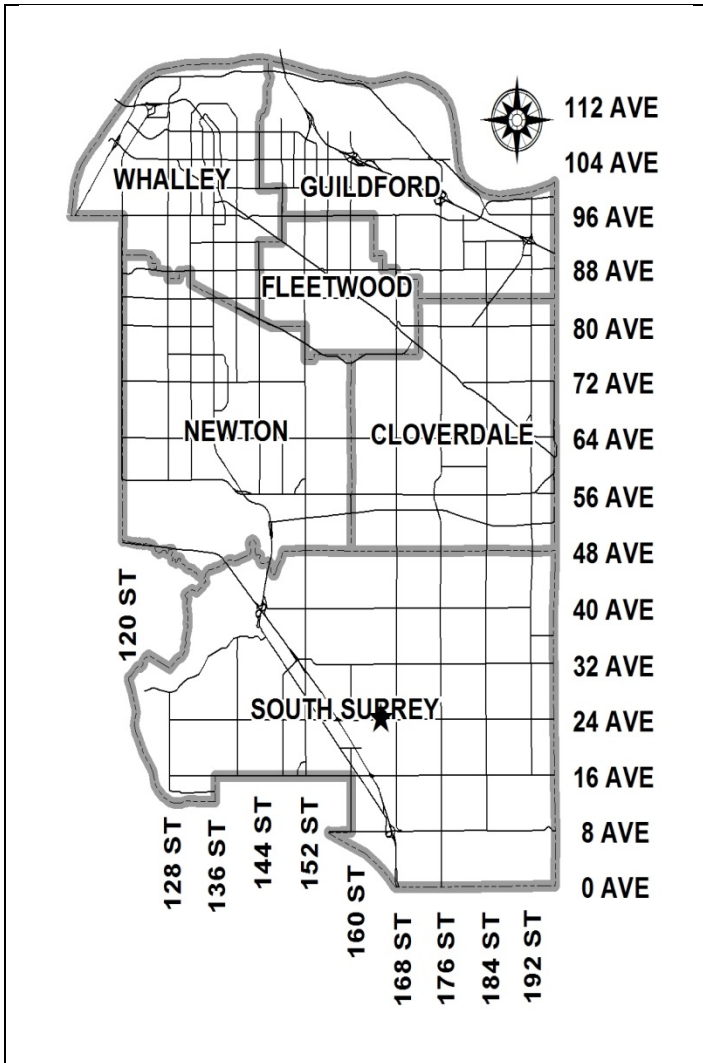


City of Surrey  
**PLANNING & DEVELOPMENT REPORT**

File: 7915-0133-00

Planning Report Date: April 18, 2016



**PROPOSAL:**

- **Partial NCP Amendment** from “Cluster Residential 10-15 upa” to “Civic Utility” and to relocate a buffer
- **Development Permit**
- **Development Variance Permit**

to permit the development of the South Surrey Operations Centre.

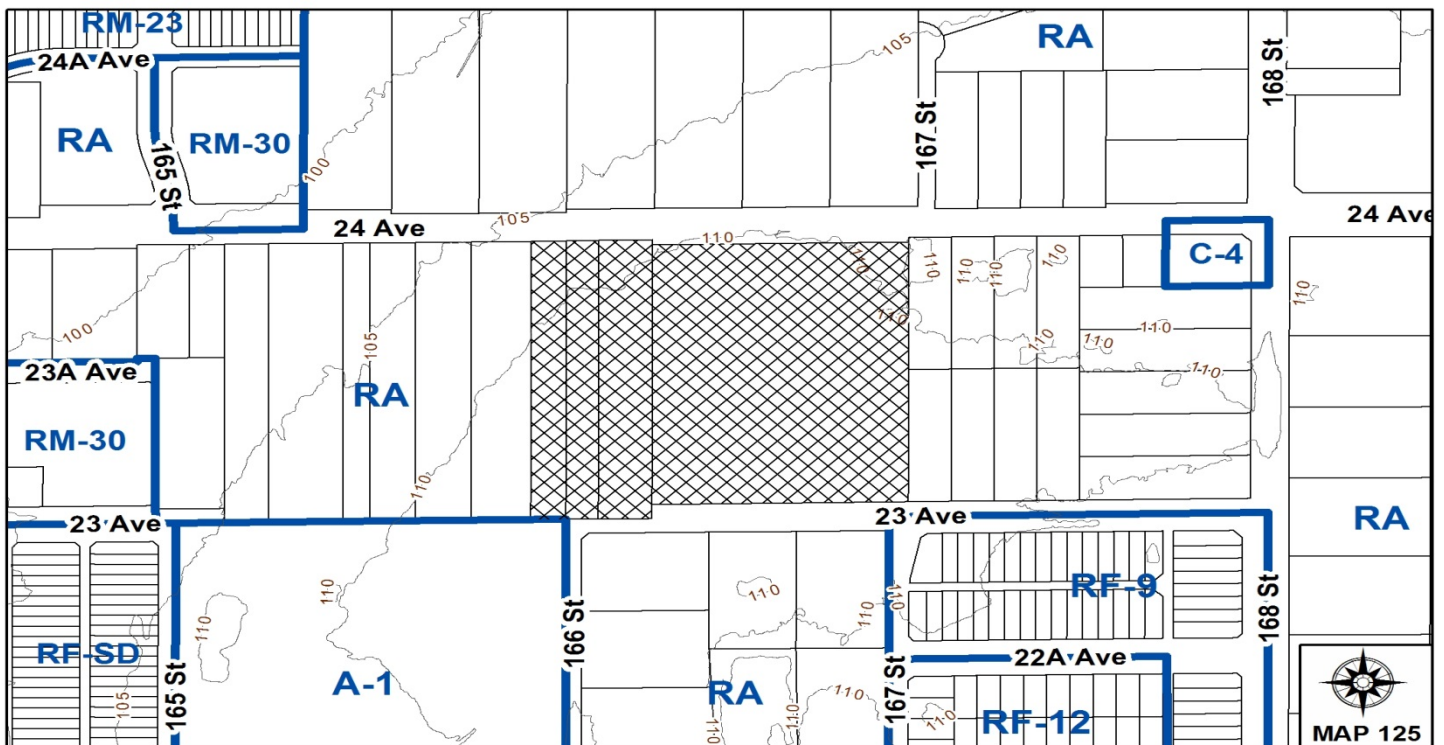
**LOCATION:** 16596/16604/16666 - 24 Avenue and 16615 - 23 Avenue

**OWNER:** City of Surrey

**ZONING:** RA

**OCP DESIGNATION:** Urban

**NCP DESIGNATION:** “Cluster Residential 10-15 upa” and “Civic Utility”



### RECOMMENDATION SUMMARY

- Approval to draft Development Permit.
- Approval for Development Variance Permit to proceed to Public Notification.

### DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- The applicant is proposing an NCP amendment from “Cluster Residential 10-15 upa” to “Civic Utility” for the two westernmost parcels at 16604 – 24 Avenue and 16615 – 23 Avenue. The applicant is also proposing to relocate the buffer on the westerly side of 16666 – 24 Avenue to 16604 – 24 Avenue.
- The applicant is proposing a Development Variance Permit to vary the westerly setback for the second storey of the proposed Operations building.

### RATIONALE OF RECOMMENDATION

- The proposed development of the South Surrey Operations Centre was announced as part of the City's 2016 capital budget in order to enhance the services provided to Surrey residents.
- The proposal complies with the OCP Designation for the site.
- The proposal partially complies with the NCP Designation for the site. The majority of the site is designated “Civic Utility”. Due to anticipated Metro Vancouver water reservoir requirements on the site, the amount of land available for a City Operations Centre was less than anticipated on 16666 – 24 Avenue, which has necessitated the purchase of additional parcels to the west. The proposed NCP amendment from “Cluster Residential 10-15 upa” to “Civic Utility” is for the two parcels at 16604 – 24 Avenue and 16615 – 23 Avenue.
- In addition, an NCP amendment is also needed for relocation of a buffer, as the incorporation of the two parcels at 16604 – 24 Avenue and 16615 – 23 Avenue into the Operations Centre site necessitates the relocation of the buffer from the westerly side of 16666 – 24 Avenue to 16604 – 24 Avenue. The buffer consists of a landscaped 11.5-metre (38 ft.) wide corridor along the western boundary of the facility and also functions as a drainage corridor and a BCS corridor.
- In addition to the landscape buffer along the west boundary of the site, the applicant is proposing extensive tree retention along the south and east boundaries of the site, and at the northwest corner of the site, which will largely buffer the internal operations of the proposed Operations facility from the surrounding residential neighbourhood.
- The proposed setback variance for the cantilevered second floor of the Operations building from 9.8 metres (32 ft.) to 6.0 metres (20 ft.) is an architectural feature that provides visual interest to the Operations building. This portion of the building is adjacent to the proposed 11.5-metre (38 ft.) wide landscape buffer, and therefore has minimal impact on neighbouring lands.

