Design Guidelines**

Site Address: 18992 32nd Avenue, Surrey, BC  
Surrey File No.: 16-0332

Project No. 16-451

March 9, 2017

Aplin & Martin Consultants Ltd.



**APLIN MARTIN**  
ENGINEERING ARCHITECTURE PLANNING SURVEYING

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## 1.0 GENERAL DEVELOPMENT PERMIT CONCEPT

### 1.1 Background

The development site at 18992 32<sup>nd</sup> Avenue is designated 'Mixed Employment' in the City of Surrey's Official Community Plan (OCP); and 'Business Park (Office)' in the Campbell Heights Local Area Plan (LAP). The total site area measures 1.01 hectares (2.50 acres) in size and the site is bounded by 32<sup>nd</sup> Avenue to the north and 190<sup>th</sup> Street to the east (**See Appendix A – Subject Site and Appendix B – Site Plan**).

The site is currently zoned A-2 'Intensive Agricultural', but is proposed to be rezoned to IB-1 'Business Park 1' (Surrey File No. 16-0332). This zone is intended to permit development of industrial business parks with a high design standard.

The site is mostly cleared of trees with fill material deposited on site. Trees are located at the edges of the property along the west property line, 32<sup>nd</sup> Avenue, and 190<sup>th</sup> Street. A certified Arborist was retained to provide an inventory of these trees.

The purpose of this general Development Permit is to prepare the site for development through road dedication, rezoning, and landscaping in advance of a final industrial use being secured. This is a similar process that was approved on adjacent sites, north of 32<sup>nd</sup> Avenue.

### 1.2 Intent

This general Development Permit provides direction and context to the overall planning and design of the proposed business park lot in Campbell Heights, on the south-west corner of 32<sup>nd</sup> Avenue and 190<sup>th</sup> Street.

The following guidelines promotes a high standard of design consistencies with the Development Permit Guidelines in the OCP, the Campbell Heights LAP and other Business Park Design Guidelines used in the Campbell Heights area. Development and future layout of the lot shall conform to the Industrial Business Park IB-1 Zone.

## 2.0 DESIGN OBJECTIVES

Future development should create a high quality, attractive, sustainable and accessible business park environment. The design objectives for development are to:

- Promote business investment and increase the attractiveness of Campbell Heights through high quality sustainable design and good planning principles.
- Promote a harmonious and cohesive character with surrounding development.
- Accommodate a range of user types within the context of the Campbell Heights Land Use Plan.
- Integrate urban design and environmental stewardship within the development process.
- Encourage a pedestrian-friendly environment.

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### 3.0 SITE DESIGN

This section is intended to guide the design of the subject site within the context of the Campbell Heights Business Park. It will provide guidance towards creating an aesthetically pleasing and functional relationship between physical site elements such as buildings, parking, loading areas, landscaping, and open spaces.

Overall, the design of the new development shall be reflective of the characteristics of surrounding development while enhancing the area through quality architecture, landscaping and site layout.

- The development of the site must conform to Zoning Bylaw requirements and the guidelines provided.
- The design will emphasize high quality built form, site layout and landscaping, while retaining as many viable trees as possible (Figure 1).



*Figure 1 - Landscaping*

#### 3.1 Site Layout

- The subject site is expected to respect the surrounding sites to ensure an attractive and compatible interface.
- The principal building shall be anchored at the corner of 32<sup>nd</sup> Avenue and 190<sup>th</sup> Street and is designed to be visually attractive from both streets.
- Buildings shall be oriented towards the street with the primary public functions located at the front of the building.
- Building setbacks shall be determined in accordance with the proposed IB-1 zone similar to adjacent sites on 32<sup>nd</sup> Avenue and 190<sup>th</sup> Street.
- Consideration of pedestrian movement shall be incorporated into the site design. Links shall be provided between the main building entrances and the City sidewalk with on-site sidewalks.
- Allocated outdoor area of respite for workers and a corner feature plaza at the corner of 32<sup>nd</sup> Avenue and 190<sup>th</sup> Street. Both outdoor areas are to contain fixed seating, landscaping and decorative paving.
- Crime Prevention Through Environmental Design (CPTED) principles should be applied (See Section 8.0).

