Committee of Council Regular Agenda

Council Chambers, 3rd Floor City Hall, 2580 Shaughnessy Street, Port Coquitlam, BC
Tuesday, March 5, 2019
Time: 2:00p.m.

1. CALL TO ORDER

2. ADOPTION OF THE AGENDA

2.1 Adoption of the Agenda

Recommendation:

That the March 5, 2019, Regular Committee of Council Meeting Agenda be adopted as circulated.

3. CONFIRMATION OF MINUTES

3.1 Minutes of Committee of Council

Recommendation:

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

- *February 19, 2019, Regular Committee of Council Meeting.*

4. REPORTS

4.1 1579, 1515 & 1491 Kingsway Avenue: Development Permit Amendment & Watercourse Development Permit Amendment

Recommendation:

That Committee of Council:

1. *Approve amending Watercourse Development Permit DP000332 for 1579, 1515 and 1491 Kingsway Avenue; and,*
2. *Approve amending Development Permit DP000331 for 1579 Kingsway Avenue.*

4.2 Gates Park Softball Field Fencing

Recommendation:

That Committee of Council direct staff to proceed with the addition of new fencing, safety netting, landscaping and pathway decommissioning at Gates Park as outlined in Option 2 of this report; and
That Committee of Council approve the funding request of $200,000, as outlined in Option 2 of this Report; and
That the cost be included in the 2019 financial plan.

4.3 January Community Centre Update

Recommendation:

None.

5. COUNCILLORS' UPDATE

6. MAYOR'S UPDATE

7. CAO UPDATE

8. RESOLUTION TO CLOSE

8.1 Resolution to Close the March 5, 2019, Regular Committee of Council Meeting to the Public

Recommendation:

That the Regular Committee of Council Meeting of March 5, 2019, be closed to the public pursuant to the following subsection(s) of Section 90(1) of the Community Charter:
Item 4.1

b) personal information about an identifiable individual who is being considered for a municipal award or honour, or who has offered to provide a gift to the municipality on condition of anonymity.

Committee of Council Regular Minutes

Council Chambers, 3rd Floor City Hall, 2580 Shaughnessy Street, Port Coquitlam, BC
February 19, 2019

Present:
Chair – Mayor West
Councillor Darling
Councillor Dupont
Councillor McCurrach
Councillor Pollock

Absent:
Councillor Penner
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 February 19, 2019, Regular Committee of Council Meeting Agenda be adopted as circulated.
Carried

3. REPORTS

3.1 1539 Angelo Avenue – Development Variance Permit Application

Moved - Seconded:
That the Committee of Council:
1. *Authorize staff to provide notice of an application to vary parking space requirements for a childcare facility at 1539 Angelo Avenue by one stall; and,*
2. *Advise Council that it supports approval of Development Variance Permit DVP00058.*

Carried

3.2 853 Seaborne Avenue – Development Permit Application

Moved - Seconded:
That Committee of Council approve Development Permit DP000364 to regulate an industrial development at 853 Seaborne Avenue.
Carried

3.3 3591 Devon Road - Watercourse Development Permit

Moved - Seconded:
That Committee of Council approve Development Permit DP00359 to protect and enhance a watercourse at 3591 Devon Road and facilitate the addition of a garage.
Carried
Opposed: Councillor Dupont

3.4 1526 Grant Avenue - Development Permit Application

Moved - Seconded:
That Committee of Council approve Development Permit DP000202 to regulate a rowhouse development at 1526 Grant Avenue.
Carried

DRAFT

3.5 2332 Marpole Avenue - Rezoning Application

Moved - Seconded:

1. *That Committee of Council recommend to Council that the Zoning Bylaw be amended to permit on-site manufacturing of liquor and accessory packaged liquor sales at 2332 Marpole Avenue; and,*
2. *That the following conditions must be met prior to the adoption of the rezoning to the satisfaction of the Director of Development Services:*
   a) *Submission of an agreement from adjacent property owner(s) indicating approval to use 11 parking spaces or submission of cash-in-lieu for these spaces; and,*
   b) *Provision for installation of a bike rack.*

Carried

4. COUNCILLORS' UPDATE

Council provided updates on City business.

5. MAYOR'S UPDATE

No update.

6. CAO UPDATE

No update.

7. RESOLUTION TO CLOSE

7.1 Resolution to Close the February 19, 2019, Regular Committee of Council Meeting to the Public

Moved - Seconded:

That the Regular Committee of Council Meeting of February 19, 2019, be closed to the public pursuant to the following subsection(s) of Section 90(1) of the Community Charter:

Item 3.1

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;

Item 3.2

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;

Item 3.3

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;

Item 3.4

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;

DRAFT

Item 3.5

g) litigation or potential litigation affecting the municipality;

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

Carried

Certified Correct,

Mayor

Corporate Officer

DRAFT

1579, 1515 & 1491 Kingsway Avenue: Development Permit Amendment & Watercourse Development Permit Amendment

RECOMMENDATIONS:

That Committee of Council:

1. Approve amending Watercourse Development Permit DP000332 for 1579, 1515 and 1491 Kingsway Avenue; and,
2. Approve amending Development Permit DP000331 for 1579 Kingsway Avenue.

PREVIOUS COUNCIL/COMMITTEE ACTION

June 5, 2018

That Smart Growth Committee approve Development Permit DP000332 to provide for watercourse protection and enhancement at 1545, 1575, 1515 and 1491 Kingsway Avenue.

That Smart Growth Committee approve Development Permit DP000331 to regulate an industrial development at 1545 and 1575 Kingsway Avenue.

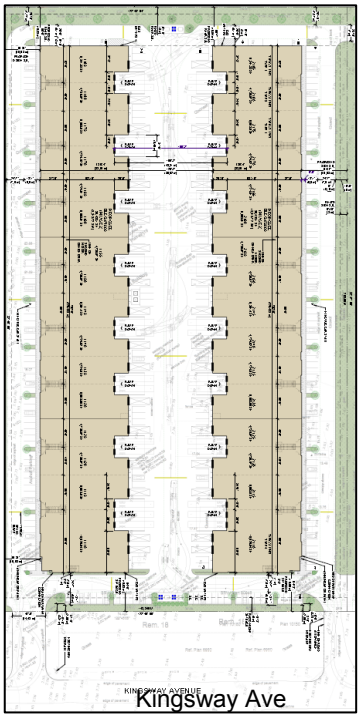
REPORT SUMMARY

The owner of the property at 1579 Kingsway Avenue (formerly 1545 and 1575 Kingsway Avenue), Conwest, has applied to revise Development Permit DP000331 and Watercourse Development Permit DP000332 to provide for a different lot configuration that would accommodate a future large development. The permits currently regulate developing 1579 Kingsway Avenue for two industrial buildings. The building on the west part of the site is now under construction, but the owner now wishes to replace the proposed construction of a building on the east part of the site with a proposal to consolidate this part of the lot with two lots to the east. As this proposal also changes the watercourse enhancement locations, an amendment to the watercourse development permit is also required. There are no significant issues with the amendments and the report recommends approval.

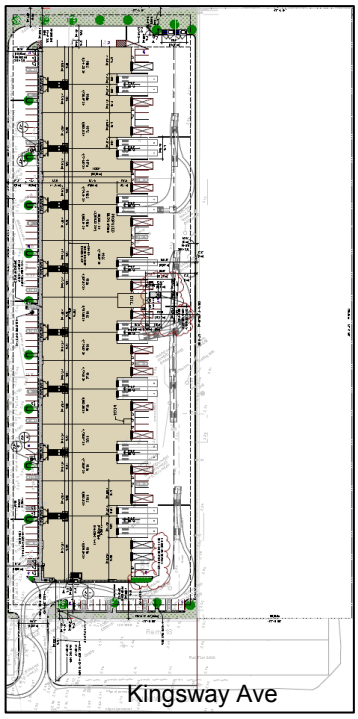
BACKGROUND

Development Permit DP000331 regulates an industrial development of 1579 Kingsway Avenue to be comprised of two tilt-up concrete buildings and landscaping; Watercourse Development Permit DP000332 provides for the protection and enhancement of the watercourses at 1579, 1515 and 1491 Kingsway Avenue. Conwest has commenced construction of the westerly building in accordance with the approved development permits. However, before starting construction of the building on the east part of the site, a large industrial tenant expressed interest in developing a larger property. To create the 14-acre site desired by the tenant, Conwest proposes to consolidate its two lots to the east at 1515 and 1491 Kingsway Avenue plus the east portion of 1579 Kingsway Avenue.

The amendment to the development permit does not impact the approved access to the site on the west side of the lot. The future development of the parcel to be created to the east would be considered by Committee in its review of a new development permit application.



Approved site layout for 1579 Kingsway



Proposed site layout, with subdivision of 1579 Kingsway

Proposed site consolidation to create 14-acre parcel

Reconfiguration of the watercourse protection area is required to facilitate the amended development proposal. As originally described to Committee, the site contains two connected

watercourse channels: a railway channel located along the northern property line and a central channel, which runs to an underground pipe near the south of the property and connects to the Kingsway Avenue stormwater sewer. These are both Class B watercourses, i.e. watercourses that are non-fish bearing but can provide food or nutrients downstream, and they are in poor condition. The proposed watercourse permit amendment relocates the central channel to the east edge of the new, consolidated property to allow for the construction of a single, large building. The 10m width of the watercourse protection areas and the length of the railway channel would remain as originally proposed. The central channel would be regraded to drain to the new eastern location. The amendment increases the total protected area by 232 m^2 compared to the approved plan.

Original location of watercourse

Proposed location of watercourse

The proposed amendment does not change required implementation measures, which include:

- structural improvements, including 'rip-rap' (boulder) banks, de-compaction and amendment of soils to enhance natural filtration and grading to improve drainage;
- planting native shrubs and trees;
- fencing the watercourse protection area;
- landscaping maintenance for a period of 2 years; and,
- removal of invasive species for a period of 5 years.

DISCUSSION

The development of the site with only one industrial building and landscaping remains in accordance with the industrial design guidelines and environmental conservation designation and

does not impact site access. The proposed amendment to the watercourse protection area will improve the watercourses through an increase in both wetted habitat and overall protected area. Committee approval of both development permit amendments is recommended.

FINANCIAL IMPLICATIONS

None.

OPTIONS

(Check = Staff Recommendation)

#	Description
1 ✓	Approve amendments to Watercourse Development Permit DP000332 and Development Permit DP000331.
2	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 proposed amendments comply with the development permit area objectives and guidelines.
3	Recommend rejection of one or both applications if the Committee is of the opinion that it does not conform to the development permit area guidelines. The applicant may then request the application be forwarded to Council for consideration.

ATTACHMENTS

Attachment #1: Location Map
Attachment #2: Letter from environmental consultant
Attachment #3: Draft Watercourse Development Permit DP000332 amendment 1
Attachment #4: Draft Development Permit DP000331 amendment 1
Attachment #5: Watercourse DP000332 Report dated June 5, 2018
Attachment #6: Development Permit DP000331 Report dated June 5, 2018

CITY OF PORT COQUITLAM
DEVELOPMENT APPLICATION LOCATION MAP

PROJECT ADDRESS: 1491-1579 Kingsway Ave **FILE NO:** DP000331
DP000332

envirowest consultants inc.
Suite 101 - 1515 Broadway Street
Port Coquitlam, British Columbia
Canada V3C 6M2
604-944-0502

January 25, 2019

City of Port Coquitlam
Planning and Economic Development Department
2580 Shaughnessy Street
Port Coquitlam, B.C.
V3C 2A8

Attention: Mr. Neil MacEachern
Environmental Coordinator

Dear Mr. MacEachern

RE: PROPOSED AMENDMENT TO WATERCOURSE DEVELOPMENT PERMIT 1491, 1515 AND 1579 KINGSWAY AVENUE, PORT CQUITLAM BC

A Watercourse Development permit was issued to Conwest (1575 PoCo) Limited Partnership (Conwest) in regards to watercourse features located on four civic properties located at 1491, 1515, 1545 and 1575 Kingsway Avenue. Development contemplated four similar industrial buildings on the properties. The two western lots were consolidated into one (and re-assigned civic address 1579 Kingsway Avenue). Construction is underway on the western portion of 1579 Kingsway Avenue. The approved plan for watercourse features involves one constructed bio-swale along the northern boundary of the site, adjacent to the Canadian Pacific Railway yards, and a second constructed bio-swale aligned through the centre of the properties.

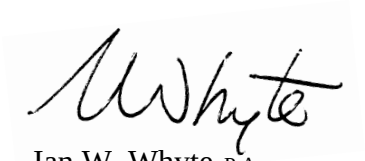
Conwest is contemplating a revised building scenario which will allow the option of developing a single, larger building on the remaining portions of the site. In order to accommodate this revised plan, a modification of the bio-swale layout is proposed. No change is proposed to the bio-swale along the north boundary of the properties. The central bio-swale is proposed to be relocated to the eastern boundary of the properties.

Apart from the relocation of one of the two bio-swales, there is effectively no difference between the approved/original plan and the revised/proposed plan (see attached Envirowest Drawing Nos. 655-54-01, -02 and -03). The total habitat area and functionality remain the same. Whereas the approved plan involved two segments of the northern bio-swale flowing east and west towards the central bio-swale, then southward, the revised plan involves the entire north bio-swale flowing eastward and subsequently southward along the east bio-swale. KM Civil Consultants

Ltd. have confirmed that there is no significant difference to the drainage utility of the bio-swales.

Should you have any questions please call me at 604-944-0502.

Sincerely,
ENVIROWEST CONSULTANTS INC.

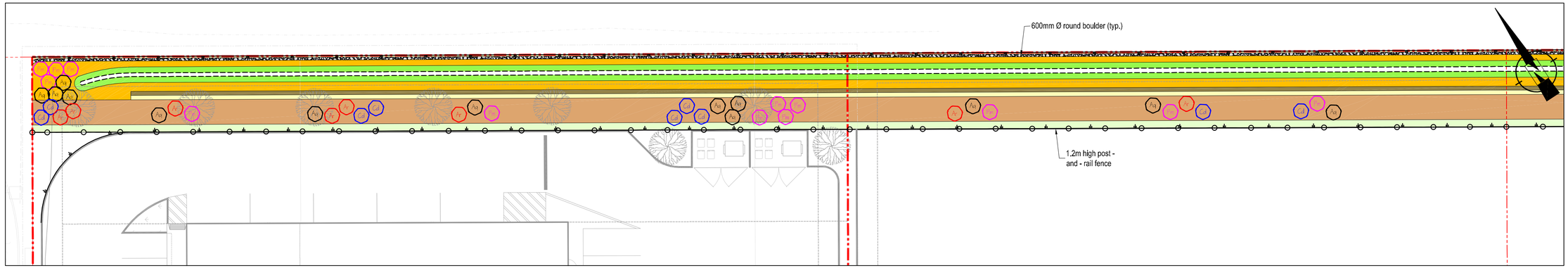


Ian W. Whyte, P.Ag
Senior Project Manager

IWW
attach.

PLAN A

SCALE 1:200 0 5 10



PLAN B

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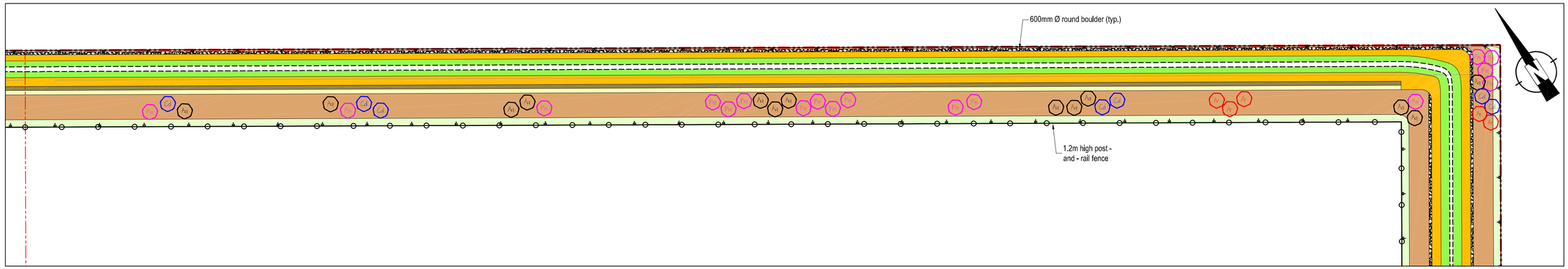

LOCATION

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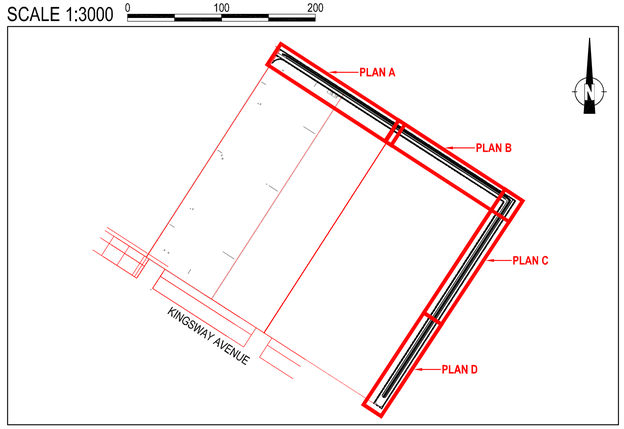


REFERENCE DRAWINGS

1. Email: 170445-A - Conwest Kingsway - Overall Site Plan - 2019-01-21.dwg. Received January 21, 2019; Krahn Group of Companies.
2. Email: 170445-A - Conwest Kingsway - Overall Site Plan - 2019-01-14.dwg. Received January 21, 2019; Conwest Group of Companies.

CONWEST (1575 - POCO) LIMITED PARTNERSHIP

1491, 1515 & 1579 KINGSWAY AVENUE
Port Coquitlam, BC

envirowest consultants inc.
Suite 101 - 1515 Broadway Street
Port Coquitlam, British Columbia
Canada V3C 6M2
office: 604-944-0502
facsimile: 604-944-0507
www.envirowest.ca

BIOSWALE LANDSCAPE PLAN

DESIGN:	DRAWN:	CHECKED:	REVISION:	REVISION DATE:
MAA/IWW	SDJ/SCM	MAA/IWW	04	January 25, 2019

SCALE: As Shown

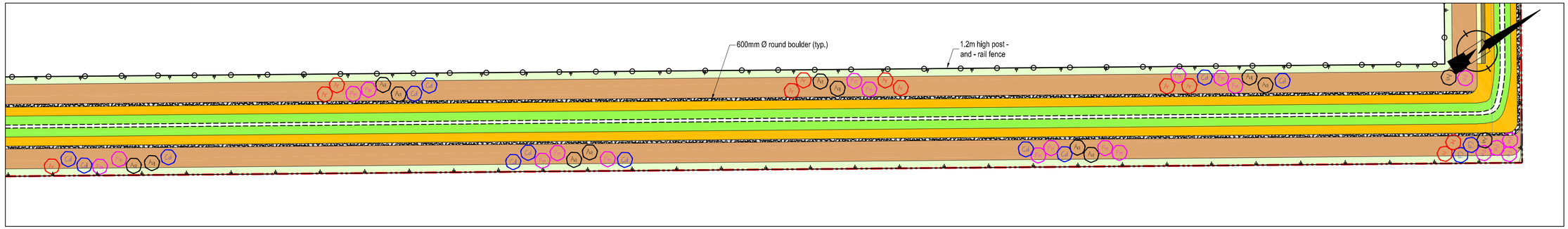
DATE: October 19, 2017

DRAWING NUMBER: 655-54-01

SHEET 1 OF 2

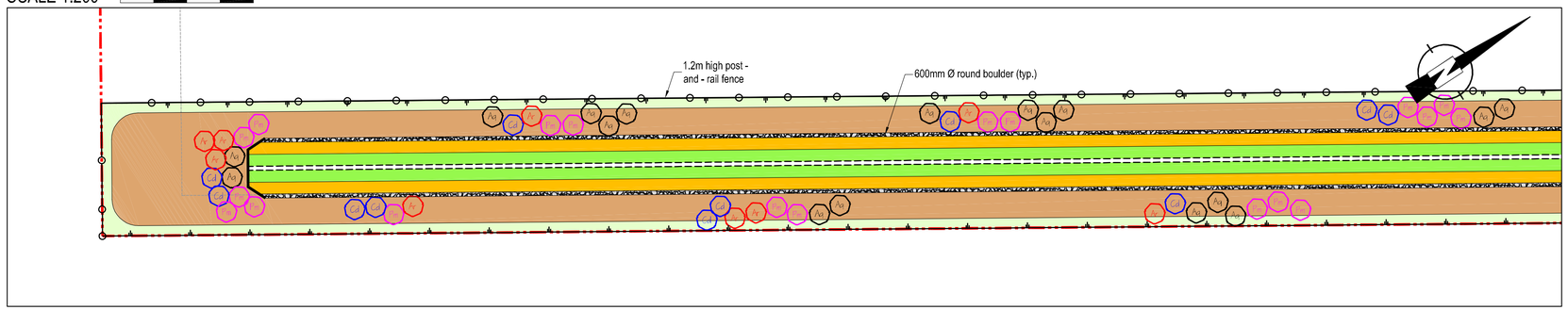
PLAN C

SCALE 1:200 0 5 10



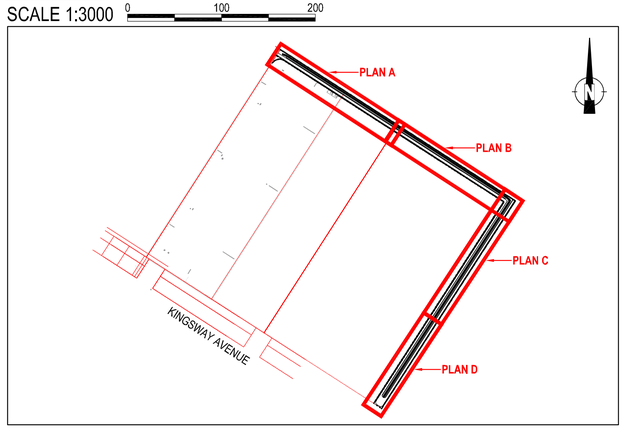
PLAN D

SCALE 1:200 0 5 10



LOCATION

SCALE 1:3000 0 100 200



GENERAL LANDSCAPE SPECIFICATIONS

1. Plant material and the planting of such material are to be in accordance with the British Columbia Landscape Standard (seventh edition) jointly published by the British Columbia Society of Landscape Architects and the British Columbia Landscape Nursery Association.
2. All works are to be conducted in accordance with the sediment control provisions of the "Standards and Best Practices for Instream Works" (Ministry of Water, Land & Air Protection, 2004).
3. All plant material is to be inspected and approved by Envirowest prior to installation.
4. Growing medium is to be free of any subsoils, roots, noxious grass, weeds, toxic materials, stone over 30 mm diameter, foreign objects, and possess an acidity range (pH) of 5.5 to 7.5. Growing medium is to be inspected by Envirowest prior to placement.
5. All Scotch broom (*Cytisus scoparius*), Japanese knotweed (*Fallopia japonica*) and blackberry (*Rubus discolor* and *R. laciniatus*) to be cleared and grubbed from project site.
6. All debris and/or excess material from landscape operations are to be collected and disposed offsite in accordance with all regulatory requirements.
7. The contractor is to provide five (5) years of plant maintenance. Plant maintenance is to include watering, selective pruning and clearing of blackberry. Species survivorship is to equal one-hundred (100) percent five (5) years from planting. Replacement of dead stock may be required to fulfill this specification. Replacement stock is also subject to one-hundred (100) percent survivorship five (5) years from planting.

REFERENCE DRAWINGS

1. Email: 170445-A - Conwest Kingsway - Overall Site Plan - 2019-01-21.dwg. Received January 21, 2019; Krahn Group of Companies.
2. Email: 170445-A - Conwest Kingsway - Overall Site Plan - 2019-01-14.dwg. Received January 21, 2019; Conwest Group of Companies.

PLANT SPECIES LIST AND SPECIFICATIONS

SYMBOL	COMMON NAME	LATIN NAME	NUMBER	COMMENTS
Ag	grand fir	*Abies grandis*	55	no. 5 pot; 1.5m min.; densely branched; well established
Pm	Douglas-fir	*Pseudotsuga menziesii*	65	no. 5 pot; 1.5m min.; densely branched; well established
Cd	black hawthorn	*Crataegus douglasii*	39	no. 5 pot; 1.5m min.; densely branched; well established
Ar	red alder	*Alnus rubra*	31	no. 5 pot; 1.5m min.; densely branched; well established
	Saskatoon	*Amelanchier alnifolia*	560	no. 3 pot; maximum 750mm spacing edge-to-edge
	Nootka rose	*Rosa nutkana*	1,684	no. 2 pot; maximum 650mm spacing edge-to-edge
	red fescue	*Festuca rubra*	672	no. 1 pot; maximum 150mm spacing edge-to-edge
	woolly bulrush	*Scirpus cyperinus*	275	no. 1 pot; maximum 300mm spacing edge-to-edge
	soft-stem bulrush	*Scirpus validus*	2,175	no. 1 pot; maximum 300mm spacing edge-to-edge
	broad-leaved cattail	*Typha latifolia*	1,878	no. 1 pot; maximum 300mm spacing edge-to-edge

CONWEST (1575 - POCO) LIMITED PARTNERSHIP

1491, 1515 & 1579 KINGSWAY AVENUE
Port Coquitlam, BC

envirowest consultants inc.
Suite 101 - 1515 Broadway Street
Port Coquitlam, British Columbia
Canada V3C 6M2
office: 604-944-0502
facsimile: 604-944-0507
www.envirowest.ca

BIOSWALE LANDSCAPE PLAN

DESIGN:	DRAWN:	CHECKED:	REVISION:	REVISION DATE:
MAA/IWW	SDJ/SCM	MAA/IWW	04	January 25, 2018
SCALE: As Shown			DRAWING NUMBER: 655-54-02	
DATE: October 19, 2017			SHEET 2 OF 2	

DATE: 2019/01/25 - 11:45am
PATH: I:\ENVF-FS-R\Active\Envirowest Files\2019\Coquitlam-PoCo\655-54 Kingsway Ave\Acad\CAD Files\655-54-01Rpt 4\2Rpt 4\2Rpt 4\2RDI Bioswale Landscape Plan.dwg
LAYOUT: 655-54-02

NORTH PROPERTY LINE BIO-SWALE - TYPICAL SECTION

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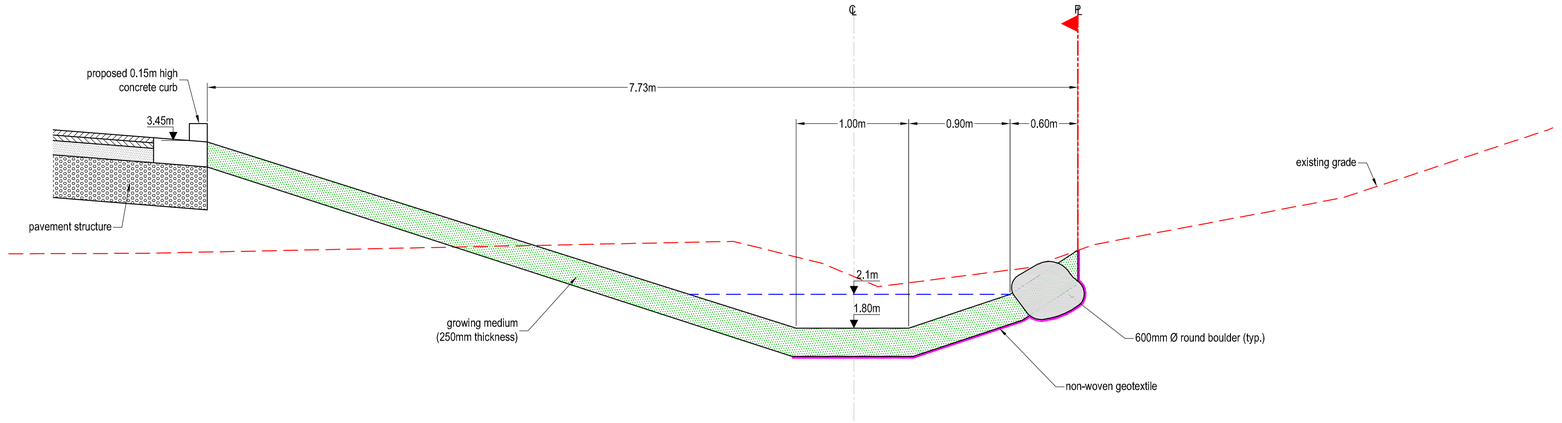

EAST PROPERTY LINE BIO-SWALE - TYPICAL SECTION

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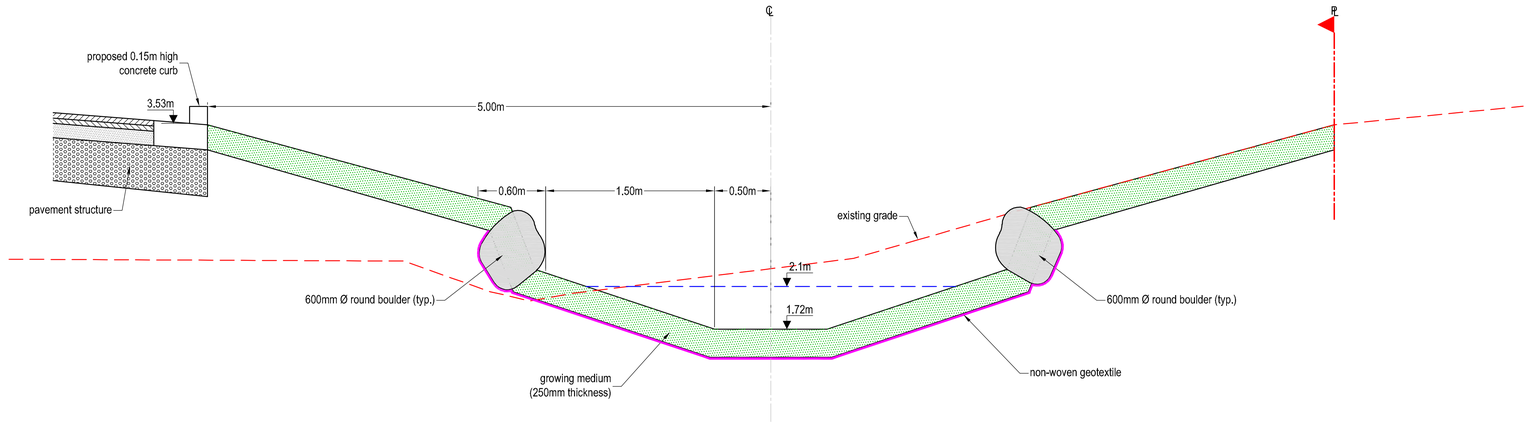

REFERENCE DRAWING
Drawing No. 2 of 2. Rev. 1. "Sections - 1575 Kingsway Ave., Port Coquitlam."
October 10, 2017. KM Civil Consultants Ltd.

CONWEST (1575 - POCO) LIMITED PARTNERSHIP

1491, 1515 & 1579 KINGSWAY AVENUE
Port Coquitlam, BC

envirowest consultants inc.
Suite 101 - 1515 Broadway Street
Port Coquitlam, British Columbia
Canada V3C 6M2
office: 604-944-0502
facsimile: 604-944-0507
www.envirowest.ca

BIOSWALE TYPICAL SECTIONS

DESIGN:	DRAWN:	CHECKED:	REVISION:	REVISION DATE:
MAA/IWW	SDJ/RK	MAA	03	January 25, 2019

SCALE: As Shown

DATE: October 19, 2017

DRAWING NUMBER: 655-54-03

DATE: 2019/01/25 - 11:56am
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LAYOUT: 655-54-03

STORM WATER MANAGEMENT LEGEND:

- 100 YEAR OVERLAND FLOW
- 100 YEAR FLOW IN PIPE
- 100 YEAR FLOW BELOW SURFACE
- OVERLAND FLOW
- CATCHMENT BOUNDARY LINE
- CATCHMENT AREA — CATCHMENT No. / AREA (ha)
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- FUTURE STORM SEWER
- EXISTING CONTOURS — 10
- EXISTING DITCHES
- MANHOLE IDENTIFIER — MH D

BEFORE YOU DIG

EXISTING UNDERGROUND UTILITIES SHOWN ON THIS DRAWING WERE COMPILED FROM A COMBINATION OF VARIOUS AS-CONSTRUCTED RECORD DRAWINGS AND SOME FIELD SURVEYS. THIS INFORMATION IS NOT NECESSARILY ACCURATE OR COMPLETE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION WHERE POTENTIAL CONFLICTS EXIST. CONTRACTOR TO CONTACT TELUS, B.C. HYDRO, FORTISBC AND BC ONE CALL PRIOR TO CONSTRUCTION TO CONFIRM LOCATIONS OF UTILITIES AND APPURTENANCES REQUIRING ADJUSTMENT. ANY DISCREPANCIES REQUIRING CHANGES TO THE DESIGN MUST BE REPORTED TO KM CIVIL CONSULTANTS IMMEDIATELY.

