



Committee of Council Agenda

Tuesday, January 28, 2020

3:30 p.m.

Council Chambers

3rd Floor City Hall, 2580 Shaughnessy Street, Port Coquitlam, BC

Pages

1. CALL TO ORDER

2. ADOPTION OF THE AGENDA

2.1 Adoption of the Agenda

Recommendation:

That the Tuesday, January 28, 2020, Committee of Council Meeting Agenda be adopted as circulated.

3. CONFIRMATION OF MINUTES

3.1 Minutes of Committee of Council

1

Recommendation:

That the minutes of the following Committee of Council Meetings be adopted:

- *January 7, 2020.*

4. REPORTS

4.1 KPMG Audit Planning 2019

5

Recommendation:

That Committee of Council accept KPMG's Audit Planning Report for the 2019 financial statement audit.

4.2 Development Permit and Development Variance Permit Applications - 1525 Kingsway Avenue

41

Recommendation:

That Committee of Council:

1. *Approve in principle Development Permit DP000416, regulating an industrial development at 1525 Kingsway Avenue.*

2. *Pursuant to s. 498 of the Local Government Act, authorize staff to provide notice of an application to vary parking requirements, and*
3. *Forward Development Variance Permit DVP00071 to Council with support for consideration, subject to comments from neighbourhood input.*

4.3 Development Permit Application - 2446 Shaughnessy Street

139

Recommendation:

That Committee of Council approve Development Permit DP000396 to regulate a six- storey apartment development at 2446 Shaughnessy Street.

5. COUNCILLORS' UPDATE

6. MAYOR'S UPDATE

7. CAO UPDATE

8. RESOLUTION TO CLOSE

8.1 Resolution to Close

Recommendation:

That the Committee of Council Meeting of Tuesday, January 28, 2020, be closed to the public pursuant to the following subsections(s) of Section 90(1) of the Community Charter:

Item 5.1

g. litigation or potential litigation affecting the municipality.

Item 5.2

i. the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose;

l. discussions with municipal officers and employees respecting municipal objectives, measures and progress reports for the purposes of preparing an annual report under section 98 [annual municipal report].

9. ADJOURNMENT

9.1 Adjournment of the Meeting

Recommendation:

That the Tuesday, January 28, 2020, Committee of Council Meeting be adjourned.

10. MEETING NOTES



Committee of Council Minutes

Tuesday, January 7, 2020

Council Chambers

3rd Floor City Hall, 2580 Shaughnessy Street, Port Coquitlam, BC

Present: Chair - Mayor West
Councillor Darling
Councillor Dupont
Councillor McCurrach
Councillor Penner
Councillor Pollock
Councillor Washington

1. CALL TO ORDER

The meeting was called to order at 2:00 p.m.

2. ADOPTION OF THE AGENDA

2.1 Adoption of the Agenda

Moved-Seconded:

That the Tuesday, January 7, 2020, Committee of Council Meeting Agenda be adopted as circulated.

In Favour (7): Mayor West, Councillor Darling, Councillor Dupont, Councillor McCurrach, Councillor Penner, Councillor Pollock, and Councillor Washington

Carried

3. CONFIRMATION OF MINUTES

3.1 Minutes of Committee of Council

Moved-Seconded:

That the minutes of the following Committee of Council Meetings be adopted:

- November 26, 2019
- December 10, 2019.

In Favour (7): Mayor West, Councillor Darling, Councillor Dupont, Councillor McCurrach, Councillor Penner, Councillor Pollock, and Councillor Washington

Carried

4. REPORTS

4.1 2020 Operating Budget (verbal report)

Moved-Seconded:

That \$14,000 for PoCo Sports Alliance Financial Support be included in the 2020-2024 Financial Plan.

In Favour (7): Mayor West, Councillor Darling, Councillor Dupont, Councillor McCurrach, Councillor Penner, Councillor Pollock, and Councillor Washington

Carried

Moved-Seconded:

That \$44,000 for CCTV Inspections be included in the 2020-2024 Financial Plan.

In Favour (7): Mayor West, Councillor Darling, Councillor Dupont, Councillor McCurrach, Councillor Penner, Councillor Pollock, and Councillor Washington

Carried

Moved-Seconded:

That \$15,000 for Fire Department Training be included in the 2020-2024 Financial Plan.

In Favour (7): Mayor West, Councillor Darling, Councillor Dupont, Councillor McCurrach, Councillor Penner, Councillor Pollock, and Councillor Washington

Carried

Moved-Seconded:

That \$12,000 for LED Screens and Audio for Remembrance Day Enhancements be included in the 2020-2024 Financial Plan.

In Favour (7): Mayor West, Councillor Darling, Councillor Dupont, Councillor McCurrach, Councillor Penner, Councillor Pollock, and Councillor Washington

Carried

Moved-Seconded:

That \$7,000 for Lions Park Artist in Residence funded from the Arts & Culture Reserve be included in the 2020-2024 Financial plan on a one-time basis .

In Favour (7): Mayor West, Councillor Darling, Councillor Dupont, Councillor McCurrach, Councillor Penner, Councillor Pollock, and Councillor Washington

Carried

Moved-Seconded:

That \$42,800 for Weekly Organics Collection be included in the 2020-2024 Financial Plan.

In Favour (7): Mayor West, Councillor Darling, Councillor Dupont, Councillor McCurrach, Councillor Penner, Councillor Pollock, and Councillor Washington

Carried

Moved-Seconded:

That Committee of Council:

1. *Approve the corporate work plan for 2020; and*
2. *Authorize staff to issue the draft operating budget for public consultation.*

In Favour (7): Mayor West, Councillor Darling, Councillor Dupont, Councillor McCurrach, Councillor Penner, Councillor Pollock, and Councillor Washington

Carried

5. COUNCILLORS' UPDATE

None.

6. MAYOR'S UPDATE

None.

7. CAO UPDATE

None.

8. RESOLUTION TO CLOSE

8.1 Resolution to Close

Moved-Seconded:

That the Committee of Council Meeting of Tuesday, January 7, 2020, be closed to the public pursuant to the following subsections(s) of Section 90(1) of the Community Charter:

Item 5.1

e. the acquisition, disposition, or expropriation of land or improvements, if the council considers that disclosure could reasonably be expected to harm the interests of the municipality;

k. negotiations and related discussions respecting the proposed provision of a municipal service that are at their preliminary stages and that, in the view of the council, could reasonably be expected to harm the interests of the municipality if they were held in public.

In Favour (7): Mayor West, Councillor Darling, Councillor Dupont, Councillor McCurrach, Councillor Penner, Councillor Pollock, and Councillor Washington

Carried

9. ADJOURNMENT

9.1 Adjournment of the Meeting

Moved-Seconded:

That the Tuesday, January 7, 2020, Committee of Council Meeting be adjourned at 9:00 p.m.

In Favour (7): Mayor West, Councillor Darling, Councillor Dupont, Councillor McCurrach, Councillor Penner, Councillor Pollock, and Councillor Washington

Carried

10. MEETING NOTES

The meeting recessed from 5:27 - 5:57 p.m. and from 7:54 - 8:09 p.m.

Mayor

Corporate Officer

RECOMMENDATION:

That Committee of Council accept KPMG's Audit Planning Report for the 2019 financial statement audit.

REPORT SUMMARY

The City's financial statements auditors, KPMG LLP, have provided staff with an Audit Planning Report for the 2019 financial statement audit. The report outlines how KPMG will perform their audit.

BACKGROUND

The Report is intended to assist the Committee in discharging its duties and responsibilities with respect to financial governance and oversight. It is one of the acceptable methods for the auditors to meet their requirements to communicate with those charged with governance for each audit engagement.

DISCUSSION

The interim audit field work was conducted during the week of November 18, 2019 and year end field work is scheduled for the weeks of March 16 to 20 and April 6 to 10, 2020. The auditors anticipate presenting their 2019 audit findings report to the Committee on May 12, 2020.

Areas of audit focus for 2019 are development cost charges and the City's tangible capital assets (with a specific focus on the Community Centre capital project). Materiality has been set at \$2,200,000 (up from \$2,000,000 in 2018). This is the point at which incorrect financial information is likely to have an impact on the decision making of users of that financial information. There are also no changes in the applicable accounting standards from the prior year that would affect the City.


Staff are currently developing processes and procedures to ensure compliance with the Asset Retirement Obligation (ARO) standard that is applicable for the 2022 financial statement year. The ARO standard is being implemented to ensure future legal obligations relating to the retirement of capital assets are recognized as liabilities by public sector entities (for example the removal of asbestos).

KPMG Audit Planning 2019

FINANCIAL IMPLICATIONS

None. The Audit Planning Report is part of the overall audit engagement.

OPTIONS (✓ = Staff Recommendation)

	#	Description
	1	Accept KPMG's Audit Planning Report for the 2019 financial statement audit
	2	Require additional information

ATTACHMENTS

Att#1: KPMG Audit Planning Report

Att#2: KPMG Audit Engagement Letter

Lead author: Chris Adams-Brush



Corporation of the City of Port Coquitlam

Audit Planning Report for the year ended
December 31, 2019

KPMG LLP

January 6, 2020, for presentation on January 28,
2020

kpmg.ca/audit



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At KPMG, we are **passionate** about earning your **trust**. We take deep **personal accountability**, individually and as a team, to deliver **exceptional service and value** in all our dealings with you.

At the end of the day, we measure our success from the **only perspective that matters – yours**.

This Audit Planning Report should not be used for any other purpose or by anyone other than Council. KPMG shall have no responsibility or liability for loss or damages or claims, if any, to or by any third party as this Audit Planning Report has not been prepared for, and is not intended for, and should not be used by, any third party or for any other purpose.



Executive summary

We are pleased to provide for your review the following information relating to the planned scope and timing for the audit of the consolidated financial statements of the Corporation of the City of Port Coquitlam (the “City”) for the year ended December 31, 2019.



Areas of audit focus

Our audit of the City is risk-focused. As part of our audit process, we have had discussions with management about any changes in the organization or other items that should be brought to our attention and considered the impact to the audit. In planning our audit, we have taken into account key areas of audit focus for financial reporting. These include:

- Community Centre capital project,
- Development cost charges, and
- Tangible capital assets.

See pages 3 to 4 for further details.



Changes in operations

The following changes in the City's operations will impact the audit of the consolidated financial statements:

- In 2019, the City opened the first phase of its new Community Centre. The remaining phases of the project continue to be under development.



Changes in accounting standards

PS 3430 *Restructuring Transactions* is effective for the City's 2019 fiscal year. Management does not expect an impact on the consolidated financial statements from the adoption of the new accounting standard.



Executive summary (continued)



Audit materiality

Materiality has been determined based on total expenses. We have determined materiality to be \$2,200,000 (2018 - \$2,000,000) for the year ended December 31, 2019.

See page 6 for further details.



Independence

We are independent of the City and have extensive quality control and conflict checking processes in place. We provide complete transparency on all services and follow the City's approved protocols.



Current developments

See pages 8 to 11 for the current developments update.

Areas of audit focus

Area of focus	Why are we focusing here?	Our audit approach
Community Centre capital project (the "Project")	The Project has various elements including the community centre, and a residential and commercial development. A portion of the Project is funded through debt obtained in 2019 from the Municipal Finance Authority ("MFA") and a Building Canada Fund grant.	<ul style="list-style-type: none"> – Update our planning inquiries with management about the status of the Project. – Update our understanding of the process activities and controls for management's monitoring of the Project. – Select a sample of contractor invoices and agree the amount recorded in tangible capital assets and holdbacks payable to the general ledger. Verify that each invoice has an accompanying report from the third party consultant used by the City to verify the progress payment. – Review the useful lives used to amortize the tangible capital assets that are part of the first phase of the Project to ensure they are reasonable. – Review the land sale receivable from the developer to ensure it is appropriately recorded. – Review the MFA debt agreement and ensure the amount recorded agrees to the cash receipts and the amount reported in the MFA's secure portal. – Review the accounting treatment applied to the Building Canada Fund grant.
Development cost charges ("DCC")	DCC charged by the City are recorded as a liability and recognized as revenue when the expenditures are incurred.	<ul style="list-style-type: none"> – Update our understanding of the process activities and controls for DCC. – Select a sample of DCC charges, recalculate the total amount, agree each factor in the calculation to supporting documentation (e.g. approved rates) and agree the amount recorded to cash receipts or letters of credit. – Select a sample of DCC expenditures and agree the amount recorded to supporting documentation.

Areas of audit focus (continued)

Area of focus	Why are we focusing here?	Our audit approach
Tangible capital assets ("TCA")	Each year, the City incurs capital expenditures which are recorded as TCA. Coordination is required between the Finance and Engineering departments to ensure that all projects and assets are accounted for appropriately.	<ul style="list-style-type: none"> – Update our understanding of the process activities and controls for TCA. – Select a sample of TCA additions, including developer contributed assets, and agree the amount recorded in the general ledger to supporting documentation. Ensure each item is recorded in the appropriate TCA category and is appropriate to capitalize. – Select a sample of TCA disposals and agree any proceeds from the disposition to cash receipts. Recalculate the gain/loss recorded and ensure the appropriate net book value of the TCA disposed has been used in the calculation, and removed from the TCA register. – Perform analytical procedures on amortization expense to assess whether the change in the balance from the prior year is reasonable.



Audit risks

Professional requirements

Fraud risk from management override of controls.

Why is it significant?

This is a presumed fraud risk. We have not identified any specific additional risks of management override relating to this audit.

Our audit approach

As the risk is not rebuttable, our audit methodology incorporates the required procedures in professional standards to address this risk. These procedures include testing of journal entries and other adjustments, performing a retrospective review of estimates and evaluating the business rationale of significant unusual transactions.

Annual inquiries

Professional auditing standards require that we annually inquire concerning Council's oversight of management's process for identifying and responding to the risks of fraud with the City. Accordingly, we ask:

- What are your views about fraud risks at the City?
- How do you exercise effective oversight of management's processes for identifying and responding to the risk of fraud in the City and internal controls management has established to mitigate these fraud risks?
- Are you aware of or have you identified any instances of actual, suspected, or alleged fraud, including misconduct or unethical behaviour related to financial reporting or misappropriation of assets? If so, have the instances been appropriately addressed and how have they been addressed?
- Is the City in compliance with laws and regulations?
- Has the City entered into any significant unusual transactions?

Materiality

Materiality determination	Comments	Amount
Materiality	Determined to plan and perform the audit and to evaluate the effects of identified misstatements on the audit and of any uncorrected misstatements on the financial statements. The corresponding amount for the prior year's audit was \$2,000,000.	\$2,200,000
Benchmark	Based on total expenses for the prior year. This benchmark is consistent with the prior year. The corresponding amount for the prior year's audit was \$89,412,000.	\$92,128,000
% of Benchmark	The corresponding percentage for the prior year's audit was 2.2%.	2.4%
Audit Misstatement Posting Threshold (AMPT)	Threshold used to accumulate misstatements identified during the audit. The corresponding amount for the prior year's audit was \$100,000.	\$110,000

Materiality is used to scope the audit, identify risks of material misstatements and evaluate the level at which we think misstatements will reasonably influence users of the financial statements. It considers both quantitative and qualitative factors.

To respond to aggregation risk, we design our procedures to detect misstatements at a lower level of materiality.

Professional standards require us to re-assess materiality at the completion of our audit based on period-end results or new information in order to confirm whether the amount determined for planning purposes remains appropriate.

We will report to Council:



Corrected audit misstatements



Uncorrected audit misstatements

Key deliverables and milestones



Current developments

Public Sector Accounting Standards

Standard	Summary and implications
Asset Retirement Obligations	<ul style="list-style-type: none"> – A new standard has been approved that is effective for fiscal years beginning on or after April 1, 2021. – The new standard addresses the recognition, measurement, presentation and disclosure of legal obligations associated with retirement of tangible capital assets in productive use. Retirement costs will be recognized as an integral cost of owning and operating tangible capital assets. PSAB currently contains no specific guidance in this area. – The ARO standard will require the public sector entity to record a liability related to future costs of any legal obligations to be incurred upon retirement of any controlled tangible capital assets ("TCA"). The amount of the initial liability will be added to the historical cost of the asset and amortized over its useful life. – As a result of the new standard, the public sector entity will have to: <ul style="list-style-type: none"> • consider how the additional liability will impact net debt, as a new liability will be recognized with no corresponding increase in a financial asset; • carefully review legal agreements, senior government directives and legislation in relation to all controlled TCA to determine if any legal obligations exist with respect to asset retirements; • begin considering the potential effects on the organization as soon as possible to coordinate with resources outside the finance department to identify AROs and obtain information to estimate the value of potential AROs to avoid unexpected issues.
Revenue	<ul style="list-style-type: none"> – A new standard has been approved that is effective for fiscal years beginning on or after April 1, 2022. – The new standard establishes a single framework to categorize revenues to enhance the consistency of revenue recognition and its measurement. – The standard notes that in the case of revenues arising from an exchange, a public sector entity must ensure the recognition of revenue aligns with the satisfaction of related performance obligations. – The standard notes that unilateral revenues arise when no performance obligations are present, and recognition occurs when there is authority to record the revenue and an event has happened that gives the public sector entity the right to the revenue.

Current developments (continued)

Standard	Summary and implications
Financial Instruments and Foreign Currency Translation	<ul style="list-style-type: none"> – New accounting standards, PS3450 <i>Financial Instruments</i>, PS2601 <i>Foreign Currency Translation</i>, PS1201 <i>Financial Statement Presentation</i> and PS3041 <i>Portfolio Investments</i> have been approved by PSAB and are effective for years commencing on or after April 1, 2021. – Equity instruments quoted in an active market and free-standing derivatives are to be carried at fair value. All other financial instruments, including bonds, can be carried at cost or fair value depending on the public sector entity's choice and this choice must be made on initial recognition of the financial instrument and is irrevocable. – Hedge accounting is not permitted. – A new statement, the Statement of Remeasurement Gains and Losses, will be included in the financial statements. Unrealized gains and losses incurred on fair value accounted financial instruments will be presented in this statement. Realized gains and losses will continue to be presented in the statement of operations. – Based on stakeholder feedback received, PSAB is considering certain scope amendments to PS 3450 <i>Financial Instruments</i>. The proposed amendments include the accounting treatment of bond repurchases, scope exclusions for certain activities by the federal government, and improvements to the transitional provisions. An initial exposure draft was issued for comment by PSAB in May 2019. PSAB is currently deliberating on the comments received and may approve a revised exposure draft for comment in December 2019.
Employee Future Benefit Obligations	<ul style="list-style-type: none"> – PSAB has initiated a review of sections PS3250 <i>Retirement Benefits</i> and PS3255 <i>Post-Employment Benefits, Compensated Absences and Termination Benefits</i>. Given the complexity of issues involved and potential implications of any changes that may arise from this review, the project will be undertaken in phases. Phase I will address specific issues related to measurement of employment benefits. Phase II will address accounting for plans with risk sharing features, multi-employer defined benefit plans and sick leave benefits. – Three Invitations to Comment were issued and have closed. The first Invitation to Comment sought guidance on whether the deferral provisions in existing public sector standards remain appropriate and justified and the appropriateness of accounting for various components of changes in the value of the accrued benefit obligation and plan assets. The second Invitation to Comment sought guidance on the present value measurement of accrued benefit obligations. A third Invitation to Comment sought guidance on non-traditional pension plans. PSAB is currently deliberating on the comments received from the three Invitations to Comment. – The ultimate objective of this project is to issue a new employment benefits section to replace existing guidance.

Current developments (continued)

Standard	Summary and implications
Public Private Partnerships (“P3”)	<ul style="list-style-type: none"> – PSAB has proposed new requirements for the recognition, measurement and classification of infrastructure procured through a public private partnership. An exposure draft has been approved by PSAB and was issued in November 2019, with comments due by February 29, 2020. – The exposure draft proposes that recognition of infrastructure by the public sector entity would occur when it controls the purpose and use of the infrastructure, when it controls access and the price, if any, charged for use, and it controls any significant interest accumulated in the infrastructure when the P3 ends. – The exposure draft proposes that the public sector entity recognize a liability when it needs to pay cash or non-cash consideration to the private sector partner for the infrastructure. – The infrastructure would be valued at cost, with a liability of the same amount if one exists. Cost would be measured by discounting the expected cash flows by a discount rate that reflects the time value of money and risks specific to the project.
Concepts Underlying Financial Performance	<ul style="list-style-type: none"> – PSAB is in the process of reviewing the conceptual framework that provides the core concepts and objectives underlying Canadian public sector accounting standards. – A Statement of Concepts (“SOC”) and Statement of Principles (“SOP”) were issued for comment in May 2018 and has closed. PSAB is in the process of developing two exposure drafts for comment. – The SOC proposes a revised, ten chapter conceptual framework intended to replace PS 1000 <i>Financial Statement Concepts</i> and PS 1100 <i>Financial Statement Objectives</i>. The revised conceptual framework would be defined and elaborate on the characteristics of public sector entities and their financial reporting objectives. Additional information would be provided about financial statement objectives, qualitative characteristics and elements. General recognition and measurement criteria, and presentation concepts would be introduced. – The SOP includes principles intended to replace PS 1201 <i>Financial Statement Presentation</i>. The SOP proposes: <ul style="list-style-type: none"> • Removal of the net debt indicator, except for on the statement of net debt where it would be calculated exclusive of financial assets and liabilities that are externally restricted and/or not available to settle the liabilities or financial assets. • Changes to common terminology used in the financial statements, including re-naming accumulated surplus (deficit) to net assets (liabilities). • Restructuring the statement of financial position to present non-financial assets before liabilities. • Removal of the statement of remeasurement gains (losses) with the information instead included on a new statement called the statement of changes in net assets (liabilities). This new statement would present the changes in each component of net assets (liabilities). • A new provision whereby an entity can use an amended budget in certain circumstances. – Inclusion of disclosures related to risks and uncertainties that could affect the entity's financial position.

Current developments (continued)

Standard	Summary and implications
International Strategy	<ul style="list-style-type: none"> – PSAB is in the process of reviewing its current approach towards International Public Sector Accounting Standards. This project may result in changes to the role PSAB plays in setting standards in Canada. – Consultation papers were released for comment in May 2018 and March 2019, and have closed. The consultation papers described the decision-making criteria PSAB expects to consider in evaluating the international strategy that best serves the public sector. It also introduced four proposed international strategies. – PSAB is expected to make a final decision about its international strategy at its March 2020 meeting.
Purchased Intangibles	<ul style="list-style-type: none"> – In October 2019, PSAB approved a proposal to allow public sector entities to recognize intangibles purchased through an exchange transaction. The proposal does not include guidance on how to account for intangibles. Instead, the definition of an asset, the general recognition criteria and the GAAP hierarchy is expected to provide guidance on how to account for intangibles. The accounting for intangibles may be addressed through future PSAB projects.

Appendices



Appendix 1: Audit quality and risk management



Appendix 2: KPMG's audit approach and methodology



Appendix 3: Required communications



Appendix 4: Lean in Audit™



Appendix 1: Audit quality and risk management



KPMG maintains a system of quality control designed to reflect our drive and determination to deliver independent, unbiased advice and opinions, and also meet the requirements of Canadian professional standards. Quality control is fundamental to our business and is the responsibility of every partner and employee. The following diagram summarises the six key elements of our quality control systems. Visit our [Audit Quality Resources page](#) for more information including access to our most recent Audit Quality and Transparency Report.

We conduct regular reviews of engagements and partners. Review teams are independent and the work of every audit partner is reviewed at least once every three years.

We have policies and guidance to ensure that work performed by engagement personnel meets applicable professional standards, regulatory requirements and the firm's standards of quality. We do not offer services that would impair our independence.

All KPMG partners and staff are required to act with integrity and objectivity and comply with applicable laws, regulations and professional standards at all times.

The processes we employ to help retain and develop people include:

- Assignment based on skills and experience
- Rotation of partners
- Performance evaluation
- Development and training
- Appropriate supervision and coaching



We have policies and procedures for deciding whether to accept or continue a client relationship or to perform a specific engagement for that client.

Existing audit relationships are reviewed annually and evaluated to identify instances where we should discontinue our professional association with the client.

Other controls include:

- Before the firm issues its audit report, Engagement Quality Control
- Reviewer reviews the appropriateness of key elements client audits
- Technical department and specialist resources provide real-time support to audit teams in the field

Appendix 2: KPMG's audit approach and methodology



In future years, we will expand our use of technology in our audit through our new smart audit platform, KPMG Clara.

Issue identification

Continuous updates on audit progress, risks and findings before issues become events

Data-driven risk assessment

Automated identification of transactions with unexpected or unusual account combinations – helping focus on higher risk transactions and outliers



Deep industry insights

Bringing intelligence and clarity to complex issues, regulations and standards

Analysis of complete populations

Powerful analysis to quickly screen, sort and filter 100% of your journal entries based on high-risk attributes

Reporting

Interactive reporting of unusual patterns and trends with the ability to drill down to individual transactions

Appendix 3: Required communications



In accordance with professional standards, there are a number of communications that are required during the course of and upon completion of our audit. These include:



Engagement letter

The objectives of the audit, our responsibilities in carrying out our audit, as well as management's responsibilities, are set out in the engagement contract attached.



Management representation letter

We will obtain from management certain representations at the completion of the annual audit. In accordance with professional standards, copies of the representation letter will be provided to Council.



Audit planning report

Represented by this report.



Audit findings report

At the completion of our audit, we will provide our audit findings to Council.



Independence

At the completion of our audit, we will re-confirm our independence to Council.

Appendix 4: Lean in Audit™



An innovative approach leading to enhanced value and quality

Our innovative audit approach, Lean in Audit™, further improves audit value and productivity to help deliver real insight to you. Lean in Audit™ is process oriented, directly engaging organizational stakeholders and employing hands-on tools, such as walkthroughs and flowcharts of actual financial processes.

By embedding Lean techniques into our core audit delivery process, our teams are able to enhance their understanding of the business processes and control environment within your organization – allowing us to provide real insight on your processes and actionable quality and productivity improvement observations.

Any insights gathered through the course of the audit will be available to both our audit team and management. For example, the audit team may identify control gaps and potential process improvement areas, while management has the opportunity to apply such insights to streamline processes, inform business decisions, improve compliance, lower costs, increase productivity, strengthen customer service and satisfaction and drive overall performance.

A Lean in Audit™ session was completed with the City in December 2019.



How it works

Lean in Audit™ employs four key Lean techniques:



1. Lean training

Provide basic Lean training and equip our audit teams with a new Lean mindset to improve quality, value and productivity.



2. Process mapping workshop

Perform an interactive workshop with your team to map selected financial process providing end-to-end transparency and understanding of the process.



3. Insight reporting

Quick and pragmatic insight report including PACE matrix with prioritized opportunities to realize benefit.



4. Kaizen event

Perform an interactive workshop to find the root cause of the problem and empower your team to find a solution.

kpmg.ca/audit



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KPMG member firms around the world have 174,000 professionals, in 155 countries.

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Ms. Karen Grommada
Director of Finance
City of Port Coquitlam
2580 Shaughnessy
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October 5, 2016

Dear Ms. Grommada,

The purpose of this letter is to outline the terms of the following audit engagements for the Corporation of the City of Port Coquitlam ("the City"), commencing for the period ending December 31, 2016:

- Audit of the consolidated financial statements
- Audit of the Home Owner Grant Treasurer/Auditor Certificate, and
- Audit of the City's compliance with subsections 2 and 3 of section 124 of Part 8 of the School Act

The attached Terms and Conditions and any exhibits, attachments and appendices hereto and subsequent amendments form an integral part of the terms of this engagement and are incorporated herein by reference (collectively the "Engagement Letter").

FINANCIAL REPORTING FRAMEWORK FOR THE FINANCIAL STATEMENTS

The annual financial statements will be prepared and presented in accordance with Canadian public sector accounting standards (hereinafter referred to as the "financial reporting framework").

The annual financial statements will include an adequate description of the financial reporting framework (hereinafter referred to as the "financial statements" or "annual financial statements").

MANAGEMENT'S RESPONSIBILITIES

Management responsibilities are described in [Appendix – Management's Responsibilities](#).

An audit does not relieve management or those charged with governance of their responsibilities.

AUDITOR'S RESPONSIBILITIES

Our responsibilities are described in [Appendix – Auditor's Responsibilities](#).

If management does not fulfill the responsibilities above, we cannot complete our audit.

AUDITOR'S DELIVERABLES

The expected form and content of our report(s) is provided in [Appendix – Expected Form of Report](#). However, there may be circumstances in which a report may differ from its expected form and content.

In addition, if we become aware of information that relates to the financial statements after we have issued our audit report, but which was not known to us at the date of our audit report, and which is of such a nature and from such a source that we would have investigated that information had it come to our attention during the course of our audit, we will, as soon as practicable: (1) communicate such an occurrence to those charged with governance; and (2) undertake an investigation to determine whether the information is reliable and whether the facts existed at the date of our audit report. Further, management agrees that in conducting that investigation, we will have the full cooperation of the City's personnel. If the subsequently discovered information is found to be of such a nature that: (a) our audit report would have been affected if the information had been known as of the date of our audit report; and (b) we believe that the audit report is currently being relied upon or is likely to be relied upon by someone who would attach importance to the information, appropriate steps will be taken by KPMG and expected by the City to prevent further reliance on our audit report. Such steps include, but may not be limited to, appropriate disclosures by the City of the newly discovered facts and the impact to the financial statements.

FEES

[Appendix – Fees for Professional Services](#) to this letter lists our fees for professional services to be performed under this Engagement Letter.

We are available to provide a wide range of services beyond those outlined above. Additional services are subject to separate terms and arrangements.

We are proud to provide you with the services outlined above and we appreciate your confidence in our work. We shall be pleased to discuss this letter with you at any time. If the arrangements and terms are acceptable, please sign the duplicate of this letter in the space provided and return it to us.



City of Port Coquitlam
October 5, 2016

Yours very truly,

KPMG LLP

C.J. James, CPA, CA

Partner, responsible for the engagement and its performance, and for the report that is issued on behalf of KPMG LLP, and who, where required, has the appropriate authority from a professional, legal or regulatory body
604-527-3635

Enclosure

cc: Council of the City of Port Coquitlam

The terms of the engagement set out are as agreed:

K. Grommada

Ms. Karen Grommada, Director of Finance

11/10/16

Date (dd/mm/yy)

Appendix – Management’s Responsibilities

Management acknowledges and understands that they are responsible for:

- (a) the preparation and fair presentation of the financial statements in accordance with the financial reporting framework referred to above
- (b) ensuring that all transactions have been recorded and are reflected in the financial statements
- (c) such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error. Management also acknowledges and understands that they are responsible for the design, implementation and maintenance of internal control to prevent and detect fraud
- (d) providing us with access to all information of which management is aware that is relevant to the preparation of the financial statements such as financial records, documentation and other matters, including the names of all related parties and information regarding all relationships and transactions with related parties
- (e) providing us with additional information that we may request from management for the purpose of the audit
- (f) providing us with unrestricted access to persons within the City from whom we determine it necessary to obtain audit evidence
- (g) providing us with written representations required to be obtained under professional standards and written representations that we determine are necessary. Management also acknowledges and understands that, as required by professional standards, we may disclaim an audit opinion when management does not provide certain written representations required.
- (h) ensuring that internal auditors providing direct assistance to us, if any, will be instructed to follow our instructions and that management, and others within the City, will not intervene in the work the internal auditors perform for us.

Appendix – Auditor’s Responsibilities Regarding the Audit of the Financial Statements

Our function as auditors of the City is:

- to express an opinion on whether the City's annual financial statements, prepared by management with the oversight of those charged with governance, are, in all material respects, in accordance with the financial reporting framework referred to above
- to report on the annual financial statements

We will conduct the audit of the City's annual financial statements in accordance with Canadian generally accepted auditing standards and relevant ethical requirements, including those pertaining to independence (hereinafter referred to as applicable “professional standards”).

We will plan and perform the audit to obtain reasonable assurance about whether the annual financial statements as a whole are free from material misstatement, whether due to fraud or error. Accordingly, we will, among other things:

- identify and assess risks of material misstatement, whether due to fraud or error, based on an understanding of the City and its environment, including the City's internal control. In making those risk assessments, we consider internal control relevant to the City's preparation of the annual financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control
- obtain sufficient appropriate audit evidence about whether material misstatements exist, through designing and implementing appropriate responses to the assessed risks
- form an opinion on the City's annual financial statements based on conclusions drawn from the audit evidence obtained
- communicate matters required by professional standards, to the extent that such matters come to our attention, to the appropriate level of management, those charged with governance and/or the board of directors. The form (oral or in writing) and the timing will depend on the importance of the matter and the requirements under professional standards.

Appendix – Auditor’s Responsibilities Regarding the Audit of the Home Owner Grant: Treasurer/Auditor Certificate

We will also perform audit procedures with respect to the Home Owner Grant: Treasurer / Auditor Certificate (“the Certificate”) in accordance with Canadian generally accepted auditing standards with the objective of expressing an opinion on whether the financial information in the Certificate presents fairly, in all material respects, in accordance with Section 12 of the Home Owner Grant Act. However, we cannot provide assurance that an opinion without reservation will be rendered. Circumstances may arise in which it is necessary for us to modify our audit report or withdraw from the audit engagement. In such circumstances, our findings or reasons for withdrawal will be communicated to management and the Council.

The report will indicate that it is intended solely for the information and use of the City and the Ministry of Community, Sport, and Cultural Development and that it is not intended to be and should not be used by anyone other than these specified parties.

Appendix – Auditor’s Responsibilities Regarding the Compliance with Subsections 2 and 3 of Section 124 of Part 8 of the School Act

We will also perform audit procedures with respect to the City’s compliance with subsections 2 and 3 of section 124 of Part 8 of the School Act in accordance with Canadian generally accepted auditing standards with the objective of expressing an opinion on whether the City is in compliance with subsections 2 and 3 of section 124 of Part 8 of the School Act. However, we cannot provide assurance that an opinion without reservation will be rendered. Circumstances may arise in which it is necessary for us to modify our audit report or withdraw from the audit engagement. In such circumstances, our findings or reasons for withdrawal will be communicated to management and the Council.

The report will indicate that it is intended solely for the information and use of the City and the Ministry of Community, Sport and Cultural Development and that it is not intended to be and should not be used by anyone other than these specified parties.

Appendix – Expected Forms of Report

INDEPENDENT AUDITORS' REPORT

To the Mayor and Council

We have audited the accompanying consolidated financial statements of the City of Port Coquitlam, which comprise the consolidated statement of financial position as at December 31, 2016 and the consolidated statements of operations, changes in net financial assets and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the City's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the City of Port Coquitlam as at December 31, 2016, and its consolidated results of operations, its changes in net consolidated financial assets and its consolidated cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Chartered Professional Accountants

Date

Burnaby, Canada

INDEPENDENT AUDITORS' REPORT

To the City of Port Coquitlam and the Ministry of Community, Sport and Cultural Development

We have audited the accompanying financial information in the Form C2 - Home Owner Grant: Treasurer/Auditor Certificate comprised of total Home Owner Grants of \$xxx, total reimbursement by Province of \$xxx and balance due from Province of \$xxx for the City of Port Coquitlam, for the year ended December 31, 2016 and notes, comprising a summary of significant accounting policies (together "the Certificate"). The Certificate has been prepared by management in accordance with the financial reporting provisions of Section 12(1) of the Home Owner Grant Act.

Management's Responsibility for the Certificate

Management is responsible for the preparation of the Certificate in accordance with the financial reporting provisions of Section 12(1) of the Home Owner Grant Act, and for such internal control as management determines is necessary to enable the preparation of the Certificate that is free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on the Certificate based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the Certificate is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Certificate. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the Certificate, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the City's preparation of the Certificate in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the Certificate.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial information in the Form C2 - Home Owner Grant: Treasurer/Auditor Certificate comprised of total Home Owner Grants of \$xxx, total reimbursement by Province of \$xxx and balance due from Province of \$xxx for the City of Port Coquitlam, for the year ended December 31, 2016, is prepared, in all material respects, in accordance with the financial reporting provisions of Section 12(1) of the Home Owner Grant Act.



Basis of Accounting and Restriction on Use

Without modifying our opinion, we draw attention to Note 1 to the Certificate, which describes the basis of accounting. The Certificate is prepared to meet the requirements of Section 12(1) of the Home Owner Grant Act. As a result, the Certificate may not be suitable for another purpose. Our report is intended solely for the City of Port Coquitlam and the Ministry of Community, Sport and Cultural Development and should not be used by parties other than the City of Port Coquitlam and the Ministry of Community, Sport and Cultural Development.

Chartered Professional Accountants

Date

Burnaby, Canada

AUDITORS' REPORT ON SUBSECTIONS 2 AND 3 OF SECTION 124 OF PART 8 OF THE SCHOOL ACT

To the Ministry of Community, Sport and Cultural Development

We have audited the City of Port Coquitlam's (the "City") compliance with subsections 2 and 3 of section 124 of Part 8 of the School Act for the year ended December 31, 2016. Compliance with subsections 2 and 3 of section 124 of Part 8 of the School Act is the responsibility of the City's management. Our responsibility is to express an opinion on this compliance based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the City complied with subsections 2 and 3 of section 124 of Part 8 of the School Act. Such an audit includes examining, on a test basis, evidence supporting compliance, evaluating the overall compliance with subsections 2 and 3 of section 124 of Part 8 of the School Act and, where applicable, assessing the accounting principles used and significant estimates made by management.

In our opinion, the City has complied, in all material respects, with subsections 2 and 3 of section 124 of Part 8 of the School Act for the year ended December 31, 2016.

Our report is intended solely for the City and the Ministry of Community, Sport and Cultural Development and should not be used by parties other than the City or the Ministry of Community, Sport and Cultural Development.

Chartered Professional Accountants

Date

Burnaby, Canada

Appendix – Fees for Professional Services

The City and KPMG agree to a fee based on actual hours incurred at mutually agreed-upon rates for the audit. The estimated fee, pursuant to our proposal dated August 25, 2016 are the following for the years ended 2016 through to 2020, exclusive of taxes:

2016	2017	2018	2019	2020
\$29,075	\$29,500	\$30,000	\$30,500	\$31,000

Our fees will be billed as the work progresses.



TERMS AND CONDITIONS FOR ASSURANCE ENGAGEMENTS

These Terms and Conditions are an integral part of the accompanying engagement letter or proposal from KPMG that identifies the engagement to which they relate (and collectively form the "Engagement Letter"). The term "Entity" used herein has the meaning set out in the accompanying engagement letter or proposal. The term "Management" used herein means the management of the Entity.

1. SEVERABILITY.

The provisions of these Terms and Conditions and the accompanying proposal or engagement letter shall only apply to the extent that they are not prohibited by a mandatory provision of applicable law, regulation or professional standards. If any of the provisions of these Terms and Conditions or the accompanying proposal or engagement letter are determined to be invalid, void or unenforceable, the remaining provisions of these Terms and Conditions or the accompanying proposal or engagement letter, as the case may be, shall not be affected, impaired or invalidated, and each such provision shall remain valid and in effect and be enforceable and binding on the parties to the fullest extent permitted by law.

2. GOVERNING LAW.

This Engagement Letter shall be subject to and governed by the laws of the province where KPMG's principal office performing this engagement is located (without regard to such province's rules on conflicts of law).

3. LLP STATUS.

KPMG LLP is a registered limited liability Partnership ("LLP") established under the laws of the Province of Ontario and, where applicable, has been registered extra-provincially under provincial legislation. KPMG is a partnership, but its partners have a degree of limited liability. A partner is not personally liable for any debts, obligations or liabilities of the LLP that arise from a negligent act or omission by another partner or by any other person under that other partner's direct supervision or control. The legislation relating to limited liability partnerships does not, however, reduce or limit the liability of the firm. The firm's insurance exceeds the mandatory professional indemnity insurance requirements established by the relevant professional bodies. Subject to the other provisions hereof, all partners of the LLP remain personally liable for their own actions and/or actions of those they directly supervise or control.

4. DOCUMENTS AND INFORMATION.

Management's cooperation in providing us with documents and related information and agreed-upon assistance on a timely basis is an important factor in being able to issue our report. Entity agrees that all management functions/responsibilities will be performed and all management decisions will be made by Entity, and not KPMG. KPMG shall be entitled to share all information provided by the Entity with all other member firms of KPMG International Cooperative ("KPMG International"). All work papers, files and other internal materials created or produced by KPMG during the engagement and all copyright and intellectual property rights in our work papers are the property of KPMG. Except as required by applicable law or regulation, the Entity shall keep confidential the existence and terms of this Engagement Letter, and such confidential information shall not be distributed, published or made available to any other person without KPMG's express written permission. Further, for purposes of the services described in this Engagement Letter only, the Entity hereby grants to KPMG a limited, revocable, non-exclusive, non-transferable, paid up and royalty-free license, without right of sublicense, to use all logos, trademarks and service marks of Entity solely for presentations or reports to the Entity or for internal KPMG presentations and intranet sites.

5. USE OF MEMBER FIRMS AND THIRD PARTY SERVICE PROVIDERS.

In some circumstances, information entered into KPMG's time and billing system regarding the Entity and the services performed by KPMG hereunder will be stored in the United States of America by KPMG or a third party processor, and such information may be subject to disclosure in accordance with laws applicable in the United States of America. KPMG acknowledges and represents to the Entity that only the name of the Entity, time incurred and description of time incurred will be entered into KPMG's time and billing system regarding the Entity. Under no circumstances will KPMG's time descriptions include any information that would be covered by privacy legislation in effect in British Columbia or made available to any person or entity without the consent of the Entity unless ordered pursuant to a competent court in British Columbia or

professional regulatory body KPMG is subject to. Notwithstanding anything contained in this agreement, KPMG will not process, store or disclose any personal information collected hereunder outside of Canada.

6. PERSONAL INFORMATION CONSENTS AND NOTICES.

Any collection, use or disclosure of personal information is subject to KPMG's Privacy Policy available at www.kpmg.ca. KPMG may be required to collect, use and disclose personal information about individuals during the course of this engagement.

The Entity represents and warrants that (i) it will obtain any consents reasonably required to allow KPMG to collect, use and disclose personal information in the course of the engagement, and (ii) it has provided notice of the potential processing of such personal information outside of Canada (as described in Section 5 above). KPMG's Privacy Officer noted in KPMG's Privacy Policy is able to answer any individual's questions about the collection of personal information required for KPMG to deliver services hereunder.

7. OFFERS OF EMPLOYMENT.

In order to allow issues of independence to be addressed, Management agrees that prior to extending an offer of employment to any KPMG partner, employee or contractor, the matter is communicated to the engagement partner or associate partner.

8. OFFERING DOCUMENTS.

If the Entity wishes to include or incorporate by reference the financial statements and our report thereon in an offering document, we will consider consenting to the use of our report and the terms thereof at that time. Nothing in this Engagement Letter shall be construed as consent and KPMG expressly does not consent to the use of our audit report(s) in offering documents. If the Entity wishes to obtain KPMG's written consent to the use of our audit report(s) in an offering document, or wishes us to provide a comfort or advice letter, we will be required to perform procedures as required by professional standards; any agreement to perform such procedures will be documented in a separate engagement letter. Management agrees to provide us with adequate notice of the preparation of such documents.

9. FEE AND OTHER ARRANGEMENTS.

KPMG's estimated fee is based on the quality of the Entity's accounting records, the agreed-upon level of preparation and assistance from the Entity's personnel, and adherence to the agreed-upon timetable. KPMG's estimated fee also assumes that the Entity's financial statements are in accordance with the applicable financial reporting framework and that there are no significant new or changed accounting policies or issues, or financial reporting, internal control over financial reporting or other reporting issues. KPMG will inform the Entity on a timely basis if these factors are not in place. Additional time may be incurred for such matters as significant issues, significant unusual and/or complex transactions, informing management about new professional standards, and any related accounting advice. Where these matters arise and require research, consultation and work beyond that included in the estimated fee, the Entity and KPMG agree to revise the estimated fee. No significant additional work will proceed without Management's concurrence, and, if applicable, without the concurrence of those charged with governance. Upon completion of these services KPMG will review with the Entity any fees and expenses incurred in excess of KPMG's estimate, following which KPMG will render the final billing. Our professional fees are also subject to a technology and support charge to cover information technology infrastructure costs and administrative support of our client service personnel, which are not included in our client service personnel fee. The technology and support fee covers costs such as our client service personnel computer hardware and customized KPMG software, telecommunications equipment, printing of financial statements and reports, client service professional administrative support, IT programming professional services and other client support services. Other disbursements for items such as travel, accommodation and meals will be charged based on KPMG's actual disbursements.