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## 3.2 Site Access

- All site access points shall conform to the City of Surrey Engineering standards, and be located to provide the most efficient and functional flow of traffic while mitigating potential conflicts with adjacent streetscapes and site features.
- Site access must not be located within 3.5 metres of the side property line, except in a shared access arrangement.
- Site access directly from 32<sup>nd</sup> Avenue is not permitted at this time but is subject to City review at the time of Building Permit submission.
- Primary two-way site access is to be located on 190<sup>th</sup> Street.

## 3.3 Onsite Circulation

- All truck turning movement must be accommodated on site.
- Parking lots and driveways shall be designed to minimize conflict between vehicular and pedestrian traffic.
- Place speciality paving on the driveway entrance for a minimum distance of 12 metres (if off 32<sup>nd</sup> Avenue) or 6 metres (if off 190<sup>th</sup> Street) from the property line, of which stamped asphalt is not acceptable.
- Walkways shall be provided to facilitate pedestrian movement to and from main entrances, as well as connect to parking areas and public sidewalks.
- Features such as distinct paving, special landscaping with trees, benches and overhead weather protection shall be incorporated into pedestrian pathway design (Figure 2).



*Figure 2 - Landscaped Pedestrian Route*

## 3.4 Parking Requirements

- Parking will conform to the City of Surrey Off-Street Parking and Loading / Unloading Bylaw.
- Parking spaces at the end of a row shall be protected from turning vehicles by a curbed landscaped area with a minimum of 1.5-metre width.
- Accessible parking spaces shall be located near building entrances, abutting or within easy access of a landscaped island with curb-cuts or curb let-downs to accommodate wheelchair / scooter movement.
- At-grade bicycle storage shall be provided close to building entrances, in areas with good lighting and visibility.



### 3.5 Off-Street Loading

- Loading bays / overhead garage doors are not permitted along 190<sup>th</sup> Street nor along the side of the building fronting 32<sup>nd</sup> Avenue. Loading areas are only permitted in the rear or side yard of building along shared property lines, and must be separated from vehicle parking.
- Loading areas shall be screened to a height of at least 2.5 metres (8 feet) by buildings, a landscape screen, a solid decorative fence, or a combination thereof.

### 3.6 Outside Storage, Staging and Display Areas

- Outdoor storage of any goods, materials, or supplies is not permitted in the IB-1 zone.
- Garbage and recycling bins shall not be located within front yard or side yards. They must be incorporated in the building or screened, to a height of at least 2.5 meters (Figure 3)
- Such areas shall not encroach on required minimum setbacks and shall not exceed 40% of the site.

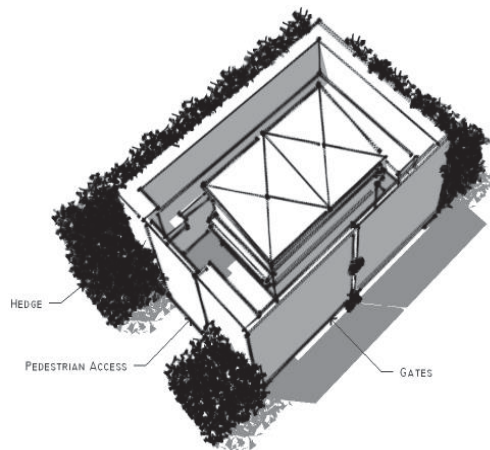


Figure 3 - Example of Garbage and Recycling Bin Screening

## 4.0 ARCHITECTURAL DESIGN

Guidelines in this section are meant to create a positive and unique built environment by ensuring the highest quality of built form that is possible within the framework of functional requirements and cost effectiveness.

### 4.1 Architectural Design Integrity

- Building design in terms of scale, architectural character, rooflines and building mass shall be compatible with other buildings on neighbouring sites.
- Ancillary or secondary building mass shall be designed and constructed consistent with the architecture of the principle building.
- The exterior of buildings shall be coordinated with design on all elevations with regards to colours, materials, architectural form and detailing to achieve design harmony and continuity.

