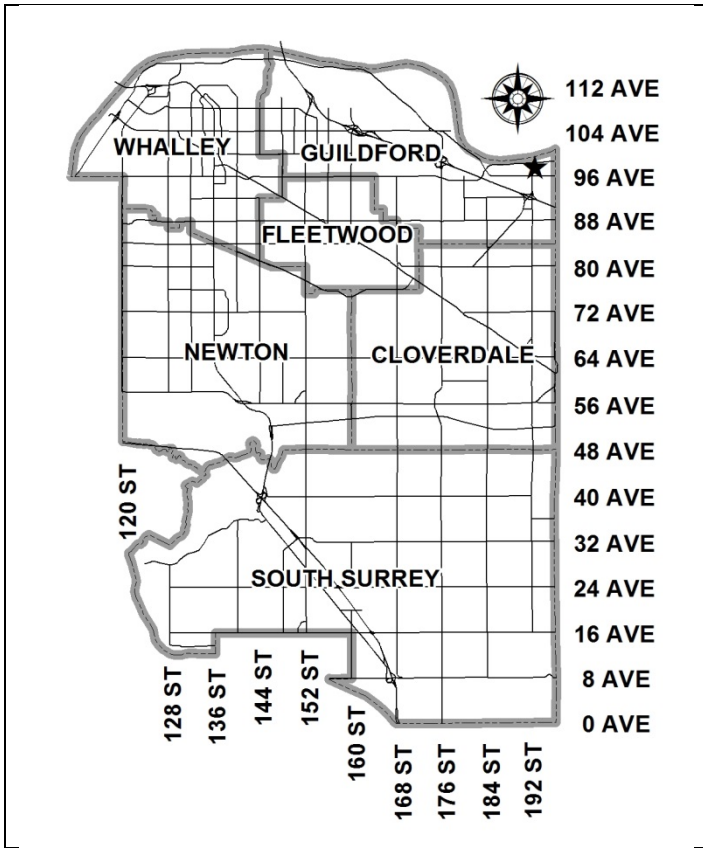


City of Surrey
PLANNING & DEVELOPMENT REPORT

File: 7915-0004-00

Planning Report Date: March 23, 2015

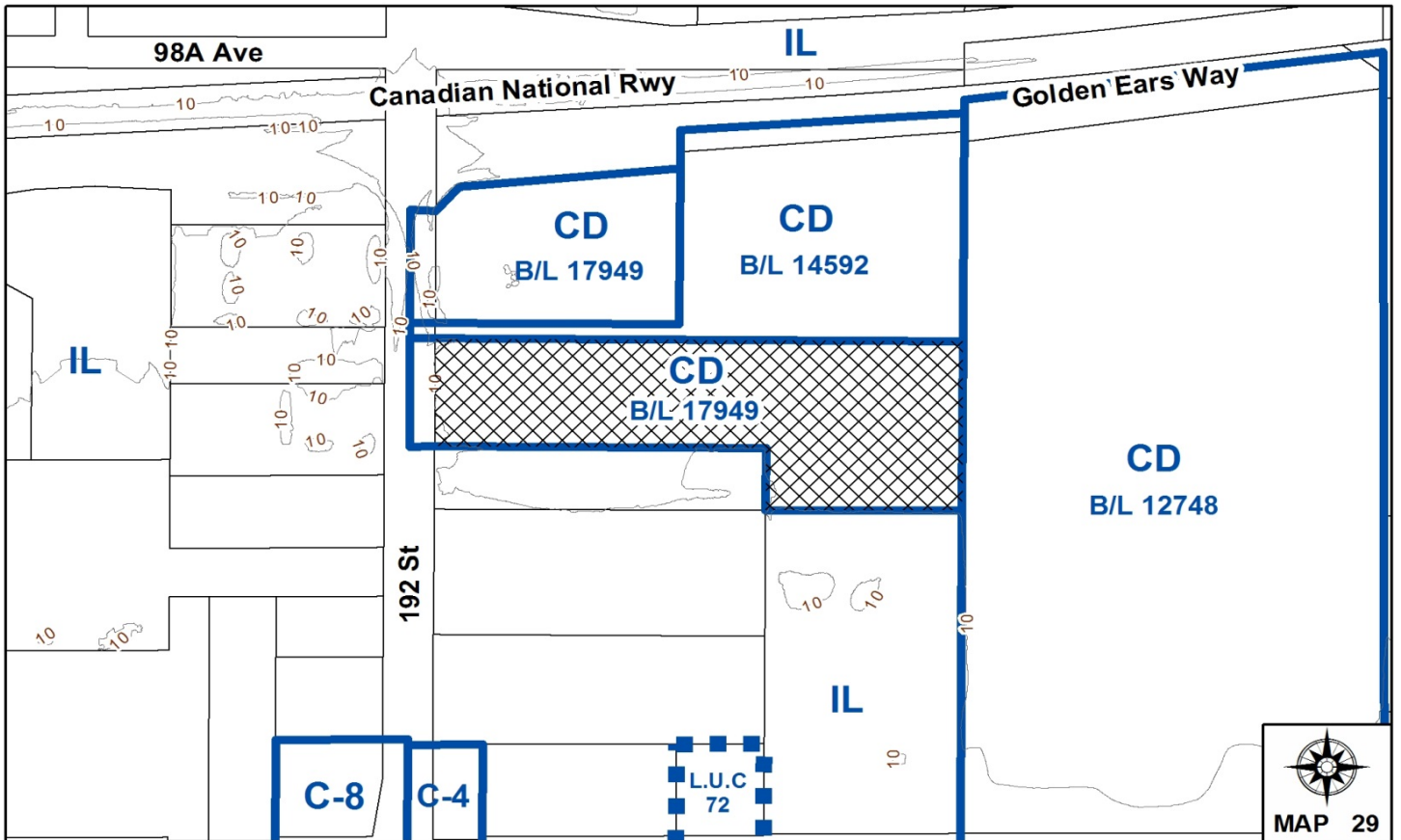


PROPOSAL:

- Development Permit
- Development Variance Permit

in order to permit the development of an organic waste biofuel processing facility.

LOCATION: 9752 - 192 Street
OWNER: City of Surrey
ZONING: CD By-law No. 17949
OCP DESIGNATION: Industrial



RECOMMENDATION SUMMARY

- Approval to draft Development Permit.
- Approval for Development Variance Permit to proceed to Public Notification.
- Approval to vary the Sign By-law through a comprehensive sign design package to allow for two murals.