KPMG's invoices are due and payable upon receipt. Amounts overdue are subject to interest. In order to avoid the possible implication that unpaid fees might be viewed as creating a threat to KPMG's independence, it is important that KPMG's bills be paid promptly when rendered. If a situation arises in which it may appear that KPMG's independence is threatened



TERMS AND CONDITIONS FOR ASSURANCE ENGAGEMENTS

because of significant unpaid bills, KPMG may be prohibited from signing the report and, if applicable, any consent.

Fees for any other services will be billed separately from the services described in this Engagement Letter and may be subject to written terms and conditions supplemental to those in this letter.

Canadian Public Accountability Board (CPAB) participation fees, when applicable, are charged to the Entity based on the annual fees levied by CPAB.

To the extent that KPMG partners and employees are on the Entity's premises, the Entity will take all reasonable precautions for the safety of KPMG partners and employees at the Entity's premises.

10. LEGAL PROCESSES.

a. The Entity on its own behalf hereby acknowledges and agrees to cause its subsidiaries and affiliates to hereby acknowledge that KPMG may from time to time receive requests or orders from the Canadian Public Accountability Board or from professional, securities or other regulatory, judicial or governmental authorities (both in Canada and abroad) to provide them with information and copies of documents in KPMG's files including (without limitation) working papers and other work-product relating to the affairs of the Entity, its subsidiaries and affiliates, which information and documents may contain confidential information of Entity. Except where prohibited by law, if a request or order is directly related to an inspection or investigation of KPMG's audit of the Entity, KPMG will advise the Entity of the request or order. The Entity hereby acknowledges that KPMG will provide these documents and information without further reference to, or authority from, the Entity, its subsidiaries and affiliates. The Entity must mark any document over which it asserts privilege as "privileged". When such an authority requests access to KPMG's working papers and other work-product relating to the Entity's affairs, KPMG will, on a reasonable efforts basis, refuse access to any document over which the Entity has expressly informed KPMG at the time of delivery that the Entity asserts privilege (by the Entity marking such document as "privileged" as contemplated in the foregoing sentence). Notwithstanding the foregoing, where disclosure of such privileged documents is required by law, KPMG will disclose such privileged documents. If and only if the authority requires such access to such privileged documents pursuant to the laws of a jurisdiction in which express consent of the Entity is required for such disclosure, then the Entity hereby provides its consent.

Where privileged Entity documents are disclosed by KPMG as contemplated above, KPMG is directed to advise the authority that the Entity is permitting disclosure only to the extent required by law and for the limited purpose of the authority's exercise of statutory authority. KPMG is directed to advise the authority that the Entity does not intend to waive privilege for any other purpose and that the Entity expects its documents to be held by the authority as privileged and confidential material. For greater certainty, the Entity and KPMG hereby agree that this acknowledgement (and, if required, consent) does not negate or constitute a waiver of privilege for any purpose and the Entity expressly relies upon the privilege protections afforded under statute and otherwise under law.

The Entity agrees to reimburse KPMG, upon request, at standard billing rates for KPMG's professional time and expenses, including reasonable legal fees, expenses and taxes, incurred in dealing with the matters described above.

b. The Entity agrees to notify KPMG promptly of any request received by Entity from any court or applicable regulatory authority with respect to the services hereunder, KPMG's confidential information, KPMG's advice or report or any related document. If KPMG is required by law, pursuant to government regulation, subpoena or other legal process to produce documents or personnel as witnesses arising out of the engagement and KPMG is not a party to such proceedings, Entity shall reimburse KPMG at standard billing rates for professional time and expenses, including, without limitation, reasonable legal fees, expenses and taxes incurred in responding to such compelled assistance.

c. If the Entity requests that KPMG produce documents or personnel as witnesses in any proceedings in any way related to the engagement or services provided by KPMG hereunder and KPMG is not a party to such proceedings, KPMG may agree to produce documents or personnel as witnesses on such terms and conditions as KPMG may, in its sole discretion, determine. Without limiting the generality of the foregoing, the Entity shall reimburse KPMG at standard billing rates for professional time

and expenses, including, without limitation, reasonable legal fees, expenses and taxes incurred in responding to such Entity requests.

11. KPMG INTERNATIONAL MEMBER FIRMS.

The Entity agrees that any claims that may arise out of this engagement will be brought solely against KPMG, the contracting party, and not against any other KPMG International member firms participating in this engagement or such third party service providers referred to in Section 5 above.

12. CONNECTING TO THE ENTITY'S IT NETWORK.

KPMG personnel are authorized to connect their computers to the Entity's IT Network, subject to any restrictions communicated to KPMG from time to time. Connection to the Entity's IT Network or the Internet via the Network, while at the Entity's premises, will be for the express purpose of conducting normal business activities, primarily relating to facilitating the completion of work referred to in this letter.

13. DELIVERABLES OR COMMUNICATIONS.

KPMG may issue other deliverables or communications as part of the services described in this Engagement Letter. Such other deliverables or communications may not be included in, summarized in, quoted from or otherwise used or referred to, in whole or in part, in any public documents or public oral statement.

KPMG expressly does not consent to the use of any communication, report, statement or conclusion prepared by us on the interim financial statements. Further any such communication, report, statement or conclusion on the interim financial statements may not be included in, summarized in, quoted from or otherwise used in any public document or public oral statement except when the interim review conclusion contains a modified conclusion as explained below.

If the interim review conclusion is modified relating to a departure from the applicable financial reporting framework, which is not as a result of an exemption permitted by securities legislation, you agree that our interim review report will accompany the interim financial statement.

14. LIMITATION ON WARRANTIES

THIS IS A SERVICES ENGAGEMENT. KPMG WARRANTS THAT IT WILL PERFORM SERVICES HEREUNDER IN GOOD FAITH WITH QUALIFIED PERSONNEL IN A COMPETENT AND WORKMANLIKE MANNER IN ACCORDANCE WITH APPLICABLE INDUSTRY STANDARDS. SUBJECT TO SECTION 1, KPMG DISCLAIMS ALL OTHER WARRANTIES, REPRESENTATIONS OR CONDITIONS, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES, REPRESENTATIONS OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

15. LIMITATION ON LIABILITY AND INDEMNIFICATION

a. Subject to Section 1: (i) Entity agrees that KPMG shall not be liable to Entity for any actions, damages, claims, fines, penalties, complaints, demands, suits, proceedings, liabilities, costs, expenses, or losses (collectively, "Claims") in any way arising out of or relating to the services performed hereunder for an aggregate amount in excess of the fees paid by Entity to KPMG under the engagement; and (ii) on a multi-phase engagement, KPMG's liability shall be based on the amount actually paid to KPMG for the particular phase that gives rise to the liability.

b. Subject to Section 1, in the event of a Claim by any third party against KPMG that arises out of or relates to the services performed hereunder, Entity will indemnify and hold harmless KPMG from all such Claims, including, without limitation, reasonable legal fees, except to the extent finally determined to have resulted from the intentional, deliberate or fraudulent misconduct of KPMG.

c. Subject to Section 1: (i) in no event shall KPMG be liable for consequential, special, indirect, incidental, punitive or exemplary damages, liabilities, costs, expenses, or losses (including, without limitation, lost profits and opportunity costs); (ii) in any Claim arising out of the engagement, Entity agrees that KPMG's liability will be several and not joint and several; and (iii) Entity may only claim payment from KPMG of KPMG's proportionate share of the total liability based on degree of fault.

d. For purposes of this Section 15, the term KPMG shall include its subsidiaries, its associated and affiliated entities and their respective current and former partners, directors, officers, employees, agents and representatives. The provisions of this Section 15 shall apply regardless of

the form of Claim, whether in contract, statute, tort (including, without limitation, negligence) or otherwise.

16. ALTERNATIVE DISPUTE RESOLUTION.

The parties shall, and shall cause both their and their respective subsidiaries', affiliates' and associated entities' current and former officers, partners, directors, employees, agents and representatives, to first attempt to settle any dispute arising out of or relating to this Engagement Letter or the services provided hereunder (the "Dispute") through good faith negotiations in the spirit of mutual cooperation between representatives of each of the parties with authority to resolve the Dispute. In the event that the parties are unable to settle or resolve a Dispute through negotiation within 30 days of when one of the parties has notified the other party of the Dispute by delivering a notice of dispute, or such longer period as the parties may mutually agree upon, such Dispute shall, as promptly as is reasonably practicable, be subject to mediation pursuant to the National Mediation Rules of the ADR Institute of Canada, Inc. that are in force at the time the notice of dispute is delivered. Any Dispute remaining unresolved for more than 60 days following the parties first meeting with a mediator or such longer period as the parties may mutually agree upon shall, as promptly as is reasonably practicable, be resolved by arbitration pursuant to the Arbitration Rules of the ADR Institute of Canada, Inc. (the "Arbitration Rules") that are in force at the time the Dispute is subject to arbitration. For certainty, the parties hereby waive any right they may otherwise have to bring a court action in connection with a Dispute. The parties also waive any right they may otherwise have to bring or participate in a class, collective, or representative proceeding in connection with a Dispute, whether in court or before an arbitrator. The arbitrator's decision shall be final, conclusive and binding upon the parties, and the parties shall have no right to appeal or seek judicial review of the arbitrator's decision. For certainty, the parties hereby waive any right of appeal which may otherwise be available under applicable legislation or under the Arbitration Rules. The place of mediation and arbitration shall be the city in Canada in which the principal KPMG office that performed the engagement is located. The language of the mediation and arbitration shall be English.

17. LIMITATION PERIOD

Subject to Section 1, no proceeding arising under or relating to the engagement may be brought by either party more than one year after the cause of action has accrued or in any event not more than five years after completion of the engagement, except that a proceeding for non-payment may be brought by KPMG at any time following the date of the last payment due to KPMG hereunder. For purposes of this Section 17, the term "KPMG" shall include its subsidiaries and associated and affiliated entities and their respective current and former partners, directors, officers, employees, agents and representatives.

18. COMMENT LETTERS OR EQUIVALENT.

Management agrees to promptly provide us with a copy of any comment letter or request for information issued by a relevant securities regulatory authority on the Entity's continuous disclosure filings or equivalent. If any of the comments pertain to the Entity's financial statements and, when applicable, Management's assessment of the effectiveness of internal control over financial reporting, Management and those charged with governance agree to engage our assistance, subject to any pre-approval process, in the process of responding to such comments.

19. PUBLIC DOCUMENTS OR EQUIVALENT.

Except as otherwise specifically agreed in this Engagement Letter, nothing in this Engagement Letter shall be construed as consent and KPMG expressly does not consent to the use of our audit report(s) in any "document" or "public oral statement" (as those terms are defined in section 138.1 of the Securities Act (Ontario)), including but not limited to when:

- (i) the Entity files with securities regulatory authorities its annual financial statements and KPMG's audit report thereon;
- (ii) the Entity files with securities regulatory authorities its Management's Discussion and Analysis in connection with the material in (i) above;
- (iii) the Entity files with securities regulatory authorities any other continuous disclosure document containing, or incorporating by reference, the annual financial statements and KPMG's audit report thereon (e.g., Annual Reports on Form 40-F or 20-F or 10-K filed on SEDAR).

If the Entity wishes to obtain KPMG's written consent to the use of our audit report(s), we will be required to perform procedures as required by professional standards. Except as otherwise specifically agreed in this Engagement Letter, any agreement to perform procedures necessary to provide KPMG's written consent or any agreement to read any other document issued by the Entity will be a separate engagement.

20. POTENTIAL CONFLICTS OF INTEREST

a. KPMG is engaged by a wide variety of entities and individuals, some of whom may be creditors, investors, borrowers, shareholders, competitors, suppliers or customers of Entity, or other parties with conflicting legal and business interests to Entity, including, without limitation, in relation to the audit, tax or advisory services provided to Entity by KPMG. KPMG's engagements with such companies and individuals may result in a conflict with Entity's interests.

b. As a condition of KPMG's engagement by Entity, Entity agrees that: (i) without further notice or disclosure, KPMG may accept or continue engagements on unrelated matters to KPMG's engagement for Entity in which KPMG may act contrary to Entity's interests even if those unrelated matters are materially and directly adverse to Entity; and (ii) without further notice or disclosure, KPMG may provide advice or services to any other person or entity making a competing bid or proposal to that of Entity whether or not KPMG is providing advice or services to Entity in respect of Entity's competing bid or proposal.

c. In accordance with professional standards, and except as set out below, KPMG will not use any confidential information regarding Entity in connection with its engagements with other clients, and will establish confidentiality and other safeguards to manage conflicts, which may include, in KPMG's sole discretion, the use of separate engagement teams and data access controls. In no event shall KPMG be liable to Entity or shall Entity be entitled to a return of fees and disbursements incurred on behalf of Entity or any other compensation whatsoever as a result of KPMG accepting or continuing a conflicting engagement.

d. Entity further agrees that KPMG may, in its sole discretion, disclose the fact or general nature of its engagement for Entity to (i) KPMG International and other KPMG International member firms in order to check against potential conflicts of interest, and (ii) to the extent reasonably required in order to obtain the consent of another entity or individual in order to permit KPMG to act for such entity or individual, or for Entity, in connection with the engagement or any future engagement.

e. Where another party has engaged KPMG to deliver services before Entity has done so, and subsequently circumstances change such that there is a conflict, which in KPMG's sole opinion cannot be adequately managed through the use of confidentiality and other safeguards, KPMG shall be entitled to terminate the engagement for Entity, without liability, immediately upon notice.

f. Other KPMG International member firms are engaged by many entities and individuals, including, without limitation, entities and individuals that may enter into transactions or may have disputes with Entity or Entity's related or affiliated entities. Entity agrees that (i) it will not assert that other KPMG International member firms are precluded from being engaged by those other entities or individuals, and (ii) those engagements of other KPMG International member firms do not conflict with KPMG's engagement for Entity.

g. Subject to Section 1, Entity will indemnify and hold harmless KPMG, its subsidiaries and associated and affiliated entities, and their respective current and former partners, directors, officers, employees, agents and representatives from any claims, actions, damages, complaints, demands, suits, proceedings, liabilities, fines, penalties, costs, expenses or losses by any third party (including, without limitation, reasonable legal fees) that alleges that KPMG was in a conflict of interest by providing services hereunder. The provisions of this subsection 20(g) shall apply regardless of the form of Claim, whether in contract, statute, tort (including, without limitation, negligence) or otherwise.

h. KPMG encourages Entity to obtain legal advice with respect to Entity's rights in connection with potential future conflicts prior to entering into the engagement.

21. LOBBYING

Unless expressly stated in this Engagement Letter, KPMG will not undertake any lobbying activity, as that term is defined in all applicable federal, provincial and municipal lobbyist registration statutes and regulations, in



connection with the engagement. In the event that KPMG and Entity agree that KPMG will undertake lobbying activity in connection with the engagement, such agreement shall be set out in an amendment to this Engagement Letter.

22. SURVIVAL

All sections hereof other than Section 12 shall survive the expiration or termination of the engagement.

1525 Kingsway Avenue – Development Permit and Development Variance Permit Applications

RECOMMENDATIONS:

That Committee of Council:

1. Approve in principle Development Permit DP000416, regulating an industrial development at 1525 Kingsway Avenue.
2. Pursuant to s. 498 of the Local Government Act, authorize staff to provide notice of an application to vary parking requirements, and
3. Forward Development Variance Permit DVP00071 to Council with support for consideration, subject to comments from neighbourhood input.

PREVIOUS COUNCIL/COMMITTEE ACTION

March 5, 2019 – Committee approved Watercourse Development Permit DP000332 to provide for watercourse protection and enhancement at 1579 and 1525 Kingsway Avenue.

REPORT SUMMARY

This report describes applications for a development permit to regulate a large format industrial development and a development variance permit to reduce required parking at 1525 Kingsway Avenue. The site is being developed by the Conwest Group of Companies to accommodate a head office, warehouse and distribution facility for a large auto parts distributor. The project is designed to comply with the site's heavy industrial zoning and development permit designations, but it does not comply with parking regulations. Information has been provided to show how the proposed parking would exceed the occupant needs. Staff recommends Committee provide approval in principle to the development permit, and advise Council that Committee supports consideration of the parking variance and authorize staff to provide public notification of the parking variance.

BACKGROUND

The site is located on the north side of Kingsway Avenue adjacent to the Canadian Pacific rail yard and the North Fraser Pretrial Centre.



Location map

1525 Kingsway Avenue – Development Permit and Development Variance Permit Applications

Surrounding land uses, other than the pretrial centre, are industrial. The site was recently consolidated from three into one parcel and the remaining structures on the property are scheduled for demolition early in 2020.

The land use designation in the Official Community Plan for the site is Heavy Industrial; policies of the Plan promote economic development and job creation within this designation. The property is zoned M2 – Heavy Industrial and the project is designed to comply with this zoning.

The objectives and guidelines of the site's industrial development permit area designation are intended to:

- guide the form and character of industrial developments,
- promote orderly development, and
- control the interface between industrial and other land uses.

The environmental conservation development permit area designation encourages:

- sustainable development and building design,
- efficient use of energy, water and other resources, and
- the reduction of waste and pollution.

Development Proposal

The Conwest Group proposes to construct a large tilt-up concrete industrial building with parking/loading bays and landscaping to accommodate a single occupant. The 35,032m² (377,000 ft²) building will include space for a head office, warehouse and distribution facility for a large auto parts distributor. The façades along Kingsway Avenue will have subtle elements of wall articulation, varying height, portions of glazing, reveal lines and recesses of varied width and a colour palette of white, blue, light and dark gray tones. The building design and color has been coordinated to create a uniform and clean look and focuses the accessory offices uses to the southeast corner of the site fronting Kingsway Avenue.



Building façade (southeast corner)

1525 Kingsway Avenue – Development Permit and Development Variance Permit DVP00071 Applications

Project Profile

	Bylaw Regulations ¹	Proposed ²	Variance Request
Site Area	3,000 m ² min'm	56,659 m ² (14 acre)	-
Total Building Area	n/a	35,032 m ² (377,081 ft ²)	n/a
Building Lot Coverage	60%	56 %	-
Setbacks:			
Front Setback (Kingsway)	6 m	42 m	-
Rear Setback (north)	3 m	15 m	-
Interior Side Setback (west)	3 m	7.5 m	-
Interior Side Setback (east)	3 m	35 m	-
Building Height	n/a	16.2 m	n/a
Parking (total)	369	300	69
Small car parking spaces	25% (75 spaces)	1% (1 spaces)	-
Loading bays	10 minimum	20	-
Bicycle Parking	Space for 6 bikes	Space for 9 bikes outdoors	-

The landscape plan calls for a mixture of trees, shrubs, groundcover plants and lawn. 70 new trees, including a mixture of conifer and deciduous species, will be planted on the southern portion of the site in landscape areas and strips within the parking areas. The previously approved watercourse development permit will also provide for 190 trees and 7,244 riparian plants along the north and east edges of the site. The watercourse protection area also provides substantial landscape screening between the site and the adjacent pretrial centre. A significant portion of the site area will be used for required parking, vehicle circulation, and transport vehicle loading areas which is typical of industrial development.

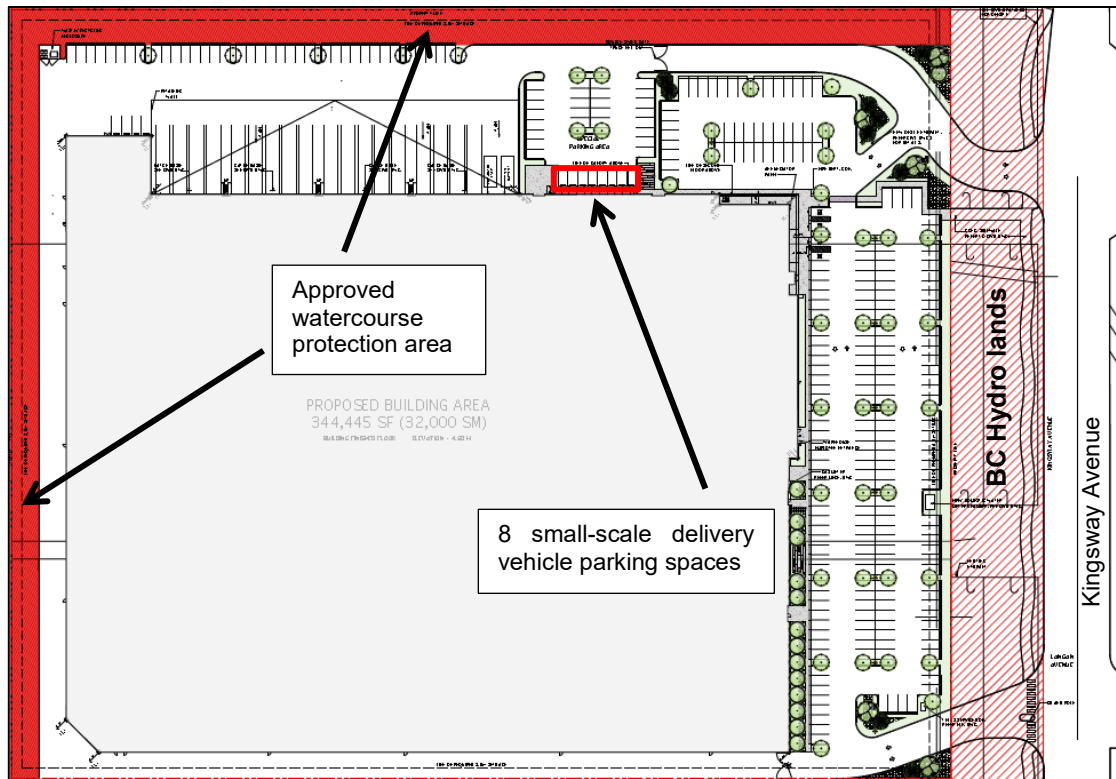
As shown in the drawing below, the building frontage and most of the parking is oriented to Kingsway Avenue and loading spaces are oriented to the east side yard. There will be two driveways which connect across BC Hydro's narrow utility lot to Kingsway Avenue. These driveways have been aligned with Langan Avenue and Coast Meridian Road intersections with Kingsway Avenue to facilitate safe turning movements.

The site circulation plan indicates industrial vehicles would enter the western driveway and exit the from the east driveway. Passenger vehicles will be able to use either driveway to enter and exit the staff parking areas. A transportation impact assessment prepared by Bunt and Associates Engineering Ltd has been reviewed by City Engineering staff and confirms the site is designed to meet access and circulation requirements for passenger and transport vehicles.

¹ Refer to Zoning Bylaw No. 3630 and Parking and Development Management Bylaw No. 4078 for specific regulations.

² Information provided by applicant.

1525 Kingsway Avenue – Development Permit and Development Variance Permit Applications



Site plan showing landscape areas, parking and driveway access

Offsite Infrastructure and Services

The City is currently working on a corridor study to assess and improve transportation and vehicle turning movements along Kingsway Avenue. It is anticipated that the results of this study will be presented to Committee in February. Staff however anticipates road widening will be required along this segment of Kingsway Avenue and have conveyed this information to Conwest. The City also has plans to construct a multi-use pathway along the north side of Kingsway Avenue to improve pedestrian and cycling routes. Accordingly, offsite requirements will include road width widening (to align with corridor study), provision of a multi-use path within the Hydro corridor, construction of new curb and gutter, sidewalk, pavement rehabilitation of half road plus 1 metre, installation of street lights and services (water, sewer, sanitary) as necessary. Further assessment will be provided at building permit stage to determine if underground utility infrastructure upgrades are required.

Furthermore, Staff anticipate there may be potential for future installation of a traffic signal at the intersection of Kingsway Avenue and Coast Meridian Road. Conwest have agreed to install electrical ducting to support a future signal. The attached draft development variance permit, described below, requires submission of design, securities and fees for offsite works and services including electrical ducting for the signal and the pathway prior to issuance of a building permit in order to ensure this work is completed.

1525 Kingsway Avenue – Development Permit and Development Variance Permit DVP00071 Applications

Onsite Parking

The applicant has requested to vary the onsite parking requirement by 69 spaces from the required 369 spaces. The Parking and Development Management Bylaw requires one parking space per 95m² (1,022 ft²) of gross floor area for industrial or warehouse uses. That would require the provision of 369 parking spaces for the proposed development. The occupant anticipates opening the building with 150 staff with room for expansion up to 237 staff. The site would also need to accommodate 8 short-term parking spaces for small-scale delivery vehicles with direct access to the warehouse. The applicant has provided information from the occupant showing the proposed 300 parking spaces will exceed current need and future growth. The applicant has also indicated the development will include a secure room to accommodate 24 bicycles and end of trip facilities including lockers and showers to promote alternative transportation.

In support of the parking variance, Conwest has offered to provide for the installation of the 3m wide mixed-use pathway with pedestrian lighting to extend the pathway of Kingsway Avenue in front of its property. This is a significant portion, approximately 200 meters, of the pathway and will improve options for alternate transportation along Kingsway Avenue.

Environmental Conservation

Measures to comply with the environmental conservation objectives and guidelines include building practices and products to reduce energy and water consumption, promote stormwater management, and reduce greenhouse gas emissions. Proposed elements include high efficiency windows and selection of native and drought-resistant plant species, use of low volatile organic compound materials, LED lighting, high efficiency irrigation system, low flow plumbing fixtures, bicycle parking and end of trip facilities for staff. A complete list of conservation measures is included in Schedule A of the development permit.

DISCUSSION

The design of the proposed industrial building and landscaping meets the intent of both the industrial design guidelines and environmental conservation designation. The proposed parking variance is in keeping with OCP design policy which suggests development should provide sufficient on-site parking to meet the specific requirements of the development. The applicant has demonstrated the proposed parking supply will exceed the needs of the warehouse user. Experience with other large single occupant warehouse users such as the Brewers Distribution warehouse at 1731 Kingsway Avenue has shown that required parking can exceed need. The inset aerial photo which was taken during business hours on a weekday shows



Parking lot at 1731 Kingsway

1525 Kingsway Avenue – Development Permit and Development Variance Permit Applications

approximately half of the staff parking at the Brewers Distribution warehouse is empty.

Staff recommend Committee provide approval in principle of the development permit (consideration of approval would then be timed with the development variance permit at Council) and recommend approval of the development variance permit to Council.


PUBLIC CONSULTATION

A sign providing notification of the application is posted on site. To date, no comments have been received.

FINANCIAL IMPLICATIONS

The construction of the Kingsway multi use pathway and roadwork by the developer provides a financial benefit to the City.

OPTIONS (✓ = Staff Recommendation)

	#	Description
	1	Approve Development Permit DP000416 in principle and authorize notification of the Development Variance Permit DVP00071 application, and recommend Council consider approval of the development variance permit and development permit at a future Council Meeting.
	2	Request additional information or amendments if Committee is of the opinion that such information or amendment would assist in its evaluation of how the design complies with the development permit area designation or variances to regulations.
	3	Refuse the applications if the Committee is of the opinion the application does not conform to the design guidelines or does not support the variances to regulations.

ATTACHMENTS

Attachment 1: Draft Development Permit DP000416

Attachment 2: Draft Development Variance Permit DVP00071

Attachment 3: Transportation Impact Assessment (prepared by Bunt and Associates)

Lead author(s): Bryan Sherrell

THE CORPORATION OF THE CITY OF PORT COQUITLAM

"DEVELOPMENT PROCEDURES BYLAW, 2013, NO. 3849"

DEVELOPMENT PERMIT

NO. DP000416

Issued to: LWEST HOLDINGS LP
(Owner as defined in the Local Government Act,
hereinafter referred to as the Permittee)

Address: 205-1311 KOOTENAY STREET, VANCOUVER, BC, V5K 4Y3

1. This Development Permit is issued subject to compliance with all of the Bylaws of the Municipality applicable thereto, except as specifically varied by this Permit.
2. This Development Permit applies to and only to those lands within the Municipality described below, and any and all buildings, structures and other development thereon:

Address: 1525 KINGSWAY AVENUE

Legal Description: LOT 1 DISTRICT LOT 288 GROUP 1 AND SECTIONS 7 AND 18
BLOCK 6 NORTH RANGE 1 EAST NEW WESTMINSTER
DISTRICT PLAN EPP96965

P.I.D.: 030-942-683

3. The above property has been designated as a Development Permit Area under Section 9.0 – Development Permit Area in the "Official Community Plan Bylaw, 2013, No. 3838".
4. "Port Coquitlam Zoning Bylaw, 2008, No. 3630" and "Parking and Development Management Bylaw, 2018, No.4078" are varied, supplemented or both in accordance with the following:
 - a. The form and character of the building, including the siting, height and general design, shall be as shown on drawings numbered DP000416 (1) to DP000416 (16) which are attached hereto and form part of this permit.
 - b. The form and character of on-site landscaping shall be as shown on drawings numbered DP000416 (10) and DP000416 (16) and the following standards for landscaping are imposed:
 - (i) All landscaping works and planting materials shall be provided in accordance with the landscaping plan and specifications thereon, which form part of this permit and is attached hereto.
 - (ii) All planting materials shall be able to survive for a period of one year from the date of the site landscape approval by the Municipality.

- c. The building and landscaping shall provide the energy conservation, water conservation and GHG emission reduction elements as shown on Schedule A to the drawings which are attached hereto and form part of this permit.

5. Landscape Security

- (a) As a condition of the issuance of this permit, the security set out below will be held by the Municipality prior to the issuance of a building permit to ensure satisfactory provision of landscaping in accordance with the terms and conditions as set forth in Clause 4 above. There is filed accordingly an irrevocable Letter of Credit or cash security in the amount **\$345,726.00** for the purpose of landscaping.
- (b) Should any interest be earned upon the security, it shall accrue to the Permittee and be paid to the Permittee if the security is returned. A condition of the posting of the security is that should the Permittee fail to carry out the works or services as hereinabove stated, according to the terms and conditions of this permit within the time provided, the Municipality may use the security to complete these works or services by its servants, agents or contractors, and any surplus shall be paid over to the Permittee.
- (c) The Permittee shall complete the landscaping works required by this permit within six months of the final inspection for the final phase of the development. Within the six month period, the required landscaping must be installed by the Permittee, and inspected and approved by the Municipality.

If the landscaping is not approved within the six month period, the Municipality has the option of continuing to hold the security until the required landscaping is completed or has the option of drawing the security and using the funds to complete the required landscaping, and recoup additional costs from the Permittee if necessary. In such a case, the Municipality or its agents have the irrevocable right to enter into the property to undertake the required landscaping for which the security was submitted.

- (d) Should the Permittee carry out the works and services permitted by this permit within the time set out above, the security shall be returned to the Permittee.
6. The land described herein shall be developed strictly in accordance with the terms and conditions and provisions of this permit and any plans and specifications attached to this permit, which shall form a part hereof.
7. This permit shall lapse if the Permittee does not substantially commence the construction permitted by this permit within two years of the (issuance) date of this permit.
8. The terms of this permit or any amendment to it, are binding on all persons who acquire an interest in the land affected by this permit.
9. This permit is not a building permit.

APPROVED BY THE COMMITTEE OF COUNCIL THE ____ DAY OF _____, 2019.

SIGNED THIS ____ DAY OF _____, 2019.

Mayor

Corporate Officer

I ACKNOWLEDGE THAT I HAVE READ AND UNDERSTAND THE TERMS AND
CONDITIONS UPON WHICH THIS PERMIT IS ISSUED.

Applicant (or Authorized Agent or
Representative of Applicant)



KINGSWAY AVENUE PH-2

1525 KINGSWAY AVE,
PORT COQUITLAM, BC

DESIGNED FOR DP BY SUBMISSION
ISSUE DATE: DECEMBER 04, 2019

WHISKEY LIST

NO.	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	12/04/19
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CONWEST (1575 POCO) GP,
250 - 1311 KOOTENAY STREET
VANCOUVER, BC V5K 4Y3

KRAHN PROJECT No. 15-0050
PROJECT TEAM

ARCHITECT OF RECORD
CRAB MITCHELL ARCHITECTURAL INC.
222 HASTY STREET
VANCOUVER, BC V6L 3L2
PHONE: 604.732.1212
EMAIL: crab@crabmitche.ca
PRINCIPAL IN CHARGE: CRAB MITCHELL

BUILDING DESIGN
KRAHN CONSULTANTS LTD.
1000 WEST 10TH AVENUE, SUITE 100
VANCOUVER, BC V6H 3G7
PHONE: 604.681.1111
EMAIL: krahncorp@krahncorp.com
PROJECT MANAGER: SCOTT DEL DATTI

STRUCTURAL
KRAHN CONSULTANTS LTD.
1000 WEST 10TH AVENUE, SUITE 100
VANCOUVER, BC V6H 3G7
PHONE: 604.681.1111
EMAIL: krahncorp@krahncorp.com
ENGINEER IN CHARGE: DARRIN W.

MECHANICAL
B/CAN ENGINEERING
1000 WEST 10TH AVENUE, SUITE 100
VANCOUVER, BC V6H 3G7
PHONE: 604.681.1111
EMAIL: bcan@bcan.ca
PRINCIPAL IN CHARGE: DARRIN W.

ELECTRICAL
B/CAN CONSULTANTS
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VANCOUVER, BC V6H 3G7
PHONE: 604.681.1111
EMAIL: bcan@bcan.ca
ENGINEER IN CHARGE: DARRIN W.

INTERIOR DESIGN
OFFICE OF MICHAEL BROWN ARCHITECTS - DESIGNER
1000 WEST 10TH AVENUE, SUITE 100
VANCOUVER, BC V6H 3G7
PHONE: 604.681.1111
EMAIL: mjb@officeofmichaelbrown.com
PRINCIPAL IN CHARGE: MICHAEL BROWN

CIVIL
KRAHN CONSULTANTS LTD.
1000 WEST 10TH AVENUE, SUITE 100
VANCOUVER, BC V6H 3G7
PHONE: 604.681.1111
EMAIL: krahncorp@krahncorp.com
PRINCIPAL IN CHARGE: DARRIN W.

SURVEY
KRAHN CONSULTANTS LTD. LAND SURVEYING INC.
1000 WEST 10TH AVENUE, SUITE 100
VANCOUVER, BC V6H 3G7
PHONE: 604.681.1111
EMAIL: krahncorp@krahncorp.com
PRINCIPAL IN CHARGE: DARRIN W.

LANDSCAPE
KRAHN CONSULTANTS LTD. LANDSCAPE ARCHITECTURE
1000 WEST 10TH AVENUE, SUITE 100
VANCOUVER, BC V6H 3G7
PHONE: 604.681.1111
EMAIL: krahncorp@krahncorp.com
PROJECT MANAGER: JONATHAN KRAHN

BUILDING CODE
KRAHN CONSULTANTS LTD.
1000 WEST 10TH AVENUE, SUITE 100
VANCOUVER, BC V6H 3G7
PHONE: 604.681.1111
EMAIL: krahncorp@krahncorp.com
PRINCIPAL IN CHARGE: DARRIN W.

FIRE PROTECTION
KRAHN CONSULTANTS LTD.
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VANCOUVER, BC V6H 3G7
PHONE: 604.681.1111
EMAIL: krahncorp@krahncorp.com
PRINCIPAL IN CHARGE: DARRIN W.

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CMA-D
Craig Michael Architecture, Design Inc.
1000 WEST 10TH AVENUE, SUITE 100
VANCOUVER, BC V6H 3G7
TEL: 604.681.1111
WWW.CMA-D.COM

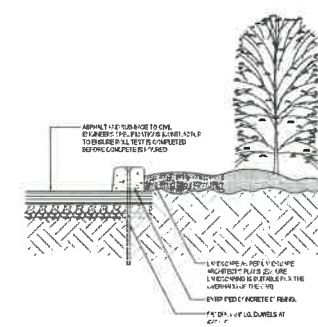
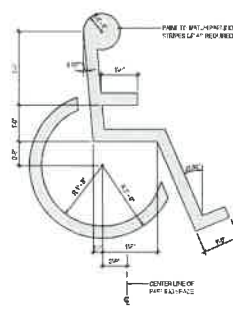
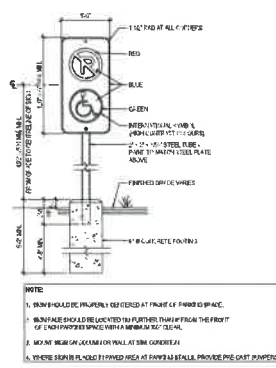
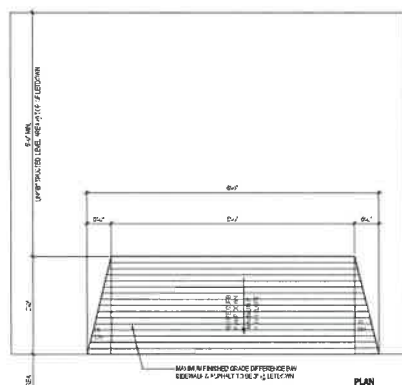
KINGSWAY AVENUE PH-2

1525 KINGSWAY AVE,
PORT COQUITLAM, BC

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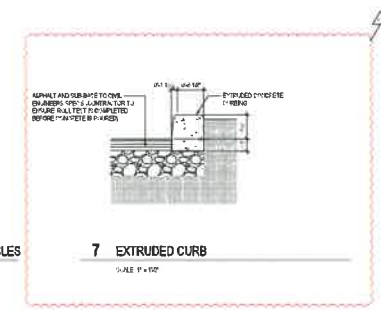
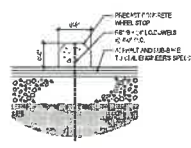
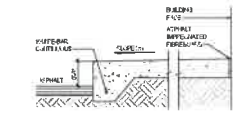
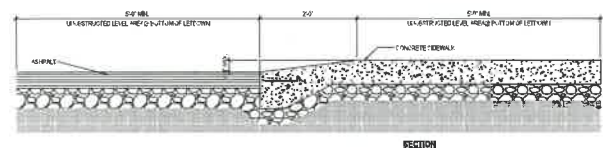
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3 ACCESSIBLE PAINTED SYMBOL
SCALE 1/4" = 1'-0"

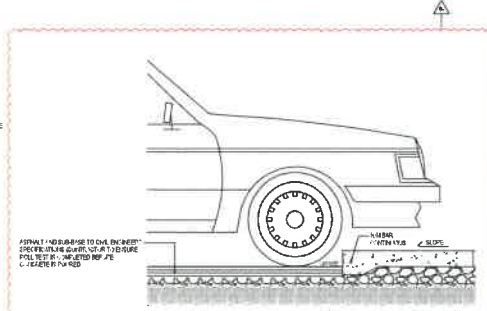
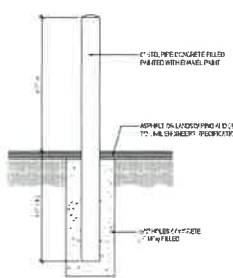
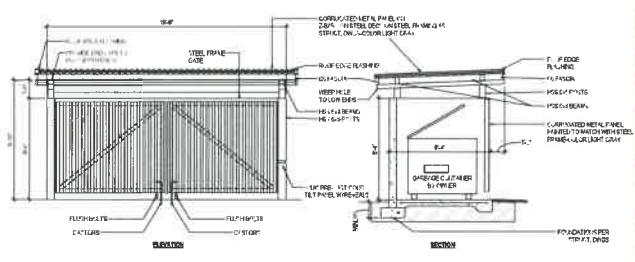
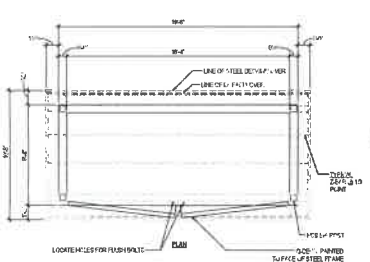
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SCALE 1/4" = 1'-0"



5 SIDEWALK EDGE DETAIL
SCALE 1/4" = 1'-0"

6 CONCRETE WHEEL STOP FOR PASSENGER VEHICLES
SCALE 1/4" = 1'-0"

7 EXTRUDED CURB
SCALE 1/4" = 1'-0"



8 WASTE-RECYCLING ENCLOSURE
A1.01 SCALE 1/4" = 1'-0"

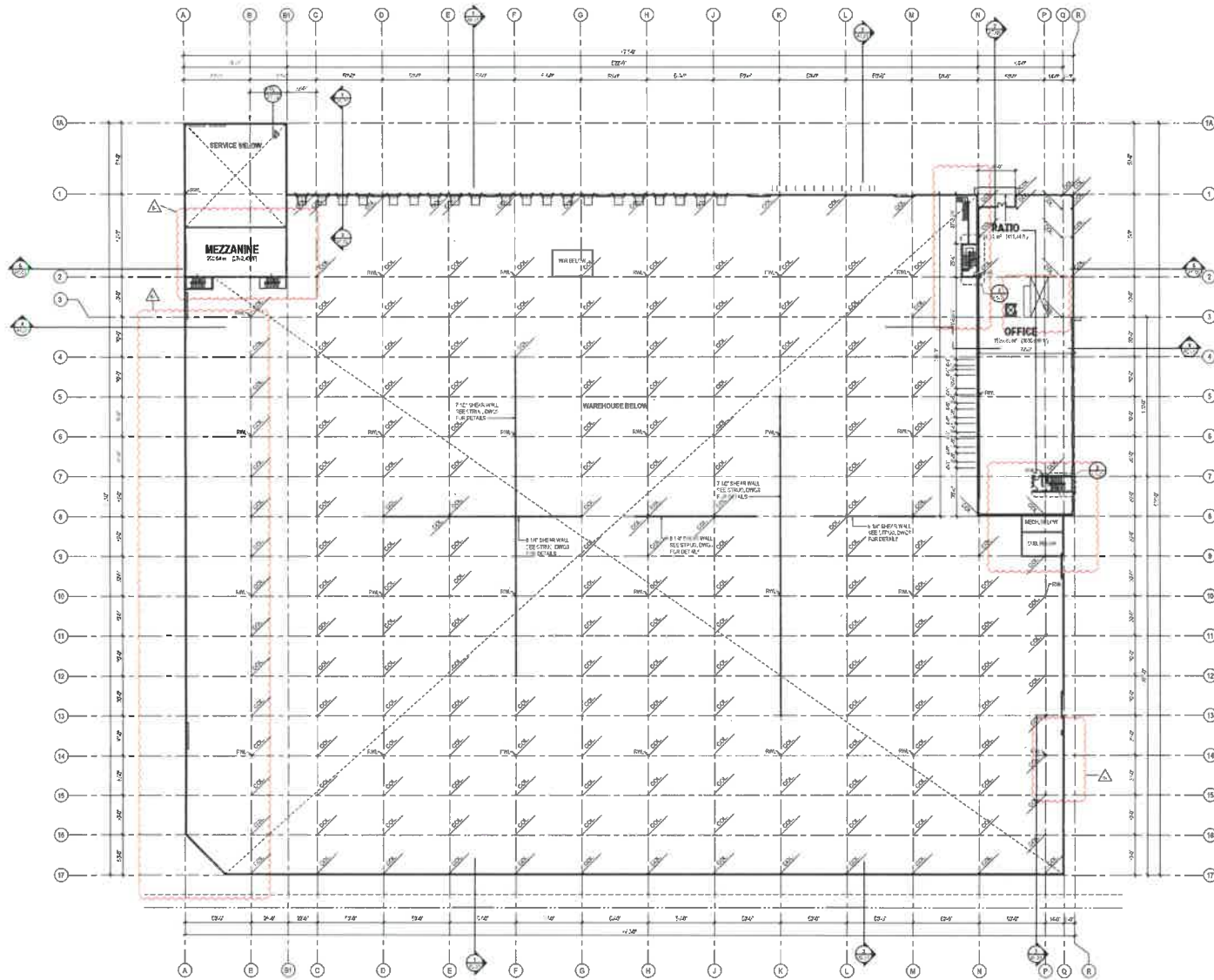
9 EXTERIOR BOLLARD
A1.10 SCALE 1/4" = 1'-0"

10 VEH. CAR OVERHANG SIDEWALK
SCALE 1/4" = 1'-0"

NO.	DESCRIPTION	DATE
1	REVISION	
2	REVISION	
3	REVISION	
4	REVISION	
5	REVISION	
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19	REVISION	
20	REVISION	