### RECOMMENDATION

The Planning & Development Department recommends that:

1. Council authorize staff to draft Development Permit No. 7915-0133-00 generally in accordance with the attached drawings (Appendix II).
2. Council approve Development Variance Permit No. 7915-0133-00 (Appendix VI) varying the following, to proceed to Public Notification:
  - (a) reduce the minimum side yard (west) setback of the RA Zone from 9.8 metres (32 ft.) to 6.0 metres (20 feet) for the second floor of the proposed Operations building.
3. Council instruct staff to resolve the following issue prior to final approval:
  - (a) ensure that all engineering requirements and issues including restrictive covenants, dedications, and rights-of-way where necessary, are addressed to the satisfaction of the General Manager, Engineering;
  - (b) submission of a subdivision layout to the satisfaction of the Approving Officer;
  - (c) submission of a finalized tree survey and a statement regarding tree preservation to the satisfaction of the City Landscape Architect;
  - (d) submission of a landscaping plan and landscaping cost estimate to the specifications and satisfaction of the Planning and Development Department;
  - (e) demolition of existing buildings and structures to the satisfaction of the Planning and Development Department; and
  - (f) the applicant satisfy the deficiency in tree replacement on the site, to the satisfaction of the Planning and Development Department.
4. Council pass a resolution to amend the Sunnyside Heights NCP to redesignate the parcels at 16604 – 24 Avenue and 16615 – 23 Avenue from “Cluster Residential 10-15 upa” to “Civic Utility” and to relocate the buffer on the westerly side of 16666 – 24 Avenue to 16604 – 24 Avenue when the project is considered for final approval.

### REFERRALS

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

Parks, Recreation & Culture: No concerns.

Surrey Fire Department: No concerns.

### SITE CHARACTERISTICS

Existing Land Use: The site contains a Metro Vancouver water reservoir which will be retained, and three single family dwellings and associated outbuildings which will be demolished.

### Adjacent Area:

Direction	Existing Use	OCP/NCP Designation	Existing Zone
North (Across 24 Avenue):	Single family residential, partially under application for an apartment building and townhouses (File No. 7914-0354-00).	Multiple Residential / "Multi-Family (30-45 upa)" and "Habitat Corridor (20m SROW)"	RA
East:	Single family residential.	Commercial/ Special Residential 15-25 upa	RA
South (Across 23 Avenue):	Single family residential and a City park (Sunnyside Saddle Club).	Urban/ "School" and "Park/Open Space"	RA and A-1
West:	Single family residential.	Urban/ Cluster Residential 10-15 upa	RA

### JUSTIFICATION FOR PLAN AMENDMENT

- The majority of the site (large parcel at 16666 – 24 Avenue) is designated "Civic Utility". Due to Metro Vancouver water reservoir requirements on the site, the amount of land that is available for a City Operations Centre was less than anticipated on the original main parcel, which necessitated the City purchase of 3 parcels to the west (16596/16604 – 24 Avenue and 16615 – 23 Avenue). These parcels have been included in the subject application and an Neighbourhood Concept Plan (NCP) amendment from "Cluster Residential 10-15 upa" to "Civic Utility" is required for the two parcels at 16604 – 24 Avenue and 16615 – 23 Avenue.
- The third parcel, 16596 – 24 Avenue, will be primarily used for the extension of 166 Street, with a small remnant portion on the westerly side that will retain its "Cluster Residential 10-15 upa" designation. It is anticipated that, when a future development application is made on the lands to the west of the subject site at 16578 – 24 Avenue, the small remnant portion of 16596 – 24 Avenue will be consolidated with these lands at that time.
- In addition, an NCP amendment is also needed for relocation of a buffer, as the incorporation of the two parcels at 16604 – 24 Avenue and 16615 – 23 Avenue into the Operations Centre site necessitates the relocation of the buffer from the westerly side of 16666 – 24 Avenue to 16604 - 24 Avenue. The buffer consists of a landscaped 11.5-metre (38 ft.) wide corridor along the western boundary of the facility, and also fulfills a function as a Biodiversity Conservation Strategy (BCS) corridor.

- The development proposal achieves the NCP objective for the extension of 166 and 167 Street and the associated drainage corridor along 166 Street. In addition, the application will provide the BCS corridor that is identified along 166 Street, as discussed later in this report.

## DEVELOPMENT CONSIDERATIONS

### Proposal

- The application proposes a partial NCP amendment from “Cluster Residential 10-15 upa” to “Civic Utility” and a Development Permit to permit the development of the South Surrey Operations Centre.
- The application also proposes a Development Variance Permit to reduce the west building setback and a subdivision for lot consolidation and dedications.
- Surrey City Council previously approved the design and construction of a new South Surrey Operations Centre that will serve as the centre of operations for Engineering and Parks Operations staff in South Surrey. The project is fully funded and completion is expected in Fall 2017.
- The subject site consist of 4 parcels at 16596/16604/16666 - 24 Avenue and 16615 - 23 Avenue. The property at 16666 – 24 Avenue contains a Metro Vancouver water reservoir, which is on land that is leased to Metro Vancouver by the City of Surrey.
- The proposed consolidation will result in a “hooked” lot over 166 Street, with a small remainder piece on the west side of 166 Street. It is anticipated that this remnant will be consolidated with the lands to the west as part of a future residential development when these parcels redevelop. The proposal also includes the implementation of the proposed drainage corridor along 166 Street and a multi-use pathway along 24 Avenue.
- The applicant is proposing a two-storey building with a gross floor area of 2,000 square metres (21,525 sq.ft.), which represents a net floor area ratio (FAR) of 0.06. The building is proposed to contain shops and maintenance areas on the ground floor and administration offices on the second floor.
- The site will also include space for fleet parking, recycling and disposal ramps and bins, vehicle and equipment wash bays, and a natural gas fueling station.

### Zoning By-law Compliance

- The Zoning By-law permits municipal buildings to be located in any zone, provided that all the minimum setbacks are equal to, or greater than, either the height of the principal building, or the setbacks prescribed in the underlying zone.
- Based on the proposed 9.8-metre (32 ft.) height of the building, the proposed Operations Centre building is required to be sited a minimum of 9.8-metre (32 ft.) from all lot lines. A variance is required for the western setback, as discussed later in this report.

## DESIGN PROPOSAL AND REVIEW

### Building Design

- The proposed Operations building is sited at the corner of 23 Avenue and 166 Street. The attractively designed building provides a significant presence on the street, and screens parking and storage areas from the public realm.
- The building design has a very modern form with clean lines and strong geometric features. The second floor is proposed to be cantilevered over the first floor on the west side of the building. Exterior cladding will consist of a brick rainscreen on the ground floor on portions of the north, south and east elevations and a rainscreen panel system on the second floor on the north and south elevations. Significant glazing is proposed where the internal functioning permits, particularly on the west and east elevations.
- The building is proposed to have shops and maintenance activities on the ground floor, with administrative offices on the second floor. The second floor extends for only a portion of the building. A landscaped green roof is proposed on the remainder of the second floor. The green roof will minimize the heat island effect and provide outdoor amenity to the administration and operation staff (see Landscape Section below for further detail on the green roof).