- All doors and windows shall be trimmed whenever such treatment would be compatible with the architectural style of the buildings. Painted or false detailing that distracts from the integrity of structures shall be avoided.
- Windows and glazing that allow for a visual connection to the interior space from outside shall be integrated with the architectural form and character of the building.

## 4.2 Form and Articulation

- Special attention will be given to the architectural expression, articulation of massing, and exterior finishing materials on buildings facing 32<sup>nd</sup> Avenue and 190<sup>th</sup> Street. In particular, facades facing the street must be articulated to establish scale and identity.
- Articulation should be achieved using architectural methods and details more substantial than paint and decoration.
- Variations in massing and changes in height and horizontal planes are encouraged.
- Promote green 'living walls' to break-up massing, and add visual interest to buildings.
- Building design shall be appropriate to the use intended, differentiating the major functional parts within them, and shall be responsive to site opportunities and conditions.
- Office components at the front face buildings shall be visually distinguished from the Warehouse/Industrial use through the use of setbacks and higher quality finishes (Figure 4 & Figure 5).
- Mechanical equipment including electrical kiosks, gas meters, etc., must be screened from the street.



*Figure 4 - Example of Office Building Design*



*Figure 5 - Example of Industrial Warehouse Design*

### 4.3 Exterior Material

- Materials are to be of high quality with a sense of permanence; therefore, entirely pre-engineered or pre-fabricated metal buildings are not acceptable. In addition, the use of sheet and profiled metal cladding is strongly discouraged as a primary cladding material and will not be acceptable except in cases of significant architectural merit (Figure 6).
- All metal products must be pre-formed, pre-finished and installed using the appropriate manufactures' accessories. Panel systems are recommended for office components.
- Materials are encouraged to be unfinished, clear coated or painted with a "natural" finish. Articulation can be achieved by reveal lines, texturing and recessing of materials.
- Standard concrete block is not acceptable as an exterior finish anywhere on the building. Where concrete block is employed, specific attention should be paid to colour, pattern, texture, and finishing. All block must be installed in compliance with good industry practice.
- The predominant method of exterior construction should be tilt up or poured in place concrete, with quality reveals, and a panel system or curtain wall style glazing for office components. Construction must be detailed to avoid extensive blank or uniform wall surfaces.
- Stucco use is to be limited and must be applied in conformance with good industry practice, paying particular attention to joint details and potential staining problems arising from the local climate.
- The use of stucco is not acceptable on the office component.
- Wood siding may be used as an accent material only.
- The use of glazing and high quality materials and finishes is required of buildings facing a street. Blank walls shall be avoided.



*Figure 6 – High Quality Exterior Material*

#### 4.4 Architectural Lighting

- Full cut-off fixtures shall be utilized to avoid excessive lighting, glare and light pollution.
- Where building facades comprise significant area of opaque materials visible to public roads and paths, decorative floodlighting is encouraged to accent recessed or articulated surface.
- Proposed building mounted lighting must be integrated with the architectural expression of the building (Figure 7).
- Entrances shall be well illuminated as a way-finding and safety feature (Figure 8).



*Figure 7 – Architectural Expression*



*Figure 8 – Way-Finding*

#### 4.5 Windows and Entrances

- Windows should respond to interior function and scale of building.
- Residential style windows are not permitted.
- Facade articulation, such as recessed window and doors areas, are encouraged to create depth and variation.
- Windows that provide high levels of natural light to building interiors, such as clerestory windows, are encouraged.
- Main public entrances must be easily identifiable from the street.
- Employee and service entrances must be clearly marked by architectural as well as graphic means.



*Figure 9 – Window Treatment*

#### 4.6 Roofscapes

- All rooftop equipment must be considered as part of the architectural vocabulary, screened so that it is invisible from the street, and incorporated into the design in a manner consistent with the overall architecture of the building.
- Sustainable options for roofscapes shall be explored at time of development (e.g. high albedo or green roofs).

- 
- Incorporate living green rooftops where possible. Encourage a roof design that allows access and use by building employees.
  - The use of skylights to allow for daylight penetration into building interiors is encouraged.