CMA-D
CMA-D Architecture Design Inc.
1000 WEST 10TH AVENUE
VANCOUVER, B.C. V6H 1A5
TEL: (604) 681-1111
FAX: (604) 681-1112
WWW.CMA-D.COM

SITE DETAILS



1 SECOND FLOOR PLAN
SCALE 1/8" = 1'-0"

CONWEST
Group of Companies

1	2008-11	10000 14th Avenue S.W. • Suite 100 • Richmond, BC V6X 1C7
2	2008-11	10000 14th Avenue S.W. • Suite 100 • Richmond, BC V6X 1C7
3	2008-11	10000 14th Avenue S.W. • Suite 100 • Richmond, BC V6X 1C7
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10000 14th Avenue S.W. • Suite 100 • Richmond, BC V6X 1C7
KINGSWAY AVENUE PH-2

Project No.:
10000 14th Avenue S.W. • Suite 100 • Richmond, BC V6X 1C7
KINGSWAY AVENUE PH-2

CONWEST
SECOND FLOOR



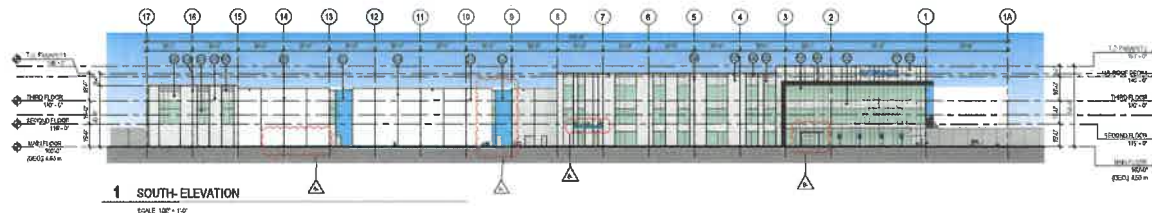
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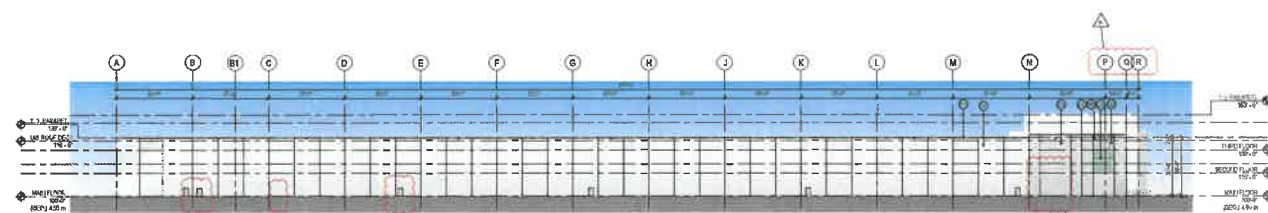
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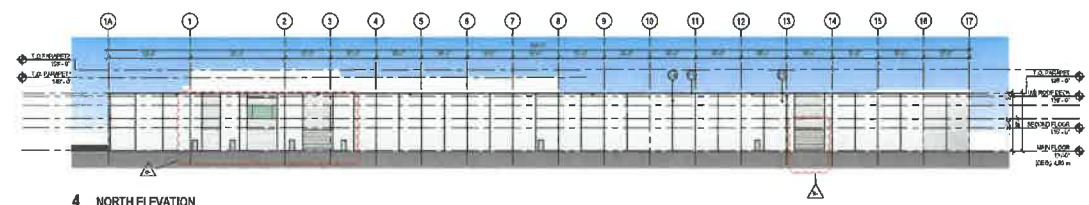
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SCALE 1/8" = 1'-0"



2 EAST-ELEVATION
SCALE 1/8" = 1'-0"



3 WEST-ELEVATION
SCALE 1/8" = 1'-0"



4 NORTH-ELEVATION
SCALE 1/8" = 1'-0"

17P000416 (B)

CONWEST
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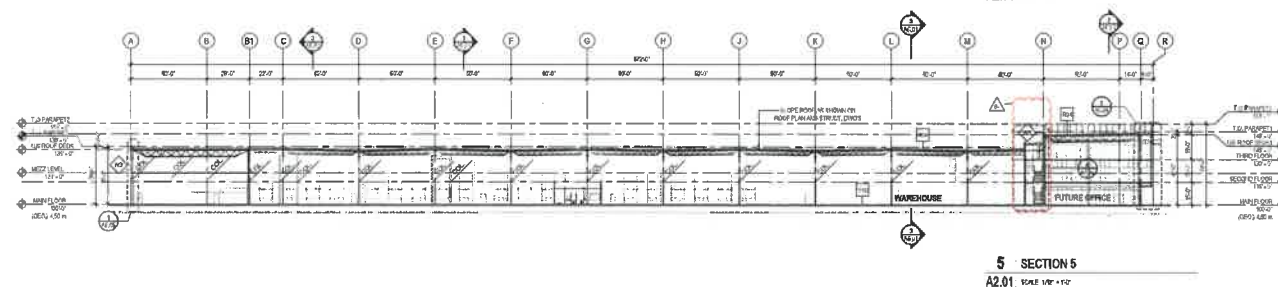
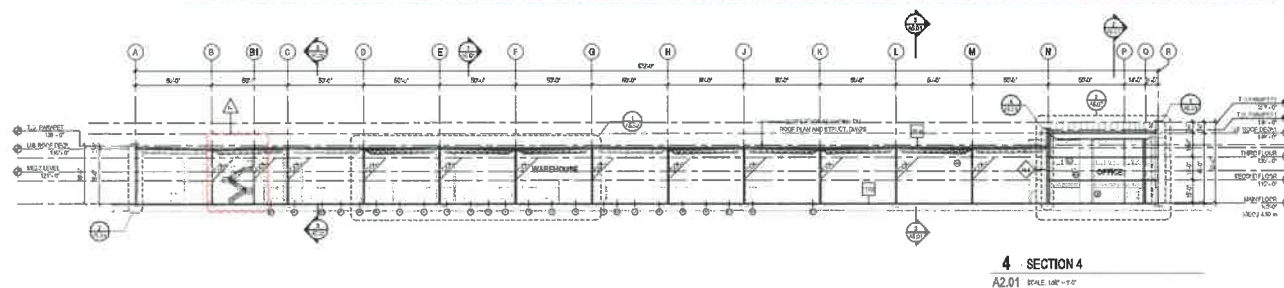
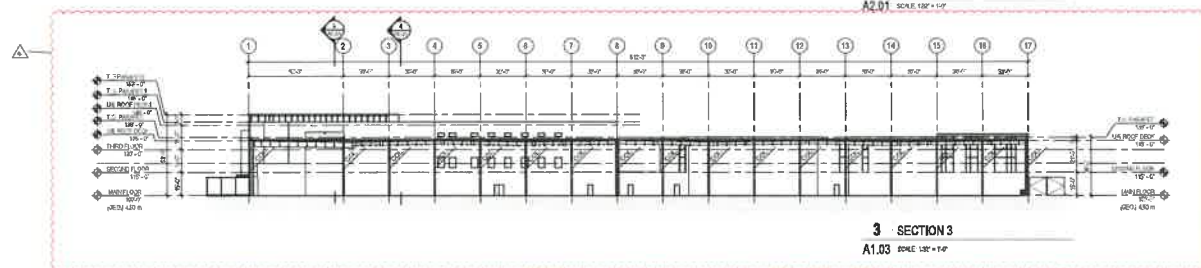
CMA-D
CMA-D Architectural Design Inc.
1100 Kingsway Avenue, Suite 200
Port Moody, BC V3H 2Y4
TEL: 604-947-1100
FAX: 604-947-1101
WWW.CMA-D.COM

1100 KINGSWAY AVE.
PORT MOODY, BC

BUILDING COLOURED
ELEVATIONS

DATE: 11/11/2017
DRAWN: J. DODD
CHECKED: J. DODD
APPROVED: J. DODD

A4.11



General Notes

Planting Notes

- All plants / planting to be per BCNTA and BCCLA standards.
- Plant selection subject to availability at the time of planting.
- Contractor shall source specified plant material and only after area of search has been exhausted will substitutions be considered.
- All trees to be staked in accordance with BCNTA Standards.
- All plants to be sourced from nurseries certified free of P. ramorum.
- Plant sizes and related container classes are specified according to the B.C. Landscape Standards current edition. For container classes #3 and smaller plant sizes shall be as shown in the plant list and the standard for all other plants, both plant size and container class shall be as shown in the plant list. Specifically, when the plant list calls for #5 class containers, these shall be as defined in the BCNTA (ANSI) Standard.
- All trees to have minimum 10 cubic metres of growing medium unless otherwise specified.
- Lay soil smooth and flush with adjoining grass areas and paving and top surface of curbs unless shown otherwise on drawings. Ensure there is a full roll width between the new sod and adjoining surfaces. Small cut pieces from a full roll will not be accepted.


Soil Preparation and Placement Notes

- All growing medium placed on project to meet or exceed BCNTA and B.C. Landscape Standards latest edition.
- Submit sieve analysis by an approved independent soil testing laboratory for each type of growing medium being used on the project PRIOR to placement for review and approval. Clearly identify source and type for each. Resubmit as required until growing medium is approved. Provide one composite sample of each type of proposed growing medium for each different application within the project. Minimum 1 The phytol sample.
- Submittals shall be made at least seven (7) days prior placement.
- Contractor shall not move or work growing medium or additives when they are excessively wet, extremely dry, or frozen or in any weather which will adversely affect growing medium structure. Growing medium whose structure has been destroyed by handling under these conditions will be rejected. Growing medium shall not be handled in wet or frozen conditions.
- Place growing medium, except structural to required finish grades and minimum depths as detailed, unless shown otherwise.

Irrigation Notes:

- The irrigation system is to be design build process. Provide shop drawings for review.
- All on-site landscape planting areas are to be irrigated with high efficiency spray heads (to BCNTA Standards). Refer to the Specifications.
- Smart controller and rain sensor(s) technology is required.

On-Site Plant List

Sym	Qty	Botanical Name	Common Name	Size /Spacing / Comments
Trees				
	15	Magnolia grandiflora	Southern Magnolia	2.5m ht. / B+B, single stem, uniform
	9	Picea omorika	Serbian Spruce	2.5m ht. / B+B
	5	Quercus pallustris	Pin Oak	7cm cal. / B+B
	41	Quercus robur 'Crimson Spire'	Red oak	7cm cal. / B+B
Shrubs				
Bt	179	Berberis thunbergii 'Atropurpurea'	Red Leaf Japanese barberry	#2 pot / 36" o.c.
Co	199	Cornus sericea 'Kelsey'	Dwarf Red-osier dogwood	#2 pot / 30" o.c.
Lp	542	Lonicera pileata	Box-leaved honeysuckle	#2 pot / 30" o.c.
Rn	451	Rosa nutkana	Nootka rose	#2 pot / 30" o.c.
L7	104	Taxus x media 'Hicksii'	Hick's yew hedge (male only)	1.5m ht WB/RB to RB
Perennials, Grasses, and Groundcovers				
Ca	284	Calamagrostis x acutiflora 'Karl Foerster'	Karl F. Feather Reed Grass	#2 pot / 24" o.c.
Cd	1610	Cotoneaster dammeri	Bearberry	#1 pot / 24" o.c.
●	536	Lavendula angustifolia 'Elegance'	Elegance English lavender	#1 pot / 18" o.c.

Landscape Drawing List

L-1.0 KEY PLAN
L-2.0 OVERALL PLAN
L-3.0 EAST - MATERIALS + PLANTING PLAN
L-4.0 SOUTH - MATERIALS + PLANTING PLAN
L-5.0 WEST - MATERIALS + PLANTING PLAN
L-6.0 SECTIONS + DETAILS
L-7.0 DETAILS

Irrigation Legend















- Irrigation Stub Out
50 PSI / 50 GPM

Lighting Legend









- Light Pole
Refer to Electrical for specifications.

Note: Lighting shown for reference only. Refer to Electrical drawings for final placement and lighting specifications.

Material Legend

Detail	Key	Material	Size	Colour/Finish
		Stonewalk - by others		Refer to Civil
		Stamped Concrete		Pattern TBD
		1" - 2" decorative granular CIP Concrete - Light sandblast CIP Concrete - Medium sandblast	2'-0" wide x lengths vary	As Shown
		Structural Soil Extent		Refer to notes for Offsite Structural/Root Barrier for Corporation of Delta
		Refer to Environment Drawings		
		Work by others		
		Sodded Lawn		

Furniture Legend

Detail	Key	Material	Manufactured by	Size	Colour/Finish
		Landscape boulders	Northwest Landscape Supply	20" - 24"	Basalt
		Sealing: Universe System	Landscape Forms	71" backless	Mounted on CIP wall
		Ultrar/Recycling: Generation 50 Litter	Landscape Forms	TBD	Metak Powdercoated (Onyx) Mount: Surface mount
		Bike Rack: Ride	Landscape Forms	3.3' x 28" x 26"	Metak Powdercoated (Onyx) Mount: Surface mount

Rev. 8, 2019
01: Oct 2, 2019 Issue 1 P1 Submittal
02: July 26, 2019 02 Submittal
03: July 26, 2019 03 Draft
04: July 26, 2019 04 Draft
05: July 26, 2019 05 Draft
06: July 26, 2019 06 Draft
07: July 26, 2019 07 Draft
08: July 26, 2019 08 Draft
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100: July 26, 2019 100 Draft

Prepared:

Drawn by: JC
Checked by: PR
Date: Dec. 4, 2019
Scale: NTS
Drawing title: Key Plan

Project:

KINGSWAY AVENUE PH-2

1525 KINGSWAY AVE.
PORT COQUITLAM, BC

Drawn by: JC

Checked by: PR

Date: Dec. 4, 2019

Scale: NTS

Drawing title: Key Plan

Project No.:
19046

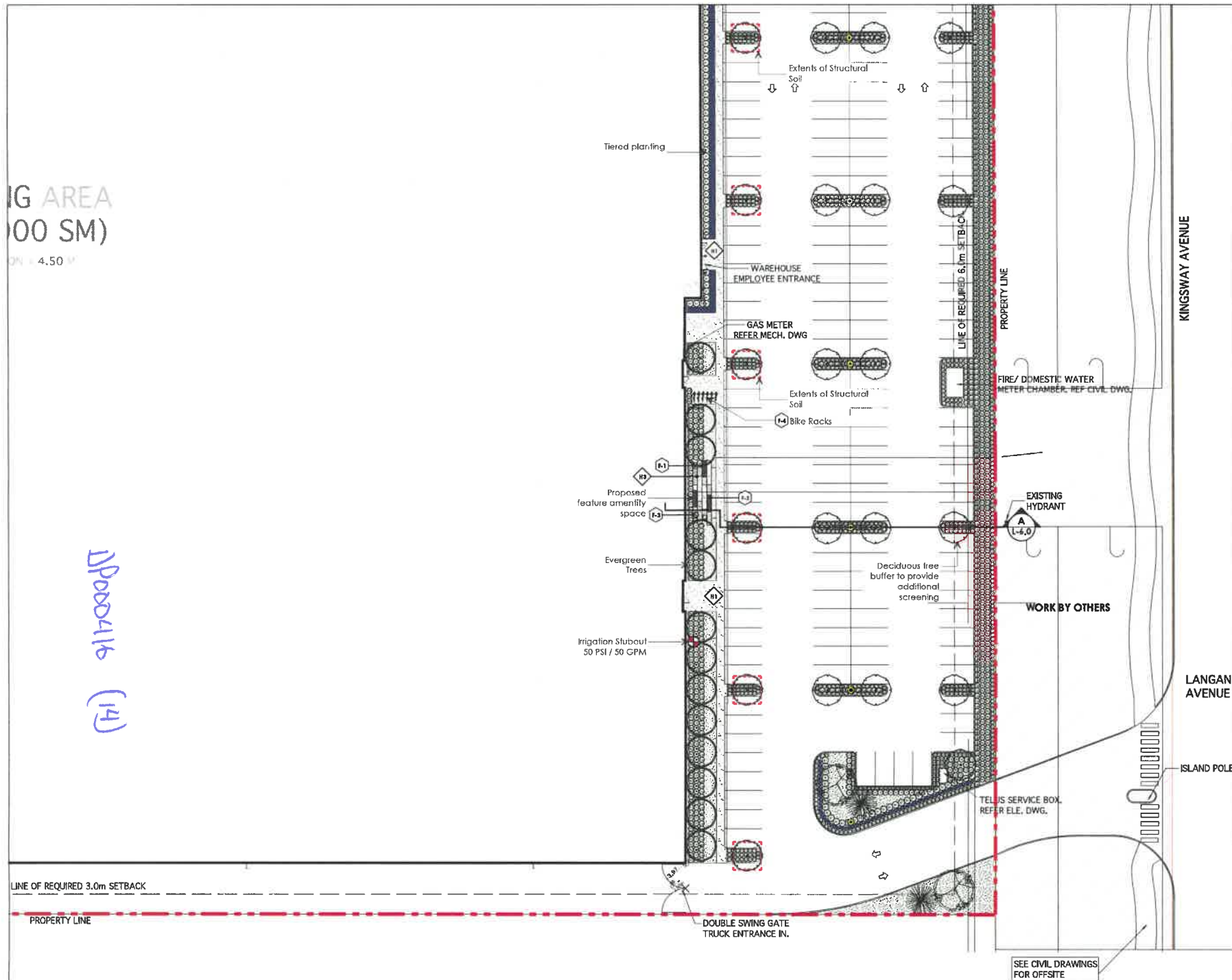
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L-1.0

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Rev. 8, 2019 DP Fabric Submission
 Oct 2, 2019 Layout for Submittal
 Aug 29, 2019 DP Submission
 Apr 24, 2019 DP Draft
 no.: (Rev.) (Rev.)

Revisions:

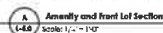
DK
 D. K. Design & Construction Ltd.
 100 - 1437 West 4th Avenue
 Vancouver BC V6J 1K5
 T: 604 684 4611
 F: 604 684 0577
 www.dkhouse.ca

Project:
KINGSWAY AVENUE PH-2
 1525 KINGSWAY AVE.
 PORT COQUITLAM, BC

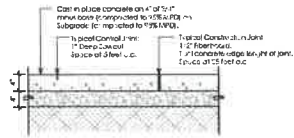
Drawn by: JC
 Checked by: PE
 Date: Dec. 3, 2019
 Scale: 1/16" = 1'-0"

Drawing Title:
**West - Materials +
 Planting Plan**

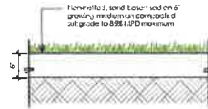
Project No.:
19046
 Sheet No.:
L-5.0



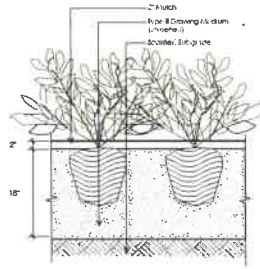
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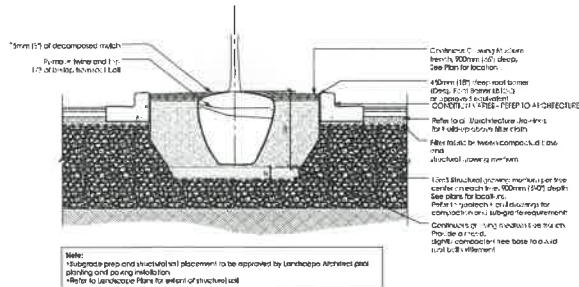
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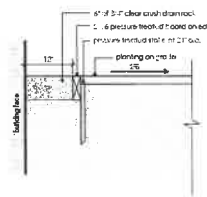
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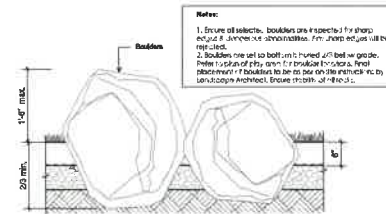
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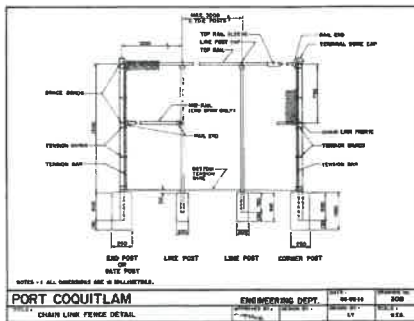
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1d-05 Gravel Drip Strip @ Building Face on Grade
Scale: 1" = 1'-0"



1d-06 Landscape Boulders
Scale: 1" = 1'-0"



1d-07 Chain Link Fence
Scale: NTS

06 Dec. 8, 2019 DP Proceed Submittal
07 Oct. 12, 2019 Revise 1:1 Budget
08 Aug. 29, 2019 DP Submittal
09 Jul. 18, 2019 DP Draft
10 June Item
Revised:
Dorelle Krack Ltd.
101 - 1037 West 10th Avenue
Vancouver BC V6J 1S5
T: 604-684-8811
F: 604-684-8877
www.dkll.ca

Project:
KINGSWAY AVENUE PH-2
1525 KINGSWAY AVE.
PORT COQUITLAM, BC

Drawn by: JC
Checked by: PK
Date: Dec. 8, 2019
Scale: AS SHOWN
Detail: Details

Project No:
19046

L-7.0

Schedule A

Energy Conservation:

Conservation Measure	Verification Method
All roofs are to be light in colour with high solar reflectance to minimize solar heat gain	BP stage; written confirmation by Architect along with staff review of BP submission
Landscaping adjacent to passenger vehicle parking areas includes shade trees to provide shading of parking space pavement	DP stage; staff review of landscape plan
Window placement to provide opportunities for natural light in office areas	DP and BP stage; staff review of building plans
Windows are to be high efficiency to reduce solar heat gain	BP stage; written confirmation by Architect along with staff review of BP submission
Use of Energy Star Rated Appliances in kitchen areas	BP stage; written confirmation by developer

Water conservation:

Conservation Measure	Verification Method
An integrated stormwater management plan has been developed for the site that captures and treats surface runoff	BP stage; written confirmation by developer
Drought tolerant plant selections are to be used for the majority of the project, so that minimal irrigation will be required after the maintenance period	DP and BP stage; staff review of landscape drawing, site inspection by Landscape Architect and City Arborist
High efficiency automated landscape irrigation system is to be installed.	DP and BP stage; staff review of landscape drawing, site inspection by Landscape Architect and City Arborist
Stormceptors and oil interceptors will be installed to improve stormwater quality	BP stage; staff review of building plans and inspections

GHG Reduction:

Conservation Measure	Verification Method
Building will utilize paints and adhesives with low volatile organic compound (VOC) off-gassing potential	BP stage; written confirmation by Architect along with staff review of BP submission
Accessible storage space for garbage, recycling and organic waste will be provided.	DP and BP stage; staff review of building plans
End of trip facilities and bicycle parking will be provided to promote alternative transportation	DP and BP stage; staff review of building plans
Two electric vehicle charging stations will be provided	BP stage; written confirmation by developer

per OCP Sec. 9.11 Environmental Conservation DPA designation

THE CORPORATION OF THE CITY OF PORT COQUITLAM

“DEVELOPMENT PROCEDURES BYLAW, 2013, NO. 3849”

DEVELOPMENT VARIANCE PERMIT

NO. DVP00071

Issued to: LWEST HOLDINGS LP
(Owner as defined in the Local Government Act, hereinafter referred to as the Permittee)

Address: 205-1311 KOOTENAY STREET, VANCOUVER, BC, V5K 4Y3

1. This Development Variance Permit is issued subject to compliance with all of the Bylaws of the Municipality applicable thereto, except as specifically varied by this permit.
2. This Development Variance Permit applies to and only to those lands within the Municipality described below, and any and all buildings, structure and other development thereon:

Address: 1525 KINGSWAY AVENUE

Legal Description: LOT 1 DISTRICT LOT 288 GROUP 1 AND SECTIONS 7
AND 18 BLOCK 6 NORTH RANGE 1 EAST NEW
WESTMINSTER DISTRICT PLAN EPP96965

P.I.D.: 030-942-683

3. The Parking and Development Management Bylaw, 2018, No.4078 Sec. 8 is varied to reduce required off-street parking spaces from 369 to 300 spaces.

For clarity, this variance applies to and only to off-street parking space requirements for the industrial development regulated by Development Permit DP000416.

4. Prior to issuance of a building permit, the following condition must be met:
 - Submission of design, securities and fees for offsite works and services, including electrical ducting to support installation of a future traffic signal at the intersection of Kingsway Avenue and Coast Meridian Road, and a mixed-use pathway with a minimum width of 3 metres, landscaping and pedestrian scale lighting located on the BC Hydro lands fronting 1525 Kingsway Avenue.
5. This permit is not a building permit.

APPROVED BY COUNCIL THE _____ DAY OF _____, 2020.

SIGNED THIS _____ DAY OF _____, 2020.

Mayor

Corporate Officer

I ACKNOWLEDGE THAT I HAVE READ AND UNDERSTAND THE TERMS AND CONDITIONS
UPON WHICH THIS PERMIT IS ISSUED.

Applicant (or Authorized Agent or Representative of
Applicant)

1491, 1515 & 1537 Kingsway Avenue Phase 2
Port Coquitlam
Transportation Impact Assessment
Final

Prepared for
Conwest Group of Companies

Date
January 17, 2020

Project No.
04-18-0252

January 17, 2020

Peter Woerler
Conwest Group of Companies
#250 – 1311 Kootenay Street
Vancouver BC Canada V5K 4Y3

Dear Peter:

**Re: Conwest 1491, 1515 & 1537 Kingsway Avenue Phase 2, Port Coquitlam
Transportation Impact Study (TIS)**

Please find attached our Transportation Impact Study (TIS) to support the above project's Development Permit (DP) application.

The study confirms that the two planned site accesses on Kingsway Avenue, one aligned with Langan Avenue and the other with Coast Meridian Road, can function satisfactorily from a geometric and operational perspective. It also provides a rationale to support the planned parking supply for the warehouse building along with enhanced arrangements for bicycle storage and end-of-trip facilities.

We trust that this information will assist you in moving forward with your application. Please do not hesitate to contact me should you have any questions about this study.

Yours truly,
Bunt & Associates



Paul Dorby, MSc
Senior Transportation Planner

CORPORATE AUTHORIZATION

Prepared By: Paul Dorby, MSc
Nicolas Moss, EIT

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Telephone: +1 604 685 6427

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Date: January 17, 2020

Project No. 04-18-0252

Approved By:

Status: Final

Engineer's Stamp

TO BE COMPLETED FOR FINAL VERSION

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1. INTRODUCTION

1.1 Study Purpose

Conwest Group of Companies (Conwest) is planning a warehouse development project located on the lands of 1491, 1515 and 1537 Kingsway Avenue in the City of Port Coquitlam, BC. A Development Permit (DP) application has been submitted to the City of Port Coquitlam and the site location is shown at **Exhibit 1.1**. The site development footprint is also highlighted in **Figure 1.1**, covering Lots 1491, 1515, 1537 along with a portion of 1579. Lots 1545 and 1579 were subject to a separate DP Application in 2018 (see Bunt Transportation Impact Assessment for 1545-1575 Kingsway Avenue [April 2018]). Lots 1537-1515 and 1491 have since been consolidated to a single legal parcel.

Figure 1.1: Footprint of Development Lots



The warehouse development plan is proposed to have two vehicle access points with Kingsway Avenue, where the western access would be aligned with Langan Avenue and the eastern access with Coast Meridian Road. As part of this study, a preliminary conceptual layout has been prepared to support the access alignments with Kingsway Avenue and which have been tested in regard to geometric and capacity operations.

A warehouse floor area of 327,097sq.ft is planned to be occupied by a single tenant with specific site layout requirements to fit their business model along with ancillary office floor space (49,952sq.ft) for a total of 377,049sq.ft.

Around 300 parking spaces are planned for the site, which is well within the expected demands, but is lower than the City of Port Coquitlam's Parking Bylaw requirements. A rationale will therefore be provided to support the proposed supply based on assessing expected demands along with providing sustainable measures to lower demand.

1.2 Study Scope & Area

A Transportation Impact Study (TIS) in support of the development plan has been requested by the City of Port Coquitlam. In response, this report will assess whether the development plan can operate satisfactorily based on the projected vehicle demands, how it can fit within the City Bylaw requirements, and how the proposed site accesses at Langan Avenue and Coast Meridian Road can function from a geometric and operational perspective.

The study area and methodology used in this report is consistent with that applied in the Bunt Transportation Impact Study for the 1545 / 1575 Kingsway Avenue project in April 2018.

1.3 Organization of Report

The report is outlined as follows:

- **Section 2** describes existing transportation systems and establishes the general scope for the planned study network;
- **Section 3** outlines the development plan along with the transportation features, covering vehicle access, parking and loading;
- **Section 4** sets out the methodology and projections for the site vehicle trip generation and distribution; and
- **Section 5** assesses the influence of the site development movements on the study network and whether mitigation measures are required.



Exhibit 1.1
Site Location

1491, 1515, & 1537 Kingsway Avenue
04-18-0252 January 2020

2. EXISTING CONDITIONS

2.1 Site Context

The site is bounded by industrial uses to the east and west (1579 Kingsway Ave under construction), Canadian Pacific Rail Yard to the north and Kingsway Avenue to the south. A BC Hydro corridor runs along the south boundary of the site. The two existing site driveways currently cross the Hydro corridor to connect with Kingsway Avenue, both of which will be realigned as part of the development plan.

2.2 Site Use

The site has a total area of around 610,000sq.ft. and where the existing buildings are to be demolished.

2.3 Street Network

Table 2.1 presents details of the street characteristics adjacent to the site.

Table 2.1: Existing Street Characteristics (adjacent to site)

STREET	CLASSIFICATION	NUMBER OF TRAVEL LANES	POSTED SPEED	PARKING FACILITIES
Kingsway Avenue	Arterial	2	50km/h	South Side
Langan Avenue	Collector	2	50km/h	Both sides
Coast Meridian Overpass	Arterial / MRN	4	50km/h	None
Coast Meridian Road	Collector	2	50km/h	West Side

The City's Master Transportation Plan (MTP) 2013 highlights the need for safety improvements on Kingsway Avenue between Coast Meridian Overpass and the Mary Hill Bypass, including the section along the site's frontage. This plan also indicates that the section between Coast Meridian Overpass and Coast Meridian Road is currently designed as a 'Collector Road', and therefore needs to be upgraded to an arterial configuration similar to the section of Kingsway Avenue east of Coast Meridian Road.

The site plans will show this section of Kingsway Avenue roadway widened from 11m to 13.5m to accommodate 4 travel lanes plus a left-turn lane and a new multi use path on the north side. This widened cross section will contribute to improved vehicle capacity on this section of Kingsway Avenue, as reflected in the operational analysis in Section 5.

Summarized in **Table 2.2** are the existing intersection controls in the immediate environs.

Table 2.2: Intersection Controls

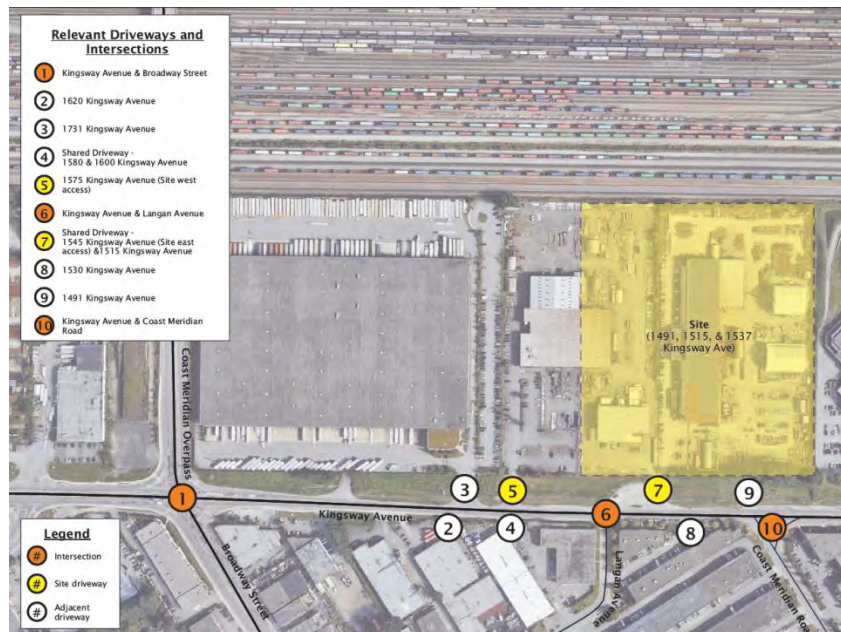
INTERSECTION	CONTROL
Kingsway Avenue and Coast Meridian Road	Minor Stop
Kingsway Avenue and Langan Avenue	Minor Stop
Kingsway Avenue and Coast Meridian Overpass	Signal

The MTP 2013 highlights that there is a need for capacity improvements at Kingsway Avenue's intersections with Langan Avenue and Coast Meridian Road and this will be covered Section 5 as part of the study network operational review.

2.4 Kingsway Avenue Driveways

Figure 2.1 highlights site driveways and intersections in the immediate vicinity of the development location and following presents key changes relevant to the Conwest projects:

- **Site Driveway 5:** (1579 Kingsway) currently under construction;
- **Site Driveway 7** (west driveway for the development) is planned to be moved around 50m westward to align with Langan Avenue; and
- **Site Driveway 9** (east driveway for the development) is proposed to move around 10m eastward to align with the intersection at Coast Meridian Road.

Figure 2.1: Kingsway Avenue Driveways

Preliminary conceptual designs for the two site driveways will be presented in the next section and reviewed as part of the operational assessment in Section 5.

2.5 Cycling Network

The project site is accessible to the City's bicycle network as highlighted at **Exhibit 2.1**. Salient routes closest to the site are covered below and these provide connections to other routes within the City to the south, north and west:

- Coast Meridian Overpass / Broadway (marked bicycle lanes); and
- Langan Avenue (signed bicycle route).

In addition to the above, the City's Master Transportation Plan (2013) highlights that Kingsway Avenue is proposed to have an 'Off-Road Multi Use Path' along the BC Hydro frontage corridor, which has been incorporated into the development plan design.

2.6 Transit

The project site is located around 2200m southeast of Port Coquitlam's downtown core and 1800m from Port Coquitlam's West Coast Express station. Transit routes and stops are highlighted at **Exhibit 2.2**.

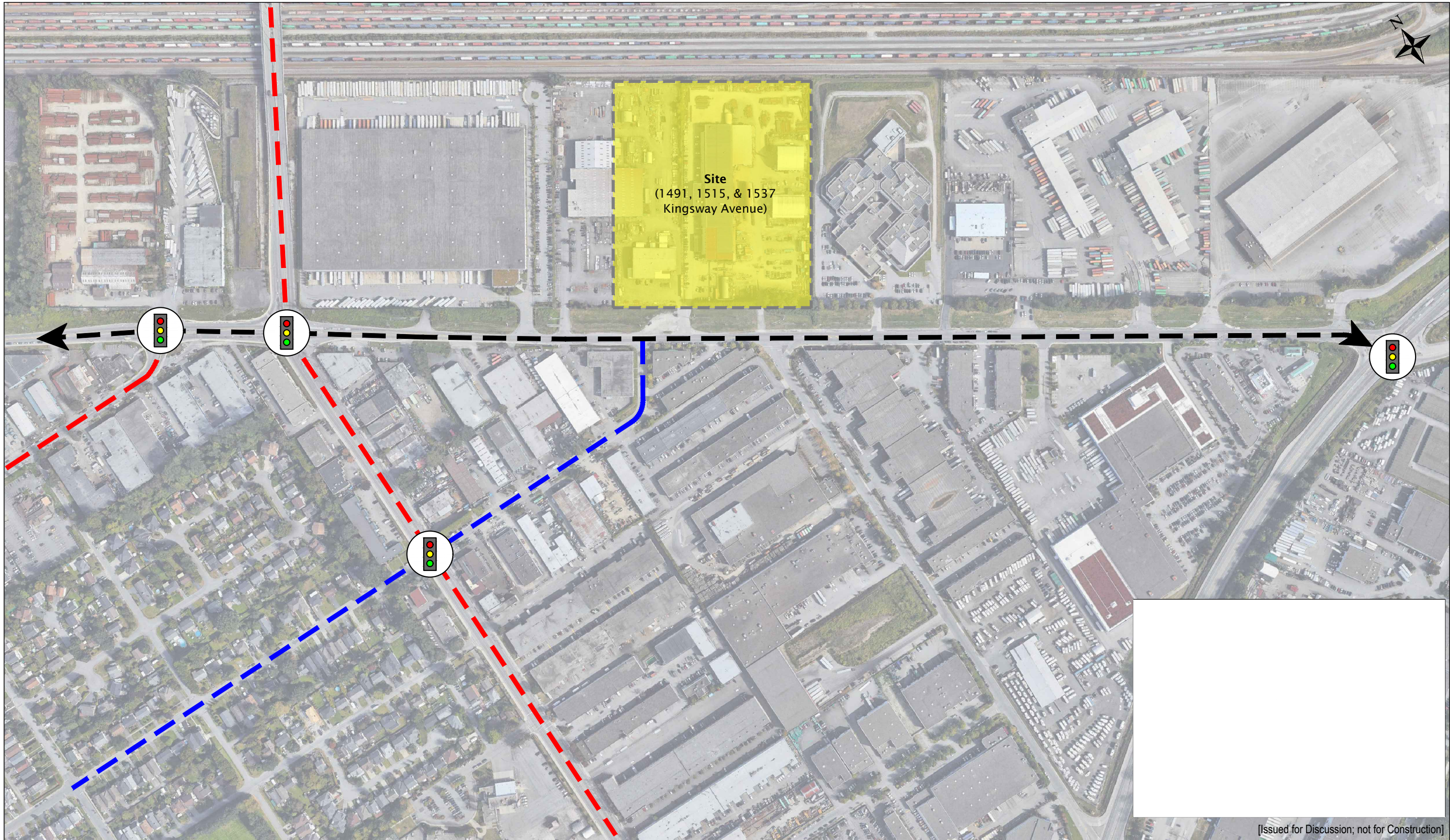
Table 2.3a presents bus stops within 400m of the site, while **Table 2.3b** highlights the operational characteristics of the bus routes.

Table 2.3a: Bus Stops within 400m

ROUTE	STOP LOCATION	COMMENTS
#175	Kingsway Avenue	Westbound Only, Peak Only
#175	Broadway	Southbound Only, Peak Only
#188	McLean Avenue	Both directions

Table 2.3b: Existing Transit Service Frequency

ROUTE #	WEEKDAY SERVICE SPAN		FREQUENCY MINUTES			
	START	END	AM	MID-DAY	PM	EVENING
#188	4:36am	1:02am	15	30	15	30
#175	6:06am / 3:03pm	8:19am / 5:43pm	30	-	30	-



[Issued for Discussion; not for Construction]

Exhibit 2.1
Bicycle Routes

1491, 1515, & 1537 Kingsway Avenue
04-18-0252 January 2020 Prepared by AK



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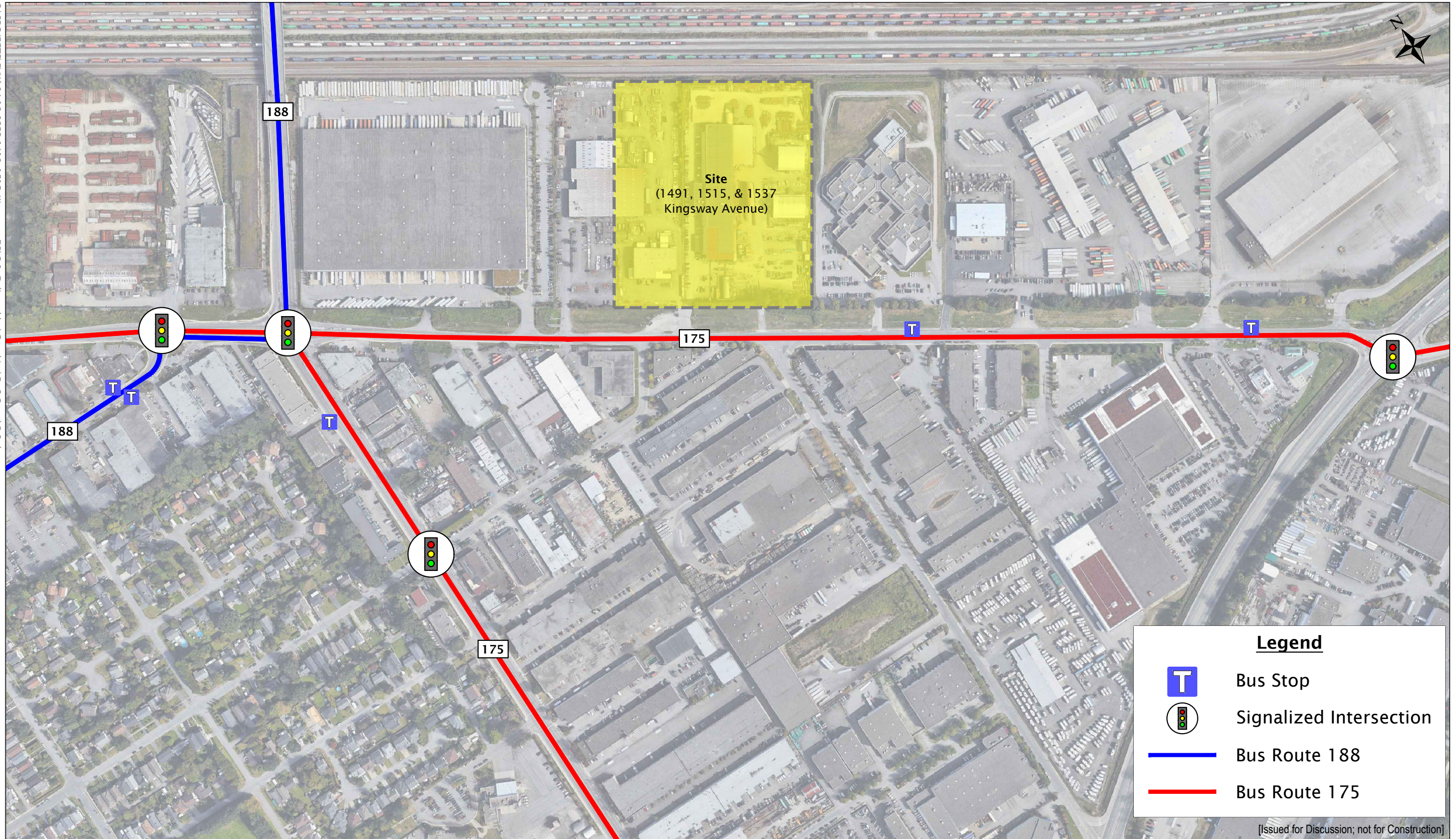


Exhibit 2.2 Transit Routes and Stops

1491, 1515, & 1537 Kingsway Avenue
04-18-0252 January 2020 Prepared by AK

2.7 Data Collection

Provided in **Table 2.4** is a summary of the collected data for the study. Port Coquitlam has kindly provided information for the Coast Meridian Overpass / Broadway Street / Kingsway Avenue intersection (from 2016).

Table 2.4: Summary of Traffic Data

INTERSECTION	SOURCE	DATE OF COUNT
Kingsway Avenue and Coast Meridian Road	Bunt	April 18, 2018
Kingsway Avenue and Langan Avenue	Bunt	April 18, 2018
1530 Kingsway Ave Driveway	Bunt	April 18, 2018
1620 Kingsway Ave Driveway	Bunt	April 18, 2018
BDL Driveway	Bunt	April 18, 2018
1515 Kingsway Ave/East Driveway for Site	Bunt	April 18, 2018
Coast Meridian Overpass / Kingsway / Broadway	Port Coquitlam	December 06, 2016

Based on the observed vehicle volumes on Kingsway Avenue adjacent to the site, the following two weekday peak hour periods were established:

- Morning (AM): 7:45am to 8:45am
- Afternoon (PM): 4:30pm to 5:30pm

Table 2.5 presents a summary of the two-way peak hour vehicle movements on the study network, while **Exhibit 2.3** presents the peak hour vehicle turning volumes.