City of Port Coquitlam - Drainage System Design Calculation Sheet - Pipe Flows

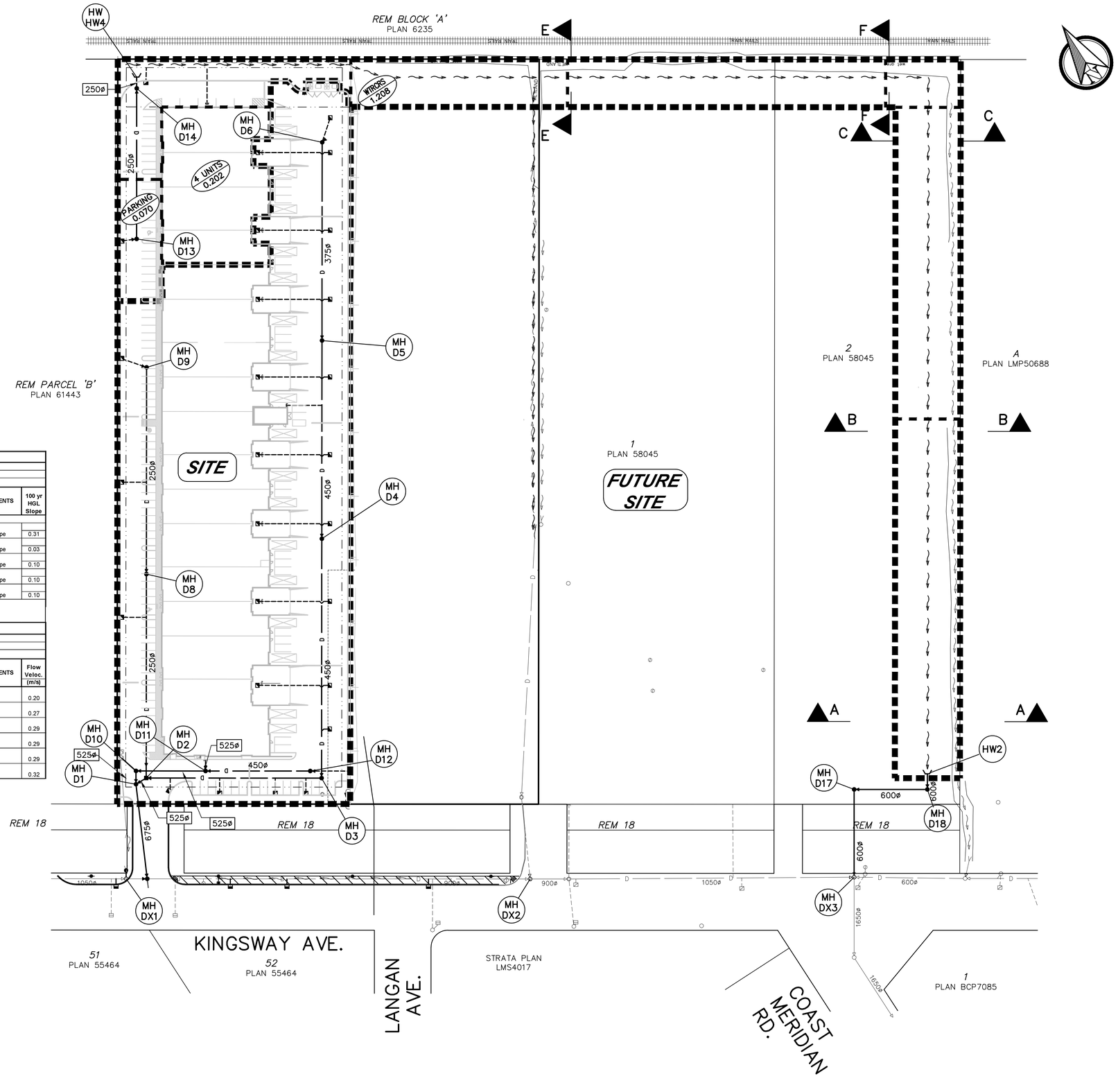
PROJECT NUMBER: 170445.2-C — File: 170445.2-C
Project Location: 1579 KINGSWAY AVE, PORT COQUITLAM — Manning's 'n': 0.013 Concrete/PVC
01/22/2019 — Q5 / Q100 = RIA — IDF Curve used: Port Coquitlam

Catchment	MANHOLE From	MANHOLE To	AREA (ha)	R	R*A	Cum R*A	Tc (min) Inlet	Tc (min) Incr.	Tc (min) Total	i10 i100 (mm/hr)	Q10 Q100 (m3/s)	Qcap (m3/s)	Slope (%)	Size (mm)	Length (m)	V (Full) (m/s)	COMMENTS	100 yr HGL Slope
4 UNITS	BLDG	DITCH	0.202	0.90	0.182	0.182				40.6	0.020							
				1.00	0.202	0.202	10.0	0.2	10.2	58.9	0.033	0.059	1	250	12.50	1.21	In pipe	0.31
PARKING	D13	DITCH	0.070	0.90	0.063	0.063				38.5	0.007							
				1.00	0.070	0.070	10.0	1.4	11.4	55.6	0.011	0.033	0.3	250	57.00	0.66	In pipe	0.03
WATERCOURSE	HW2	D2B	1.208	0.90	1.087	1.087				40.8	0.123							
				1.00	1.208	1.208	10.0	0.1	10.1	59.2	0.199	0.434	0.5	600	5.50	1.54	In pipe	0.10
-	D2B	D1B	0.000	0.90	0.000	1.087				40.3	0.122							
				1.00	0.000	1.208	10.1	0.3	10.3	58.4	0.196	0.434	0.5	600	26.00	1.54	In pipe	0.10
-	D1B	DX3	0.000	0.90	0.000	1.087				39.6	0.120							
				1.00	0.000	1.208	10.3	0.4	10.7	57.4	0.193	0.434	0.5	600	35.00	1.54	In pipe	0.10

City of Port Coquitlam - Drainage System Design Calculation Sheet - Watercourse Flows

PROJECT NUMBER: 170445-C — File: 170445-C
Project Location: 1579 KINGSWAY AVE, PORT COQUITLAM — Manning's 'n': 0.03 Clean and Straight Ditch
01/22/2019 — Q5 / Q100 = RIA — IDF Curve used: Port Coquitlam

Catchment	MANHOLE From	MANHOLE To	AREA (ha)	R	R*A	Cum R*A	Tc (min) Inlet	Tc (min) Incr.	Tc (min) Total	i10 i100 (mm/hr)	Q10 Q100 (m3/s)	Qcap (m3/s)	Slope (%)	Bottom Width (m)	Length (m)	Flow Depth (m)	COMMENTS	Flow Veloc. (m/s)
SECTION DD (PARKING)	D13+BLDG	DITCH START	0.070	0.90	0.063	0.063				40.9	0.007							
				1.00	0.070	0.070	10.0	6.4	16.4	59.4	0.012	0.067	0.10	1	75	0.10		0.20
SECTION EE (DITCH1+4UNITS+PRK	DITCH START	LOT 1 PL	0.359	0.90	0.323	0.386				32.6	0.035							
				1.00	0.359	0.429	16.4	11.4	27.8	46.7	0.056	1.163	0.10	1	185	0.18		0.27
SECTION FF (DITCH2)	LOT 1 PL	LOT 1 PL	0.190	0.90	0.171	0.557				25.6	0.040							
				1.00	0.190	0.619	27.8	0.9	28.7	36.1	0.062	1.681	0.10	1	15	0.20		0.29
SECTION CC (DITCH3)	LOT 1 PL	CORNER	0.045	0.90	0.040	0.597				25.2	0.042							
				1.00	0.045	0.663	28.7	6.9	35.6	35.6	0.066	1.779	0.10	1	120	0.20		0.29
SECTION BB (DITCH4)	CORNER	WATERCOURSE MIDPOINT	0.253	0.90	0.228	0.825				22.9	0.052							
				1.00	0.253	0.916	35.6	7.1	42.7	32.1	0.082	2.378	0.10	1	124	0.20		0.29
SECTION AA (DITCH5)	WATERCOURSE MIDPOINT	KINGSWAY	0.292	0.90	0.263	1.087				21.0	0.064							
				1.00	0.292	1.208	42.7	0.1	42.8	29.4	0.099	3.230	0.10	1	1	0.25		0.32



No.	DATE	REVISION	DRN	TECH	ENG
13	2019.01.24	ISSUED FOR DEVELOPMENT PERMIT AMENDMENT	NWP	JKC	SIM
12	2018.12.14	REVISED SITE PLAN, GRADING, AND SERVICING	NWP	JKC	SIM
11	2018.11.21	CIVIL SITE INSTRUCTION No. 4	NWP	JKC	SIM
10	2018.10.29	ISSUED FOR AMENDMENT TO BP	NWP	JKC	SIM
9	2018.10.16	REVISED STORM AND WATER SERVICING	NWP	JKC	SIM
8	2018.09.14	ISSUED FOR ON-SITE CONSTRUCTION	NWP	JKC	SIM

DESTROY ALL PRINTS BEARING PREVIOUS REVISION NUMBER

LEGAL DESCRIPTION:
LOT A, DISTRICT LOT 288 AND 382, GROUP 1, SECTION 7, BLOCK 6 NORTH, RANGE 1 EAST, NEW WESTMINSTER DISTRICT, PLAN EPP74940

BENCHMARK:
ELEVATIONS ARE GEODETIC, SHOWN IN METRES, DERIVED FROM CITY BENCHMARK #98
ELEVATION=3.272m
DATUM: CVD28GVRD, 2005

KM Civil CONSULTANTS LTD.
ABBOTSFORD OFFICE
110 - 34077 Gladys Avenue
Abbotsford, BC V2S 2E8
Tel: 604-853-8831 Fax: 604-853-1580
VANCOUVER OFFICE
110 - 2920 Virtual Way
Vancouver, BC V5M 0C4
Tel: 604-294-6662 Fax: 604-294-6665

CONWEST (1575 POCO) LP

#250-1311 KOOTENAY STREET, VANCOUVER, B.C., V5K 4Y3
ATTENTION: JEREMY BERGMANN
TEL.:(294-5067 FAX.:(604)293-2474

STORMWATER MANAGEMENT PLAN

1579 KINGSWAY AVE., PORT COQUITLAM

DESIGNED:	DRAWN:	REVIEWED:	APPROVED:	SCALE: HORZ. / VERT.
JKC	GL	SIM	SIM	1:750

MUNICIPAL PROJECT NUMBER: OFS00100
MUNICIPAL DRAWING NUMBER:
KM CIVIL PROJECT No.: 170445.2-C
DRAWING No.: 1 of 2
DATE: AUGUST, 2017
REVISION No.: 13

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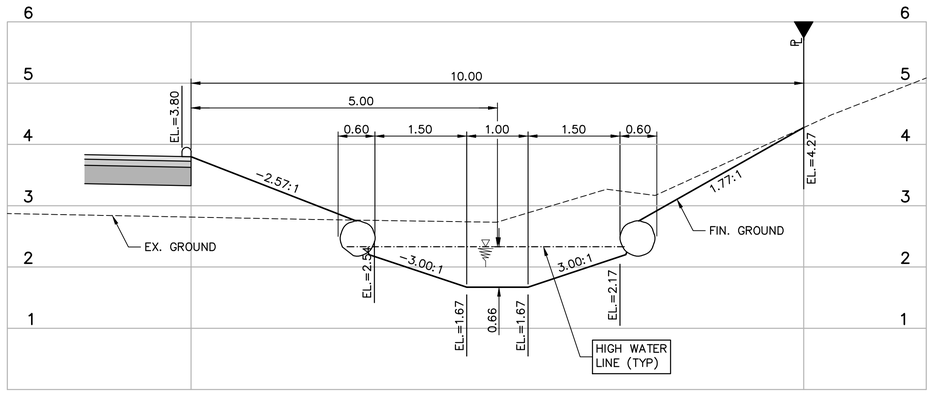
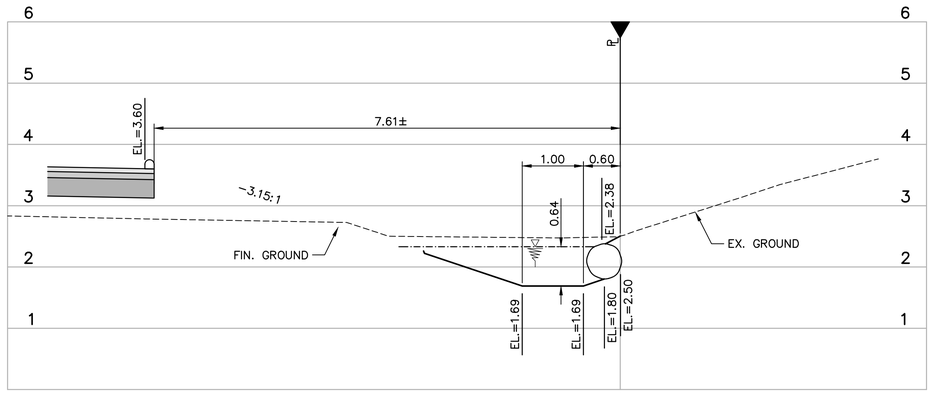
PLOT DATE: Jan 24, 2019
PLOT BY: Nathan Wakefield
FILE: K:\170445.2-C\1579 Kingsway Ave, PoCo-Conwest\2-Design\5-Civil\1-Design\-CURRENT\170445.2-C-STORM.dwg



SECTION C–C



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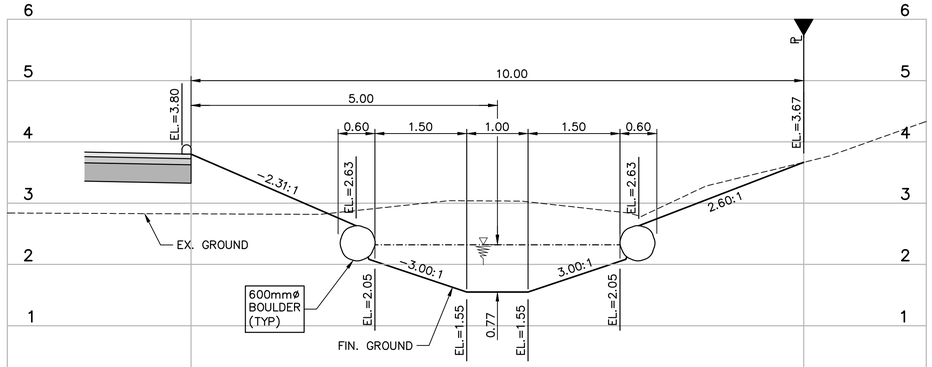

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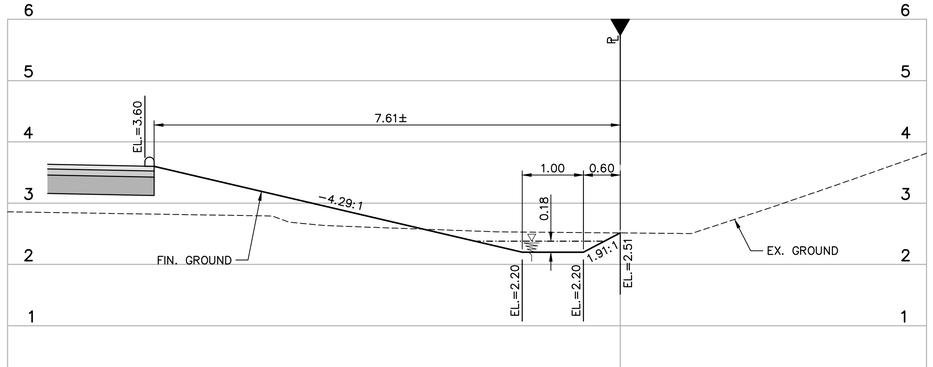
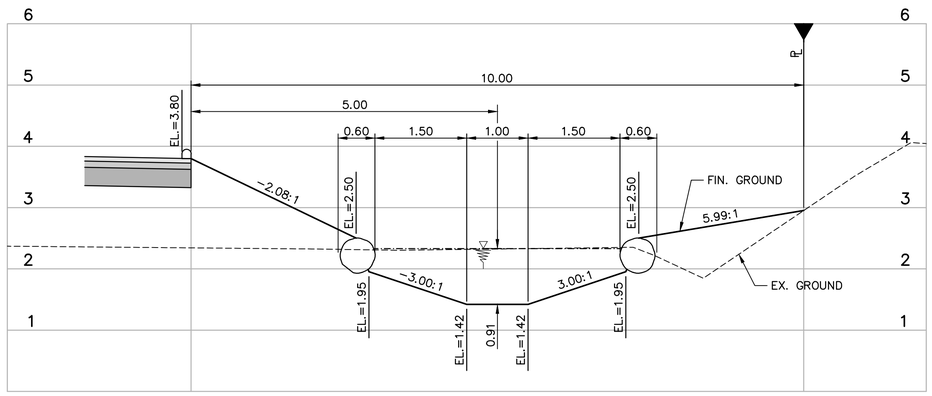
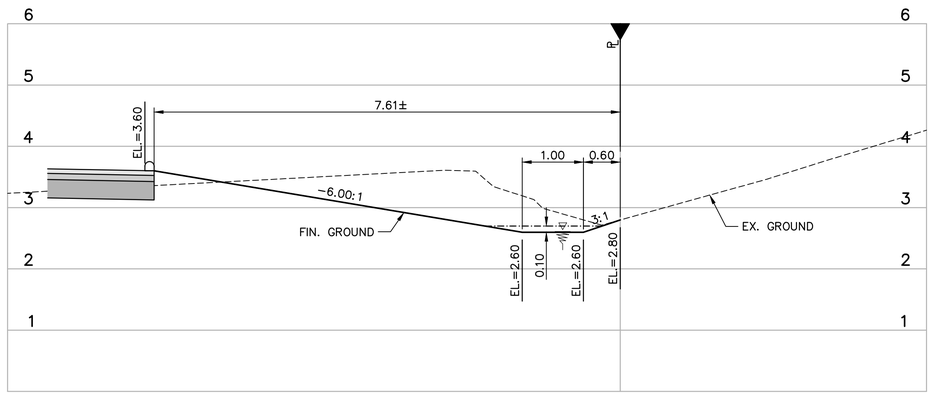


SECTION E–E



SECTION A–A



SECTION D–D

No.	DATE	REVISION	DRN	TECH	ENG
13	2019.01.24	ISSUED FOR DEVELOPMENT PERMIT AMENDMENT	NWP	JKC	SIM
12	2018.12.14	REVISED SITE PLAN, GRADING, AND SERVICING	NWP	JKC	SIM
11	2018.11.21	CIVIL SITE INSTRUCTION No. 4	NWP	JKC	SIM
10	2018.10.29	ISSUED FOR AMENDMENT TO BP	NWP	JKC	SIM
9	2018.10.16	REVISED STORM AND WATER SERVICING	NWP	JKC	SIM
8	2018.09.14	ISSUED FOR ON-SITE CONSTRUCTION	NWP	JKC	SIM

DESTROY ALL PRINTS BEARING PREVIOUS REVISION NUMBER

LEGAL DESCRIPTION:
LOT A, DISTRICT LOT 288 AND 382, GROUP 1, SECTION 7, BLOCK 6 NORTH, RANGE 1 EAST, NEW WESTMINSTER DISTRICT, PLAN EPP74940

BENCHMARK:
ELEVATIONS ARE GEODETIC, SHOWN IN METRES, DERIVED FROM CITY BENCHMARK #98
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DATUM: CVD28GVRD, 2005

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CONWEST (1575 POCO) LP

#250-1311 KOOTENAY STREET,
VANCOUVER, B.C., V5K 4Y3
ATTENTION: JEREMY BERGMANN
TEL.:(294-5067 FAX.:(604)293-2474

SECTIONS

1579 KINGSWAY AVE., PORT COQUITLAM

DESIGNED:	DRAWN:	REVIEWED:	APPROVED:	SCALE: HORZ.	VERT.
JKC	GL	SIM	SIM	1:50	1:50

MUNICIPAL PROJECT NUMBER: **OFS00100**
MUNICIPAL DRAWING NUMBER:
KM CIVIL PROJECT No.: **170445.2-C**
DATE: **AUGUST, 2017**
DRAWING No.: **2** of **2**
REVISION No. **13**

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PLOT DATE: Jan 24, 2019
PLOT BY: Jeremy Mc Kinnon-Berg Ave. PoCo-Conwest2-Dwgs\4-Civil\1-Design\1-CURRENT\170445.2-C\170445.2-C-SWMP SECTIONS.dwg

THE CORPORATION OF THE CITY OF PORT COQUITLAM

"DEVELOPMENT PROCEDURES BYLAW, 2013, NO. 3849"

WATERCOURSE DEVELOPMENT PERMIT AMENDMENT (1)

AMENDMENT TO DP000332

Issued to: CONWEST (1575 POCO) GP LTD
(Owner as defined in the Local Government Act,
hereinafter referred to as the permittee)

Address: 250-1311 KOOTENAY ST VANCOUVER BC V5K 4Y3

1. This Development Permit Amendment applies to DP000332 issued June 5, 2018

2. DP000332 is amended by:

   a) Replacing drawings numbered DP000332 (A) to DP000332 (C) with drawings numbered DP000332 Amendment 1 (A) to DP000332 Amendment 1 (C)

   b) Amending the landscape security amount from $196,360.00 to $199,815.

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)

CONSTRUCTION AND EROSION CONTROL

Impact Mitigation Guidelines

Silt fences have been installed around the boundary of portions of the Properties (in particular, adjacent to the ditches) where clearing/demolition has already commenced. Silt fences will be installed the remainder of the Properties prior to clearing. Sediment and erosion control (ESC) measures would be implemented.

Instream Works

The subject watercourses are not natural channels (they are manmade), nor do they convey water from natural sources (they convey only runoff from industrial lands). As such these ditches are not streams as defined by the *Water Sustainability Act* (WSA). As the City considers the ditches to be Class B habitat, implying that they sustain fish habitat values, a Request for Review will be submitted to Fisheries and Oceans Canada (DFO) in accordance with the *Fisheries Act*. If water is present in the ditches at the time of reconstruction, dewatering would be performed.

Work Schedules

Reconstruction of the ditches would be timed to coincide with favourable weather but would not be restricted to the standard instream work window (given that the ditches are not inhabited by fish). Landscaping would be performed either in spring or fall.

Monitoring and Compliance

Periodic site inspections would be undertaken by an environmental consultant during the construction period, with particular emphasis on monitoring at the project start-up and during wet weather. Site runoff will need to be monitored to ensure that turbidity is not elevated by runoff from fill material. If water appears visually turbid, water samples would be collected. The objective would be to ensure that suspended sediment in the discharge water does not exceed 25 mg/L during dry weather and 75 mg/L during wet weather. Regular reports of observations and recommendations, if required, would be made available to the City.

WATERCOURSE PROTECTION AREA (WPA) MANAGEMENT PLAN

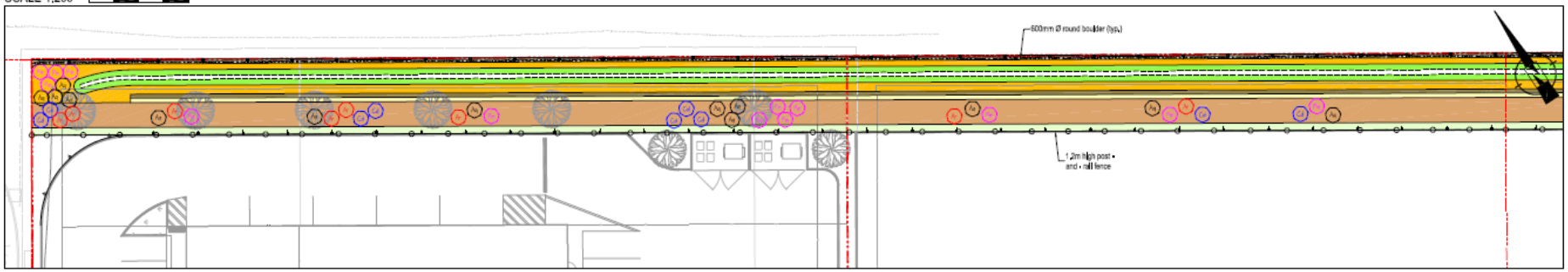
The setback boundary would be protected by a 0.9 metre (3 ft.) wood post and rail fence.

All portions of the WPA would be completely reconstructed and enhanced. The landscaping contractor will be retained to maintain the site for at least two years post-planting, including irrigation and replacement of any dead or dying plant material. A report would be provided by an environmental consultant to the City at the end of each growing season for at least two years post-planting to ensure that the performance objectives of the plantings has been achieved. A bond provided to the City with respect to landscape works will include all of the maintenance and reporting items described above.

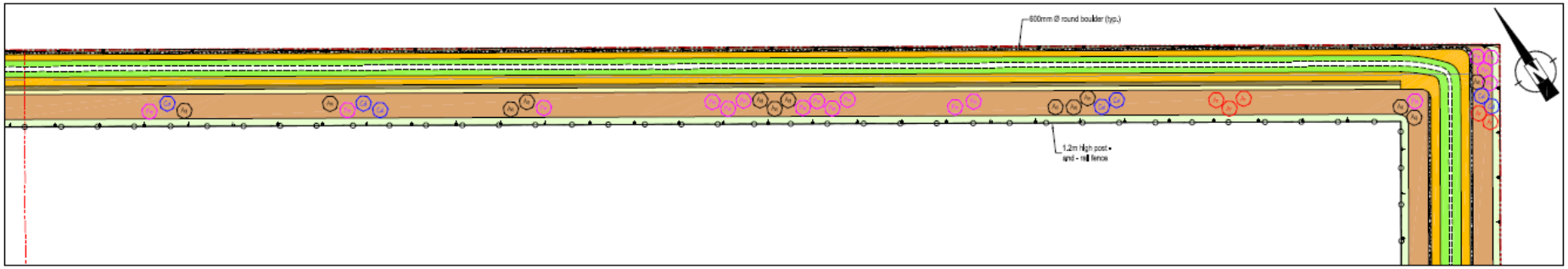
All invasive plants will be removed from the site. Maintenance will ensure that any reestablishment of invasive plants is prevented for 5 years.

Native soils are presently limited to the existing WPA. To the extent feasible, these soils will be retained for reuse in the new WPA. Additional (imported) soil will be required to provide an enhanced depth (minimum 400 mm) of topsoil.

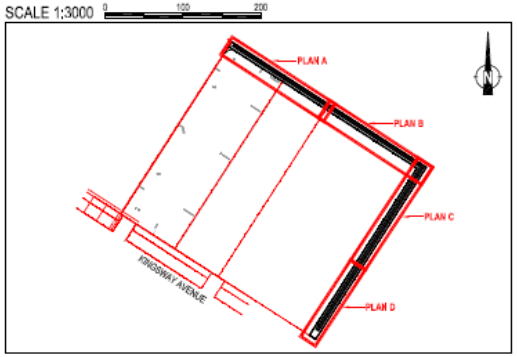
PLAN A
SCALE 1:200



PLAN B
SCALE 1:200



LOCATION
SCALE 1:3000



REFERENCE DRAWINGS
1. Email: 170445-A - Conwest Kingsway - Overall Site Plan - 2019-01-21.dwg. Received January 21, 2019; Krahn Group of Companies.
2. Email: 170445-A - Conwest Kingsway - Overall Site Plan - 2019-01-14.dwg. Received January 21, 2019; Conwest Group of Companies.

CONWEST (1575 - POCO) LIMITED PARTNERSHIP

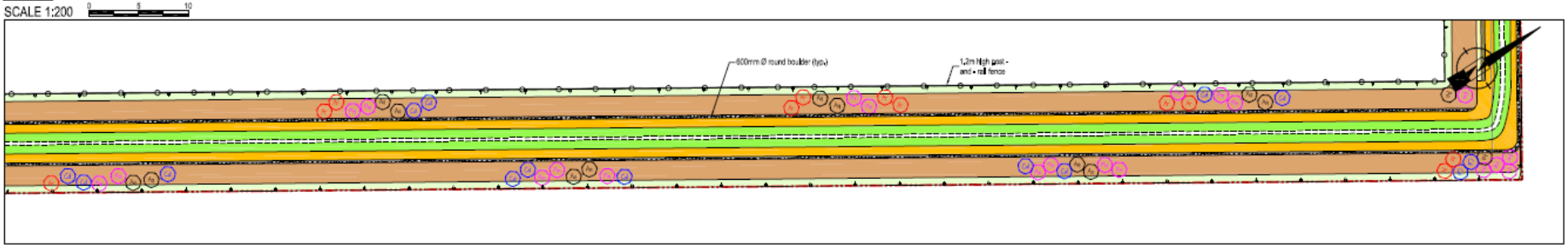
1491, 1515 & 1579 KINGSWAY AVENUE
Port Coquitlam, BC

envirowest consultants inc.
Suite 101 - 1515 Broadway Street
Port Coquitlam, British Columbia
Canada V3C 6M2
office: 604-944-0502
facsimile: 604-944-0507
www.envirowest.ca

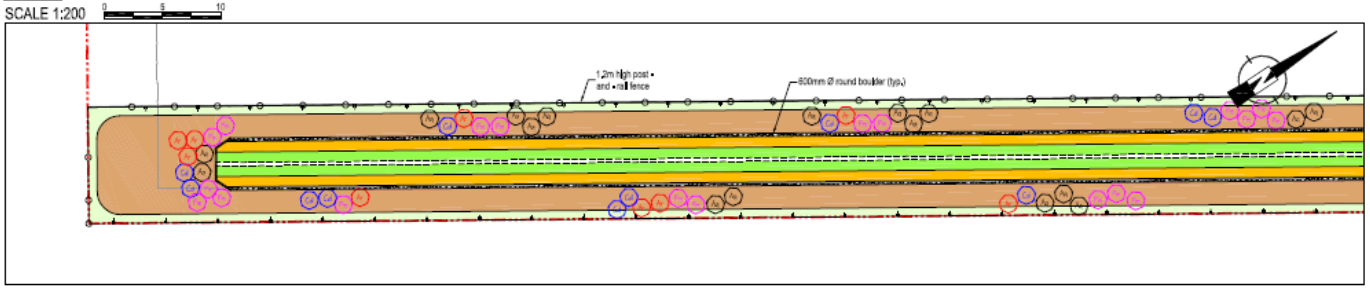
BIOSWALE LANDSCAPE PLAN

DESIGN	DRAWN	CHECKED	REVISION	REVISION DATE
MAA/WW	SDJ/SCM	MAA/WW	04	January 25, 2019
SCALE: As Shown			DRAWING NUMBER: 655-54-01	
DATE: October 19, 2017			SHEET 1 OF 2	

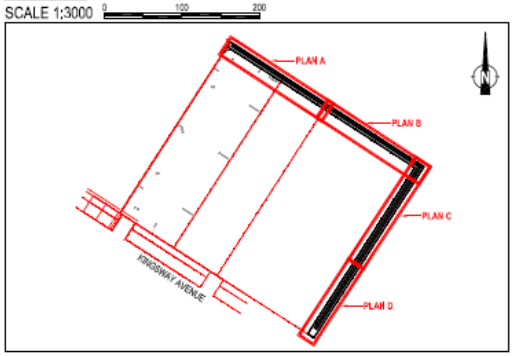
PLAN C
SCALE 1:200 0 5 10



PLAN D
SCALE 1:200 0 5 10



LOCATION
SCALE 1:3000 0 100 200



GENERAL LANDSCAPE SPECIFICATIONS

1. Plant material and the planting of such material are to be in accordance with the British Columbia Landscape Standard (seventh edition) jointly published by the British Columbia Society of Landscape Architects and the British Columbia Landscape Nursery Association.
2. All works are to be conducted in accordance with the sediment control provisions of the "Standards and Best Practices for Instream Works" (Ministry of Water, Land & Air Protection, 2004).
3. All plant material is to be inspected and approved by Envirowest prior to installation.
4. Growing medium is to be free of any subsoils, roots, noxious grass, weeds, toxic materials, stone over 30 mm diameter, foreign objects, and possess an acidity range (pH) of 6.5 to 7.5. Growing medium is to be inspected by Envirowest prior to placement.
5. All Scotch broom (*Cytisus scoparius*), Japanese knotweed (*Fallopia japonica*) and blackberry (*Rubus discolor* and *R. laciniatus*) to be cleared and grubbed from project site.
6. All debris and/or excess material from landscape operations are to be collected and disposed offsite in accordance with all regulatory requirements.
7. The contractor is to provide five (5) years of plant maintenance. Plant maintenance is to include watering, selective pruning and clearing of blackberry. Species survivorship is to equal one-hundred (100) percent five (5) years from planting. Replacement of dead stock may be required to fulfill this specification. Replacement stock is also subject to one-hundred (100) percent survivorship five (5) years from planting.

REFERENCE DRAWINGS

1. Email: 170445-A - Conwest Kingsway - Overall Site Plan - 2019-01-21.dwg, Received January 21, 2019; Krahn Group of Companies.
2. Email: 170445-A - Conwest Kingsway - Overall Site Plan - 2019-01-14.dwg, Received January 21, 2019; Conwest Group of Companies.

PLANT SPECIES LIST AND SPECIFICATIONS

SYMBOL	COMMON NAME	LATIN NAME	NUMBER	COMMENTS
Ag	grand fir	*Abies grandis*	55	no. 5 pot; 1.2m min.; densely branched; well established
Ps	Douglas-fir	*Pseudotsuga menziesii*	65	no. 5 pot; 1.2m min.; densely branched; well established
Cd	black hawthorn	*Crataegus douglasii*	39	no. 5 pot; 1.2m min.; densely branched; well established
Ar	red alder	*Alnus rubra*	31	no. 5 pot; 1.2m min.; densely branched; well established
	Saskatoon	*Amelanchier alnifolia*	560	no. 3 pot; maximum 750mm spacing edge-to-edge
	Nootka rose	*Rosa nutkana*	1,684	no. 2 pot; maximum 650mm spacing edge-to-edge
	red fescue	*Festuca rubra*	672	no. 1 pot; maximum 150mm spacing edge-to-edge
	woolly bulrush	*Scirpus cyperinus*	275	no. 1 pot; maximum 300mm spacing edge-to-edge
	softstem bulrush	*Scirpus validus*	2,175	no. 1 pot; maximum 300mm spacing edge-to-edge
	broadleaved cattail	*Typha latifolia*	1,878	no. 1 pot; maximum 300mm spacing edge-to-edge

CONWEST (1575 - POCO) LIMITED PARTNERSHIP

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www.envirowest.ca

BIOSWALE LANDSCAPE PLAN

DESIGN	DRAWN	CHECKED	REVISION	REVISION DATE
MAA/WW	SDJ/SCM	MAA/WW	04	January 25, 2018
SCALE: As Shown			DRAWING NUMBER: 655-54-02	
DATE: October 19, 2017			SHEET 2 OF 2	

GENERAL LANDSCAPE SPECIFICATIONS

1. Plant material and the planting of such material are to be in accordance with the British Columbia Landscape Standard (seventh edition) jointly published by the British Columbia Society of Landscape Architects and the British Columbia Landscape Nursery Association.
2. All works are to be conducted in accordance with the sediment control provisions of the "Standards and Best Practices for Instream Works" (Ministry of Water, Land & Air Protection, 2004).
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Cd	black hawthorn	*Crataegus douglasii*	39	no. 5 pot; 1.5m min.; densely branched; well established
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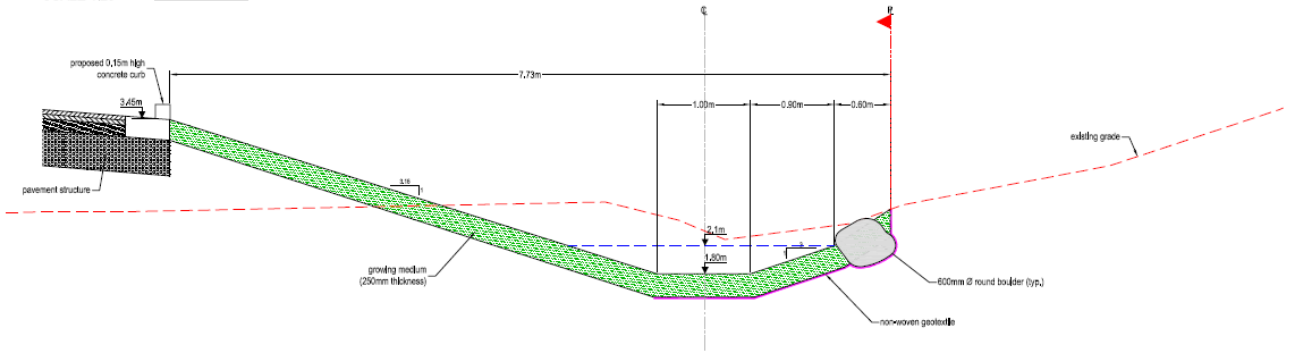
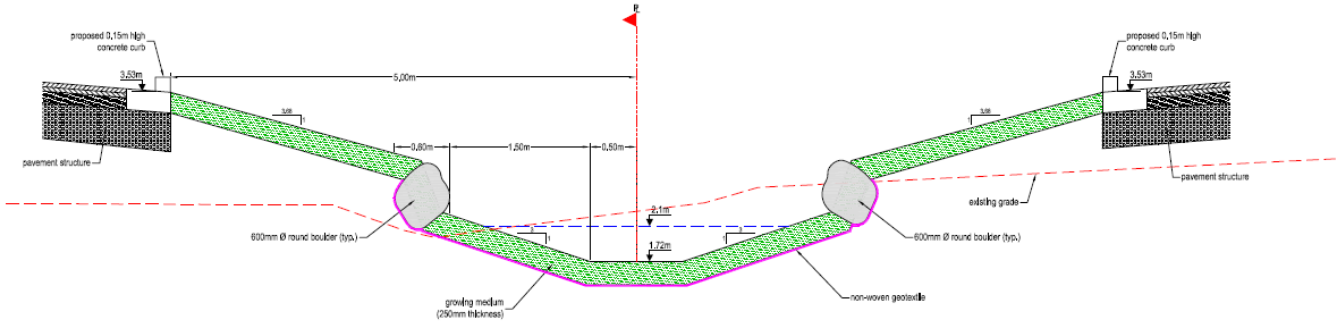
	soft-stem bulrush	*Scirpus validus*	2,175	no. 1 pot; maximum 300mm spacing edge-to-edge
	broad-leaved cattail	*Typha latifolia*	1,878	no. 1 pot; maximum 300mm spacing edge-to-edge

NORTH PROPERTY LINE BIO-SWALE - TYPICAL SECTION
SCALE 1:25



CENTRE PROPERTY LINE BIO-SWALE - TYPICAL SECTION
SCALE 1:25



REFERENCE DRAWING
Drawing No. 2 of 2, Rev. 1, "Sections - 1575 Kingsway Ave., Port Coquitlam," October 10, 2017. KM Civil Consultants Ltd.

CONWEST (1575 - POCO) LIMITED PARTNERSHIP

1491, 15

envirowest consultants inc.
Suite 101 - 1515 Broadway Street
Port Coquitlam, British Columbia
Canada V3C 6M2

BIOSWALE TYPICAL SECTIONS

DESIGN:	DRAWN:	CHECKED:	REVISION:	REVISION DATE:
MAA	SDJ/RK	MAA	01	February 27, 2018
SCALE: As Shown			DRAWING NUMBER: 655-54-03	
DATE: October 19, 2017				

STORM WATER MANAGEMENT LEGEND:

- 100 YEAR OVERLAND FLOW
- 100 YEAR FLOW IN PIPE
- 100 YEAR FLOW BELOW SURFACE
- OVERLAND FLOW
- CATCHMENT BOUNDARY LINE
- CATCHMENT AREA — CATCHMENT No. / AREA (ha)
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- FUTURE STORM SEWER
- EXISTING CONTOURS
- EXISTING DITCHES
- MANHOLE IDENTIFIER (MH D)

BEFORE YOU DIG

EXISTING UNDERGROUND UTILITIES SHOWN ON THIS DRAWING WERE COMPILED FROM A COMBINATION OF VARIOUS AS-CONSTRUCTED RECORD DRAWINGS AND SOME FIELD SURVEYS. THIS INFORMATION IS NOT NECESSARILY ACCURATE OR COMPLETE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION WHERE POTENTIAL CONFLICTS EXIST. CONTRACTOR TO CONTACT TELUS, B.C. HYDRO, FORTISBC AND BC ONE CALL PRIOR TO CONSTRUCTION TO CONFIRM LOCATIONS OF UTILITIES AND APPURTENANCES REQUIRING ADJUSTMENT. ANY DISCREPANCIES REQUIRING CHANGES TO THE DESIGN MUST BE REPORTED TO KM CIVIL CONSULTANTS IMMEDIATELY.