### Vehicular Access and Parking

- Two vehicular accesses from 166 Street are proposed to the site. It is anticipated that the majority of traffic to the site will come via 24 Avenue onto 166 Street, and will not enter the site through the residential neighbourhood to the south. There is an emergency access proposed on 23 Avenue but this will be used for emergencies only.
- A total of 139 parking spaces are proposed, which exceeds the requirements of the Zoning By-law of 27 parking spaces on the site.
- The parking area is split into a publicly accessible parking area along 166 Street, where 83 visitor and staff parking spaces are provided (including two electric vehicle charging spaces), and a fleet parking area that will be secured behind security gates where 56 spaces are provided. This area will include another two electric vehicle charging spaces. In addition, a total of 7 bicycle parking spaces will be provided

### Landscaping

- The applicant is proposing a number of landscaped areas throughout the site which is in addition to the retention of the existing treed areas along the southern and eastern portions of the site and in the northwest corner. A large landscaped area is proposed at the northwest corner of the site along 24 Avenue, which will contain a rain garden with sedges and river rock, and a pathway. This area includes the retention of a number of existing trees.
- The applicant is also proposing a green roof over a portion of the Operations building, as discussed above. The green roof will contain a patio area, a path and low ground cover planting, primarily succulents such as sedum herbs and grasses.

- The 11.5-metre (38 ft.) wide landscape buffer along 166 Street also functions as a drainage corridor and a BCS corridor. The landscape buffer will be in the form of an attractively designed rain garden and will enhance the streetscape. A depression will be created for the rain garden with a 0.40-metre (1 ft.) high corten steel wall proposed on the west side of the depression. A river stone channel is proposed at the base of the corten steel wall, mimicking a creek bed. Planting in the drainage corridor includes grasses, river birch and aspens.
- The forest understory will remain undisturbed along the eastern and most of the south portion of the site where significant numbers of trees are propose to be retained. This will result in a buffer area with a natural forest feel in these areas.
- The applicant is also proposing a concrete wall with brick detailing at the southwest corner of the site and along the public parking areas. The wall will screen the internal operations of the site in areas that are more visible from the public view. In areas along the Operations yard that are less visible from public view, a lock block concrete wall is proposed.

### Public Art

- The City of Surrey has supported the implementation of artworks within its civic facilities and public open space such as parks and greenways since 1998 when it adopted a Public Art Policy. Staff will work with the Public Art group to identify opportunities to incorporate public art on the proposed South Operations Centre site.

### TREES

- Thomas Walz, ISA Certified Arborist of BC Plant Health Care Inc, 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	34	34	0
Cottonwood	17	16	1
<b>Deciduous Trees (excluding Alder and Cottonwood Trees)</b>			
Big Leaf Maple	18	12	6
Mountain Ash	1	1	0
Paper Birch	27	27	0
Cherry	10	9	1
Pacific Dogwood	8	8	0
Cascara	1	1	0
Willow	1	1	0
<b>Coniferous Trees</b>			
Western Red Cedar	66	56	10
Douglas Fir	163	119	44

Tree Species	Existing	Remove	Retain
Scots Pine	1	1	0
Spruce	2	2	0
Grand Fir	1	1	0
Western Hemlock	8	8	0
<b>Total (excluding Alder and Cottonwood Trees)</b>	<b>307</b>	<b>246</b>	<b>62</b>
<b>Total Replacement Trees Proposed (excluding Boulevard Street Trees)</b>		32	
<b>Total Retained and Replacement Trees</b>		94	

- The Arborist Assessment states that there are a total of 307 protected trees on the site, excluding Alder and Cottonwood trees. Fifty-one (51) existing trees, approximately 14% of the total trees on the site, are Alder and Cottonwood trees. It was determined that 62 trees can be retained as part of this development proposal. The proposed tree retention was assessed taking into consideration the location of services, building and parking area footprints and road dedication.
- 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 542 replacement trees on the site. The applicant is proposing 32 replacement trees. The new trees on the site will consist of a variety of trees including fir, cedar, hemlock, aspens, and Japanese Stewartia.
- In summary, a total of 94 trees are proposed to be retained or replaced on the site.

#### BIODIVERSITY CONSERVATION STRATEGY

- The City of Surrey Biodiversity Conservation Strategy (BCS) Green Infrastructure Network (GIN) map, identifies that a Local BCS Corridor (#26) is located within the subject site. The corridor is located within the Redwood BCS management area and has a Low ecological value.
- The BCS further identifies the GIN area of the subject site as having a Low habitat suitability rating, derived from species at risk presence, species accounts and known ecosystem habitat inventories. The BCS recommends a target Corridor width of 20 metres (66 feet) and target area of 3,680 square metres (39,610 sq.ft.), or approximately 9.0% of the subject property.
- Protecting green infrastructure Hubs (large habitat areas) and Sites (smaller habitat areas) are critical to preserving natural habitat refuges and a diversity of habitat features while maintaining/enhancing Corridors ensures connectivity between fragmented hubs for genetic variation throughout the City. The closest Biodiversity Hub connection in the GIN to the subject site is Hub F, which is located in an area roughly bounded by 16 Avenue, 168 Street, 8 Avenue and Highway 99, centered on the Fergus Watershed Biodiversity Preserve. The BCS Management Area Objectives that the proposed corridor dedication (Corridor #26) will help



to achieve include increased landscape permeability (amount of natural and semi-natural habitat) on public land and increased tree canopy cover.

- The development proposal conserves/enhances 2,070 square metres (22,280 sq.ft.) of the subject site through the dedication of a 11.5-metre (38 ft.) wide BCS corridor which is 56% of the target GIN area and 58% of the target corridor width. This method of GIN retention/enhancement will assist in the long term protection of the natural features and allows the City to better achieve biodiversity at this location that is consistent with the guidelines contained in the BCS.
- In order for the proposal to fully comply with the BCS target recommendations, an additional 1610 square metres (17,330 sq.ft.) of the GIN area would be required on the subject site.

### SUSTAINABLE DEVELOPMENT CHECKLIST

The applicant prepared and submitted a sustainable development checklist for the subject site on April 5, 2016. 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 majority of the site is designated as “Civic Utility” in the Sunnyside Heights NCP.</li> </ul>
2. Density & Diversity (B1-B7)	<ul style="list-style-type: none"> <li>• n/a</li> </ul>
3. Ecology & Stewardship (C1-C4)	<ul style="list-style-type: none"> <li>• New absorbent soils, dry swales, natural landscaping, xeriscaping green roofs, permeable pavement and rain water wetlands are proposed.</li> <li>• The applicant is providing a BCS corridor along 166 Street.</li> </ul>
4. Sustainable Transport & Mobility (D1-D2)	<ul style="list-style-type: none"> <li>• The proposal includes preferred parking spaces for carpools and electric vehicle parking spaces and bicycle parking spaces.</li> </ul>
5. Accessibility & Safety (E1-E3)	<ul style="list-style-type: none"> <li>• The design follows CPTED design principles to maximize surveillance.</li> </ul>
6. Green Certification (F1)	<ul style="list-style-type: none"> <li>• The project will follow best practices for green and environmental strategies and energy efficient systems. Feasibility of LEED certification will be assessed during design development and cost budgeting.</li> </ul>
7. Education & Awareness (G1-G4)	<ul style="list-style-type: none"> <li>• Development signs were installed, pre-notification letters were sent, and a public open house was held.</li> </ul>

### PRE-NOTIFICATION

- Pre-notification letters were sent on April 4, 2016, and development proposal signs were installed on the site to inform area residents about the proposal. In response, staff have received 1 phone call and 8 emails. The caller wanted to discuss the possibility of the City purchasing his parcel as it was adjacent to the original development site. The City recently purchased the caller's parcel, and it has been added to the subject application.
- Two (2) of the email respondents had no concerns and were looking for information on the proposal. Six (6) of the email respondents expressed concerns about the amount of proposed tree removal and the potential impact of a City Operations Centre on nearby properties.