Table 2.5: Existing Peak Hour Roadway Link Volumes

ROAD LINK	PEAK LINK VOLUMES (VEH/HR)	
	AM	PM
Coast Meridian Overpass	1,575	1,865
Kingsway Avenue (west of Broadway)	1,970	1,800
Broadway Street	1,115	1,735
Kingsway Avenue (along site frontage)	935	1,180
Langan Avenue	135	145
Coast Meridian Road	205	235

Evidently, the afternoon PM peak-hour volume is typically higher. For example, on Kingsway Avenue at the site access frontage, the PM peak-hour two-way volume is 26% higher than the AM peak-hour volume. This will provide important context for the operational analysis.

2.8 Summary

Overall, the project site is within walking distance of the downtown area and is reasonably well-located with respect to transit, especially in comparison to many other industrial sites in Metro Vancouver. These positives should assist in lowering the site vehicle demands with respect to parking and impacts on the adjacent streets.

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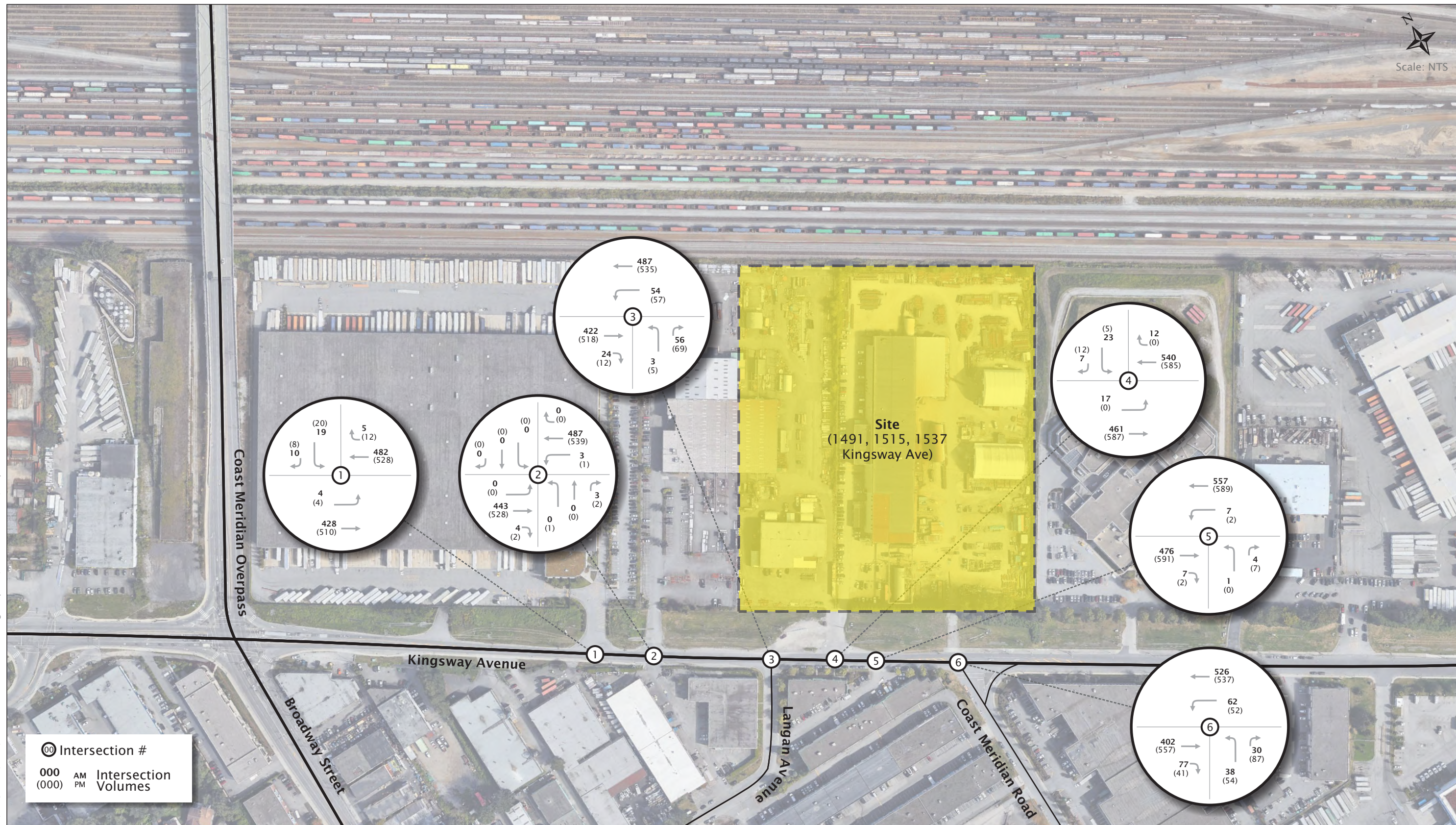


Exhibit 2.3 Existing Vehicle Volumes

1491, 1515, & 1537 Kingsway Avenue
04-18-0252 January 2020

3. SITE PLAN REVIEW

3.1 Introduction

This section presents the development plan from a transportation perspective. It first sets out details on the planned site uses before reviewing tenant operations, site driveway and circulation, and parking and loading requirements. One of the key areas covered is the need for a vehicle parking relaxation and this will be supported with enhanced bicycle storage and end-of-trip facilities.

3.2 Development Content

The proposed warehouse building is presented at **Exhibit 3.1** and represents an intensification of industrial use, consistent with the City's expectations for this part of the City. Summarized in **Table 3.1** is a breakdown of the planned floor areas and it should be noted that the office component will be auxiliary to the warehouse use (consistent with the City's zoning). This relationship will be important for assessing the parking needs along with the vehicle trip demands for the project.

Table 3.1: Development Content

LAND USE	FLOOR AREA SQ.FT.	FLOOR AREA SQ.M.
Warehouse	327,097sq.ft.	30,388sq.m.
Office	49,952sq.ft.	4,641 sq.m.
TOTALS	377,049SQ.FT	35,029SQ.M

3.3 Expected Tenant Operations

Conwest has a specific tenant for the planned warehouse building. The prospective tenant has their own unique operational dynamics with respect to employee numbers, day-to-day site vehicle activity and how much service truck loading is required. The prospective tenant, as with many similar operators these days, heavily uses automation to manage the storage and movement of goods within the warehouse, and consequently, it results in lower employee numbers compared to similar operations conducted say 10 or 15 years ago.

The prospective tenant advised that they anticipate starting operations at the Kingsway Warehouse with around 75 to 80 operational employees with the potential to increase future numbers as set out in **Table 3.2**.

Table 3.2: Projected Tenant Employee Numbers

EMPLOYEE TYPE	FUTURE PROJECTIONS
Operations	160 employees
Non-operations	77 employees
TOTALS	237 EMPLOYEES

These numbers provide an important reference point for the parking review later in the section.

One of the unique aspects of the prospective tenant's operations is the 'daily transfer orders', or Specials, and projections for these movement types is presented in **Table 3.3**. Please note specials originate at remote satellite facilities and commute to this distribution facility for delivery pick-ups and are continual in transit, and therefore do not create additional burden on the parking requirements.

Table 3.3: Specials or Daily Transfers (8am to 6pm)

ACTIVITY	MOVEMENTS (PER DAY)	EQUIVALENT TWO-WAY VEHICLE MOVEMENTS (PER DAY)	AVERAGE TWO-WAY MOVEMENTS (PER HOUR)
Specials	300 to 350	600 to 700	60 to 70

It indicates that, on average, these movements would be equivalent to around 1 per minute, while each vehicle would be parked for a short period of time as a driver picks up a relatively small number of parts and then departs, hence parking for only a few minutes each time.

As well, the prospective tenant estimates that it typically receives up to **10 tractor trailers per day** (with growth factored in) for store stock and DC transfer orders and the expectations for the site is to park 2 tractor trailers and 12 box trucks at any one time (i.e. 14 in total). As well, the loading zone will also have to handle several small parcel truck deliveries and pick-ups each day.

Internally employee parking will be separated from the truck moving and loading activities. Employee parking will primarily be located along the south frontage of the building, while parking for the aforementioned 'Specials' will be located on the east side of the building. Service truck loading docks will be located on the northeast portion of the site, immediately north of the 'Specials' parking area.

3.4 Site Driveway and Circulation

The driveways planned to support the warehouse development (realigned as mentioned in Section 2) will assist both with the site's internal circulation/functionality and better distributing vehicles onto the road network. The main features for each of site access is presented in **Table 3.4**.

Table 3.4: Planned Driveway Arrangements

DRIVEWAY	PROPOSED ALIGNMENT WITH KINGSWAY	ENTRY WIDTH	SERVICE TRUCK FUNCTION
West Driveway	Opposite Langan Avenue	10m	Primary entry point for WB-20s
East Driveway	Opposite Coast Meridian Road	11m	Primary exit point for WB-20s

Planned entry widths at the site access interfaces with Kingsway Avenue have been guided primarily by the need to align with the City streets opposite, while also ensuring there is sufficient room to accommodate the movements for a WB-20 tractor trailer.

The site access design incorporates the City-planned changes on Kingsway Avenue, essentially between Broadway Street and Coast Meridian Road, based on the following configuration:

- Two vehicle travel lanes westbound and eastbound
- Bidirectional left-turn centre lane; and
- Multiuse Path (MUP) on the north side along the BC Hydro Corridor

Even though WB-20 trucks will physically be able to enter and exit the west and east driveways, the planned operational routing is for them to enter at the west access (Langan Avenue) and depart from the east access (Coast Meridian Road). This arrangement will remove the potential for two WB-20 tractor trailer trucks passing each other simultaneously.

Please also note that the projected number of tractor-trailer movements would only be around 10 per day (or 1 per hour) and therefore the chances of a WB-20 exiting and another one entering at the same time will have a very 'low probability of occurrence'. As such, even if a WB-20 enters from the east access it should not result in any operational problems.

A WB-20 truck was used to test both of the site driveway designs. This exercise is presented at **Exhibit 3.2** and it confirms there is sufficient manoeuvring width for these trucks to enter or exit the planned warehouse site, while allowing for a SU9 truck to pass simultaneously. Internal loading design has been reviewed by the Architect for the project, and where the layout will be consistent with the geometrics observed at other industrial sites for the range of vehicle types expected. Further details can be obtained from the Krahn Group of Companies.

3.5 Vehicle Parking

Vehicle parking for the site has been reviewed based on the City's "Parking and Development Management Bylaw, 2005, No. 3525". **Table 3.5a** presents the applicable Parking Bylaw rate for the planned use (Section W) of the Bylaw, while **Table 3.5b** calculates the requirement in the context of the proposed supply.

Table 3.5a: Port Coquitlam Parking Bylaw Requirements (Section 8)

LAND USE	BYLAW CATEGORY	RATE
Warehouse / Auxiliary Office	Manufacturing and industrial buildings and uses, display yards and storage yards, research laboratories, servicing and repair establishments and similar uses	1 per 3 employees or 1 for each 95sq.m. (1022.56sq.ft.) of gross floor area, whichever is greater

Table 3.5b: Planned Vehicle Parking Supply Review

LAND USE	PARAMETER	BYLAW SUPPLY REQUIREMENT	PROPOSED	DIFFERENCE
Warehouse / Auxiliary Office	35,029sq.m GFA	369	300	-69
	237 employees	79	300	+221

Clearly a reduction is required in the context of the City Parking Bylaw rate based on the gross floor area being the governing factor, while the rate based on employee numbers means that the parking required would be oversupplied.

To provide further context, the ITE Parking Generation Manual (4th Edition) has been reviewed and the outputs from this have been summarized in **Table 3.6**, setting out the peak parking demand for manufacturing and warehouse land uses. This review shows that the peak parking demand for the planned warehouse's floor area would be for around 190 spaces, which is well below the City Bylaw requirement of 369 spaces.

Table 3.6: ITE Manufacturing and Warehouse Demand Rates

PEAK DEMAND PARAMETERS	MANUFACTURING (ITE #140)	WAREHOUSE (ITE #150)
ITE Raw Data	1.02 per 1000sq.ft.	0.51 spaces per 1000sq.ft.
Equivalent Bylaw Rate	1 space per 91sq.m.	1 space per 182sq.m.
Projected for 35,029sqm	385 spaces occupied	192 spaces occupied

Another point for this review is to understand expected demands from the prospective tenant, who provided projected employee numbers as set out in Table 3.2. The prospective tenant projects that up to 237 employees could be located at the warehouse, and assuming each one is a single-occupant vehicle driver, it would indicate the absolute maximum parking demand for 237 parking spaces in the very unlikely event everyone is present on-site at the same time.

Furthermore, parking demand will be lower as some employees will walk, ride share, use transit or be dropped-off, and as such, demand will likely be closer to 160 parking spaces occupied at peak times. In addition to employee parking, the prospective tenant also needs to provide 34 spaces for 'daily transfer order' vehicles, and with this, the combined parking needs would for a total of 195 parking spaces. This is consistent with the ITE observed demand for warehouse in Table 3.6.

In sum, it is therefore proposed to provide **300 marked parking spaces** to minimize the number of unused parking spaces on-site and this will be supplement with enhanced facilities for bicycle parking as set out below.

3.6 Proposed Bicycle Parking

The following presents the rationale for the proposed bicycle parking supply along with the storage arrangements and end-of-trip facilities. As per Table 3.2, the prospective tenant is expected to start operations at the Kingsway site with around 75 to 80 operational employees but with the potential to increase future numbers to 237 employees.

As per the City of Port Coquitlam Master Transportation Plan 2013, it advises the following with respect to cycling demand in the City:

‘Ultimately, as bicycle ridership in Port Coquitlam is low, this indicates a significant potential for growth in this mode. The improvement concepts are to be affordable and practical improvements to the bicycle network, occurring in conjunction with city road improvements and land development, where possible.’

According to TransLink’s Trip Diary Survey around 1% of residents in the City use bicycles for day-to-day activities; however, the low sample size may underestimate this mode, while the City has been developing new cycling infrastructure which should increase this proportion in the future. For the 1491-1515 Kingsway project, a target of 5% to 10% of employees cycling to work will be made and this would be equivalent for the need of 12 to 24 bicycle parking spaces, based on future projected employee numbers.

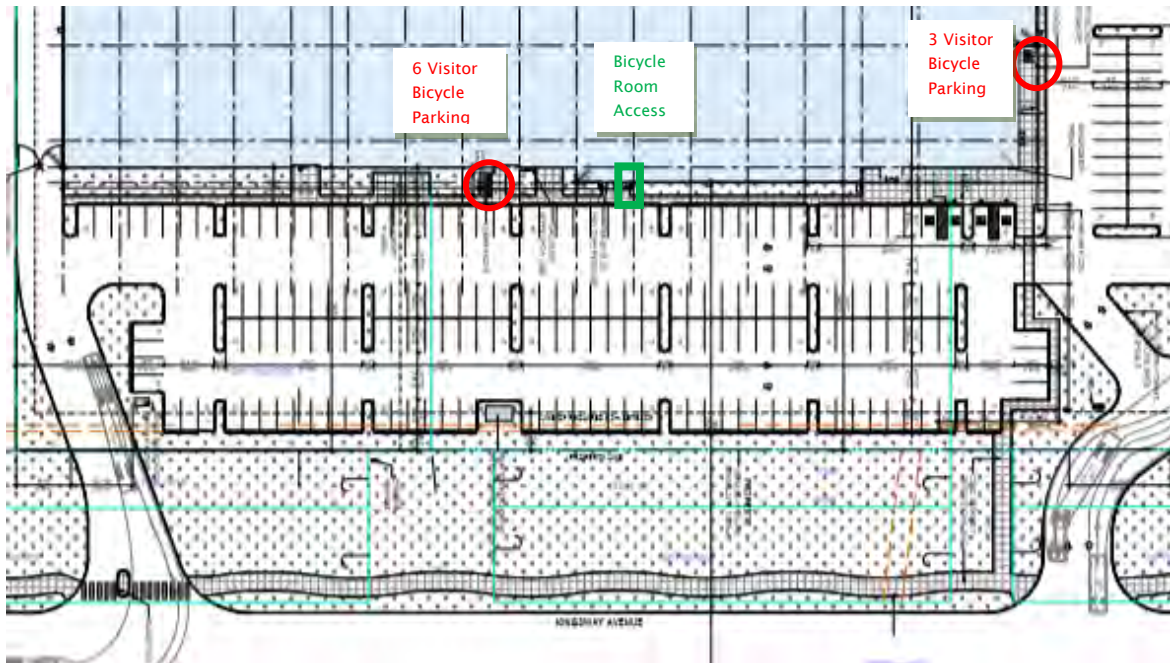
As the City of Port Coquitlam does not have a specific Bylaw requirement for employee bicycle parking, the City of Vancouver (COV) Parking Bylaw has been reviewed as a proxy especially as it specifically covers industrial-use buildings. COV requires for industrial buildings: ‘a *minimum of 1 space for each 1,000 square metres of gross floor area in the building or 1 space for every 17 employees on a maximum work shift, whichever is the greater*’. This requirement would be equivalent to 14 to 35 bicycle parking spaces with the higher number based on the project site’s floor area (35,029sqm).

Given the above, it is planned to provide up to **24 secure bicycle parking spaces** as it falls midrange of the City of Vancouver’s Bylaw Parking requirement and it would be equivalent to 10% of the future site employees cycling to work. As employee numbers at the start will be lower, the proportion of bicycle spaces to employees will be high, and as such, it may be prudent to scale the installation of new bicycle spaces overtime.

The project design has incorporated a secure bicycle storage room located on the south side of the building (door access highlighted in **Figure 3.1**) and this will be entered at-grade. It will be accessible from both of the site driveways with Kingsway Avenue where the City’s planned Multi-Use Path will be located (currently being developed on the BC Hydro corridor).

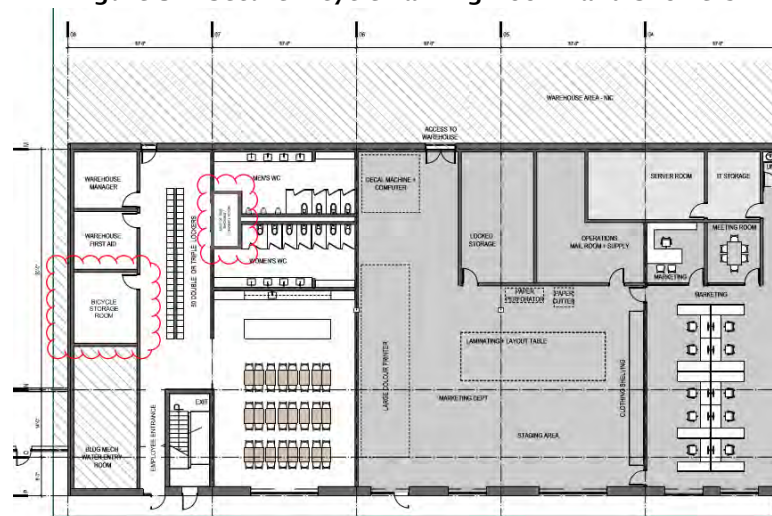
In addition to the secure bicycle parking spaces, 9 visitor spaces are planned with one rack of 3 located close to the main entrance along with another rack of 6 located close to the employee entrance

Figure 3.1: Bicycle Room Access and Visitor Bicycle Parking Locations



A preliminary layout for the planned facilities is shown in **Figure 3.2** and it is also where the employee lockers, showers and washrooms are located.

Figure 3.2: Secure Bicycle Parking Room* and Showers



Please note the bicycle parking Room Layout is underdeveloped (this is for indicative purposes only) and will be able to accommodate up to 24 parking spaces, either stacked, horizontal or vertical. The room will be locked and accessible by cyclists with a Fob key. The door would be 75cm wide and constructed of steel. As well, the bicycle room will be located adjacent to the following end-of-trip facilities:

- changing room with lockers;
- shower;
- toilet; and
- wash basin and grooming station (i.e. mirror, counter, and electrical outlets).

3.7 Service Truck Parking

Loading requirements for the project are set out in the Parking and Development Management Bylaw. The land use applicable to apply to the entire project is 'commercial/industrial,' where the minimum number of loading spaces shall be:

- 3 spaces for 2300sq.m. (24,757sq.ft.) to 4600sq.m. (49,514sq.ft.), plus
- An additional 1 space for each additional 4600sq.m. (49,514sq.ft.)

Based on these rates, **Table 3.7** summarizes the minimum loading requirement would be for 10 spaces, while the development site plan will provide 20 spaces to meet the needs of the expected end user.

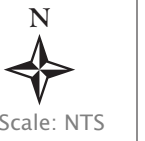
Table 3.7: Loading Bylaw Requirements

DESCRIPTION	RATE	LOADING SPACES
First 4,600sq.m	Varies	3
Remaining 30,429sq.m	1 per 4600sq.m.	7
TOTAL		10

3.8 Summary

Conceptual driveway designs have been developed to integrate with the City's new Kingsway Avenue street design and can accommodate the physical needs of WB20 tractor-trailers. Overall 300 parking spaces are proposed and as such a relaxation will required based on the City's Bylaw requirement (369 spaces), and this change will be supported with enhanced storage and end-of-trip facilities for bicycle parking (for 24 spaces), lowering the car use for employees.

Planned service truck loading provision is for 20 spaces to meet the prospective tenant's requirements and which is 8 spaces above the City bylaw.



1491, 1515, & 1537 Kingsway Avenue
04-18-0252 January 2020



[Based on Drawing A10 from Conwest dated August 19, 2019]

[Issued for Discussion; not for Construction]

Exhibit 3.2 WB-20 Truck AutoTURN Analysis



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2020/01/17 11:12, Plotted by Roxana Sorkhi

4. PROJECTED VEHICLE MOVEMENTS

4.1 Introduction

This section presents the projected new site-vehicle movements based on ITE Trip Rates along with the vehicle type and distribution patterns.

4.2 Trip Generation

For estimation purposes, the following ITE Trip Generation Manual (10th Edition) average rates are used to measure trips generated by the warehouse/office land uses, assuming urban/suburban conditions:

- *Warehouse* land use (ITE code 150) for main building; and
- *General Office Building* land use (ITE code 710) is assumed the accessory office floor area located at the southeast corner of the building.

Table 4.1a presents the ITE trip rates for the planned two land uses and it takes into consideration appropriate rates for the auxiliary office, while **Table 4.1b** presents the projected vehicle trips for the development.

Table 4.1a: Trip Generation Rates (per 1,000sq.ft. of GFA)

LAND USE	TRIP GENERATION RATES					
	WEEKDAY AM PEAK-HOUR			WEEKDAY PM PEAK-HOUR		
	IN	OUT	TOT	IN	OUT	TOT
Warehouse	0.13	0.04	0.17	0.05	0.14	0.19
General Office Building	1.00	0.16	1.16	0.18	0.97	1.15

Table 4.1b: Projected Site Generated Trips

LAND USE	GFA SQ.FT.	GENERATED TRIPS					
		WEEKDAY AM PEAK-HOUR			WEEKDAY PM PEAK-HOUR		
		IN	OUT	TOT	IN	OUT	TOT
Warehouse	327,097	43	13	56	16	46	62
Office	49,952	50	8	58	9	48	57
TOTAL		92	21	114	25	94	119

Vehicle volumes are projected at around 115 to 120 per hour in the peak hour periods and are expected to be conservative based on the future employee numbers (237) along with daily transfer vehicle movements highlighted in Section 3. It should therefore provide a robust basis for the operational analysis.

Based on previous Bunt studies at similar sites, the number of heavy vehicle trips for warehousing is estimated at 31% in the AM and 43% in the PM periods; **Table 4.2** shows this breakdown. A heavy vehicle

can be single unit truck or tractor trailer (up to a WB-20) and these proportions will be important for the site access capacity analysis work.

Table 4.2: Breakdown of Light and Heavy Vehicle Trips (Warehouse Only)

TRIPS	GENERATED TRIPS							
	WEEKDAY AM PEAK-HOUR				WEEKDAY PM PEAK-HOUR			
	%	IN	OUT	TOT	%	IN	OUT	TOT
Light Vehicle	69%	30	9	39	57%	10	26	36
Heavy Vehicle	31%	13	4	17	43%	6	20	26
TOTAL	100%	43	13	56	100%	16	46	62

4.3 Directional Trip Distribution

Directional trip distribution has been based on observations from adjacent driveways, including the neighbouring BDL site, and this has been combined with the observed turning proportions at the adjacent intersections. Presented in **Table 4.3** is a breakdown of the proposed site traffic distribution.

Table 4.3: Directional Trips 1491, 1515 & 1537 Kingsway Avenue

STREET	WEEKDAY AM PEAK-HOUR % (TRIPS)	WEEKDAY PM PEAK-HOUR % (TRIPS)
Kingsway Avenue West	38% (43)	43% (51)
Kingsway Avenue East	51% (58)	38% (46)
Langan Avenue	5% (6)	7% (8)
Coast Meridian Road	6% (7)	12% (14)
	114	119

4.4 Background Traffic Growth

Similar to the 1545 / 1575 Kingsway Bunt TIS, a background growth factor at 1.5% per year has been applied, and it covers up to the Opening Year 2022 along with the Future Design Year 2027 (+5 years).

4.5 Related Developments – 1545/75 Kingsway Avenue

In addition to the background growth, the projected movements for the Conwest Project at 1545 Kingsway Avenue has been added to the network and a breakdown of the movements has been presented in **Table 4.4**, based on 50% of the projected volume from the Bunt TIS for 1545/75 Kingsway Avenue (April 2018). These volumes will be layered into the operational analysis.

Table 4.4: Directional Trips 1545/75 Kingsway Project (50% Developed)

STREET	WEEKDAY AM PEAK-HOUR % (TRIPS)	WEEKDAY PM PEAK-HOUR % (TRIPS)
Kingsway Avenue West	38% (18)	43% (21)
Kingsway Avenue East	51% (24)	38% (19)
Langan Avenue	5% (3)	7% (4)
Coast Meridian Road	6% (3)	12% (6)

4.6 Vehicle Flow Diagrams

Using the vehicle trip generation and distribution information established above, the projected development vehicle traffic volumes have been presented at **Exhibit 4.1** and will form the basis for the capacity analysis in the next section together with the application of background traffic growth of existing street volumes.

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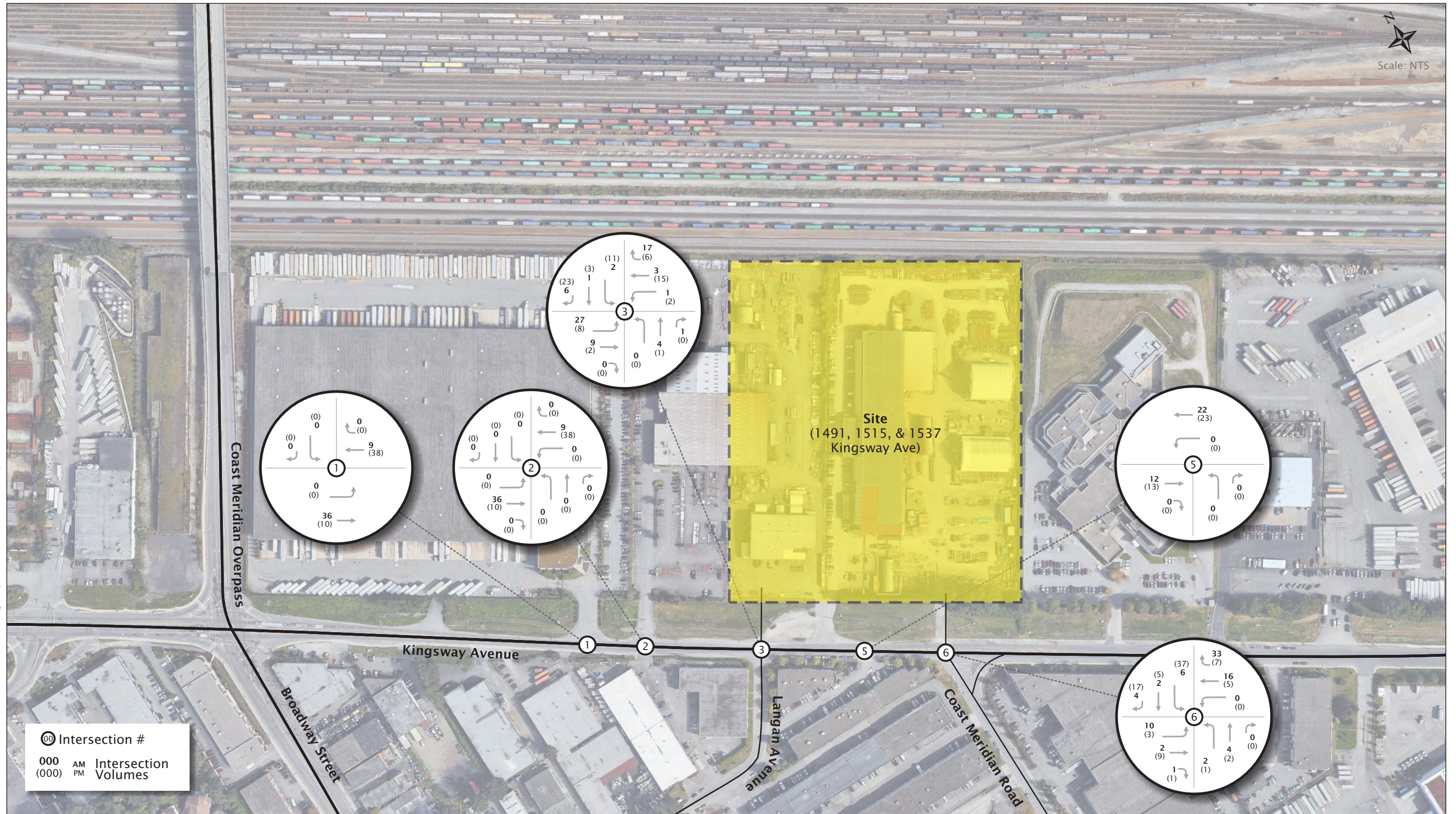


Exhibit 4.1 Development Volumes

1491, 1515, & 1537 Kingsway Avenue
04-18-0252
January 2020

5. STUDY NETWORK OPERATIONS

5.1 Introduction

This section presents the existing and future conditions on the study network to understand the impacts of the proposed development on the study network, whether there is a need for mitigation measures, and a response from the Ministry of Transportation and Infrastructure (MOTI).

5.2 Percentage Impact of Development

Before undertaking the operational assessment, it is important first to understand the percentage change in new vehicle movements on the study network with the development plan in place. This review is summarized in **Table 5.1**, focusing on the busier weekday afternoon peak-hour period (established in Section 2). Please note that the new development movements account for the removal of the existing movements from the site.

Table 5.1: Changes in Traffic on Network Afternoon Peak-Hour

INTERSECTION	EXISTING	DEVELOPMENT	% CHANGE
Kingsway Avenue and Coast Meridian Road	1,330	+82	+6.2%
Kingsway Avenue and Langan Avenue	1,195	+59	+4.9%
Coast Meridian Overpass at Kingsway Avenue	3,640	+36	+1.0%

At the Coast Meridian Overpass, the increase in new development movements would only be around 1%, a magnitude of change which is well within the peak hour volume variations. Based on this, the study analysis is planned to focus on Kingsway Avenue's intersections with Langan Avenue and Coast Meridian Road along with the neighbouring driveways.

5.3 Ministry of Transportation and Infrastructure (MOTI) Response

Based on the projected site vehicle movements at the Kingsway Avenue and Highway 7B intersection, the MOTI has confirmed that the development plan is not expected to represent a material change to operations at this intersection, and as such, there is no further consideration required on this matter. The MOTI letter is included in **Appendix A** along with Bunt's supporting memo on this matter.

5.4 Modelling Parameters

Vehicle operations for the study network intersections and driveways will be assessed using the methods outlined in the 2000 Highway Capacity Manual (HCM), using the Synchro 9 analysis software (Build 908). The traffic operations were assessed using the Level of Service (LOS) performance measure.

The LOS rating is based on average vehicle delay and ranges from "A" to "F" based on the quality of operation at the intersection. LOS "A" represents optimal, minimal delay conditions while a LOS "F"

represents an over-capacity condition with considerable congestion and/or delay. Delay is calculated in seconds and is based on the average intersection delay per vehicle.

Table 5.2 summarizes the LOS thresholds for the six Levels of Service, for both signalized and unsignalized intersections.

Table 5.2: Intersection Level of Service Thresholds

LEVEL OF SERVICE	AVERAGE CONTROL DELAY PER VEHICLE (SECONDS)	
	SIGNALIZED	UNSIGNALIZED
A	≤10	≤10
B	>10 and ≤20	>10 and ≤15
C	>20 and ≤35	>15 and ≤25
D	>35 and ≤55	>25 and ≤35
E	>55 and ≤80	>35 and ≤50
F	>80	>50

Source: Highway Capacity Manual

Performance thresholds used to trigger consideration of roadway or traffic control improvements to support roadway or traffic control improvements employed in this study are listed below:

Unsignalized Intersections:

- Individual movement Level of Service = LOS E or better, unless the volume is very low in which case LOS F is acceptable.

For this report, the performance reporting convention is as follows:

- For unsignalized two-way stop-controlled intersections, SimTraffic output was reported for individual movements LOS and delays, as the HCM 2000 methodology does not directly take into account the effects of platooning created by nearby intersections and driveways, nor interactions between vehicles and pedestrians and cyclists. 95th Percentile Queues are reported as estimated by SimTraffic as well.

Performance reporting convention noted above will be consistently applied throughout this section. As well, traffic model assumptions for this study contain two salient changes from the previous model prepared by Bunt for the 1545 / 1575 Kingsway Avenue Project as summarized below:

- The previous model assumed an overly conservative approach to the Peak Hour Factor (PHF) which was used to estimate the peak 15-minute period in the model and applied to all vehicle movements on the study network. In this version, a more appropriate approach has been adopted with the PHF derived for each intersection and then applied to its individual movements for calculating the peak 15 minute period; and

- For future design years, the current model will assume that Kingsway Avenue will have a four-lane cross section along with a dedicated left-turn lane, essentially doubling the roadway link capacity in theory.

Operational analysis has focused on following conditions, while detailed outputs from the analysis is provided in **Appendix B**:

- Existing Conditions;
- Future Year 2027 Operations without Development; and
- Future Year 2027 Operations with Development.

5.5 Existing Conditions

Summarized in **Table 5.3a** is the existing site access intersections (but without driveways) at Langan Avenue and Coast Meridian Road.

Table 5.3a: Proposed Site Access Operations: Existing Conditions

INTERSECTION	MOVE- MENT	AM PEAK-HOUR			PM PEAK-HOUR		
		LOS	Delay Seconds	95 th Per Queue (m)	LOS	Delay Seconds	95 th Per Queue (m)
Kingsway Ave & Langan Ave	EBT	A	0.9	7	A	0.7	0
	EBR	A	0.2		A	0.2	
	WBL	A	3.7	28	A	4.1	24
	WBT	A	0.9		A	0.7	
	NBL	A	6.3	17	C	16.3	15
	NBR	A	5.1		A	4.4	
Kingsway Ave & Coast Meridian Rd	EBT	A	0.9	4	A	0.7	1
	EBR	A	0.4		A	0.2	
	WBL	A	5.3	16	A	3.9	16
	WBT	A	0.8	7	A	0.6	0
	NBL	C	17.1	25	B	12.3	16
	NBR	A	3.3		A	1.9	

As can be seen, there are no current operational issues at either location with the highest Level of Service recorded at 'C,' while the highest 95th Percentile queues range between 25m and 30m. This output will provide an important benchmark for assessing future conditions.

Presented in **Table 5.3b** is a summary of the operations for the adjacent driveway access on this stretch of Kingsway Avenue and shows no identified operational issues with Levels of Service ranging of between 'A' and 'C'.

Table 5.3b: Adjacent Driveway Operations: Existing Conditions

INTERSECTION	MOVE-MENT	AM PEAK-HOUR			PM PEAK-HOUR		
		LOS	Delay Seconds	95 th Per Queue (m)	LOS	Delay Seconds	95 th Per Queue (m)
Kingsway Ave @ BDL	EBL	A	2.3	4	A	4.1	7
	EBT	A	0.4		A	0.4	
	WBT	A	0.2	0	A	0.3	8
	WBR	A	0.0		A	0.0	
	SBL	A	10.0	27	A	8.6	24
	SBR	A	4.5		A	3.5	
1600 Kingsway Ave	EBT	A	0.3	0	A	0.3	0
	EBR	A	0.0		A	0.0	
	WBL	A	0.0	0	A	-	3
	WBT	A	0.5		A	0.5	
	NBL	A	-	7	A	-	5
	NBR	A	5.2		A	2.7	
Kingsway Ave @ Dynamic Structure	EBL	A	4.6	20	A	3.4	15
	EBT	A	0.7		A	0.5	
	WBT	A	0.5	6	A	0.3	3
	WBR	A	0.0		A	0.0	
	SBL	C	15.7	29	C	12.3	18
	SBR	A	5.9		B	6.5	
1530 Kingsway Ave	EBT	A	0.5	0	A	0.3	0
	EBR	A	0.2		A	0.1	
	WBL	A	5.3	11	A	3.6	10
	WBT	A	0.6		A	0.4	
	NBL	A	-	7	A	-	6
	NBR	A	2.9		A	3.9	

5.6 Future Year 2027 Operations without Development

Presented in **Table 5.4a** is a summary of the site intersection operations with 9 years background growth added at 1.5% per annum linearly. Again, the analysis does not highlight any operational issues with Levels of Service of 'C' or better recorded.

Table 5.4a: Site Access Operations: 2022 Opening Day + 5 Years Background Growth

INTERSECTION	MOVE- MENT	AM PEAK-HOUR			PM PEAK-HOUR		
		LOS	Delay Seconds	95 th Per Queue (m)	LOS	Delay Seconds	95 th Per Queue (m)
Kingsway Ave & Langan Ave	EBT	A	0.9	7	A	0.7	0
	EBR	A	0.2		A	0.2	
	WBL	A	3.7	28	A	4.1	24
	WBT	A	0.9		A	0.7	
	NBL	A	6.3	17	C	16.3	15
	NBR	A	5.1		A	4.4	
	NBR	A	2.9		A	3.9	
Kingsway Ave & Coast Meridian Rd	EBT	A	0.9	4	A	0.7	1
	EBR	A	0.4		A	0.2	
	WBL	A	5.3	16	A	3.9	16
	WBT	A	0.8	7	A	0.6	0
	NBL	C	17.1	25	B	12.3	16
	NBR	A	3.3		A	1.9	

Presented in **Table 5.4b** is a breakdown of the results for the adjacent site driveways and again confirming no operational issues are anticipated on this part of Kingsway Avenue.

Table 5.4b: Driveway Operations: 2022 Opening Day + 5 Years Background Volumes

INTERSECTION	MOVE-MENT	AM PEAK-HOUR			PM PEAK-HOUR		
		LOS	Delay Seconds	95 th Per Queue (m)	LOS	Delay Seconds	95 th Per Queue (m)
Kingsway Ave @ BDL	EBL	A	4.7	6	A	4.7	12
	EBT	A	0.6		A	0.6	
	WBT	A	0.4	3	A	0.3	1
	WBR	A	0.0		A	0.0	
	SBL	B	14.8	30	B	14.6	19
	SBR	A	3.9		A	5.6	
1575/1600 Kingsway Ave	EBL	A	4.2	18	A	4.9	8
	EBT	A	0.5		A	0.3	
	EBR	A	0.1		-	-	
	WBL	-	-	13	-	-	-
	WBT	A	1.1		A	0.7	
	WBR	A	0.5		A	0.2	
	NBL	-	-	5	-	-	5
	NBT	-	-		-	-	
	NBR	A	2.3		A	4.2	
	SBL	B	12.4	9	C	15.7	17
	SBT	-	-		-	-	
	SBR	A	6.0		A	5.8	
Kingsway Ave @ Dynamic Structure	EBL	A	7.2	30	-	-	-
	EBT	A	1.1		A	0.4	
	WBT	A	0.9	16	A	0.5	7
	WBR	A	0.3		-	-	
	SBL	C	24.8	34	C	20.3	13
	SBR	C	18.4		A	7.0	
1530 Kingsway Ave	EBT	A	0.6	-	A	0.3	0
	EBR	A	0.1		A	0.0	
	WBL	A	10.0	27	-	-	14
	WBT	A	1.2		A	0.5	
	NBL	-	-	10	-	-	7
	NBR	A	5.3		A	5.2	

5.7 Future Year 2027 Operations with Development

Presented in **Table 5.5a** is a summary of the site access operations with 9 years linear background growth at 1.5% per annum plus the new development volumes along with the planned street design for Kingsway Avenue.

Table 5.5a: Site Access Operations: 2022 Opening Day + 5 Years with Development

INTERSECTION	MOVE- MENT	AM PEAK-HOUR			PM PEAK-HOUR		
		LOS	Delay Seconds	95 th Per Queue (m)	LOS	Delay Seconds	95 th Per Queue (m)
Kingsway Ave & Langan Ave / W Site Access	EBL	A	4.3	12	A	5.4	8
	EBT	A	0.3	-	A	0.2	-
	EBR	A	0.2		A	0.1	
	WBL	A	3.8	15	A	3.8	15
	WBT	A	0.2	1	A	0.2	-
	WBR	A	0.1		A	0.1	
	NBL	C	16.9	18	B	11.1	16
	NBT	B	10.7		-	-	
	NBR	A	3.5		A	3.5	
	SBL	-	-	9	B	13.6	14
	SBT	-	-		-	-	
	SBR	A	2.2		A	2.9	
Kingsway Ave & Coast Meridian Rd / E Site Access	EBL	A	3.6	6	-	-	3
	EBT	A	0.3	1	A	0.3	3
	EBR	A	0.2	1	A	0.1	1
	WBL	A	3.8	12	A	4.5	13
	WBT	A	0.4	1	A	0.3	1
	WBR	A	0.3	0	A	0.3	-
	NBL	C	16.3	34	C	19.6	33
	NBT	C	22.0		-	-	
	NBR	A	4.5		A	4.1	
	SBL	B	11.6	15	C	15.8	30
	SBT	-	-		C	24.7	
	SBR	A	7.0		A	8.4	

This analysis confirms that the northbound left-turn movement from Coast Meridian Road to Kingsway Avenue will continue to operate with a acceptable LOS of 'C' in a scenario involving both the development in place along with the widening of Kingsway Avenue, i.e. to two through-lanes per direction.

Even though the City of Port Coquitlam identified capacity issue at this intersection in their 2013 Master Transportation Plan (MTP), a traffic signal is not fully warranted at this point in time. Bunt considered that based on this analysis the intersection can continue to operate as a stop-controlled intersection for the 2027 horizon year regardless of the site development.

It is recommended however, as part of the site access construction work along with the widening work for Kingsway Avenue that traffic signal ducting and chambers be installed to accommodate the potential for a future traffic signal at this location, should it be warranted.

Presented in **Table 5.5b** is the operational review for the adjacent driveways and again no operational issues are identified.

Table 5.5b: Driveway Operations: 2022 Opening Day + 5 Years with Development

INTERSECTION	MOVE- MENT	AM PEAK-HOUR			PM PEAK-HOUR		
		LOS	Delay Seconds	95 th Per Queue (m)	LOS	Delay Seconds	95 th Per Queue (m)
Kingsway Ave @ BDL	EBL	A	3.3	5	A	5.9	5
	EBT	A	0.2		A	0.2	
	WBT	A	0.1	3	A	0.1	-
	WBR	A	0.1		A	0.2	
	SBL	C	18.1	30	B	12.2	18
	SBR	A	4.3		A	3.2	
1575/1600 Kingsway Ave	EBL	A	3.3	9	A	4.0	6
	EBT	A	0.2	-	A	0.1	0
	EBR	A	0.0		A	0.1	
	WBL	-	-	1	-	-	3
	WBT	A	0.2		A	0.2	
	WBR	A	0.1		A	0.0	
	NBL	-	-	5	-	-	5
	NBT	-	-		-	-	
	NBR	-	-		A	1.9	
	SBL	A	7.5	12	A	9.4	17
	SBT	-	-		-	-	
	SBR	A	4.2		A	4.0	
1530 Kingsway Ave	EBT	A	0.3	-	A	0.2	-
	EBR	A	0.1		-	-	
	WBL	A	3.3	4	-	-	4
	WBT	A	0.3	3	A	0.2	
	NBL	-	-	6	-	-	8
	NBR	A	4.8		A	3.2	

6. SUMMARY

Conwest Group of Companies is planning an industrial development located at 1491, 1515 & 1537 Kingsway Avenue in the City of Port Coquitlam, BC. A Development Permit application will be submitted to the City of Port Coquitlam and this study forms part of the supporting materials. Previously the site was occupied by industrial buildings while new development plan encompasses 327,097sq.ft of warehouse space along with 49,952sq.ft of auxiliary office space.