## 5.0 LANDSCAPING

This section is intended to guide the design and installation of landscaping that will enhance the character of Campbell Heights Business Park, by creating a coherent landscape which responds to and reinforces the character of adjacent streetscapes and open spaces.

### 5.1 General Landscaping

- Landscaping elements shall function to define public spaces and provide a transition to private spaces.
- The layout and design of planted areas shall respond to the site and building form and function. Where space permits create layered planting arrangements.
- Plant selection will be based on compatibility with soil and solar exposure. Shrubs, flowers and ground covers are encouraged to be grouped together in clusters rather than in individual scattered locations.
- Plant materials shall provide year-round interest e.g., include a mix of evergreen and flowering plant material as well as form, texture and shape.
- Highlight trees (e.g. specimen or larger calliper trees, highlight shrubs and perennials / annuals) shall be installed adjacent to signage, entry plazas, drive aisles entries and pedestrian accesses from the sidewalk. A double row of alternating trees shall be planted to achieve a canopy affect over all sidewalks adjacent to public roads. Trees should be planted on both sides of sidewalks (i.e. one row within the property line and one row within the public right-of-way).
- Landscaping (trees and shrubs) adjacent to pedestrian corridors shall provide a vertical clear zone from 1.2 metres above-ground to approximately 2.0 metres. This will promote pedestrian safety and increase visibility.
- Native plant species that enhance environmental qualities and provide wildlife habitat shall be incorporated wherever possible.
- Consider the mature state of plants, as long term maintenance is often inconsistent.
- All landscape and plant materials shall meet BC Society of Landscape Architect / BC Nursery Trades Association Standards. All landscape work shall be completed within one year of the start of construction and shall include a one-year material guarantee.
- Landscaping shall be prepared as per the Zoning Bylaw.

### 5.2 Tree Retention in Landscaping

- Site analysis will consider significant trees identified through arborist assessment, as defined in Surrey's Tree Protection Bylaw.
- Every effort is to be made to retain existing trees within and immediately adjacent to landscaping strips.
- Significant trees recommended for retention by a certified Arborist, at the time of the Development Permit, are to be incorporated into the landscape design.

### 5.3 Parking Area

- Provide landscaping within and at the periphery of surface parking lots in order to visually break up and screen parking from public streets and neighbouring properties. Landscaping shall also be used to define parking clusters, highlight pedestrian routes, increase human comfort, provide visual relief and interrupt paved surfaces to increase natural drainage.
- Landscape strips shall be provided at the ends of each parking row, and between every six parking spaces. They shall be at least 1.5 metres wide and include a shade tree (6-centimetre [2.5-inch] callipers preferred) and plant material.
- Provide shade trees and landscaping at the ends of each parking rank (i.e. a group of parking spaces separated by driving aisles) within a landscaping strip located along the side of parking spaces. There shall be at least one shade tree at the ends of a single row of parking spaces and two shade trees at the ends of two adjoining rows (front to front) of parking spaces.
- A maximum distance of approximately 20 meters (66 feet) shall be maintained between trees within a fronting street parking lot.
- Reduce the amount of impermeable asphalt paving in parking areas by introducing a variation in paving materials (e.g. concrete, decorative pavers and a continuous, shallow concrete gutter or swale with rolled edges). Typical locations for decorative paving include vehicle entrances, pedestrian crossings and adjacent to the main building entrance.
- Permeable paving should be used wherever possible (Figure 10).



*Figure 10 - Permeable Pavement*

### 5.4 Screening and Fencing

- Loading areas, outdoor storage, service areas, garbage containers and utility boxes shall be integrated into landscaping and screened from general public view.
- Define areas for private use and public use through landscaping and architectural features (such as bollards and raised planters). Screen features shall be designed to maintain opportunities for casual surveillance from the street.
- Avoid using fencing along property lines that abut streets. When a fence is unavoidable, a transparent fence combined with other landscaping features shall be used. Transparent fences combined with landscaping can be used at the property line.
- Fencing or gating shall only be installed when required for specific screening, security, or safety purposes.