*(The applicant has retained a significant number of trees (62), and has designed the site such that the impact on nearby properties should be minimal. The site is buffered on the east and south through the extensive retention of trees and on the west by the landscape buffer, and also opaque screening as discussed above, which means the internal operations of the facility will not be visible from the public realm.)*

- A public open house was held on Wednesday, May 27, 2015 at the Pacific Heights Elementary School. Thirty-one (31) people signed the sign-in sheet and 4 comment sheets were filled out. The comments indicated concerns about the potential impact of a City Operations Centre on nearby properties and asked for wider buffers to be provided around the proposed Operations Centre.

*(In response, the applicant has increased the width of the buffers around the proposed facility, and with the recent purchase of 16596 - 24 Avenue and 16604 - 24 Avenue has ensured that traffic to the site will be primarily from 24 Avenue through the soon-to-be constructed 166 Street, and not through the neighbourhood to the south of the site.)*

### ADVISORY DESIGN PANEL

The application was not referred to the ADP for review. The design and landscaping plans were reviewed by staff and found to be generally acceptable.

### BY-LAW VARIANCE AND JUSTIFICATION

(a) Requested Variance:

- Reduce the minimum side yard (west) setback of the RA Zone from 9.8 metres (32 ft.) to 6.0 metres (20 ft.) for the second floor of the proposed Operations building.

Staff Comments:

- The proposed setback variance is for the cantilevered second floor of the proposed Operations building only and is an architectural feature that provides visual interest to the Operations building.w3

- This portion of the building is adjacent to the proposed 11.5-metre (38 ft.) wide BCS corridor/landscape buffer, and therefore has minimal impact on the neighbouring lands.

#### INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I.	Lot Owners, Action Summary and Project Data Sheets
Appendix II.	Proposed Site Plan, Building Elevations, Landscape Plans and Perspective
Appendix III.	Engineering Summary
Appendix IV.	Summary of Tree Survey and Tree Preservation
Appendix V.	NCP Redesignation Map
Appendix VI.	Development Variance Permit No. 7915-0133-00

*original signed by Ron Hintsche*

Jean Lamontagne  
General Manager  
Planning and Development

KB/dk



## DEVELOPMENT DATA SHEET

Existing Zoning: RA

Required Development Data	Minimum Required / Maximum Allowed	Proposed
<b>LOT AREA*</b> (in square metres)		
Gross Total		41,034 sq.m.
Road Widening area		9,314 sq.m.
Undevelopable area		
Net Total		31,720 sq.m.
<b>LOT COVERAGE</b> (in % of net lot area)		
Buildings & Structures (Ops Centre bldg)		4%
Paved & Hard Surfaced Areas		
Total Site Coverage		
<b>SETBACKS</b> ( in metres)		
South (23 Avenue)	9.8 m	12 m
North (24 Avenue)	9.8 m	181 m
East (167 Street)	9.8 m	115 m
West (166 Street)	9.8 m	6 m (DVP required)
<b>BUILDING HEIGHT</b> (in metres/storeys)		
Principal		9.8 m
Accessory		
<b>NUMBER OF RESIDENTIAL UNITS</b>		
Bachelor		
One Bed		
Two Bedroom		
Three Bedroom +		
Total		
<b>FLOOR AREA: Residential</b>		
		2,000 sq.m.
<b>FLOOR AREA: Commercial</b>		
Retail		
Office		
Total		
<b>FLOOR AREA: Industrial</b>		
<b>FLOOR AREA: Institutional</b>		
<b>TOTAL BUILDING FLOOR AREA</b>		2,000 sq.m.

*\* If the development site consists of more than one lot, lot dimensions pertain to the entire site.*

**Development Data Sheet cont'd**

<b>Required Development Data</b>	<b>Minimum Required / Maximum Allowed</b>	<b>Proposed</b>
DENSITY		
# of units/ha /# units/acre (gross)		
# of units/ha /# units/acre (net)		
FAR (gross)		
FAR (net) (Ops Centre bldg)		0.06
AMENITY SPACE (area in square metres)		
Indoor		
Outdoor		
PARKING (number of stalls)		
Commercial		
Industrial and Office	27	139
Residential Bachelor + 1 Bedroom		
2-Bed		
3-Bed		
Residential Visitors		
Institutional		
Total Number of Parking Spaces	27	139
Number of disabled stalls	1	2
Number of small cars		
Tandem Parking Spaces: Number / % of Total Number of Units		
Size of Tandem Parking Spaces width/length		

Heritage Site	NO	Tree Survey/Assessment Provided	YES
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Carscadden Stokes  
McDonald Architects Inc.  
715 East Hastings Street  
Vancouver, BC V6A 1R3  
604 633 1830  
hello@carscadden.ca  
@carscaddenarch  
carscadden.ca

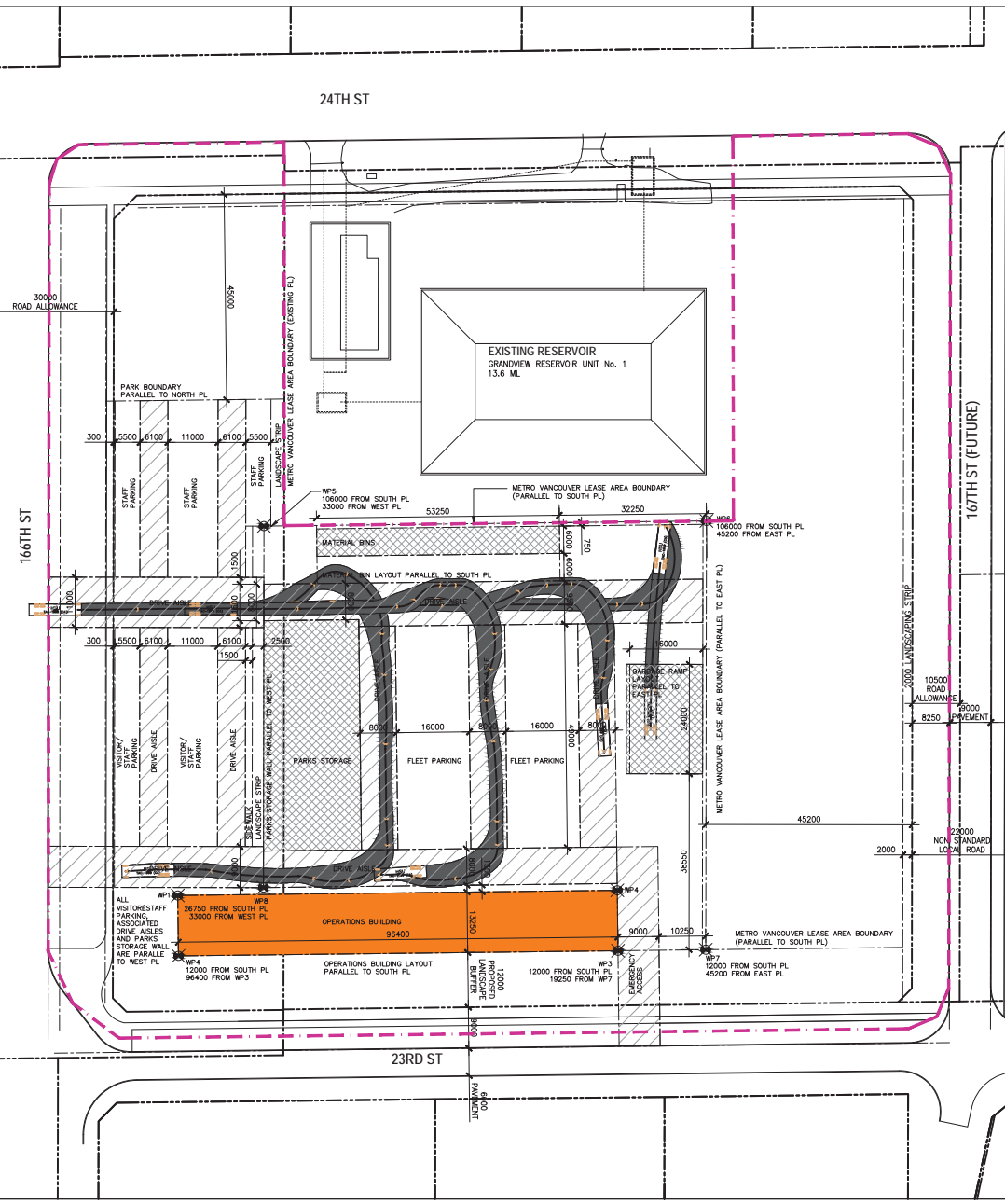
**GENERAL NOTES:**

1. REFER TO LANDSCAPE AND CIVIL DRAWINGS ALSO
2. SITE INFO BASED ON LEGAL SURVEY PROVIDED BY CITY OF SURREY - SURVEY SECTION AND WAS LABELLED AS PRELIMINARY AND UNDATED. IT WAS RECEIVED ON JAN 20, 2015. THIS SURVEY HAS BEEN SCALED UP BY 1/0.9992897 TO ACCOUNT FOR GEODETIC DIMENSIONS. ALLOWANCES AND RIGHT OF WAYS ARE ADDED BASED ON PRELIMINARY COMMENTS ON ROAD RIGHT OF WAY REQUIREMENTS LOCATION: 16669 24 AVE FROM THE CITY OF SURREY DATED AUGUST 12, 2015. THIS IS NOT A LEGAL SURVEY