The City's Master Transportation Plan (MTP) 2013 highlights the need for safety improvements on Kingsway Avenue between Coast Meridian Overpass and the Mary Hill Bypass, including the section along the site's frontage, while intersection upgrades are identified at Langan Avenue and Coast Meridian Road.

The site is reasonably accessible to the City's bicycling network (Langan Avenue, Coast Meridian Overpass / Broadway / McLean Avenue), while there are two transit routes close by (#175 and #188) and the site is also within reasonable walking distance of downtown Port Coquitlam.

Two vehicle driveways are planned to access the project site from Kingsway Avenue: the west location will be aligned with Langan Avenue while the east location will be aligned with Coast Meridian Road. Truck movements are planned to enter the west driveway and exit from the east driveway to improve site operational efficiency.

A preliminary conceptual layout has been prepared to support the driveway geometrics with Kingsway Avenue and integrate with the streets opposite. It also takes into consideration the City widening requirements on this section of Kingsway Avenue.

Internally, employee parking will be separated from the truck loading activities. The majority of the employee stalls will be located on the south side of the site, while a service truck loading area will be positioned on the east side of the building along with parking for the daily delivery vehicles ('Specials').

Site parking is planned at 300 spaces, which is 69 spaces below the City Bylaw minimum requirement, but more in line with the ITE Parking Generation Manual warehouse demand projections and above the prospective tenant's expected needs.

A secure bicycle room for 24 spaces is planned and would be accessible at-grade on the southwest corner of the building, Cyclists will have access to a number of end-of-trip facilities, including showers, lockers, etc. As well 9 visitor spaces are planned.

Service truck loading is planned at 20 spaces based on the prospective tenant's requirements and which is generally consistent with other warehouse projects of this scale. This supply is above the City loading bylaw requirement by 8 spaces.

The site is projected to generate around 115 to 120 two-way vehicle movements in the peak hour periods based on the warehouse/office land use planned, equating to around 2 vehicle movements per minute spread across two driveways.

The Ministry of Transportation and Infrastructure has reviewed the development's impact at the Highway 7B and Kingsway Avenue intersection and confirmed that no further review is required.

The intersection operational review confirms the site access driveways can operate within acceptable levels of capacity based on the projected demands for the future Design Year 2027 (with background growth at 1.5% per annum). Although increased vehicle delay occurs with some vehicle movements at the intersection for the Site Driveway/Coast Meridian Road/Kingsway Avenue, overall the intersection will remain within acceptable threshold values. It is recommended; however, as part of the construction work for the site access along with the Kingsway Avenue widening that traffic signal ducts and chambers be installed to accommodate a future traffic signal, should it be warranted.

In sum, this study demonstrates that the development plan's site accesses can operate satisfactorily based on the projected vehicle demands while site circulation and parking supply are consistent with the expected demands, and more generally, it should not have any adverse impacts to vehicle operations along Kingsway Avenue.

APPENDIX A

MOTI Letter/Bunt Memo



Your File #: DP000416
MOTI File #: 2019-06427
Date: Jan/16/20

City of Port Coquitlam
Development Services Department
#200 - 2564 Shaughnessy Street
Port Coquitlam, B.C. V3C 3G4
Canada

Attention: Brian Sherrell - Planner

**Re: Development Permit Approval for:
1491, 1515 and 1537 Kingsway Avenue – Port Coquitlam**

We have no objections to the proposed development to allow a proposed 34,760 sq.m. industrial building, as shown on CMA+D Project No. 18-0360 site plan drawing A10.

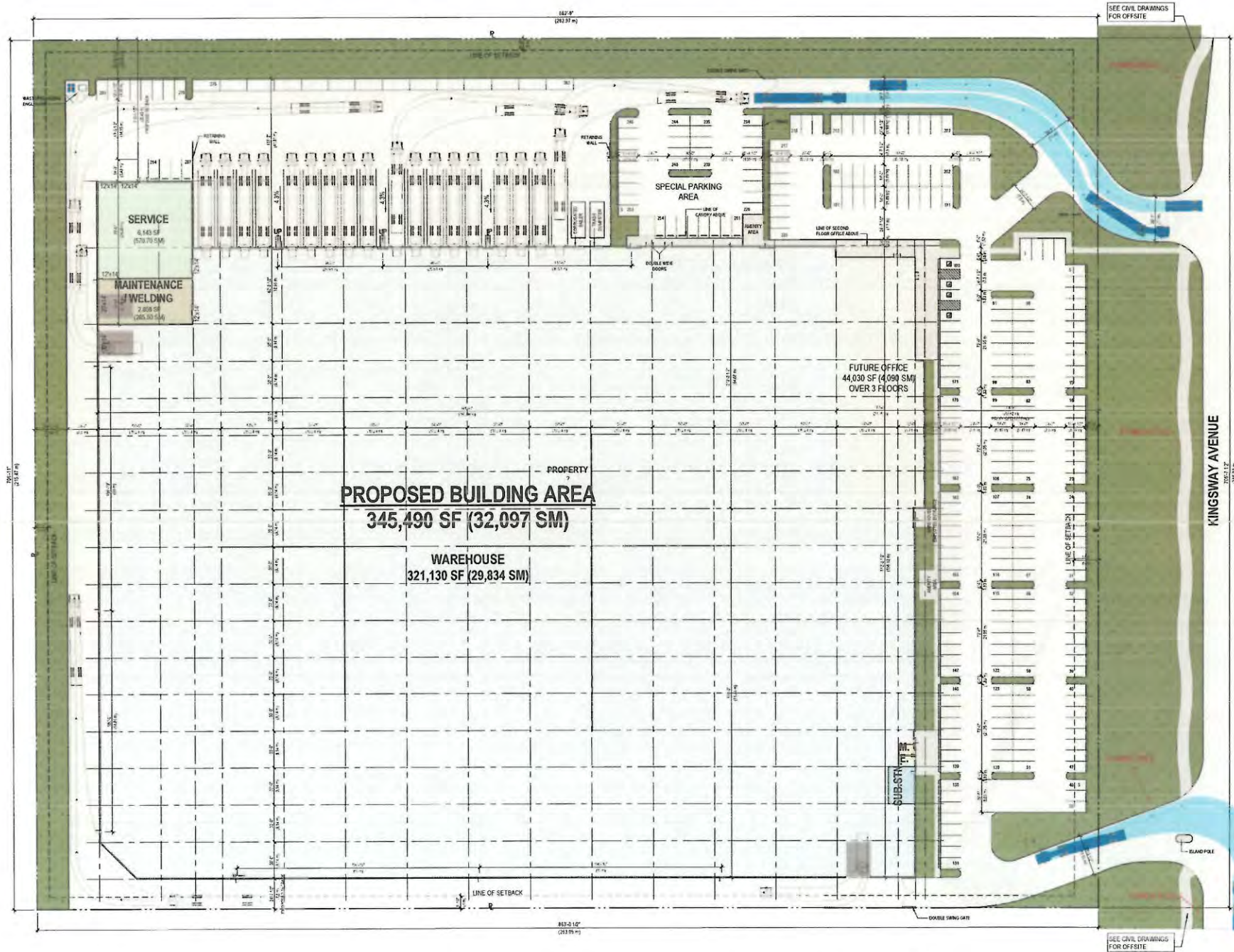
Approval is provided pursuant to Section 505 of the Local Government Act.

If you have any questions, please feel free to call Roanna Cruz at (236) 468-1928 or by email at Roanna.Cruz@gov.bc.ca

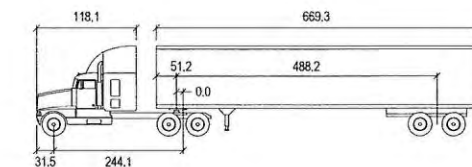
Yours truly,

Roanna Cruz
Senior Development Officer

Local District Address
Lower Mainland District 310-1500 Woolridge Street Coquitlam, BC V3K 0B8 Canada Phone: (604) 527-2221 Fax: (604) 527-2222



1 SITE PLAN
SCALE 1:500



WB-20	inches		
Tractor Width	102.4	Lock to Lock Time	6.0
Trailer Width	102.4	Steering Angle	28.2
Tractor Track	102.4	Articulating Angle	70.0
Trailer Track	102.4		

2 CONTEXT PLAN
SCALE 1:400

Approved pursuant to section 505 of the Local Government Act
this 16th day of January, 2020
Roann G
for Minister of Transportation

ZONING BY-LAW ANALYSIS PROJECT DATA PHASE 2 (EAST)

CIVIC ADDRESS 1575 1545, 1515 & 1491 KINGSWAY AVENUE, PORT COQUITLAM
LEGAL ADDRESS L. 1, DISTRICT LOT 268, OP 1, SECTION 7 & 18, BLOCK 6 NORTH RANGE 1 EAST NEW WESTMINSTER, PLAN 5506-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 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MEMO

DATE: December 5, 2019
PROJECT NO: 04-19-0252
PROJECT: 1491-1515 Kingsway
SUBJECT: MOTI Response

TO: Peter Woerler, Conwest Developments

PREPARED BY: Paul Dorby, MSc

1. INTRODUCTION

This memo has been prepared in response to the Ministry of Transportation and Infrastructure email of December 3, 2019 in respect to the planned industrial/employment development located at 1491-1515 Kingsway Avenue, Port Coquitlam. Comments from the MOTI email is summarized below and were based upon Bunt & Associates Transportation Impact Study (Bunt TIS) dated August 27, 2019:

- *'Study doesn't include impact assessment for H7B intersection with Kingsway.*
- *The study identifies 30-40% of new traffic as heavy vehicles/trucks.*
- *With approximately 50-60 vehicles/hr accessing the site from the east- that is from H7B, this new traffic will put pressure on existing available storage at the intersection (most specifically, left turn lanes).*
- *The result of the above two comments is that we need to address the need for **additional storage** at H7B left turn lanes to avoid traffic spilling back to highway through lanes. I will follow up as to what additional storage means in terms of on the ground application.*
- *Also, were you asked to send in a Terms of Reference prior to the Traffic Impact Study? Or did you have a scope meeting re: the TIA? If so, could you send this to me?'*

The following provides additional context from the Bunt TIA in order to assist the MOTI in assessing the full impacts of the development at the intersection of Highway 7B and Kingsway Avenue.

2. BACKGROUND

Transportation planning work for the 1491 - 1515 Kingsway Development was primarily focused on the site design along with assessing the immediate environs as the City of Port Coquitlam was concerned about the number of driveway locations on this part of Kingsway Avenue and to see how these could be consolidated/better aligned.

The City of Port Coquitlam provided general guidance on the general approach to the TIA scope, and based on this, a study network was developed on Kingsway Avenue between Coast Meridian Road and Broadway to support the Development Permit application (project complies with the City's existing zoning).

It is acknowledged that wider consideration should have been given to better inform the Ministry of Transportation and Infrastructure on the expected impact at the Kingsway Avenue and Highway 7B intersection and this will be covered in the following sections.

3. DEVELOPMENT IMPACT AT KINGSWAY AVENUE/HIGHWAY 7B

Dynamic Structures was still active on the development site when Bunt collected site driveway count data in April 2018 and this date has been attached for reference. Dynamic Structures typically had around 150 employees on-site although in the past it was as high as 180.

Table 3.1 summarizes the site-vehicle driveway movements (April 2018) which were recorded going to/coming from the direction of the Kingsway Avenue and Highway 7B intersection, while similarly **Table 3.2** presents the projected new site development vehicle movements for this same direction (taken from Exhibit 4.1 of the Bunt Transportation Impact Study).

Table 3.1: Previous Site Vehicle Volumes to/from Highway 7B & Kingsway Avenue

TIME PERIOD	EASTBOUND	WESTBOUND	COMBINED
8am to 9am	23	12	35
4pm to 5pm	38	10	48

Table 3.2: Projected New Site Vehicle Volumes to/from Highway 7B & Kingsway Avenue

TIME PERIOD	EASTBOUND	WESTBOUND	COMBINED
8am to 9am	8	49	57
4pm to 5pm	46	12	58

As can be seen, the development 'net new' is closer to 22 (57-35) new two-way vehicle movements in the morning peak-hour to/from Kingsway Avenue/Highway 7B intersection, which is equivalent to 1 vehicle every 3 minutes. In the afternoon peak-hour, the magnitude of change is lower at 10 (58-

48) additional two-way vehicle movements in the direction of Kingsway Avenue/Highway 7B intersection, or 1 vehicle every 6 minutes.

To provide context, background vehicle volumes on Kingsway Avenue (between Coast Meridian Road and Highway 7B) were reviewed using a CTS Automatic Count from December 2016. This data is summarized in **Table 3.3** for the weekday peak hours, while the output has been attached for reference.

Table 3.3: CTS Automatic Count Summary on Kingsway Avenue

TIME PERIOD	EASTBOUND	WESTBOUND	COMBINED
8am to 9am	297	155	452
4pm to 5pm	290	346	638

Clearly the more critical time period for vehicle volume movements is the weekday afternoon PM peak-hour, which is higher by around 40% compared to the weekday AM peak-hour period. Next, **Table 3.4** highlights the change in vehicle volume demand without and with the existing site-vehicle movements removed.

Table 3.4: Development Impact on Kingsway Avenue (between Coast Meridian & H7b)

SCENARIO	8AM TO 9AM TWO WAY	4PM TO 5PM TWO WAY
Background Volume	452	638
New Development Volume	57 (13%)	58 (9%)
New Development (net new)	22 (5%)	10 (1.6%)

During the more critical PM peak-hour, the 'net new' development vehicle volumes would be equivalent to 1.6% of the total two-way Kingsway Avenue volume. In the morning peak-hour the proportion is higher, but the background volume is around 180 vehicles per hour lower.

Bunt also reviewed a vehicle turning count survey at the Highway 7B and Broadway intersection, conducted in October 2013, in order to provide an indication of the relative vehicle volume flow along this corridor by direction and time of day. This is presented in **Table 3.5** and again it shows the critical time period being the weekday PM peak-hour.

Table 3.5: Vehicle Volume north of Broadway on Highway 7B

TIME PERIOD	NORTHBOUND	SOUTHBOUND	COMBINED
8am to 9am	900	1700	2600
4pm to 5pm	2200	1100	3300

Based on the combined northbound and southbound background vehicle volumes on Highway 7B, the development's 'net new' in the more critical PM peak-hour would be just 0.3% (10/3300).

Given the above, the development's 'net new' impact at the intersection of Highway 7B and Kingsway Avenue is not considered material to the existing operations, while the next section will explain the definition of heavy vehicles used for the analysis.

4. DEFINITION OF HEAVY VEHICLES

Presented in **Figure 4.1** is breakdown of the vehicle classification used by Bunt. Class A represents the type of light vehicles counted (in addition to cars and motor bicycles), while the Class B group is counted as heavy vehicles including box vans, step vans and Single Unit trucks.

Figure 4.1: Truck Classification








Type of Vehicle	Length in metres (feet)	Width in metres (feet)	Height in metres (feet)	Gross Vehicle Weight (kg) (lbs)		Class
Van	4.6 – 5.6 (15.0 – 18.5)	1.8 (6.0)	2.0 – 2.1 (6.5 – 7.0)	2,132 – 4,264 (4,700 – 9,400)		A
Pick-up	4.4 – 6.11 (14.5 – 20.0)	1.8 (6.0)	1.5 – 2.0 (5.0 – 6.5)	2,495 – 4,536 (5,500 – 10,000)		A
Cube Van	5.5 – 9.1 (18.0 – 25.0)	2.4 – 2.6 (8.0 – 8.5)	3.04 (10.0)	2,722 – 4,536 (6,000 – 10,000)		B
Step Van	5.5 – 9.1 (18.0 – 25.0)	2.4 – 2.6 (8.0 – 8.5)	3.04 (10.0)	2,700 – 4,536 (6,000 – 10,000)		B
Single Units	7.3 – 10.9 (24.0 – 36.0)	2.4 – 2.6 (8.0 – 8.5)	3.66 (12.0)	4,536 – 11,793 (10,000 – 26,000)		B
Tractor-trailer	12.2 – 21.3 (40.0 – 70.0)	2.4 – 2.6 (8.0 – 8.5)	4.11 (13.5)	> 11,795 (> 26,000)		C
Trailer	8.5 – 14.6 (28.0 – 48.0)	2.4 – 2.6 (8.0 – 8.5)	4.11 (13.5)			C

Table 4.1 summarizes the projected heavy vehicle movements from the planned development (see Table 4.2 of the TIA) and these have projected to/from the intersection of Kingsway Avenue and Highway 7B (based on the proportions from Table 4.3 of the TIA).

Table 4.1: Projected New Heavy Vehicle Movements (excluding net new reduction)

TIME PERIOD	SITE OVERALL HEAVY VEHICLES	KINGSWAY EAST DISTRIBUTION	KINGSWAY AVE / HIGHWAY 7B HEAVY VEHICLES NEW	KINGSWAY AVE / HIGHWAY 7B HEAVY VEHICLES NEW
8am to 9am	17	51%	9	2
4pm to 5pm	27	38%	10	3

Basically the development could generate up to 10 new heavy vehicle movements in the peak-hours to/from Kingsway Avenue/Highway 7B, but the 'net new' would be equivalent to 2 to 3 additional heavy vehicle movements at the Highway 7B/Kingsway Avenue intersection for the weekday peak-hour periods.

5. SUMMARY

The Bunt's Transportation Impact Study (August 27, 2019) primarily focused on the site design and immediate environs for the Development Permit application submission materials to the City of Port Coquitlam, but it is appreciated that wider consideration should have been given to the impact at the Highway 7B/Kingsway Avenue intersection to inform the MOTI.

Given this, it is hoped that this memo can provide sufficient information for the MOTI to better understand the development's impact at the Highway 7B and Kingsway Avenue intersection and in particular that the 'net new' site-generated vehicle movements are not expected to be material to influence existing operations.

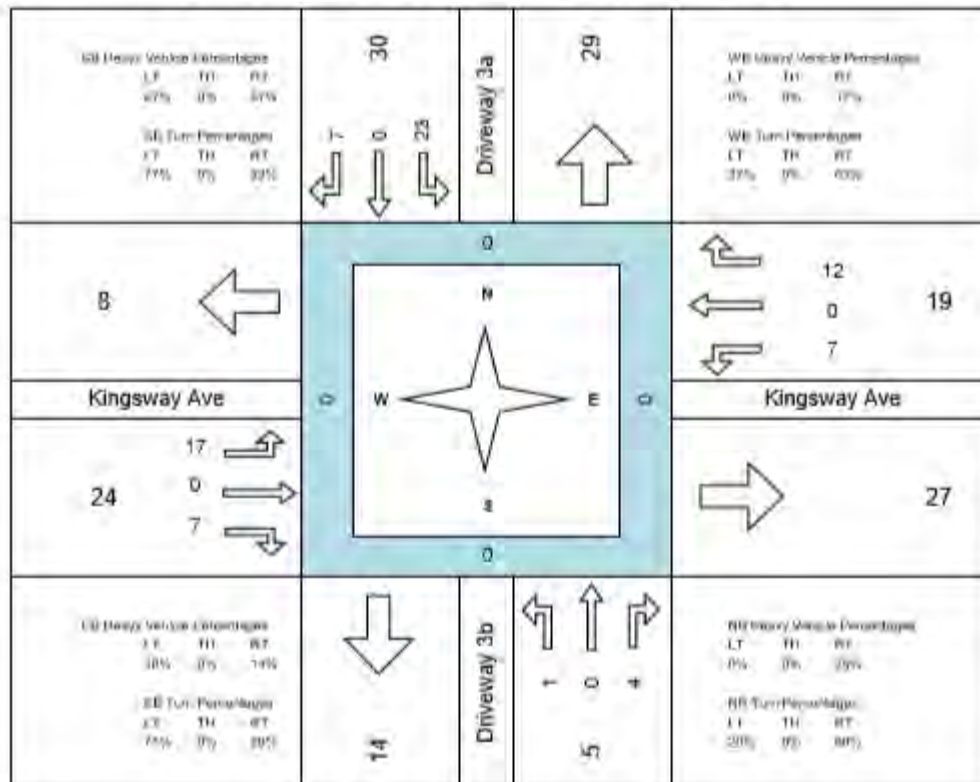
Further information and clarification can be provided to assist the MOTI as necessary in reviewing this matter.

location 3a and 3b @ Kingsway Ave

Project #: 04-18-0124 Date: Apr 18, 2019
 Peak Hour: 07:45 — 08:45 Weather: Clear
 Overall PHF: 0.78 Road Cond: Dry
 Notes: TM only



Time Intervals	All Vehicles Movements												Pedestrians			
	NE LT	NE TH	NE RT	SE LT	SE TH	SE RT	EW LT	EW TH	EW RT	WS LT	WS TH	WS RT	N	S	E	W
06:00 - 06:15	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0
06:15 - 06:30	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
06:30 - 06:45	0	0	1	2	0	1	8	0	0	1	0	16	0	0	0	0
06:45 - 07:00	0	0	0	3	0	2	4	0	0	9	0	7	0	0	0	0
07:00 - 07:15	0	0	0	2	0	5	2	0	0	0	0	2	0	0	0	0
07:15 - 07:30	0	0	0	1	0	0	2	0	0	1	0	3	0	0	0	0
07:30 - 07:45	0	0	0	0	0	2	0	0	0	3	0	3	0	0	0	0
07:45 - 08:00	0	0	0	2	0	0	7	0	0	4	0	2	0	0	0	0
08:00 - 08:15	0	0	0	4	0	3	4	0	4	2	0	4	0	0	0	0
08:15 - 08:30	1	0	0	5	0	4	3	0	3	9	0	5	0	0	0	0
08:30 - 08:45	0	0	0	0	0	0	3	0	0	1	0	1	0	0	0	0
08:45 - 09:00	0	0	2	2	0	2	1	0	0	1	0	5	0	0	0	0
N/A - N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N/A - N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N/A - N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N/A - N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N/A - N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak V _h	1	0	0	0	0	0	4	7	0	4	0	5				
PHF	0.25		0.25	0.00		0.44	0.01		0.40	0.44		0.50				

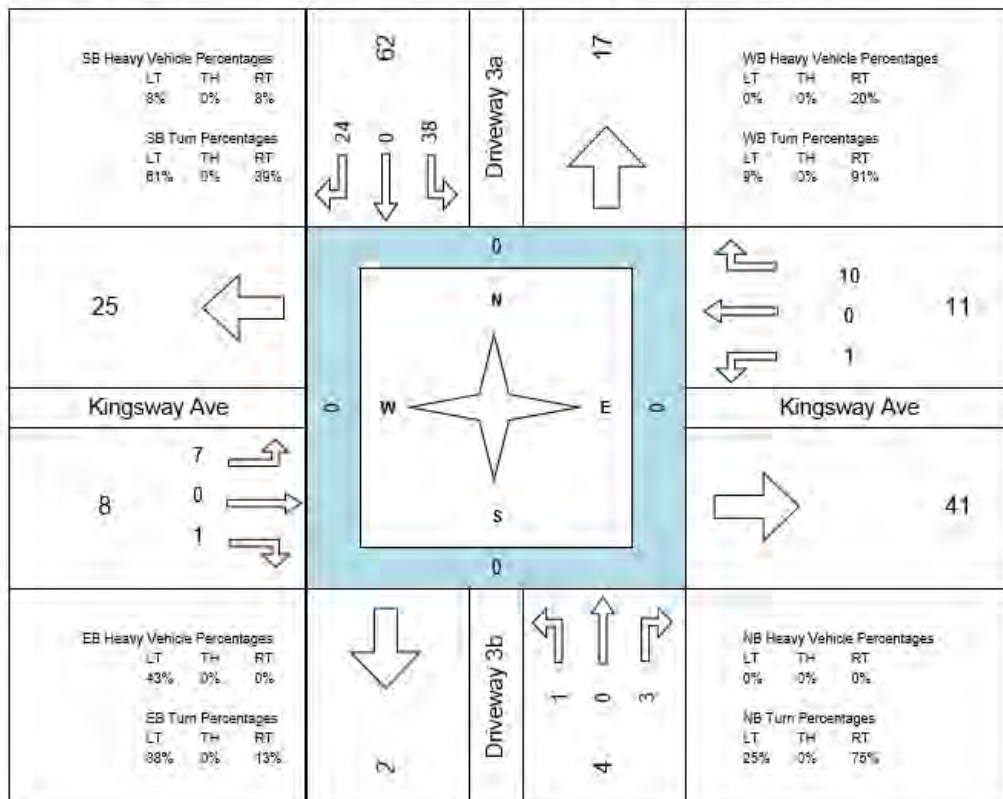


location 3a and 3b @ Kingsway Ave

Project #: 04-18-0124 Date: Apr 18, 2018
 Peak Hour: 15:00 — 18:00 Weather: Clear
 Overall PHF: 0.56 Road Cond: Dry
 Notes: TM only



Time Intervals	All Vehicles Movements												Pedestrians			
	NB LT	NB TH	NB RT	SB LT	SB TH	SB RT	EB LT	EB TH	EB RT	WB LT	WB TH	WB RT	N	S	E	W
15:00 - 15:15	0	0	1	4	0	6	2	0	0	0	0	3	0	0	0	0
15:15 - 15:30	0	0	0	21	0	14	0	0	0	0	0	3	0	0	0	0
15:30 - 15:45	0	0	1	2	0	2	3	0	0	1	0	3	0	0	0	0
15:45 - 16:00	1	0	1	5	0	2	2	0	1	0	0	1	0	0	0	0
16:00 - 16:15	1	0	2	4	0	1	1	0	0	1	0	0	0	0	0	0
16:15 - 16:30	0	0	1	3	0	4	0	0	1	0	0	1	0	0	0	0
16:30 - 16:45	0	0	2	3	0	3	0	0	2	1	0	0	0	0	0	0
16:45 - 17:00	0	0	3	0	0	2	0	0	0	1	0	0	0	0	0	0
17:00 - 17:15	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0
17:15 - 17:30	0	0	1	0	0	7	0	0	0	0	0	0	0	0	0	0
17:30 - 17:45	1	0	1	0	0	2	0	0	1	0	0	1	0	0	0	0
17:45 - 18:00	0	0	0	2	0	1	0	0	2	0	0	1	0	0	0	0
N/A - N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N/A - N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N/A - N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N/A - N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N/A - N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak V _{hour}	1		1	21		14	3		1	1		3				
PHF	0.25		0.75	0.45		0.43	0.58		0.25	0.25		0.83				



LOCATION: Kingsway Ave between Coast Meridian Rd & Mary Hill Bypass									
PROJECT: 5588 - Port Coquitlam - 2016 Fall As And When Data Collection Services									
NOTES: Suspect Data Highlighted in Red. Tubes removed on Sun, Dec 4 and replaced on Mon, Dec 5 fr									
Start Date									
Saturday, December 03, 2016									
EASTBOUND									
Time	AVERAGE WEEKDAY			SATURDAY			SUNDAY		
	Passenger	Commercial	All	Passenger	Commercial	All	Passenger	Commercial	All
0 - 1	13	2	15				75	0	75
1 - 2	12	2	14				39	1	40
2 - 3	5	1	6				29	0	29
3 - 4	16	1	17				21	1	22
4 - 5	42	2	44				16	2	20
5 - 6	87	3	90				51	1	52
6 - 7	235	9	244				85	2	87
7 - 8	288	8	294				79	3	82
8 - 9	288	9	297				121	3	124
9 - 10	210	11	221				239	3	242
10 - 11	186	11	197	355	5	360	324	5	329
11 - 12	187	9	196	449	5	454	357	5	362
12 - 13	158	6	164	411	11	422	262	0	371
13 - 14	154	5	159	400	2	402	350	5	355
14 - 15	260	14	274	481	10	491	54	1	55
15 - 16	273	17	290	406	4	410	0	0	0
16 - 17	281	8	289	336	2	338	0	0	0
17 - 18	222	3	225	340	1	341	0	0	0
18 - 19	163	3	166	222	1	223	0	0	0
19 - 20	138	3	141	186	0	186	0	0	0
20 - 21	113	2	115	143	0	143	0	0	0
21 - 22	84	3	87	131	0	131	0	0	0
22 - 23	67	1	68	127	0	127	0	0	0
23 - 24	46	3	49	92	1	93	0	0	0
Total	3562	133	3695	3991	42	4033	2204	41	2245
%	96.4%	3.6%	100.0%	99.0%	1.0%	100.0%	98.2%	1.8%	100.0%
WESTBOUND									
Time	AVERAGE WEEKDAY			SATURDAY			SUNDAY		
	Passenger	Commercial	All	Passenger	Commercial	All	Passenger	Commercial	All
0 - 1	27	3	30				69	0	69
1 - 2	15	1	16				42	0	42
2 - 3	8	1	9				30	1	31
3 - 4	13	3	16				22	0	22
4 - 5	31	6	37				8	0	8
5 - 6	82	7	89				30	1	31
6 - 7	99	6	105				59	0	59
7 - 8	150	8	158				97	4	101
8 - 9	148	7	155				148	3	151
9 - 10	188	7	195				271	1	272
10 - 11	185	10	195	410	7	417	322	3	325
11 - 12	129	8	137	421	7	428	358	5	363
12 - 13	134	7	141	423	6	429	414	3	417
13 - 14	204	8	212	439	4	443	419	4	423
14 - 15	280	11	291	451	6	457	53	0	53
15 - 16	352	9	361	409	3	412	0	0	0
16 - 17	338	8	346	383	1	384	0	0	0
17 - 18	314	4	318	284	3	287	0	0	0
18 - 19	230	3	233	245	0	245	0	0	0
19 - 20	159	4	163	195	6	201	0	0	0
20 - 21	129	5	134	154	1	155	0	0	0
21 - 22	107	5	112	142	0	142	0	0	0
22 - 23	74	5	79	119	0	119	0	0	0
23 - 24	68	4	72	129	2	131	0	0	0
Total	3414	140	3554	4184	46	4230	2342	25	2367

APPENDIX B

SimTraffic Reports

1: Kingsway Ave & BDL Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.1	0.5	0.0	0.0	0.1	0.1	0.2
Total Del/Veh (s)	2.3	0.4	0.2	0.0	10.0	4.5	0.5

2: 1600 Kingsway Ave/1575 Kingsway Ave & Kingsway Ave Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Denied Del/Veh (s)	0.0	0.0		0.0	0.1	0.0
Total Del/Veh (s)	0.3	0.0		0.5	5.2	0.4

3: Langan Ave & Kingsway Ave Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	0.9	0.2	3.7	0.9	6.3	5.1	1.3

4: Kingsway Ave & Dyn Struct Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	4.6	0.7	0.5	0.0	15.7	5.9	1.1

5: 1530 Kingsway Ave & Kingsway Ave Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0		0.1	0.0
Total Del/Veh (s)	0.5	0.2	5.3	0.6		2.9	0.6

6: Coast Meridian Rd & Kingsway Ave Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	3.0	0.8	0.2	0.2	0.5
Total Del/Veh (s)	0.9	0.4	5.3	0.8	17.1	3.3	1.7

Total Network Performance

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)			0.7				
Total Del/Veh (s)			5.2				

Queuing and Blocking Report
Existing AM

06/27/2019

Intersection: 1: Kingsway Ave & BDL

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (m)	1.5	23.2
Average Queue (m)	0.3	13.2
95th Queue (m)	3.7	26.8
Link Distance (m)	99.5	45.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: 1600 Kingsway Ave/1575 Kingsway Ave & Kingsway Ave

Movement	NB
Directions Served	LTR
Maximum Queue (m)	6.9
Average Queue (m)	1.1
95th Queue (m)	6.8
Link Distance (m)	65.0
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Langan Ave & Kingsway Ave

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (m)	3.8	25.8	16.3
Average Queue (m)	0.8	10.4	10.2
95th Queue (m)	6.9	28.2	16.8
Link Distance (m)	77.8	38.8	68.0
Upstream Blk Time (%)		0	
Queuing Penalty (veh)		2	
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Kingsway Ave & Dyn Struct

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (m)	20.8	4.5	25.6
Average Queue (m)	5.4	0.8	12.6
95th Queue (m)	20.4	5.7	29.1
Link Distance (m)	38.8	28.1	60.5
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: 1530 Kingsway Ave & Kingsway Ave

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (m)	10.1	7.6
Average Queue (m)	2.1	1.2
95th Queue (m)	10.8	7.3
Link Distance (m)	49.9	71.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Coast Meridian Rd & Kingsway Ave

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	LR
Maximum Queue (m)	2.8	14.6	3.1	22.4
Average Queue (m)	0.4	8.2	0.4	9.5
95th Queue (m)	3.7	16.4	6.6	24.5
Link Distance (m)	49.9		106.5	76.1
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)		25.0		
Storage Blk Time (%)			0	
Queuing Penalty (veh)			0	

Network Summary

Network wide Queuing Penalty: 2

1: Kingsway Ave & BDL Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.1	0.4	0.0	0.0	0.1	0.1	0.2
Total Del/Veh (s)	4.1	0.4	0.3	0.0	8.6	3.5	0.5

2: 1600 Kingsway Ave/1575 Kingsway Ave & Kingsway Ave Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Denied Del/Veh (s)	0.0	0.0		0.0	0.1	0.0
Total Del/Veh (s)	0.3	0.0		0.5	2.7	0.4

3: Langan Ave & Kingsway Ave Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.1	0.0
Total Del/Veh (s)	0.7	0.2	4.1	0.7	16.3	4.4	1.1

4: Kingsway Ave & Dyn Struct Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.2	0.0
Total Del/Veh (s)	3.4	0.5	0.3	0.0	12.3	6.5	0.7

5: 1530 Kingsway Ave & Kingsway Ave Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.3	0.1	3.6	0.4	3.9	0.4

6: Coast Meridian Rd & Kingsway Ave Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	3.3	0.6	0.1	0.1	0.5
Total Del/Veh (s)	0.7	0.2	3.9	0.6	12.3	1.9	1.2

Total Network Performance

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)			0.6				
Total Del/Veh (s)			4.0				

Intersection: 1: Kingsway Ave & BDL

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (m)	4.9	10.2	21.2
Average Queue (m)	0.8	1.4	10.0
95th Queue (m)	7.1	8.2	24.3
Link Distance (m)	99.5	30.7	45.6
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: 1600 Kingsway Ave/1575 Kingsway Ave & Kingsway Ave

Movement	WB	NB
Directions Served	LTR	LTR
Maximum Queue (m)	2.3	4.4
Average Queue (m)	0.2	0.9
95th Queue (m)	3.1	5.3
Link Distance (m)	77.8	65.0
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: Langan Ave & Kingsway Ave

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (m)	22.2	14.5
Average Queue (m)	8.6	9.2
95th Queue (m)	23.7	15.0
Link Distance (m)	38.8	68.0
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Kingsway Ave & Dyn Struct

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (m)	17.7	1.5	16.5
Average Queue (m)	3.9	0.2	6.8
95th Queue (m)	15.4	3.2	17.9
Link Distance (m)	38.8	28.1	60.5
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: 1530 Kingsway Ave & Kingsway Ave

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (m)	7.8	5.0
Average Queue (m)	1.4	1.3
95th Queue (m)	9.6	6.2
Link Distance (m)	49.9	71.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Coast Meridian Rd & Kingsway Ave

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (m)	0.6	13.1	13.6
Average Queue (m)	0.1	6.3	7.6
95th Queue (m)	1.3	16.3	15.6
Link Distance (m)	49.9		76.1
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)		25.0	
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

Network Summary

Network wide Queuing Penalty: 1

1: Kingsway Ave & BDL Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.3	0.5	0.0	0.0	0.2	0.1	0.3
Total Del/Veh (s)	4.7	0.6	0.4	0.0	14.8	3.9	0.8

2: 1600 Kingsway Ave/1575 Kingsway Ave & Kingsway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0		0.0	0.0	0.1	0.1	0.1	0.0
Total Del/Veh (s)	4.2	0.5	0.1		1.1	0.5	2.3	12.4	6.0	0.9

3: Langan Ave & Kingsway Ave Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.3	0.2	0.0
Total Del/Veh (s)	1.2	0.5	5.1	1.5	30.3	6.8	1.9

4: Kingsway Ave & Dyn Struct Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	7.2	1.1	0.9	0.3	24.8	18.4	1.8

5: 1530 Kingsway Ave & Kingsway Ave Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0		0.1	0.0
Total Del/Veh (s)	0.6	0.1	10.0	1.2		5.3	1.0

6: Coast Meridian Rd & Kingsway Ave Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	3.2	1.0	0.2	0.2	0.7
Total Del/Veh (s)	1.1	0.5	5.9	1.2	28.4	6.6	2.5

Total Network Performance

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)				0.8			
Total Del/Veh (s)				7.9			

Intersection: 1: Kingsway Ave & BDL

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (m)	6.6	1.5	26.9
Average Queue (m)	0.8	0.3	13.2
95th Queue (m)	6.0	3.4	29.6
Link Distance (m)	99.5	30.7	45.6
Upstream Blk Time (%)			0
Queuing Penalty (veh)			0
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: 1600 Kingsway Ave/1575 Kingsway Ave & Kingsway Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	18.9	5.9	4.1	7.2
Average Queue (m)	4.4	1.1	0.7	2.4
95th Queue (m)	18.1	13.0	5.0	8.8
Link Distance (m)	30.7	77.8	65.0	45.6
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	1			
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Langan Ave & Kingsway Ave

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (m)	14.3	35.4	20.4
Average Queue (m)	1.4	14.0	11.1
95th Queue (m)	10.6	35.5	20.6
Link Distance (m)	77.8	38.8	68.0
Upstream Blk Time (%)		1	
Queuing Penalty (veh)		5	
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report
Background 2027 AM, No Improvements

06/27/2019

Intersection: 4: Kingsway Ave & Dyn Struct

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (m)	33.8	16.9	30.7
Average Queue (m)	9.1	3.2	17.0
95th Queue (m)	29.6	16.2	34.3
Link Distance (m)	38.8	28.1	60.5
Upstream Blk Time (%)	1	1	
Queuing Penalty (veh)	6	4	
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: 1530 Kingsway Ave & Kingsway Ave

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (m)	23.9	12.2
Average Queue (m)	5.1	2.2
95th Queue (m)	25.6	9.9
Link Distance (m)	49.9	71.9
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	2	
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Coast Meridian Rd & Kingsway Ave

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	LR
Maximum Queue (m)	9.0	15.7	7.7	36.1
Average Queue (m)	1.2	9.3	1.1	17.0
95th Queue (m)	8.9	18.0	10.0	40.2
Link Distance (m)	49.9		106.5	76.1
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)		25.0		
Storage Blk Time (%)		0	0	
Queuing Penalty (veh)		0	0	

Network Summary

Network wide Queuing Penalty: 18

1: Kingsway Ave & BDL Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.7	0.5	0.0	0.0	0.1	0.1	0.3
Total Del/Veh (s)	4.7	0.6	0.3	0.0	14.6	5.6	0.7

2: 1600 Kingsway Ave/1575 Kingsway Ave & Kingsway Ave Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0		0.0	0.0		0.1	0.1	0.1	0.0
Total Del/Veh (s)	4.9	0.3		0.7	0.2		4.2	15.7	5.8	0.9

3: Langan Ave & Kingsway Ave Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	0.8	0.5	4.9	1.3	27.3	6.6	1.6

4: Kingsway Ave & Dyn Struct Performance by movement

Movement	EBT	WBT	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	0.4	0.5	20.3	7.0	0.6

5: 1530 Kingsway Ave & Kingsway Ave Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Denied Del/Veh (s)	0.0	0.0		0.0	0.1	0.0
Total Del/Veh (s)	0.3	0.0		0.5	5.2	0.4

6: Coast Meridian Rd & Kingsway Ave Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	3.0	0.7	0.3	0.2	0.4
Total Del/Veh (s)	0.9	0.3	7.5	0.8	28.0	3.5	2.3

Total Network Performance

Denied Del/Veh (s)	0.6
Total Del/Veh (s)	6.8

Intersection: 1: Kingsway Ave & BDL

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (m)	7.5	0.7	17.5
Average Queue (m)	1.3	0.1	7.6
95th Queue (m)	12.0	1.4	18.7
Link Distance (m)	99.5	30.7	45.6
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: 1600 Kingsway Ave/1575 Kingsway Ave & Kingsway Ave

Movement	EB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (m)	4.3	5.2	12.7
Average Queue (m)	1.1	0.9	7.9
95th Queue (m)	7.9	5.1	17.0
Link Distance (m)	30.7	65.0	45.6
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Langan Ave & Kingsway Ave

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (m)	34.0	18.0
Average Queue (m)	13.4	10.9
95th Queue (m)	32.4	18.1
Link Distance (m)	38.8	68.0
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	2	
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Kingsway Ave & Dyn Struct

Movement	WB	SB
Directions Served	TR	LR
Maximum Queue (m)	7.4	10.7
Average Queue (m)	0.6	4.8
95th Queue (m)	6.6	12.9
Link Distance (m)	28.1	60.5
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: 1530 Kingsway Ave & Kingsway Ave

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (m)	0.7	6.5	6.7
Average Queue (m)	0.0	1.5	1.4
95th Queue (m)	0.0	13.5	6.6
Link Distance (m)	28.1	49.9	71.9
Upstream Blk Time (%)		0	
Queuing Penalty (veh)		0	
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Coast Meridian Rd & Kingsway Ave

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (m)	5.8	19.6	27.9
Average Queue (m)	0.9	9.7	16.2
95th Queue (m)	6.0	22.1	35.2
Link Distance (m)	49.9		76.1
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)		25.0	
Storage Blk Time (%)		0	
Queuing Penalty (veh)		3	

Network Summary

Network wide Queuing Penalty: 4

1: Kingsway Ave & BDL Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	2.8	0.2	0.0	0.0	0.1	0.1	0.1
Total Del/Veh (s)	3.3	0.2	0.1	0.1	18.1	4.3	0.5

2: 1600 Kingsway Ave/1575 Kingsway Ave & Kingsway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0		0.0	0.0		0.1	0.1	0.0
Total Del/Veh (s)	3.3	0.2	0.0		0.2	0.1		7.5	4.2	0.3

3: Langan Ave/Site W & Kingsway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.1			0.1
Total Del/Veh (s)	4.3	0.3	0.2	3.8	0.2	0.1	16.9	10.7	3.5			2.2

3: Langan Ave/Site W & Kingsway Ave Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	0.8

5: 1530 Kingsway Ave & Kingsway Ave Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.3	0.1	3.3	0.3	4.8	0.3

6: Coast Meridian Rd/Site E & Kingsway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	2.7	0.2	0.3	0.1	0.1	0.1	0.1		0.1
Total Del/Veh (s)	3.6	0.3	0.2	3.8	0.4	0.3	16.3	22.0	4.5	11.6		7.0

6: Coast Meridian Rd/Site E & Kingsway Ave Performance by movement

Movement	All
Denied Del/Veh (s)	0.3
Total Del/Veh (s)	1.4

Total Network Performance

Movement	All
Denied Del/Veh (s)	0.3
Total Del/Veh (s)	3.1

Queuing and Blocking Report
Total 2027 AM, Kingsway Ave Widened

07/04/2019

Intersection: 1: Kingsway Ave & BDL

Movement	EB	WB	SB
Directions Served	L	TR	LR
Maximum Queue (m)	4.6	1.3	28.2
Average Queue (m)	0.8	0.2	13.2
95th Queue (m)	5.0	2.7	29.6
Link Distance (m)		30.8	40.5
Upstream Blk Time (%)			0
Queuing Penalty (veh)			0
Storage Bay Dist (m)	50.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: 1600 Kingsway Ave/1575 Kingsway Ave & Kingsway Ave

Movement	EB	WB	WB	NB	SB
Directions Served	L	L	T	LTR	LTR
Maximum Queue (m)	9.6	0.8	0.6	2.9	10.5
Average Queue (m)	2.1	0.1	0.1	0.4	2.8
95th Queue (m)	8.8	1.6	1.2	4.7	11.6
Link Distance (m)			78.7	59.8	40.5
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	20.0	30.0			
Storage Blk Time (%)	0				
Queuing Penalty (veh)	0				

Intersection: 3: Langan Ave/Site W & Kingsway Ave

Movement	EB	WB	WB	NB	SB
Directions Served	L	L	T	LTR	LTR
Maximum Queue (m)	11.2	12.2	0.6	17.9	8.9
Average Queue (m)	3.4	6.2	0.1	11.2	2.7
95th Queue (m)	12.2	14.5	1.3	18.1	9.4
Link Distance (m)			75.4	64.5	53.8
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	30.0	50.0			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report
Total 2027 AM, Kingsway Ave Widened

07/04/2019

Intersection: 5: 1530 Kingsway Ave & Kingsway Ave

Movement	WB	WB	NB
Directions Served	L	T	LR
Maximum Queue (m)	2.7	1.6	6.9
Average Queue (m)	0.6	0.2	1.2
95th Queue (m)	4.4	3.3	6.1
Link Distance (m)		48.8	68.2
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	20.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Coast Meridian Rd/Site E & Kingsway Ave

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LTR
Maximum Queue (m)	6.6	0.9	0.8	10.8	0.6	0.2	32.4	14.7
Average Queue (m)	1.2	0.1	0.1	4.9	0.1	0.0	14.0	3.9
95th Queue (m)	6.4	1.4	1.2	11.8	0.8	0.3	33.9	14.7
Link Distance (m)		48.8	48.8		102.6	102.6	71.1	56.0
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)	20.0			25.0				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 0

1: Kingsway Ave & BDL Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	3.4	0.1	0.0	0.0	0.1	0.2	0.1
Total Del/Veh (s)	5.9	0.2	0.1	0.2	12.2	3.2	0.4

2: 1600 Kingsway Ave/1575 Kingsway Ave & Kingsway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0		0.0	0.0		0.1	0.1	0.1	0.0
Total Del/Veh (s)	4.0	0.1	0.1		0.2	0.0		1.9	9.4	4.0	0.4

3: Langan Ave/Site W & Kingsway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1		0.2	0.1		0.1
Total Del/Veh (s)	5.4	0.2	0.1	3.8	0.2	0.1	11.1		3.5	13.6		2.9

3: Langan Ave/Site W & Kingsway Ave Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	0.7

5: 1530 Kingsway Ave & Kingsway Ave Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Denied Del/Veh (s)	0.0			0.0	0.1	0.0
Total Del/Veh (s)	0.2			0.2	3.2	0.2

6: Coast Meridian Rd/Site E & Kingsway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)		0.0	0.0	3.1	0.2	0.4	0.3		0.2	0.2	0.2	0.2
Total Del/Veh (s)		0.3	0.1	4.5	0.3	0.3	19.6		4.1	15.8	24.7	8.4

6: Coast Meridian Rd/Site E & Kingsway Ave Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	1.9

Total Network Performance

Movement	All
Denied Del/Veh (s)	0.3
Total Del/Veh (s)	3.7

Queuing and Blocking Report
Total 2027 PM, Kingsway Ave Widened

07/04/2019

Intersection: 1: Kingsway Ave & BDL

Movement	EB	SB
Directions Served	L	LR
Maximum Queue (m)	4.6	14.6
Average Queue (m)	0.8	8.0
95th Queue (m)	4.9	17.8
Link Distance (m)		40.5
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	50.0	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: 1600 Kingsway Ave/1575 Kingsway Ave & Kingsway Ave

Movement	EB	EB	WB	NB	SB
Directions Served	L	T	TR	LTR	LTR
Maximum Queue (m)	5.3	0.6	1.3	5.3	15.1
Average Queue (m)	0.8	0.0	0.2	0.9	7.6
95th Queue (m)	5.9	0.0	2.7	5.2	17.2
Link Distance (m)		30.8	78.7	59.8	40.5
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	20.0				
Storage Blk Time (%)	0				
Queuing Penalty (veh)	0				

Intersection: 3: Langan Ave/Site W & Kingsway Ave

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (m)	8.1	12.8	17.8	10.3
Average Queue (m)	1.3	7.3	10.2	6.6
95th Queue (m)	7.5	14.9	16.0	13.6
Link Distance (m)			64.5	53.8
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)	30.0	50.0		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report
Total 2027 PM, Kingsway Ave Widened

07/04/2019

Intersection: 5: 1530 Kingsway Ave & Kingsway Ave

Movement	WB	NB
Directions Served	L	LR
Maximum Queue (m)	3.4	6.0
Average Queue (m)	0.5	1.9
95th Queue (m)	3.8	7.7
Link Distance (m)		68.2
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	20.0	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Coast Meridian Rd/Site E & Kingsway Ave

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	LTR	LTR
Maximum Queue (m)	3.0	1.3	0.8	11.6	0.3	33.0	26.0
Average Queue (m)	0.4	0.2	0.1	5.4	0.0	13.3	14.0
95th Queue (m)	3.3	2.7	1.2	13.3	0.7	32.6	29.6
Link Distance (m)		48.8	48.8		102.6	71.1	56.0
Upstream Blk Time (%)						0	
Queuing Penalty (veh)						0	
Storage Bay Dist (m)	20.0			25.0			
Storage Blk Time (%)							
Queuing Penalty (veh)							

Network Summary

Network wide Queuing Penalty: 0

Development Permit Application - 2446 Shaughnessy Street

RECOMMENDATION:

That Committee of Council approve Development Permit DP000396 to regulate a six-storey apartment development at 2446 Shaughnessy Street.