- Gates are to be of high quality design and material, such as custom metal fabrication. Chain-link material is to be avoided.

## 5.5 Site Lighting

- Public spaces, entrances, outdoor amenities and pedestrian routes shall be well lit. Concentrate brighter levels in areas such as entries and paths, and create a transition to lower light levels away from areas where light is not needed.
- Sidewalk lighting shall be mounted as to direct light onto the walking surfaces. Bollard lighting is recommended for pedestrian areas.
- Specially lit and landscaped identification signs, ponds, fountains, decorative pavers, and enhanced landscaped medians are encouraged.
- Avoid up-lights and other light polluting fixtures.
- Consider glare to motorists and adjacent properties when providing appropriate light levels. Utilize “Full cut-off fixtures” where appropriate (Figure 11).
- In landscaped open spaces, particular attention should be given to relationships between lighting and planting.
- For consistency between developments, the type of street lamps on public streets, their height, intensity, and spacing, etc., will be coordinated by Surrey’s Engineering Department through the servicing agreement process.
- Where appropriate, consider installing outdoor lighting activated by photocells and/or timers.
- Lighting along pedestrian pathways shall not exceed 4 metres (13 feet) in height. Fixtures and poles should be in a colour that complements the building’s architecture and parking lot lighting.
- Parking lot light standards are not to exceed 9 metres (30 feet) in height. Fixtures and poles should be in a colour that complements the building’s architecture.
- Locate luminaires in difficult to reach places. Mount fixtures high on walls, in inaccessible locations or recessed into the building structure, to help prevent vandalism.



*Figure 11 - Full Cut-Off Fixtures*



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## 6.0 SIGNAGE

Guidelines in this section are intended to regulate development signage within an overall signage system that will both contribute to and reinforce the character and image of the Business Park.

- All signage shall meet the requirements of the City of Surrey Sign Bylaw.
- Building facade signs shall be oriented to a single fronting street, subject to the requirements of the Surrey Sign Bylaw.
- Signage should clearly identify businesses and reflect the aesthetic integrity of the neighbourhood.
- Integrate signs into the building design where possible and design signs to present a unified appearance.
- Free-standing signs shall be integrated into the site landscaping and designed to complement the architecture of the buildings on site.
- Free-standing signs shall fully minimize the structure and design of non-copy areas.
- Maximum height of any free-standing sign is 2.4 meters (8 feet) above grade. The grade at the base of the sign should not exceed the average adjacent grade by more than 0.6 meters (2 feet).
- Avoid backlit acrylic or plastic “box” type signs unless they are integrated into the overall building design. Avoid locating illuminated signs next to residential sites.
- Animated electronic signs are not permitted.
- Single or double pole freestanding pylon signs are not permitted.

## 7.0 ENVIRONMENT AND SUSTAINABILITY

### 7.1 Sustainable Buildings and Design

- Projects should be planned and designed to address guidelines for sustainable development contained in the Campbell Heights LAP. In addition, projects are encouraged to use LEED (Leadership in Energy and Environmental Design) or similar green building rating systems and include features such as sustainable sites, water conservation, energy efficiency, renewable, recycled and local materials and good indoor air quality, for example:
  1. On-site storm water management; designated carpool parking stalls and on-site bicycle racks;
  2. Water Conservation - Lower volume plumbing fixtures Low maintenance / drought resistant landscaping and permeable paving;
  3. Energy Efficiency - Energy efficient mechanical and lighting systems; and
  4. Materials - Green materials such as FSC Certified wood. Green construction methods (construction waste management).

Developers are also encouraged to take advantage of energy efficiency programs, incentives, and design support offered by utilities such as BC Hydro or Fortis BC.