**LEED INFORMATION:**

SYMBOL	DESCRIPTION	AREA
	PROJECT SITE AREA	TOTAL SITE AREA = 38563.8m <sup>2</sup>
	METRO VAN LEASE AREA - EXCLUDED FROM SCOPE OF PROJECT	LEASE AREA SITE AREA = 8292.4 m <sup>2</sup>
	LEED SITE AREA	LEED SITE AREA = 30271.5 m <sup>2</sup>
	OPERATIONS BUILDING	BUILDING FOOTPRINT = 1277.3 m <sup>2</sup>

FTE = 46  
REQUIRED COVERED BIKE STORAGE = 5% OF FTE = 3  
TRANSIENTS = 65  
REQUIRED SECURE BIKE RACKS = 5% OF TRANSIENTS = 4



**Carscadden**

04/17/19  
**SOUTH SURREY OPERATIONS CENTRE**

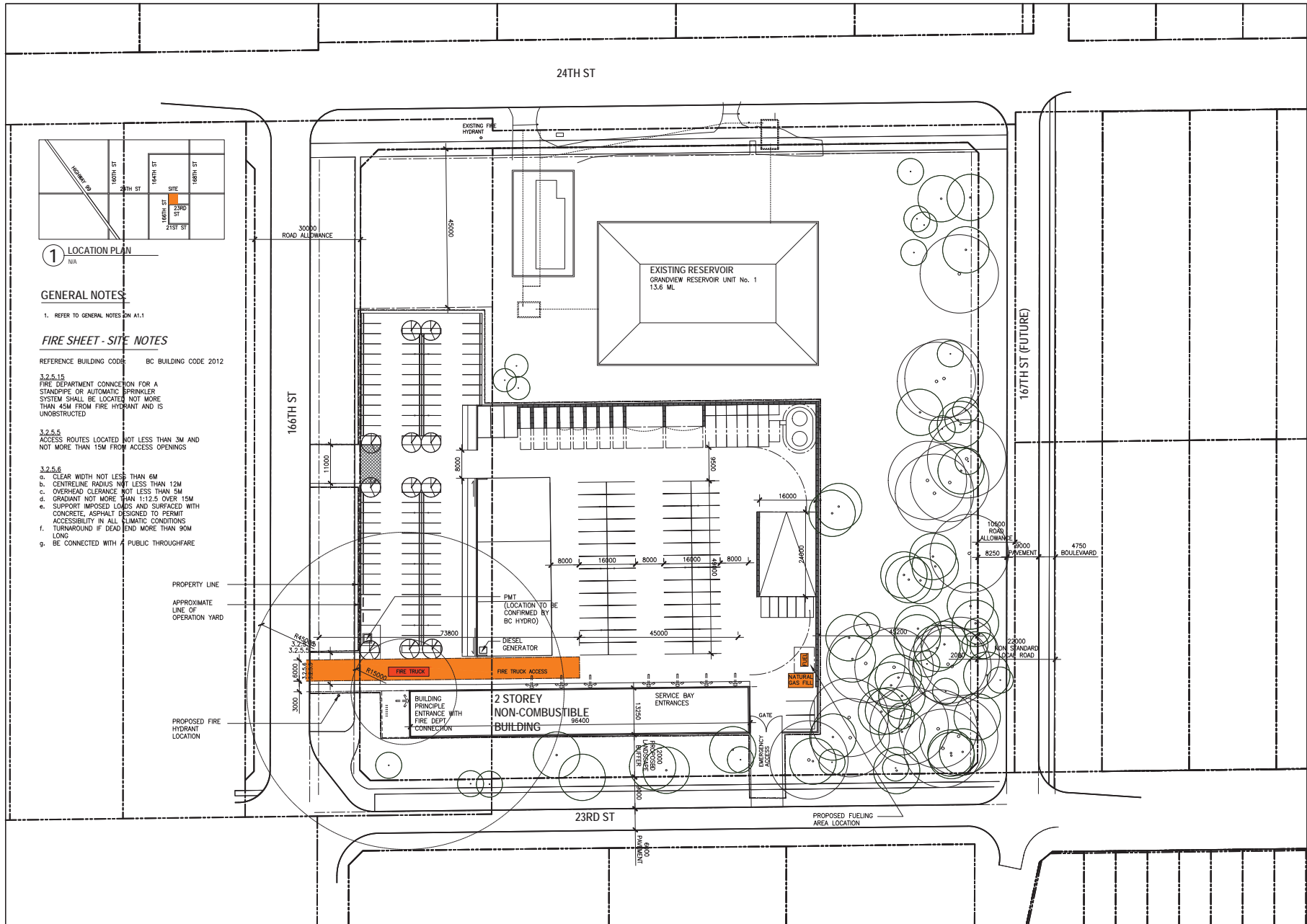


**LAYOUT AND LEED BOUNDARY SITE PLAN**

SHEET TITLE  
DRAWN: \_\_\_\_\_ CHECKED: \_\_\_\_\_  
DESIGN NO: \_\_\_\_\_ DATE: \_\_\_\_\_  
**1519**  
SCALE: **1:500**  
SHEET: **A1.1**

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**1 LOCATION PLAN**  
N/A

**GENERAL NOTES**

1. REFER TO GENERAL NOTES ON A1.1

**FIRE SHEET - SITE NOTES**

REFERENCE BUILDING CODE: BC BUILDING CODE 2012

**3.2.5.15**  
FIRE DEPARTMENT CONNECTION FOR A STANDPIPE OR AUTOMATIC SPRINKLER SYSTEM SHALL BE LOCATED NOT MORE THAN 45M FROM FIRE HYDRANT AND IS UNOBSTRUCTED

**3.2.5.5**  
ACCESS ROUTES LOCATED NOT LESS THAN 3M AND NOT MORE THAN 15M FROM ACCESS OPENINGS

**3.2.5.6**  
a. CLEAR WIDTH NOT LESS THAN 6M  
b. CENTRELINE RADIUS NOT LESS THAN 12M  
c. OVERHEAD CLEARANCE NOT LESS THAN 5M  
d. GRADIENT NOT MORE THAN 1:12.5 OVER 15M  
e. SUPPORT IMPOSED LOADS AND SURFACED WITH CONCRETE, ASPHALT DESIGNED TO PERMIT ACCESSIBILITY IN ALL CLIMATIC CONDITIONS  
f. TURNAROUND IF DEAD END MORE THAN 90M LONG  
g. BE CONNECTED WITH A PUBLIC THROUGHFARE

PROPERTY LINE  
APPROXIMATE LINE OF OPERATION YARD

PROPOSED FIRE HYDRANT LOCATION



Carscadden Stokes  
McDonald Architects Inc.  
715 East Hastings Street  
Vancouver, BC V6A 1R3  
604 633 1830  
hello@carscadden.ca  
@carscaddenarch  
carscadden.ca