REPORT SUMMARY

This report describes a development permit application for a 33-unit, six-storey apartment building with three levels of automated stackable parking at 2446 Shaughnessy Street. The proposal substantially conforms to the Zoning Bylaw with only minor variances and the design complies with the intent of the Downtown development permit area guidelines in terms of the overall architectural style and detailing, the materials used and the creation of an overall attractive pedestrian realm. Staff recommend the application be approved.

BACKGROUND

Proposal: The applicant, Kutak Developments Ltd., proposes to construct a 33-unit, six-storey apartment building on the southeast corner of Shaughnessy Street and Atkins Avenue.



Location Map

Development Permit Application - 2446 Shaughnessy Street

The site is flanked to the south and east by older single-family houses. The house on the lot directly south of the lane was recently demolished after sustaining fire damage. The applicant intends to apply for a development permit to accommodate a similar development for this site. To the southeast of the site, the City has issued a Development Permit for a 7 storey (26.5 metre) apartment development at 2279 Kelly Avenue and a building permit application is in process.

Policy and Regulations: The Official Community Plan (OCP) designates the site as High Density Apartment Residential and allows for multiple-family developments within this designation to have a higher profile. The property is zoned RA2 (Residential Apartment 2).

The site is included within the Downtown and Environmental Conservation development permit area designations of the OCP. The Downtown DP design guidelines promote coordination of siting and building design; use of high quality cladding materials; consideration of the relationship between buildings and open areas; and, the overall visual impact of buildings and landscaping. The environmental conservation DP objectives and guidelines encourage sustainable development and building design; efficient use of energy, water and other resources; and, reduction of waste and pollution.

Project Profile

	Bylaw Regulations ¹	Proposed ²	Requested Variance
Site Area minimum	930m ²	1,219m ²	
Floor Area Ratio	up to 2.5	2.09	
Dwelling Units	n/a	33	
Adaptable Units	30%	30% (10 units)	
Family Friendly Units	25% (8)	27% (9)	
Building Lot Coverage	60%	53%	
Setbacks:			
Front (Atkins)	4.0 m	3.4 m	0.6 m
Rear (lane)	7.5 m	7.5 m	
Interior side	3.0 m	3.0 m	
Exterior side (Shaughnessy)	3.0 m	3.0 m	
Building Height	30 m	21.3 m	
Parking: Total	50	51	
Resident	43	44	
Visitor	7	7	
Stall Width (adjoining structure)	3.0 m	2.8 m	0.2 m
Parkade Drive Aisle	6.5 m	6.25 m	0.25 m

¹ Refer to Zoning Bylaw No. 3630, Parking and Development Management Bylaw No. 4078 and Building and Plumbing Bylaw No. 3710 for specific regulations

² Information provided by applicant

Development Permit Application - 2446 Shaughnessy Street

	Bylaw Regulations ¹	Proposed ²	Requested Variance
Indoor Recreation Area	66m ²	58.7m ²	7.3m ²
Outdoor Recreation Area	115.5m ²	195.6m ²	
Bicycle Parking			
Long-term (bike room)	33	34	
Short-term (bike rack)	6	6	

Project Description: The proposed six-storey apartment building includes 9 studio units, 9 one-bedroom/one bedroom plus den units and 11 two-bedroom/two bedroom plus den units, and 4 three-bedroom units, varying in size from 40.9m² (441 ft²) to 109.2m² (1,176 ft²).

The building has been oriented with its main pedestrian entrance on Shaughnessy Street and vehicular access from the lane to the south. The design of the building has been influenced by the use of a three-level automated stacking parkade system, proposed as a unique way of providing the required parking on a relatively small site. A fully underground level contains a level of the automated vehicular parking system and bicycle parking. At street level, the first level of the building is double height and contains the building



Shaughnessy Street facade

lobby, indoor amenity space (including a dog grooming room and a separate workshop area), storage and utilities and two additional levels of the parking system. The residential units are on the 2nd through 6th floors with a rooftop terrace.

The developer advises the design of the building is intended to provide for a landmark development on Shaughnessy Street. The proposal provides for the first storey on Shaughnessy and Atkins elevations to have the appearance of a double height single-

storey, with strong vertical elements, expansive windows and substantial hard and soft landscaping, intending to reduce the building massing and provide for a pedestrian scale. The first storey elevations facing the lane and houses to the east are softened with living green walls.

The residential floors also contain strong vertical elements, with a variation of materials, colours and stepping of the mass, intended to help break up the large building, create visual interest and a balanced architectural program. A series of curved balconies project from the building at the corner of Shaughnessy Street and Atkins, providing for a distinct architectural element.

The appearance of the building's mass is further reduced by having the 6th floor stepped back from the lower floors of the building. The roof of the building contains private patios for the top floor units and a common outdoor amenity space with an outdoor cooking station, seating areas and resident garden plots.



Shaughnessy / Atkins Facade

All the required residential parking is contained within the automated system. Six visitor parking stalls (including one accessible stall) are located at grade at the south of the building and accessed directly from the lane. Also located within the visitor parking area is an exterior car/bike wash station. The applicant advises that mechanized parking system increase efficiency of the parking area by allowing drivers to exit their vehicle at grade before it is stowed in its final location. To park, a resident would steer towards their allocated space within the parking system, open the security gate, drive into a regular sized parking space, exit the machine and close the gate. To retrieve the car, a resident will request their vehicle via a fob/key, gate will open, resident enters, drives vehicle out and closes the gate. The vehicles, once parked in the parking system, are not accessible to residents. Each stall in the parking system will be roughed in with an electric vehicle charging station, and a fully functioning public EV charging station is proposed to be

located at the visitor parking stall location. In the case of a power outage, the system can be manually operated through the use of manual jacks attached to the hydraulic system.

The proposed landscape plan provides for 16 trees on site (2 Japanese Maple, 6 Star Magnolia, 4 Serbian Spruce, 3 Kousa Dogwood and 1 Yoshino Cherry) as well as a variety of shrubs, grasses and perennials in the landscape planters along street frontages. In front of the building, 6 deciduous trees are proposed to be planted within the boulevard.

The project is designed to comply with the environmental conservation area designation by including such measures as using energy star rated appliances, using drought tolerant native plants, incorporating porous hard surfaces to reduce storm water run-off and, providing roughed in for electric vehicle charging for all units plus a functioning car charging station located in the visitor parking area among other items. A complete list of conservation measures is provided in Schedule A of the draft development permit.

Variances to Zoning and Parking Bylaw Regulations: A minor 0.6m variance has been requested to allow for articulation of the parkade wall fronting Atkins Avenue. The applicant has also requested a 7.3m² reduction to the amount of required indoor amenity space and variances to the parking stall and drive aisles widths are requested to accommodate the design parameters for the automated parking system.

Off-site Improvements: This project requires off-site upgrades, including: street lighting, road drainage, street trees, undergrounding of the overhead wiring, and fully constructing the rear lane including storm drainage. Final off-site improvements will be determined at the Building Permit stage. A determination of the feasibility of undergrounding the overhead wiring at the time of construction would be made working with the Utilities at building permit stage.

DISCUSSION

At over 20 metres in height and containing 6 storeys (5 residential storeys), the proposed apartment building would be taller than existing surrounding buildings although still in keeping with the permitted height in the RA2 zone (30 metres) and only slightly smaller than a 7 storey (26.5 metre) apartment development approved, but yet to be constructed, nearby on Kelly Avenue.

The architect has used a variety of techniques to reduce the volumetric impact of this large scale development on the pedestrian realm, to provide for compatibility with surrounding development, and to meet the intent of the Downtown development permit guidelines for form and character. These mechanisms including designing the first two stories to appear as a double height single story with a distinct pedestrian-scaled building entrance, landscaping and plaza on Shaughnessy Street; articulating the façade by using variable

setbacks, architectural elements, materials, and softening the appearance of the building wall with treatment and wider setbacks. While providing for a more modernist building style, the design still provides architectural elements that are reflective of the historic downtown character, including vertical brick elements and wrought iron balcony rails.

The design guidelines suggest stepping back portions of the building above the 3rd floor to reduce volumetric impact; the proposed development steps the building back on the 5th floor.

The proposed variance to the Atkins Avenue setback is minor and provide for a more aesthetically pleasing building. The requested variances to the parking bylaw provide for increased functionality of the automated system. The variance proposed for a reduction in area for the indoor amenity space is rationalized by the additional area (almost double) that has been provided for the outdoor amenity space located on the roof top. Staff support the variances.

It is staff's opinion that the design of the proposed apartment and landscaping is attractive and meets the overall intent of the development permit guidelines. Accordingly, staff recommend approval. However, if Committee determines that it wishes to obtain additional public input on the design given the scale and height of the development as an option it may choose to hold an advertised public meeting prior to making a decision on the application.

FINANCIAL IMPLICATIONS


None.

PUBLIC CONSULTATION

A sign has been posted on site to inform area residents of the application and, to date, no comments have been received.

OPTIONS

(Check = Staff Recommendation)

#	Description
1 	Approve Development Permit DP000396

2	Determine that it wishes to hold an advertised public meeting to provide for consideration of the design prior to making a decision on the development permit application
3	Request additional information or amendments if the Committee is of the opinion that such information or amendment would assist in its evaluation of how the design complies with the development permit area designation.
4	Recommend rejection of the application if the Committee is of the opinion the application does not conform to the design guidelines. Pursuant to the delegated authority, the applicant may then request the application be forwarded to Council for consideration.

ATTACHMENTS

Attachment #1: Draft Development Permit

Attachment #2: Proposed Automated Parking System

THE CORPORATION OF THE CITY OF PORT COQUITLAM

"DEVELOPMENT PROCEDURES BYLAW, 2013, NO. 3849"

DEVELOPMENT PERMIT

NO. DP000396

Issued to: Patrik Kutak, Kutak (Shaughnessy01) Limited Partnership

Address: #2007-1177 West Hastings St
Vancouver, BC
V6E 2K3

1. This Development Permit is issued subject to compliance with all of the Bylaws of the Municipality applicable thereto, except as specifically varied by this Permit.
2. This Development Permit applies to and only to those lands within the Municipality described below, and any and all buildings, structures and other development thereon:

Address: 2446 Shaughnessy Street

Legal Description: Lot 86 District Lot 289 Group 1 NWD Plan NWP15939
Lot 87 District Lot 289 Group 1 NWD Plan NWP15939

P.I.D.: 010-141-332
000-599-506

3. The above property has been designated as a Development Permit Area under Section 9.0 – Development Permit Area in the "Official Community Plan Bylaw, 2013, No. 3838".
4. "Port Coquitlam Zoning Bylaw, 2008, No. 3630" and "Parking and Development Management Bylaw, 2005, No.3525" are varied, supplemented or both in accordance with the following:
 - a. The form and character of the building, including the siting, height and general design, shall be as shown on drawings numbered DP000396(1) to DP000396(20) which are attached hereto and form part of this permit.
 - b. The form and character of on-site landscaping shall be as shown on drawings numbered DP000396(21) to DP000396(28) and the following standards for landscaping are imposed:
 - (i) All landscaping works and planting materials shall be provided in accordance with the landscaping plan and specifications thereon, which form part of this permit and is attached hereto.
 - (ii) All planting materials shall be able to survive for a period of one year from the date of the site landscape approval by the Municipality.
 - c. The building and landscaping shall provide the energy conservation, water conservation and GHG emission reduction elements as shown on Schedule A to the drawings which are attached hereto and form part of this permit.

5. **Landscape Security**

- (a) As a condition of the issuance of this permit, the security set out below will be held by the Municipality prior to the issuance of a building permit to ensure satisfactory provision of landscaping in accordance with the terms and conditions as set forth in Clause 4 above. There is filed accordingly an irrevocable Letter of Credit or cash security in the amount **\$156,400** for the purpose of landscaping.
- (b) Should any interest be earned upon the security, it shall accrue to the Permittee and be paid to the Permittee if the security is returned. A condition of the posting of the security is that should the Permittee fail to carry out the works or services as hereinabove stated, according to the terms and conditions of this permit within the time provided, the Municipality may use the security to complete these works or services by its servants, agents or contractors, and any surplus shall be paid over to the Permittee.
- (c) The Permittee shall complete the landscaping works required by this permit within six months of the final inspection for the final phase of the development. Within the six month period, the required landscaping must be installed by the Permittee, and inspected and approved by the Municipality.

If the landscaping is not approved within the six month period, the Municipality has the option of continuing to hold the security until the required landscaping is completed or has the option of drawing the security and using the funds to complete the required landscaping, and recoup additional costs from the Permittee if necessary. In such a case, the Municipality or its agents have the irrevocable right to enter into the property to undertake the required landscaping for which the security was submitted.

- (d) Should the Permittee carry out the works and services permitted by this permit within the time set out above, the security shall be returned to the Permittee.
- 6. The land described herein shall be developed strictly in accordance with the terms and conditions and provisions of this permit and any plans and specifications attached to this permit, which shall form a part hereof.
 - 7. This permit shall lapse if the Permittee does not substantially commence the construction permitted by this permit within two years of the (issuance) date of this permit.
 - 8. The terms of this permit or any amendment to it, are binding on all persons who acquire an interest in the land affected by this permit.
 - 9. This permit is not a building permit.

APPROVED BY THE COMMITTEE OF COUNCIL THE ____TH DAY OF JANUARY, 2020.

SIGNED THIS ____ DAY OF _____, 2020.

Mayor

Corporate Officer

I ACKNOWLEDGE THAT I HAVE READ AND UNDERSTAND THE TERMS AND
CONDITIONS UPON WHICH THIS PERMIT IS ISSUED.

Applicant (or Authorized Agent or
Representative of Applicant)

PORT COQUITLAM, BRITISH COLUMBIA

DATES: Development Permit Application:

05 April 2019

ARCHITECTURAL

A1.01	COVER SHEET
A1.02	PROJECT DATA
A1.03	DESIGN RATIONALE & RESPONSE TO CITY COMMENTS
A2.01	SURVEY PLAN
A2.02	SITE CONTEXT PLAN
A2.03	SITE CONTEXT ELEVATION
A3.01	LEVEL P1
A3.02	LEVEL 01
A3.03	MEZZANINE LEVEL
A3.04	LEVEL 02
A3.05	LEVEL 03-05
A3.06	LEVEL 06
A3.07	ROOF LEVEL
A4.01	WEST & SOUTH ELEVATIONS
A4.02	EAST & NORTH ELEVATIONS
A5.01	SECTION A
A6.01	VIEW @ NORTH-WEST CORNER
A6.02	VIEW @ NORTH-EAST CORNER
A6.03	VIEW @ WEST ELEVATION
A6.04	VIEW @ SOUTH-WEST CORNER

PROJECT DIRECTORY

OWNER:
KUTAK DEVELOPMENT SERVICES LTD
C/O KUTAK (SHAUGHNESSY01) LIMITED
PARTNERSHIP
2007 - 1177 West Hastings Street
Vancouver, BC V6E 2K3
Ph: 604 670-8845
Contact: Patrick Kutak

ARCHITECT:
BINGHAM HILL ARCHITECTS
201-1444 Alberni Street
Vancouver, BC V6G 2Z4
Ph: 604 688 8254
Contact: John Bingham

LANDSCAPE ARCHITECT:
DURANTE KREUK
102 - 1637 West 5th Avenue
Vancouver, BC V6J 1N5
Ph: 604 684 4511
Contact: Peter Kreuk

STRUCTURAL ENGINEER:
WSB CONSULTING STRUCTURAL ENGINEERS
118-3855 Henning Drive
Burnaby, BC V5C 6N3
Ph: 604 294 3753 Fax: 604 294 3754
Contact: Darryl Bowers

MECHANICAL CONSULTANT:
FLOW CONSULTING GROUP INC
1080 - 1075 West Georgia Street
Vancouver, BC V6E 3C9
Ph: 604 609 0500
Contact: Ron Braun

ELECTRICAL CONSULTANT:
FLOW CONSULTING GROUP INC.
1080 - 1075 West Georgia Street
Vancouver, BC V6E 3C9
Ph: 604 609 0500
Contact: Tanya Arthur

CODE CONSULTANT:
GHL CONSULTANTS LTD
950 - 409 Granville Street
Vancouver, BC V6C 1T2
Ph: 604 689-4449
Contact: David Graham

INTERIOR DESIGN:
STUDIO FINLAY
603-518 Homer Street
Vancouver, BC V6B 1E8
Ph: 604 780 4560
Contact: Andrea Finlay

GEO TECHNICAL CONSULTANT:
GEOPACIFIC CONSULTANT LTD.
1778 West 75th Avenue
Vancouver, BC V6P 5P2
Ph: 604 439 0922
Contact: Moll Kolan

ENVELOPE CONSULTANT:
BC BUILDING SCIENCE
611 Bent Court
New Westminster, BC V3M 1V3
Ph: 604 620 6456
Contact: Chad Cranewick

SURVEYOR:
OLSEN & ASSOCIATES
204 - 15585 24th Avenue
Surrey, BC V4A 2J4
Ph: 604 531 4067

CIVIL ENGINEER:
VECTOR ENGINEERING SERVICES LTD
3375 Norland Avenue
Burnaby, BC V5B 3A9
Ph: 604 298 2333
Contact: Chris Peterson

TRAFFIC CONSULTANT:
BUNT & ASSOCIATES
1550 - 1050 West Pender Street
Vancouver, BC V6E 3S7
Ph: 604 685 8427
Contact: Simon Button

ABBREVIATIONS

[illegible]

LEGEND



ONE SHAUGHNESSY
KUTAK DEVELOPMENT SERVICES LTD
2446 SHAUGHNESSY STREET
PORT COQUITLAM, BRITISH COLUMBIA

DMD396(1)

5	DP SUBMISSION 5r	JUNE 2020
4	DP SUBMISSION 4	NOV 2019
3	DP SUBMISSION 3	OCT 2019
2	DP SUBMISSION 2	APR 2019
1	DP SUBMISSION 1P	

bingham + hill

1001 11th Avenue, Suite 1000
New York, NY 10019
Tel: (212) 692-1100
Fax: (212) 692-1101
www.11thavenue.com

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Product Data:
COVER SHEET

ALL DIMENSIONS SHALL BE VERIFIED ON SITE.		
PROJ. #	1807	DRAWING NUMBER A1.01
SCALE		
DATE		
CHECKED		

PROJECT INFO

CIVIC ADDRESS 2448 SHAUGHNESSY STREET, PORT COQUITLAM
 LEGAL DESCRIPTION Lot 68 + 370L 289 Group 1 N.W.D. plan 15039
 CURRENT ZONING R42
 EXISTING USE 2 single family dwellings
 PERMITTED CONDITIONAL USE To meet O.C.P.
 PROPOSED USE RESIDENTIAL
 FLOOD ELEVATION 7.37m (24.2')

FLOOR AREA SUMMARY

	Allowable	Proposed
TOTAL (max. 2.5 FSR)	32,603.0 sq ft 3,047.5 m ²	27,456.5 sq ft 2,550.8 m ²

SITE INFO

PROPERTY AREA 19,121.2 sq ft
 1,219.0 m²

LOT COVERAGE 6,896.0 sq ft
 640.85 m²

BUILDING HEIGHT ALLOWED 35.40 ft 28,992 m
 PROPOSED 70.00 ft 21.3 m (FROM AVERAGE SITE ELEVATION TO TOP OF ROOF DECK)

NO. OF STORES 8

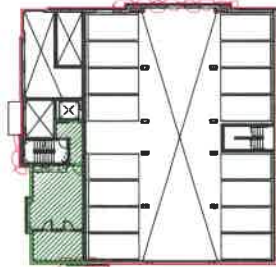
SETBACKS

	ALLOWED/REQUIRED	PROPOSED
	FEET METERS	FEET METERS
FRONT SIDE	13.10 ft 4.0 m	13.1 ft 4.0 m
INTERIOR SIDE	9.80 ft 3.0 m	9.80 ft 3.0 m
EXT. SIDE	13.10 ft 4.0 m	13.10 ft 4.0 m
REAR SIDE	24.80 ft 7.5 m	24.80 ft 7.5 m

WASTE CONTAINERS REQUIRED (BETHRITE)

WASTE	CONTAINER CHOICE	# OF UNITS	RATE (L/UNIT/WEEK)	C-ABS VOLUME GENERATED (L/WEEK)	D CONTAINER CAPACITY (L)	E-OD # OF CONTAINERS REQS. PER
GARBAGE	4 CU. YD. BIN	33	95.0	3135.0	3068.4	1
RECYCLING - NEWSPRINTS	360L CART	33	8.5	280.5	360.0	1
RECYCLING - MIXED PAPERS W/ CARDBOARD	4 CU. YD. BIN	33	40	1320.0	3068.4	1
RECYCLING - MIXED CONTAINERS	360L CART	33	9.0	297.0	360.0	1
COMPOSTABLES	360L CART	33	14.0	462.0	360.0	2
TOTAL			186.5	5494.5		

* NUMBER OF CONTAINERS SHOWN FOR GARBAGE IS REDUCED TO REFLECT THE VOLUME OF COMPOSTABLES DIVERTED.



AREA INSIDE RED LINE = "BUILDING AREA" CODE

AREA = 887.7m (7,879 sq ft)

AREA WITH GREEN HATCH = MEZZANINE (CODE 10% MAX ALLOWED)

AREA = 65.7m (577 sq ft)

MEZZANINE PERCENTAGE = 10% OF TOTAL BUILDING AREA

MEZZANINE CODE COMPLIANCE

AREA SUMMARY

	a	b	c	d	e	gross build	tot
	RESIDENTIAL (sq.ft.)	COMMON (sq.ft.)	SERVICE (sq.ft.)	AMENITY INDOOR (sq.ft.)	AMENITY OUTDOOR (sq.ft.)	GROSS AREA (BUILDABLE) (sq.ft.)	TOTAL F.S.R. AREA (sq.ft.)
LEVEL 1	0	602.16	0	257.61	0	859.77	0
MEZZANINE	0	100.17	0	402.7	0	502.87	0
LEVEL 2	5711.79	693.76	0	0	0	6405.55	5711.79
LEVEL 3	5711.79	693.77	0	0	0	6405.56	5711.79
LEVEL 4	5711.79	693.77	0	0	0	6405.56	5711.79
LEVEL 5	4635.35	688.28	0	0	0	5323.63	4635.35
LEVEL 6	4600.32	688.32	0	0	0	5288.64	4600.32
ROOF	0	688.32	0	0	0	688.3 sq ft	0 sq ft
TOTAL (sq ft)	27,456.48 sq ft	4,891.2 sq ft	300.1 sq ft	660.2 sq ft	0 sq ft	33,068.0 sq ft	27,456.5 sq ft
TOTAL (m ²)	2,550.79 m ²	426.54 m ²	33.45 m ²	61.34 m ²	0 m ²	3,072.12 m ²	2,550.79 m ²
% OF GROSS AREA	83.0%	13.9%	1.1%	2.0%	0.0%	100.0%	83.0%
% OF F.S.R. AREA	188.8%	18.7%	1.8%	3.4%	0.0%	188.4%	188.8%
EFFICIENCY							83.8%

SUITE SUMMARY

FLOOR LEVEL	# OF STOREYS	FLOOR TO FLOOR	STUDIO	1 BED	1 BED + DEN	2 BED	2 BED + DEN	3 BED	3 BED + DEN	TOTAL
LEVEL 1	1	16. ft	0	0	0	0	0	0	0	0
MEZZANINE	0	0	0	0	0	0	0	0	0	0
LEVEL 2	1	10. ft	2	1	1	1	1	1	0	7
LEVEL 3	1	10. ft	2	1	1	1	1	1	0	7
LEVEL 4	1	10. ft	2	1	1	1	1	1	0	7
LEVEL 5	1	10. ft	2	1	1	1	1	1	0	7
LEVEL 6	1	10. ft	1	0	1	2	1	0	0	5
ROOF LEVEL	0	0								
TOTAL	8		9	4	5	6	5	4	0	33
%			27%	12%	15%	18%	15%	12%	0%	100%

ADAPTABLE HOUSING REQUIRED

PERCENTAGE OF ADAPTABLE UNITS REQUIRED 30%

TOTAL NUMBER OF UNITS IN BUILDING 33

NUMBER OF ADAPTABLE UNITS REQUIRED 10

PARKING REQUIRED

On-Street Parking:

	Required	Proposed
Stalls:	1.0 spaces per Studio 1.3 spaces per 1 BED 1.5 spaces per 2 BED +	9 12 23
	Subtotal:	44
Visitor:	1.0 space per 5 units	7
	TOTAL:	51
Small Car Allowance:	Max. 25% of total parking spaces	11
HVC Spaces:	1.0 space per 100 spaces	1

BICYCLE PARKING

Long Term Storage:	1.0 space/unit (50% horiz & 40% vert. (max))	33
Short Term Storage:	Min. 6 spaces	6

AMENITY AREAS

			REQUIRED		PROPOSED	
			m2	sq. ft.	m2	sq. ft.
INDOOR AMENITY AREA	2 m ² per dwelling unit	2 m ² x 33	66.0	710.4	61.3	660.2
OUTDOOR AMENITY AREA	3.5 m ² per dwelling unit	3.5 m ² x 33	115.5	1,243.2	105.6	2,106.0

D000396(2)



ONE SHAUGHNESSY
 KUTAK DEVELOPMENT SERVICES LTD
 2446 SHAUGHNESSY STREET
 PORT COQUITLAM, BRITISH COLUMBIA

5	DP SUBMISSION 5	JAN 20 2015
4	DP SUBMISSION 4	NOV 20 2014
3	DP SUBMISSION 3	OCT 2 2014
2	DP SUBMISSION 2	SEP 16 2014
1	ISSUED FOR DP	APR 16 2014



Project J01
PROJECT DATA

PROJ. #	1807	DRAWING NUMBER
SCALE		
DRAWN		
CHECKED		

A1.02

DESIGN RATIONALE
2446 SHAUGHNESSY – PORT COQUITLAM
D.P. 000396

- Shaughnessy 1 is a proposed residential development in the Port Coquitlam City Centre area providing a contemporary resolution to a site development which adds character and scale within the areas existing development fabric. The transition from single family to multi-family in the area over the last 15 years has been dominated by 3 to 4 storey linear developments responding to parking requirements.
- This proposal consolidates two existing residential lots facing Shaughnessy Street and Atkins Avenue with a lane for vehicle/service access. There are no significant trees within the site except at the north property line which will be retained. Adjacent buildings include 3 and 4 storey apartment buildings with occasional single-family undeveloped lots.
- Site size and soil conditions impact foundation design and limit parkade construction in this area. This condition is not unique to developing urban areas, however development of new parking technology is mitigating this problem with methods of moving cars mechanically within structures, saving on the footprint otherwise needed for car maneuvering. Shaughnessy 1 incorporates this technology which enables development to take place and effectively use the available footprint and height for the residential development.
- The stacking parking system is perhaps the precursor to how we will be adapting to the new vision of the individual vehicle use within our current planning model. It presents new and sustainable options to land use and the built form.
- Building Code changes enable higher wood frame construction (up to 6 storeys) which minimizes the building footprint and allows for more efficient use of a local, sustainable building material. Adaptable housing requirements and step code energy savings make for a sustainable base building consistent with the intent of the O.C.P.
- The project, as a result of this approach, incorporates 3 of the objectives of Growth Management in the O.C.P.
 - "Incorporate sustainable development and 'smart growth' principles of practices into community planning."
 - "Ensure that development is carried out in a systematic and orderly manner and is accompanied by adequate services and facilities."
 - "attain moderate and community wide energy reductions"

The O.C.P. 7.2. Housing & Neighbourhoods "the objectives.....choice, tenure price housing form" are also met.
- The strong architectural character of this building provides a landmark on Shaughnessy Street without disturbing the rhythm of the existing architectural development. The use of brick and windows with a vertical character provides a useful interruption to the more linear streetscape governed by the guidelines.
- An intensive residential development with the use of high-quality materials will enhance the individual character of the building and the streetscape as a whole. Although not consistent with the guidelines, it contrasts with the existing in a positive way adding character.
- Recreation and outdoor amenity are provided at the roof of level 6 in excess of requirements, serviced by elevator. Level 6 residents have direct access to private gardens from their suites via stair providing a unique opportunity to use the roof in this area.
- The main entrance is from Shaughnessy Street and responds to the pedestrian scale, while the top floor steps back from the main building face. The building corners are highlighted with large balconies. The masonry construction and large punctuated windows provide a contemporary character with the use of low maintenance durable materials. Vehicle access is from the lane together with Visitor parking and a public electric car charging station.

Building character is maintained along Atkins Avenue with a landscaped base, balconies, and a top floor stepped back from the main building envelope consistent with that on Shaughnessy Street.

The guidelines suggest a 3rd storey setback. However, this building site presents unique challenges which can be compensated for by a strong design response and stepping back Level 6. The guidelines within the area the building is located suggests that setting back the building form at the 3rd storey is an appropriate urban design characteristic. In this case, as time moves on, we can see that perhaps this idea is not appropriate for all cases and buildings with smaller footprints may have to respond in a different way. This project provides a strong contrast, which in its own way strengthens its neighbours by bringing diversity within the area.

The east elevation is similarly modelled with all habitable room windows facing either the lane or Atkins Avenue to mitigate overview of potential adjacent developments.

- Relaxations:
 - The parkade intrudes into the required setback on Atkins Avenue by 2'-0" for a limited area midway for 22'-0" to facilitate vehicle turning in the parkade and steps back to the required setback at the residential level and is not readily apparent within the building form.
 - The shortfall in required Amenity space (7.3m²) is offset by the provision of an excess of outdoor amenity space at roof level mitigating the need for the indoor amenity space requirement.
- Landscaping at grade enhances the pedestrian experience along both Shaughnessy and Atkins with seating and stepped landscaping modulating the street wall, while at the corner a low bench/seal provides a soft resolution to what could have been a "hard" corner. Lane access is a nominally landscaped urban response of organized visitor parking and a public electric vehicle charging station.
- Green garden plots are located at the roof level providing an excess of outdoor amenity by 69%.
- An electric vehicle charging station is provided accessed from the lane while pre-wiring within the vehicle stacking is provided for individual vehicles.
- Dwelling units are family oriented and provide a mixture of unit types consistent with the intent of the O.C.P. including:
 - 30% adaptable units
 - 12% 3 bedroom units
 - 33% 2 bedroom units
- In conclusion, the development of this site represents a unique approach to "small" scale redevelopment, and although not meeting the strict requirements laid out in the design guidelines, it does carry forward the intent of requiring a high standard of design while meeting the intent of the O.C.P.

THE CORPORATION OF THE
CITY OF PORT COQUITLAM

MEMORANDUM

DATE: July 3, 2019
TO: Chris Laing
 Planner
FROM: Stephen Chee
 Building Inspector

SUBJECT: Development Permit Application Per 2444 - 2448 Shaughnessy Street
 Request For Comments Dp000396

The Building Division has the following comments for this application:
 (Drawings were incomplete and insufficient for a plan review.) A Building Code review will be done at the time of building permit application. The items below are to be addressed:

- Building is located in the flood plain area of the City. Habitable floor space is not permitted below the flood plain elevation including residential storage rooms.
 - Residential storage and ground floor amenity has been removed from below flood plain.
 - Utility spaces remain.
- Submit details of mezzanine compliance or revise approach to building code compliance for an additional storey in building height.
 - Mezzanine has been adjusted to be not more than 10% of building area - calculation indicated on D.P. drawings. Refer to A1.02 Project Data.
- Indicate building height measured from first storey.
 - Building height indicated on elevations from average grade to top floor, less than 18m.
- Bicycle storage room is not permitted to open directly into a lobby exit.
 - Exit has been rearranged to eliminate "Exit Lobby" requirements.
- Minimum exit stair run 280 mm.
 - Maximum exit stair rise 180 mm. All stairs will comply with new code requirements BCBC 2018
- Minimum dwelling unit stair run 255 mm.
- Confirm access to vehicles in storage garage in lift parking in the event of electrical power loss and fire.
 - See separate letter from Kutak Developments.
- Indicate if visitor parking is part of lift system.
 - Visitor parking is not part of the lift system.
- Confirm compliance to construction requirements of 3.2.2.50.1(b). The uppermost floor level serves a rooftop enclosure for elevator machinery, or a stairway.
 - "Building Area" is 650m². The roof level is not considered as a storey.
- Provide floor space on both sides of adaptable doors to conform to BC Building code.
 - This will be provided, or automatic door openers will be installed. Currently indicated as D.O. on the drawings.
- Indicate occupant load. Roof?
 - Occupant load will be no more than 60. Signage will be provided to indicated same on roof level.
- Indicate who will be using roof deck and proposed occupant load on roof.
 - Roof deck is for the use of the residents and their guests as outdoor amenity.
- Provide washroom facilities to occupied roof deck.
 - It is not intended to provide washroom facilities at roof deck as it would create a 7th floor.