### 7.2 Energy and Water Efficiency

- Buildings should be designed to reduce energy consumption by incorporating solar access, shading, maximizing the amount of daylight into interior spaces and by providing windows that can open, where possible. For example:

- Maximize the southern exposure and provide shading devices to minimize heat gain during the summer;
- Maximize the amount of glazing and windows on south facing exterior walls; and,
- Incorporate skylights, interior courtyards, or provide terracing that allows for daylight penetration into building interiors, etc.
- Explore opportunities for the use of energy efficient mechanical and electrical equipment and fixtures such as LED lighting and water conserving plumbing fixtures.
- Consider incorporating alternative and renewable energy production systems at the outset of the design stage to reduce dependence on traditional energy sources for heating, lighting and cooling purposes.
- Work with BC Hydro and City of Surrey to explore district energy options, promote high performance buildings and reduce the use of electricity overall.
- Consider using permeable materials for outdoor surfaces, subject to considerations of the water table in the area and approval of the Engineering Department.
- Work with the City of Surrey to set minimum standards for energy efficiency for new development.

### 7.3 Stormwater Management – Lot Drainage

- Reduce stormwater run-off and maximize pervious surfaces through the use of features such as bio-swales, rain gardens and infiltration trenches.
- Bio-swales are to be located on private property flanking public sidewalks or parking areas.
- Consider using permeable materials for outdoor surfaces such as parking areas (subject to consideration of the water table in the area, and approval by the Engineering Department).
- Promote living green roofs and green walls where appropriate.
- Implement onsite exfiltration systems to mitigate the increased imperviousness of individual lots as they are developed.
- Roof top downspouts are to be directed to the onsite stormwater features, such as bio-swales, rain gardens and infiltration trenches. Controlled flow roof drains shall be considered for onsite detention.
- Provide civil site plan to show onsite storm water management and grading concept at Development Permit stage.



*Figure 12 – Bio-swale*

### 7.4 Vegetation

- Apply erosion and sedimentation controls to protect/reuse top soil and prevent storm sewer sedimentation.

- 
- Implement a minimum depth of 450 millimetres of topsoil in all landscaped areas to allow for greater runoff retention.
  - Maximize the quantity of native plant species, but take into consideration energy efficiency and conservation in the selection of plant material (e.g. use species that conserve water, moderate the effects of wind, provide shade in summer to reduce energy requirements for cooling, allow sunlight and daylight to buildings, and/or reduce the extent of paved surfaces to allow natural drainage).
  - Incorporate green-screen/living-screen walls that utilize landscaping and vines rather than concrete material on conjunction with landscaping features such as berming, and screening.
  - Include tree species with large canopies where appropriate.

## 7.5 Innovative Practices

- Investigate eco-industrial networking in order to develop new local and regional business relationships. Eco-industrial networking allows industry to harness new and existing energy, material, water, human and infrastructure resources, to improve production efficiency, investment competitiveness, and community and ecosystem health.
- Provide incentives for alternative transportation methods such as cycling, by incorporating bike racks (covered where possible) and onsite shower facilities into building and site design.
- Provide preferred parking for carpools, vanpools, and/or car co-ops.
- Encourage the use of electric vehicles and/or vehicles reliant on alternative fuel sources. Explore opportunities to provide rapid recharge stations.

## 8.0 CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

The development of individual sites within the subject area shall conform to Crime Prevention Through Environmental Design (CPTED) principles.

- Define onsite open space by creating a clear transition from public to private areas through the use of landscaping elements such as entry features, planting, paving, and lighting.
- Define public open space through high-quality design and landscape elements.
- Where required, provide fencing to limit access to areas not visible from the street. Fencing is not supported in street facing setback areas.
- Organize and design buildings and landscape areas to allow for maximum overlook by Business Park users of adjacent streets, open spaces and plazas, parking areas and building entrances.
- Locate walkways and pathways on the periphery of the site, adjacent to arterial, connector and local roads.
- Consider the “front-back” nature of development and design to increase surveillance at the rear of buildings.
- Minimize opportunity for climbing onto roofs of industrial warehouse buildings.
- On-grade parking and loading areas not visible from the street shall be designed with gates to restrict access afterhours.
- Use durable external finishes that are resistant to vandalism (e.g. graffiti).