Preferred Option Draft  
Mar 3, 2016

This is not a Legal Survey

**Carscadden**

04/17/16  
**SOUTH SURREY OPERATIONS CENTRE**



**SITE FIRE SHEET**

SHEET TITLE

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

1519

SCALE

1:500

SHEET

**A1.3**

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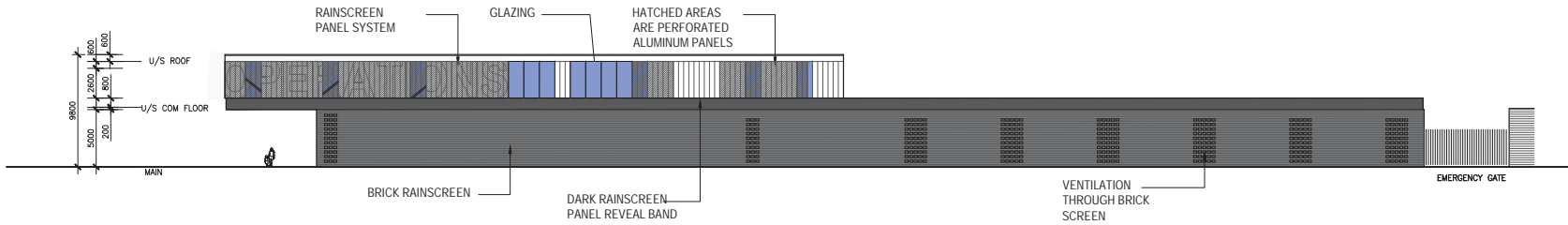
**SOUTH SURREY  
OPERATIONS CENTRE**

concept rendering from 23rd st + 166th  
APRIL 4 2016

CARSCADDEN STOKES  
MCDONALD ARCHITECTS

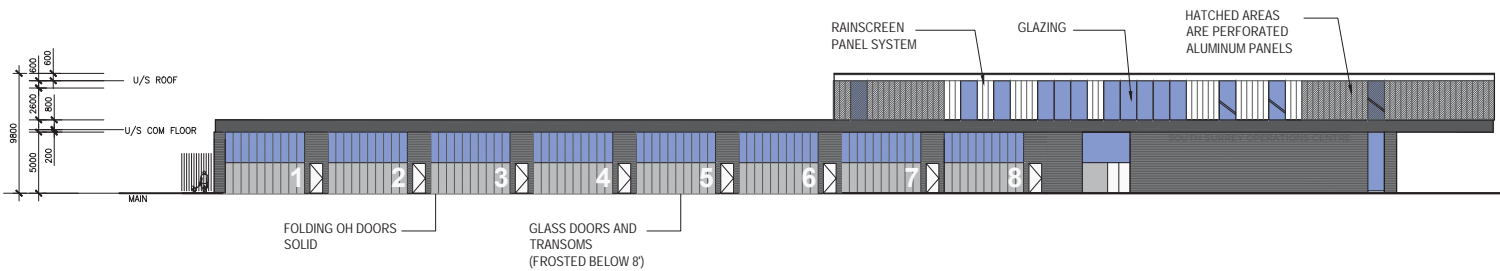


Carscadden Stokes  
 MacDonald Architects Inc.  
 715 East Hastings Street  
 Vancouver, BC V6A 1R3  
 604 633 1830  
 hello@carscadden.ca  
 @Carscaddenarch  
 carscadden.ca



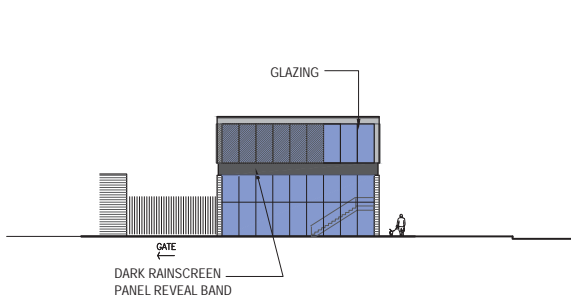
1 EXTERIOR ELEVATION - SOUTH  
 Scale: 1:200

ROOF  
 2ND FLOOR  
 GROUND FLOOR

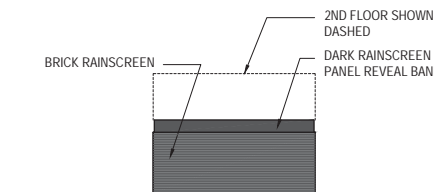


2 EXTERIOR ELEVATION - NORTH  
 Scale: 1:200

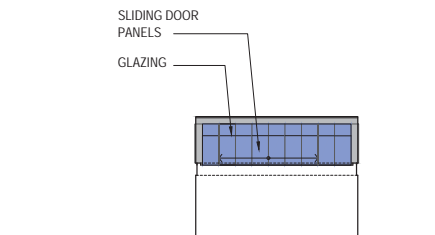
ROOF  
 2ND FLOOR  
 GROUND FLOOR



3 EXTERIOR ELEVATION - WEST  
 Scale: 1:200



4 EXTERIOR ELEVATION - EAST  
 Scale: 1:200



5 EXTERIOR ELEVATION - EAST  
 Scale: 1:200

ROOF  
 2ND FLOOR  
 GROUND FLOOR

**Carscadden**

JOB TITLE  
**SOUTH SURREY  
 OPERATIONS CENTRE**



**ELEVATIONS**

SHEET TITLE	
DRAWN	CHECKED
JOB NO.	DATE
<b>1519</b>	
SCALE	
<b>1:200</b>	
SHEET	

**A4.1**

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

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

DATE: **April 18, 2016 (supersedes Feb. 25, '16)** PROJECT FILE: **7815-0133-00**

---

RE: **Engineering Requirements (Commercial/Industrial)  
Location: 16666 24 Avenue**

#### NCP AMENDMENT

There are no engineering requirements relative to the NCP Amendment.

#### SUBDIVISION

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

- Dedicate varying width from 8.442 to 5.0 m on 24 Ave. for the ultimate 37.0 m Arterial Road.
- Dedicate 9.942 m on 23 Ave. for the ultimate 20.0 m wide Local Road.
- Dedicate 30.0 m for 166 St., for the ultimate 30.0 m wide Local Road and wildlife/drainage corridor.
- Dedicate 5.0 m x 5.0 m corner cuts at 166 St. /24 Ave and 3.0 m x 3.0 m at 166 St. and 23 Ave.
- Dedicate 10.5 m for 167 St. for the ultimate 22.0 m non-standard Local Road.
- Dedicate 3.0 m x 3.0 m corners cuts at 167 St./24 Ave. and 167 Street/23 Ave.
- Register a 2.7 m wide SRW along the south side of 24 Ave., for Multi-Use-Pathway. Additional width of SRW may be required for tree retention and access to Grandview Heights Water Reservoir.
- Register a 0.5 m wide SRW on 23 Ave., 166 St. and 167 St.

##### *Works and Services*

- Construct 4.0 m wide multi-use pathway along 24 Ave.
- Provide road widening along 24 Ave. to accommodate left turn bays at 166 St.
- Widen 23 Ave. to a unique local road standard with ultimate 9 m pavement width, curb and sidewalk, modified to maximize tree retention.
- Construct 166 St. to a unique local road standard which accommodates 11 m pavement width, curbs, sidewalks, and 10 m wide drainage/wildlife corridor on east side.
- Construct 167 St. to a local road standard to the extent possible within provided dedication and provide funding to the half road standard.
- Construct storm sewer system to service the proposed development and provide on-site stormwater management features in accordance with the NCP.
- Extend water mains along 23 Ave., 166 St. and 167 St. frontages.
- Construct sanitary sewer to service the site and along all frontages.
- Pay any Latecomer Agreement Charges that may become applicable between now and the completion of this subject project.

A Servicing Agreement is required prior to Subdivision.

#### DEVELOPMENT PERMIT

There are no engineering requirements relative to issuance of the Development Permit.