City of Port Coquitlam - Drainage System Design Calculation Sheet - Pipe Flows

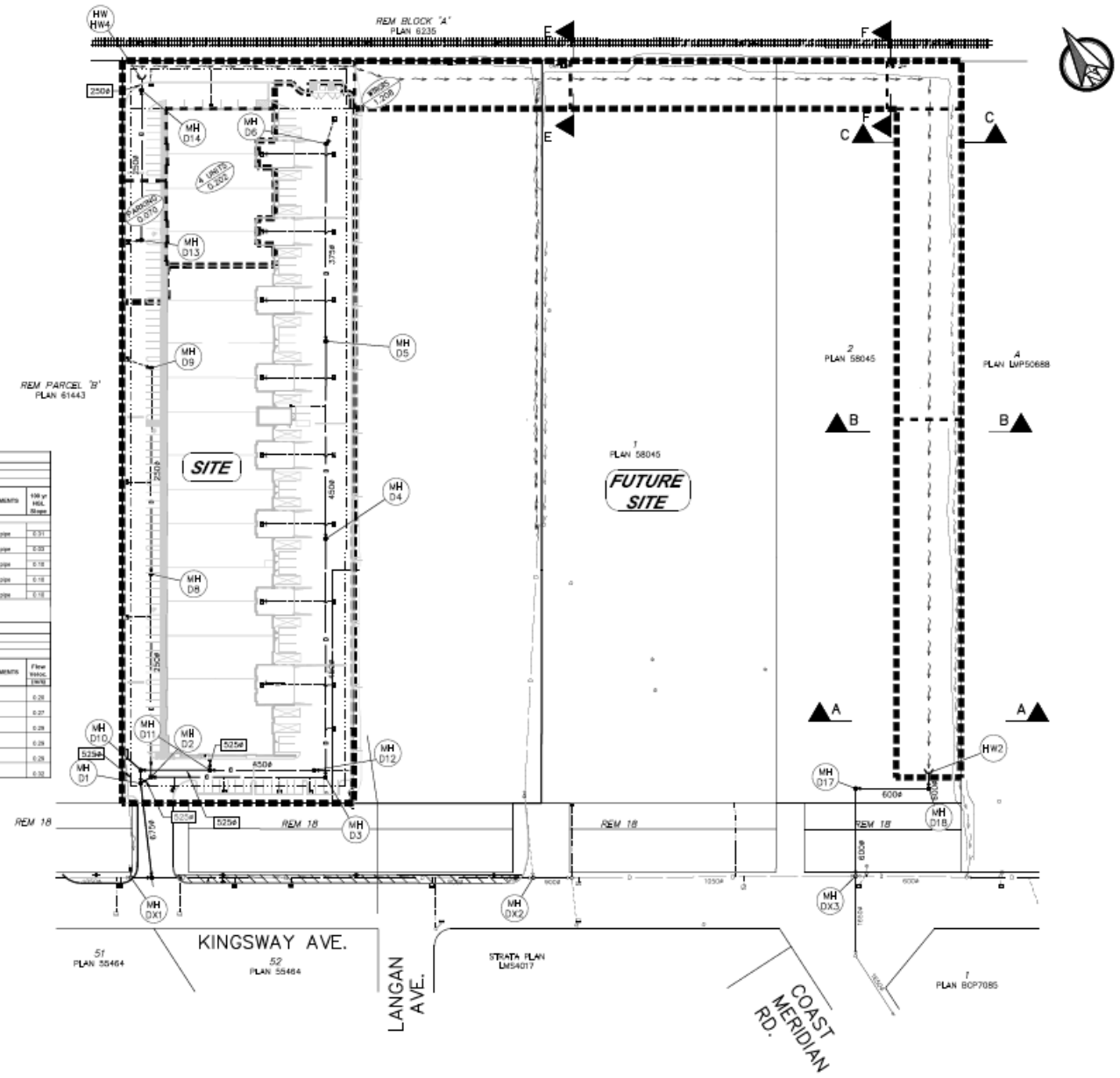
PROJECT NUMBER: 170445.2-C — P.No: 170445.2-C
Project Location: 1579 KINGSWAY AVE, PORT COQUITLAM — Manning's 'n': 0.013 Concrete/PVC
01/22/2018 — IQ5 I Q100 = f(I,A) IDF Curve used: Port Coquitlam

Catchment	MANHOLES From	MANHOLES To	AREA (ha)	R	R*A	Cum R*A	Tc (min) Inlet	Tc (min) Ins.	Tc (min) Total	I100 (mm/hr)	Q100 (m3/s)	Qcap	Slope (%)	Size (mm)	Length (m)	V Full (m/s)	COMMENTS	100 yr HGL Slope
4 UNITS	BLDG	DITCH	0.202	0.90	0.182	0.182												
				1.00	0.202	0.202	10.0	0.2	10.2	98.9	0.333	0.669	1	250	12.19	1.21	In pipe	0.01
PARKING	D13	DITCH	0.070	0.90	0.063	0.063												
				1.00	0.070	0.270	10.0	1.4	11.4	96.6	0.311	0.533	0.3	250	97.08	0.66	In pipe	0.03
WATERCOURSE	HW2	D09	1.209	0.90	1.087	1.087				46.5	0.121							
				1.00	1.209	1.296	10.0	0.1	10.1	99.2	0.199	0.434	0.5	600	3.00	1.54	In pipe	0.16
-	D09	D10	0.000	0.90	0.000	1.087				46.3	0.120							
				1.00	0.000	1.296	10.1	0.3	10.3	98.4	0.199	0.434	0.5	600	26.08	1.54	In pipe	0.16
-	D10	D40	0.000	0.90	0.000	1.087				96.6	0.120							
				1.00	0.000	1.296	10.3	0.4	10.7	97.4	0.193	0.434	0.5	600	35.08	1.54	In pipe	0.16

City of Port Coquitlam - Drainage System Design Calculation Sheet - Watercourse Flows

PROJECT NUMBER: 170445-C — P.No: 170445-C
Project Location: 1579 KINGSWAY AVE, PORT COQUITLAM — Manning's 'n': 0.03 Clean and Straight Ditch
01/22/2018 — IQ5 I Q100 = f(I,A) IDF Curve used: Port Coquitlam

Catchment	MANHOLES From	MANHOLES To	AREA (ha)	R	R*A	Cum R*A	Tc (min) Inlet	Tc (min) Ins.	Tc (min) Total	I100 (mm/hr)	Q100 (m3/s)	Qcap	Slope (%)	Bottom Width (m)	Length (m)	Flow Depth (m)	COMMENTS	Flow HGL (m/s)
SECTION DD (PARKING)	D13+BLDG	DITCH START	0.070	0.90	0.063	0.063				46.9	0.057							
				1.00	0.070	0.070	10.0	6.4	16.4	78.4	0.012	0.067	0.16	1	78	0.13		0.28
SECTION EE (DITCH+4UNITS+PRK)	DITCH START	LOT 1 PL	0.399	0.90	0.323	0.390				32.0	0.035							
				1.00	0.399	0.469	16.4	11.4	27.8	48.7	0.066	1.363	0.16	1	189	0.18		0.27
SECTION FF (DITCH)	LOT 1 PL	LOT 1 PL	0.190	0.90	0.171	0.561				20.5	0.040							
				1.00	0.190	0.659	27.8	0.9	28.7	39.1	0.062	1.681	0.16	1	19	0.20		0.29
SECTION CC (DITCH2)	LOT 1 PL	CORNER	0.845	0.90	0.760	0.760				29.2	0.042							
				1.00	0.845	0.860	28.7	0.9	29.6	35.6	0.060	1.779	0.16	1	128	0.20		0.29
SECTION BB (DITCH4)	CORNER	WATERCOURSE E MIDPOINT	0.255	0.90	0.229	0.989				22.9	0.032							
				1.00	0.255	0.945	35.6	7.1	42.7	32.1	0.082	2.378	0.16	1	124	0.23		0.26
SECTION AA (DITCH5)	WATERCOURSE E MIDPOINT	KINGSWAY	0.292	0.90	0.263	1.087				21.0	0.054							
				1.00	0.292	1.238	42.7	0.1	42.8	28.4	0.099	3.230	0.16	1	1	0.25		0.32



No.	DATE	REVISION	DRN	TECH	ENG
13	2019.01.24	ISSUED FOR DEVELOPMENT PERMIT AMENDMENT	MWP	JKD	SIM
12	2018.12.14	REVISED SITE PLAN, GRADING, AND SERVICING	MWP	JKD	SIM
11	2018.11.21	CIVIL SITE INSTRUCTION No. 4	MWP	JKD	SIM
10	2018.10.29	ISSUED FOR AMENDMENT TO DP	MWP	JKD	SIM
9	2018.10.16	REVISED STORM AND WATER SERVICING	MWP	JKD	SIM
8	2018.09.14	ISSUED FOR ON-SITE CONSTRUCTION	MWP	JKD	SIM

LEGAL DESCRIPTION: LOT A, DISTRICT LOT 209 AND 392, GROUP 1, SECTION 7, BLOCK 6 NORTH, RANGE 1 EAST, NEW WESTMINSTER DISTRICT, PLAN EPP74840

BENCHMARK: ELEVATIONS ARE GEODETIC, SHOWN IN METRES, DERIVED FROM CITY BENCHMARK #99 ELEVATION=9.272m DATUM: CVD28GVRD, 2005

KM Civil CONSULTANTS LTD.
ABBOTSFORD OFFICE # 110 - 34077 Gladys Avenue Abbotsford, BC V2S 2E8 Tel: 604-853-8831 Fax: 604-853-1580
VANCOUVER OFFICE # 110 - 2800 Virtual Way Vancouver, BC V5M 0C4 Tel: 604-294-6662 Fax: 604-294-6665

CONWEST (1575 POCO) LP
#250-1311 KOOTENAY STREET, VANCOUVER, B.C., V5K 4Y3
ATTENTION: JEREMY BERGMANN
TEL.:(294-5067 FAX.:(604)293-2474

STORMWATER MANAGEMENT PLAN

1579 KINGSWAY AVE., PORT COQUITLAM

DESIGNED: JKD — DRAWN: GL — REVIEWED: SIM — APPROVED: SIM — SCALE: HORZ. 1:750 VERT.

MUNICIPAL PROJECT NUMBER: OF800100 — MUNICIPAL DRAWING NUMBER: — KM CIVIL PROJECT No.: 170445.2-C — DATE: AUGUST, 2017 — DRAWING No.: 1 of 2 — REVISION No.: 13

City of Port Coquitlam - Drainage System Design Calculation Sheet - Pipe Flows

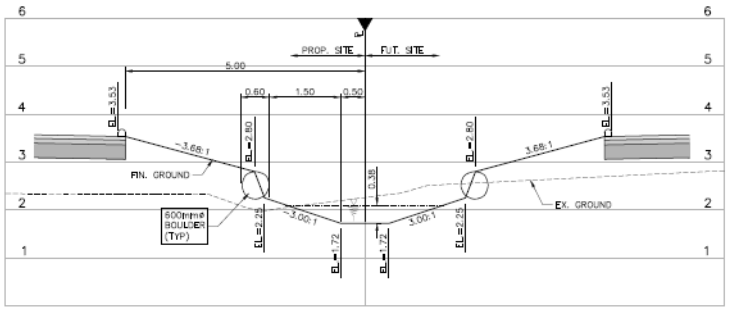
PROJECT NUMBER: 170445.2-C | File: 170445.2-C
Project Location: 1579 KINGSWAY AVE, PORT COQUITLAM | Manning's 'n': 0.013 Concrete/PVC
01/22/2019 | Q5 / Q100 = RiA | IDF Curve used: Port Coquitlam

Catchment	MANHOLE		AREA	R	R*A	Cum R*A	Tc (min)			i10 / i100 (mm/hr)	Q10 / Q100 (m3/s)	Qcap (m3/s)	Slope (%)	Size (mm)	Length (m)	V (Full) (m/s)	COMMENTS	100 yr HGL Slope
	From	To	(ha)				Inlet	Incr.	Total									
4 UNITS				0.90	0.182	0.182				40.6	0.020							
	BLDG	DITCH	0.202	1.00	0.202	0.202	10.0	0.2	10.2	58.9	0.033	0.059	1	250	12.50	1.21	In pipe	0.31
PARKING				0.90	0.063	0.063				38.5	0.007							
	D13	DITCH	0.070	1.00	0.070	0.070	10.0	1.4	11.4	55.6	0.011	0.033	0.3	250	57.00	0.66	In pipe	0.03
WATERCOURSE				0.90	1.087	1.087				40.8	0.123							
	HW2	D2B	1.208	1.00	1.208	1.208	10.0	0.1	10.1	59.2	0.199	0.434	0.5	600	5.50	1.54	In pipe	0.10
-				0.90	0.000	1.087				40.3	0.122							
	D2B	D1B	0.000	1.00	0.000	1.208	10.1	0.3	10.3	58.4	0.196	0.434	0.5	600	26.00	1.54	In pipe	0.10
-				0.90	0.000	1.087				39.6	0.120							
	D1B	DX3	0.000	1.00	0.000	1.208	10.3	0.4	10.7	57.4	0.193	0.434	0.5	600	35.00	1.54	In pipe	0.10

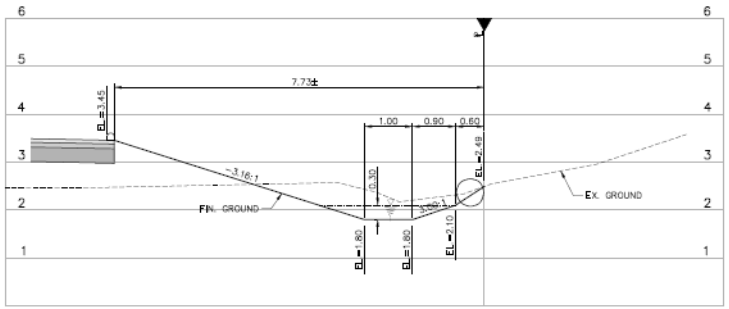
City of Port Coquitlam - Drainage System Design Calculation Sheet - Watercourse Flows

PROJECT NUMBER: 170445-C | File: 170445-C
Project Location: 1579 KINGSWAY AVE, PORT COQUITLAM | Manning's 'n': 0.03 Clean and Straight Ditch
01/22/2019 | Q5 / Q100 = RiA | IDF Curve used: Port Coquitlam

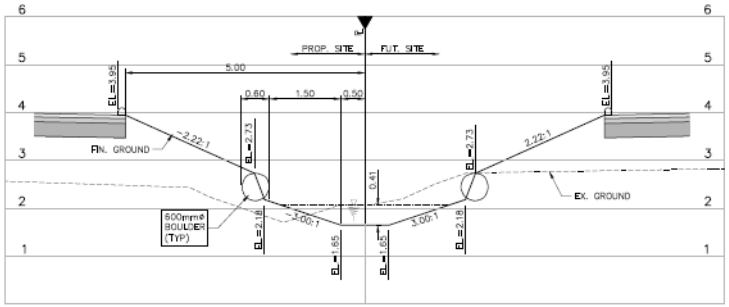
Catchment	MANHOLE		AREA	R	R*A	Cum R*A	Tc (min)			i10 / i100 (mm/hr)	Q10 / Q100 (m3/s)	Qcap (m3/s)	Slope (%)	Bottom Width (m)	Length (m)	Flow Depth (m)	COMMENTS	Flow Veloc. (m/s)
	From	To	(ha)				Inlet	Incr.	Total									
SECTION DD (PARKING)				0.90	0.063	0.063				40.9	0.007							
	D13+BLDG	DITCH START	0.070	1.00	0.070	0.070	10.0	6.4	16.4	59.4	0.012	0.067	0.10	1	75	0.10		0.20
SECTION EE (DITCH1+4UNITS+PRK				0.90	0.323	0.386				32.6	0.035							
	DITCH START	LOT 1 PL	0.359	1.00	0.359	0.429	16.4	11.4	27.8	46.7	0.056	1.163	0.10	1	185	0.18		0.27
SECTION FF (DITCH2)				0.90	0.171	0.557				25.6	0.040							
	LOT 1 PL	LOT 1 PL	0.190	1.00	0.190	0.619	27.8	0.9	28.7	36.1	0.062	1.681	0.10	1	15	0.20		0.29
SECTION CC (DITCH3)				0.90	0.040	0.597				25.2	0.042							
	LOT 1 PL	CORNER	0.045	1.00	0.045	0.663	28.7	6.9	35.6	35.6	0.066	1.779	0.10	1	120	0.20		0.29
SECTION BB (DITCH4)				0.90	0.228	0.825				22.9	0.052							
	CORNER	WATERCOURSE MIDPOINT	0.253	1.00	0.253	0.916	35.6	7.1	42.7	32.1	0.082	2.378	0.10	1	124	0.20		0.29
SECTION AA (DITCH5)				0.90	0.263	1.087				21.0	0.064							
	WATERCOURSE MIDPOINT	KINGSWAY	0.292	1.00	0.292	1.208	42.7	0.1	42.8	29.4	0.099	3.230	0.10	1	1	0.25		0.32



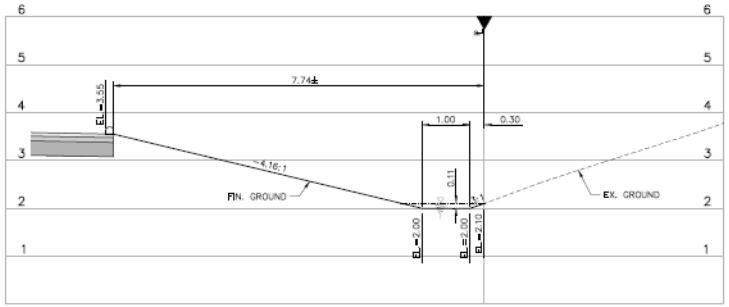
SECTION C–C



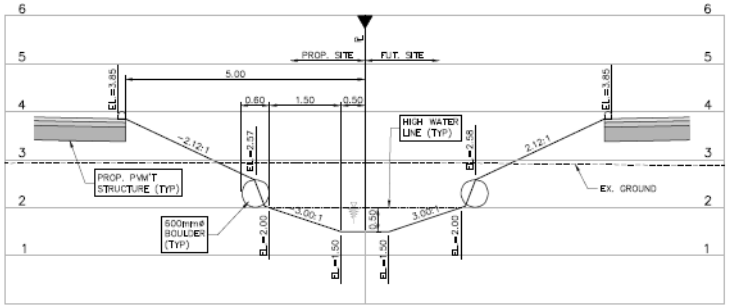
SECTION F–F



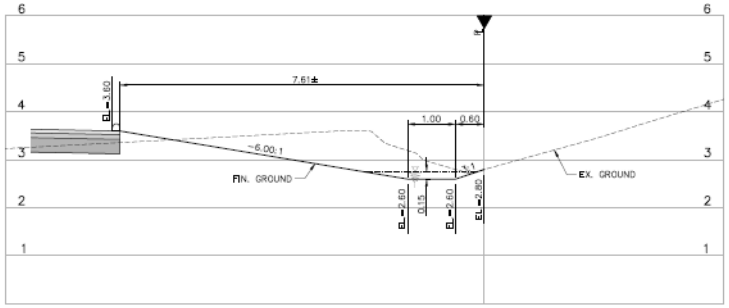
SECTION B–B



SECTION E–E



SECTION A–A



SECTION D–D

No.	DATE	REVISION	DRN	TECH	ENG
6					
5					
4					
3	2018.03.09	REVISED PER CITY COMMENTS	NWP	JC	SIM
2	2018.03.02	RE-ISSUED FOR DEVELOPMENT PERMIT	NWP	JC	SIM
1	2017.10.10	ISSUED FOR DEVELOPMENT PERMIT	NWP	JC	SIM

LEGAL DESCRIPTION: LOT 47, DISTRICT LOT 288, AND LOT 48, DISTRICT LOT 288 AND 382, BOTH OF GROUP 1, SECTION 7, BLOCK 6 NORTH, RANGE 1 EAST, NEW WESTMINSTER DISTRICT, PLAN 48118

BENCHMARK: ELEVATIONS ARE GEODETIC, SHOWN IN METRES, DERIVED FROM CITY BENCHMARK #86
ELEVATION=3.272m
DATUM: CVD28GVRD, 2005

KM Civil CONSULTANTS LTD.

ABBOTSFORD OFFICE
400 - 34077 Gladys Avenue
Abbotsford, BC V2S 2E8
Tel: 604-853-8831 Fax: 604-853-1580

VANCOUVER OFFICE
110 - 2920 Virtual Way
Vancouver, BC V5M 0C4
Tel: 604-294-6662 Fax: 604-294-6665

CONWEST (1575 POCO) LP
#250-1311 KOOTENAY STREET,
VANCOUVER, B.C., V5K 4Y3
ATTENTION: JEREMY BERGMANN
TEL.:(294-5067 FAX.:(604)293-2474

SECTIONS

1575 KINGSWAY AVE., PORT COQUITLAM

DESIGNED	DRAWN	REVIEWED	APPROVED	SCALE: HORZ. / VERT.
JKC	GL	SIM	SIM	1:50 / 1:50

MUNICIPAL PROJECT NUMBER:
MUNICIPAL DRAWING NUMBER:
KM CIVIL PROJECT No.: 170445-C
DATE: AUGUST, 2017
DRAWING No.: 2 of 2
REVISION No.: 3

THE CORPORATION OF THE CITY OF PORT COQUITLAM

"DEVELOPMENT PROCEDURES BYLAW, 2013, NO. 3849"

DEVELOPMENT PERMIT AMENDMENT (1)

AMENDMENT TO DP000331

Issued to: CONWEST (1575 POCO) GP LTD
(Owner as defined in the Local Government Act, hereinafter referred to as the Permittee)

Address: 250-1311 KOOTENAY ST VANCOUVER BC V5K 4Y3

1. This Development Permit Amendment applies to DP000331 issued June 5, 2018.

2. DP000331 is amended by:
   a. Replacing drawings numbered DP000331 (1) to DP000331 (18) with drawings numbered DP000331 amendment 1 (1) to DP000331 amendment 1 (15) which are attached hereto and form part of this permit.
   b. Amending the landscape security amount from $196,760.00 to $102,123.00

APPROVED BY THE COMMITTEE OF COUNCIL THE [CLICK **HERE** ENTER THE DAY (IE 12TH)] DAY OF [CLICK **HERE** - ENTER THE MONTH, YEAR].

SIGNED THIS [CLICK **HERE** - ENTER THE DAY (IE 12TH)] DAY OF [CLICK **HERE** - ENTER THE MONTH, YEAR].

Mayor

_____
Corporate Officer

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

Applicant (or Authorized Agent or Representative of Applicant)

CONWEST KINGSWAY AVENUE

1579 KINGSWAY AVENUE, PORT COQUITLAM

DP000331 Amendment 1 (1)

SHEET LIST

ARCHITECTURAL DP SHEET LIST

A0.1 COVER PAGE
A2.1 SITE PLANS
A2.2 SITE DETAILS
A2.3 SITE PLAN - FIRE TRUCK ACCESS
A2.4 SITE ENLARGED PLANS
A3.1 FLOOR PLANS
A3.10 ROOF PLAN
A4.1 ELEVATIONS
A4.2 ELEVATIONS
A5.1 BUILDING SECTIONS

PROJECT TEAM

ARCHITECT OF RECORD

LARRY PODHORA ARCHITECTURE INC.
1952 BRACKMAN WAY
SAANICH B.C. V8L 0C2

CONTACT: LARRY PODHORA

STRUCTURAL

KRAHN ENGINEERING LTD.
110 - 2920 VIRTUAL WAY
VANCOUVER BC V5M 0C4
P: 604.294.6662

CONTACT: WESLEY LIN

MECHANICAL

BYCAR ENGINEERING LTD.
105A - 7808 132 STREET
SURREY BC V3W 4N1
P. 604.591.2766

CONTACT: DARYL KETURAKIS

ELECTRICAL

SML CONSULTANTS LTD.
109 - 7225 BROWN STREET
DELTA BC V4G 1G5
P. 604.946.7660

CONTACT: RICK TUCKER

BUILDING DESIGN

KRAHN ENGINEERING LTD.
110 - 2920 VIRTUAL WAY
VANCOUVER BC V5M 0C4
P: 604.294.6662

CONTACT: SCOTT DELGATTY

CIVIL

KM CIVIL CONSULTANTS LTD.
400 - 34077 GLADYS AVENUE
ABBOTSFORD B.C. V2S 3E6
P. 604.853.6831 F. 604.853.1580

CONTACT: STUART MCGREGOR

LANDSCAPE

DURANTE KREUK LTD.
102 - 1637 WEST 5 AVENUE
VANCOUVER BC V6J 1N5
P. 604.684.4611 F. 604.684.0577

CONTACT: PETER KREUK

SURVEY

PAPOVE PROFESSIONAL LAND SURVEYING INC
202 - 1120 WESTWOOD ST, PORT COQUITLAM BC V3B 7K8
P: 604.464.5199

CONTACT: BILL PAPOVE

Krahn GROUP OF COMPANIES
ABBOTSFORD • EDMONTON • VANCOUVER
VANCOUVER OFFICE

CONWEST
Group of Companies

This drawing shall not be used for construction purposes until the seal appearing hereon is signed and dated by the Architect or Engineer.

NO.	DATE YMD	DESCRIPTION
25	2019/02/20	ISSUED FOR AMENDMENT TO DP
9	2018/10/12	ISSUED FOR AMENDMENT TO DP
8	2018/09/14	ISSUED FOR CONSTRUCTION
6	2018/09/22	RE-ISSUED FOR BP
4	2018/05/07	ISSUED FOR DP
3	2018/04/16	ISSUED FOR TENDER

ISSUED AND REVISIONS

larry podhora | architecture inc

PROJECT NAME
CONWEST KINGSWAY AVENUE

PROJECT ADDRESS
1579 KINGSWAY AVENUE, PORT COQUITLAM

DRAWING TITLE
COVER PAGE

SCALE	
DRAWN	MA
CHECKED	SAD
PROJECT NO.	17044A
DRAWING NO.	A0.1

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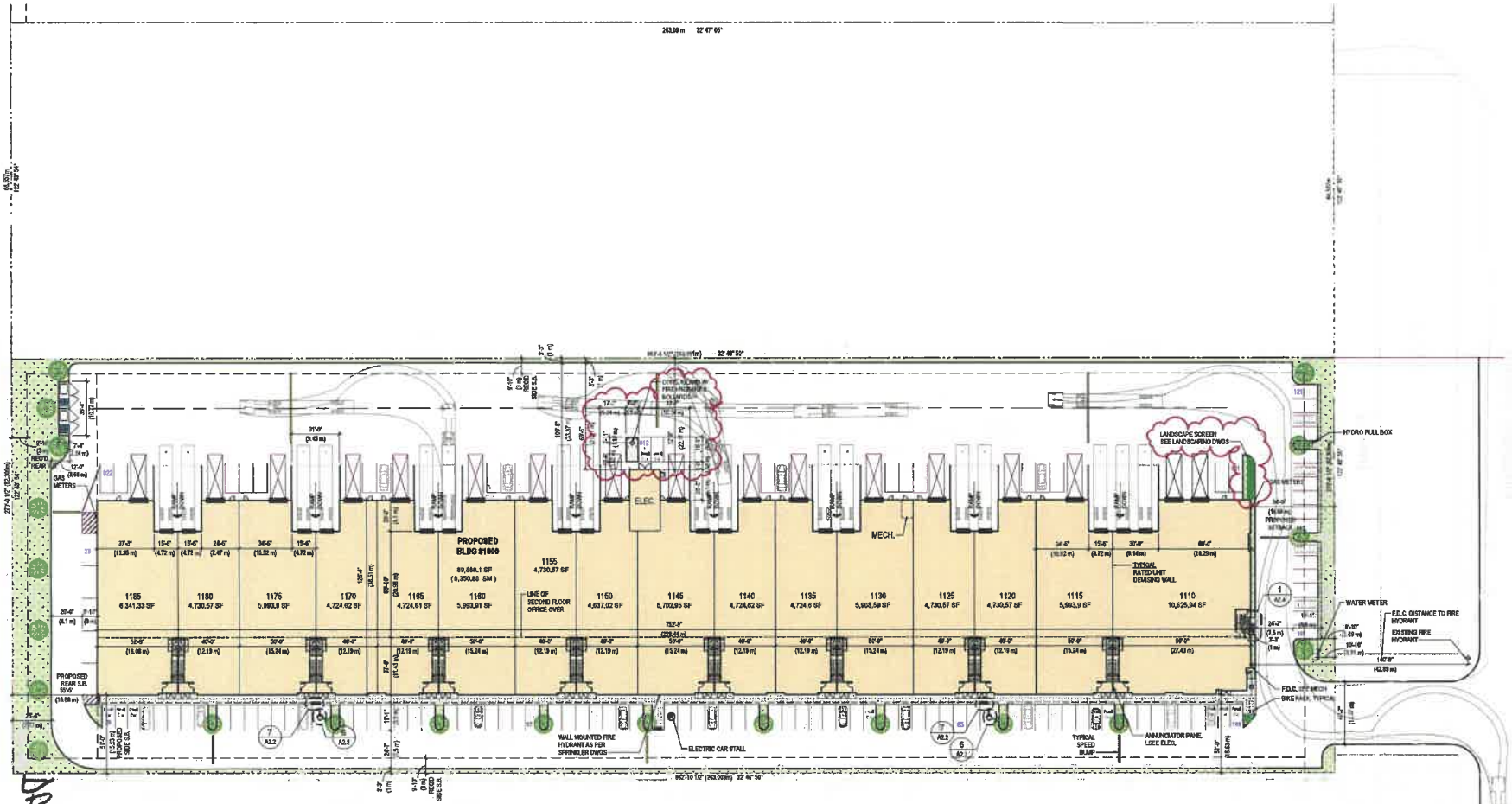

PROJECT DATA

CIVIC ADDRESS:	1579 KINGSWAY AVENUE
LEGAL ADDRESS:	LT A, DL 268 & 362, GP 1, SRC 7, BLK 6N, RGE 1E, NWD PLAN. EPP74940
ZONING:	M2
BUILDING USE:	INDUSTRIAL
SITE AREA:	233,034.00 SF (21,649.57 m²) = 2.16 ha
GROSS BUILDING AREA:	BLDG # / AREA (SF) / AREA (SM): #1000 — 89,886.1 SF — 8,350.86 m²

FLOOR AREA:

BLDG #	USE	LEVEL	CLASSIFICATION	AREA (SF)	AREA (SM)
#1000	WAREHOUSE	MAIN FLOOR	GROUP 'F2'	89,916.3 SF	8,270.07 m²
#1000	OFFICE	SECOND FLOOR	GROUP 'D'	26,134.6 SF	2,427.56 m²
TOTAL:				115,152.8 SF	10,698.05 m²

1. SITE COVERAGE:

ALLOWABLE SITE COVERAGE: 60% [252,885.0 SF (23,494.8 SM)]

PROPOSED SITE COVERAGE: (BUILDING AREA) / (SITE AREA) = %
89,886.1 SF / 233,034 SF = 39%

2. DENSITY (FLOOR SPACE RATIO):

TOTAL FLOOR AREA: 115,152.8 SF (10,698.05 m²)

MAX. ALLOWED FSR: N/A

PROPOSED FSR: (TOTAL FLOOR AREA) / (SITE AREA)
115,152.8 SF / 233,034 SF = 0.49

3. BUILDING HEIGHT:

	MAX. ALLOWED	PROPOSED
BUILDING HEIGHT:	N/A	32'-10" (10.01 M)

4. REQUIRED SETBACKS:

	MIN. REQ'D	PROPOSED
FRONT YARD (SOUTH):	20'-0" (6.0 M)	54'-6" (16.58M)
SIDE YARD (EAST):	9'-10" (3.0 M)	64'-7" (19.68 M)
SIDE YARD (WEST):	9'-10" (3.0 M)	51'-0" (15.53 M)
REAR YARD (NORTH):	9'-10" (3.0 M)	55'-5" (16.88 M)

5. LANDSCAPING REQUIREMENTS:

A LANDSCAPED STRIP WITH A MIN. WIDTH OF 3 METRES ALONG THE FRONT & EXTERIOR SIDE LOT LINES THAT INCLUDES A MIN. OF ONE TREE PER 10 LINEAL METRES OF ALL LOT LINES ABUTTING A STREET;

B, A LANDSCAPED STRIP WITH MIN. WIDTH OF 3 METRES ALONG INT. SIDE AND REAR LOT LINES ABUTTING A LOT DESIGNATED FOR RESIDENTIAL, COMMERCIAL, INSTITUTIONAL, OR PARK USE IN THE OFFICIAL COMMUNITY PLAN OR SEPARATED FROM SUCH A LOT BY A STREET OR LANE;

C, A LANDSCAPED STRIP WITH A MIN. WIDTH OF 1 METRE ADJACENT TO A BUILDING WALL FACING A STREET OR PARK. FOR CLARITY, THIS LANDSCAPE STRIP MAY INCL. WALKWAYS PROVIDING ACCESS TO THE BLDG & D, IN THE PARKING AREA, ONE LANDSCAPED STRIP OR ISLAND WITH A MIN. AREA OF 9M2 FOR EVERY EIGHT PARKING STALLS AND INCLUDES A MIN. OF ONE TREE.

6. PARKING AND LOADING:

OCCUPANCY	NO. STALLS REQUIRED
INDUSTRIAL:	1 STALL / 1,222.57 SF (95 SM) FLOOR AREA
OFFICE:	1 STALL / 1,222.57 SF (95 SM) FLOOR AREA

USE	LEVEL	AREA (SF)	AREA (SM)	PARKING FACTOR (SF)	PARKING FACTOR (SM)	REQUIRED NO. OF STALLS
WAREHOUSE	MAIN FLOOR	89,916.27 SF	8,270.07 m²	1,022.57	95	87.95
OFFICE	SECOND FLOOR	26,134.56 SF	2,427.56 m²	1,022.57	95	25.56
TOTALS:		115,152.84 SF	10,698.05 m²			112.61

LOADING STALLS REQUIRED: 2 FOR THE FIRST 2,300 SM, 1 PER ADDITION 4,600 SM OR FRACTION THEREOF

ACCESSIBLE STALLS REQUIRED: 1 % OF TOTAL STALLS REQUIRED
114 x 0.01 = 1.14 (2)

MIN. STALL DIMS REQ'D:	WIDTH	LENGTH	DRIVE AISLE	ANGLE
STANDARD STALL:	8'-10 1/2" (2.7 M)	18'-0 1/2" (5.5 M)	24'-7" (7.5 M)	90°
ACCESSIBLE STALL:	12'-2" (3.7 M)	18'-0 1/2" (5.5 M)	24'-7" (7.5 M)	90°
SMALL CAR STALL:	8'-2 1/2" (2.5 M)	16'-5" (5.0 M)	24'-7" (7.5 M)	90°
LOADING STALL:	8'-6" (2.6 M)	29'-6 1/2" (9.0 M)	24'-7" (7.5 M)	90°

TOTAL STALLS

	REQD/ALLOWED	PROVIDED:
MIN. REQ'D STANDARD STALLS (75%)	83	108
MIN REQ'D ACCESSIBLE STALLS (1%)	2	2
ALLOWED NO. OF SMALL CAR STALLS (25%)	28	11
TOTAL:	113	121
LOADING STALLS	4	34

PROJECT NORTH

1 SITE PLAN
SCALE 1/32" = 1'-0"

NO.	DATE/YMD	DESCRIPTION
11	2019/02/15	ISSUED FOR AMENDMENT TO DP
10	2018/12/06	RE-ISSUED FOR BP
9	2018/10/12	ISSUED FOR AMENDMENT TO BP
8	2018/09/14	ISSUED FOR CONSTRUCTION
7	2018/09/20	RE-ISSUED FOR BP
6	2018/05/07	ISSUED FOR BP
5	2018/04/16	ISSUED FOR TENDER
4	2018/04/06	RE-ISSUED FOR DP
3	2018/03/15	ISSUED FOR CLIENT REVIEW
2	2018/02/26	RE-ISSUED FOR DP
1	2017/12/12	ISSUED FOR DP

ISSUES AND REVISIONS

SEAL

larry podhora | architecture inc

PROJECT NAME
CONWEST KINGSWAY AVENUE

PROJECT ADDRESS
1579 KINGSWAY AVENUE, PORT COQUITLAM

SITE PLAN

SCALE	As indicated
DRAWN	NA
CHECKED	SAG
PROJECT NO.	1704-5-A

DRAWING NO.
A2.1

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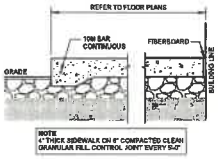
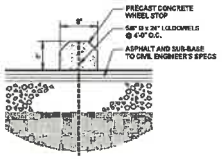
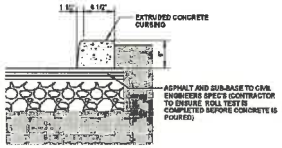
DP00231 Amendment 1 (2)



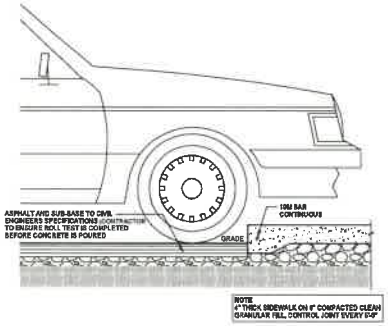
4 SIDEWALK DETAIL
SCALE: 1" = 1'-0"



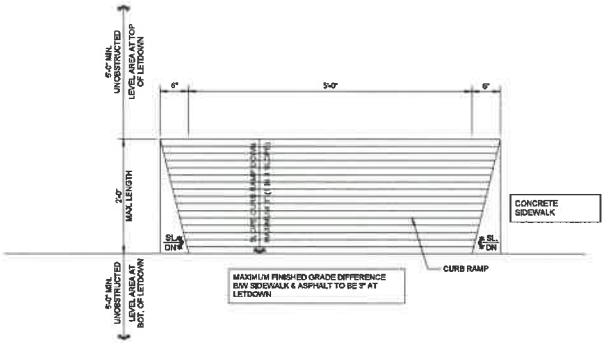
3 CONCRETE WHEEL STOP
SCALE: 1" = 1'-0"



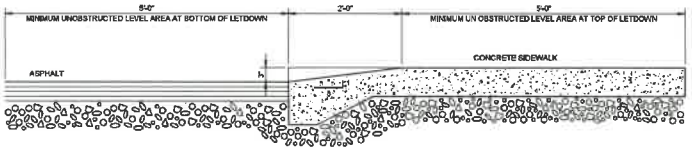
2 EXTRUDED CURB
SCALE: 1" = 1'-0"



1 W/H_CAR OVERHANG SIDEWALK
SCALE: 1" = 1'-0"

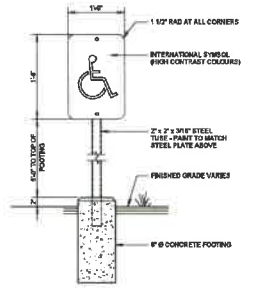


PLAN OF H/C SIDEWALK LETDOWN

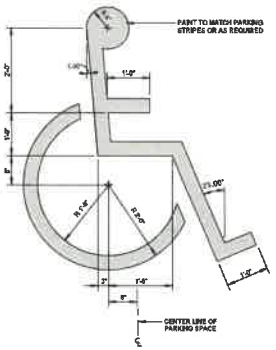


SECTION OF H/C SIDEWALK LETDOWN

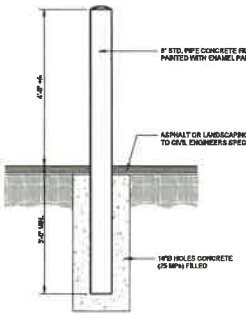
7 H/C SIDEWALK LETDOWN
SCALE: 1" = 1'-0"



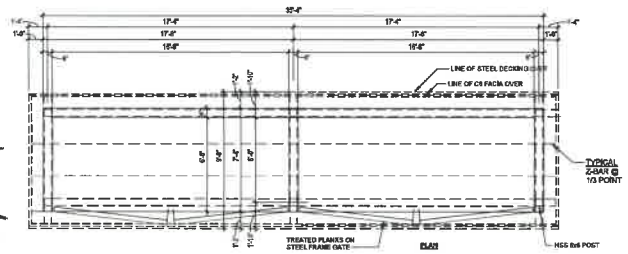
6 ACCESSIBLE SIGN
SCALE: 1" = 1'-0"

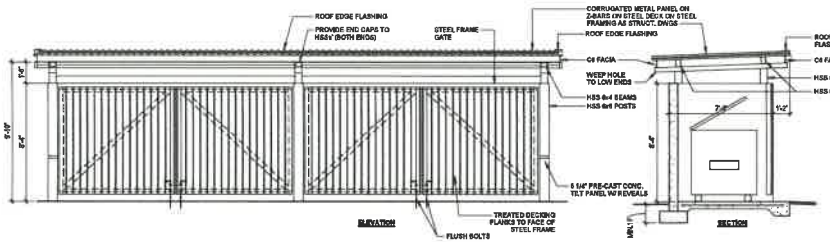


5 ACCESSIBLE PAINTED SYMBOL
SCALE: 3/4" = 1'-0"



8 BOLLARD DETAIL
SCALE: 1 1/2" = 1'-0"





9 GARBAGE ENCLOSURE
SCALE: 1/4" = 1'-0"

DP000331 amendment 1 (3)

This drawing shall not be used for construction purposes until the seal appearing hereon is signed and dated by the Architect or Engineer

NO.	DATE YYMD	DESCRIPTION
11	2018/02/13	ISSUED FOR AMENDMENT TO DP
9	2018/01/12	ISSUED FOR AMENDMENT TO BP
8	2018/08/14	ISSUED FOR CONSTRUCTION
7	2018/06/22	RE-ISSUED FOR BP
6	2018/04/27	ISSUED FOR BP
5	2018/04/16	ISSUED FOR TENDER
4	2018/04/06	RE-ISSUED FOR DP
2	2018/02/26	RE-ISSUED FOR DP
1	2017/10/12	ISSUED FOR DP