Note:

- Lot consolidation required. - In process
- Demolition permits required. - In process
- Fire sprinkler calculations and sealed design drawings are required at time of building permit application.
 - Understood, will be provided at B.P. Application
- Building is located in the flood plain area of the City. A restrictive covenant and geotechnical report is required as per the Community Charter Section 56 from a geotechnical engineering confirming the safe use in a flood plain.
 - Understood, will be provided at B.P. Application
- Design to comply to the current BC Building Code edition at time of building permit application.
 - Understood, will be provided at B.P. Application - assume BCBC 2018
- Registered professional to review storm water management.
 - Understood, will be provided at B.P. Application
- Plan review to be done at time of building permit application. Working drawings required.
 - Understood, will be provided at B.P. Application



Stephen Chee



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2446 SHAUGHNESSY STREET
PORT COQUITLAM, BRITISH COLUMBIA

D000396(3)

5	DP SUBMISSION 5	JAN 20 2020
4	DP SUBMISSION 4	NOV 20 2019
3	DP SUBMISSION 3	OCT 2 2019
2	DP SUBMISSION 2	SEP 16 2019
1	ISSUED FOR DP	SEP 16 2019

NO.	DESC / REVISION	DATE
1	bingham hill	2019.07.03



DESIGN RATIONALE & RESPONSE TO CITY COMMENTS

PROJECT #	1807	DRAWING NUMBER
SCALE		A1.03
DRAWN		
CHECKED		



5	DP SUBMISSION 6:				JULY 20 2020
4	DP SUBMISSION 4				NOV 25 2019
3	DP SUBMISSION 5				OCT 2 2019
2	DP SUBMISSION 2				SEP 6 2019
1	ISSUED FOR DP				AUG 29 2019
File	BDDV / MYKISONS				DATE



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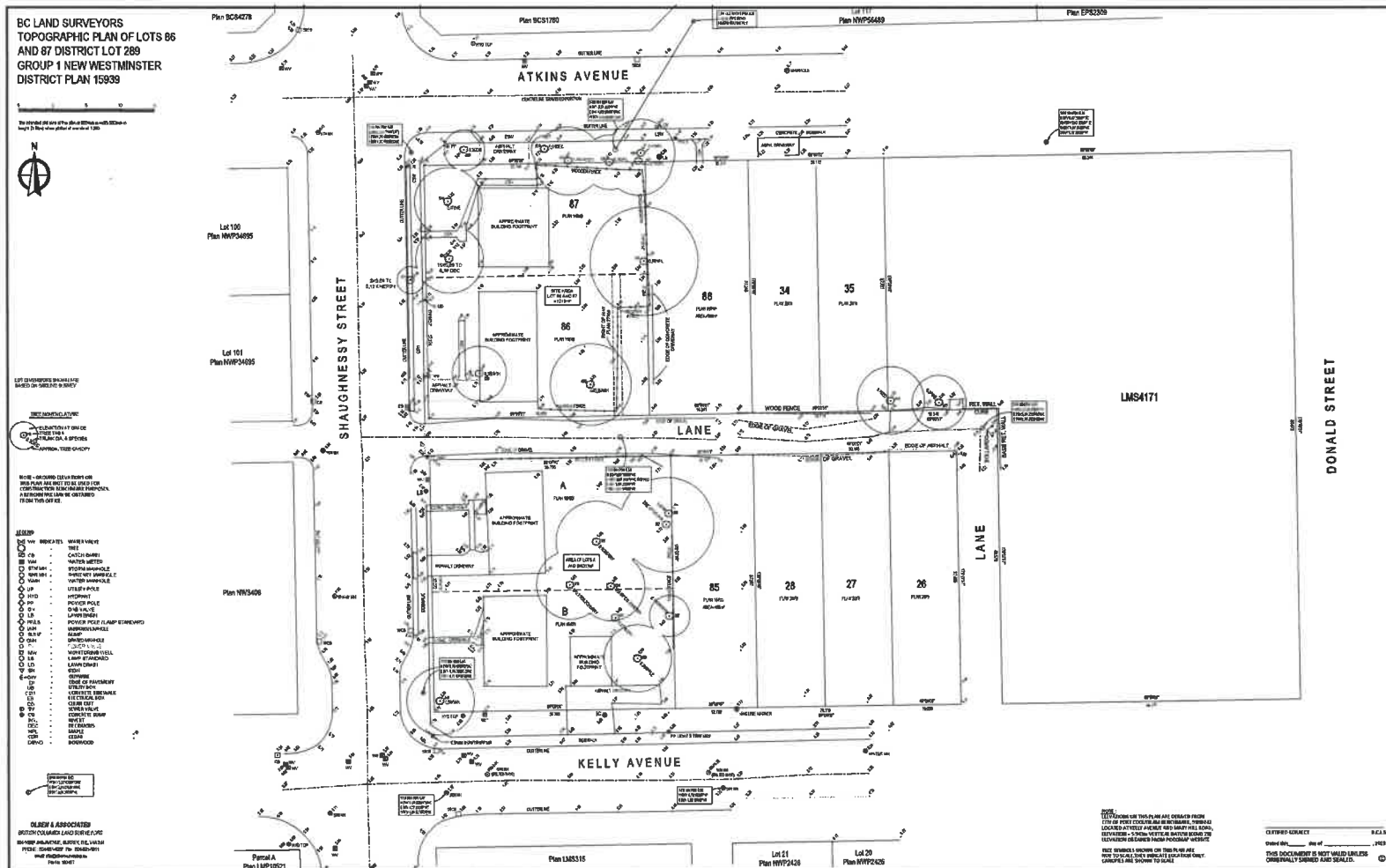
1011 124th Avenue SE
Burien, WA 98148
Tel: 206.835.4444
Fax: 206.835.4444

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Burien, WA 98148
Tel: 206.835.4444
Fax: 206.835.4444



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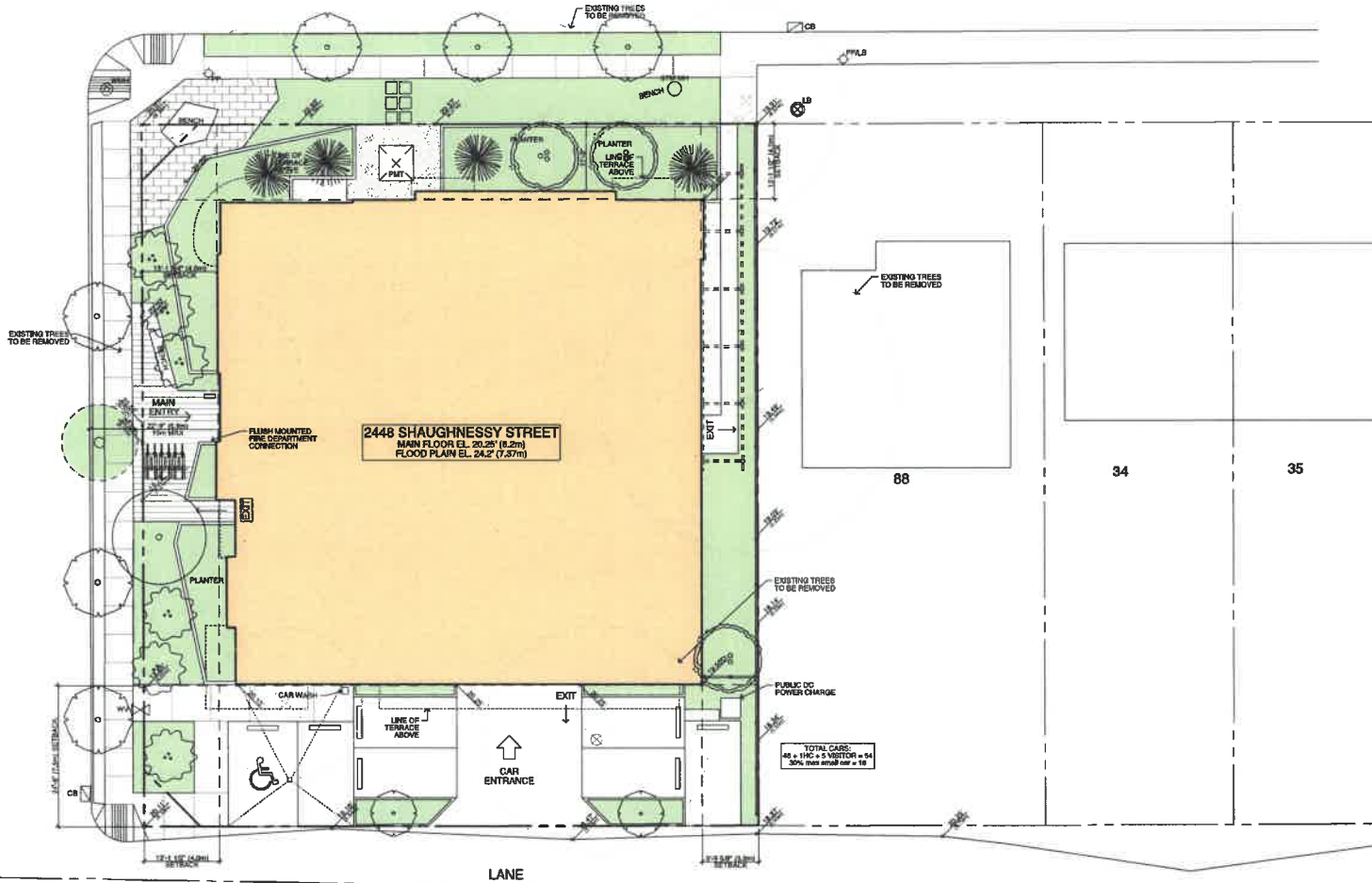
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PROJ. #	1807	DRAWING NUMBER A2.01
SCALE		
DRAWN		
CHECKED		



SHAUGHNESSY STREET

ATKINS AVENUE

○ FIRE
HYDRANT



DP000396(5)



ONE SHAUGHNESSY
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PORT COQUITLAM, BRITISH COLUMBIA

5	DP SUBMISSION 5	JAN 20
4	DP SUBMISSION 4	NOV 19
3	DP SUBMISSION 3	OCT 19
2	DP SUBMISSION 2	SEP 19
1	ISSUED FOR DP	AUG 19

DATE: 08/02/2020



DISPERSED SITE
SITE CONTEXT PLAN

PHASE 2	1807	DATE: 08/02/2020
SCALE	1/8" = 1'-0"	DRAWING NUMBER
DRAWN		A2.02
CHECKED		



2448 SHAUGHNESSY STREET

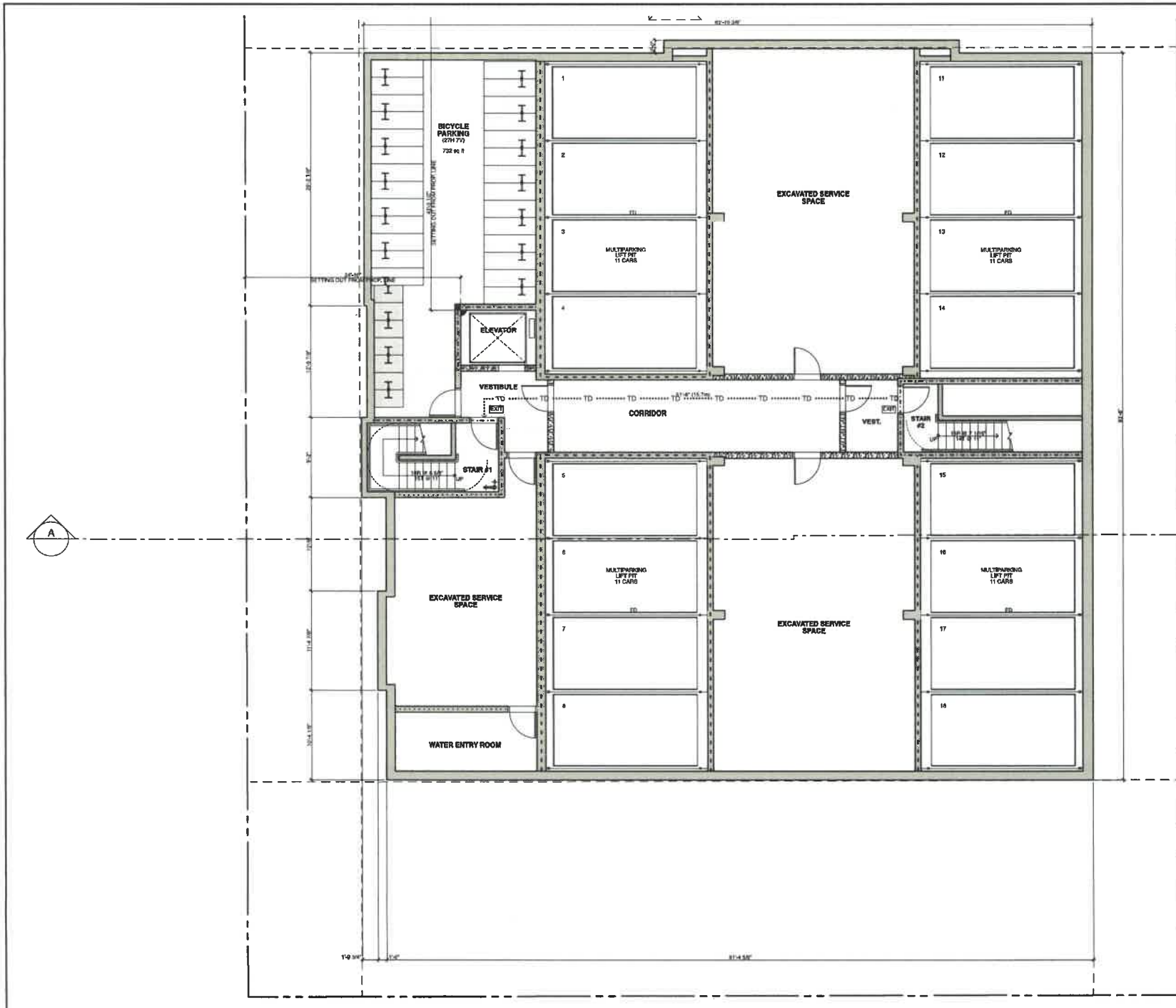
PROPOSED FUTURE BUILDING

DP000396(6)



ONE SHAUGHNESSY
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PORT COQUITLAM, BRITISH COLUMBIA

5	DP SUBMISSION 5	JAN 20 2020
4	DP SUBMISSION 4	SEP 26 2019
3	DP SUBMISSION 3	OCT 2 2019
2	DP SUBMISSION 2	APR 18 2019
1	ISSUED FOR DP	APR 18 2019
Rev.	REVISION / REVISION	DATE
binghamhill architects		
1111 BINGHAMHILL AVENUE, SUITE 100, PORT COQUITLAM, BC V3C 2K1		
TEL: 604.273.1111 FAX: 604.273.1112		
WWW.BINGHAMHILLARCHITECTS.COM		
ALL DIMENSIONS SHALL BE NOTED ON SET		
PROJ. #	1807	DRAWING NUMBER
SCALE		A2.03
DRAWN		
CHECKED		



DP000 396(7)



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NO.	REVISION / REVISION	DATE
6	DP SUBMISSION 6	JAN 10
4	DP SUBMISSION 4	MAY 09
3	DP SUBMISSION 3	OCT 08
2	DP SUBMISSION 2	SEP 08
1	ISSUED FOR DP	JUN 08

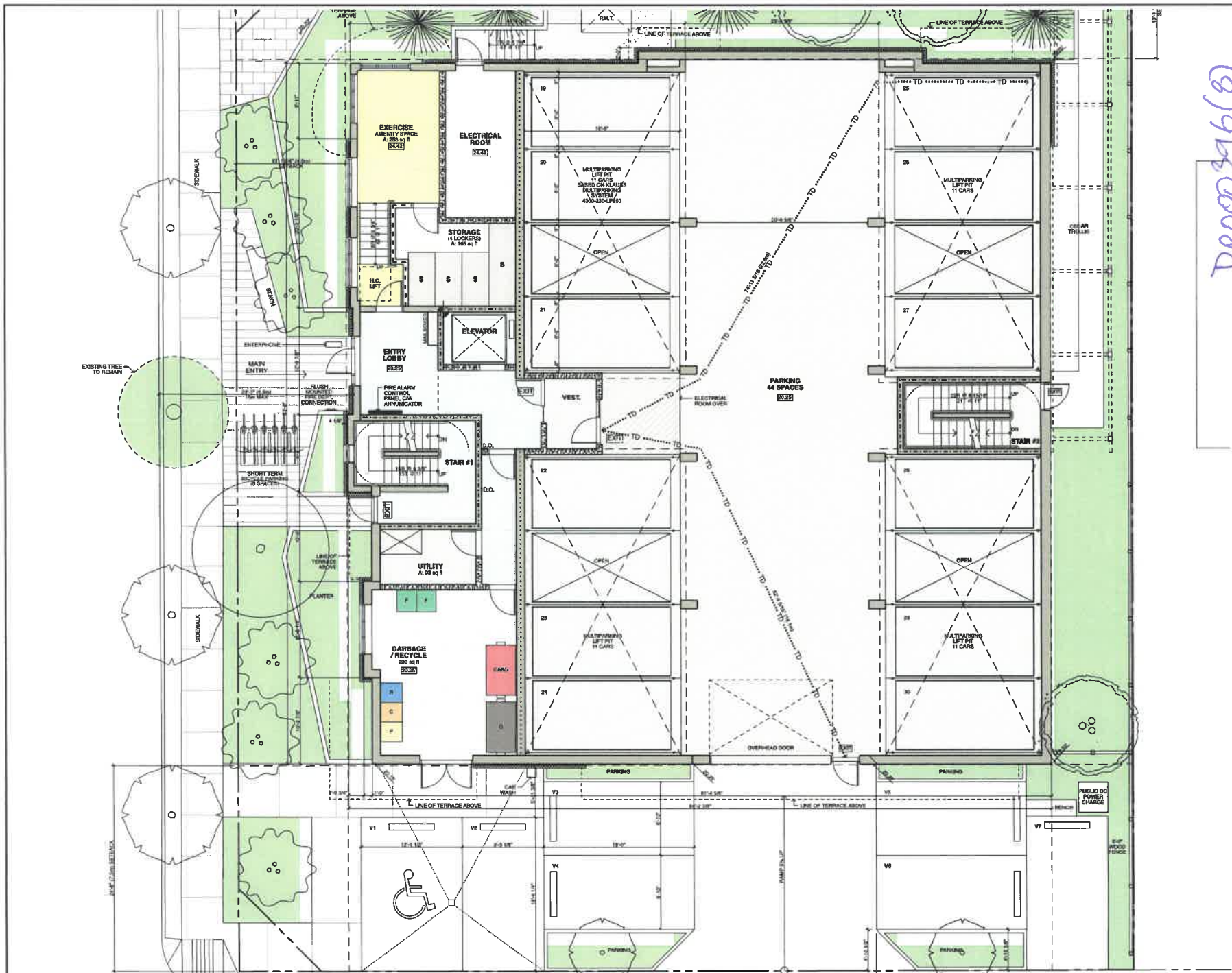
hinghamhill
architects

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 Vancouver, BC V6Z 1Y6
 Tel: 604.681.1111
 Fax: 604.681.1112
 Email: info@hinghamhill.com
 Website: www.hinghamhill.com

CONSENT TO DESIGN: THE DESIGNER IS NOT RESPONSIBLE FOR THE DESIGN OF THE PROJECT OR THE CONSTRUCTION OF THE PROJECT. THE DESIGNER IS NOT RESPONSIBLE FOR THE DESIGN OF THE PROJECT OR THE CONSTRUCTION OF THE PROJECT. THE DESIGNER IS NOT RESPONSIBLE FOR THE DESIGN OF THE PROJECT OR THE CONSTRUCTION OF THE PROJECT.

LEVEL P1

PROJECT NO.	1807	DRAWING NUMBER
SCALE		A3.01
DRAWN		
CHECKED		



000096(8)

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 PORT COQUITLAM, BRITISH COLUMBIA

5	DP SUBMISSION 6	APR 20
4	DP SUBMISSION 4	NOV 18
3	DP SUBMISSION 3	2019
2	DP SUBMISSION 2	OCT 1
1	ISSUED FOR DP	2019

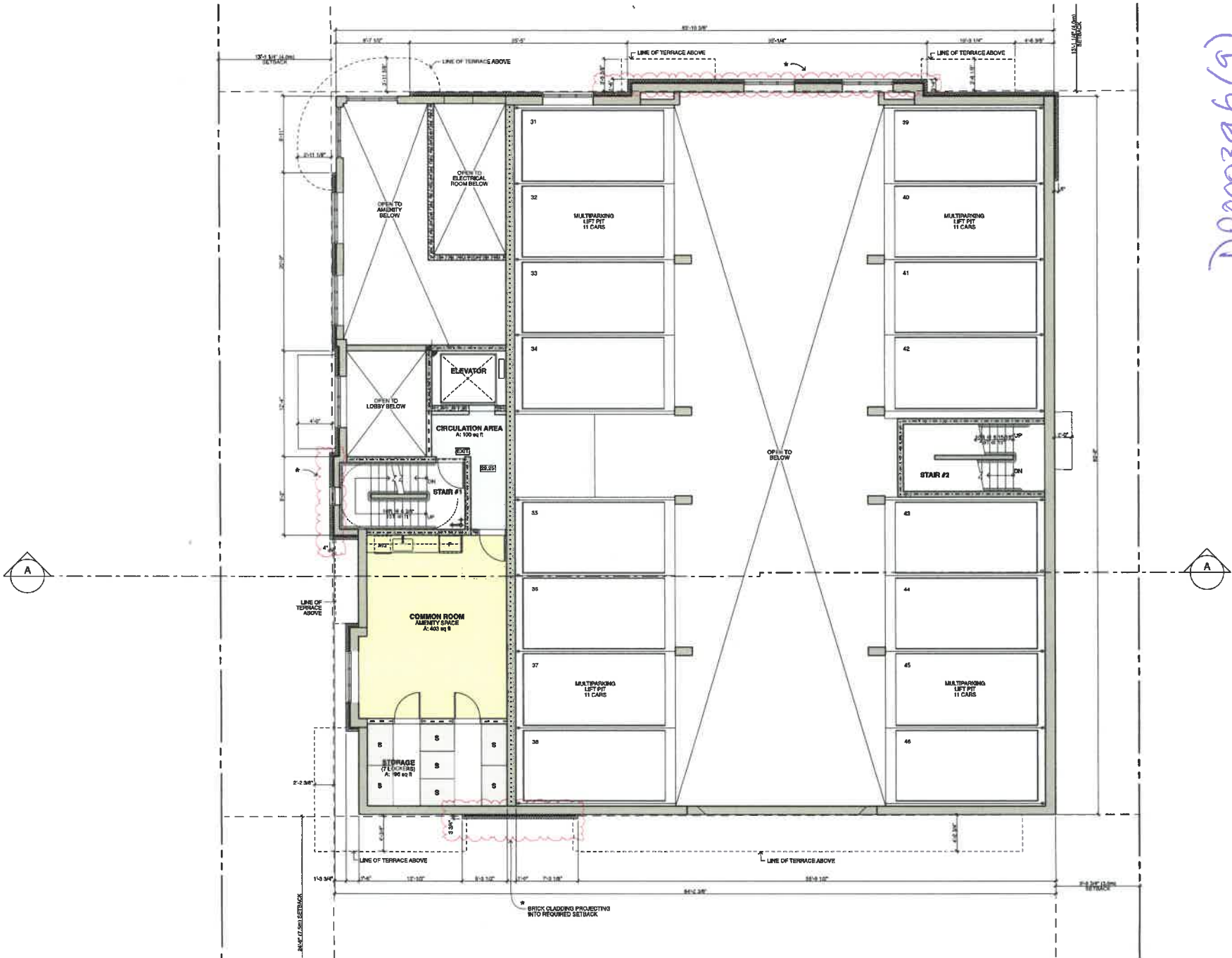
NO.	DATE / REVISION	BY
1		
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no. 010
LEVEL 01
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 SCALE: 1/8" = 1'-0"
 DRAWING NUMBER: **A3.02**



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PORT COQUITLAM, BRITISH COLUMBIA

DP00396(9)



6	DP SUBMISSION 5	JAN 20
5	DP SUBMISSION 4	NOV 19
4	DP SUBMISSION 3	OCT 19
3	DP SUBMISSION 2	SEP 19
2	DP SUBMISSION 1	AUG 19
1	ISSUED FOR DP	JUL 19

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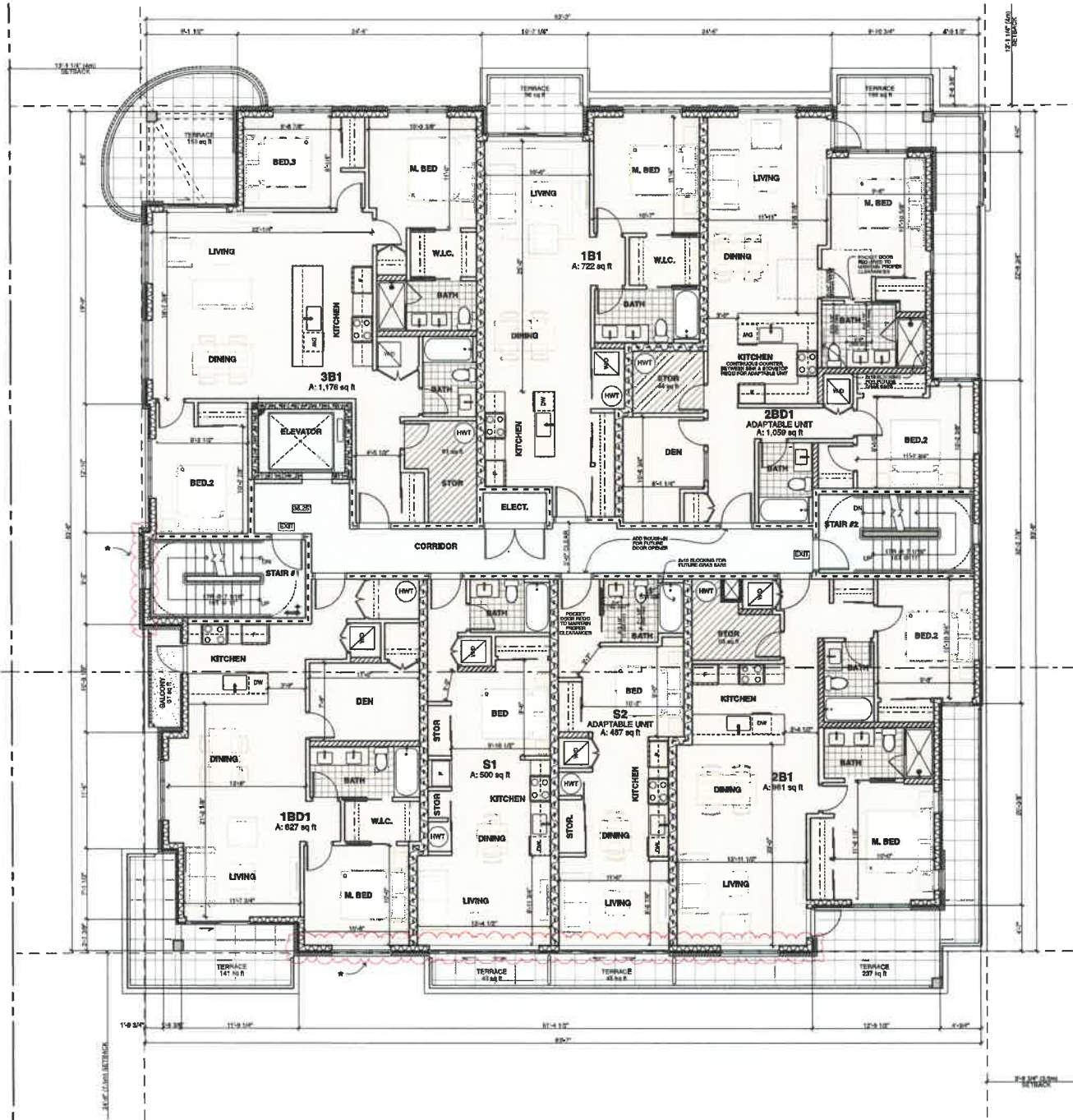
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PROJ. #	1807	CONVING NUMBER
SCALE		A3.03
DRAWN		
CHECKED		



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DP000396(10)



5	DP SUBMISSION 5	JAN 20 2020
4	DP SUBMISSION 4	NOV 15 2019
3	DP SUBMISSION 3	OCT 2 2019
2	DP SUBMISSION 2	NOV 1 2018
1	ISSUED FOR DP	APR 18 2018

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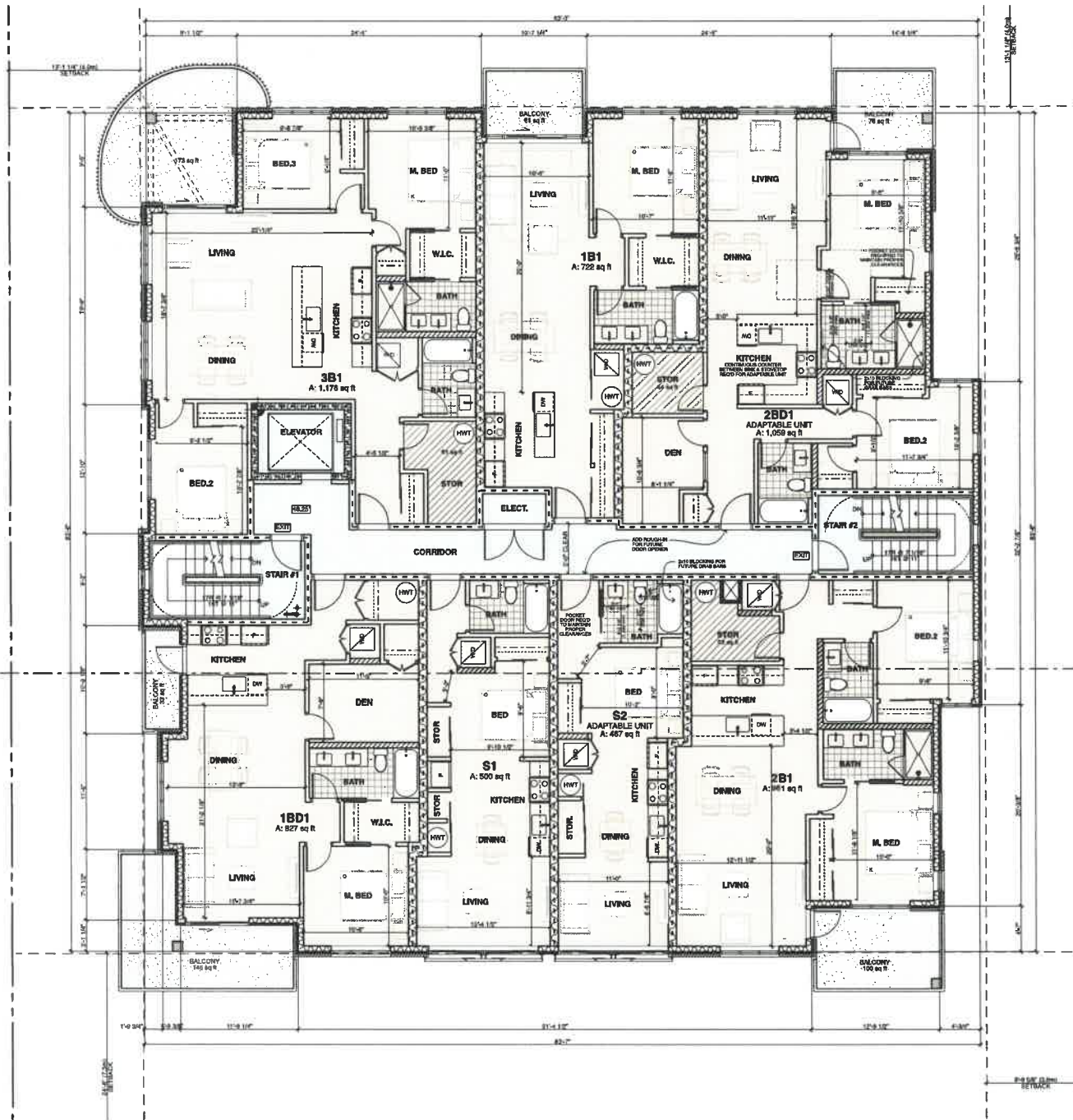
Floors
LEVEL 02

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SCALE		A3.04
DRAWN		
CHECKED		



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PORT COQUITLAM, BRITISH COLUMBIA

DP00396(11)



NO.	REVISION / REVISION	DATE
5	DP SUBMISSION 5	2023-10-10
4	DP SUBMISSION 4	2023-09-15
3	DP SUBMISSION 3	2023-08-22
2	DP SUBMISSION 2	2023-08-08
1	ISSUED FOR DP	2023-07-28

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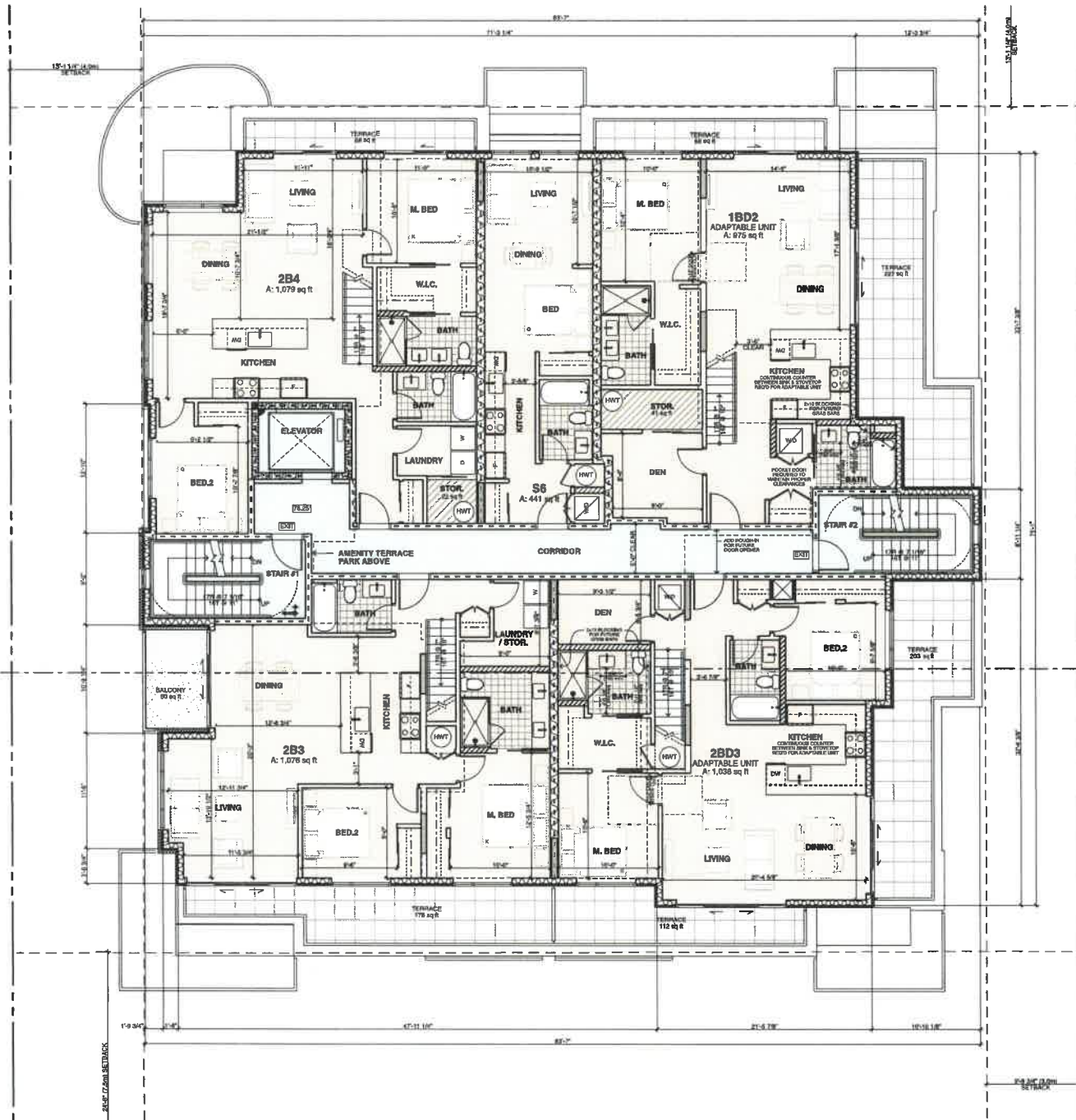
LEVEL 03-05

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PROJ #	1807	DRAWING NUMBER A3.05
SCALE		
DRAWN		
CHECKED		



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DP000396 (12)



5	DP SUBMISSION 5	JAN 20 2025
4	DP SUBMISSION 4	NOV 14 2024
3	DP SUBMISSION 3	OCT 12 2024
2	DP SUBMISSION 2	SEP 19 2024
1	ISSUED FOR DP	APR 09 2019

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ALL DIMENSIONS SHOWN ARE VERIFIED ON SITE
DATE OF VERIFICATION: 10/10/2024
BY: [Signature]

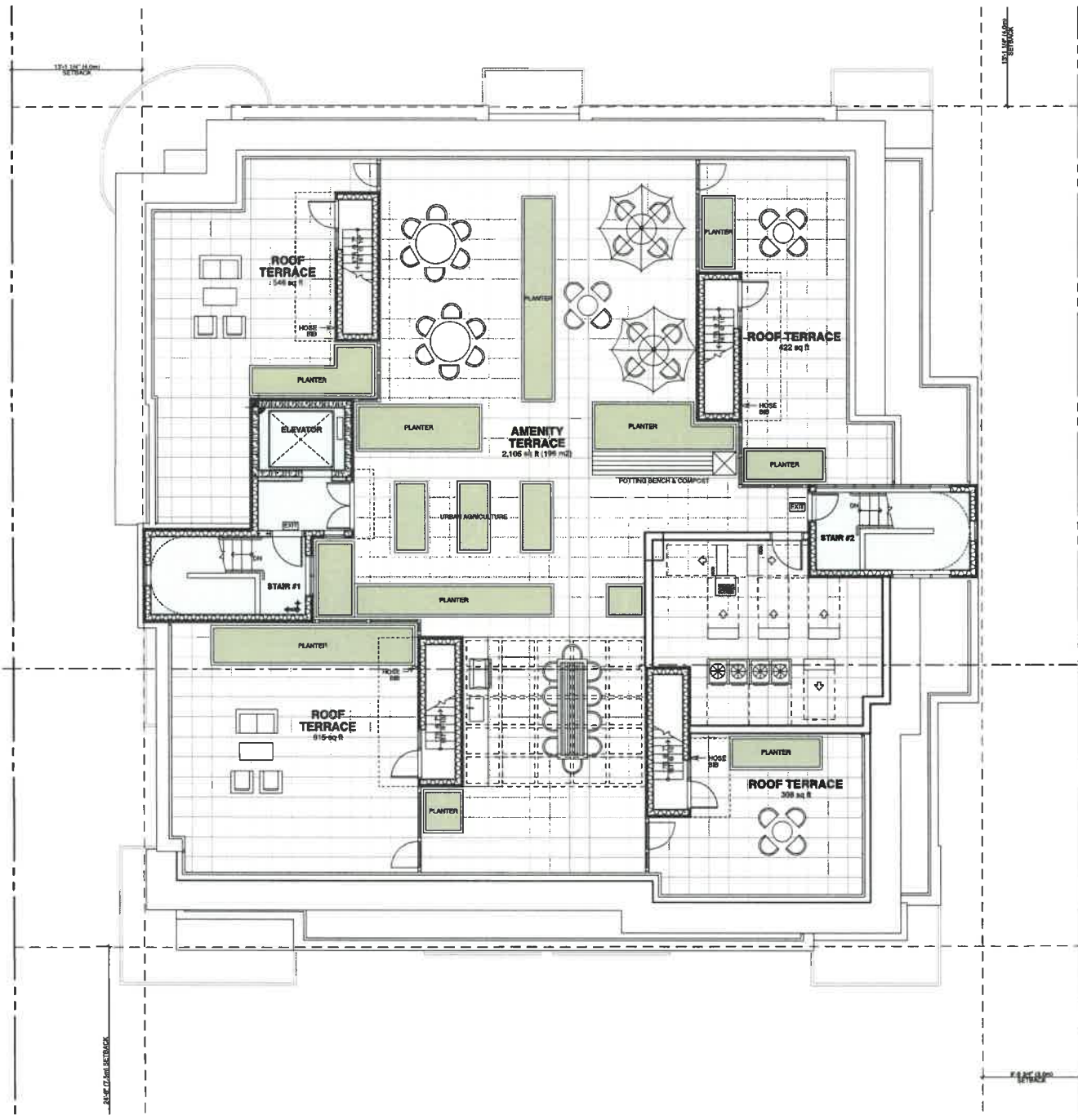
LEVEL 06

PROJECT #	1807	DRAWING NUMBER
SCALE		
DATE		A3.06
CHECKED		



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DP00396(13)



5	DP SUBMISSION 5	JAN 20 2013
4	DP SUBMISSION 4	NOV 20 2012
3	DP SUBMISSION 3	OCT 1 2012
2	DP SUBMISSION 2	SEPT 4 2012
1	ISSUED FOR DP	AUG 28 2012

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General Floor Plan
ROOF LEVEL

PROJ #	1807	DRAWN NUMBER
SCALE		
DRAWN		A3.07
CHECKED		



WEST ELEVATION - SHAUGHNESSY STREET



SOUTH ELEVATION - LANE

MATERIAL SCHEDULE		
ID	MATERIAL	COLOR
①	BRICK PORTLAND	- DPL ALABAMA B'WOOD - WHITE
②	VINYL WINDOWS INSUL GLASS TRANSLUCENT	- BLACK - WHITE - POLAR WHITE
③	PAINTED CONCRETE	A - BH HC-166 B - BH HC-05
④	CEMENTIOUS FABRIC	A - BH HC-166 B - BH HC-05
⑤	GUARD RAIL	- BLACK
⑥	METAL FLASHING	- BLACK
⑦	GLASS DOOR	- BH CC-64
⑧	ENTRANCE	- NATURAL WOOD

DP000396(14)



ONE SHAUGHNESSY
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2446 SHAUGHNESSY STREET
PORT COQUITLAM, BRITISH COLUMBIA

Revision History		
NO.	DESCRIPTION	DATE
6	DP SUBMISSION 5	APR 20 2025
4	DP SUBMISSION 4	NOV 25 2024
3	DP SUBMISSION 3	OCT 1 2024
2	DP SUBMISSION 2	NOV 1 2023
1	ISSUED FOR DP	2023
Prepared by: [Signature]		
Checked by: [Signature]		
Designed by: [Signature]		
Elevation WEST & SOUTH ELEVATIONS		
FIG. #	1007	DRAWING NUMBER
SCALE		
DATE		
CHECKED		
A4.01		



EAST ELEVATION



NORTH ELEVATION - ATKINS AVENUE

MATERIAL SCHEDULE		
ID	MATERIAL	COLOR
1	BRICK PORTLAND - SLATE	- PL. ALABASTER 6"X10"
2	WALL WINDOW NAIL GLASS TRANSLUCENT	- BLACK - LOUVE - POLAR WHITE
3	PAINTED CONCRETE	A - BH HC-64 B - BH HC-65
4	CEMENTOUS PLANK	A - BH HC-64 B - BH HC-65
5	GLAZED RAIL	- BLACK
6	METAL FLASHING	- BLACK
7	O.H. DOOR	- BH CC-64
8	ENTRANCE	- NATURAL WOOD

DP00396(15)



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PORT COQUITLAM, BRITISH COLUMBIA

5	DP SUBMISSION 5	JAN 20 2015
4	DP SUBMISSION 4	NOV 20 2014
3	DP SUBMISSION 3	OCT 2 2014
2	DP SUBMISSION 2	SEP 16 2014
1	ISSUED FOR DP	AUG 26 2014



EAST & NORTH ELEVATIONS

PROJ. #	1907	CONTRACT NUMBER
SCALE		
DRAWN		
CHECKED		

A4.02



D000396 (15)



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COMMITTEE MEMBER, COLORADO CHAPTER, AIA
OF THE ARCHITECTS • MEMBER, BOARD OF DIRECTORS
OF THE ARCHITECTS • MEMBER, BOARD OF DIRECTORS
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PROJ. #	1607	DATE: 05/10/2011
SCALE		A5.01
DRAWN		
CHECKED		



View @ North-East Corner

D00396(18)



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NO.	REVISION / REVISION	DATE
5	DP SUBMISSION 5	JAN 20 2023
4	DP SUBMISSION 4	NOV 20 2022
3	DP SUBMISSION 3	OCT 27 2022
2	DP SUBMISSION 2	SEPT 16 2022
1	ISSUED FOR DP	APR 08 2021

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 Bingham Hill Architects is a member of the B.C. Building Association (BCBA) and the International Association of Architects and Architects-in-Training (IAAAT).

VIEW @ NORTH-EAST CORNER

PROJECT NO.	1807	REVISION NUMBER
SCALE		
DRAWN		
CHECKED		A6.02

DP000396(197)



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PORT COQUITLAM, BRITISH COLUMBIA

NO.	REVISION / REVISIONS	DATE
5	DP SUBMISSION 5	JAN 20 2019
4	DP SUBMISSION 4	NOV 25 2018
3	DP SUBMISSION 3	OCT 2 2018
2	DP SUBMISSION 2	SEP 14 2018
1	ISSUED FOR DP	APR 26 2018

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DESIGNED BY: bingham+hill architects
DRAWN BY: bingham+hill architects
CHECKED BY: bingham+hill architects
DATE: 2018-01-19

VIEW @ WEST ELEVATION

PROJECT #	1807	DRAWING NUMBER
SCALE		A6.03
DRAWN		
CHECKED		



View @ West Elevation



View @ South-West Corner

DP00398 (20)



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 PORT COQUITLAM, BRITISH COLUMBIA

NO.	REVISION / COMMENTS	DATE
5	DP SUBMISSION 5	JAN 25 2025
4	DP SUBMISSION 4	NOV 25 2024
3	DP SUBMISSION 3	OCT 1 2024
2	DP SUBMISSION 2	SEP 16 2024
1	ISSUED FOR DP	JAN 29 2024

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VIEW:
VIEW @ SOUTH-WEST CORNER

PROJECT	1007	DRAWING NUMBER
SCALE		
DATE		
CHECKED		A6.04

PLANT LIST

SYM	QTY	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS
TREES					
ST	6	Street Tree	To be confirmed	7 cm cal. B&B	
AJ	2	Acer japonica	Japanese Maple	5 cm cal. B&B	
MS	6	Magnolia stellata	Star magnolia	4m Ht. Multiflora	
PO	4	Picea Omorica	Serbian Spruce	3M height. B&B	
CK	3	Cornus kousa 'Salem'	Kousa dogwood	4m Ht multi-stem. B&B	
PY	1	Prunus yedoensis	Yoshino Cherry	6 cm cal. B&B	Bee Friendly
SHRUBS					
AZ	193	Azalea japonica 'Gumpo White'	Japanese Azalea	#2 pot, 18" o.c.	Bee Friendly
B	65	Blechnum spicant	Deer Fern	#2 pot, 16" o.c.	
Cs	45	Cornus sericea 'Kelsey'	Dwarf red osier dogwood		
GS	105	Gaultheria shallon	Salal	#2 pot, 2' o.c.	
HS	3	Hibiscus syriacus	Rose of Sharon	#3 pot, 4' o.c.	Bee Friendly
Lp	59	Lonicera pileata	Box leaved honeysuckle		
RH	52	Rhododendron 'Blue Baron'	Rhododendron	#5 pot, 30" o.c.	Bee Friendly
Rh	7	Rhododendron 'English Roseum'	Rhododendron	#5 pot, 48" o.c.	Bee Friendly
SH	114	Sarcococca hookeriana Humilis	Sweet box		
Sp	6	Salix x 'Flame'	Flame Willow		
⊗	140	Taxus media x Hicksii	Yew hedge	4' ht, rootball to rootball	Male Plants Only
FERNS, PERENNIALS, GROUNDCOVERS, GRASSES & VINES					
⊕	144	Cotoneaster dammeri	Bearberry	#1 pot, 12" o.c.	
L	158	Liriope muscari 'Big Blue'	Lilyturf	#1 pot, 16" o.c.	
Δ	29	Lonicera japonica 'Halliana'	Japanese Honeysuckle	#1 pot	
P	208	Pachysandra terminalis	Pachysandra	#1 pot, 12" o.c.	
TEMPORARY URBAN AGRICULTURE MIX					
⊗	20	Allium tuberosum	Dwarf Chives	4" pot, 10" o.c.	Bee Friendly
⊗	20	Achillea millefolium 'White Beauty'	White yarrow	4" pot, 10" o.c.	Bee Friendly
⊗	20	Origanum vulgare	Oregano	4" pot, 10" o.c.	Bee Friendly
⊗	20	Salvia officinalis	Sage	4" pot, 10" o.c.	Bee Friendly
⊗	20	Rosmarinus officinalis	Rosmary	4" pot, 10" o.c.	Bee Friendly
⊗	20	Thymus vulgaris	Woolly Thyme	4" pot, 10" o.c.	Bee Friendly

NOTES

Planting Note

1. All work shall meet or exceed the requirements as outlined in the current Edition of the Canadian Landscape Standard.
2. Plant sizes and related container classes are specified according to the Canadian Landscape Standard current Edition. For container classes #3 and smaller, plant sizes shall be as shown in the plant list and the Standard; for all other plants, both plant size and container class shall be as shown in the plant list. Specifically, when the plant list call for #5 class containers, these shall be as defined in the Canadian Nursery Stock (ANSI) Standard.
3. All trees to be staked in accordance with BCNTA Standards.
4. ALL STREET TREES Install 8" x 24" Deep Root Barrier centred on each tree between tree pit and sidewalk (ON BOTH SIDES: CURB AND SIDEWALK).