Rémi Dubé, P.Eng.  
Development Services Manager  
IK1

## Tree Preservation Summary - Overall

**Surrey Project No:**

**Address:** 16666/16614/16615/ 16604/16596 24 Avenue, Surrey

**Registered Arborist:** Thomas Walz - BC Plant Health Care Inc.

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)	<b>358</b>
<b>Protected Trees to be Removed (or already removed)</b>	<b>296</b>
<b>Protected Trees to be Retained</b> (excluding trees within proposed open space or riparian areas)	<b>62</b>
<b>Total Replacement Trees Required:</b>  <ul style="list-style-type: none"> <li>- Alder &amp; Cottonwood Trees Requiring 1 to 1 Replacement Ratio  <math>\underline{\quad 50 \quad} \times \text{one (1)} = 50</math></li> <li>- All other Trees Requiring 2 to 1 Replacement Ratio  <math>\underline{\quad 246 \quad} \times \text{two (2)} = 492</math></li> </ul>	<b>542</b>
<b>Replacement Trees Proposed</b>	<b>32</b>
<b>Replacement Trees in Deficit</b>	<b>510</b>
<b>Protected Trees to be Retained in Proposed [Open Space / Riparian Areas]</b>	<b>n/a</b>

Off-Site Trees	Number of Trees
<b>Protected Off-Site Trees to be Removed</b>	
<b>Total Replacement Trees Required:</b>  <ul style="list-style-type: none"> <li>- Alder &amp; Cottonwood Trees Requiring 1 to 1 Replacement Ratio  <math>\underline{\hspace{2cm}} \times \text{one (1)} = 0</math></li> <li>- All other Trees Requiring 2 to 1 Replacement Ratio  <math>\underline{\hspace{2cm}} \times \text{two (2)} = 0</math></li> </ul>	<b>0</b>
<b>Replacement Trees Proposed</b>	
<b>Replacement Trees in Deficit</b>	<b>0</b>

Summary, report and plan prepared and submitted by:


---

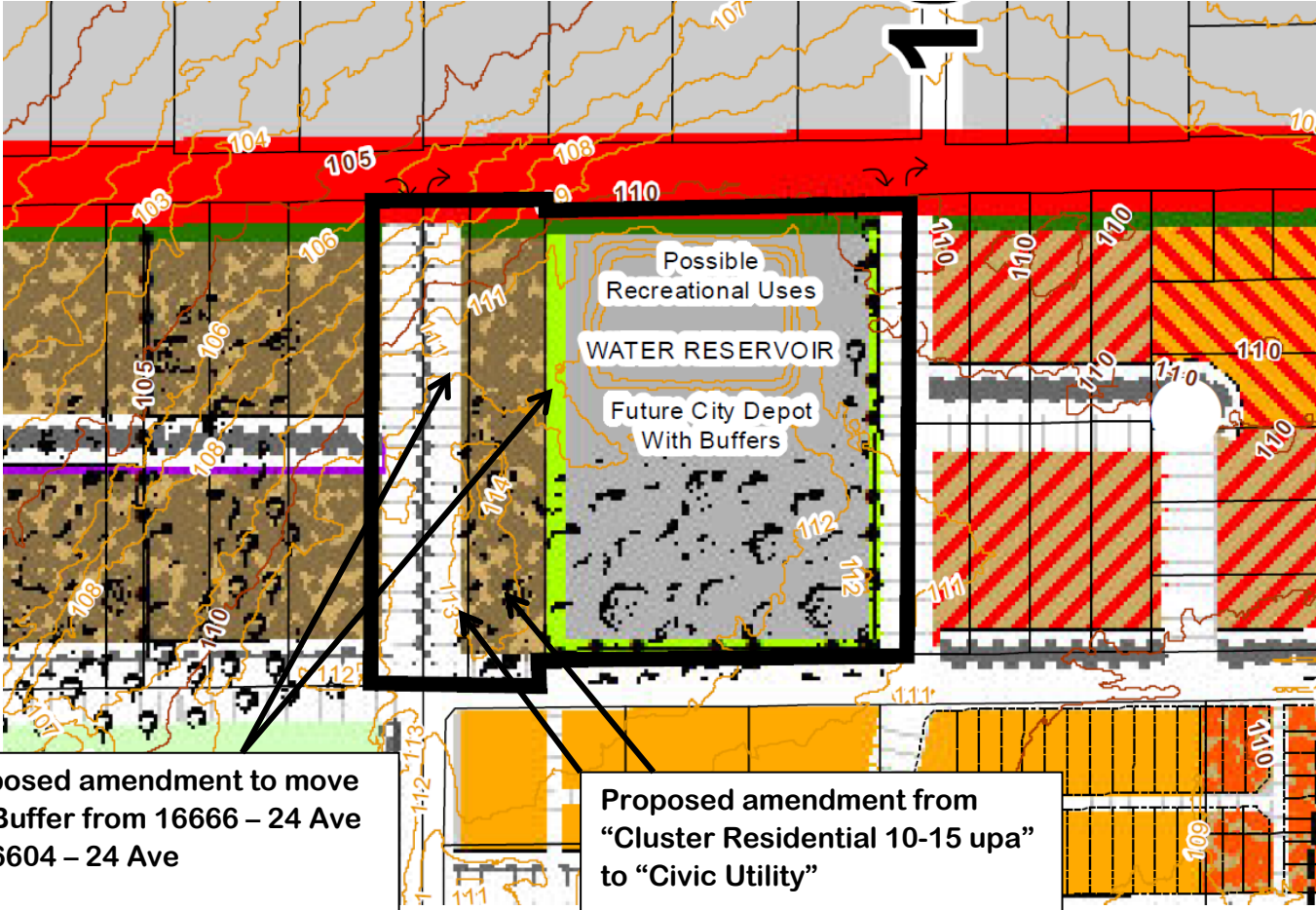
 (Signature of Arborist)

April 4, 2016  


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 Date

7915-0133-00: Proposed NCP Amendment



Proposed amendment to move the Buffer from 16666 - 24 Ave to 16604 - 24 Ave

Proposed amendment from "Cluster Residential 10-15 upa" to "Civic Utility"



(the "City")

DEVELOPMENT VARIANCE PERMIT

NO.: 7915-0133-00

Issued To: City of Surrey  
("the Owner")

Address of Owner: 13450 - 104 Avenue  
Surrey, BC V3T 1V8

1. This development variance permit is issued subject to compliance by the Owner with all statutes, by-laws, orders, regulations or agreements, except as specifically varied by this development variance permit.
2. This development variance permit applies to that real property including land with or without improvements located within the City of Surrey, with the legal description and civic address as follows:

Parcel Identifier: 011-298-057  
West 61.22 Feet Of The West Half Lot 4 Section 13 Township 1  
New Westminster District Plan 7992  
16604 - 24 Avenue

Parcel Identifier: 011-298-081  
West Half Lot 4 Except: Westerly 61.22 Feet, Section 13 Township 1  
New Westminster District Plan 7992  
16615 - 23 Avenue

Parcel Identifier: 011-386-282  
Lot "A" Section 13 Township 1 New Westminster District Plan 9408  
16596 - 24 Avenue

Parcel Identifier: 024-320-307  
Lot 1 Section 13 Township 1 New Westminster District Plan LMP40141  
16666 - 24 Avenue

(the "Land")

3. (a) As the legal description of the Land is to change, the City Clerk is directed to insert the new legal description for the Land once title(s) has/have been issued, as follows:

Parcel Identifier:

---

- (b) If the civic address(es) change(s), the City Clerk is directed to insert the new civic address(es) for the Land, as follows:
- 

4. Surrey Zoning By-law, 1993, No. 12000, as amended is varied as follows:
  - a) Reduce the minimum side yard (west) setback of the RA Zone from 9.8 metres (32 ft.) to 6.0 metres (20 ft.) for the second floor of the proposed Operations building.
5. This development variance permit applies to only that portion of the buildings and structures on the Land shown on Schedule A which is attached hereto and forms part of this development variance permit. This development variance permit does not apply to additions to, or replacement of, any of the existing buildings shown on attached Schedule A, which is attached hereto and forms part of this development variance permit.
6. The Land shall be developed strictly in accordance with the terms and conditions and provisions of this development variance permit.
7. This development variance permit shall lapse if the Owner does not substantially start any construction with respect to which this development variance permit is issued, within two (2) years after the date this development variance permit is issued.
8. The terms of this development variance permit or any amendment to it, are binding on all persons who acquire an interest in the Land.
9. This development variance permit is not a building permit.