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- Requires side yard setback relaxations to allow exiting stairs on the north and south sides of the building to satisfy the BC Building Code, to allow for the installation of chemical tanks on the north side of the building, and to allow for weather protection on the south side of the building for the outside viewing of the operation of the facility.
- Requires rear yard setback relaxation to allow for the placement of an odour suppression stack within the setback area.
- Requires a relaxation of the required number of off-street parking spaces.
- Requires relaxation to the maximum height of a portion of the principal building to allow for the stack, which is an integral part of the odour suppression system for the facility.
- Requires relaxation of the Sign By-law to allow two murals on the north façade of the proposed building.

RATIONALE OF RECOMMENDATION

- Complies with the Industrial designation in OCP.
- Will greatly assist the City in achieving its solid waste diversion goal of 70% by 2015.
- Allows the City to establish a non-thermal waste-to-energy program.
- Allows the City to operate a wholly sustainable, closed loop waste collection program.
- Supplements growing regional demand for organic waste processing infrastructure.
- The proposed density and building form are suitable for this area of Port Kells. The building features high quality durable materials.

RECOMMENDATION

The Planning & Development Department recommends that:

1. Council approve the applicant's request to vary the Sign By-law to allow two murals as described in Appendix II.
2. Council authorize staff to draft Development Permit No. 7915-0004-00 including a comprehensive sign design package generally in accordance with the attached drawings (Appendix III).
3. Council approve Development Variance Permit No. 7915-0004-00 (Appendix VII) varying the following, to proceed to Public Notification:
 - (a) to reduce the minimum north side yard setback of the CD Zone (By-law No. 17949) from 7.5 metres (25 ft.) to 5.5 metres (18 ft.) for a stairwell and to 3.5 metres (11 ft.) to allow for the installation of chemical storage tanks;
 - (b) to reduce the minimum south side yard setback of the CD Zone (By-law No. 17949) from 7.5 metres (25 ft.) to 4.5 metres (14.5 ft.) for a stairwell and canopy;
 - (c) to reduce the minimum rear yard setback of the CD Zone (By-law No. 17949) from 7.5 metres (25 ft.) to 3 metres (9.8 ft.) for an odour suppression stack;
 - (d) to increase the maximum height of a portion of a principal building or structure of the CD Zone (By-law No. 17949) from 18 metres (60 ft.) to 80 metres (263 ft.) for an odour suppression stack; and
 - (e) to reduce the minimum number of off-street site parking spaces from 143 spaces to 18 spaces.
4. Council instruct staff to resolve the following issues prior to 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) modification of the existing statutory right-of-way for access along the southern portion of the north adjoining property (9770 - 192 Street);
 - (c) submission of a landscaping plan and landscaping cost estimate to the specifications and satisfaction of the Planning and Development Department; and
 - (d) resolution of all urban design issues to the satisfaction of the Planning and Development Department.

REFERRALS

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

SITE CHARACTERISTICS

Existing Land Use: Vacant

Adjacent Area:

Direction	Existing Use	OCP Designation	Existing Zone
North:	Metro Vancouver waste transfer station.	Industrial	CD By-law No. 14592
East:	Mixed industrial uses.	Industrial	CD By-law No. 12748
South:	Mixed industrial uses.	Industrial	IL
West (Across 192 Street):	Mixed industrial uses.	Industrial	IL

DEVELOPMENT CONSIDERATIONSBackground:

- The subject lot is located in the Port Kells industrial area, north of Highway No. 1 and south of the intersection with the Golden Ears Way, and adjacent to the existing Metro Vancouver waste transfer station.
- The subject lot is designated Industrial under the Official Community Plan (OCP) and is zoned "Comprehensive Development Zone (CD)" (By-law No. 17949). The lot has an area of 2.68 hectares (6.6 acres).
- As a requirement of the Metro Vancouver Integrated Solid Waste and Resource Management Plan, all member municipalities within the region have been required to implement curbside collection of food waste by 2015, which is when this waste material was banned from the landfill. Accordingly, the City implemented its organics waste collection program called "Rethink Waste", on October 1, 2012.
- In conjunction with this curbside program, the City has identified a need to construct a facility to process the material collected. Currently, the organic waste that is collected in the City is being processed at Fraser Richmond Soil and Fiber, a compost facility located in Richmond.

- As a result, the City of Surrey decided to proceed with the development of an organic waste biofuel processing facility on the subject site to meet its operational goals with respect to organic waste diversion and recycling. The proposed organic waste biofuel processing facility will be developed as a Public Private Partnership (P3) project.
- In September 2012, the Federal P3 Canada Fund approved for funding of 25%, up to \$16.9 million, for the construction of the organic waste biofuel processing facility.
- In May 2013, the City began the P3 process for the construction of the organic waste biofuel processing facility on the subject site with the release of a Request for Qualification.
- In order to provide a level of certainty to the prospective P3 proponents, it was necessary for the subject site to be zoned to accommodate the proposed organic waste biofuel processing facility, which is considered a recycling plant.
- As the required lot size was unknown at the time, two City-owned lots, the 2.68-hectare (6.6 ac.) subject lot and the 1.36-hectare (3.4 ac.) lot to the north, were rezoned from Light Impact Industrial Zone (IL) to Comprehensive Development Zone (CD) By-law No. 17949. Final adoption of the rezoning was given by Council on June 17, 2013 (Application No. 7910-0241-00).
- CD By-law No. 17949 is based on the IL Zone but incorporates the following as a permitted use:
 - Recycling plant limited to an organic waste biofuel processing facility, provided that the disposal of organic waste and biofuel production is confined to an enclosed building.*
- On December 10, 2014, Council approved the recommendations of Corporate Report No. R206; 2014 to award the Surrey Biofuel Processing Facility Project to Iris Solutions, to design, build, finance, operate and maintain the Surrey Organics Biofuel Processing Facility for a 25-year term, subject to two conditions that have subsequently been fulfilled (as documented in Corporate Report No. R035; 2015).

Current Proposal

- The subject proposal is for a Development Permit to regulate the form and character of the proposed organic waste biofuel processing facility and a Development Variance Permit to relax the height, setbacks and parking requirements for the proposed facility.
- The proposed organic waste biofuel processing facility is currently intended to handle primarily residential organic waste collected in the City of Surrey. However, in order to accommodate growing regional demand for organic waste processing, this facility may also accept organic material from the Industrial/ Commercial/ Institutional sectors and/or from neighbouring municipal curbside organic waste collection programs.
- It is intended that the proposed organic waste biofuel processing facility will convert both wet and dry organic waste into gas that can be directed into existing natural gas distribution systems and/or can be used to fuel vehicles.

- As noted, the proposed organic waste biofuel processing facility will be constructed as a P3 project, which is a competitive process that requires prospective proponents to submit proposals to the City for review and evaluation. Orgaworld has been selected as the preferred proponent for the construction and operation of this facility.
- The proposed building includes a 13,021-square metre (140,161 sq. ft.) biofuel processing plant with a 1,302-square metre (14,015 sq. ft.), three-storey office component.
- The floor area ratio (FAR) is 0.53 based on the 2.68-hectare (6.6-acre) lot area and the lot coverage is 30.3%. This proposal is within the 1.0 FAR and 60% lot coverage permitted under CD By-law No. 17949.