Irrigation Notes

1. A High Efficiency Irrigation System to be provided for all 'Soft Landscape Areas' shown on the drawing.
2. Irrigated areas to be installed as a design build irrigation system from the stub outs provided. Provide submittals of design to consultant at least one week prior to installation and as-built drawing within one month of substantial performance.
3. The irrigation system design and installation shall be in accordance with the Irrigation Industry of Canada Standards and Guidelines.
4. Irrigation sleeves to be sized accordingly - sleeve diameter to be twice the size of the pipe it carries.
5. Provide a separate line for the planter pots (5) to be operation year round (for planters on rooftop)

LEGEND

Detail	Symbol	Description
SURFACING		
		CIP Concrete BROOM FINISHED PATHWAYS 100mm THICK, SAWCUT AS PER PLAN.
		Linear Concrete Pavers
		Permeable Pavers AquaPave Standard by Abbotsford Concrete Charcoal, Herringbone Paving Pattern
		Concrete Pavers
		Hydrapressed Slabs 18" x 18" Colour: Natural
		Drain Rock
		Sodded Lawn
		Shrub Planting
		Hedge
FURNISHING		
		Custom Bench
		Potting Bench
		Compost
		Class B Bike Rack
		Pretabricated Metal Planter
All other furniture are shown for scale reference only.		
MECHANICAL & ELECTRICAL		
		Overhead Light
		Recessed Wall Light
		Irrigation Stub out
		Hose bib
GRADING AND DRAINAGE (in Meters)		
	+BG xx.xx	Building Grade
	+HBG xx.xx	Interpolated Building Grade
	+EG xx.xx	Existing Grade
	+FG xx.xx	Finish Grade
	+FFE xx.xx	Finish Floor Elevation
	+TW xx.xx	Top of Wall Elevation
	+BW xx.xx	Bottom of Wall Elevation
	+TS xx.xx	Top of Stair Elevation
	+BS xx.xx	Bottom of Stair Elevation
	+TC xx.xx	Top of Curb Elevation
	4.5%	Slope Direction & Percentages

04 2019-10-02 Released for DP
 03 2019-09-04 Released for DP
 02 2019-04-05 Issued for DP
 01 2018-12-17 Tree Management Plan
 no. | date | item
 Revisions:

Dumas Kruk Ltd.
 102 - 1807 West 5th Avenue
 Vancouver BC V6J 1N5
 T: 604 684 4811
 F: 604 684 0877
 www.dklb.ca

Project:
**Shaughnessy and Aldins
 by Kulak,
 Perle Coquilham, BC**

Drawn by: XL
 Checked by: PK
 Date: Oct 02, 2019
 Scale: NTS
 Drawing Title:

Project No.:
18084
 Sheet No.:

L-1.0

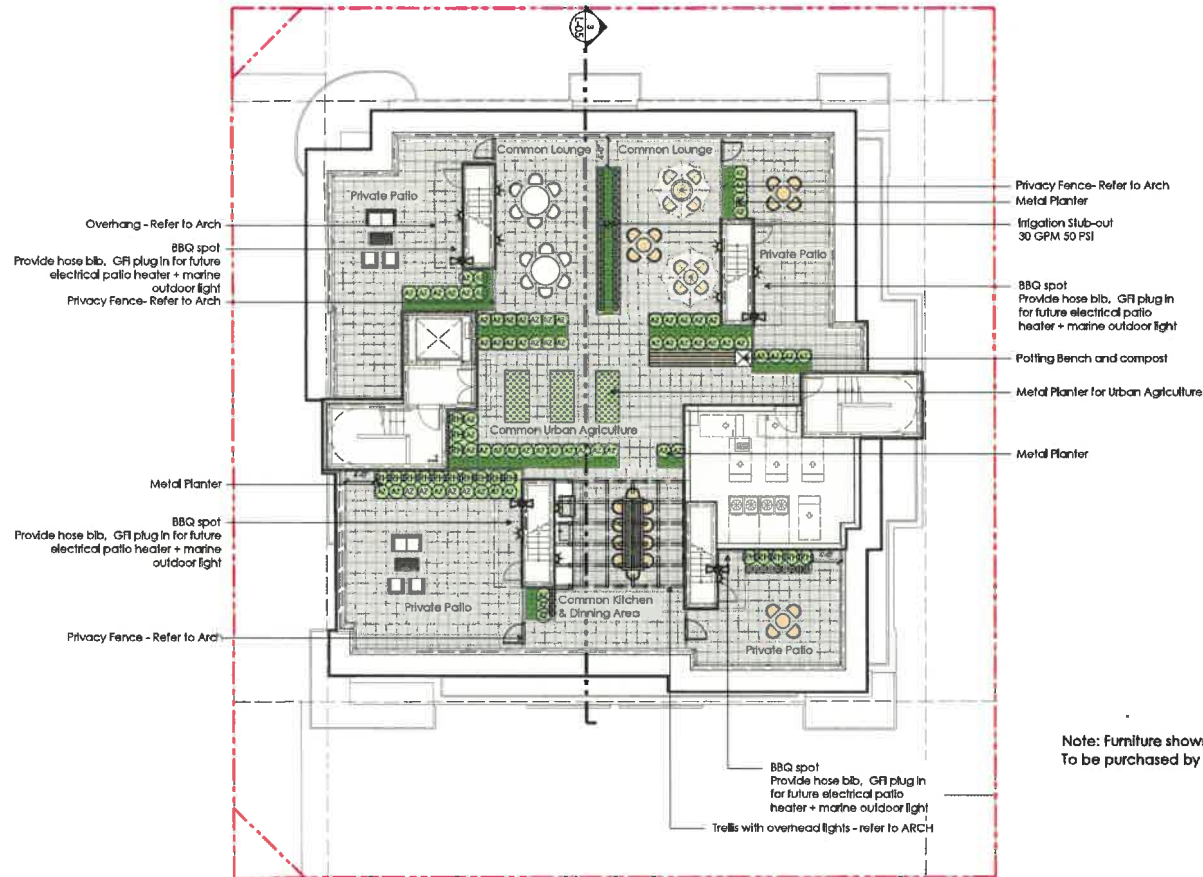


durand kreuk ltd.
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Vancouver BC V6J 1N5
t: 604 684 4811
f: 604 684 0577
www.dklbc.ca

Drawn by:	XL
Checked by:	PK
Date:	2019-10-02
Scale:	1/8" = 1'-0"
Drawing Title:	

Project No.:
18084

1-1.2



Note: Furniture shown for scale only.
To be purchased by owner / strata / resident.



DP000396 (25)

06	2019-10-02	Revised for DP
05	2019-09-12	Soil Depth Diagram
04	2019-09-06	Revised for DP
03	2019-04-25	Soil Depth Diagram
02	2019-04-05	Issued for DP
01	2018-12-17	Tree Management Plan
no.:		date:
Revisions:		Item:

dk Diemata Korak Ltd.
102 - 1102 West 10th Avenue
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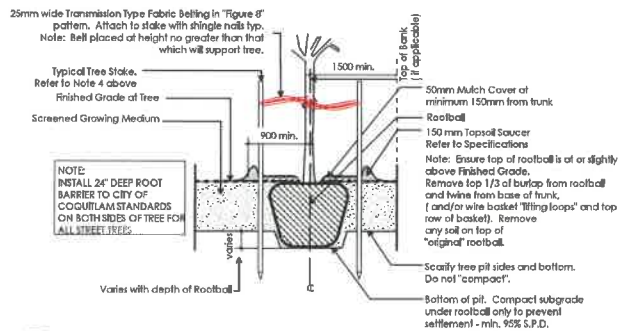
Project:
**Shaughnessy and Atkins
by Kulak,
Port Coquitlam, BC**

Drawn by:	XL
Checked by:	PK
Date:	2019-10-02
Scale:	1/8" = 1'-0"
Drawing Title:	

Roof Landscape Plan

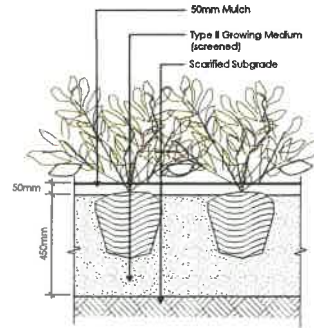
Project No.:
18084
Sheet No.:

1-1.3



- General Notes:
1. Do not cut Tree Leader.
 2. Protect tree from damage during planting. Ensure rootball protected from Sun, frost or Desiccation.
 3. Ensure tree location does not conflict with Underground Services. "Call before digging".
 4. All street trees to be staked with 2 x 100mmØ x 2.5m long. Minimum depth of stake embedment is 1m. Ensure stakes do not penetrate or damage rootball. Ensure all stakes are aligned parallel to sidewalk/road on tree pit centreline.
 5. Provide min. 5 cubic meters of growing medium per tree.
 6. Refer to Growing Medium Chart below for surface area depth of Growing Medium.

Depth of Growing Medium Total (mm)	Area (M2)	Variation 1 Size of Surface Strip	Variation 2 Size of Surface Circle
450	11.11	3.3 M x 3.3 M	3.80 M Ø
600	8.33	2.9 M x 2.9 M	3.25 M Ø
750	6.67	2.6 M x 2.6 M	2.90 M Ø

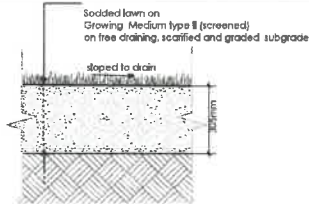


1 Typical Tree Planting on Grade
L-3.1 NTS

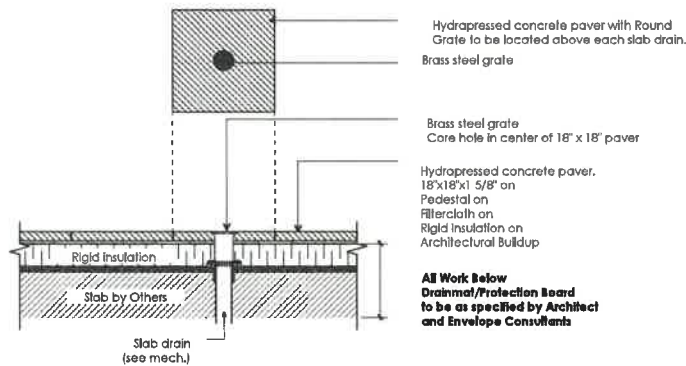
2 Typical Shrub Planting on Grade
L-3.1 Scale 1:10

Hydressed Concrete Slab Note:
01. Cut all Pavers as required to maintain pattern/layout as shown on Plans.
02. All pavers to be cut with Concrete Stone Saw, no guillotine cuts will be allowed.
03. Min. paver cut to be no less than 1/3 of original size.

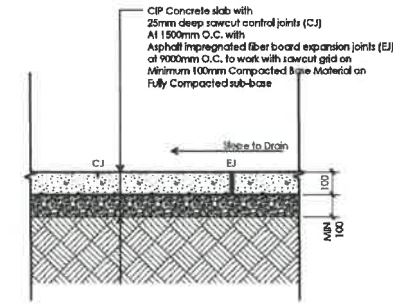
- Notes:
- 1) See specifications for all sodded lawn equipments.
 - 2) Refer to landscape plan for lawn area grading and elevation information.
 - 3) Ensure entire lawn area is free of existing debris such as organic material (lumps/rocks/weeds) and rocks etc. Ensure level and consistent scarified sub-grade throughout entire lawn area.



3 Lawn on Grade
L-3.1 Scale 1:10



4 Hydressed Concrete Pavers on inverted Roof
L-3.1 Scale 1:10



5 CIP Concrete on Grade
L-3.1 Scale 1:10

04 2015-10-02 Released for DP
03 2015-09-04 Released for DP
02 2015-04-05 Issued for DP
01 2015-12-17 Tree Management Plan
no.: date: Item:
Revision:



Project:
**Shaughnessy and Atkins,
Port Coquitlam, BC**

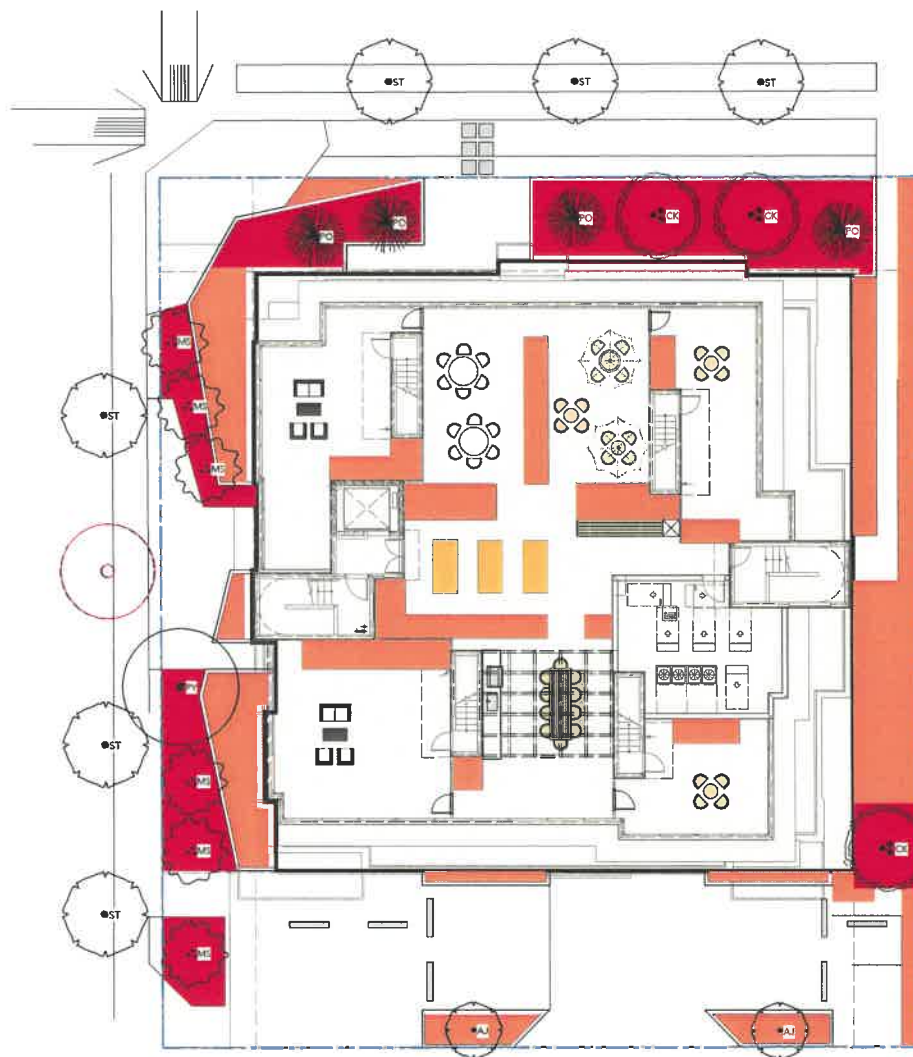
Drawn by: ML
Checked by: PE
Date: Oct 02, 2019
Scale: As Noted
Drawing Title:

Landscape Details

Project No.:
18084
Sheet No.:

L-3.1

1800396(26)



6" Soil Depth	L1: 10.8 sq.ft.
18" Soil Depth	Roof: 72.3 sq.ft.
24" Soil Depth	L1: 1292.1 sq.ft. ROOF: 547.7
36" Soil Depth	L1: 1297.0 sq.ft.



04	2019-10-02	Revised for DP
03	2019-09-12	Soil Depth Diagram
04	2019-08-04	Revised for DP
03	2019-06-25	Soil Depth Diagram
02	2019-04-03	Issued for DP
01	2018-12-17	Tree Management Plan
Rev:	date:	Rev:

DK CONSULTING
 100-1107 West 5th Avenue
 Vancouver BC V6J 1N5
 T: 604 684 4811
 F: 604 684 0277
 www.dkbc.ca

Project:
**Shaughnessy and Atkins
 by Kulak,
 Port Coquitlam, BC**

Drawn by:	XL
Checked by:	PK
Date:	2019-10-02
Scale:	1/8" = 1'-0"

Drawing Title:
Soil Loading Diagram

Project No.:
18084

Sheet No.:

L-0.1

TP 000396 (20)

Schedule A

Energy Conservation:

Conservation Measure	Verification Method
All roofs are to be cool-roof as per ASHRAE 90.1-2007 5.5.3.1 Exception 'A': 17 psf rock ballast to minimize solar heat gain	BP stage; written confirmation by Architect along with staff review of BP submission
Landscaping throughout the site to provide shelter for pedestrians and to maximize shading of parking space pavement	DP stage; staff review of landscape plan
Window placement to provide opportunities for natural light	DP and BP stage; staff review of building plans
Windows and skylights are to be high efficiency Low-E glazing to reduce solar heat gain and provide natural lighting	BP stage; written confirmation by Architect along with staff review of BP submission
Lighting that is downward casting full cut-off fixtures to reduce glare and spill-over to adjacent areas	BP stage; written confirmation by developer

Water conservation:

Conservation Measure	Verification Method
Native and drought tolerant plant selections are to be used for the majority of the project to reduce water consumption	DP and BP stage; staff review of landscape drawing, site inspection by Landscape Architect and City Arbourist
High efficiency landscape irrigation system with rain sensors is to be installed	DP and BP stage; staff review of landscape drawing, site inspection by Landscape Architect and City Arbourist
Stormceptors and oil interceptors will be installed to improve stormwater quality	BP stage; staff review of building plans and inspections
Soft landscaping areas provided to reduce stormwater flows	DP stage; staff review of landscape plan

GHG Reduction:

Conservation Measure	Verification Method
Provision of bicycle racks to promote alternative transportation	DP and BP stage; staff review of building plans

per OCP Sec. 9.11 Environmental Conservation DPA designation

SCANNED



MEMO

DATE: April 8, 2019
PROJECT NO: 04-19-0021
PROJECT: 2444 Shaughnessy Street – Port Coquitlam, BC
SUBJECT: Vehicle Parking Review

CITY OF PORT COQUITLAM
RECEIVED - PLANNING

APR 09 2019

TO: Patrik Kutak
Kutak Development Services

FILE: _____

PREPARED BY: Simon Button, P.Eng.
REVIEWED BY: Paul Dorby, M.Sc.

1. INTRODUCTION

Kutak Development Services is seeking a Development Application for a residential project located at 2444 - 2448 Shaughnessy Street in Port Coquitlam, BC. In total, 32 residential units are planned, over six levels.

Residents' parking is planned to be provided through a mechanized parking system, while conventional parking spaces will be provided for visitor parking. A mechanized system is required for this site given its small footprint along with the flood plain location, and as such, a conventional parkade design will be impractical / inefficient for the project to achieve its allowable density. The system also minimizes excavation depth and the volume of concrete required for the parkade which has environmental benefits including reduced carbon dioxide emissions from cement production.

The City of Port Coquitlam (City) raised a number of questions regarding the proposed mechanized parking system and the purpose of this memo is to provide:

1. Background information regarding the use of mechanized parking systems in Canada and abroad.
2. A description of how the mechanized parking system will operate.
3. A comparison between the parking space dimensions and the City requirements.
4. A description of how electric vehicle charging stations can be used.
5. An operational review of the proposed parking layout.

2. MECHANIZED PARKING SYSTEM - BACKGROUND

There is a variety of equipment available that can be categorized as 'mechanized parking systems'. The equipment ranges in terms of automation from vehicle elevators which require the driver to operate the elevator to fully automated systems where the driver steers the vehicle into a transfer area, exits the vehicle and the system parks the vehicle.

Mechanized parking systems are used to minimize the area / volume required for storing parked vehicles by allowing drivers' to exit their vehicle before it is parked in its final location. Minimizing the space required for vehicle parking is particularly useful on smaller sites, sites in dense urban locations and sites where excavation depth is impractical / limited.

Such systems are most commonly used in Europe, Asia and Central America; however, they are being increasingly used in Canada for the aforementioned reasons. Two of the leading manufacturers of mechanized parking systems both have offices located in Canada and have been operating here for over 40 years. Table 1 notes some of the development projects in the Lower Mainland which have implemented and / or considered mechanized parking systems. The parking systems proposed in this project are categorized as 'semi-automated'

Table 1: Example Mechanized Parking System Projects

PROJECT	NUMBER OF PARKING SPACES	PARKING SYSTEM	CURRENT STATUS
Jamleson House	240	Fully-automated	Constructed
Broadway Hotel	60	Semi-automated	Design development
E 3 rd Avenue Commercial/Office Development	30	Car elevator	Development approvals
W 10 th Avenue Commercial/Residential Development	9	Car elevator + turntable, or Semi-automated + turntable	Design development
W 6 th Avenue Residential Development	6	Car elevator + semi-automated	Constructed
Main Street Commercial/Office/Residential Development	10	Car elevator	Development approvals
Seymour Street Office Development	20	Car elevator	Constructed
West Pender Hotel	22	Car elevator	Development approvals
Lonsdale Mixed-use Development	<40	Fully automated, or Car elevator + semi-automated	Design development

3. PROJECT DESCRIPTION

The development is located at the southwest corner of the Shaughnessy Street & Atkins Street intersection and will entail 32 residential units, ranging from studio to three bedroom units. Figure 1 shows the current site plan with the driveway located at the rear lane. Six visitor parking spaces are proposed at grade. A parking lift would be installed under the two visitor spaces (west side of driveway); providing two residential parking spaces underneath these visitor spaces (see orange box below).

Within the building, the residents parking arrangements will be in four pods with each able to store 11 vehicles (highlighted in red). This brings the total vehicle parking supply to 52 spaces. Additional details regarding the parking systems are provided in Section 4.

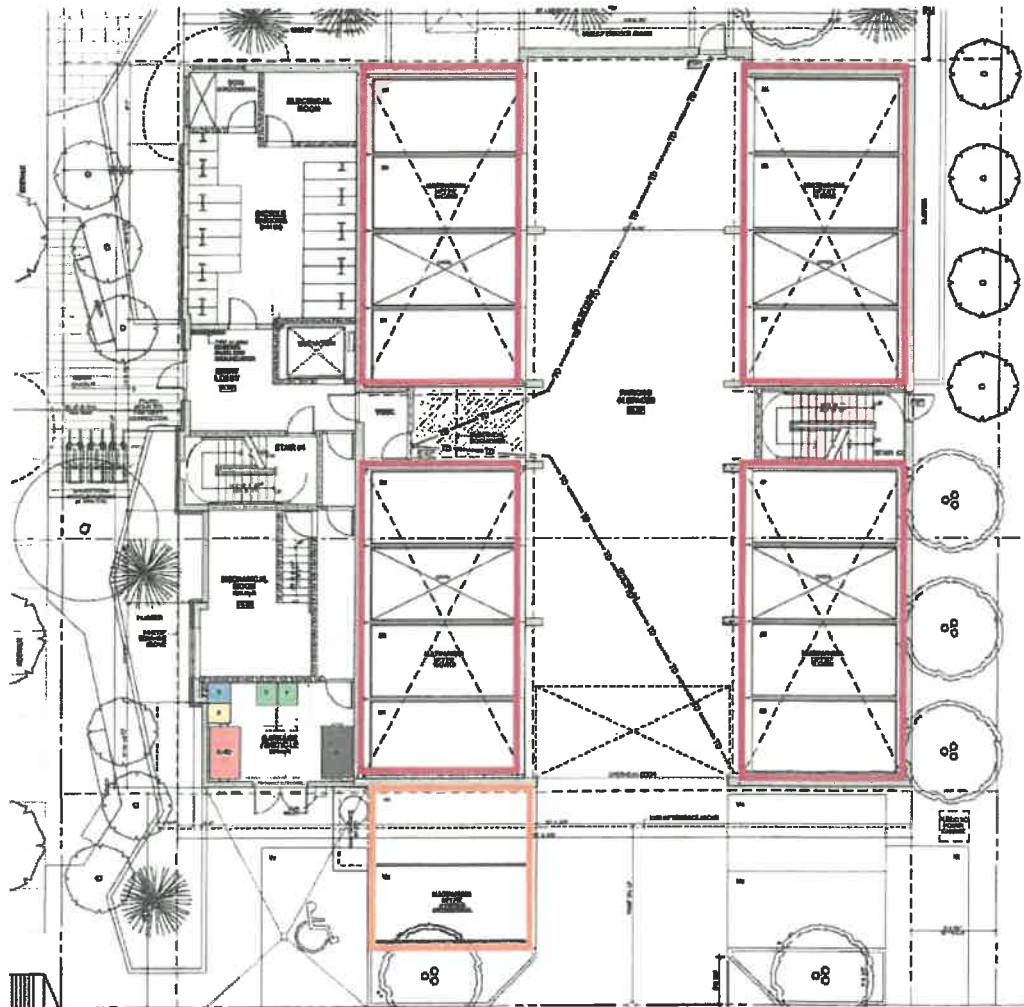


Figure 1: Site Plan

4. BYLAW REQUIREMENTS

4.1 Vehicle Parking

The Parking and Development Management Bylaw, 2018 Bylaw No. 4078 from the City outlines the typical vehicle parking requirements for development projects. Table 1 summarizes the City's minimum required parking supply for residents (43 spaces) and visitors (6 spaces). The development will satisfy this minimum requirement.

Table 1: Bylaw Vehicle Parking Requirement

REQUIREMENT TYPE	UNITS	BYLAW RATE	BYLAW REQUIREMENT
Studio	8	1.0 per dwelling	8
One bedroom	9	1.3 per dwelling	12
Two bedrooms +	15	1.5 per dwelling	23
Visitor	32 (sum of above)	0.2 per dwelling	6
TOTALS	32		49

The City also requires standard parking spaces to be 5.5m long x 2.7m wide x 2.1m high and allows up to 25% to be designated as small car spaces at 5.0m long x 2.5m wide x 2.1m high.

4.2 Bicycle Parking

The City of Port Coquitlam requires one long-term bicycle parking space per residential unit and six short-term spaces per building containing more than 20 residential units. The development will exceed the minimum long-term bicycle parking requirement by providing **1.25 spaces per unit** or **33 spaces**. Spaces will be located at-grade which is the most convenient location to the street, while six short-term spaces will be located at the front of the building.

4.3 Loading

The City does not require any loading spaces for the proposed development.

5. PROPOSED PARKING SYSTEM

5.1 Operations

Each of the four parking pods inside the building will be four spaces wide and three spaces high (one at-grade, one above grade and one below grade). Figure 2 shows the profile of one of the parking pods which will each be four spaces wide. The parking system saves space by moving the parking platforms horizontally and vertically to store the vehicle. One space needs to remain empty at all times in order for the system to function. Therefore, each four by three grid can provide eleven parking spaces ($4 \times 3 - 1 = 11$). Each vehicle will be assigned a designated a parking space.

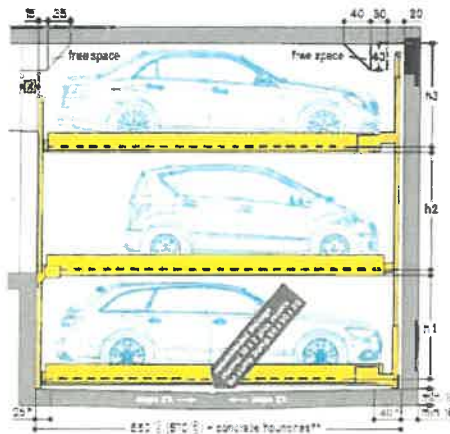


Figure 2: Potential Parking System (Profile View)

To park a vehicle:

- Steer towards allocated parking space;
- Open the door through either an RFID user terminal (mounted to the pod – an example is shown in **Figure 3**) or Smartphone App;
- Steer vehicle into the vacant parking platform, turns off vehicle engine and exit pod; and
- Close door through either an RFID user terminal or Smartphone App.

To retrieve a vehicle:

- A driver requests their vehicle through either an RFID user terminal or Smartphone App;
- The pod will move the driver's vehicle to ground level (if not already) by moving the platforms horizontally and vertically;
- A driver enters the vehicle and exits the pod; and
- A driver closes the door through either an RFID user terminal or a Smartphone App.

Throughout the operation, the driver parking/retrieving their vehicle will have a line of sight of the parking pod which will prevent conflicts.



Figure 3: Example RFID User Terminal

Two parking lifts (Figure 4) which are each two spaces wide will be installed the visitor parking spaces highlighted in orange in Figure 1; providing four underground parking spaces under the visitor parking. The parking lifts are a simpler mechanism than the pods utilized within the building and have some differences. While not in operation, the roof of the parking lift will be at-grade, providing a surface for visitor parking. When a resident parks/retrieves their vehicle they follow a similar process to the process described above. To park a vehicle, the parking lift (including a visitor's car if it is parked) is raised such that a resident's car can be parked on the lower level. The parking lift then lowers, such that the roof (and the visitor's car) is brought down to grade level.



Figure 4: Example Parking Lift (one space wide)

5.2 Parking Space Dimensions

The exact parking system model proposed for this project has not yet been finalized. Table 2 summarizes the anticipated minimum dimensions and largest vehicles the system can accommodate.

Table 2: Parking Space Dimensions

DIMENSION	MINIMUM SPACE DIMENSION	MAXIMUM VEHICLE DIMENSION
Width	2.7m	1.9m
Length	5.7m	5.2m
Height	2.1m	2.05m

Table 2 compares the proposed parking space sizes with the City's Bylaw parking space dimensions.

Table 2: Proposed versus Bylaw Vehicle Parking Space Dimensions

DIMENSION	PROPOSED	BYLAW
Space Width	2.7m	2.7m
Length	5.7m	5.5m
Height	2.1m	2.1m

Key findings include:

- Overall the proposed and bylaw dimensions are very similar; and,
- The maximum vehicle dimensions are less than the physical space dimensions. This is to be anticipated as this is the case with regular parking spaces as well since some buffer space is needed. The suitability of the maximum vehicle height and length are discussed in the following sections. Very few cars exceed the maximum 1.9m width.

5.2.1 Vehicle Height

The maximum vehicle height the system can accommodate is anticipated to be 2.05m. The vehicle dimensions included in the Canadian Vehicle Specifications¹ show that the average vehicle height for all vehicles available for sale in Canada is 1.67m. The 2.05m maximum vehicle height represents the 91st percentile of all vehicles available for sale in Canada and not the actual vehicles sold. The average and percentile values may be skewed by taller yet less frequently purchased vehicles.

Examples of vehicles that are within the 2.05m height limit include the: Land Rover Range Rover, Chevrolet Colorado, Chevrolet Silverado, GMC Sierra and the Cadillac Escalade. Vehicles that exceed the 2.05m height limit are primarily limited to cargo vans such as the: Ford Transit Wagon, GMC Savana Cargo Van, and the Mercedes-Benz Sprinter 2500 Cargo/Passenger Van.

Given the above, the 2.05m vehicle height is not anticipated to be an issue for the vast majority of future residents.

5.2.2 Vehicle Length

The maximum vehicle length the system can accommodate is anticipated to be 5.0m. In 2013, Bunt completed a vehicle length survey of 394 on-street parked vehicles in the City of Coquitlam. The survey found that 84% of vehicles are 5.0m long or less and that the average vehicle length is 4.7m.

¹ The Canadian Vehicle Specifications consists of a database of original vehicle dimensions. The database is compiled annually by the Collision Investigation and Research Division of Transport Canada. The 2018 vehicle model year was reviewed for this study.

This indicates that the proposed parking system which can accommodate vehicles up to 5.0m long can accommodate the large majority of vehicles in the local area. Vehicles that exceed the 5.0m length limit typically include large SUVs, cargo vans and extended pickup trucks.

5.3 Electric Charging

Each parking platform can be equipped with a vehicle charging station. The proposed parking system is not anticipated to limit any City or developer vehicle charging requirements.



Figure 4: Electric Charging Station on Vehicle Platform

5.4 Maintenance

The developer will maintain ownership of the parking system to ensure proper maintenance. The developer will contract with a local certified company to conduct regular maintenance on the system. The developer will charge the strata a monthly rate per parking space used to cover maintenance costs. Maintenance costs are currently estimated at \$30 to \$50 per month per space.

5.5 Training

All parking system users will be residents and will receive training before they can use the parking system.

5.6 Emergency Access

The systems are built with multiple safeguards to ensure safe operation. In the scenario where an individual is left within the parking system, the gates can be manually opened from the inside. In the scenario where the electrical supply is disconnected, the gates can be manually unlocked using a key and opened.

5.7 Design Approval

Both manufactures currently being considered for the parking system are based in Germany where construction of the systems will also occur. The shop drawings and loads imposed on the building envelope by the system will be approved by an engineer licensed to practice by Engineers and Geoscientists British Columbia.

6. QUEUING OPERATIONS

The proposed 32 residential units are anticipated to generate up to 10-15 vehicle trips (inbound and outbound) during peak hours. This equates to one vehicle either entering or exiting the site every four to six minutes.

The process to park a vehicle typically takes less than one minute to complete.

Assuming a Poisson arrival pattern, even during peak hours, the odds of there being more than one entering vehicle is less than 5% which equates to less than three minutes. Therefore, due to the limited vehicle usage, the proposed parking system is not anticipated to cause significant queuing. If queuing does occur, with multiple vehicles entering at the same time, it will occur within the parkade and not onto the lane.

The potential for queuing is substantially less than some other mechanized systems such as car elevators which have a single entry/exit location. A single car elevator can typically accommodate approximately 30 parking spaces until a vehicle queue forms during peak hours. In addition, systems that have a single shared entry/exit frequently have conflicting vehicle movements inbound/outbound. The proposed system does not present these issues.

11. PARKING SYSTEM - OVERVIEW

The Klaus Parking System is an innovative approach to motor vehicle parking and we are excited to introduce it to Port Coquitlam residents. With respect to the design of the multi-family building at 2444-2448 Shaughnessy Street in Port Coquitlam, the Parking System offers efficient use of space in the general parking areas by stacking motor vehicles on top of each other when not in use.

While this type of parking system is unique to Port Coquitlam, it is by no means unique product. Klaus Multi-parking, along with many of its competitors, has been a leader in the design and manufacturing of parking systems in over 65 countries worldwide for over 40 years. The parking solutions can be found in single family homes, commercial, residential, and industrial buildings, including several projects in the Lower Mainland and across equipment.

Pertaining specifically to the proposed project at 2444-2448 Shaughnessy Street, the Klaus Multi-Parking System is intended to solve parking limitations on this site specifically:

1. The inefficiency of excavating conventional underground parking structure and the myriad issues associated with having that structure in a flood plain. The Parking System allows the Developer to meet or exceed the City residential, handicap, and visitor parking requirements for the site's designated FSR.
2. Efficient use of space within the parking area by stacking vehicles when not in use. In this instance, 4 Klaus Multi-Parking systems will allow for 44 parking spaces in the place of 16 traditional stalls.
3. The Parking System mitigates many of the challenges faced with traditional multi-family parking by eliminating parking ramps, turn radius issues, and parking width restrictions. In some instances, it could be argued that residents can be in and out of the parking garage faster than most traditional underground parkades.
4. The gated Multi-Parking System provides an additional layer of vehicle security.
5. The parking system has much reduced carbon footprint as there is significantly less energy used to creating the cavity and provides almost three times the parking spaces compared to a conventional parkade. The energy used for moving the platforms is minimal and where possible hydraulics and gravity does the work.

This car parking system is safe, reliable, secure and convenient. For those readers unfamiliar with how it operates, let me also clearly state that it is impossible for people to be accidentally trapped within the machine or to fall into the pit platforms. This parking system machine is used worldwide including in Canada and USA.

The parking system machine has its end-users in mind. All and ONLY end users/patrons will be trained and authorized to use the machines. While the training to using the machine is simple, it reinforces key principles of community, curtesy, responsibilities and vigilance.

The project will have four (4) parking machines with 11 car capacity each. A patron will be assigned and connected to a specific platform within a specific machine via RFI reader. So every specific patron will soon become intimate with the process and where their car ends up. Every specific platform can only be 1 space away from their default resting space. The machine can only operate one platform at a time. The machine only operates when the RFI and key are set to ON, which is done by the operator outside the machine. The platforms only move behind closed gates and the operator engaging the ON button.

11. PARKING SYSTEM – OVERVIEW continued...

If a patron forgot something in the car and needs to retrieve it, they will go through the similar procedure to retrieve the vehicle, except driving the vehicle out of the platform.

A serious safety features either included as standard or as added supplements will be installed by the developer, they include the following:

1. Standard Features:
 - a. A reset button on main level at rear wall – this is in place, if the parking sequence is unfinished by previous patron OR there was a power disruption that prevented completion of a parking sequence. This will reset the program and patron will inspect the platform on the way to the rear button, press the button if all ok, exit the machine, and engage the ON button at the front controller to complete the last parking sequence – closing the gate. Next Patron with their unique RFI id will initiate their parking sequence, thus retrieving their platform to the main level and opening the gate upon completion.
 - b. A manual disconnect lever – this will open the gate of the machine from the inside. In the unlikely event that someone finds themselves on the inside of the machine, a person can open the gate manually and exit. The machine will require a reset before it can be operated again.
2. Kutak Supplemental features:
 - a. A wide lens camera will be installed on each level on the inside of the machine connected to the central monitoring system. Cameras will be working in tandem with a simple intercom also connected to the same central monitoring system. The drive isle will also be monitored – This is in place to ensure no one intentionally tries to stay behind in the vehicle to entrap themselves or if a driver forgets someone in the car, central security can inform the emergencies and guide the individual of what to do. It also serves as evidence for insurance reasons.
 - b. An intercom at each level of the inside of the machine and one besides the machine controls outside of the machine – as per above
 - c. Additional battery packs in case of power outage.
 - d. Additional zone of sprinkler coverage to exceed NFPA13, one at each level, please refer to sprinkler concepts.

A separate report by Bunt and Associates is prepared and included in the submission.

11. PARKING SYSTEM – Q & A

1.1 Design and Function

Q – In the event of a power failure, what happens? Can I get my car?

A – the parking machines do not operate without power, there is an ability to manually open the gate(s) should someone require to get in or out of the machine. You will not be able to retrieve your vehicle while there is no power to the machines.

Q – Are there any special lighting requirements in the event of a power failure?

A – the manufacturer does not require any special lighting for the machine in an event of power failure, BUT the developer will provide battery pack exit lighting for any patron who may have been in mid-parking sequence. The parking machines are gated so no one can actually be inside unless they are in mid-parking sequence.

Q – Do the Klaus Parking Systems require any special ventilation for the pit designs?

A – the equipment has been designed to operate between 5C and 40C with 50% atmospheric humidity, unless the site conditions vary from that manufacturer does not require any special ventilation for the machine in the pit, BUT the developer will provide additional CO monitoring and fresh air intake and exhaust of the pits.

Q – Is the Klaus Parking System seismically designed?

A – base building structural engineer will determine the seismic bracing with respect to BC Building code 4.1.8.18: Elements of Structures, non-structural components and equipment. Klaus Parking System will be signed off by BC P.eng for conformance to manufacturer's installation.

Q – Is there access to the Pit level?

A – No, other than on the platform. Only authorized and specialized personnel can override the machine to operate the platforms, this is only done during maintenance and repairs.

Q – How does a user operate the parking system?

A – a user has an assigned RFI and key, the user has been trained and authorized to use the machine. The steps are simple – drive in front of the machine, get out of the car to activate the parking sequence – a specific/assigned platform arrives at the entry level, gate opens and patron either enters or retrieves their car, then completes the sequence by pressing/turning key to close the gate to get it ready for the next patron. It is further answered in Bunt Report.

Q – Can any person operate the Klaus Parking System without training?

A – no, every user will be adequately trained and authorized to use it.

Q – Does the Klaus Parking System provide security to motor vehicles?

A – since the vehicles are stowed away behind a gate AND in plain sight, also the developer will include a recorded/monitored surveillance of the parking machines from inside and out.

11. PARKING SYSTEM – Q & A continued...

Q – What types of cars will the Klaus Parking System accommodate?

A- majority of cars, SUV, Vans and compact trucks. Further answered in Bunt report.

1.2 Safety and Regulatory

Q – Can I get out if the sliding door shuts by accident?

A – It is not possible for the door to close by accident, a key/RFI reader has master control over the current operation. There is a manual disconnect and ability to open the gate from inside should that ever happen.

Q – A BC registered Engineer will be required to sign off that the design and operation of the Klaus Parking System meets local and provincial requirements. Do you know which Engineer will be responsible for this sign off?

A – Ryan McKenzie, President of Klaus Multiparking North West is a registered Peng in BC and he will sign off.

Q – Is the Klaus Parking System CSA approved?

A – Yes.

Q – Is it possible to fall off the lift or would there be an approved guardrail in place to prevent accidental falling?

A – it is not possible to fall to the pit as the parking system ensures that the adjacent platforms are at that level.

Q – Does the Klaus Parking System need to have fire sprinklers?

A – the manufacturer has provisions to accommodate sprinkler and other piping within the machine, our base building will exceed the NFPA13 by adding additional heads for the fact that more vehicles are stacked in one area.

11. PARKING SYSTEM – Q & A continued...

1.3 Maintenance

Q – What is the anticipated maintenance of the Klaus Parking System?

A – the parking system will be maintained by a local authorized installer of the parking system. The developer will remain involved in the project to ensure that twice yearly inspections are adhered to and that patrons are able to get prompt response in case of emergencies or breakdowns.

Q – Is Maintenance of the Klaus Parking System handled locally?

A – Yes, by the company that installed it.

Q – What happens when the parking system breaks down?

A – The Klaus parking system is very reliable, having been used in thousands of stalls all over the world. Klaus Parking recommends bi-annual preventative maintenance on the parking systems in order to avoid any potential issues. However, in the unlikely event of a system failure, the Developer will dispatch one of the local parking system technicians. Most issues can be resolved within one visit. Also note that as the currently proposed design includes 5 independent parking systems, should a failure occur, it would be limited to the affected mechanism only and not the entire parkade.

November 25, 2019

Planning and Building Department- City of Port Coquitlam
City Hall Annex
200-2564 Shaughnessy St
Port Coquitlam BC V3C 3G4

RE: Development Permit Application For 2444-2448 Shaughnessy Street, DP000396

To Whom it may concern:

Please accept this letter as a response to a request for additional information about the parking system used in this site plan.

In the event of electrical power loss and/or failure, access to the entry level of the parking system can be had by way of a manual gate release mechanism, built in to the door motors above every door (see picture, marked as ①). Vehicles at upper levels can be lowered by manually opening hydraulic valves and platform descends at a controlled velocity on gravity and hydraulic pressure, limited through flow restriction orifices. Ground level platforms can be pushed side to side by manually disengaging the motor brake on each pallet. The bottom platforms can be raised by manually opening the hydraulic valves and using a large automotive style jack, in non-emergency situations. In all cases, access into the parking machine will be dealt with through a work safe BC confined space procedure.

Vehicles at ground level and above are open to fire fighting spray coverage at all times (see picture). Gates are also constructed of perforated, galvanized steel, allowing visibility and access to spraying fires through the gates if needed. The building will feature emergency access through an access hatch at the P1 level.

Best regards,



Ryan McKenzie, C.E.T., P.Eng.
Klaus MultiParking NW

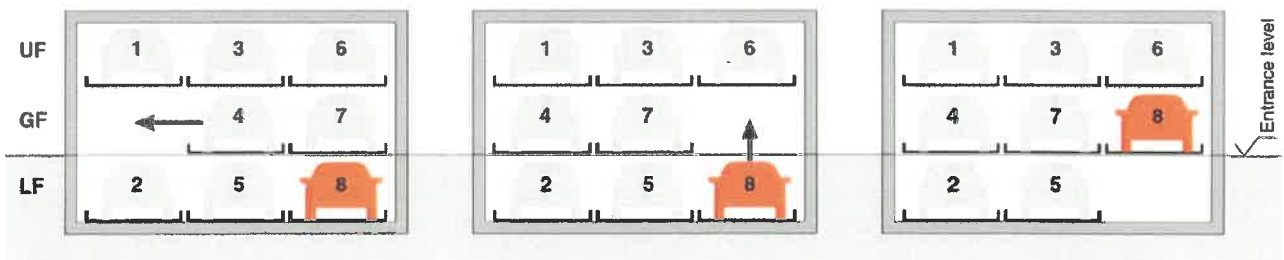


❑ Perforated steel plate



Function with standard numbering and identification of parking levels

e.g. for parking space No. 8:
Check first that all doors are closed, then select No. 8 on operating panel.



For driving the vehicle off platform No. 8 the ground floor parking platforms are shifted to the left.

The empty space is now below the vehicle which shall be driven off the platform. The platform No. 8 will be lifted.

The vehicle on platform No. 8 can now be driven off the platform.

Vancouver Kelowna Edmonton Calgary Winnipeg Toronto Ottawa Montreal

www.multiparking.com.com
Ph: 647-878-7926