ISSUED AND REVISIONS

Krahn GROUP OF COMPANIES
ABBOTSFORD • EDMONTON • VANCOUVER
VANCOUVER OFFICE

CONWEST
Group of Companies

larry podhora | architecture inc

PROJECT NAME
CONWEST KINGSWAY AVENUE

PROJECT ADDRESS
1579 KINGSWAY AVENUE, PORT COQUITLAM

DRAWING TITLE
SITE DETAILS

SCALE	As Indicated
DRAWN	NA
CHECKED	SAD
PROJECT NO.	17045-A
DRAWING NO.	A2.2

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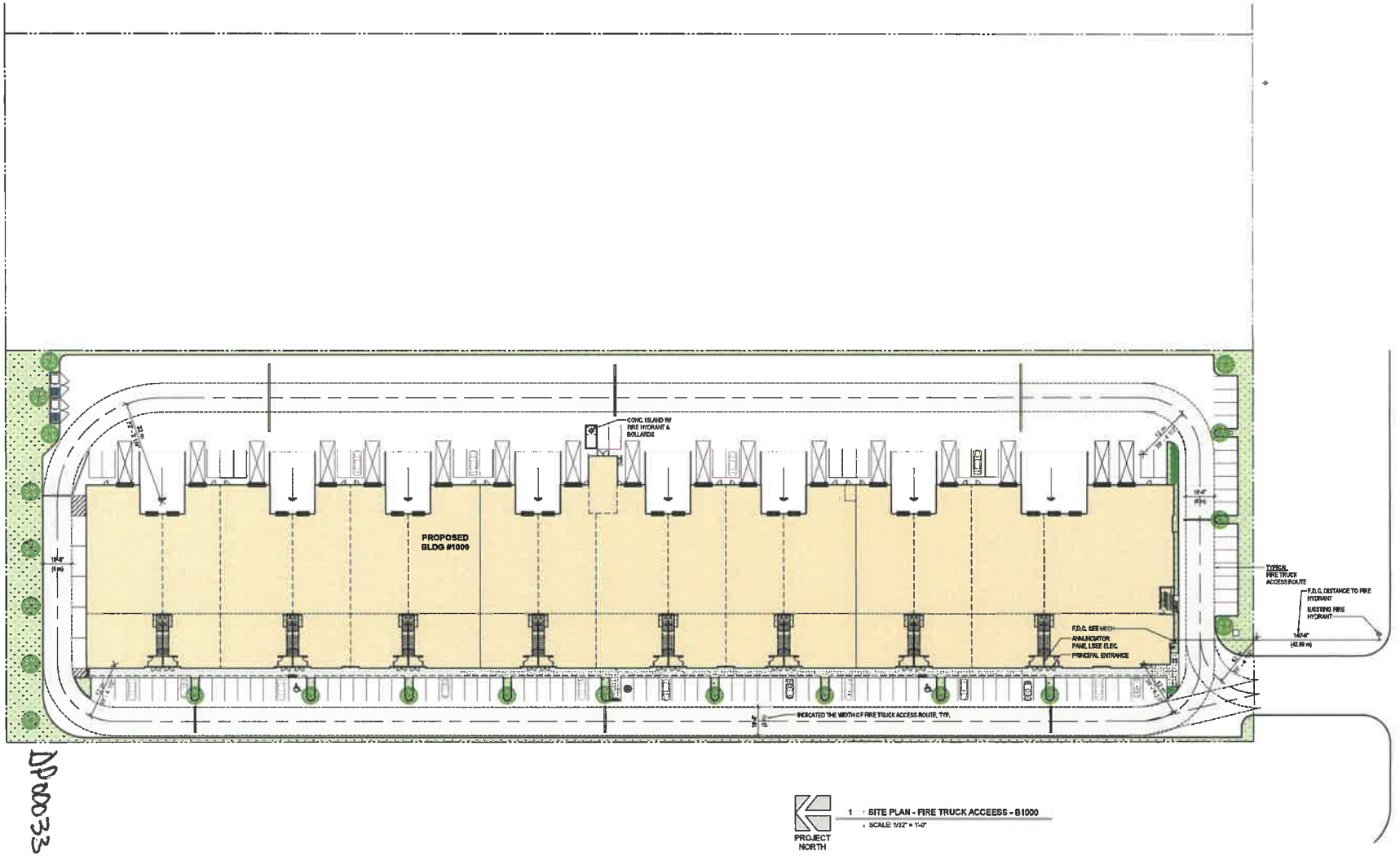

PROJECT NORTH

1 : SITE PLAN - FIRE TRUCK ACCEESS - B1000
SCALE: 1/32" = 1'-0"

DP000331 amendment 1 (4)

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NO.	DATE YMD	DESCRIPTION
11	2016/02/10	ISSUED FOR AMENDMENT TO DP
9	2015/10/27	ISSUED FOR AMENDMENT TO BP
8	2015/05/04	ISSUED FOR CONSTRUCTION
7	2015/05/22	RE-ISSUED FOR BP

ISSUED AND REVISIONS

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PROJECT NAME
CONWEST KINGSWAY AVENUE

PROJECT ADDRESS
1579 KINGSWAY AVENUE, PORT COQUITLAM

DRAWING TITLE
SITE PLAN - FIRE TRUCK ACCESS

SCALE	1/32" = 1'-0"
DRAWN	NA
CHECKED	SAP
PROJECT NO.	17044-A

DRAWING NO.
A2.3

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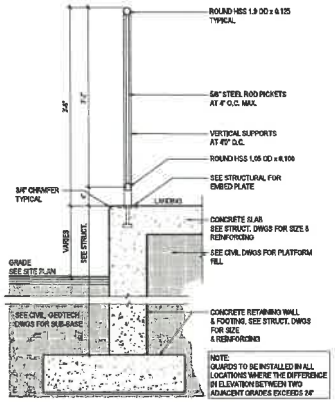
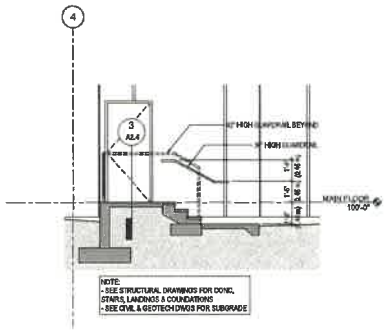
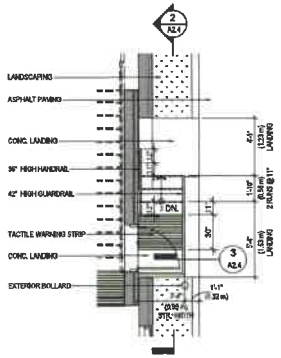


3 STEEL GUARDRAIL ON CONCRETE
A2.4 SCALE: 1" = 1'-0"



2 EXTERIOR STAIR PLAN
A2.4 SCALE: 1/4" = 1'-0"



1 EXTERIOR STAIR PLAN
A2.1 SCALE: 1/4" = 1'-0"

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NO.	DATE YMD	DESCRIPTION
11	2019/02/13	ISSUED FOR AMENDMENT TO DP
9	2018/10/12	ISSUED FOR AMENDMENT TO BP
8	2018/08/14	ISSUED FOR CONSTRUCTION
7	2018/06/22	RE-ISSUED FOR BP

ISSUES AND REVISIONS

SEAL

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PROJECT NAME
CONWEST KINGSWAY AVENUE

PROJECT ADDRESS
1579 KINGSWAY AVENUE, PORT COQUITLAM

DRAWING TITLE
SITE ENLARGED PLANS

SCALE	As indicated
DRAWN	HA
CHECKED	SAC
PROJECT NO.	170445-A
DRAWING NO.	A2.4

PROJECT NORTH

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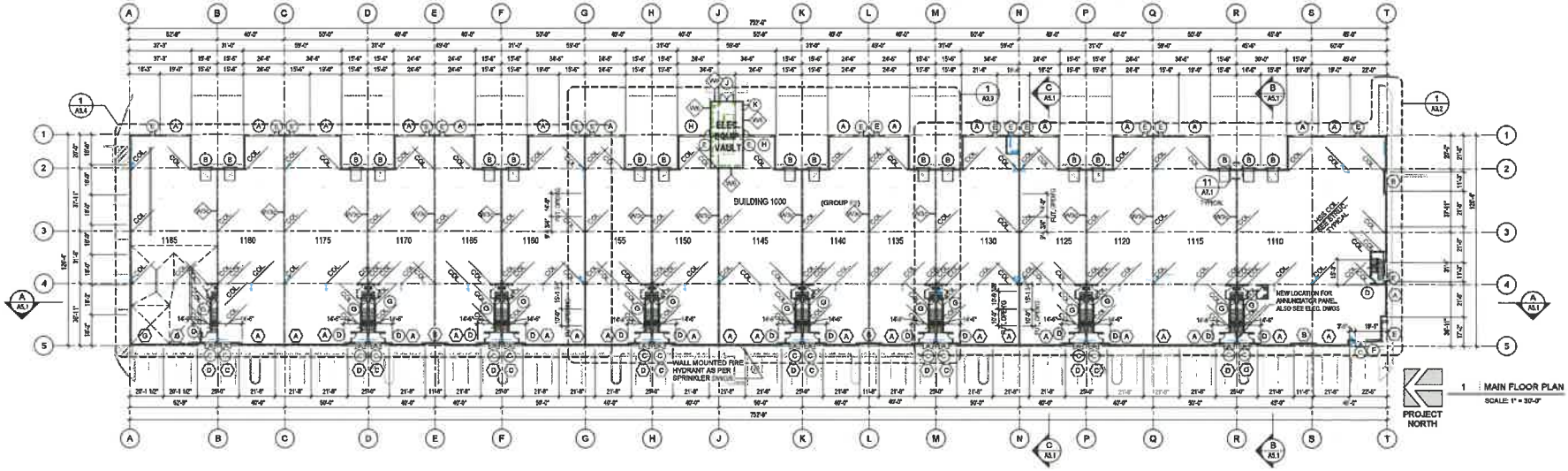
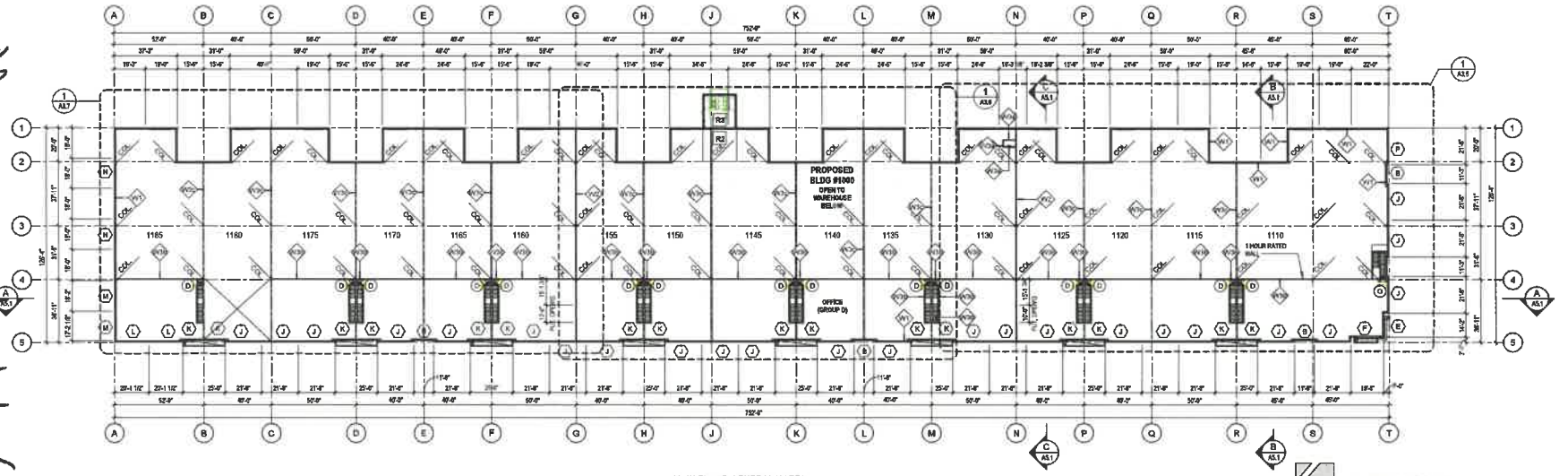
DP000331 amendment 1 (5)



1 MAIN FLOOR PLAN
SCALE: 1" = 30'-0"

PROJECT NORTH



2 2ND FLOOR PLAN
SCALE: 1" = 30'-0"

PROJECT NORTH

MAIN FLOOR GENERAL NOTES

SEE SCHEDULE DRAWING FOR ALL FLOOR, WALL, CEILING, AND ROOF ASSEMBLIES.

EXIT SIGNAGE
EXIT SIGNANGE TO BE PROVIDED PER ELECTRICAL DRAWINGS.

FIRESTOPPING
FIRESTOPPING SHALL COMPLY TO CAN/ULC-S115-M STANDARDS.

FINISHES
FINISHES ARE NOT SHOWN ON THESE DRAWINGS. FINISHES ARE TO BE SPECIFIED BY OWNER, OR OWNER'S INTERIOR DESIGNER AT THE OWNER'S REQUEST, AND INCLUDES ALL INTERIOR FINISHES INCLUDING MILLWORK, CEILING TYPES AND INTERIOR SIGNAGE. NEITHER THE KRAHN GROUP OF COMPANIES OR LARRY PODHORA ARCHITECT HAVE BEEN RETAINED TO CHOOSE, SPECIFY OR DESIGN INTERIOR FINISHES, MILLWORK OR INTERIOR SIGNAGE; AND THEREFORE ASSUME NO LIABILITY OR RESPONSIBILITY FOR SELECTED FINISHES, THEIR INSTALLATION OR THEIR PERFORMANCE. NEVERTHELESS, ALL FINISHES SELECTED BY OWNER OR OWNER'S REPRESENTATIVE MUST COMPLY WITH CURRENT PROVINCIAL BUILDING CODE, CURRENT EDITION, AND MUST MEET THE FLAME SPREAD AND SMOKE DEVELOPMENT REQUIREMENTS CONTAINED WITHIN.

DOOR SIGNAGE
ALL DOORS NOT SPECIFIED IN DOOR AND DOOR HARDWARE SCHEDULE SHALL BE BY THE OWNER OR OWNER'S INTERIOR DESIGNER.

FIRE SAFETY PLAN
FIRE SAFETY PLAN TO BE PROVIDED BY FIRE PROTECTION CONSULTANT, INSTALLED TO THEIR REQUIREMENTS, AND TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION.

PORTABLE FIRE EXTINGUISHERS:
FIRE EXTINGUISHERS SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH THE BC FIRE CODE AND TO THE SATISFACTION OF THE FIRE PROTECTION CONSULTANT.

SPRINKLERED BUILDING
BUILDING IS FULLY SPRINKLERED PER CODE ANALYSIS, DRAWINGS AND PERMIT APPLICATION FOR SPRINKLER SYSTEM IS THE RESPONSIBILITY OF OTHERS. DESIGN PARAMETERS ARE PER THE MECHANICAL CONSULTANT'S DRAWINGS. PULL STATIONS AND FIRE ALARM SPECIFICATIONS FOR INSTALLATION AND MONITORING ARE PER THE ELECTRICAL DRAWINGS.

FIRE-RESISTANCE RATING LEGEND

- 45 MIN FIRE-RESISTANCE RATING
- 1 HOUR FIRE-RESISTANCE RATING
- 2 HOUR FIRE-RESISTANCE RATING

DP000331 Amendment 1 (6)

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VANCOUVER OFFICE

CONWEST
Group of Companies

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NO.	DATE YYMD	DESCRIPTION
20	2019/02/28	ISSUED FOR AMENDMENT TO DP
19	2018/12/04	RE-ISSUED FOR BP
18	2018/11/16	ISSUED FOR AMENDMENT TO BP
9	2018/10/12	ISSUED FOR AMENDMENT TO BP
8	2018/09/14	ISSUED FOR CONSTRUCTION
6	2018/08/22	RE-ISSUED FOR BP
5	2018/07/16	TENDER ADDENDUM #1
4	2018/06/07	ISSUED FOR BP
3	2018/04/16	ISSUED FOR TENDER
2	2018/02/09	RE-ISSUED FOR DP
1	2017/10/13	ISSUED FOR DP

ISSUES AND REVISIONS

larry podhora | architecture inc

PROJECT NAME
CONWEST KINGSWAY AVENUE

PROJECT ADDRESS
1579 KINGSWAY AVENUE, PORT COQUITLAM

DRAWING TITLE
FLOOR PLANS

SCALE	As Indicated
DRAWN	HA
CHECKED	SPD
PROJECT NO.	1715415A
DRAWING NO.	A3.1

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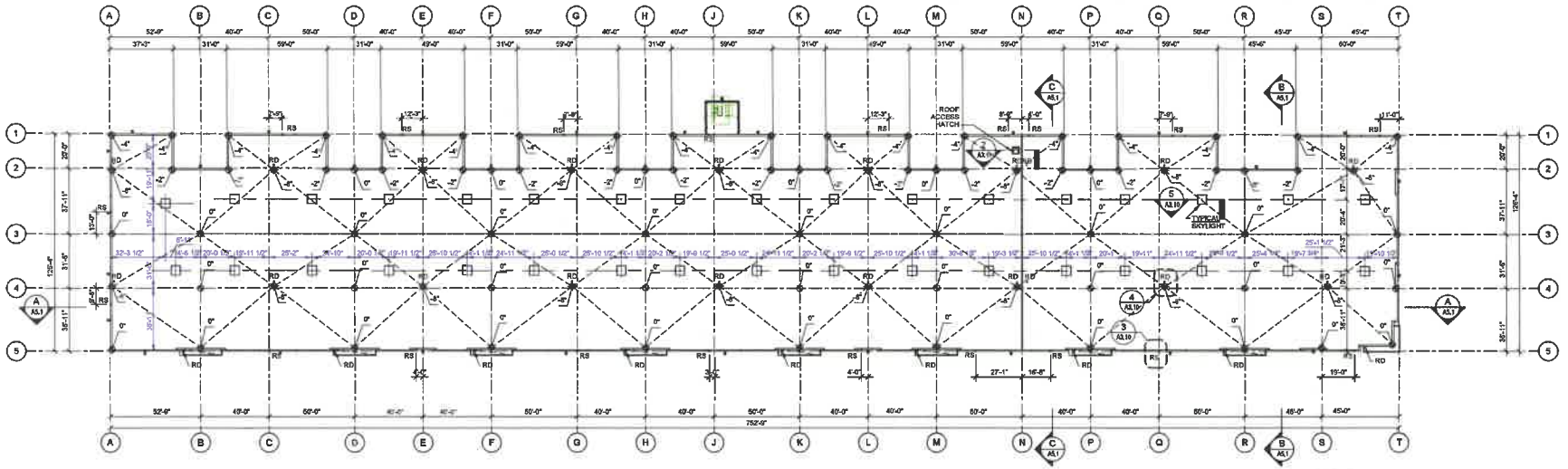
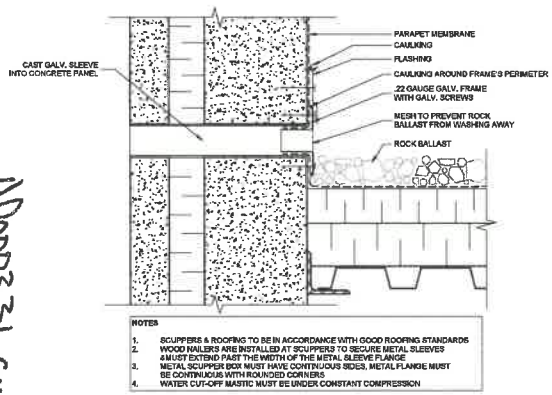
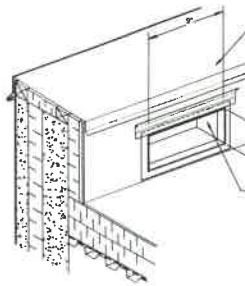


1 : ROOF PLAN
SCALE: 1" = 30'-0"

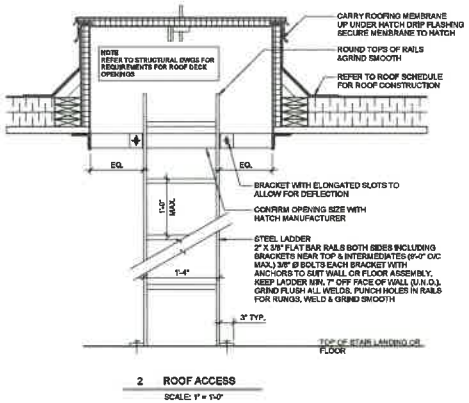
PROJECT NORTH



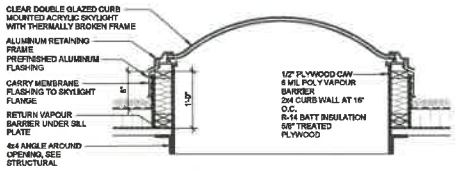
NOTES
1. SCUPPERS & ROOFING TO BE IN ACCORDANCE WITH GOOD ROOFING STANDARDS
2. WOOD NAILERS ARE INSTALLED AT SCUPPERS TO SECURE METAL SLEEVES
3. METAL MUST EXTEND PAST THE WIDTH OF THE METAL SLEEVE FLANGE
4. METAL SCUPPER BOX MUST HAVE CONTINUOUS SIDES, METAL FLANGE MUST BE CONTINUOUS WITH ROUNDED CORNERS
5. WATER CUT-OFF MASTIC MUST BE UNDER CONSTANT COMPRESSION



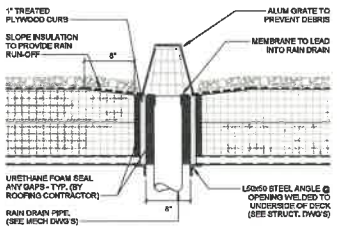
3 SCUPPER
SCALE: 3" = 1'-0"



2 ROOF ACCESS
SCALE: 1" = 1'-0"



5 : SKYLIGHT
SCALE: 1" = 1'-0"



4 ROOF DRAIN
SCALE: 1 : 10

ROOF NOTES

SEE SCHEDULE DRAWING FOR ALL FLOOR, WALL, CEILING, AND ROOF ASSEMBLIES.

DRAINAGE
- ALL ROOF DRAINS PER MECHANICAL DRAWINGS.
- ROOF RAINWATER TO BE DRAINED TO STORM SYSTEM PER MECHANICAL AND CIVIL DRAWINGS AND SPECIFICATIONS.
- POSITIVE DRAINAGE IS GENERALLY PROVIDED BY SLOPING OF STRUCTURE. ROOFING CONTRACTOR TO PROVIDE SLOPED INSULATION OR CRICKETS AT ANY LOCATIONS WHERE ASSISTANCE TO POSITIVE DRAINAGE IS REQUIRED.
- OVERFLOW SCUPPERS AS REQUIRED AS NOTED ON PLANS, CONTRACTOR TO CONFIRM DETAILS.

ROOFING
- CONTRACTOR TO CONFIRM ALL ASPECTS OF ROOF DESIGN WITH QUALIFIED ROOFING CONTRACTOR/CONSULTANT
- WARRANTY FOR ROOFING MEMBRANE TO BE PROVIDED BY MANUFACTURER, COPY OF WARRANTY DOCUMENTATION TO BE PROVIDED TO KRAHN GROUP OF COMPANIES.
- ELEVATIONS SHOWN ON ROOF PLANS INDICATE ELEVATION OFFSET FROM U/S DECK ELEVATION IN ITS RESPECTED AREA.

ROOF OPENINGS FOR MECHANICAL EQUIPMENT
ALL SIZES, LOCATIONS AND CURBING ASSOCIATED WITH EQUIPMENT SHOWN ON THIS PLAN TO BE CONFIRMED WITH MECHANICAL DRAWINGS AND SUPPLIER'S SPECIFICATIONS. SUPPORTS AROUND OPENINGS TO BE CONFIRMED WITH AND PER STRUCTURAL DRAWINGS.

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CONWEST
Group of Companies

This drawing shall not be used for construction purposes until the seal appearing hereon is signed and dated by the Architect or Engineer.

NO.	DATE (YMD)	DESCRIPTION
25	2018/02/23	ISSUED FOR AMENDMENT TO BP
9	2018/01/12	ISSUED FOR AMENDMENT TO BP
8	2018/09/14	ISSUED FOR CONSTRUCTION
4	2018/06/22	RE-ISSUED FOR BP
4	2018/06/01	ISSUED FOR BP
3	2018/04/18	ISSUED FOR TENDER

ISSUED AND REVISIONS

larry podhora | architecture inc

PROJECT NAME
CONWEST KINGSWAY AVENUE

1579 KINGSWAY AVENUE, PORT COQUITLAM

DRAWING TITLE
ROOF PLAN

SCALE	As indicated
DRAWN	KA
CHECKED	SAD
PROJECT NO.	178445A

A3.10

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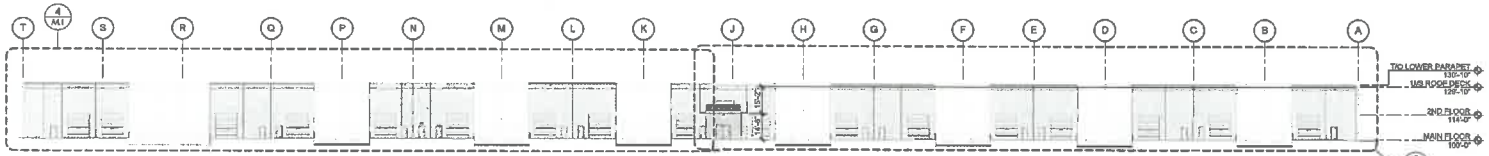
ID000331 Amendment 1 (1)

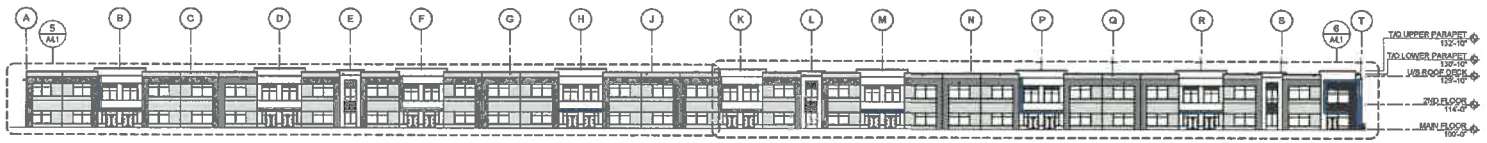
PROJECT COLOURS			
C1	BM	WEDDING VEIL	2125-70
C2	BM	SILVER LINING	2119-60
C3	BM	SILVER STREAK	2119-40
C4	REYNOBOND	KONIG BLUE	

NOTE: THE ABOVE LEGEND ITEMS ARE SHOWN ONLY ON A SMALL AREA OF THE ELEVATIONS, HOWEVER, THEY APPLY TO ALL SIMILARLY MARKED AREAS THROUGHOUT THE BUILDING.

EXTERIOR FINISH LEGEND		
MARK	DESCRIPTION	COMMENTS
A1	CONCRETE TILT-UP PANEL	PAINTED COLOUR C1
A2	CONCRETE TILT-UP PANEL	PAINTED COLOUR C2
A3	CONCRETE TILT-UP PANEL	PAINTED COLOUR C3
A4	REYNOBOND ALUMINUM COMPOSITE PANEL	PRE-FINISHED COLOUR C4
B	CONCRETE SUSPENDED SLAB	PAINTED COLOUR C2
D1	STEEL MAN DOOR	PAINTED COLOUR C2
D2	OVERHEAD DOOR	PAINTED COLOUR C2
E	RWA	PAINTED COLOUR C2
F	STEEL MAN DOOR	COLOUR C1
F1	METAL FLASHING	PRE-FINISHED, COLOUR TO MATCH C1
F2	METAL FLASHING	PRE-FINISHED, COLOUR TO MATCH C2
F3	METAL FLASHING	PRE-FINISHED, COLOUR TO MATCH C3
G1	VISION GLASS	CLEAR
G2	SPANDREL GLAZING	OPACI COAT GRAY
G3	SPANDREL GLAZING	OPACI COAT COLOUR TO MATCH C4
M	ALUMINUM MULLION	CLEAR ANNODIZED
R	CONCRETE PANEL REVEAL	PAINT TO MATCH THE PANELS
S	SUN SHADES	CLEAR ANNODIZED
S2	METAL SCREEN/GUARDRAIL	PAINTED COLOUR C4



1 EAST ELEVATION
SCALE: 1/32" = 1'-0"



2 WEST ELEVATION
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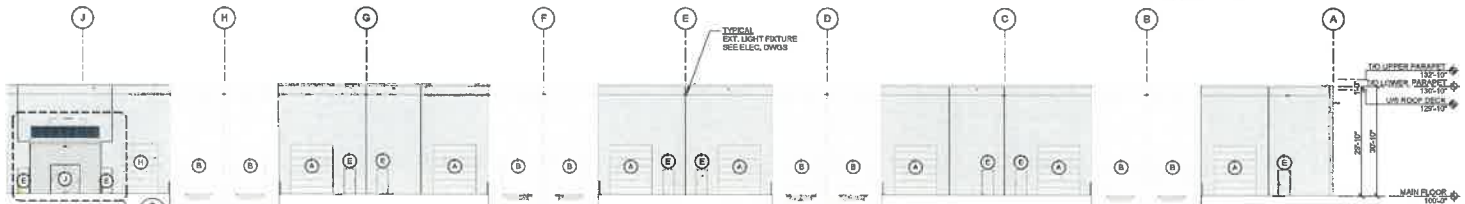
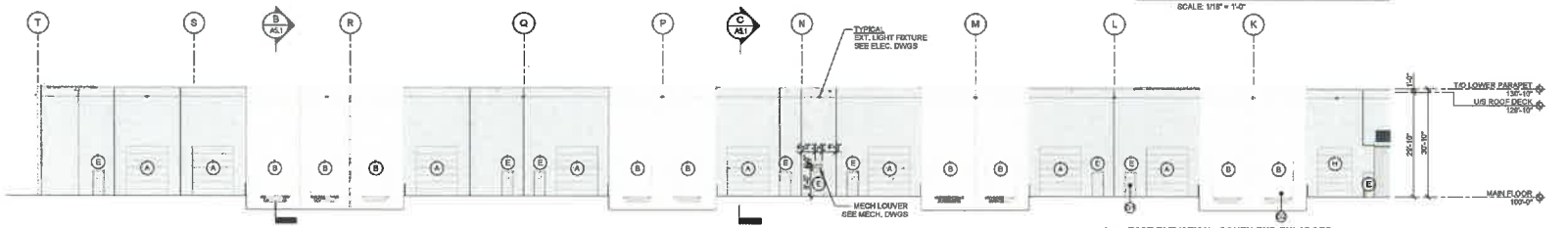
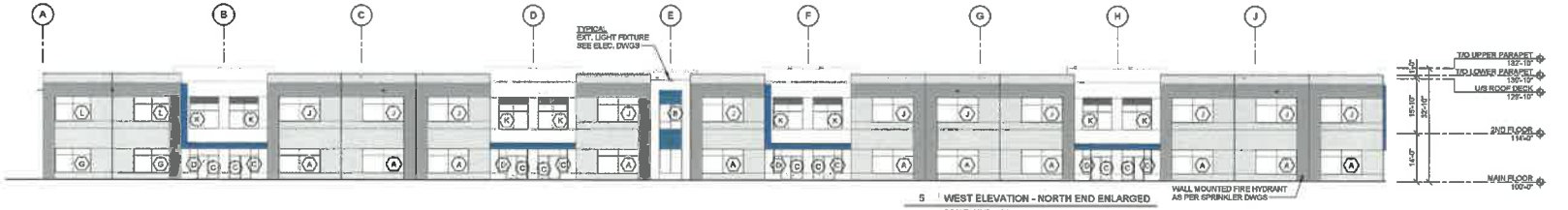


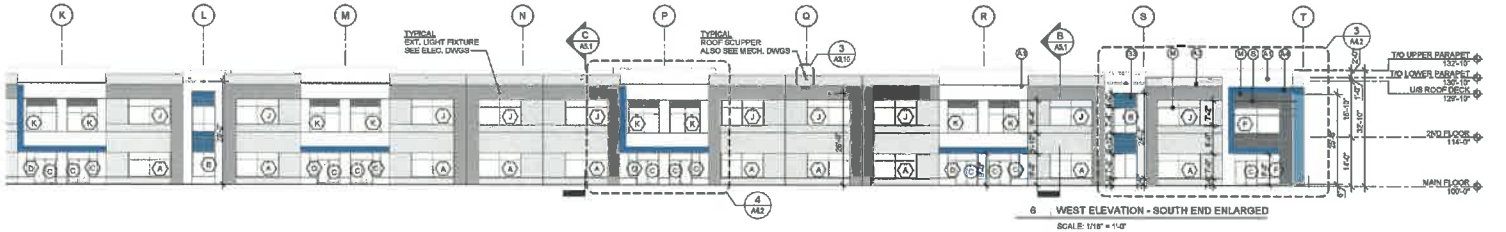
3 EAST ELEVATION - NORTH END ENLARGED
SCALE: 1/16" = 1'-0"



4 EAST ELEVATION - SOUTH END ENLARGED
SCALE: 1/16" = 1'-0"



5 WEST ELEVATION - NORTH END ENLARGED
SCALE: 1/16" = 1'-0"



6 WEST ELEVATION - SOUTH END ENLARGED
SCALE: 1/16" = 1'-0"

NO.	DATE YMD	DESCRIPTION
20	2019/07/23	ISSUED FOR AMENDMENT TO DP
5	2019/10/02	ISSUED FOR AMENDMENT TO BP
5	2019/09/24	ISSUED FOR CONSTRUCTION
6	2019/09/22	RE-ISSUED FOR DP
4	2019/05/07	ISSUED FOR BP
3	2019/04/15	ISSUED FOR TENDER
1	2017/09/12	ISSUED FOR DP

ISSUES AND REVISIONS

SEAL

Krahn GROUP OF COMPANIES
EDMONTON • VANCOUVER

CONWEST
Group of Companies

larry podhora | architecture inc

PROJECT NAME
CONWEST KINGSWAY AVENUE

PROJECT ADDRESS
1579 KINGSWAY AVENUE, PORT COQUITLAM

DRAWING TITLE
ELEVATIONS

SCALE	As Indicated
DRAWN	MA
CHECKED	SBD
PROJECT NO.	1784/5A

A4.1

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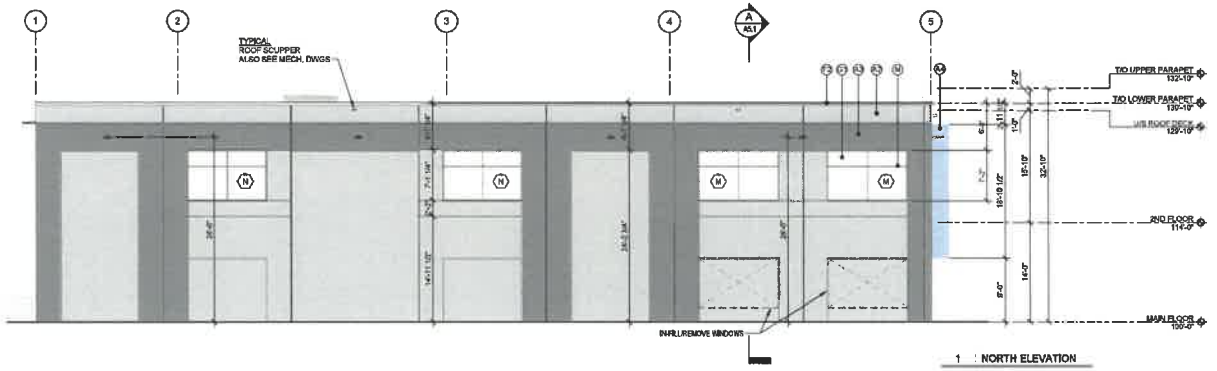
DP000331 Amendment 1 (8)

EXTERIOR FINISH LEGEND		
MARK	DESCRIPTION	COMMENTS
A1	CONCRETE TILT-UP PANEL	PAINTED COLOUR C1
A2	CONCRETE TILT-UP PANEL	PAINTED COLOUR C2
A3	CONCRETE TILT-UP PANEL	PAINTED COLOUR C3
A4	REYNOBOND ALUMINUM COMPOSITE PANEL	PRE-FINISHED COLOUR C4
B	CONCRETE SUSPENDED SLAB	PAINTED COLOUR C2
D1	STEEL MAN DOOR	PAINTED COLOUR C2
D2	OVERHEAD DOOR	PAINTED COLOUR C2
E	RAIL	PAINTED COLOUR C2
F	STEEL MAN DOOR	COLOUR C1
F1	METAL FLASHING	PRE-FINISHED, COLOUR TO MATCH C1
F2	METAL FLASHING	PRE-FINISHED, COLOUR TO MATCH C2
F3	METAL FLASHING	PRE-FINISHED, COLOUR TO MATCH C3
G1	VISION GLASS	CLEAR
G2	SPANDREL GLAZING	OPACI COAT GRAY
G3	SPANDREL GLAZING	OPACI COAT COLOUR TO MATCH C4
M	ALUMINUM MULLION	CLEAR ANNODIZED
R	CONCRETE PANEL REVEAL	PAINT TO MATCH THE PANELS
S	SUN SHADES	CLEAR ANNODIZED
S2	METAL SCREEN/GUARDRAIL	PAINTED COLOUR C4

PROJECT COLOURS			
C1	BM	WEDDING VEIL	2125-70
C2	BM	SILVER LINING	2119-60
C3	BM	SILVER STREAK	2119-40
C4	REYNOBOND	KONIG BLUE	

NOTE: THE ABOVE LEGEND ITEMS ARE SHOWN ONLY ON A SMALL AREA OF THE ELEVATIONS. HOWEVER, THEY APPLY TO ALL SIMILARLY MARKED AREAS THROUGHOUT THE BUILDING.