PRE-NOTIFICATION

In accordance with Council policy, a development proposal sign was erected on the property. To date, staff have not received any comments with respect to the proposal.

PUBLIC INFORMATION MEETING

- As part of the rezoning application process to permit a biofuel facility on this site, a Public Information Meeting was held on April 18, 2013 to advise the surrounding businesses and property owners of the proposed use. At that meeting, the attendees were advised that as part of the Development Permit process, a further Public Information Meeting would be held to apprise surrounding business owners and tenants of the exact type of technology being proposed and to seek further input in the proposal.
- On February 24, 2015 a Public Information Meeting (PIM) was held for the proposed Development Permit and to advise the business and property owners of the technology for the biofuel facility. Owners and business in the area bounded by 96 Avenue to the south, Golden Ears Way to the north, 196 Street to the east and 190 Street to the west were notified about the meeting by letter. The PIM was held at the Port Kells Community Hall from 5:00 p.m. to 7:00 p.m. for the convenience of the business owners.
- Eleven people attended the PIM, and information on the form and character of the building and on the technology, specifically the odour suppressant system, was provided. The attendees were supportive of the concept of the organic recycling biofuel facility and were reassured that odour would not be an issue related to the operation of the facility.

DESIGN PROPOSAL AND REVIEW

- The proposed vehicular access for the green waste disposal trucks, employees, and visitors to the facility is from 192 Street. Once on site, the green waste disposal trucks will proceed north to a queuing area to wait to weigh and deposit the waste into the biofuel facility. Employees and visitors will proceed south to a parking lot which parallels the south property line.

- A secondary access proposed along the northern boundary and through the panhandle portion of the adjacent waste transfer facility operated by Waste Tec. A statutory right-of-way was secured as part of an earlier subdivision to create a site for the waste transfer station to allow for this shared driveway between the sites. The applicant requires the use of this driveway access to allow for the removal of compost material from the rear portion of the building.
- The applicant has advised that this secondary access will be used by vehicles to remove the compost material during the non-operational hours of the waste transfer station, so that the adjoining business operation is not disrupted. The applicant is currently negotiating with Metro Vancouver to amend the existing statutory right-of-way as the right-of-way area currently does not extend far enough to the east to meet the access location currently proposed on the subject site.
- The Zoning By-law requires 1 parking space per 100 square metres (1,075 sq. ft.) of building area. Based on this calculation, a total of 143 parking spaces are required. The applicant proposes to provide 18 parking spaces, and one bus parking space (see By-law Variance section).
- The building is proposed to be constructed using tilt-up concrete panels. The building is proposed to be painted in colour blocking which represents the process occurring within the building. The orange colour represents the Dutch origin of the company and defines the major material movement area inside the facility. The waste receiving area is proposed to be painted black. The Surrey logo tones of green represent the proposed compost tunnels and reactors.
- On the west elevation facing 192 Street is the proposed office building, attached to the biofuel facility. This element incorporates glazing with a wood roof overhang supported by a structural wood beam. Inside, the office component is a lookout area which will allow visitors to observe the processing plant. A second storey balcony incorporates a demonstration garden which will use the compost material created in the biofuel process.
- Along the south side of the building, there is a proposed walkway, which will allow visitors to look inside the facility from the outside. A canopy has been proposed over these windows to provide weather protection (see By-law Variance section).
- At the rear of the site is a proposed stack, which is an integral part of the odour suppression system. The CD By-law No. 17949 limits the height of buildings and structures to 18 metres (60 ft.). In order to optimize the odour mitigation, it was determined that the stack needed to be 80 metres (262 ft.) in height. This element is proposed to be painted grey which will allow it to blend in with the skyline (see By-law Variance section).
- The height of the odour suppression stack requires a substantial base to anchor it to the ground. This base is 4.5 metres (15 ft.) in diameter and encroaches into the rear yard setback requirement (see By-law Variance section).
- Between the front of the building and 192 Street, there are a number of tanks and mechanical equipment that are required as part of the biofuel processing before the product is introduced into the gas grid.

- The applicant has provided images of what this equipment may look like, but it may change once the final specifications for this equipment are determined. The question was raised if some of this equipment can be "wrapped" similar to the BC Hydro kiosks. The applicant will consider this request, provided that this treatment does not void any warranties for the equipment.
- Building fascia signage is proposed on the upper part of the wall on the west elevation to identify the facility. Along the north elevation, mural type signage is proposed on the black-coloured portion of the wall. This includes the picture representation of the recycling of green waste into biofuel and an image of the green tote used at the curbside collection. As mural signs are not permitted under the Sign By-law, a relaxation to the Sign By-law is required. Council may grant approval to variances to the sign By-law through the approval of a Development Permit that includes a comprehensive sign design package.
- Landscaping is proposed along the 192 Street road frontage, as well as around the perimeter of the site. The proposed landscaping will consist of deciduous and coniferous native and non-native trees and shrubs. The landscaping north of the driveway access will screen most of the mechanical equipment required in the biofuel processing.
- To maintain security on the site, a black vinyl coated chain link fence is proposed. A gate is proposed onsite at the end of the queuing area for the driveway entrance to the property to provide site security during the evening hours.

TREES

- Norman Hol, ISA Certified Arborist of Arbortech consulting prepared an Arborist Assessment for the subject property. The table below provides a summary of the tree retention and removal by tree species:

Table 1: Summary of Tree Preservation by Tree Species:

Tree Species	Existing	Remove	Retain
Alder and Cottonwood Trees			
Cottonwood	4	4	
	4	4	
Total Replacement Trees Proposed (excluding Boulevard Street Trees)		31	
Contribution to the Green City Fund		n/a	

- There are four cottonwood trees on the property, all of which are proposed to be removed.
- The applicant is required to plant trees on a 1 to 1 replacement ratio for Alder and Cottonwood trees. This requires a total of 4 replacement trees on the site. The applicant is proposing 31 replacement trees, exceeding City requirements.

- The new trees on the site will consist of a variety of tree species including Douglas Fir, Paper Birch, Dogwood, Horn Bean, Sweet Gum and an Apple tree in the demonstration garden.