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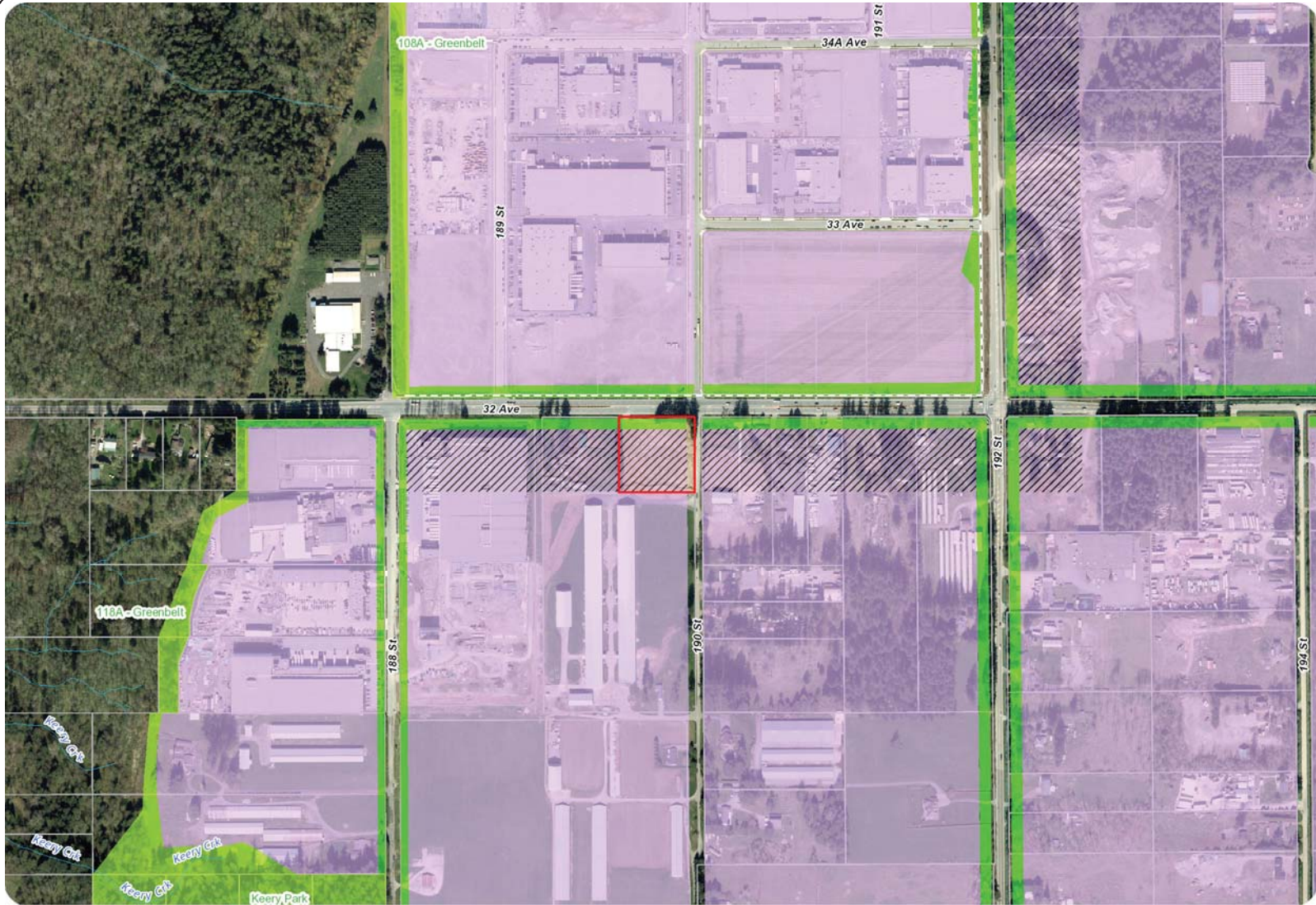
# APPENDIX A

## SUBJECT SITE

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# Subject Site - 18992 32 Ave



- Legend**
- Dog-Off-Leash Area (labels)
  - Park (labels)
  - Plaza/Square (labels)
  - Trails and Paths
  - River
  - Creek
  - Ditch
  - Sports Fields
  - Diamonds
  - Park Outdoor Recreation Facilities
  - Playground
  - Water Playground
  - Business Park
  - Business Park (Office)
  - Technology Park or Business Park
  - Technology Park or Business Park (Office)
  - Commercial
  - Business Park or Live/ Work in Cluster Housing Form
  - City Park
  - Open Space Corridors/Buffers
  - Landscaping Strips
  - Stormwater Management Facilities
  - Lots (Outline)