AUTHORIZING RESOLUTION PASSED BY THE COUNCIL, THE      DAY OF      , 20 .  
ISSUED THIS      DAY OF      , 20 .

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Mayor – Linda Hepner

---

City Clerk – Jane Sullivan



Carscadden Stokes  
McDonald Architects Inc.  
715 East Hastings Street  
Vancouver, BC V6A 1R3  
604 633 1830  
hello@carscadden.ca  
@carscaddenarch  
carscadden.ca

**GENERAL NOTES:**

1. REFER TO LANDSCAPE AND CIVIL DRAWINGS ALSO
2. SITE INFO BASED ON LEGAL SURVEY PROVIDED BY CITY OF SURREY - SURVEY SECTION AND WAS LABELLED AS PRELIMINARY AND UNDATED. IT WAS RECEIVED ON JAN 20, 2015.
3. THIS SURVEY HAS BEEN SCALED UP BY 1/0.9995897 TO ACCOUNT FOR GEODETIC DIMENSIONS - ALLOWANCES AND RIGHT OF WAY ARE ADDED BASED ON PRELIMINARY COMMENTS ON ROAD RIGHT OF WAY REQUIREMENTS LOCATION: 16666 24 AVE FROM THE CITY OF SURREY DATED AUGUST 12, 2015.
4. THIS IS NOT A LEGAL SURVEY

**PARKING NOTES:**

REFERENCE STANDARD:  
CITY OF SURREY OFF-STREET PARKING AND LOADING/UNLOADING PART 5 (ACCESSED JAN 2016)

**REQUIRED PARKING**  
OFFICE USES (NOT IN SURREY CITY CENTRE) - 2 PARKING SPACES FOR EVERY 100 SM OF GFA ON FLOORS ABOVE GROUND  
LIGHT IMPACT INDUSTRIAL - 1 PARKING SPACES FOR EVERY 100 SM  
WHERE MORE THAN 50 STALLS PROVIDED 1/100 SHALL BE FOR PERSONS WITH DISABILITIES  
PARKING STALLS - 5.5M X 2.0M  
PARKING FOR PERSONS WITH DISABILITIES - 5.5M X 4.35M  
DRIVE ASLE WIDTH 6.1 M PER 5.4.8

**PARKING SUMMARY - STAFF AND VISITOR**

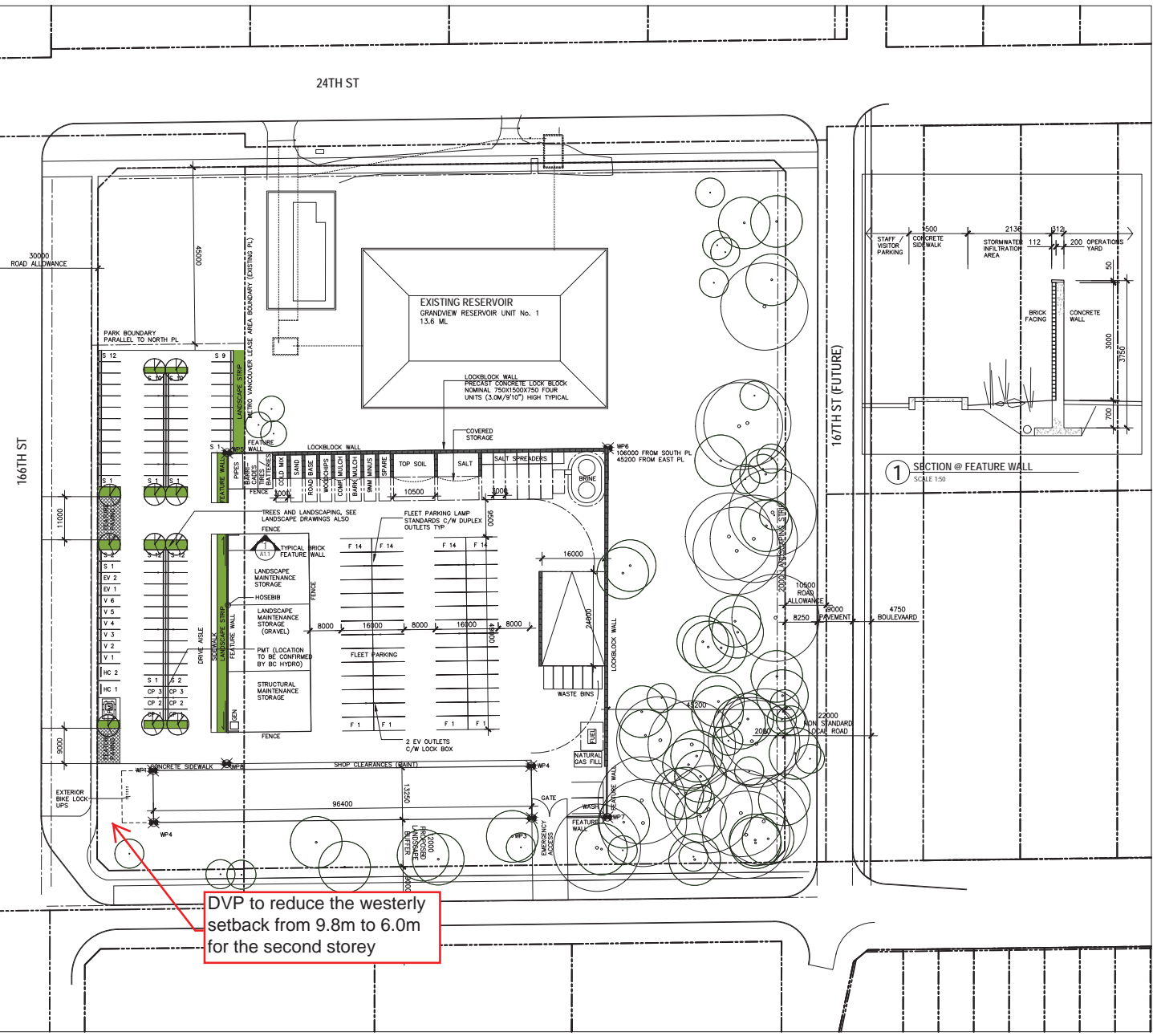
USE	GFA	FLOOR LEVEL	REQUIRED STALLS	PROPOSED STALLS
OFFICE AND ADMINISTRATIVE	719 SM	SECOND	14	34 STAFF 3 CARPOOL
LIGHT IMPACT INDUSTRIAL	1281 SM	FIRST	13	33 STAFF 3 CARPOOL
				1 EV STAFF 1 EV VISITOR 2 HC 6 VISITOR
<b>TOTAL</b>			<b>27</b>	<b>83</b>

**PARKING SUMMARY - FLEET**

FLEET STALLS (3.5M X 8M) 56  
(TWO HAVE LOCKED OUTLETS FOR EV PARKING)

**BICYCLE SPACES AND STORAGE**

AS PER 5.18.0.2.5  
WHERE 10 OR MORE PARKING SPACES FOR VEHICLES ARE REQUIRED, BICYCLE STORAGE SHALL BE PROVIDED FOR NON-RESIDENTIAL DEVELOPMENTS AS FOLLOWS:  
0.06 BICYCLE SPACE/100m<sup>2</sup> GFA - OFFICES  
AS ONLY 27 PARKING SPACES ARE REQUIRED, NO BICYCLE SPACES AND STORAGE ARE REQUIRED.  
HOWEVER, THEY WOULD BE CALCULATED AS FOLLOWS  
2000 SM / 100 X 0.06 = 1.2 "REQUIRED"  
NOTE THAT 7 ARE PROVIDED  
Loading/Unloading:  
-TBC by City of Surrey



DVP to reduce the westerly setback from 9.8m to 6.0m for the second storey

Carscadden

SOUTH SURREY OPERATIONS CENTRE

SITE PLAN

DATE: \_\_\_\_\_  
 DRAWN: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 DESIGNED: \_\_\_\_\_  
 SCALE: \_\_\_\_\_  
 SHEET: \_\_\_\_\_

A1.2

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Schedule A