SUSTAINABLE DEVELOPMENT CHECKLIST

The applicant prepared and submitted a sustainable development checklist for the subject site on January 14, 2015. 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"> • Site is located in an existing industrial area and complies with the Industrial designation in the Official Community Plan.
2. Density & Diversity (B1-B7)	<ul style="list-style-type: none"> • The proposed development has a 0.53 FAR.
3. Ecology & Stewardship (C1-C4)	<ul style="list-style-type: none"> • An additional 20 trees are proposed to be planted. • The facility is for the recycling of organic waste, and compost will be created as part of the process. • A rooftop demonstration is included as part of the educational component of the facility
4. Sustainable Transport & Mobility (D1-D2)	<ul style="list-style-type: none"> • Bike racks and lockers will be provided on site.
5. Accessibility & Safety (E1-E3)	<ul style="list-style-type: none"> • A key consideration.
6. Green Certification (F1)	<ul style="list-style-type: none"> • N/A
7. Education & Awareness (G1-G4)	<ul style="list-style-type: none"> • There will be an educational viewing area for school children

ADVISORY DESIGN PANEL

This project was reviewed by the Advisory Design Panel on February 12, 2015. Overall, the design concept of the building was well received. The comments provided by the Advisory Design Panel have been addressed as outlined in italics in Appendix VI.

BY-LAW VARIANCES AND JUSTIFICATION

(a) Requested Variance:

- To relax the north side yard set back of CD By-law No. 17949 from 7.5 metres (25 ft.) to 5.5 metres (18 ft.) for the exiting stairs, and 3.5 metres (11.4 ft.) to allow for the installation of chemical storage tanks.

Applicant's Reasons:

- The wall of the building is set back the required 7.5 metres (25 ft.) from the north property line. The BC Building Code requires exiting stairs from the building, and these stairs extend into the setback area.
- The production details are currently being reassessed to ensure optimum function of the biofuel facility. Originally, the chemical tanks were to be located inside the north east portion of the plant. The consulting engineers have determined that operationally, these structures are better suited to being placed on the outside of the building.
- These chemical tanks are located outside of the north overhead door on the east side of the building. The tanks are 6.0 metres (19.6 ft.) metres in height, and encroach into the setback area by 4.0 metres (13 ft.).
- The setbacks required by the contents of these tanks satisfy the requirements of the Fire Code..

Staff Comments:

- The CD By-law was created based on the IL Zone, which requires either a 7.5-metre (25 ft.) setback or a "0" metre setback. The bulk of the building complies with the setback of CD By-law No. 17949 and the north setback variance is only for the extension of the exiting stairs to satisfy the BC Building Code.
- The tanks are required for the operation of the facility and the production of biofuels. The applicant has proposed to paint a similar green as proposed elsewhere on the building.
- Staff support the requested variances.

(b) Requested Variance:

- To relax the south side yard setback of CD By-law No. 17949 from 7.5 metres (25 ft.) to 4.5 metres (15 ft.) for the existing stairs and a canopy.

Applicant's Reasons:

- The wall of the building is set back the required 7.5 metres (25 ft.) from the south property line. The BC Building Code requires exiting stairs from the building, and these stairs extend into the setback area.
- As well, there is a walkway around the south side of the building to provide access to viewing areas so that visitors can look into the processing area. This viewing area is protected by a wood canopy which provides weather protection which encroaches into the side yard setback.

Staff Comments:

- The CD By-law was created based on the IL Zone, which requires either a 7.5-metre (25 ft.) setback or a "0" metre setback. The bulk of the building complies with the setback of CD By-law No. 17949 and the south setback variance is only for the provision of weather protection over a visitor viewing area and the existing stairs to satisfy the BC Building Code.
- Staff support the requested variance.

(c) Requested Variance:

- To relax the rear yard setback of CD By-law No. 17949 from 7.5 metres (25 ft.) to 5.4 metres (18 ft.) for the odour suppression stack.

Applicant's Reasons:

- The rear wall of the building is set back the required 7.5 metres (25 ft.) from the rear property line. The odour suppression stack is located outside of this wall area, and requires a larger base to support the height of the structure.

Staff Comments:

- The CD By-law was drafted based on the IL Zone, which requires a 7.5-metre (25 ft.) setback from the rear property line. The bulk of the building complies with the setback of CD By-law No. 17949 and the rear setback variance is to accommodate the siting of the stack at the rear of the property, which abuts industrial uses.
- Staff support the requested variance.

(d) Requested Variance:

- To increase the maximum allowable height of a portion of the principal building in CD By-law No. 17949 from 18 metres (60 ft.) to 80 metres (263 ft.) for the odour suppression stack.

Applicant's Reasons:

- The terms of the partnership contract has strict provisions on the level of odours which can be produced and discharged by this processing facility. The initial calculations determined that a 40-metre (131 ft.) stack would be sufficient to satisfy this restriction. On further review of the anticipated volume of material to be processed, and the odours associated with the production, a 70-metre (230 ft.) stack would calculate into a 0.97 odour unit per 1.5 kilometres (1 mile).
- To ensure that the plant operates within the parameters of the agreement, an 80-metre stack (263 ft.) would ensure that the odour emissions are below the 1.0 odour units specified in the agreement.

Staff Comments:

- The proposed stack is connected to and forms an integral part of the facility. It is therefore considered part of the principal building.
- The surrounding residents were concerned about the potential for odour emissions produced by the biofuel facility. At the Public Information Meeting, technical data was discussed with the surrounding property owners that provided assurances that, with the higher stack height proposed odours would not be an issue. The neighbouring property owners didn't express any concern about the height of the stack.
- Under the terms of the partnership agreement, if odours exceed the 1 odour unit/m³ as specified, the plant is to be closed until the issue is addressed. There are monetary penalties associated with the release of odours that exceed the specifications in the contract.
- Staff support the requested variance.

(e) Requested Variance:

- To decrease the required number of off-street parking spaces from 143 spaces to 18 spaces.

Applicant's Reasons:

- The parking proposed on-site is based on the known current and projected occupant loads from Orgaworld's experience and other similar facilities they operate. The organic waste processing facility that Orgaworld operates in London, Ontario requires only 16 parking spaces.
- The proposed facility in Port Kells will have 15 employees in total, with half of them working during a shift. A total of 8 employee parking spaces are required at any one time. A further 10 parking spaces and one bus parking space are proposed for visitors and tours.

Staff Comments:

- The parking requirements in the Surrey Zoning By-law are based on industry standards for the number of employees working within an industrial building. The floor area of the majority of this facility is used for the creation of biofuel and composting of organic waste. Employees will not be working within these areas while the processing is occurring. Based on the information provided on the parking requirements at the other facility, staff support the requested variance.