1 NORTH ELEVATION
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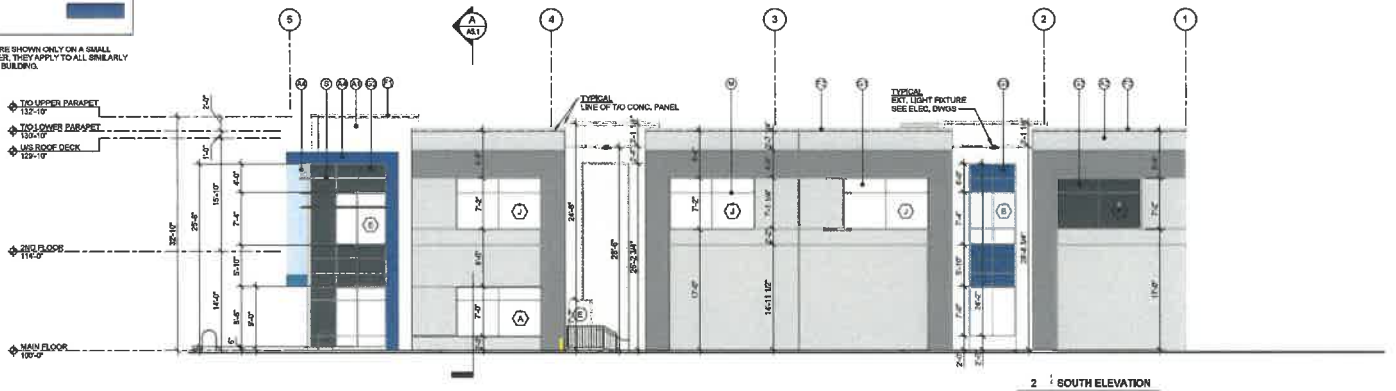
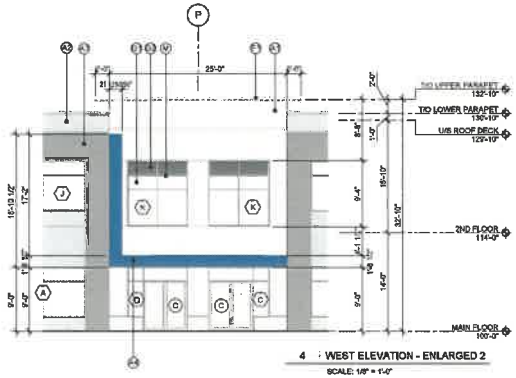
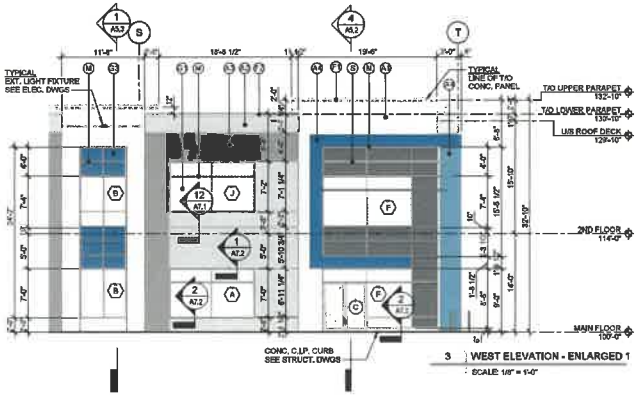


2 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



4 WEST ELEVATION - ENLARGED 2
SCALE: 1/8" = 1'-0"



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

DP000331 Amendment 1 (2)

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NO.	DATE (YMD)	DESCRIPTION
20	2019/02/23	ISSUED FOR AMENDMENT TO DP
9	2018/09/12	ISSUED FOR AMENDMENT TO BP
8	2018/08/14	ISSUED FOR CONSTRUCTION
6	2018/06/22	RE-ISSUED FOR BP
4	2018/05/07	ISSUED FOR BP
3	2018/04/16	ISSUED FOR REVIEW
1	2017/09/12	ISSUED FOR DP

ISSUED AND REVISIONS

larry pochora | architecture inc

CONWEST KINGSWAY AVENUE

1579 KINGSWAY AVENUE, PORT COQUITLAM

DRAWING TITLE

ELEVATIONS

SCALE	1/8" = 1'-0"
DRAWN	NA
CHECKED	SAD
PROJECT NO.	1704454
DRAWING NO.	A4.2

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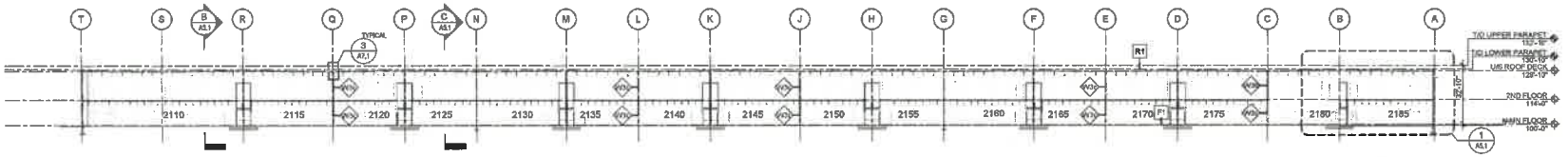

A SECTION
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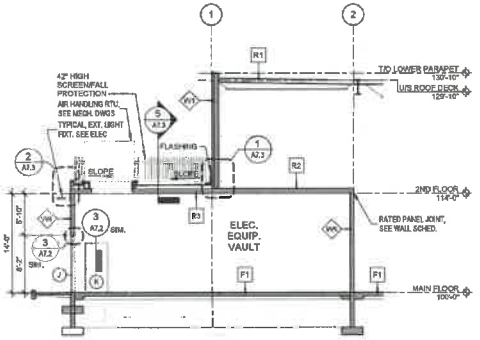
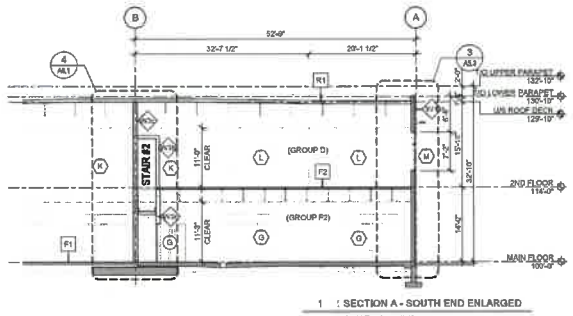
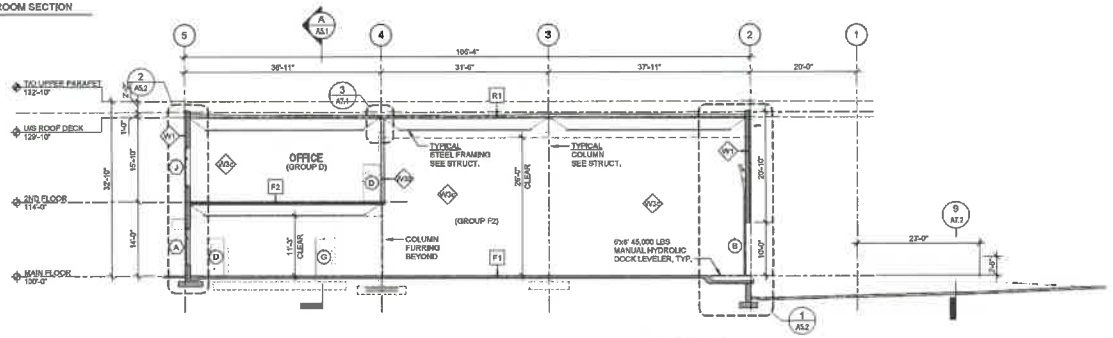


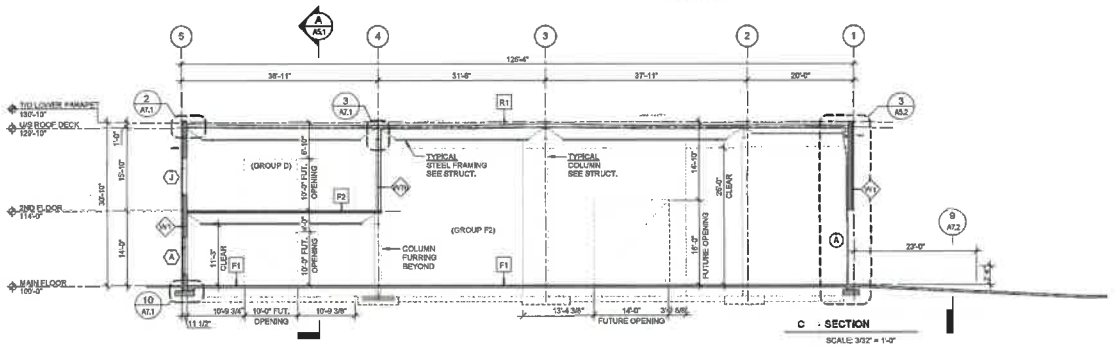
2 ELECTRICAL ROOM SECTION
A4.3 SCALE: 1/8" = 1'-0"



1 SECTION A - SOUTH END ENLARGED
SCALE: 3/32" = 1'-0"



B SECTION
SCALE: 3/32" = 1'-0"



C SECTION
SCALE: 3/32" = 1'-0"

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NO.	DATE YMD	DESCRIPTION
20	2018/02/23	ISSUED FOR AMENDMENT TO DP
19	2018/12/04	RE-ISSUED FOR BP
9	2018/10/12	ISSUED FOR AMENDMENT TO BP
8	2018/09/14	ISSUED FOR CONSTRUCTION
6	2018/08/22	RE-ISSUED FOR BP
4	2018/05/07	ISSUED FOR BP
3	2018/04/18	ISSUED FOR TENDER

ISSUES AND REVISIONS

larry podhora | architecture inc

PROJECT NAME
CONWEST KINGSWAY AVENUE

PROJECT ADDRESS
1579 KINGSWAY AVENUE, PORT COQUITLAM

DRAWING TITLE
BUILDING SECTIONS

SCALE	As Indicated
DRAWN	NA
CHECKED	SAD
PROJECT NO.	179445A
DRAWING NO.	A5.1

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DP000331 amendment 1 (10)

Landscape Drawing List

L-1.0	OVERALL - LANDSCAPE PLAN
T-01	TREE MANAGEMENT PLAN
L-1.1	NORTH - PLANTING PLAN ENLARGEMENT
L-1.2	SOUTH - PLANTING PLAN ENLARGEMENT
L-2.0	DETAILS

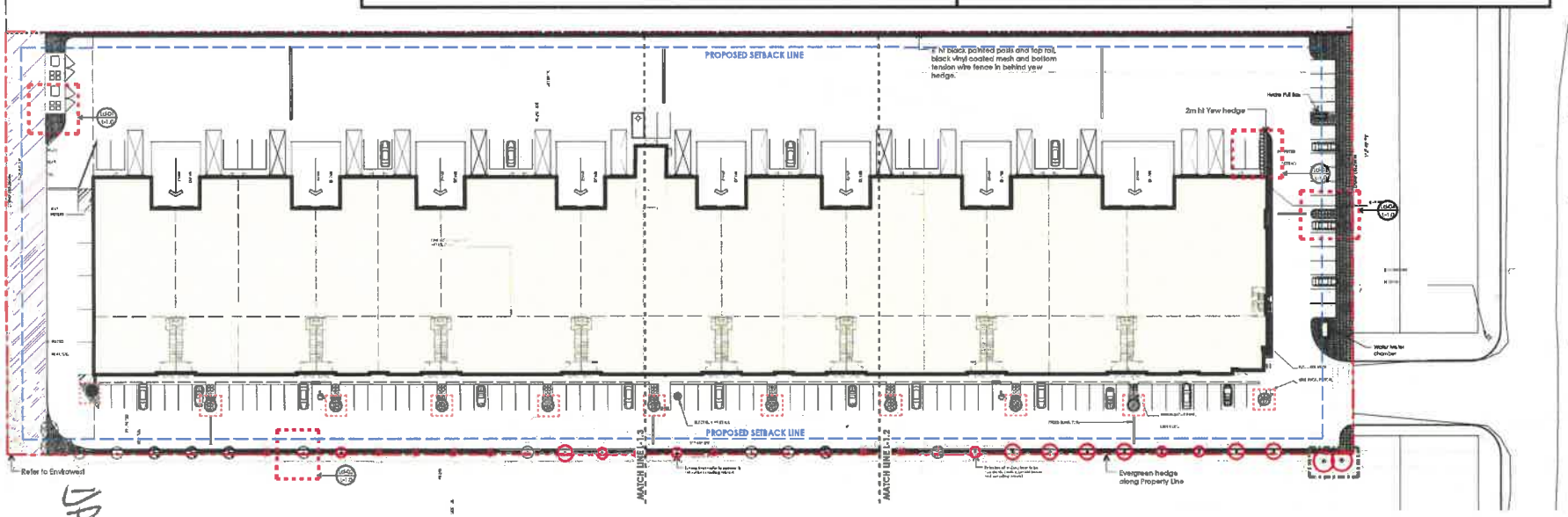
General Notes

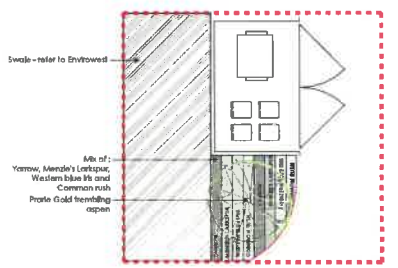
General Notes
1. Refer to architectural drawings for all walls and stair layout and elevations, unless otherwise noted.
2. Refer to electrical drawings for all final landscape lighting layout and specifications.
3. Refer to architectural and mechanical drawings for all drain locations and rim elevations.

Planting Notes
1. All plants / planting to be per BCNTA and BCSLA standards.
2. Plant selection subject to availability at the time of planting.
3. Contractor shall source specified plant material and only after area of search has been exhausted will substitutions be considered.
4. All trees to be staked in accordance with BCNTA Standards.
5. All plants to be sourced from nurseries certified free of P. ramorum.
6. 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 calls 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.
7. All trees to have minimum 10 cubic meters of growing medium unless otherwise specified.
8. Lay sod smooth and flush with a-joining 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 a-joining surfaces. Small cut pieces from a full roll will not be accepted.
9. Refer to L-2.0 for planting legend.

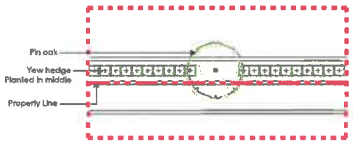
Soil Preparation and Placement Notes
1. All growing medium placed on project to meet or exceed BCNTA and B.C Landscape Standards latest edition.
2. Submit sieve analysis by an approved independent soil testing laboratory for each type of growing medium being used on the project PRIOR to placement for 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 litre physical sample.
3. Submittals shall be made at least seven (7) days prior placement.
4. Contractor shall not move or work growing medium or additives when they are excessively wet, extremely dry, or frozen or in any manner 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.
5. Slab drainage shall be 19mm (3/4") diameter drain gravel free from any silt and clay as shown in details.
6. Place growing medium, except structural to required finish grades and minimum depths as detailed, unless shown otherwise.

Irrigation Notes:
1. The irrigation system is to be design build process. Provide shop drawings for review.
2. All soft landscape planting areas are to be irrigated with high efficiency spray heads (to BCNTA Standard). Refer to the Specifications
3. Smart controller and rain sensor is required.

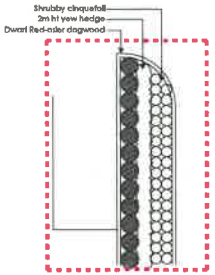




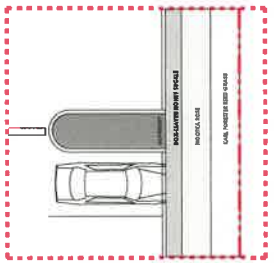
Ld-01 / L-1.1 Landscape Planting Enlargement
Scale 1/8" = 1'-0"



Ld-02 / L-1.1 Landscape Planting Enlargement
Scale 1/8" = 1'-0"



Ld-03 / L-1.1 Landscape Planting Enlargement
Scale 1/8" = 1'-0"



Ld-04 / L-1.1 Landscape Planting Enlargement
Scale 1/8" = 1'-0"

no.	date:	item:
4	Feb 13, 2019	DP Amendment
3	Mar. 23, 2018	Issue for DP
2	Mar. 07, 2018	Issue for Coordination
1	Oct. 07, 2017	Planting Plan Client Review

Revisions:

Durante Kreuk Ltd.
102 - 1637 West 5th Avenue
Vancouver BC V6J 1N5
T: 604 684 4511
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www.dkl.bc.ca

Project:
Conwest Kingsway Ave

1579 Kingsway Ave, Port Coquitlam

Drawn by:	AB
Checked by:	PK
Date:	Feb 12, 2019
Scale:	1/32"=1'0"

Drawing Title:
Overall - Landscape Plan

Project No.: 17079

Sheet No.:

L-1.0 of **L-1.2**

DP000331 amendment (1)

DRAWING KEY

Extent of drip line of existing tree recommended for retention (location from survey)

Tree Number referred to in existing trees suitable for retention

Location of Tree Protection Barrier (TPB). Extent of TPB to include entire Critical Root Zone (CRZ) - this is a reference ONLY **Refer to Arbortech for exact TPZ measurements**

TREE NOTES

1. Install tree protection barriers to Port Coquitlam requirements (see detail Tree Protection Fencing on T-01) and maintain throughout construction. Further information provided on Appendix C in Tree Management report prepared by Arbortech Consulting.

2. A total of 22 trees have been observed to be in a suitable condition for consideration of re-location within the subject site. A qualified tree moving contractor is required to undertake tree moving in accordance with ANSI A300 standards for installation. Certain remediation measures are also recommended to correct previous installation practices.

The following trees are to be retained: U01 to U09, U11, U12, U16 to U20, U22 to U26 and U28.

3. Trees, their environment, and their health and stability change with time. The recommendations to protect and retain trees are based on observations from Arbortech made on February 2018. Durante Kreuk Ltd. cannot guaranty that trees recommended for retention will remain whole or stable. Durante Kreuk Ltd. assumes no responsibility for tree protection unless we have been contracted to provide services in that regard.

4. It is the responsibility of the owner or their agent to obtain all necessary approvals for the tree retention and removal scheme presented herein. Any changes that the municipality requests should be brought to the attention of the project arborist from Arbortech Consulting to review and resolve.

5. Some existing trees may not be shown on this drawing (i.e. undersize or bylaw exempt trees, or grouped trees). It is the responsibility of the contractor(s) to confirm that all necessary municipal approvals are in place, and to determine the full scope of tree removal work. Only the trees shown to be retained and protected are to remain on site, unless otherwise directed by the owner.

6. Trees and stumps to be removed from within the tree protection zone (including CPZ, RPZ and WSS) are to be removed as directed and with on-site supervision from an arborist from Arbotech Consulting.

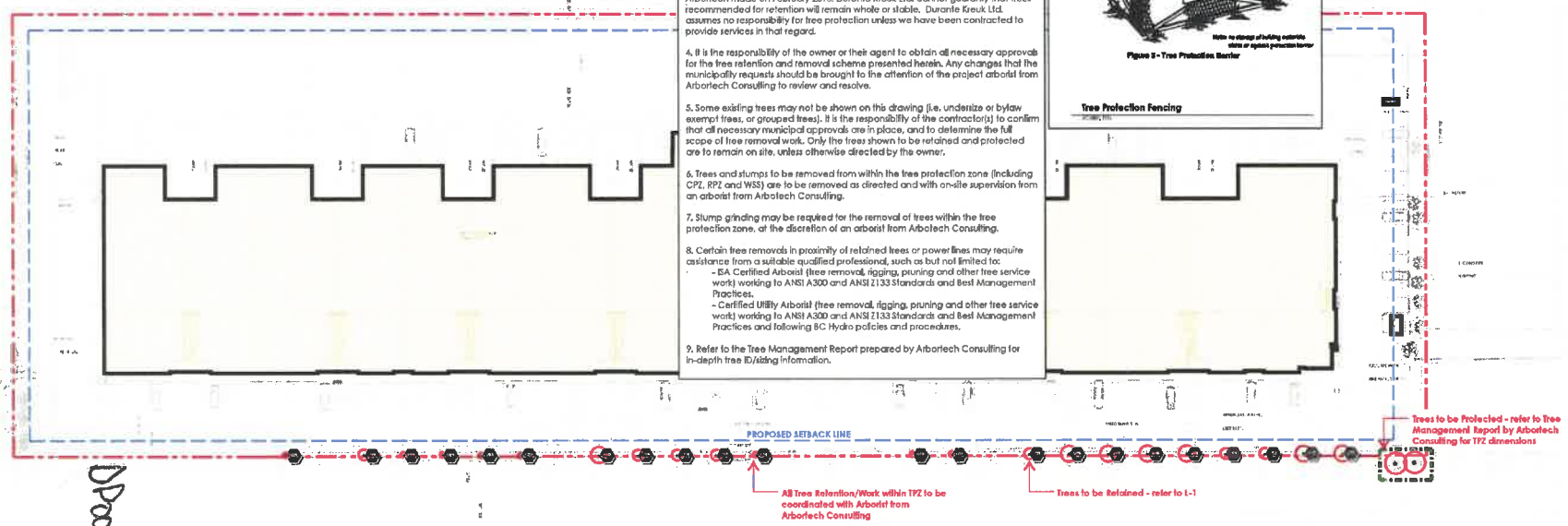
7. Stump grinding may be required for the removal of trees within the tree protection zone, at the discretion of an arborist from Arbotech Consulting.

8. Certain tree removals in proximity of retained trees or power lines may require assistance from a suitable qualified professional, such as but not limited to:
   - ISA Certified Arborist (tree removal, rigging, pruning and other tree service work) working to ANSI A300 and ANSI Z133 Standards and Best Management Practices.
   - Certified Utility Arborist (tree removal, rigging, pruning and other tree service work) working to ANSI A300 and ANSI Z133 Standards and Best Management Practices and following BC Hydro policies and procedures.

9. Refer to the Tree Management Report prepared by Arbortech Consulting for in-depth tree ID/sizing information.

Figure 3 - Tree Protection Barrier

Tree Protection Fencing



This drawing shall be read in conjunction with TREE MANAGEMENT REPORT by ARBORTECH Consulting, dated February 20, 2018.

North

no.	date	Item
4	Feb 13, 2019	DP Amendment
3	Mar. 23, 2018	Issue for DP
2	Mar. 07, 2018	Issue for Coordination
1	Oct. 07, 2017	Planting Plan Client Review

Revisions:

Durante Kreuk Ltd.
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www.dkl.bc.ca

Project:

Conwest Kingsway Ave

1579 Kingsway Ave, Port Coquitlam

Drawn by:	AB
Checked by:	PK
Date:	Feb 12, 2019
Scale:	1/32"=1'0"

Drawing Title:

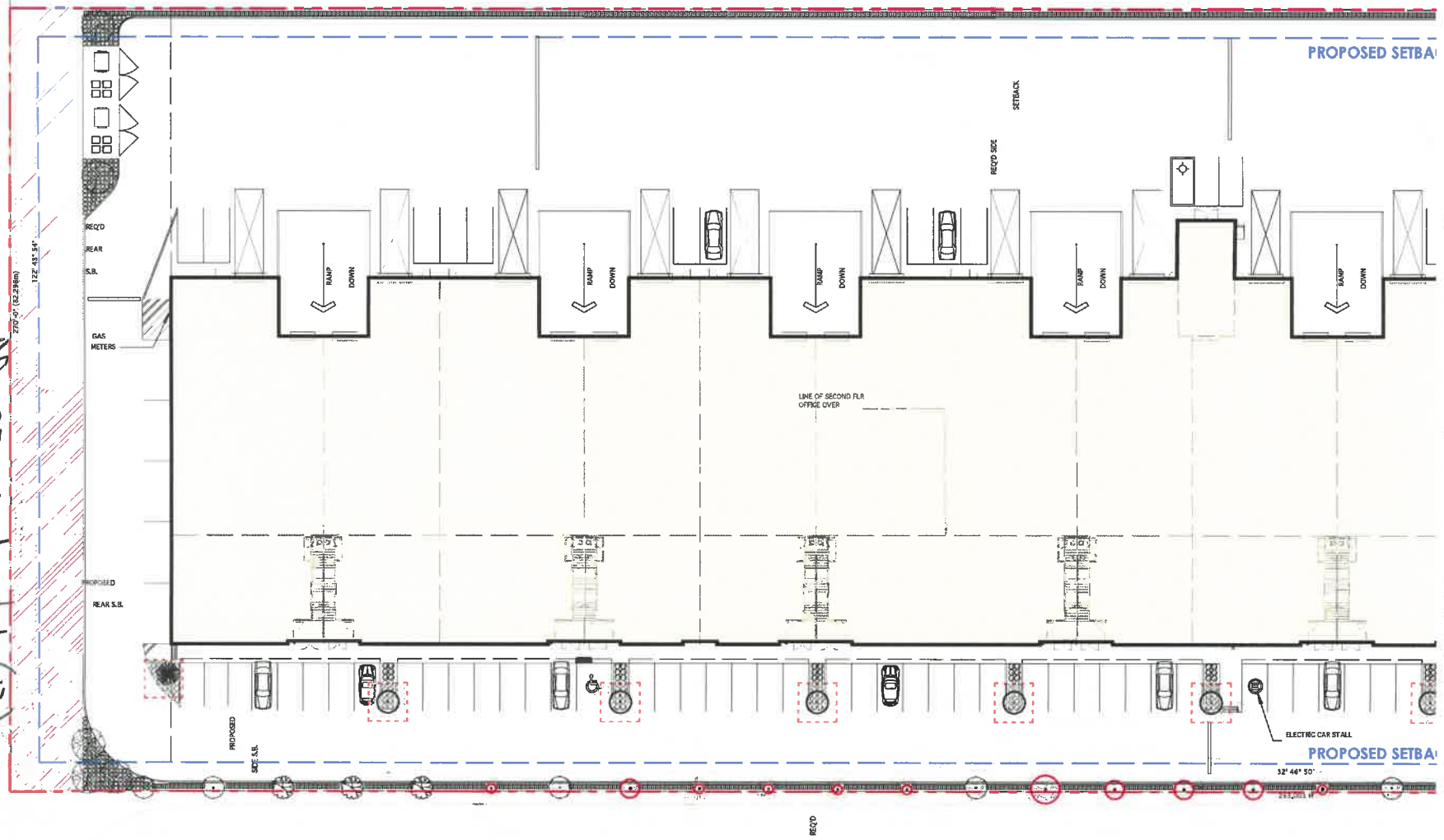
Tree Management Plan

Project No.: 17079

Sheet No.:

T-01 of T-01

DP000331 amendment 1 (2)



DP000331 Amendment 1 (13)

North

no.:	date:	Item:
4	Feb 13, 2019	DP Amendment
3	Mar. 23, 2018	Issue for DP
2	Mar. 07, 2018	Issue for Coordination
1	Oct. 07, 2017	Planting Plan Client Review

Revisions:

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Vancouver BC V6J 1N5
t: 604 684 4611
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www.dkl.bc.ca

Project:

Conwest Kingsway Ave

1579 Kingsway Ave, Port Coquitlam

Drawn by:	AB
Checked by:	PK
Date:	Feb 13 2019
Scale:	1/16" = 1'-0"

Drawing Title:

North- Planting Plan Enlargement

Project No.: 17079

Sheet No.:

L-1.1 of L-1.2

PROPOSED SETBACK LINE
Hydro Pull Box
RAMP DOWN
RAMP DOWN
RAMP DOWN
RAMP DOWN
PROPOSED SETBACK
GAS METERS
EXISTING FIRE HYDRANT
Water Meter chamber
F.D.C. SEE MECH
BIKE RACK, TYPICAL
ANNUNCIATOR PANEL SEE ELEC.
SPEED BUMP, TYP.
ELECTRIC CAR STALL
PROPOSED SETBACK LINE
122° 45' 55"
270'-0" (82.298m)
32° 46' 50"
North
4 Feb 13, 2019 DP Amendment
3 Mar. 23, 2018 Issue for DP
2 Mar. 07, 2018 Issue for Coordination
1 Oct. 07, 2017 Planting Plan Client Review
no.: date: Item:
Revisions:
Durante Kreuk Ltd.
102 - 1637 West 5th Avenue
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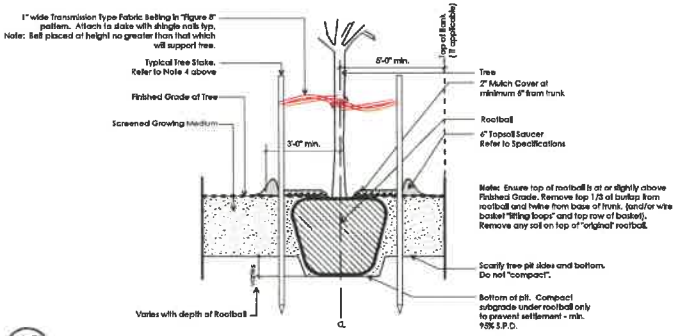
F: 604 684 0577
www.dkl.bc.ca
Project:
Conwest Kingsway Ave
1579 Kingsway Ave,
Port Coquitlam
Drawn by: AB
Checked by: PK
Date: Feb 12, 2019
Scale: 1/16" = 1'-0"
Drawing Title:
South - Planting Plan Enlargement
Project No.: 17079
Sheet No.:
L-1.2 of L-1.2

PLANT LIST

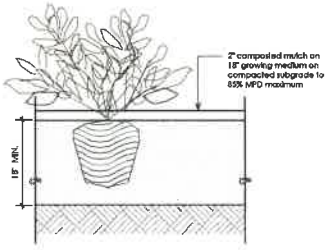
Sym	Qty	Botanical Name	Common Name	Size /Spacing / Comments
		Trees		
	22	Trees to be Retained	Retained	Refer to T-01/L-1
	1	Pinus contorta	Shore pine	2.5m ht/WB
	5	Populus tremloides 'Prairie Gold'	Prairie Gold trembling aspen	5cm cal/WB
	10	Quercus robur 'Crimson Spire'	Crimson Spire red oak	5cm cal/B+B/Columnar
	4	Acer rubrum	Red maple	6cm cal./B+B
	6	Quercus palustris	Pin oak	6cm cal./B+B
		Shrubs		
	12	Cornus sericea 'Kelseyi'	Dwarf Red-osier dogwood	#2 pot / 30" o.c.
	143	Lonicera pileata	Box-leaved honeysuckle	#2 pot / 24" o.c.
	945	Taxus x media 'Hicksii'	Yew hedge (male only)	1.2m ht / B+B, RB to RB
	15	Taxus x media 'Hicksii'	Yew hedge (male only)	2m ht / WB, RB to RB
	208	Rosa nutkana	Nootka rose	#2 pot / 24" o.c.
		Perennials, Grasses, Groundcovers and Bio-swale		
	203	Cotoneaster dammeri	Bearberry	#1 pot / 24" o.c.
	208	Calamagrostis x acutiflora 'Karl Forester'	Karl F. Feather Reed Grass	#2 pot / 24" o.c.
	178	Potentilla fruticosa	Shrubby cinquefoil	#2 pot / 18" o.c.
	115	Achillea millefolium*	Yarrow	4" pot / 18" o.c. *
	110	Delphinium menziesii*	Menzie's Larkspur	4" pot / 18" o.c. *
	113	Iris missouriensis*	Western blue iris	4" pot / 18" o.c. *
	118	Juncus effusus*	Common rush	4" pot / 18" o.c. *
		Wetland - refer to Envirowest drawings		

Depth of Growing Medium Total (mm)	Area (M2)	Variation 1 Size of Surface Square	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

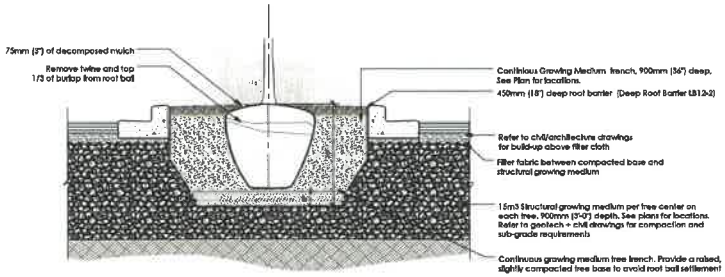
General Notes:
1. Do not cut Tree Leader.
2. Protect tree from damage during planting. Ensure rootball protected from Sun, Frost or Dessication.
3. Ensure tree location does not conflict with Underground Services. "Call before digging".
4. All street trees to be staked with 2 - 100mmØ x 2.5m long. Minimum 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.



Ld -02 / L-1.0 **Typical Deciduous tree Planting on Grade**
Scale NTS



Ld -01 / L-1.0 **Typical Shrub Planting on Grade**
Scale 1" = 1'-0"



Note:
- Subgrade prep and structural soil placement to be approved by Landscape Architect prior planting and paving installation
- Refer to Landscape Plans for extent of structural soil

Ld-02 / L-1.0 **Parking Island: Tree Planting with Structural Soil**
Scale 1" = 1'-0"

no.	date:	Item:
4	Feb 15, 2019	DP Amendment
3	Mar. 28, 2018	Issue for DP
2	Mar. 07, 2018	Issue for Coordination
1	Oct. 07, 2017	Planting Plan Client Review

Revisions:

Durante Kreuk Ltd.
102 - 1637 West 5th Avenue
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T: 604 684 4611
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www.dkl.bc.ca

Project:
Conwest Kingsway Ave

1579 Kingsway Ave, Port Coquitlam

Drawn by:	AB
Checked by:	PK
Date:	Feb 12, 2019
Scale:	As Shown

Drawing Title:
Details

Project No.:
17079

Sheet No.:
L-2.0 of **L-2.0**

DP000331 amendment 1 (15)

Watercourse Development Permit DP000332
1545, 1575, 1515 and 1491 Kingsway Avenue

RECOMMENDATIONS:

That Smart Growth Committee approve Development Permit DP000332 to provide for watercourse protection and enhancement at 1545, 1575, 1515 and 1491 Kingsway Avenue.

PREVIOUS COUNCIL/COMMITTEE ACTION

None directly related to this application.

REPORT SUMMARY

This report describes an application from the Conwest Group of Companies to obtain a watercourse protection development permit in association with its proposal for an industrial development. As described in the attached report from the environmental consultant, there are two watercourses impacting the development site, both of which are defined as Class B (non-fish bearing). Issuance of the proposed watercourse development permit is required prior to Committee's consideration of a development permit for the industrial development to ensure appropriate setbacks are first established. The attached draft watercourse development permit allows for a requested variance to prescribed setbacks and ensures the implementation of proposed enhancements to compensate for this variance. Approval is recommended.

BACKGROUND

The Official Community Plan includes the site within a watercourse development permit area designation to provide for the protection and enhancement of two watercourses in the locations shown by Figure 1. These watercourses are defined as Class B, which means they are non-fish bearing but have significant food or nutrient values. The proposal to develop the site for industrial purposes is described in the separate development permit report to Committee.

A "railway channel" watercourse, which comprises two separated sections, is located between the property edge and CP Rail tracks and a "central channel" watercourse is located between 1575 and 1515 Kingsway along the property line. The wetted area of the railway channel ranges from 1 to 6 metres in width, and generally contains grasses (reed canary grass, cattails, and small-fruited bulrush) with adjacent areas including flowering plants, bushes and trees such as hardhack, hawthorn, willow, cottonwood, birch, and alder as well as invasive blackberry. Chain link fencing separates this watercourse from paved parking surfaces associated with former industrial developments along the tracks. The vegetation present in the central channel is largely the same as that of the railway channel, with the addition of wool grass, rose, red-osier dogwood, and lady fern, as well as non-native specimens of evergreen blackberry and morning glory. Substantial man-made debris is found in this channel.

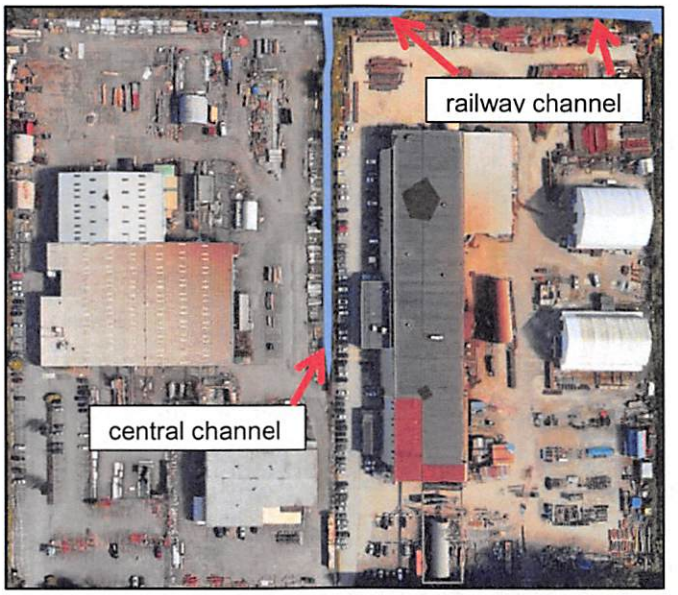


Figure 1: Watercourse Location (image prior to building demolition)

Water from the channels flows into a storm sewer running perpendicular to Kingsway Avenue. This flow is conveyed underground via the Broadway Street storm system before discharging 945 metres downstream to a ditch north of Mary Hill Bypass.

The watercourses collect rainfall from the site and the adjacent rail yards, and are generally dry during summer months. Water sampling indicates that their contribution of nutrients to downstream habitat is extremely low and the existing vegetation is inadequate to regulate water temperatures sufficiently to foster growth of riparian microorganisms, although the in-stream vegetation may help filter contaminants from runoff. No occurrences of provincially listed species at risk were identified and habitat was assessed to be unsuitable to support known species at risk in the region.

These watercourses would not be subject to setback requirements under provincial and federal regulations. However, the City requires a watercourse protection setback ranging from 5m to 15m pursuant to the watercourse protection area designation of the Official Community Plan. The setback is measured from the high water mark as there is no defined top of bank for these channels.

The applicant proposes to establish a consistent 10m wide riparian area that spans across both sides of the central channel, with a slight realignment to the channel to flow more directly to the storm system. This setback varies the prescribed setback as discussed in the attached report from the environmental consultant. A short section of the central adjacent to the railway channel would be culverted to allow for vehicle passage. To compensate for the variance, a southern portion of

the central channel would be 'daylighted' by the removal of the storm pipe and extension of the above-ground channel from the north. The west railway channel would be extended 90m to just short of the western property line, with a protected area extending 7.8m south of the CP rail property as shown by Figure 2. This would result in a 35% increase in total protected area above minimum requirements, and an 82% increase in functional habitat area over the current state.