Scale: 1:5,338

The data provided is compiled from various sources and is NOT warranted as to its accuracy or sufficiency by the City of Surrey. This information is provided for information and convenience purposes only. Lot sizes, legal descriptions and encumbrances must be confirmed at the Land Title Office. Use and distribution of this map is subject to all copyright and disclaimer notices at [cosmos.surrey.ca](http://cosmos.surrey.ca)



Map created on: 14/11/2016

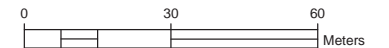
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# APPENDIX B

## SITE PLAN

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**PROPOSED PLAN**



LEGAL DESCRIPTION  
 SECTION 21 TOWNSHIP 7 NWD  
 LEGAL SUBDIVISION 15, E1/2 PCL A  
 (REF PL 5278).

PID: 013-239-619

GROSS SITE AREA  
 1.01 hectares / 2.50 acres (approx.)

NET SITE AREA  
 0.85 hectares / 2.12 acres (approx.)

ZONING REQUIREMENTS  
 Max. Building Size:  
 Max. Floor Area:

EXISTING DESIGNATIONS  
 Zoning: A-2  
 LAP: Business Park (Office)  
 OCP: Mixed Employment

PROPOSED DESIGNATIONS  
 Zoning: IB-1  
 LAP: Business Park (Office)  
 OCP: Mixed Employment

LOT YIELD  
 Existing Number of Lots: 1  
 Proposed Number of Lots: 1



Scale: 1:1000



Project No.: 16-451  
 Date: 09/11/2016

Drawing  
**1**



# APLIN MARTIN

ENGINEERING ARCHITECTURE PLANNING SURVEYING

## SURREY

201-12448 82nd Ave  
Surrey, BC V3W 3E9  
Canada

## SURREY CENTRAL

Suite 1680 - 13450 102 Ave  
Surrey, BC V3T 5X3  
Canada

## VANCOUVER

910 - 1111 W Hastings St  
Vancouver, BC V6E 2J3  
Canada

## KELOWNA

454 Leon Ave  
Kelowna, BC V1Y 6J3  
Canada

## CALGARY

9 - 2611 37 Ave NE  
Calgary, AB T1Y 5V7  
Canada



MIKE FADUM AND ASSOCIATES LTD.  
VEGETATION CONSULTANTS

## Tree Preservation Summary

Surrey Project No: 16-0332-00

Address: 18992 – 32 Avenue

Registered Arborist: Vanessa Melney

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)	27
<b>Protected Trees to be Removed</b>	14
<b>Protected Trees to be Retained</b> (excluding trees within proposed open space or riparian areas)	13
<b>Total Replacement Trees Required:</b>  <ul style="list-style-type: none"> <li>- Alder &amp; Cottonwood Trees Requiring 1 to 1 Replacement Ratio 0 X one (1) = 0</li> <li>- All other Trees Requiring 2 to 1 Replacement Ratio 14X two (2) = 28</li> </ul>	28
<b>Replacement Trees Proposed</b>	TBD
<b>Replacement Trees in Deficit</b>	TBD
<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>  <ul style="list-style-type: none"> <li>- Alder &amp; Cottonwood Trees Requiring 1 to 1 Replacement Ratio 0 X one (1) = 0</li> <li>- All other Trees Requiring 2 to 1 Replacement Ratio 0 X two (2) = 0</li> </ul>	0
<b>Replacement Trees Proposed</b>	TBD
<b>Replacement Trees in Deficit</b>	TBD

Summary report and plan prepared and submitted by: Mike Fadum and Associates Ltd.

Signature of Arborist:



Date: April 19, 2017



Mike Fadum and Associates Ltd.  
#105, 8277-129 Street, Surrey, BC, V3W 0A6  
Phone 778-593-0300 Fax 778-593-0302