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 Sign By-law Variance Table
Appendix III.	Site Plan, Building Elevations, Landscape Plans and Perspective
Appendix IV.	Engineering Summary
Appendix V.	Summary of Tree Survey and Tree Preservation
Appendix VI.	ADP Comments
Appendix VII.	Development Variance Permit No. 7915-0004-00

INFORMATION AVAILABLE ON FILE

- Parking Assessment Prepared by Stantec Consulting Dated February 12, 2015
- Biofuel Odour Assessment prepared by Stantec Consulting dated October 2014 and February 2015.
- Complete Set of Architectural and Landscape Plans prepared by Stantec Architecture, dated February 12, 2015.

original signed by Judith Robertson

Jean Lamontagne
General Manager
Planning and Development

LAP/dk

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DEVELOPMENT DATA SHEET

Existing Zoning: CD By-law No. 17949

Required Development Data	Minimum Required / Maximum Allowed	Proposed
LOT AREA (in square metres)		
Gross Total		
Road Widening area		
Undevelopable area		
Net Total		2.68 ha.
LOT COVERAGE (in % of net lot area)		
Buildings & Structures	60%	53%
Paved & Hard Surfaced Areas		30.3%
Total Site Coverage		83.3%
SETBACKS (in metres)		
Front	7.5m	
Rear	7.5m	7.5m building; 5.4m stack *
Side #1 (N)	7.5m	7.5m building; 5.5. stair* and 3.5m for tanks *
Side #2 (S)	7.5m	7.5m building; 4.5m canopy *
BUILDING HEIGHT (in metres/storeys)		
Principal	18m	12m building/ 80m stack*
Accessory	6m	
NUMBER OF RESIDENTIAL UNITS	n/a	
Bachelor		
One Bed		
Two Bedroom		
Three Bedroom +		
Total		
FLOOR AREA: Commercial		
FLOOR AREA: Industrial Accessory Office	26,800 m ²	13,021 m ² 1,302 m ²
FLOOR AREA: Institutional		14,323 m ²
TOTAL BUILDING FLOOR AREA	26,800 m ²	14,323 m ²

* **Variance requested**

Development Data Sheet cont'd

Required Development Data	Minimum Required / Maximum Allowed	Proposed
DENSITY		
# of units/ha /# units/acre (gross)		
# of units/ha /# units/acre (net)		
FAR (gross)		
FAR (net)	1.0	0.53
AMENITY SPACE (area in square metres)	n/a	
Indoor		
Outdoor		
PARKING (number of stalls)		
Commercial		
Industrial	143	18 *
Residential Bachelor + 1 Bedroom		
2-Bed		
3-Bed		
Residential Visitors		
Institutional		
Total Number of Parking Spaces		
Number of disabled stalls		
Number of small cars		
Tandem Parking Spaces: Number / % of Total Number of Units		
Size of Tandem Parking Spaces width/length		

* **Variance requested**

Heritage Site	NO	Tree Survey/Assessment Provided	YES
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PROPOSED SIGN BY-LAW VARIANCE

#	Proposed Variance	Sign By-law Requirement	Rationale
1	To allow for two mural signs on the north elevation of the building	Mural signs are prohibited	The requested murals are a picture representation of the recycling of green waste into biofuel and an image of the green tote used at the curbside collection. These images are educational in nature and capture the process that is occurring within the building



ORGAWORD CANADA SURREY BIOFUEL PROCESSING FACILITY

9752 192ND STREET, SURREY, BC



DRAWING LIST

C-101	SITE LAYOUT
C-101A	SITE EQUIPMENT SCHEDULE & PHOTOS
L-101	LANDSCAPE PLAN
L-102	LANDSCAPE DETAILS
E-101	SITE AND BUILDING MOUNTED LIGHTING PLAN
C-102	WAY FINDING SHEET 1
C-103	WAY FINDING SHEET 2
C-106	UTILITIES PLAN
A-102	CONCRETE WORK PLAN
C-107	GRAZING PLAN
C-108	EROSION SEDIMENT CONTROL PLAN
C-109	EROSION SEDIMENT CONTROL DETAILS
A-103	ELEVATIONS
A-104	CROSS SECTIONS
A-105	ISOMETRIC VIEWS - EXTERIOR
A-106	ISOMETRIC VIEWS - INTERIOR
A-107	ADMINISTRATION AREA - FLOOR PLANS AND CROSS SECTIONS
A-108	ADMINISTRATION AREA - ELEVATIONS & INTERIOR ISOMETRICS
A-110	EXTERIOR RENDERINGS
A-111	EXTERIOR RENDERINGS
A-113	SITE ELEVATIONS
A-114	SITE ELEVATIONS
A-115	SITE SECTIONS

SUBMISSION TO ADVISORY DESIGN PANEL

CITY OF SURREY FILE # 7915-0004-00

Project Number: 114501665

WALL LEGEND	
	CAST IN-PLACE CONCRETE
	TILT-UP CONCRETE
	METAL CLADDING ON STEEL FRAMES
	GWB ON STEEL STUDS

Revision	No.	DATE	BY	CHKD

Formal Seal

SUBMISSION TO ADP

FOR THE SUBMITTAL OF PERMITS
DATE OF SUBMITTAL: 11/15/2016

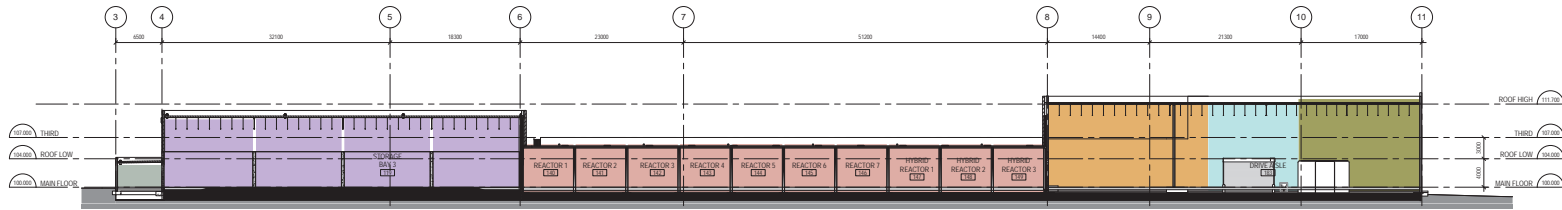
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ORGAWORLD CANADA