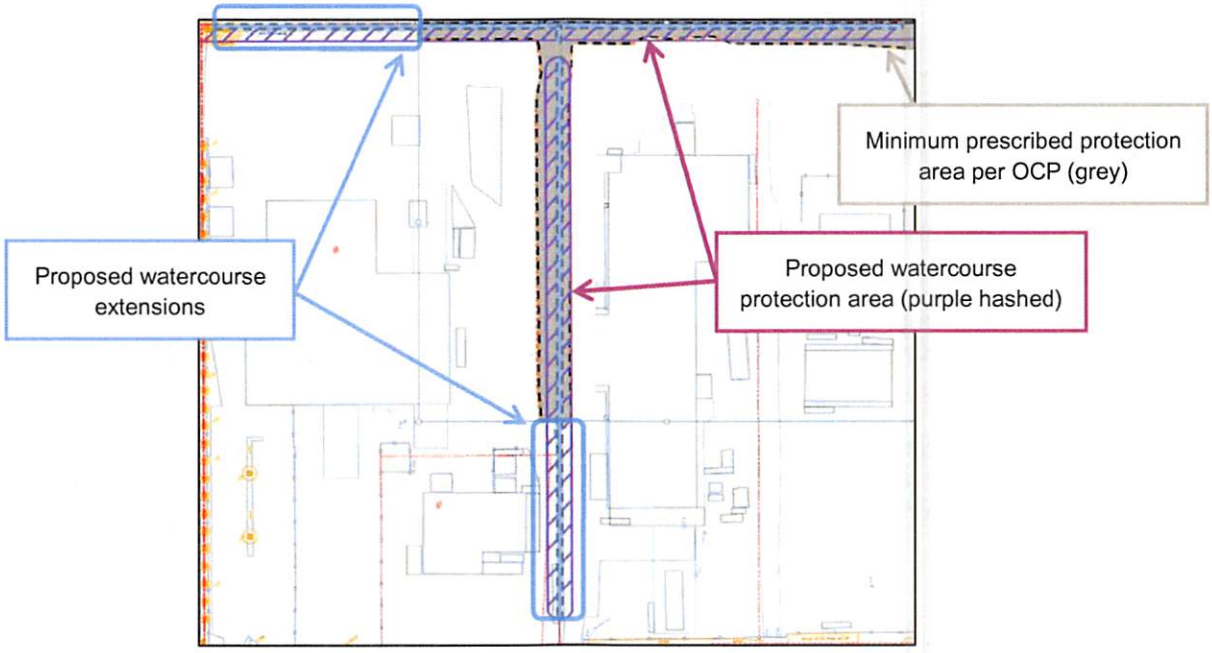


Figure 2: Proposed watercourse extensions and watercourse protection areas

The proposed watercourse development permit ensures the following measures would be taken:

- structural improvements to the watercourses, including the construction of 'rip-rap' (boulder) banks, decompaction and amendment of soils to enhance natural filtration and appropriate grading to improve drainage;
- planting of native shrubs and trees including, nootka rose, red fescue, wooly bulrush, soft-stem bulrush, broad leaved cattail, Saskatoon, grand fir and Douglas-fir. At least one tree will be planted for every 25 m^2 of protected area and 50% or more will be coniferous;
- fencing of the watercourse protection area;
- landscaping maintenance for a period of 2 years; and,
- removal of invasive species for a period of 5 years

DISCUSSION

The plan is to significantly improve the watercourses through an increase in both wetted habitat and overall protected area. These improvements will compensate for the requested variance to

prescribed setbacks and substantially mitigate potential environmental impacts of the industrial developments.

FINANCIAL IMPLICATIONS

None.

OPTIONS

(Check = Staff Recommendation)

#	Description
1 ☑	Approve Watercourse Development Permit DP000332.
2	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 proposal complies with the watercourse protection area objectives and guidelines
3	Recommend rejection of the application if the Committee is of the opinion that it does not conform to the watercourse protection area guidelines. The applicant may then request the application be forwarded to Council for consideration.

ATTACHMENTS

Attachment #1: Location Map
Attachment #2: Envirowest Report
Attachment #3: Draft Watercourse Development Permit DP000332

City of Port Coquitlam
Development Permit Location Map

WATERCOURSE DEVELOPMENT PERMIT APPLICATION

1491, 1515, 1545 AND 1575 KINGSWAY AVENUE,
PORT COQUITLAM, BC

CONWEST (1575 POCO) LIMITED PARTNERSHIP
SUITE 250 – 1311 KOOTENAY STREET
Vancouver, BC V5K 4Y3

March 26, 2018

ENVIROWEST CONSULTANTS INC.
Suite 101 - 1515 Broadway Street
Port Coquitlam, BC V3C 6M2

office: 604-944-0502
facsimile: 604-944-0507

www.envirowest.ca

INTRODUCTION

Development applications will be submitted by Conwest (1575 PoCo) Limited Partnership (Conwest) for four contiguous properties located at 1491, 1515, 1545 and 1575 Kingsway Avenue, Port Coquitlam (collectively, the Properties). The applicant is proposing to remove existing industrial buildings and construct four new multi-unit office/warehouse buildings with associated parking/loading areas.

The proposed development will entail impacts within 50 metres (m) of the top-of-bank of watercourses listed in Schedule A of the Watercourse Protection Development Permit Area (Official Community Plan (OCP) Section 9.8). The following report has been prepared in support of the rezoning and development permit applications.

SITE DESCRIPTION

General Site Description

The Properties are bounded by an adjacent industrial lot to the west, a Provincial judicial remand institute to the east, a Canadian Pacific Railway (CPR) yard to the north, and properties owned by BC Hydro and Fortis BC to the south, adjacent to Kingsway Avenue.

All four lots comprising the Properties are (or until recently were) occupied by industrial buildings and are otherwise hard-surfaced for parking or storage. The Properties are near to 100 percent impervious surface; there is virtually no landscaping associated with the current uses.

Legal Data

The proposed development involves four existing lots:

1. 1491 Kingsway Avenue
   PID 005-649-706
   Lot 2, Block 6 North, Sections 7 and 18, Range 1 East, NWD, Plan NWP 58045

2. 1515 Kingsway Avenue
   PID 001-688-405
   Lot 1, Block 6 North, Sections 7 and 18, Range 1 East, District Lot 288, NWD, Plan NWP 58045

3. 1545 Kingsway Avenue
   PID 006-400-710
   Lot 47, Block 6 North, Range 1 East, District Lot 288, NWD, Plan NWP 49119

4. 1575 Kingsway Avenue
PID 006-400-817
Lot 48, Block 6 North, Sections 7, Range 1 East, District Lots 288/382, NWD, Plan NWP 49119

The total site area is approximately 7.82 ha (19.3 acres). A site survey plan, depicting current lot boundaries and dimensions, is included as Attachment A.

Topographic Data

The Property is flat and most elevations across the properties are in the range of 2.0 to 3.0 metres geodetic. The lowest onsite elevation is approximately 1.2 metres within the drainage system. Elevations slightly above 4.0 metres geodetic occur offsite along the railway tracks, north of the site. A topographic plan is included as Attachment B.

Watercourses

Drainage ditches occur along the north boundary of the Property, adjacent to the railway tracks. These ditches drain southward between the lots at 1515 and 1575 Kingsway Avenue. Note that a mapping error on both Map 22 of the OCP and the PoCoMAP web-site depict these watercourses offset by approximately 100 metres to the southeast of their actual locations.

The ditches on and adjacent to the Properties are identified by the City of Port Coquitlam as Class B watercourses. Map 22 of the OCP defines Class B watercourses as "*significant food/nutrient value; no fish documented*".

The ditch that is aligned along the north boundary of the Properties (the Railway Ditch) drains overland runoff from the CPR yard and northern portions of the Properties. The Railway Ditch drains to the ditch (the Central Ditch) that flows southward towards Kingsway Avenue. The wetted areas of the two ditches have been highlighted on the topographic plan (Attachment B). Minor swales, not considered to be Class A or B watercourses, also drain portions of the Properties. The two ditches are described below. Photographs characterizing the ditches are included as Attachment C.

<u>Railway Ditch</u>

The western portion of the Railway Ditch (adjacent to 1575 Kingsway Avenue) commences approximately 58 metres west of, and flows towards, the Central Ditch. A minor swale extends further west adjacent to the reminder of the northern boundary of 1575 Kingsway Avenue. The eastern portion of the Railway Ditch extends across the entire northern boundaries of 1491 and 1515 Kingsway Avenue, and flows westward to the Central Ditch. The channel of the Railway Ditch is poorly defined and of variable width. The western portion is a narrow swale located

between the paved surfaces of the Properties and the toe of the railway track ballast. The invert of this section of ditch is ingrown with reed canarygrass and cattails; where the invert is exposed the substrates are characterized by fines. The eastern portion of the Railway Ditch commences at the northeast corner of 1491 Kingway Avenue and extends westward adjacent to 1515 Kingway to the Central Ditch. The wetted width varies from less than 1 metres to over 6 metres, with shallow ponds characterizing the wider sections. Inverts are either ingrown with reed canary grass and cattails or, where bare, are characterized by fines. Small-fruited bulrush occur sporadically throughout the invert of the Railway Ditch.

The riparian plant community of the western section of the Railway Ditch is sparse and includes reed canarygrass, hardhack, willow and hawthorn. The riparian zone of the eastern section of the Railway Ditch additionally includes black cottonwood, birch and red alder trees. Non-native Himalayan blackberry is common adjacent to the Railway Ditch.

A chain-link fence occurs immediately adjacent to the wetted edge of the Railway Ditch. On the western section, the fence has been installed at approximately 2.5 to 3.0 metres south of the property boundary. On the eastern section, the fence has been installed at approximately 4.2 to 6.2 metres south of the property boundary.

Central Ditch

Drainage from the Railway Ditch is conveyed along the common property boundary between 1515 and 1575 Kingsway Avenue. This watercourse is approximately 165 metres in length and ends at a stormwater inlet structure. Flow is conveyed in a storm sewer the remainder of the distance to Kingsway Avenue, including a section adjacent to the entire eastern boundary of 1545 Kingsway Avenue.

The southern (downstream) section of the Central Ditch is relatively well defined, with a channel width of between 1.0 and 1.5 metres. This section of channel has an invert characterized by instream vegetation that includes reed canarygrass and cattail, with fines where no vegetation occurs. Anthropogenic debris is abundant within the channel. The northern (upstream) section, extending approximately 40 metres downstream of the Railway Ditch, is wider with an average wetted width of approximately 4.0 metres. Instream vegetation (cattail, small-fruited bulrush, wool grass and reed canarygrass) characterizes the channel invert.

The riparian plant community of the Central Ditch is narrow and disturbed but includes a variety of native species that include birch, black cottonwood, hawthorn, rose, willow, hardhack, red osier dogwood and lady fern. Non-native species present adjacent to the Central Ditch include Himalayan blackberry, evergreen blackberry and morning glory.

A chain-link fence is aligned along the boundary between 1515 and 1575 Kingsway Avenue, commencing near the stormwater inlet structure. This fence jogs westward by 3 to 4 metres, starting about 27 metres south of the north property boundary. A minor swale parallels (to the east) the Central Ditch over about half of its length.

Connectivity to Downstream Fish Habitat

The watercourses that drain the Properties are connected to downstream watercourses via an extensive network of storm sewers. Initially, the drainage is conveyed by approximately 111 metres of on-site 700 mm diameter storm sewer that connect to the municipal storm sewer within Kingsway Avenue. Flow is subsequently conveyed eastward by approximately 112 metres of 1,050 mm diameter storm sewer within Kingsway Avenue, and southward by approximately 722 metres of 1,650 mm diameter storm sewer along Coast Meridian Road to the Mary Hill Bypass. The storm sewer discharges to a ditch on the north side of the Mary Hill Bypass. The total length of storm sewer between the Properties and the ditch at Mary Hill Bypass is approximately 945 metres.

The ditch adjacent to the Mary Hill Bypass extends approximately 520 metres to Broadway Street where it is conveyed under that road in a 30 metre long culvert to the remnant section of Broadway Creek (most of that drainage system was eliminated when Broadway Street was widened in the mid-2000s). Approximately 620 metres further downstream, Broadway Creek and its tributary Brown Creek are conveyed through the Harbour Street Pump Station to the Pitt River. Broadway Creek is slough-like and provides no high quality habitat for salmonids. Brown Creek, while manmade, offers some higher value salmonid habitat.

Fish species are not documented within the Mary Hill Bypass Drainage Ditch, however coho salmon (*Oncorhynchus kisutch*), cutthroat trout (*O. clarkii*), stickleback (*Gasterosteus* sp.), and catfish (*Ameiurus* sp.), have been documented as present within Broadway Creek. As there is no barrier to fish migration between Broadway Creek and the Mary Hill Bypass Ditch, both are deemed to be inhabited by salmonids. Broadway Creek is identified as Class A habitat (inhabited by salmonids year-round) while the Mary Hill Bypass Ditch is Class A(O) implying that it is only seasonally inhabited by salmonids.

A plan identifying the key features of the drainage system between the Properties and the Pitt River is included as Attachment D.

Functionality and Classification of On-site Watercourses

Both the Railway Ditch and the Central Ditch are manmade features than were constructed solely to facilitate drainage of the adjacent lands. Within the CPR yard, grades were raised to provide flood-proof and geotechnically stable railway beds. Runoff from the CPR yard includes overland runoff from compacted gravel roadways during heavy rainfall, and seepage from the more porous gravel track ballast that may occur after rainfall. There is likely no flow generated from the CPR yard after modest periods of dry weather.

When the Properties were originally developed they were not constructed to flood-proof elevations and were likely susceptible to occasional flooding. The Railway and Central ditches are shallow relative to the adjacent lands that are predominantly paved or compacted gravel, There is little freeboard in the ditches and they frequently overtop.

The two ditches on the Properties are ephemeral (seasonally dry) owing primarily to highly impervious catchment areas and the extremely flat topographic setting. The ditches are likely wet from the commencement of fall rains through until late spring when they dry, and then are wet for short durations during summer and early fall rainfall. The shallow ponds of the eastern extent of the Railway Ditch may be wet for longer periods.

The water quality of the ditches and the downstream drainage system is likely typical of runoff from developed industrial land. Sampling was conducted to assess this factor. Sampling was conducted on November 19, 2017. There had been eleven consecutive days of (light to moderate) rain prior to the sampling date, with 13.7 mm of rain on the sampling date, suggesting that the drainage system would have been "flushed" of many contaminants. Water samples were collected at three locations. Sample 1 was located within the Central Ditch, 10 metres upstream (north) of the inlet of the onsite culvert. Sample 2 was within the stormwater manhole at Coast Meridian and Mary Hill Bypass. Sample 3 was within the Mary Hill Bypass Ditch, 10 metres downstream (west) of the stormwater outfall at Coast Meridian.

The highest concentrations of nitrate, nitrite and ammonia (nutrients) were within the Mary Hill Bypass Ditch, although all concentrations were below 1.0 mg/L. It is highly unlikely that the Central Ditch is a significant contributor of nutrients (i.e. mass) to the Mary Hill Bypass Ditch (the nearest downstream watercourse potentially inhabited by fish. Orthophosphate (nutrient) concentrations were below detection limits at all three sample locations. It is apparently of no consequence to the nutrient regime of the Mary Hill Bypass Ditch.

The concentration of aluminum was highest at within the Central Ditch; aluminum at all three sample locations exceeded BC Water Quality Guidelines. The concentration of lead was highest within the manhole (Sample 2); the concentration exceeded BC Water Quality Guidelines. The concentration of zinc was highest within the Mary Hill Bypass Ditch; the concentration exceeded BC Water Quality Guidelines. Water quality can be expected to be poorer during drier weather when dilution is less of a factor.

Overall, the functionality of the two on-site ditches with respect to fish habitat functions and values is extremely low. Fish do not inhabit the ditches and the nearest downstream open waterbody is the Mary Hill Bypass Ditch which has potential (but undocumented) fish presence. Nutrients are limited by the lack of organic sources (such as riparian vegetation), which is a function of the highly manipulated and impervious character of the land that drains to the two ditches on the Properties. As nutrients are lacking and the ditches are ephemeral, the community of benthic invertebrates (fish food organisms) is also expected to be limited. Further, the substrates of the ditches and lack of flushing flows would also hinder the transport of preferred fish food organisms from the Properties.

Riparian vegetation is extremely limited and would not provide thermal protection (shade) during the warmer months, leading to water temperatures that limited aquatic productivity and/or contribute to evaporation that dries the ditches.

In conclusion, the contribution of food organisms and nutrients to downstream waters inhabited by fish is extremely limited and brings into question the current classification of the ditches as Class B habitat. At best, the onsite ditches should certainly be deemed to be at the lowest end of the Class B scale.

Other Biophysical Features

Habitat Linkages

The nominal riparian habitats that are associated with the two onsite ditches are isolated from other areas of functional, natural habitat. Within the immediate area of the Properties, the very narrow bank of vegetation along the Railway Ditch extends east and west along the south edge of the CPR yard. Connectivity to larger greenspace units occurs about 700 metres to the east (at the east end of the CPR yard) and over 1,200 metres to the east at the Pitt River riparian zone. A band of open greenspace occur along the frontage of the Properties, adjacent to Kingsway Avenue. However, this open space is generally void of natural vegetation as it is maintained for above-ground BC Hydro power lines and below-ground Fortis Gas pipelines. Greenspaces within residential areas to the west are not functionally connected.

The habitat linkages that exist are of low functional value and may provide habitats only for small migrating birds.

Soils and Terrains

Soils at the subject property were historically medium- to fine-textured Fraser River floodplain deposits which tend to be poorly drained and feature a high groundwater table (Luttmerding 1980[1]). Natural surface soils (topsoils) would have been stripped and replaced with a layer of structural soil (gravel) during the initial site preparation. The subject site is flat with manipulated slopes towards the onsite ditches or storm sewer catch-basins.

Potential Hazards

Evidence of potential hazards including land slides, bank erosion, flooding or drainage blockage were not observed.

[1] **Luttmerding, H.A. 1980.** RAB Bulletin 18 Soils of the Langley-Vancouver Map Area Report No. 15 British Columbia Soil Survey Volume 1. British Columbia Ministry of Environment Assessment and Planning Division. 47 p.

Significant Trees

The property does include some trees that meet the definition of a "significant tree" in accordance with the City of Port Coquitlam Tree Bylaw. These are all black cottonwood trees that have been deemed by the project arborist, Arbotech Consulting Ltd., to be unsuitable for retention adjacent to the proposed development.

Major Vegetation

There is virtually no natural vegetation on the Properties with the exception of the nominal strips of riparian vegetation that occur adjacent to the two onsite ditches (as described above).

Wildlife

The following species were identified by the BC Conservation Data Centre (CDC) to occur and/or to have critical habitat mapped within 2.5 kilometres of the Properties:

- blue vervain (*Verbena hastate* var. *scabra*)
- small spike-rush (*Eleocharis parvula*)
- false-pimpernel (*Lindernia dubia* var. *anagallidea*)
- nuttall's waterweed (*Elodea nuttallii*)
- mountain sneezeweed (*helenium autumnale* var. *grandiflorum*)
- streambank lupine (*Lupinus rivularis*)
- three-flowered waterwort (*Elatine rubella*) and
- Oregon forestsnail (*Allogona townsendiana*)

No occurrences were mapped on the Property. Information provided by the CDC is included as Attachment E.

The CDC was further searched to identify species-at-risk that occur within Metro Vancouver and the Coastal Western Hemlock biogeoclimatic zone (BC Conservation Data Centre 2018[2]). This search identified 124 species for consideration; however, none were considered to have habitat suitable to support critical life history functions sustained within the Properties. Critical life history functions are identified as breeding, nesting, denning, or hibernating for animals, and germination, flowering and seed dispersal for plants.

Wildlife use of the Properties is presently extremely limited. Wildlife use following completion of the proposed development would be similar or slightly improved (discussed below).

[2] **BC Conservation Data Centre. 2018.** BC Species and Ecosystem Explorer. BC Minist. Of Environ. Victoria, BC. http://a100.gov.bc.ca/pub/eswp/ [accessed February 20, 2018].

PROJECT DESCRIPTION

The following information generally summarizes the nature of the proposed development:

- purpose – develop the Properties as four office/warehouse buildings (see Site Plan prepared by Krahn Group of Companies, included as Attachment F).

- excavation area – following demolition of existing buildings, the site will be filled to establish the minimum building elevations at a flood protected elevation. Most development will occur above existing elevations. Excavation will be required only for utility installations;

- the footprints for the four new buildings are depicted on the proposed site plan (Attachment F). Impervious surfaces will also include driveways and the parking lot area, encompassing all of the Properties except for stream and landscape areas;

- proposed building setbacks will include the following:

  a) front yard – 16.55 m (min. required – 6.0 m);
  b) side yard (east) – 15.60 m (min. required – 3.0 m);
  c) side yard (west) – 15.53 m (min. required – 3.0 m);
  d) rear yard – 16.88 m (min. required – 3.0 m)

- site coverage:

  allowable – 60% (46,971 m^2)
  proposed – 42% (33,264 m^2)

Proposed Drainage

A stormwater management has been prepared and submitted to the City separately by the project's civil engineer. Runoff from parking/storage space adjacent to the reconstructed Railway Ditch (plus some roof drainage from the north ends of the four buildings) will be directed to the Railway Ditch. Runoff from parking/storage space adjacent to the Central Ditch will be routed to the Central Ditch. Storm sewers will drain the remainder of the site, with all drainage conveyed off-site to the existing storm sewer in Kingsway Avenue.

Impacts to Watercourse Protection Areas

In accordance with the City of Port Coquitlam's Watercourse Protection Bylaw (the Bylaw), setbacks from watercourses are determined on the basis of fish presence, flow permanence, and the extent of existing or potential vegetation.

The onsite watercourses are not inhabited by fish and are not permanently wet (they are dry seasonally dry). As potential vegetation is considered to exist on land void of permanent structures, the extent of potential vegetation is defined by the existing buildings. Buildings are located between 12 metres and more than 50 metres from top-of-bank. Accordingly, the Bylaw specifies that the minimum setback should be 15 metres.

As the pre-development setbacks range from zero to a few metres, with no habitat beyond these setbacks, a variation of the Bylaw–prescribed setback is proposed. Post-development WPAs are depicted by Envirowest Drawing No. 655-54-08 (Rev 1) included in Attachment F.

ENVIRONMENTAL ASSESSMENT

Location of Watercourse Protection Area (WPA)

The proposed WPA encompasses and expands upon the current extent of watercourses on the Properties. Riparian habitat is also expanded relative to its current extent. The WPA is based on the present location of the two ditches, with extension of the Railway Ditch to include the entire northern boundary of the Properties, and extension of the Central Ditch to include most of the Properties north-to-south dimension.

Variation in WPA Boundaries

The proposed development involves the reconstruction and extension of the two existing ditches. Existing and proposed habitats are quantitatively compared under three scenarios:

1. Existing wetted and riparian habitats, based on the current extent of habitats;
2. Existing wetted habitat, plus a 5 metre setback (assumed to be restored/enhanced); and
3. Proposed habitats (all restored/enhanced).

	Existing	**Existing wetted plus 5 m riparian**	**Proposed**
Railway Ditch			
wetted habitat	519 m^2	519 m^2	894 m^2
riparian habitat	524 m^2	1,035 m^2	1,410 m^2
Central Ditch			
wetted habitat	256 m^2	256 m^2	690 m^2
riparian habitat	1,229 m^2	1,590 m^2	1,610 m^2
TOTAL	**2,528 m^2**	**3,400 m^2**	**4,604 m^2**

The proposed redevelopment increases the onsite functional habitat area from 2,528 m^2 to 4,604 m^2, an increase of 2,076 m^2.

The extent of riparian habitat that would be determined in accordance with Bylaw-prescribed 15 metre setbacks would be 7,605 m^2 (including wetted habitat the total would be 8,380 m^2). The extent of riparian habitat that would be determined in accordance with the Provincial Riparian Areas Regulation (RAR) is 1,074 m^2 (including wetted habitat the total would be 1,849 m^2).

The proposed reconstruction of all wetted and riparian habitats on the Properties emphasizes the capability of the watercourses to bio-filter site runoff. Landscape plans are provided in Attachment G.

In support of the proposed setback variation, several points should be considered, as summarized below:

1. the subject watercourses, while presently identified as Class B habitat, contribute only marginally to downstream fish habitat which, at its nearest point occurs almost one kilometer downstream through a network of storm sewers and culverts;

2. the subject watercourses are ephemeral (seasonally dry) and drain lands that are almost 100 percent developed (railway yard and industrial storage parking areas);

3. current setbacks are virtually non-existent. The areas adjacent to the watercourses are heavily industrialized and near to 100% impermeable surfaces;

4. adherence to a 15 metre setback would provide no measurable benefit to downstream fisheries;

5. watercourse length is extended with the proposed works. The length of storm sewer between the site and the nearest open channel fish habitat (at the Mary Hill Bypass) would be shortened by extending the Central Ditch closer to Kingsway Avenue; and

6. reconstruction of the wetted and riparian areas will allow the watercourses to be improved, most notably their capabilities to improve the quality of water discharged from the Properties, with nominal improvements to habitats for fish and wildlife;

Proposed Mitigation

The proposed development involves a reduction in watercourse/riparian habitat of 3,776 m^2 relative to the Bylaw-prescribed setback (15 metres). This impact is offset by the proposed reconstruction/enhancement of 4,604 m^2 of habitat.

Construction period impact mitigation measures are addressed below (see Construction and Erosion Control). Post construction impact mitigation is addressed by protecting the proposed WPA (see WPA Management Plan, below) and by site drainage works. Storm drainage that is not directed to the proposed watercourses will treated separately by oil-water separators prior to discharging from the Properties.

CONSTRUCTION AND EROSION CONTROL

Impact Mitigation Guidelines

Silt fences have been installed around the boundary of portions of the Properties (in particular, adjacent to the ditches) where clearing/demolition has already commenced. Silt fences will be installed the remainder of the Properties prior to clearing. Sediment and erosion control (ESC) measures would be implemented.

Instream Works

The subject watercourses are not natural channels (they are manmade), nor do they convey water from natural sources (they convey only runoff from industrial lands). As such these ditches are not streams as defined by the *Water Sustainability Act* (WSA). As the City considers the ditches to be Class B habitat, implying that they sustain fish habitat values, a Request for Review will be submitted to Fisheries and Oceans Canada (DFO) in accordance with the *Fisheries Act*. If water is present in the ditches at the time of reconstruction, dewatering would be performed.

Work Schedules

Reconstruction of the ditches would be timed to coincide with favourable weather but would not be restricted to the standard instream work window (given that the ditches are not inhabited by fish). Landscaping would be performed either in spring or fall.

Monitoring and Compliance

Periodic site inspections would be undertaken by an environmental consultant during the construction period, with particular emphasis on monitoring at the project start-up and during wet weather. Site runoff will need to be monitored to ensure that turbidity is not elevated by runoff from fill material. If water appears visually turbid, water samples would be collected. The objective would be to ensure that suspended sediment in the discharge water does not exceed 25 mg/L during dry weather and 75 mg/L during wet weather. Regular reports of observations and recommendations, if required, would be made available to the City.

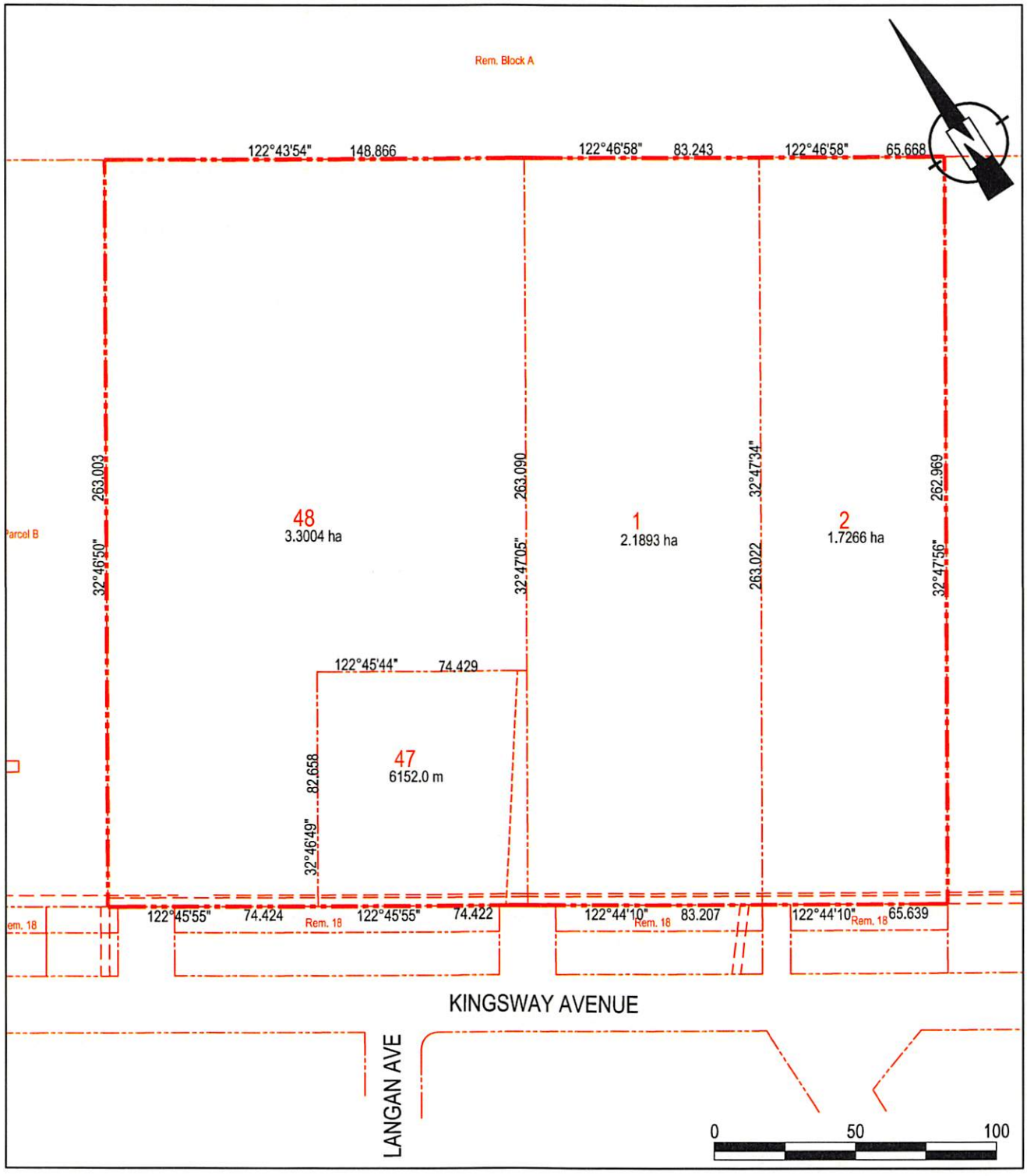
WATERCOURSE PROTECTION AREA (WPA) MANAGEMENT PLAN

The proposed WPA is shown on the site plan (Attachment F) and the landscape plans (Attachment G). The setback boundary would be protected by a 0.9 metre (3 ft.) wood post and rail fence.

All portions of the WPA would be completely reconstructed and enhanced. The landscaping contractor will be retained to maintain the site for at least two years post-planting, including irrigation and replacement of any dead or dying plant material. A report would be provided by an environmental consultant to the City at the end of each growing season for at least two years post-planting to ensure that the performance objectives of the plantings has been achieved. A bond provided to the City with respect to landscape works will include all of the maintenance and reporting items described above.

ATTACHMENT A

SITE SURVEY PLAN



REFERENCE DRAWING

1. File No. 7339B. "Topographic Plan of Lot 1 District Lot 288 Group 1, and Lots 2 Both of Section 7 & 18 , Block 6 North, Range 1 East, Plan 58045, and of Lot 47, District Lot 288 & Lot 48 District Lot 288 & 382, Both of Group 1, Section 7, Block 6 North, Range 1 East All of New Westminster District". Papove Professional Land Surveying Inc. November 08, 2017.

CONWEST (1575 - POCO) LIMITED PARTNERSHIP

1491, 1515, 1545 & 1575 KINGSWAY AVENUE
Port Coquitlam, BC

envirowest consultants inc.
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Port Coquitlam, British Columbia
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SURVEY PLAN

DESIGN	DRAWN	CHECKED	REVISION	REVISION DATE
IWW	RK	IWW	01	February 27, 2018

SCALE: 1:2000
DATE: February 22, 2018
DRAWING NUMBER: 655-54-05

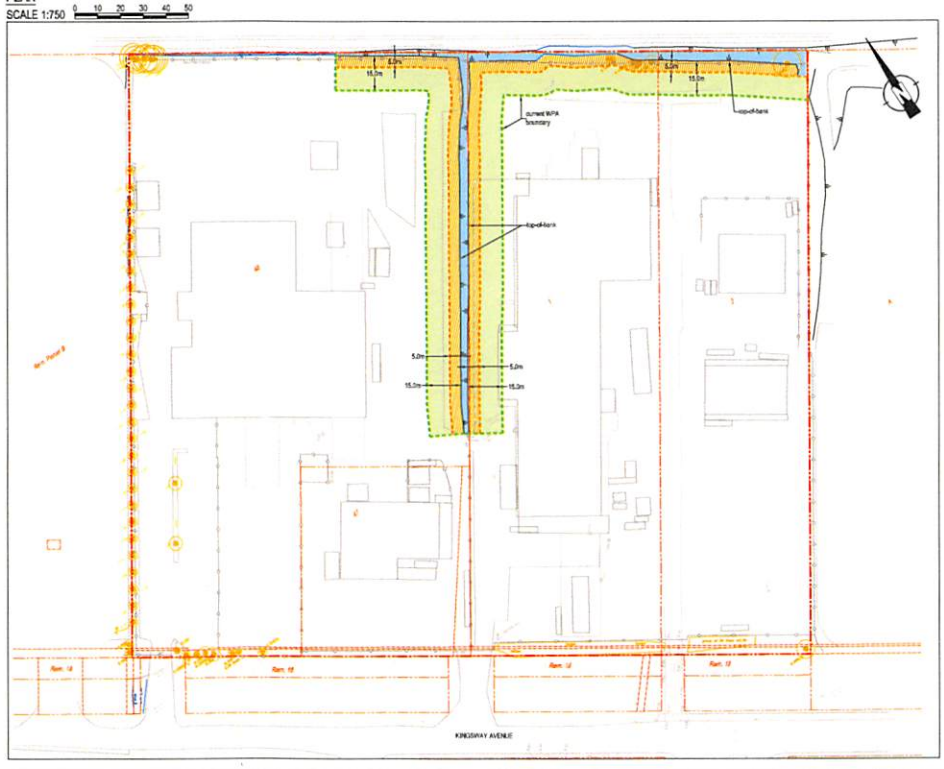
DATE: 2018-02-27 - 1:59pm
PATH: \\ENV-FS-RV\Alpha\Envirowest Files\2018\Coquitlam-Poco\655-54 Kingsway Ave\AutoCAD\Final\655-54-05R01 Survey Plan.dwg
LAYOUT: 655-54-05 Survey Plan

ATTACHMENT B

TOPOGRAPHIC PLAN

LOCATION
SCALE 1:7500 0 100 200 300 400 500

PLAN
SCALE 1:750 0 10 20 30 40 50



LEGEND
- 15m Setback Area (7,501 m²)
- 5m Setback Area (2,582 m²)
- Wetted Area (1,210 m²)

REFERENCE DRAWINGS
1. File No. 7339B, "Topographic Plan of Lot 1 District Lot 288 Group 1, and Lots 2 Both of Section 7 & 18, Block 6 North, Range 1 East, Plan 58045, and of Lot 47, District Lot 288 & Lot 48 District Lot 288 & 382, Both of Group 1, Section 7, Block 6 North, Range 1 East All of New Westminster District", November 08, 2017. Papove Professional Land Surveying Inc.
2. 2004 Ortho Photograph From Metro Vancouver.

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TOPOGRAPHIC PLAN

DESIGN	DRAWN	CHECKED	REVISION	REVISION DATE
IWW	RK/SCM	IWW	02	March 16, 2018
SCALE: As Shown			DRAWING NUMBER: 655-54-06	
DATE: February 22, 2018				

ATTACHMENT C

PHOTOGRAPHS

Photograph 1. View looking north across 1545/1575 Kingsway Avenue, with building demolition underway (January 2, 2018).

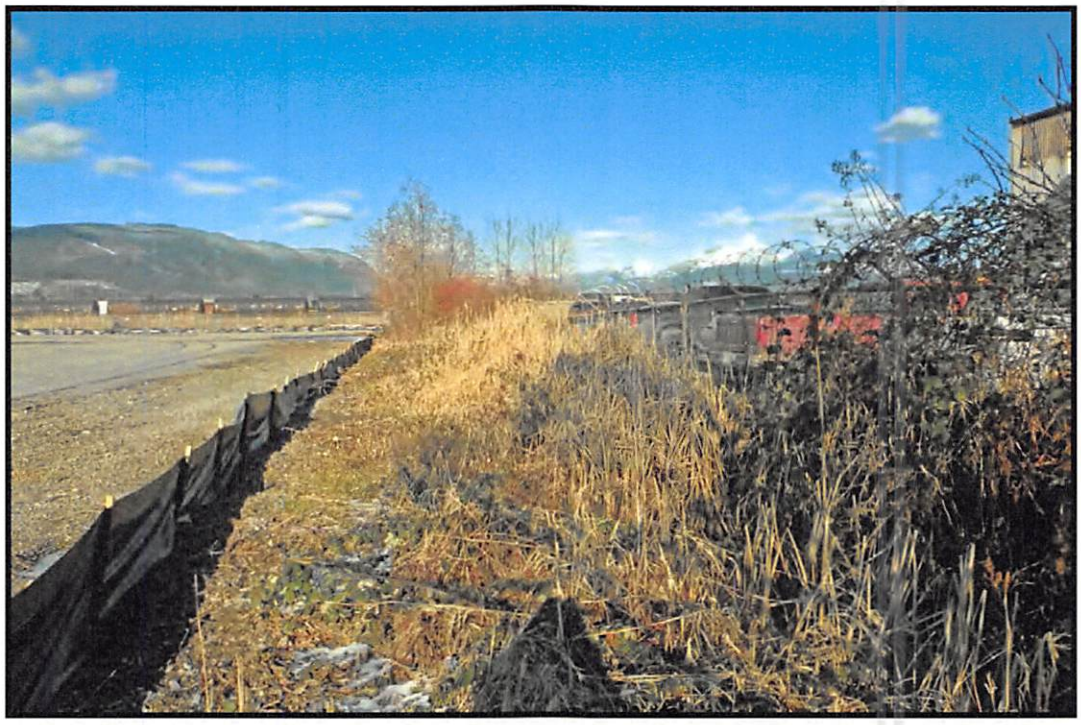
Photograph 2. View looking south towards buildings on 1491/1515 Kingsway Avenue (December 10, 2017).

Photograph 3. Looking east along Railway Ditch, west of the Central Ditch (in background) (February 20, 2018).

Photograph 4. Looking through existing chain-link fence at Railway Ditch, west of Central Ditch (February 20, 2018).

Photograph 5. Looking east across material storage area towards Railway Ditch, east of Central Ditch (January 2, 2018).

Photograph 6. Ponded area at east end of Railway Ditch (January 2, 2018).

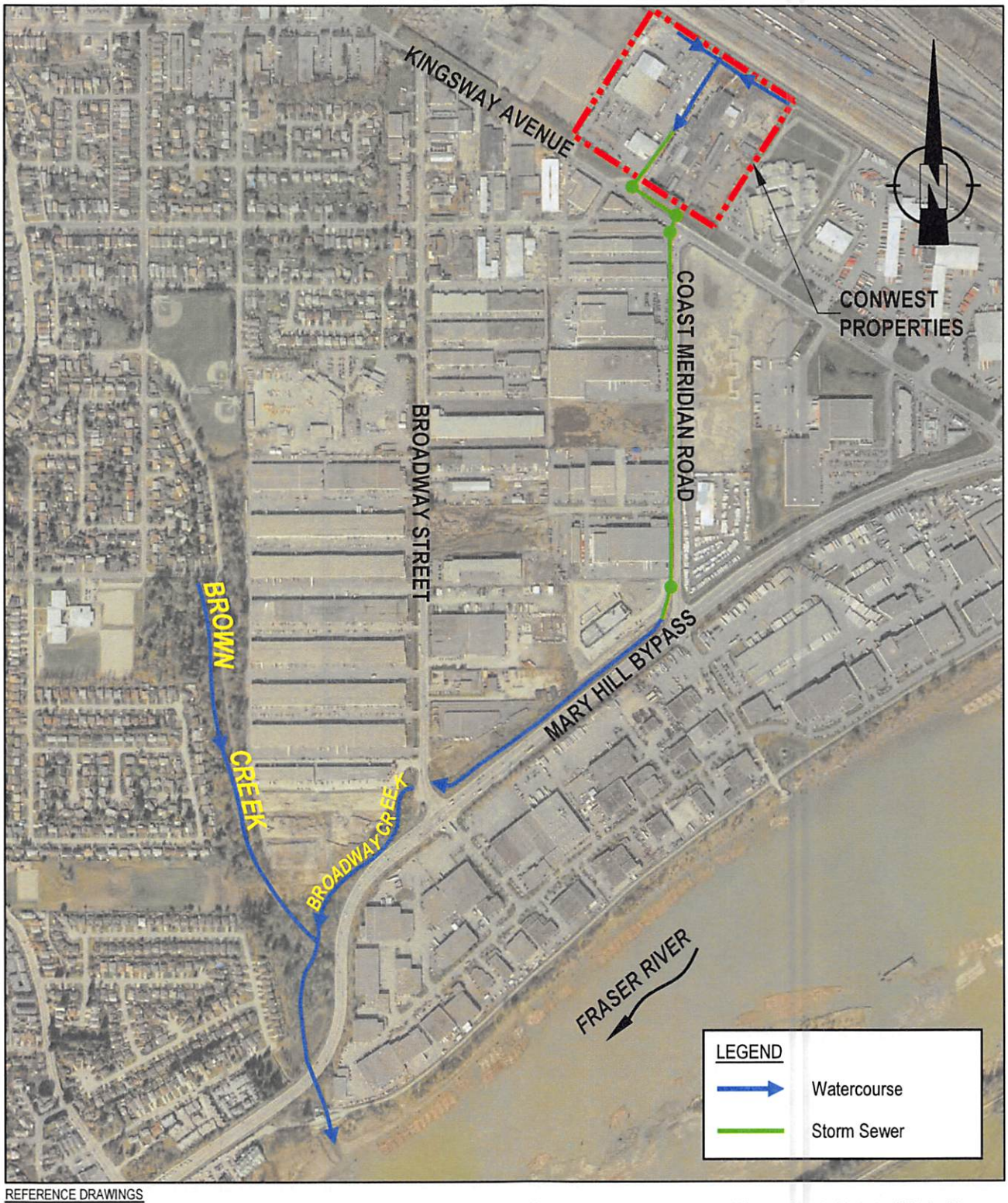


Photograph 7. Looking north along the west side of the Central Ditch (February 20, 2018).

Photograph 8. Looking south at southern (downstream) end of Central Ditch. Debris obscures view of the stormwater inlet (January 2, 2018).

ATTACHMENT D

DRAINAGE PLAN



REFERENCE DRAWINGS

1. File No. 7339B. "Topographic Plan of Lot 1 District Lot 288 Group 1, and Lots 2 Both of Section 7 & 18, Block 6 North, Range 1 East, Plan 58045, and of Lot 47, District Lot 288 & Lot 48 District Lot 288 & 382, Both of Group 1, Section 7, Block 6 North, Range 1 East All of New Westminster District". Papove Professional Land Surveying Inc. November 08, 2017.
2. 2016 Watercourses from City of Port Coquitlam Webmaps (http://pocowebmap.portcoquitlam.ca/pocomap2013pub/default.aspx).
3. 2004 Ortho Photograph From Metro Vancouver.

CONWEST (1575 - POCO) LIMITED PARTNERSHIP

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DRAINAGE SYSTEM

DESIGN	DRAWN	CHECKED	REVISION	REVISION DATE
IWW	RK	IWW	01	February 27, 2018

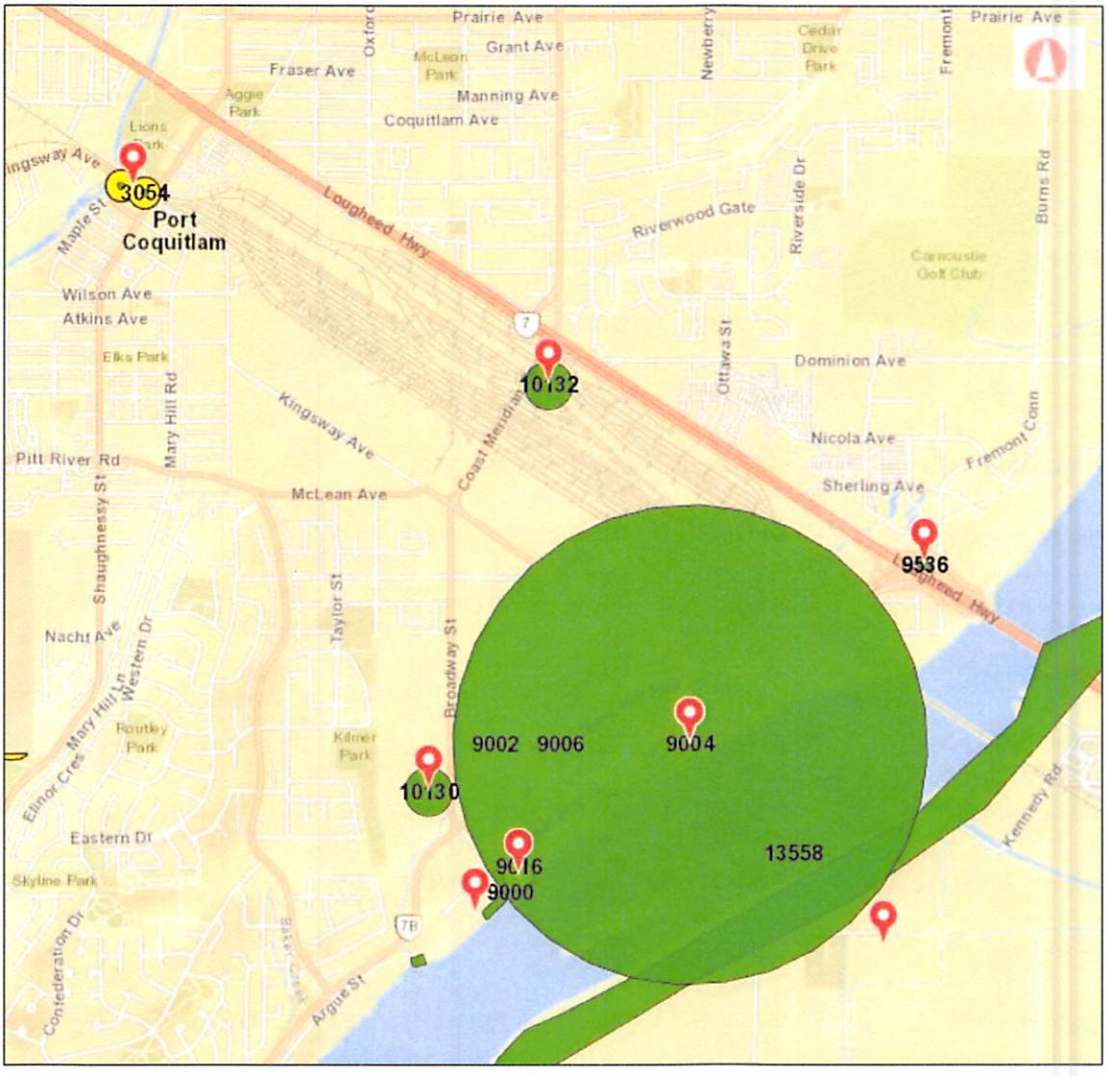
SCALE	DRAWING NUMBER
1:10,000	655-54-07

DATE: February 22, 2018

DATE: 2018-02-27 - 1:57pm
PATH: \\ENV-FS-R\Alpha\Envirowest Files\2018\Coquitlam-P-Co\655-54 Kingsway Ave\AutoCAD\Final\655-54-07R01 Drainage System.dwg
LAYOUT: 655-54-07 Drainages

ATTACHMENT E

CDC SPECIES-AT-RISK INFORMATION



iMapBC Mapping

Legend

Species and Ecosystems at Available Occurrences - CD

FEATURE_CODE

- Animal - Vertebrate
- Animal - Invertebrate
- Plant - Vascular
- Plant - Non-vascular
- Ecological Community

Species and Ecosystems at and Historical) Publicly Avail CDC

FEATURE_CODE

- Animal - Vertebrate
- Animal - Invertebrate
- Plant - Vascular

0 0.73 1.47 km

1: 36,112

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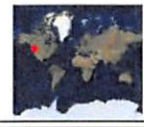
Datum: NAD83

Projection: WGS_1984_Web_Mercator_Auxiliary_Sphere

Key Map of British Columbia



BC Species and Ecosystems Explorer Search Results

Scientific Name	English Name	Status					
		Provincial	BC List	COSEWIC	SARA	Global	CF Priority
Acipenser medirostris	Green Sturgeon	S1N (2004)	Red	SC (2013)	1-SC (2006)	G3 (2004)	2
Acipenser transmontanus	White Sturgeon	S2 (2004)	No Status	E (2003)	1-E (2006)	G4 (2002)	2
Acipenser transmontanus pop. 4	White Sturgeon (Lower Fraser River population)	S2 (2010)	Red	T (2012)		G4T2 (2002)	1
Actinemys marmorata	Western Pond Turtle	SX (2012)	Red	XT (2012)	1-XX (2005)	G3G4 (2013)	2
Allogona townsendiana	Oregon Forestsnail	S2 (2015)	Red	E (2013)	1-E (2005)	G3G4 (2010)	1
Alopecurus carolinianus	Carolina meadow-foxtail	S2 (2015)	Red			G5 (1986)	3
Alsia californica		S3 (2015)	Blue			G4 (1992)	3
Anagallis minima	chaffweed	S3 (2015)	Blue			G5 (1984)	2
Anaxyrus boreas	Western Toad	S4 (2016)	Yellow	SC (2012)	1-SC (2005)	G4 (2008)	2
Andreaea sinuosa		S1S2 (2011)	Red			G2 (2009)	1
Antigone canadensis	Sandhill Crane	S4B (2015)	Yellow	NAR (1979)		G5 (1996)	5
Aplodontia rufa	Mountain Beaver	S4 (2015)	Yellow	SC (2012)	1-SC (2003)	G5 (2015)	4
Ardea herodias fannini	Great Blue Heron, fannini subspecies	S2S3B,S4N (2009)	Blue	SC (2008)	1-SC (2010)	G5T4 (1997)	1
Argia emma	Emma's Dancer	S3S4 (2015)	Blue			G5 (1990)	4
Ascaphus truei	Coastal Tailed Frog	S4 (2016)	Yellow	SC (2011)	1-SC (2003)	G4 (2016)	1
Asio flammeus	Short-eared Owl	S3B,S2N (2015)	Blue	SC (2008)	1-SC (2012)	G5 (2014)	2
Bidens amplissima	Vancouver Island beggarticks	S3 (2015)	Blue	SC (2001)	1-SC (2003)	G3 (1988)	1
Botaurus lentiginosus	American Bittern	S3B (2015)	Blue			G5 (2016)	2
Brachyramphus marmoratus	Marbled Murrelet	S3B,S3N (2015)	Blue	T (2012)	1-T (2003)	G3 (2013)	1
Brachythecium holzingeri		S2S3 (2011)	Blue			GU (2000)	2
Brotherella roellii	Roell's brotherella	S1S2 (2011)	Red	E (2010)		G3 (2004)	2
Bryum schleicheri		S2S3 (2015)	Blue			G5? (2000)	3
Buteo lagopus	Rough-legged Hawk	S3N (2015)	Blue	NAR (1995)		G5 (1996)	2
Butorides virescens	Green Heron	S3S4B (2015)	Blue			G5 (2014)	4
Callicladium haldanianum		S3 (2015)	Blue			G5 (1991)	3

Callitriche heterophylla var. heterophylla	two-edged water-starwort	S2S3 (2000)	Blue			G5T5 (1998)	3
Callophrys eryphon sheltonensis	Western Pine Elfin, sheltonensis subspecies	S3 (2013)	Blue			G5TNR	4
Callophrys johnsoni	Johnson's Hairstreak	S1S2 (2013)	Red			G3G4 (2004)	2
Carex comosa	bearded sedge	S3 (2016)	Blue			G5 (1998)	3
Carex feta	green-sheathed sedge	S3 (2015)	Blue			G5 (1990)	2
Carex interrupta	green-fruited sedge	S2S3 (2015)	Blue			G4 (2006)	2
Carychium occidentale	Western Thorn	S3 (2015)	Blue			G3G4 (2002)	2
Catostomus sp. 4	Salish Sucker	S1 (2010)	Red	T (2012)	1-E (2005)	G1 (2011)	1
Charina bottae	Northern Rubber Boa	S4 (2012)	Yellow	SC (2016)	1-SC (2005)	G5 (2016)	1
Chordeiles minor	Common Nighthawk	S4B (2015)	Yellow	T (2007)	1-T (2010)	G5 (2014)	2
Chrysemys picta	Painted Turtle	S3 (2012)	No Status	E/SC (2006)	1-E/SC (2007)	G5 (2016)	2
Chrysemys picta pop. 1	Painted Turtle - Pacific Coast Population	S2 (2012)	Red	T (2016)	1-E (2007)	G5T2 (2007)	2
Claytonia washingtoniana	Washington springbeauty	S2 (2017)	Red			G2G4 (2001)	3
Coccothraustes vespertinus	Evening Grosbeak	S5 (2015)	Yellow	SC (2016)		G5 (1996)	2
Contopus cooperi	Olive-sided Flycatcher	S3S4B (2015)	Blue	T (2007)	1-T (2010)	G4 (2008)	2
Corynorhinus townsendii	Townsend's Big-eared Bat	S3S4 (2015)	Blue			G4 (2015)	2
Cryptomastix devia	Puget Oregonian	SX (2015)	Red	XT (2013)	1-XX (2005)	G3 (2005)	1
Cypseloides niger	Black Swift	S2S3B (2015)	Blue	E (2015)		G4 (2015)	2
Danaus plexippus	Monarch	S3B (2013)	Blue	E (2016)	1-SC (2003)	G4 (2015)	2
Diphyscium foliosum		S2S3 (2015)	Blue			G5 (1991)	3
Discelium nudum		S1 (2015)	Red			G3G4 (1999)	1
Elatine rubella	three-flowered waterwort	S3 (2015)	Blue			G5 (1988)	2
Epargyreus clarus	Silver-spotted Skipper	S3 (2013)	Blue			G5 (2009)	4
Epargyreus clarus californicus	Silver-spotted Skipper, californicus subspecies	S1 (2016)	Red			G5TNR	
Erigeron philadelphicus var. glaber	salt marsh Philadelphia daisy	S1 (2013)	Red			G5T1 (2015)	
Euphyes vestris	Dun Skipper	S2 (2013)	Red	T (2013)	1-T (2003)	G5 (2016)	2
Falco peregrinus	Peregrine Falcon	S3B (2015)	No Status	SC (2007)	1-SC	G4 (2000)	2

Falco peregrinus anatum	Peregrine Falcon, anatum subspecies	S2?B (2010)	Red	NAR (2017)	1-SC (2012)	G4T4 (2006)	2
Fissidens pauperculus	poor pocket moss	S1 (2015)	Red	E (2011)	1-E (2003)	G3? (2012)	2
Fissidens ventricosus		S2S3 (2015)	Blue			GU (2000)	2
Galba bulimoides	Prairie Fossaria	S3? (2015)	Blue			G5 (1999)	4
Galba dalli	Dusky Fossaria	S3S4 (2015)	Blue			G5 (1999)	
Glyceria leptostachya	slender-spiked mannagrass	S3 (2015)	Blue			G3 (1991)	2
Gulo gulo	Wolverine	S3 (2015)	No Status	SC (2014)		G4 (2005)	2
Gulo gulo luscus	Wolverine, luscus subspecies	S3 (2010)	Blue	SC (2014)		G4T4 (1996)	2
Haliotis kamtschatkana	Northern Abalone	S2 (2002)	Red	E (2009)	1-E	G3G4 (2010)	2
Hirundo rustica	Barn Swallow	S3S4B (2015)	Blue	T (2011)	1-T (2017)	G5 (2014)	2
Hydroprogne caspia	Caspian Tern	S3B (2015)	Blue	NAR (1999)		G5 (1996)	2
Hygrohypnum alpinum		S3 (2015)	Blue			G4G5 (2007)	3
Isoetes nuttallii	Nuttall's quillwort	S3 (2015)	Blue			G4? (2011)	2
Juncus brevicaudatus	short-tailed rush	S1S3 (2015)	Red			G5 (1998)	6
Juncus oxymeris	pointed rush	S3? (2015)	Blue			G5 (1993)	3
Lepus americanus washingtonii	Snowshoe Hare, washingtonii subspecies	S1 (2011)	Red			G5T3T5 (1996)	1
Lilaea scilloides	flowering quillwort	S2S3 (2015)	Blue			G5? (1998)	3
Lindernia dubia var. anagallidea	false-pimpernel	S2S3 (2001)	Blue			G5T4 (1997)	2
Lindernia dubia var. dubia	yellowseed false pimpernel	S2 (2017)	Red			G5T5 (2000)	1
Lobaria retigera	smoker's lung	S3 (2010)	Blue			GNR	4
Lupinus rivularis	streambank lupine	S1 (2009)	Red	E (2002)	1-E (2005)	G2G4 (2009)	1
Megascops kennicottii	Western Screech-Owl	S4 (2015)	No Status	T (2012)	1-T	G4G5 (2016)	2
Megascops kennicottii kennicottii	Western Screech-Owl, kennicottii subspecies	S2S3 (2017)	Blue	T (2012)	1-T	G5T4 (2003)	1
Mustela frenata altifrontalis	Long-tailed weasel, altifrontalis subspecies	SH (2011)	Red			G5TNR	Not Assessed
Myodes gapperi occidentalis	Southern Red-backed Vole, occidentalis subspecies	S1 (2006)	Red			G5T5 (1996)	1
Myotis keenii	Keen's Myotis	S3? (2015)	Blue	DD (2003)	3 (2005)	G3 (2014)	1
Myotis lucifugus	Little Brown Myotis	S4 (2015)	Yellow	E (2013)	1-E (2014)	G3 (2015)	5
Myriophyllum pinnatum	green parrot's-feather	S2S3 (2015)	Blue			G5	2

						(1985)	
Navarretia intertexta	needle-leaved navarretia	S2 (2015)	Red			G5TNR	2
Nephroma occultum	cryptic paw	S2S3 (2007)	Blue	SC (2006)	1-SC (2007)	G4 (2007)	2
Nycticorax nycticorax	Black-crowned Night-heron	S1 (2015)	Red			G5 (1996)	3
Octogomphus specularis	Grappletail	S2 (2015)	Red			G4 (1990)	2
Omus audouini	Audouin's Night-stalking Tiger Beetle	S1 (2017)	Red	T (2013)		G5 (2008)	1
Oncorhynchus clarkii clarkii	Cutthroat Trout, clarkii subspecies	S3S4 (2004)	Blue			G4T4 (1997)	2
Ophiogomphus occidentis	Sinuous Snaketail	S3 (2015)	Blue			G5 (2015)	2
Oreamnos americanus	Mountain Goat	S3 (2015)	Blue			G5 (1996)	1
Pachydiplax longipennis	Blue Dasher	S3S4 (2015)	Blue			G5 (2015)	4
Parnassius clodius claudianus	Clodius Parnassian, claudianus subspecies	S3S4 (2013)	Blue			G5TNR	6
Patagioenas fasciata	Band-tailed Pigeon	S3S4B (2015)	Blue	SC (2008)	1-SC (2011)	G4 (2000)	2
Phaeophyscia kairamoi	five o'clock shadow	S3 (2010)	Blue			G3G4 (1999)	3
Phalacrocorax auritus	Double-crested Cormorant	S3S4B (2015)	Blue	NAR (1978)		G5 (1999)	2
Physcomitrium immersum		S1 (2015)	Red			G4 (2004)	2
Physella propinqua	Rocky Mountain Physa	S3S4 (2015)	Blue			G5Q (2015)	6
Physella virginea	Sunset Physa	S3S5 (2015)	Blue			G5Q (2015)	Unable to Determine
Planorbula campestris	Meadow Rams-horn	S3S4 (2015)	Blue			G4G5 (2015)	6
Platyhypnidium riparioides		S3? (2011)	Blue			G4 (2004)	2
Plebejus saepiolus insulanus	Greenish Blue, insulanus subspecies	SH (2013)	Red	E (2012)	1-E (2003)	G5TH (2003)	1
Pohlia cardotii		S3 (2015)	Blue			G2G3 (2007)	1
Progne subis	Purple Martin	S3B (2015)	Blue			G5 (2014)	3
Rana aurora	Northern Red-legged Frog	S3 (2016)	Blue	SC (2015)	1-SC (2005)	G4 (2015)	1
Rana pretiosa	Oregon Spotted Frog	S1 (2016)	Red	E (2011)	1-E (2003)	G2 (2013)	1
Rhinichthys cataractae - Chehalis lineage	Nooksack Dace	S1 (2010)	Red	E (2007)	1-E (2003)	G3 (1996)	1
Rubus nivalis	snow bramble	S3? (2015)	Blue			G4? (1990)	2
Rupertia physodes	California-tea	S3 (2015)	Blue			G4 (1985)	2
Salvelinus confluentus	Bull Trout	S3S4 (2011)	Blue	SC (2012)		G4 (2011)	2

Salvelinus confluentus - coastal lineage	Bull Trout - Coastal Lineage	S3 (2011)	Blue	SC (2012)		G4T3T4 (2011)	
Sidalcea hendersonii	Henderson's checker-mallow	S3 (2015)	Blue			G3 (2004)	2
Sorex bendirii	Pacific Water Shrew	S2? (2015)	Red	E (2016)	1-E (2003)	G4 (2011)	1
Sorex rohweri	Olympic Shrew	S2? (2015)	Red			G4G5 (2007)	1
Sorex trowbridgii	Trowbridge's Shrew	S3 (2015)	Blue			G5 (1996)	2
Speyeria zerene bremnerii	Zerene Fritillary, bremnerii subspecies	S2 (2013)	Red			G5T3T4 (1998)	2
Sphaerium patella	Rocky Mountain Fingernailclam	SH (2015)	Red			G2G3 (2015)	2
Sphaerium striatinum	Striated Fingernailclam	S3S4 (2015)	Blue			G5 (2015)	Not Assessed
Sphagnum contortum		S3 (2015)	Blue			G5 (1990)	3
Spirinchus sp. 1	Pygmy Longfin Smelt	S1S2 (2013)	Red	DD (2004)		G1G2Q (2015)	1
Strix occidentalis	Spotted Owl	S1 (2015)	Red	E (2008)	1-E (2003)	G3G4 (2013)	2
Sympetrum vicinum	Autumn Meadowhawk	S3S4 (2015)	Blue			G5 (2015)	4
Tanypteryx hageni	Black Petaltail	S3 (2015)	Blue			G4 (2000)	4
Thaleichthys pacificus	Eulachon	S2S3 (2004)	Blue	E/T (2011)		G5 (2005)	2
Tyto alba	Barn Owl	S2? (2015)	Red	T (2010)	1-SC (2003)	G5 (1996)	2
Ursus arctos	Grizzly Bear	S3? (2015)	Blue	SC (2002)		G4 (2000)	2
Verbena hastata var. scabra	blue vervain	S2S3 (2012)	Blue			G5T5 (2002)	2

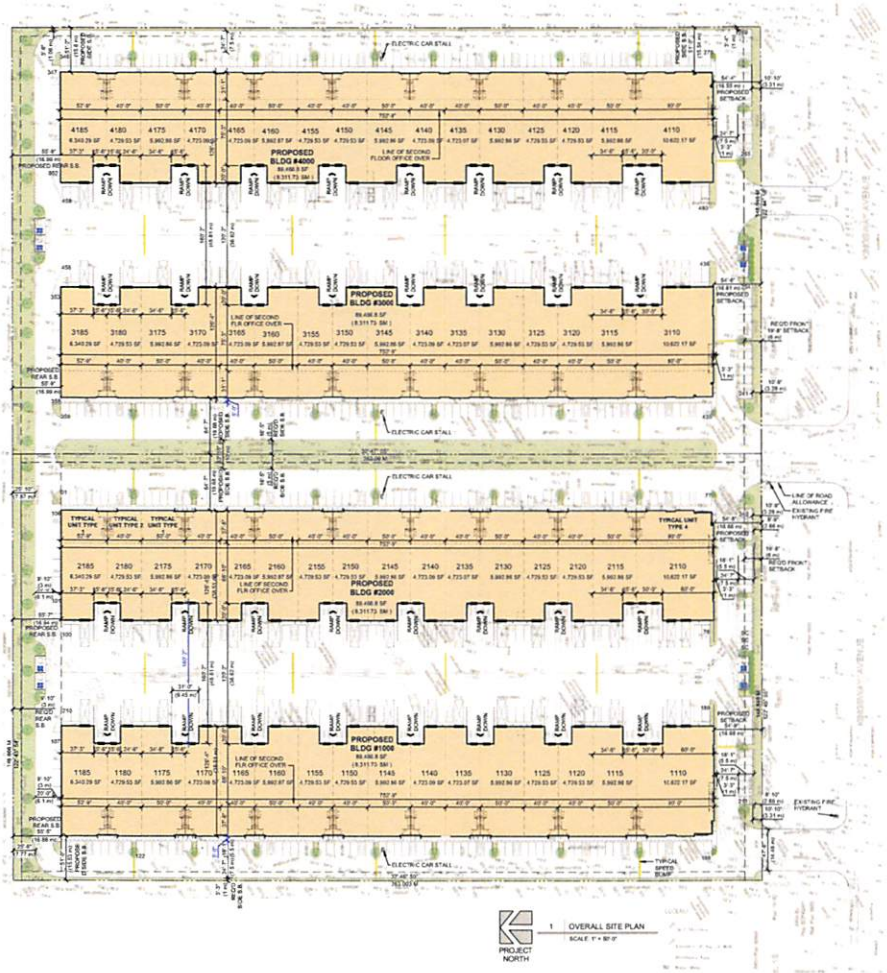
Search Summary

Time Performed	Tue Feb 20 14:19:34 PST 2018
Results	124 records.
Search Criteria	Search Type: Plants & Animals AND Regional Districts: Metro Vancouver (MVRD) (Restricted to Red, Blue, and Legally designated species) AND BGC Zone:CWH Sort Order:Scientific Name Ascending
Notes	1. Citation: B.C. Conservation Data Centre. 2018. BC Species and Ecosystems Explorer. B.C. Minist. of Environ. Victoria, B.C. Available: http://a100.gov.bc.ca/pub/eswp/ (accessed Feb 20, 2018). 2. Forest District, MoE Region, Regional District and habitat lists are restricted to species that breed in the Forest District, MoE Region, Regional District or habitat (i.e., species will not be placed on lists where they occur only as migrants). 3. The data contained in the Results Export in BCSEE are provided under the Open Government License - BC.

Modify Search | New Search | Results

ATTACHMENT F

SITE PLAN



1 OVERALL SITE PLAN
SCALE: 1" = 80'-0"

PROJECT DATA

CIVIC ADDRESS: 1575, 1545, 1515 & 1491 KINGSWAY AVENUE, PORT COQUITLAM

LEGAL ADDRESS: L. 1, DISTRICT LOT 286, GP 1, SECTION 7 & 18, BLOCK 6 NORTH, RANGE 1 EAST, PLAN69045
L. 2, SECTIONS 7 & 18, BLOCK 6 NORTH, RANGE 1 EAST, PLAN 59045
L. 47 DISTRICT LOT 286, GROUP 1, SECTION 7, BLOCK 6 NORTH, RANGE 1 EAST, PLAN 49119
L. 48, DISTRICT LOTS 286 & 362, GROUP 1, SECTION 7, BLOCK 6 NORTH, RANGE 1 EAST, PLAN 49119

ZONING: M2

BUILDING USE: INDUSTRIAL

SITE AREA: 842,875 SF (78,315.00 m²) = 7.93 15 ha

GROSS BUILDING AREA:

BLDG #	AREA (SF)	AREA (SM)
#1000	89,466.8 SF	8,311.73 m²
#2000	89,466.8 SF	8,311.73 m²
#3000	89,466.8 SF	8,311.73 m²
#4000	89,466.8 SF	8,311.73 m²
TOTAL	357,867.1 SF	33,246.94 m²

FLOOR AREA:

BLDG #	USE	LEVEL	CLASSIFICATION	AREA (SF)	AREA (SM)
#1000	WAREHOUSE	MAIN FLOOR	GROUP F2	89,466.8 SF	8,311.73 m²
#1000	OFFICE	SECOND FLOOR	GROUP 'D'	27,872.4 SF	2,589.43 m²
#1000				117,339.1 SF	10,901.16 m²
#2000	WAREHOUSE	MAIN FLOOR	GROUP F2	89,466.8 SF	8,311.73 m²
#2000	OFFICE	SECOND FLOOR	GROUP 'D'	27,872.4 SF	2,589.43 m²
#2000				117,339.1 SF	10,901.16 m²
#3000	WAREHOUSE	MAIN FLOOR	GROUP F2	89,466.8 SF	8,311.73 m²
#3000	OFFICE	SECOND FLOOR	GROUP 'D'	27,872.4 SF	2,589.43 m²
#3000				117,339.1 SF	10,901.16 m²
#4000	WAREHOUSE	MAIN FLOOR	GROUP F2	89,466.8 SF	8,311.73 m²
#4000	OFFICE	SECOND FLOOR	GROUP 'D'	27,872.4 SF	2,589.43 m²
#4000				117,339.1 SF	10,901.16 m²
TOTAL				469,356.5 SF	43,604.64 m²

1. SITE COVERAGE

ALLOWABLE SITE COVERAGE: 80% [505,785.6 SF | 46,989.5M]

PROPOSED SITE COVERAGE: (BUILDING AREA) / (SITE AREA) = %
357,867.1 SF / 842,875.6 SF = 42%

2. DENSITY (FLOOR SPACE RATIO):

TOTAL FLOOR AREA: 469,356.5 SF (43,604.64 m²)

MAX. ALLOWED FSR: N/A

PROPOSED FSR: (TOTAL FLOOR AREA) / (SITE AREA)
469,356.5 SF / 842,875.64 SF = 0.56

3. BUILDING HEIGHT

	MAX. ALLOWED	PROPOSED
BUILDING HEIGHT	N/A	33' 10" (10.31 M)

4. REQUIRED SETBACKS

	MIN. REQ'D	PROPOSED
FRONT YARD (SOUTH):	19' 8" (6.0 M)	54' 4" (16.55M)
SIDE YARD (EAST):	9' 10" (3.0 M)	35' 2" (10.83 M)
SIDE YARD (WEST):	9' 10" (3.0 M)	31' 2" (10.53 M)
REAR YARD (NORTH):	9' 10" (3.0 M)	55' 5" (16.89 M)

5. LANDSCAPING REQUIREMENTS:

A LANDSCAPED STRIP WITH A MIN. WIDTH OF 3 METRES ALONG THE FRONT & EXTERIOR SIDE LOT LINES THAT INCLUDES A MIN. OF ONE TREE PER 10 LINEAL METRES OF ALL LOT LINES ABUTTING A STREET;

A LANDSCAPED STRIP WITH A MIN. WIDTH OF 3 METRES ALONG INT. SIDE AND REAR LOT LINES ABUTTING A LOT DESIGNATED FOR RESIDENTIAL, COMMERCIAL, INSTITUTIONAL, OR PARK USE IN THE OFFICIAL COMMUNITY PLAN OR SEPARATED FROM SUCH A LOT BY A STREET OR LANE;

C. A LANDSCAPED STRIP WITH A MIN. WIDTH OF 1.5METRE ADJACENT TO A BUILDING WALL FACING A STREET OR PARK FOR CLARITY, THIS LANDSCAPE STRIP MAY INCL. WALKWAYS PROVIDING ACCESS TO THE BLDG &

D. IN THE PARKING AREA, ONE LANDSCAPED STRIP OR ISLAND WITH A MIN. AREA OF 9M2 FOR EVERY EIGHT PARKING STALLS AND INCLUDES A MIN. OF ONE TREE

6. PARKING AND LOADING

OCCUPANCY	NO. STALLS REQUIRED
INDUSTRIAL	1 STALL / 1,022.57 SF (95 SM) FLOOR AREA
OFFICE	1 STALL / 1,022.57 SF (95 SM) FLOOR AREA

USE	LEVEL	AREA (SF)	AREA (SM)	PARKING FACTOR (SF)	PARKING FACTOR (SM)	REQUIRED NO. OF STALLS
WAREHOUSE	MAIN FLOOR	357,867.06 SF	33,246.94 m²	1,022.57	95	349.97
OFFICE	SECOND FLOOR	111,489.42 SF	10,357.71 m²	1,022.57	95	109.03
TOTALS		469,356.48 SF	43,604.64 m²			459.00

LOADING STALLS REQUIRED: 2 FOR THE FIRST 2,300 SM, 1 PER ADDITION 4,600 SM OR FRACTION THEREOF
(43,604.64 SM - 2,300 SM) / 4,600 SM] + 1 = 9.99 (10)

ACCESSIBLE STALLS REQUIRED: 1% OF TOTAL STALLS REQUIRED
459 x 0.01 = 4.59 (5)

MIN. STALL DIM'S REQ'D:	WIDTH:	LENGTH:	DRIVE AISLE:	ANGLE:
STANDARD STALL	8' 6" (2.7 M)	18' 0" (5.5 M)	24' 7" (7.5 M)	90°
ACCESSIBLE STALL	12' 2" (3.7 M)	18' 0" (5.5 M)	24' 7" (7.5 M)	90°
SMALL CAR STALL	8' 2" (2.5 M)	16' 0" (5.0 M)	24' 7" (7.5 M)	90°
LOADING STALL	9' 6" (2.9 M)	30' 0" (9.0 M)	24' 7" (7.5 M)	90°

TOTAL STALLS:

	REQUIRED/ALLOWED:	PROVIDED:
MIN. REQ'D STANDARD STALLS (70%)	322	478
MIN REQ'D ACCESSIBLE STALLS (1%)	5	5
ALLOWED NO. OF SMALL CAR STALLS (30%)	138	0
TOTAL	459	483
LOADING STALLS	10	136

Krahn GROUP OF COMPANIES

CONWEST

larry podhora / architect

CONWEST KINGSWAY AVENUE

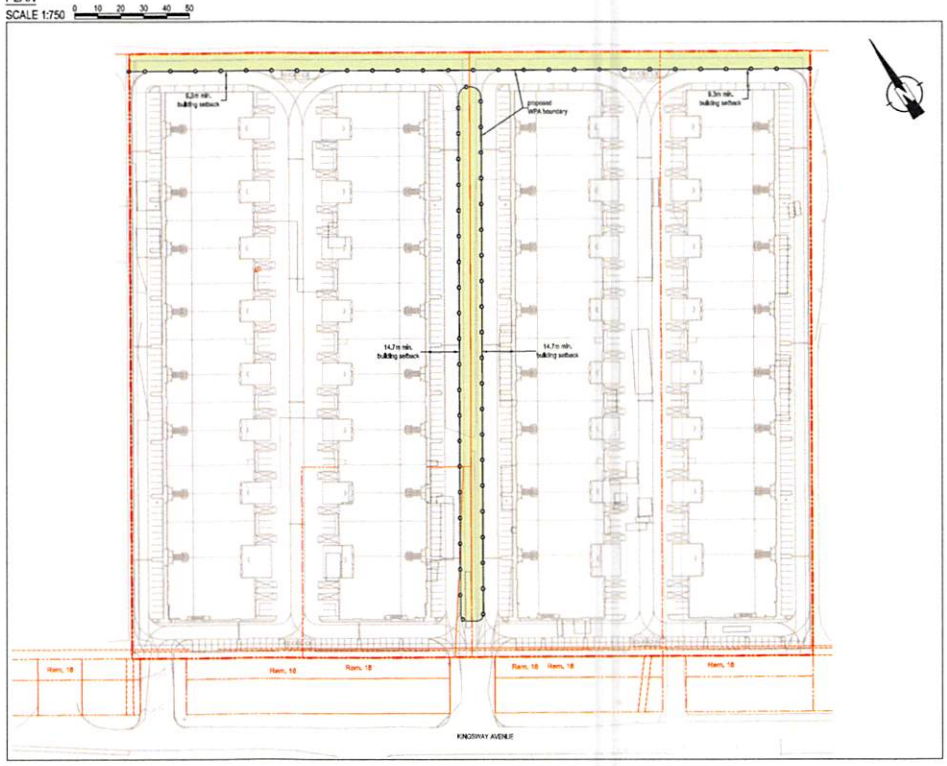
1575, 1545, 1515 & 1491 KINGSWAY AVENUE, PORT COQUITLAM

OVERALL SITE PLAN

A2.2

LOCATION
SCALE 1:7500 0 100 200 300 400 500

PLAN
SCALE 1:750 0 10 20 30 40 50



LEGEND
Proposed WPA Area (4,604 m²)

REFERENCE DRAWINGS
1. Email: 170445 - Conwest Kingsway Ave - 2018-02-20 - Sheet - A2-2 - Overall Site Plan.dwg. Received February 20, 2018; Krahn Group of Companies.
2. 2004 Ortho Photograph From Metro Vancouver.