SURREY BIOFUEL PROCESSING FACILITY

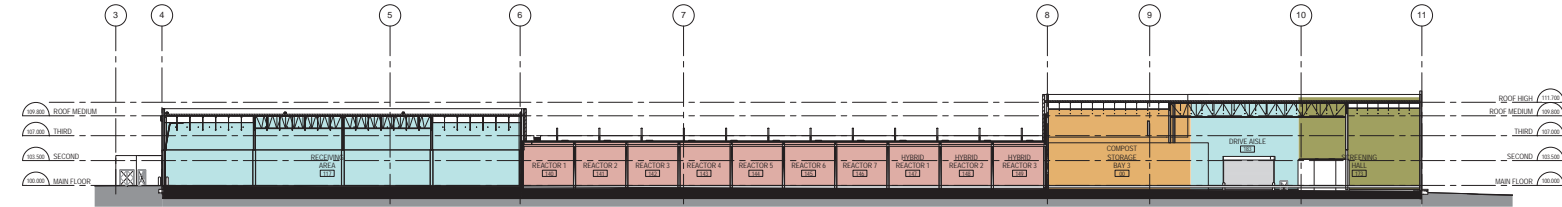
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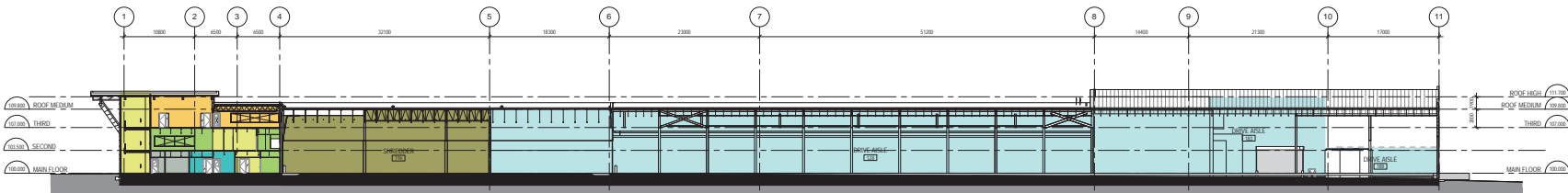
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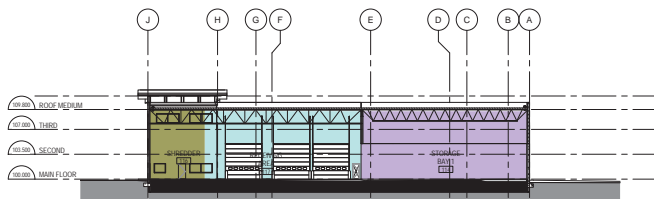
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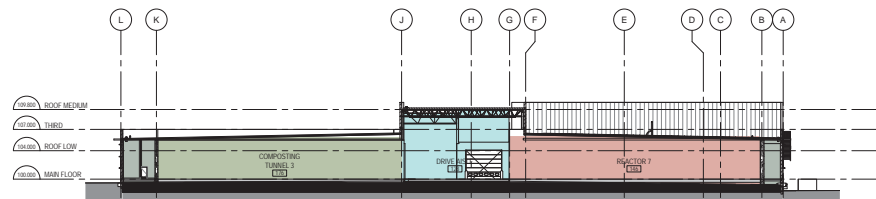
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4 BUILDING CROSS SECTION F
A-104 1:250



5 BUILDING CROSS SECTION H
A-104 1:250

INTER-OFFICE MEMO

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

FROM: Development Services Manager, Engineering Department

DATE: March 13, 2015 PROJECT FILE: **7815-0004-00**

**RE: Engineering Requirements (Commercial/Industrial)
Location: 9752 192 Street**

DEVELOPMENT PERMIT/DEVELOPMENT VARIANCE PERMIT

The following issues are to be addressed through the Building Permit process:

Property and Right-of-Way Requirements

- Extend existing reciprocal access statutory right-of-way (SRW) between subject property and 9770-192 Street to the new proposed access location.

Works and Services

- Construct raised median along 192 Street;
- Construct new curb return driveway access. Relocate infrastructure such as existing street lights and street trees as required;
- Construct storm, sanitary, and water service connections;
- Provide a stormwater management plan; and
- Provide a restrictive covenant for stormwater management features.

A Servicing Agreement is required for the above noted works.



Rémi Dubé, P.Eng.
Development Services Manager

AH



TREE PRESERVATION SUMMARY

Surrey Project No.: 79 - -
 Project Location: 9810 and 9752 192nd Street Surrey, BC
 Consulting Arborist: Norman Hol

1 Summary description of the existing tree resource. See also the arborist report on file

See Arborist Report

2 Summary of Proposed Tree Removal and Replacement

Quantity of Bylaw Protected Trees Identified	(A)	<u>4</u>
Quantity of Bylaw Protected Trees to be Removed (Hazard)	(B)	<u>0</u>
Quantity of Bylaw Protected Trees to be Removed	(C)	<u>4</u>
Quantity of Bylaw Protected Trees to be Retained	(A-B-C) (D)	<u>0</u>
Quantity of Replacement Trees Required (2:1 ratio except for alder and cottonwood at 1:1 ratio)	(E)	<u>4</u>
Quantity of Replacement Trees Proposed	(F)	<u>4</u>
Quantity of Replacement Trees in Deficit	(E-F) (G)	<u>0</u>
Quantity of Retained Trees and Replacement Trees on Site	(D+F) (H)	<u>4</u>
Number of Lots Proposed in the Project	(I)	<u>N/A</u>
Average Number of Trees per Lot	(H/I)	<u>N/A</u>

3 Tree Survey and Preservation/Replacement Plan Attached

Yes

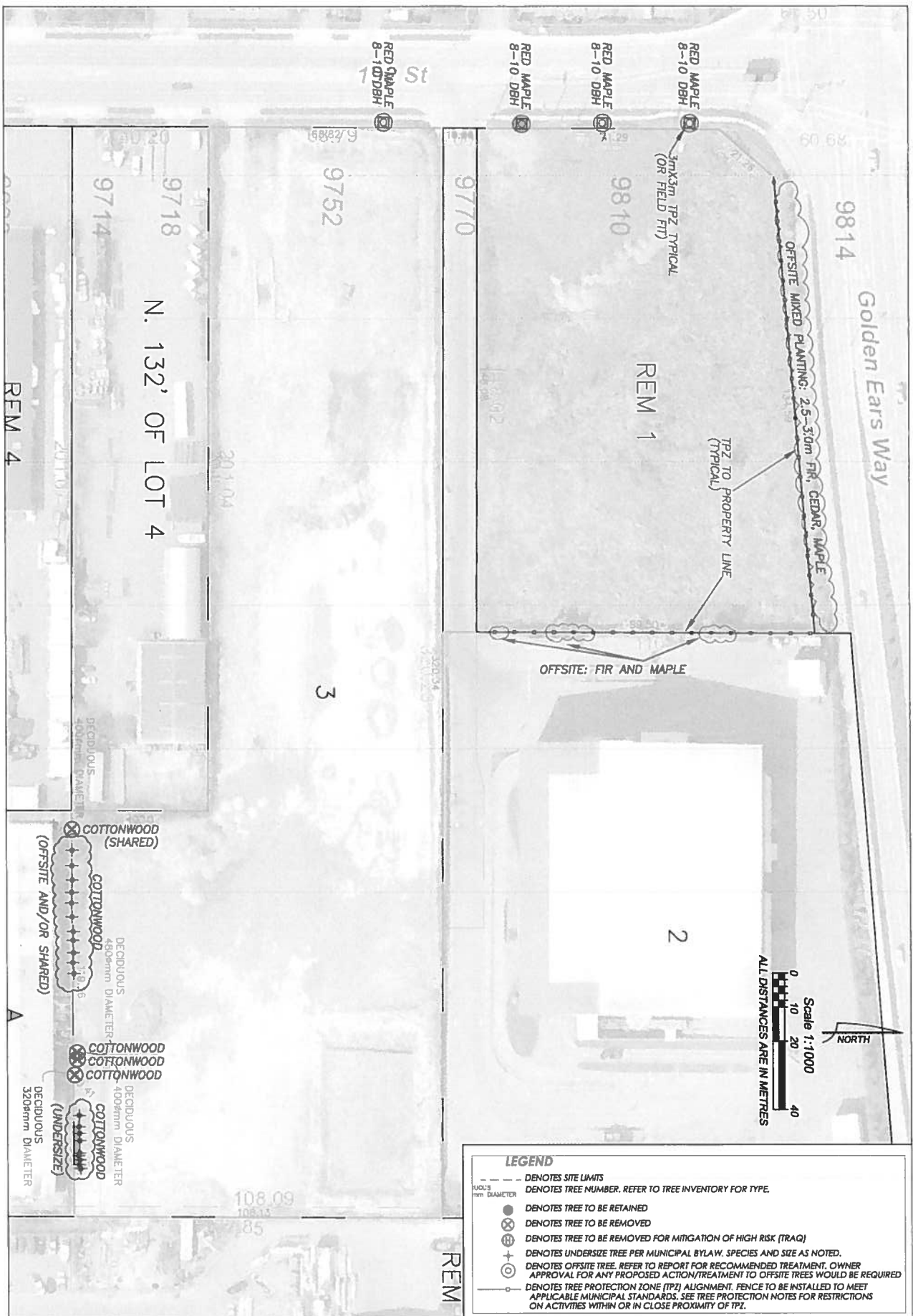
This summary and referenced documents are prepared and submitted by:

Norman Hol, Consulting Arborist

Dated: March 1, 2013

Direct: 604 813 9194

Email: norm@aclgroup.ca



LEGEND

- - - DENOTES SITE LIMITS
- DENOTES TREE NUMBER. REFER TO TREE INVENTORY FOR TYPE.
- DENOTES TREE TO BE RETAINED
- ⊗ DENOTES TREE TO BE REMOVED
- ⊗ DENOTES TREE TO BE REMOVED FOR MITIGATION OF HIGH RISK (TRAQ)
- ⊕ DENOTES UNDERSIZE TREE PER MUNICIPAL BYLAW. SPECIES AND SIZE AS NOTED.
- DENOTES OFFSITE TREE. REFER TO REPORT FOR RECOMMENDED TREATMENT. OWNER APPROVAL FOR ANY PROPOSED ACTION/TREATMENT TO OFFSITE TREES WOULD BE REQUIRED
- - - DENOTES TREE PROTECTION ZONE (TPZ) ALIGNMENT. FENCE TO BE INSTALLED TO MEET APPLICABLE MUNICIPAL STANDARDS. SEE TREE PROTECTION NOTES FOR RESTRICTIONS ON ACTIVITIES WITHIN OR IN CLOSE PROXIMITY OF TPZ.

acigroup.ca ARBORTECH CONSULTING a division of ACI GROUP		TREE MANAGEMENT DRAWING	
GREATER VANCOUVER OFFICE: SUITE 200 - 3740 CHATHAM STREET, RICHMOND, BC CANADA V7E 2Z3 p 604.275.3484		PROJECT: SURREY BIOFUEL FACILITY	
FRASER VALLEY OFFICE: SUITE 109 - 1528 MCCALLUM ROAD, ABBOTSFORD, BC CANADA V2S 8A3 p 604.755.7132		ADDRESS: 9810 AND 9752 192ND STREET SURREY	
		CLIENT: MCELHANNY - CITY OF SURREY	
		ACL FILE: 13112	SHEET: 1 OF 2

REV #	DATE	COMMENTS
0	MAR 1 2013	FIRST SUBMISSION



Advisory Design Panel Minutes

6E - City Manager's Boardroom
City Hall
13450 - 104 Avenue
Surrey, B.C.
THURSDAY, FEBRUARY 12, 2015
Time: 4:00 p.m.

Present:

L. Mickelson - Chair
C. Taylor
D. Newby
N. Baldwin
S. Vincent
M. Ehman
M. Vance
M. MacCaull
D. Ramslie

Absent:

M. Young
S. Forrest
G. McGarva
T. Wolf
E. Mashig
B. McGinn
T. Coady
Cpl. M. Searle

Guests:

P. Oostelbos, Orgaworld
R. Lauzan, Orgaworld
M. Yn, Stantec Architecture
T. Dickson, Barnett Dembek Architects
B. Casidy, Barnett Dembek Architects
M. Dembek, Barnett Dembek Architects
D. Kohli, Barnett Dembek Architects
M. Mitchell, M2 Landscape Architecture
T. Kyle, M2 Landscape Architecture
C. J. Kavolinas, C. Kavolinas & Associates Inc.
R. Wallis, Focus Architecture
C. Hogan, Focus Architecture Inc.

Staff Present:

T. Ainscough, City Architect
M. Rondeau, Senior Planner
C. Craig, Administrative Assistant
L. Pitcairn, Planner
R. Costanzo, Manager Operations
B. van Drimmelen, Project Specialist

1. 4:15 PM

File No.:	7915-0004-00
New or Resubmit:	New
Last Submission Date:	N/A
Description:	DP for a 3P Biofuel Facility Port Kells
Address:	9752-192 Street
Developer:	Orgaworld
Architect:	Michael McNaught, Stantec Architecture
Landscape Architect:	Stantec Architecture
Planner:	Lee-Anne Pitcairn
Urban Design Planner:	Mary Beth Rondeau

The Urban Design Planner presented an overview of the proposed project.

- This is a public facility and will benefit from the ADP review. The proposed use has significant positive benefits for recycling and sustainability.
- The proposal fits well within the industrial-area zoning. No significant issues with this proposal with regard to form and density.

- This project has a very tall filtration stack. As the site is well-nestled into the Port Kells area, a tall, simple mono-stack would fit well into the surroundings.

Rob Constanzo, City of Surrey Engineering noted the following:

- There are sustainable benefits from deriving gas from food waste (carbon neutral). This biofuel facility will significantly decrease the amount of metric tons of waste that is produced each year. It meets many of the objectives of the Sustainability Charter.

The Project Architect presented an overview of the site plan, building plans, elevations, cross sections, and streetscapes. Images of the facility were shown to illustrate size, colour coding and general site. The following was noted:

- The building programme is expressed in blocks in the layout and architectural resolution of the building.
- The plan is to utilize this building in an educational capacity for tour groups/children's school groups, etc. Observation windows will be incorporated into the design; three (3) different locations within the facility will be zoned for public access.
- Developing a strong face of the building facing 192nd is important. The entrance is a structural system with wood (cross-laminated timber panel roof) and a beacon (prominent even in the daytime and nighttime).

The Landscape Architect reviewed the landscape plans and highlighted the following:

- Planting was designed to screen as much as possible. The rooftop will be host to a demonstration garden and various plantings to educate children on compost usage.
- Roof water containment is an issue that is still being reviewed (to see if the bioswales can hold water for a longer period of time).

**ADVISORY DESIGN PANEL STATEMENT OF REVIEW
DP for a 3P Biofuel Facility Port Kells, 9752 - 192 Street
File No. 7915-0004-00**

It was

Moved by C. Taylor

Seconded by S. Vincent

That the Advisory Design Panel (ADP)

recommends that the applicant address the following recommendations and revise and resubmit to *Planning staff*.

Carried

STATEMENT OF REVIEW COMMENTS

Site

- It is an industrial building in the middle of an industrial area; not conflicting with anything, the building is doing exactly what it was designed to do.
- It is wonderful to see a public compost facility operating within the city, in a primarily industrial area.

Building Form and Character

- General support of the scheme and variances for the stack height and reduced yards.
- Strong, simple programme diagram well-represents the function of the facility. The structure is very rational with regard to its design, colour coding and scale. The colour and graphics are excellent tools of communication.
- The wood entry canopies are inconsistent with the simplicity of the building. The odd angle bracket on the canopy seems irrational for an industrial building. Metal such as galvanized steel would be more congruous with the overall look and feel of an industrial building - no need to make the entrance of the building sentimental.

(Orgaworld is in disagreement and believes that the portrayal of the Public Face of an Organic Processing Facility, that collects all residential kitchen, yard and tree waste, should have a strong simple sustainable presence (message) of wood, and advanced wood products in our case, for it is a strong reflection of the guiding principles wrote into the cities sustainable character (section EN 2, 7 & 14). As to the A-symmetrical nature of the supporting wood structure, we see this as dual design gesture. One that provides an educational clue to how there are different ways we can pursue the same goal and to garner interest and inspiration in the minds of students and citizens that visit the facility. The other design requirement was to provide a northern support that was raised to allow the team to develop a front vehicular service area with fewer encumbrances.)

- To give the building form a more distinctive feel, consider developing visitor experience, starting from the entrance and progressing through the facility. Make something of the educational opportunity of the south walkway to the viewing canopy.

(Orgaworld is in agreement and is working with the City of Surrey to develop a visitor and educational experience and understanding of the process from the front gate, to the visitor area inside, along the south walkway to the viewing windows and to the east biofiltration stack. Orgaworld will make efforts, to the extent of not being compliant with the project agreement, interfering with the

operational process or the safety of the staff, citizens and visitors, to achieve the essence of this comment.)

- The limited frontage makes the site organization difficult to resolve. The current arrangement makes the building less prominent to the street (192 Street).

(Orgaworld is in agreement with this comment but, due to the nature of the City required access to the site and the linear nature of the operational process, is unable to alter the configuration and location, i.e. prominence, of the building to 192nd Street.)

- The filtration stack can be supported either simply as shown or there may be an opportunity to express the purpose of this element more visually.

(Orgaworld is in agreement with the comment to have a simple biofiltration stack.)

Landscaping

- A number of steps have been taken to maximize the landscaping given the confines of the industrial area. There is a good mix of planting that is both practical and aesthetically pleasing.
- Consider defining the public parking area and entry zone with a change in paving material or pattern.

(Orgaworld considered defining the paving surface of the public area different than the service area but after reviewing the lifecycle, operational and safety benefits are not pursuing this approach.)

- Encourage the continuation of stormwater drainage on-site as much as possible (as noted in the presentation).

(Orgaworld is reviewing the on-site storm water drainage design opportunities.)

CPTED

- For safety purposes, a fence around the site would be welcomed.

(A fence will be provided around the entire site.)

Accessibility

- Universal parking is adequate; allow one (1) stall for disabled parking.
- Consider unisex washrooms with power door access.

(Orgaworld will consider unisex washrooms with power door access.)

- The viewing area wall height should be less than or equal to 42" high for accessibility.

(Orgaworld agrees and will maintain the viewing area wall height to be less than or equal to 42 inches high above the finished grade.)

- Elevator buttons should be horizontal.

(Orgaworld will consider placing the elevator buttons horizontal.)

Sustainability

- This facility has large amounts of heat produced; heat recovery where possible should be considered.

(Orgaworld agrees with this comment and are reviewing heat recovery opportunities.)

- Embrace the opportunities for education - this is an important visceral experience for people to witness closed-loop waste processing.

(Orgaworld is in agreement and is working with the City of Surrey to develop a visitor and educational experience and understanding of the process from the front gate, to the visitor area inside, along the south walkway to the viewing windows and to the east biofiltration stack. Orgaworld will make efforts, to the extent of compliance with project agreement, interfering with the operational process or the safety of the staff, citizens and visitors, to achieve the essence of this comment.)

CITY OF SURREY

(the "City")

DEVELOPMENT VARIANCE PERMIT

NO.: 7915-0004-00

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

Address of Owner: 13450 104 Ave
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: 025-560-140
Lot 3 District Lot 387A Group 2 New Westminster District BCP3186
9752 192 St

(the "Land")

3. Surrey Zoning By-law, 1993, No. 12000, Amendment By-law 2013, No. 17949, as amended is varied as follows:
 - (a) In Section F Yards and Setbacks the north side yard setback is varied from 7.5 metres (25 ft.) to 5.5 metres (18 ft.) for a stairwell and 3.5 metres (11 ft.) for chemical storage tanks;
 - (b) In Section F Yards and Setbacks the south side yard setback is varied from (25 ft.) to 4.5 metres (14.5 ft.) for a stairwell and canopy;
 - (c) In Section F Yards and Setbacks the rear yard setback is varied from 7.5 metres (25 ft.) to 3 metres (9.8 ft.) for an odour suppression stack;
 - (d) In Section G Height of Buildings the height of a portion of the principal building is increased from 18 metres (60 ft.) to 80 metres (263 ft.) for an odour suppression stack; and

4. Surrey Zoning By-law, 1993, No. 12000as amended is varied as follows:
 - (e) In Part 5 Off-Street Parking and Loading/Unloading the minimum number of off-street parking spaces is reduced from 143 spaces to 18 spaces.
5. This development variance permit applies to only that portion of the building 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 .

Mayor – Linda Hepner

City Clerk – Jane Sullivan