CONWEST (1575 - POCO) LIMITED PARTNERSHIP

1491, 1515, 1545 & 1575 KINGSWAY AVENUE
Port Coquitlam, BC

envirowest consultants inc.
Suite 101 - 1515 Broadway Street
Port Coquitlam, British Columbia
Canada V3C 6M2
office: 604-944-0502
facsimile: 604-944-0507
www.envirowest.ca

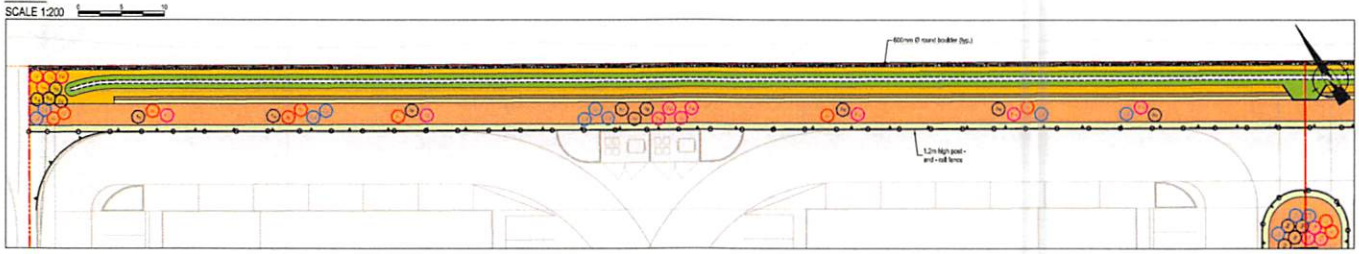
POST DEVELOPMENT WPA

DESIGN	DRAWN	CHECKED	REVISION	REVISION DATE
MW	SCM	MW	01	March 16, 2018
SCALE: As Shown				
DATE: March 16, 2018			DRAWING NUMBER: 655-54-08	

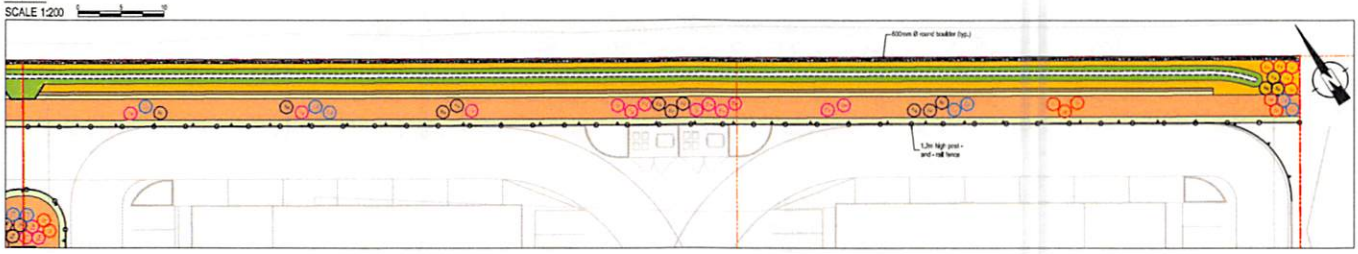
ATTACHMENT G

LANDSCAPE PLANS

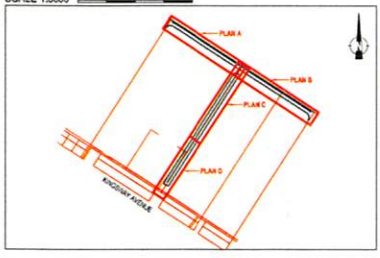
PLAN A
SCALE 1:200



PLAN B
SCALE 1:200



LOCATION
SCALE 1:3000



REFERENCE DRAWINGS
Email: 170445 - Conwest Kingsway Ave - 2018-02-20 - Sheet - A3-2 - Overall Site Plan.dwg,
Received February 20, 2018; Krahn Group of Companies.

CONWEST (1575 - POCO) LIMITED PARTNERSHIP

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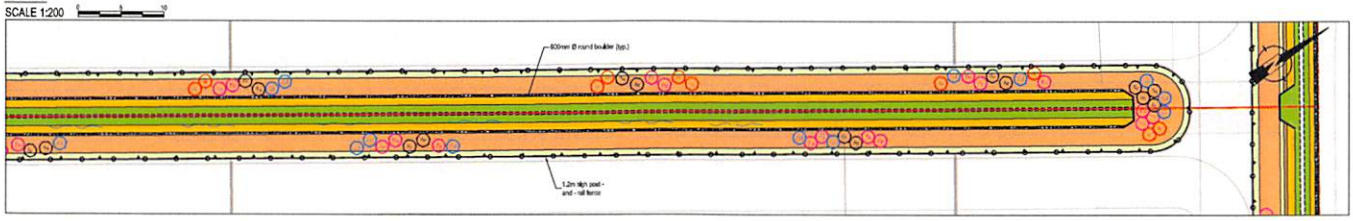
office: 604-944-0502
facsimile: 604-944-0527
www.envirowest.ca

BIOSWALE LANDSCAPE PLAN

DESIGN	DRAWN	CHECKED	REVISION	REVISION DATE
MAA/WW	SDJ/SCM	MAA/WW	02	March 16, 2018
SCALE: As Shown			DRAWING NUMBER: 655-54-01	
DATE: October 19, 2017			SHEET 1 OF 2	

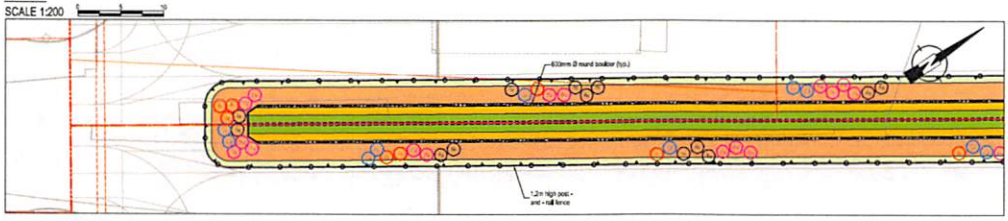
PLAN C

SCALE 1:200



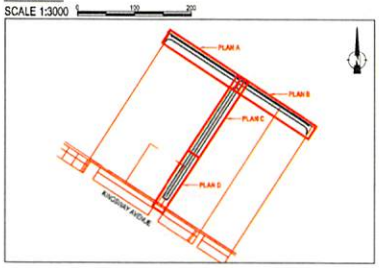
PLAN D

SCALE 1:200



LOCATION

SCALE 1:3000



GENERAL LANDSCAPE SPECIFICATIONS

1. Plant material and the planting of such material are to be in accordance with the British Columbia Landscape Standard (seventh edition) jointly published by the British Columbia Society of Landscape Architects and the British Columbia Landscape Nursery Association.
2. All works are to be conducted in accordance with the sediment control provisions of the "Standards and Best Practices for Instream Works" (Ministry of Water, Land & Air Protection, 2004).
3. All plant material is to be inspected and approved by Envirowest prior to installation.
4. Growing medium is to be free of any subsoils, roots, noxious grass, weeds, toxic materials, stone over 30 mm diameter, foreign objects, and possess an acidity range (pH) of 5.5 to 7.5. Growing medium is to be inspected by Envirowest prior to placement.
5. All Scotch broom (*Cytisus scoparius*), Japanese knotweed (*Fallopia japonica*) and blackberry (*Rubus discolor* and *R. laciniatus*) to be cleared and grubbed from project site.
6. All debris and/or excess material from landscape operations are to be collected and disposed of/take in accordance with all regulatory requirements.
7. The contractor is to provide five (5) years of plant maintenance. Plant maintenance is to include watering, selective pruning and clearing of debris/weeds. Species survivorship is to equal one-hundred (100) percent five (5) years from planting. Replacement of dead stock may be required to fulfill this specification. Replacement stock is also subject to one-hundred (100) percent survivorship five (5) years from planting.

PLANT SPECIES LIST AND SPECIFICATIONS

SYMBOL	COMMON NAME	LATIN NAME	NUMBER	COMMENTS
	grand fir	*Abies grandis*	56	no. 5 pot; 1.5m min.; densely branched; well established
	Douglas-fir	*Pseudotsuga menziesii*	65	no. 5 pot; 1.5m min.; densely branched; well established
	black hawthorn	*Crataegus douglasii*	38	no. 5 pot; 1.5m min.; densely branched; well established
	red alder	*Alnus rubra*	31	no. 5 pot; 1.5m min.; densely branched; well established
	Saskatoon	*Amelanchier alnifolia*	560	no. 3 pot; maximum 750mm spacing edge-to-edge
	Nootka rose	*Rosa nutkana*	1,684	no. 2 pot; maximum 650mm spacing edge-to-edge
	red fescue	*Festuca rubra*	672	no. 1 pot; maximum 150mm spacing edge-to-edge
	woolly bulrush	*Scirpus cyperinus*	275	no. 1 pot; maximum 300mm spacing edge-to-edge
	soft-stem bulrush	*Scirpus validus*	2,175	no. 1 pot; maximum 300mm spacing edge-to-edge
	broad-leaved cattail	*Typha latifolia*	1,878	no. 1 pot; maximum 300mm spacing edge-to-edge

REFERENCE DRAWINGS

Email: 170445 - Conwest Kingsway Ave - 2018-02-20 - Sheet - A2-2 - Overall Site Plan.dwg.
Received February 20, 2018; Krahn Group of Companies.

CONWEST (1575 - POCO) LIMITED PARTNERSHIP

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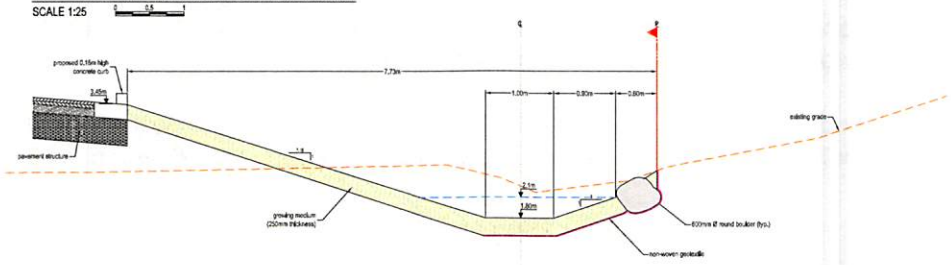
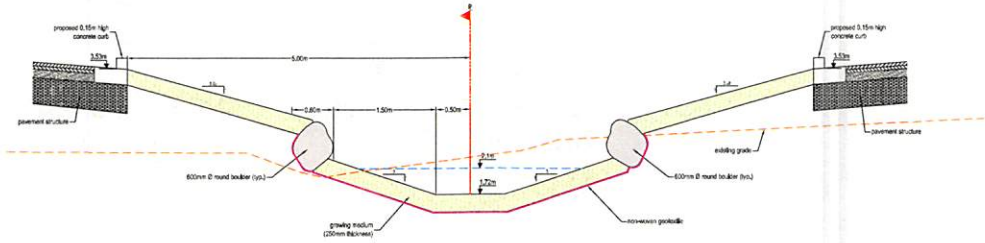
BIOSWALE LANDSCAPE PLAN

DESIGN	DRAWN	CHECKED	REVISION	REVISION DATE
MAA/MW	SDJ/SCM	MAA/MW	02	March 16, 2018
SCALE: As Shown			DRAWING NUMBER: 655-54-02	
DATE: October 19, 2017				SHEET 2 OF 2

NORTH PROPERTY LINE BIO-SWALE - TYPICAL SECTION
SCALE 1:25



CENTRE PROPERTY LINE BIO-SWALE - TYPICAL SECTION
SCALE 1:25



REFERENCE DRAWING
Drawing No. 2 of 2, Rev. 1, "Sections - 1575 Kingsway Ave., Port Coquitlam."
October 10, 2017, KM Civil Consultants Ltd.

CONWEST (1575 - POCO) LIMITED PARTNERSHIP

1491, 1515, 1545 & 1575 KINGSWAY AVENUE
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BIOSWALE TYPICAL SECTIONS

DESIGN	DRAWN	CHECKED	REVISION	REVISION DATE
MAA	SDJ/RK	MAA	01	February 27, 2018
SCALE: As Shown			DRAWING NUMBER: 655-54-03	
DATE: October 19, 2017				

THE CORPORATION OF THE CITY OF PORT COQUITLAM

"DEVELOPMENT PROCEDURES BYLAW, 2013, NO. 3849"

WATERCOURSE DEVELOPMENT PERMIT

NO. DP000332

Issued to: CONWEST (1575 POCO) GP LTD
(Owner as defined in the Local Government Act,
hereinafter referred to as the permittee)

Address: 250-1311 KOOTENAY ST 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:	1491, 1515, 1545 and 1575 Kingsway Avenue
Legal Description:	LOT 2, BLOCK 6N, SECTIONS 7 AND 18, RANGE 1E, NEW WEST DISTRICT, PLAN NWP58045
	LOT 1, BLOCK 6N, SECTIONS 7 AND 18, RANGE 1E, DISTRICT LOT 288, NEW WEST DISTRICT, PLAN NWP58045
	LOT 47, BLOCK 6N, RANGE 1E, DISTRICT LOT 288, NEW WEST DISTRICT, PLAN NWP49119
	LOT 48, BLOCK 6N, SECTIONS 7, RANGE 1E, DISTRICT LOTS 288/382, NEW WEST DISTRICT, PLAN NWP49119
P.I.D.:	005-649-706
	001-688-405
	006-400-710
	006-400-817

3. The above property has been designated as a Development Permit Area under Section 9.8 – Watercourse Protection in the "Official Community Plan Bylaw, 2013, No. 3838".

4. "Port Coquitlam Zoning Bylaw, 2008, No. 3630" and "Subdivision Servicing Bylaw, 1987, No. 2241" are varied, supplemented or both, subject to the following:

   a. All landscaping works, stormwater management measures, sediment control measures and planting materials shall be provided in accordance with plans numbered DP000332(A) to DP000332(C) and specifications thereon which are attached hereto and form part of this permit
   b. All on-site planting materials shall be able to survive for a period of five years from the date of site landscape approval by the Municipality.

5. **Landscape Security**

(a) As a condition of the issuance of this Permit, the Municipality is holding the security set out below to ensure satisfactory provision of landscaping and its maintenance 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 amounts:

a. **$196,360.00** for the purpose of landscaping the habitat enhancement area including invasive species removal;
b. **$8,000** for the maintenance of landscaping the in the habitat enhancement area to be held for a minimum period of two years after the final inspection of associated buildings on the subject property; and,
c. **$22,500.00** for the purpose of inspection and continued removal of invasive species to be held for a minimum period of five years after the final inspection of associated buildings on the subject property.

(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 of a building on the site. Within the six month period, the required landscaping must be installed by the permittee, and inspected and approved by the Municipality.

If the on-site landscaping is not approved within a 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 landscape security shall be returned to the permittee, provided that a sum of 10% of the original landscaping security stated in Clause 5(a)a. above may be withheld by the Municipality for an additional year. At year-end, or upon re-inspection at the request of the permittee, if the Municipality deems the landscaping to be completed, the 10% hold back will be released. Should the permittee fail to remedy any aspect of the landscaping not in accordance with the approved plan, the Municipality may deduct the cost of remedying the defect from the said deposit and recoup additional costs from the permittee if necessary.

(e) The permittee shall carry out the inspection, reporting and maintenance prescribed in the watercourse protection area management plan. The landscape inspection and maintenance security may be reduced by up to $8,500.00 annually upon submission of a report from a qualified environmental consultant confirming the performance

objectives of the watercourse protection area management plan have been achieved.

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 obtain all required development permits or a building 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. 9. This Permit is not a building permit.

APPROVED BY THE SMART GROWTH COMMITTEE THE DAY OF JUNE, 2018.

SIGNED THIS _____ DAY OF _____, 2018.

_____
Mayor

_____
Clerk

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)

CONSTRUCTION AND EROSION CONTROL

Impact Mitigation Guidelines

Silt fences have been installed around the boundary of portions of the Properties (in particular, adjacent to the ditches) where clearing/demolition has already commenced. Silt fences will be installed the remainder of the Properties prior to clearing. Sediment and erosion control (ESC) measures would be implemented.

Instream Works

The subject watercourses are not natural channels (they are manmade), nor do they convey water from natural sources (they convey only runoff from industrial lands). As such these ditches are not streams as defined by the *Water Sustainability Act* (WSA). As the City considers the ditches to be Class B habitat, implying that they sustain fish habitat values, a Request for Review will be submitted to Fisheries and Oceans Canada (DFO) in accordance with the *Fisheries Act*. If water is present in the ditches at the time of reconstruction, dewatering would be performed.

Work Schedules

Reconstruction of the ditches would be timed to coincide with favourable weather but would not be restricted to the standard instream work window (given that the ditches are not inhabited by fish). Landscaping would be performed either in spring or fall.

Monitoring and Compliance

Periodic site inspections would be undertaken by an environmental consultant during the construction period, with particular emphasis on monitoring at the project start-up and during wet weather. Site runoff will need to be monitored to ensure that turbidity is not elevated by runoff from fill material. If water appears visually turbid, water samples would be collected. The objective would be to ensure that suspended sediment in the discharge water does not exceed 25 mg/L during dry weather and 75 mg/L during wet weather. Regular reports of observations and recommendations, if required, would be made available to the City.

WATERCOURSE PROTECTION AREA (WPA) MANAGEMENT PLAN

The setback boundary would be protected by a 0.9 metre (3 ft.) wood post and rail fence.

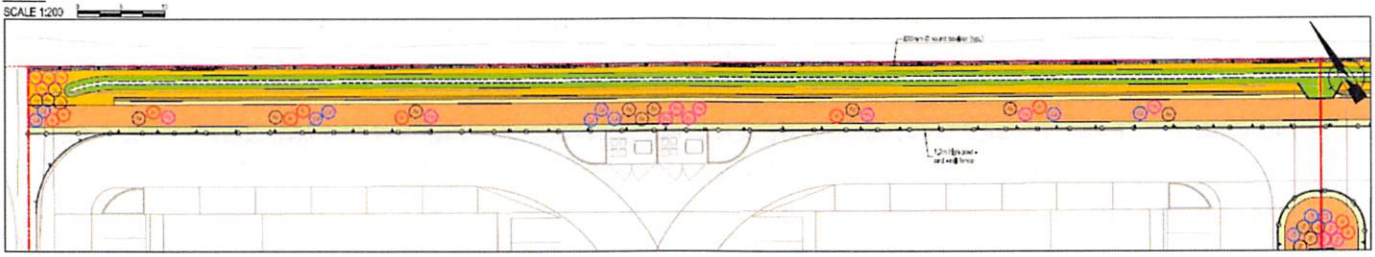
All portions of the WPA would be completely reconstructed and enhanced. The landscaping contractor will be retained to maintain the site for at least two years post-planting, including irrigation and replacement of any dead or dying plant material. A report would be provided by an environmental consultant to the City at the end of each growing season for at least two years post-planting to ensure that the performance objectives of the plantings has been achieved. A bond provided to the City with respect to landscape works will include all of the maintenance and reporting items described above.

All invasive plants will be removed from the site. Maintenance will ensure that any reestablishment of invasive plants is prevented for 5 years.

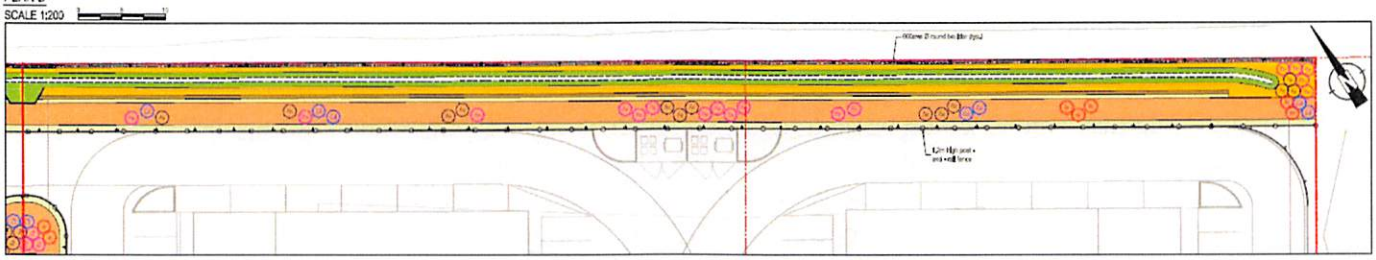
Native soils are presently limited to the existing WPA. To the extent feasible, these soils will be retained for reuse in the new WPA. Additional (imported) soil will be required to provide an enhanced depth (minimum 400 mm) of topsoil.

DP000332(B)

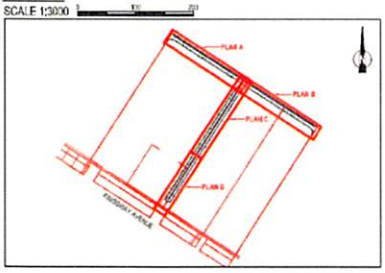
PLAN A
SCALE 1:200



PLAN B
SCALE 1:200



LOCATION
SCALE 1:3000



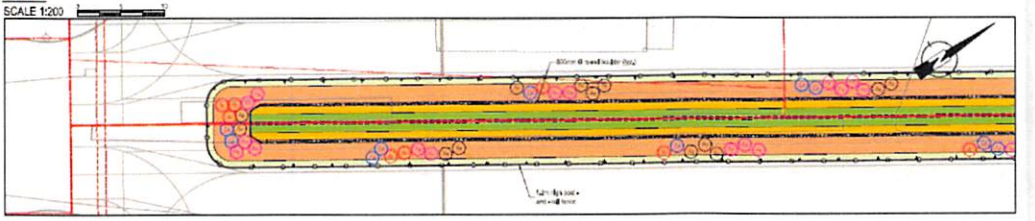
REFERENCE DRAWINGS:
Email: 170445 • Conwest Kingsway Ave • 2018-02-20 • Sheet • A2-2 • Overall Site Plan.dwg,
Received February 20, 2018; Krahn Group of Companies.

CONWEST (1575 - POCO) LIMITED PARTNERSHIP	envirowest consultants inc.	BIOSWALE LANDSCAPE PLAN
1491, 1515, 1545 & 1575 KINGSWAY AVENUE Port Coquitlam, BC	Suite 101 • 1515 Broadway Street Port Coquitlam, British Columbia Canada V3C 6M2 office: 604-944-0502 facsimile: 604-944-0507 www.envirowest.ca	DRAWN: MAA/MW DRAWN: SDJ/SCM CHECKED: MAA/MW REVISION: 02 REVISION DATE: March 16, 2018
		SCALE: As Shown
		DATE: October 19, 2017
		DRAWING NUMBER: 655-54-01 SHEET 1 OF 2

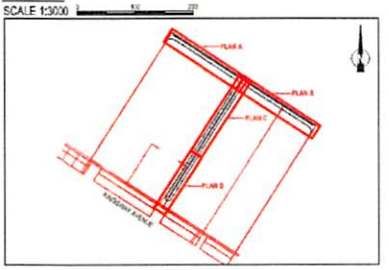
5

PLAN C
SCALE 1:200

PLAN D
SCALE 1:200



LOCATION
SCALE 1:3000



GENERAL LANDSCAPE SPECIFICATIONS

1. Plant material and the planting of such material are to be in accordance with the latest British Columbia Landscape Standard prepared jointly by the British Columbia Society of Landscape Architects and the British Columbia Landscape Nursery Association.
2. All works are to be constructed in accordance with the sediment control guidelines of the Stormwater and Flood Protection Bylaw (known locally as the City of Port Coquitlam Bylaw 3748, 2004).
3. Adjacent municipalities to be contacted and approved by if required prior to installation.
4. Growing medium to be free of any subsoils, roots, rubbish, grass, weeds, and waste lids, stone over 30 mm diameter, toxic materials, and concrete or asphalt larger than 0.5 m³ (1.5 x 0.5 x 0.5). Growing medium to be described by Greenwood prior to placement.
5. All trees within Cultus expansion, Japanese knotweed (Fallopia japonica) and blackberry (Rubus discolor and R. laciniatus) to be cleared and grubbed from project site.
6. Adjacent property owners, municipal, provincial and federal agencies are to be informed and discussions held to determine any applicable requirements.
7. The contractor is to provide five (5) years of plant maintenance. This maintenance is to include weeding, selective pruning and clearing of dandelions. Seeding requirements to result in overall germination of 100 percent after 30 years from planting. Replacement of deciduous trees may be required to fulfill this specification. Replacement trees to be subject to inspection by the City of Port Coquitlam for an additional five (5) years from planting.

PLANT SPECIES LIST AND SPECIFICATIONS

SYMBOL	COMMON NAME	LATIN NAME	PLANTED	COMMENTS
	grand fir	Abies grandis	51	no. 5 cm², 1.5m wide, densely branched, well established
	Douglas-fir	Pseudotsuga menziesii	56	no. 5 cm², 1.5m wide, densely branched, well established
	black hawthorn	Crataegus douglasii	31	no. 5 cm², 1.5m wide, densely branched, well established
	red alder	Alnus rubra	18	no. 5 cm², 1.5m wide, densely branched, well established
	Saskatoon	Amelanchier alnifolia	563	no. 2 cm², mid-term 750mm spacing edge-to-edge
	Nootka rose	Rosa nutkana	1,564	no. 2 cm², mid-term 600mm spacing edge-to-edge
	red huckleberry	Vaccinium parvifolium	872	no. 1 cm², mid-term 100mm spacing edge-to-edge
	swamp lily bulb	Lilium columbianum	975	no. 1 cm², mid-term 300mm spacing edge-to-edge
	salmonberry	Rubus spectabilis	2,171	no. 1 cm², mid-term 300mm spacing edge-to-edge
	broadleaved sedge	Carex obnupta	1,971	no. 1 cm², mid-term 300mm spacing edge-to-edge

REFERENCE DRAWINGS
Email: 170446 - Conwest Kingsway Ave - 20180425 - Sheet - A3/2 - Overall Site Planting.
Received February 20, 2018 Krahn Group of Companies.

CONWEST (1575 - POCO) LIMITED PARTNERSHIP	envirowest consultants inc.	BIOSWALE LANDSCAPE PLAN	
1491, 1515, 1545 & 1575 KINGSWAY AVENUE Port Coquitlam, BC	Suite 901 - 1515 Broadway Street Port Coquitlam, British Columbia Canada V3C 6M2 office 604-944-0502 fax/digital 604-944-0507 www.envirowest.ca	DRAWN: MAA/WW; DESIGN: SEL/SCM; CHECKED: MAA/WW; REVISION: 02; DATE: March 19, 2018	
		SCALE: As Shown	DRAWING NUMBER: 655-54-02 SHEET 2 OF 3
		DATE: October 19, 2017	

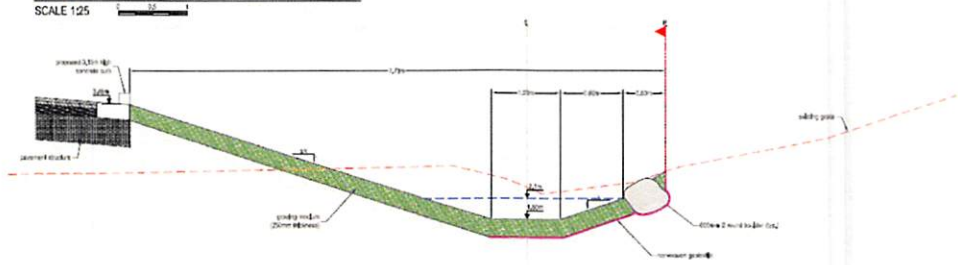
GENERAL LANDSCAPE SPECIFICATIONS

1. Plant material and the planting of such material are to be in accordance with the British Columbia Landscape Standard (seventh edition) jointly published by the British Columbia Society of Landscape Architects and the British Columbia Landscape Nursery Association.
2. All works are to be conducted in accordance with the sediment control provisions of the "Standards and Best Practices for Instream Works" (Ministry of Water, Land & Air Protection, 2004).
3. All plant material is to be inspected and approved by Envirowest prior to installation.
4. Growing medium is to be free of any subsoils, roots, noxious grass, weeds, toxic materials, stone over 30 mm diameter, foreign objects, and possess an acidity range (pH) of 5.5 to 7.5. Growing medium is to be inspected by Envirowest prior to placement.
5. All Scotch broom (*Cytisus scoparius*), Japanese knotweed (*Fallopia japonica*) and blackberry (*Rubus discolor* and *R. laciniatus*) to be cleared and grubbed from project site.
6. All debris and/or excess material from landscape operations are to be collected and disposed offsite in accordance with all regulatory requirements.
7. The contractor is to provide five (5) years of plant maintenance. Plant maintenance is to include watering, selective pruning and clearing of blackberry. Species survivorship is to equal one-hundred (100) percent five (5) years from planting. Replacement of dead stock may be required to fulfill this specification. Replacement stock is also subject to one-hundred (100) percent survivorship five (5) years from planting.

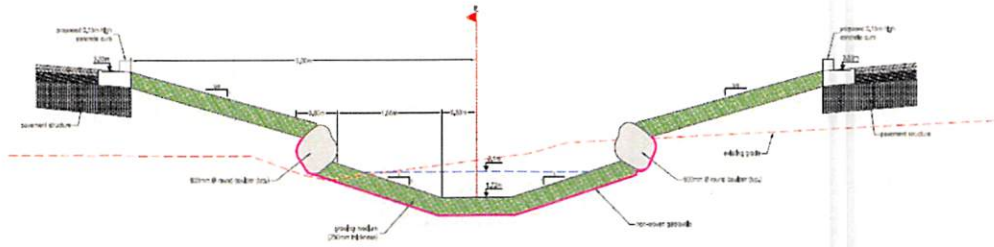
PLANT SPECIES LIST AND SPECIFICATIONS

SYMBOL	COMMON NAME	LATIN NAME	NUMBER	COMMENTS
	grand fir	*Abies grandis*	55	no. 5 pot; 1.5m min.; densely branched; well established
	Douglas-fir	*Pseudotsuga menziesii*	65	no. 5 pot; 1.5m min.; densely branched; well established
	black hawthorn	*Crataegus douglasii*	39	no. 5 pot; 1.5m min.; densely branched; well established
	red alder	*Alnus rubra*	31	no. 5 pot; 1.5m min.; densely branched; well established
	Saskatoon	*Amelanchier alnifolia*	560	no. 3 pot; maximum 750mm spacing edge-to-edge
	Nootka rose	*Rosa nutkana*	1,684	no. 2 pot; maximum 650mm spacing edge-to-edge
	red fescue	*Festuca rubra*	672	no. 1 pot; maximum 150mm spacing edge-to-edge
	woolly bulrush	*Scirpus cyperinus*	275	no. 1 pot; maximum 300mm spacing edge-to-edge
	soft-stem bulrush	*Scirpus validus*	2,175	no. 1 pot; maximum 300mm spacing edge-to-edge
	broad-leaved cattail	*Typha latifolia*	1,878	no. 1 pot; maximum 300mm spacing edge-to-edge

NORTH PROPERTY LINE BIO-SWALE - TYPICAL SECTION
SCALE 1:25



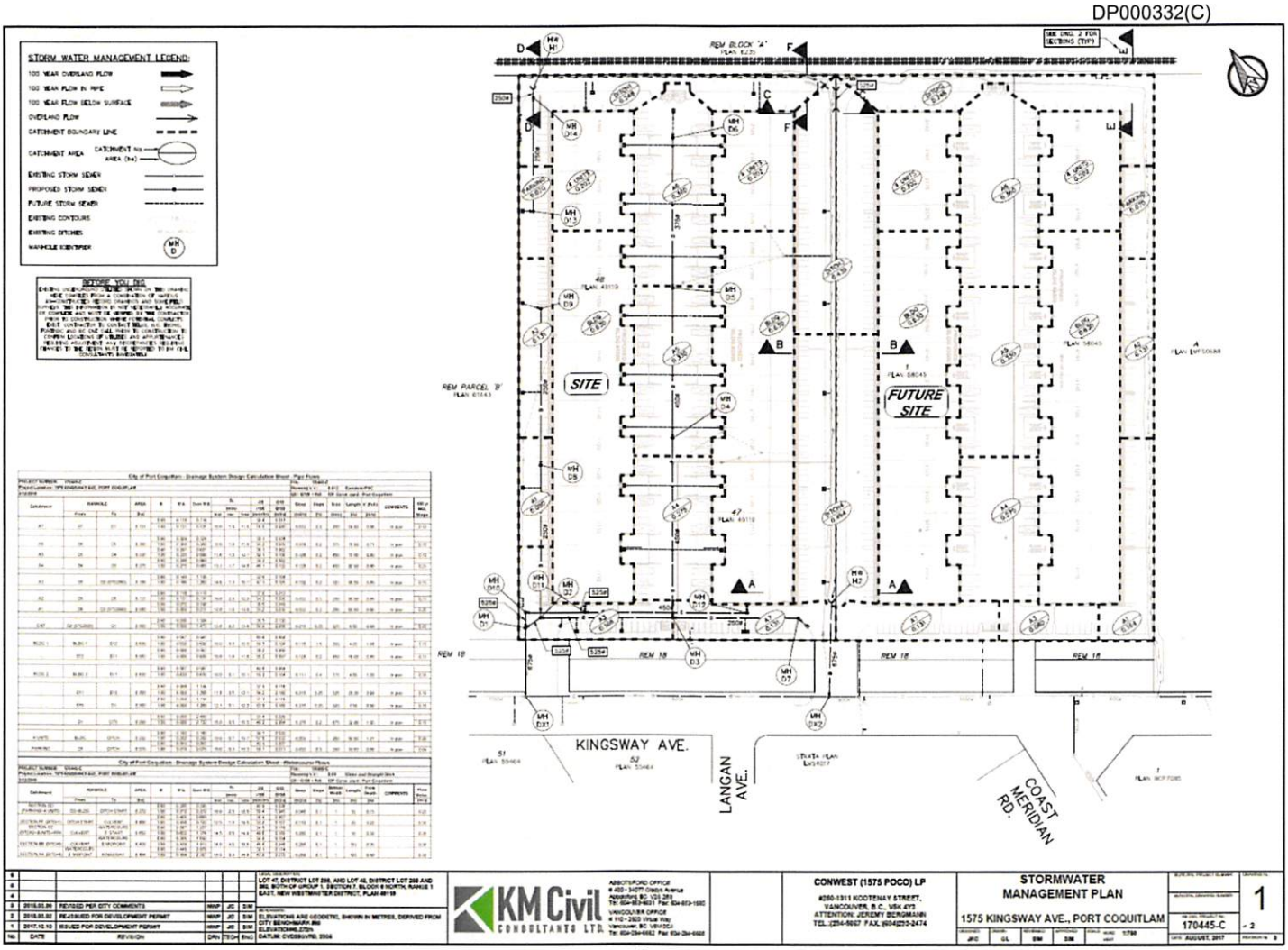
CENTRE PROPERTY LINE BIO-SWALE - TYPICAL SECTION
SCALE 1:25



REFERENCE DRAWING
Drawing No. 2 of 2, Rev. 1, "Sections - 1575 Kingsway Ave, Port Coquitlam"
October 10, 2017, KM Civil Consultants Ltd.

CONWEST (1575 - POCO) LIMITED PARTNERSHIP	envirowest consultants inc.	BIOSWALE TYPICAL SECTIONS
1491, 15		

DRAWN: MAA	DESIGN: SD/RK	CHECKED: MAA	REVISION: 01	REVISED DATE: February 27, 2018
SCALE: As Shown				DRAWING NUMBER: 655-54-03
DATE: October 19, 2017				


STORM WATER MANAGEMENT LEGEND:
100 YEAR OVERLAND FLOW
100 YEAR FLOW IN PIPE
100 YEAR FLOW BELOW SURFACE
OVERLAND FLOW
CATCHMENT BOUNDARY LINE
CATCHMENT AREA
EXISTING STORM SEWER
PROPOSED STORM SEWER
FUTURE STORM SEWER
EXISTING CONTOURS
EXISTING DITCHES
MANHOLE IDENTIFIER
BEFORE YOU DIG
SITE
FUTURE SITE
REM PARCEL 'B'
REM BLOCK 'A'
REM 18
KINGSWAY AVE.
LANGAN AVE.
COAST MERIDIAN RD.
LOT 47, DISTRICT LOT 298, AND LOT 48, DISTRICT LOT 298 AND 299, BOTH OF GROUP 1, SECTION 7, BLOCK 8 NORTH, RANGE 1 EAST, NEW WESTMINSTER DISTRICT, PLAN 49119
REVISED PER CITY COMMENTS
REVISED FOR DEVELOPMENT PERMIT
ISSUED FOR DEVELOPMENT PERMIT
ELEVATIONS ARE GEODETIC, SHOWN IN METRES, DERIVED FROM CITY BENCHMARK 200
ELEVATIONS 2.72m
DATUM: CVD28GVRD, 2004
KM Civil CONSULTANTS LTD.
CONWEST (1575 POCO) LP
#200-1311 KOOTENAY STREET, VANCOUVER, B.C., V5K 4Y2
ATTENTION: JEREMY BERGMANN
TEL.:(254-5607 FAX.:(604)253-2474
STORMWATER MANAGEMENT PLAN
1575 KINGSWAY AVE., PORT COQUITLAM
170445-C
AUGUST, 2017
1

City of Port Coquitlam - Drainage System Design Calculation Sheet - Pipe Flows

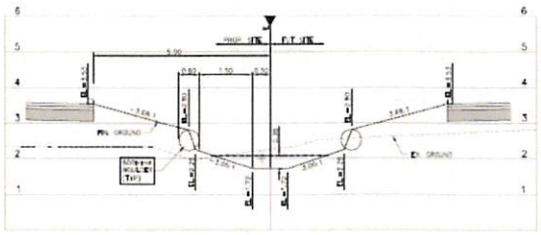
PROJECT NUMBER: 170445-C | File: 170445-C
Project Location: 1575 KINGSWAY AVE, PORT COQUITLAM | Manning's 'n': 0.013 Concrete/PVC
3/12/2018 | Q5 / Q100 = RIA | IDF Curve used: Port Coquitlam

Catchment	MANHOLE		AREA	R	R*A	Cum R*A	Tc (min)			I10 / I100	Q10 / Q100	Qcap	Slope	Size	Length	V (Full)	COMMENTS	100 yr HGL Slope
	From	To	(ha)				Inlet	Incr.	Total	(mm/hr)	(m3/s)	(m3/s)	(%)	(mm)	(m)	(m/s)		
A7	D7	D3	0.131	0.90	0.118	0.118	10.0	1.5	11.5	58.4	0.013	0.033	0.3	250	59.00	0.66	In pipe	0.12
				1.00	0.131	0.131				56.5	0.020							
A6	D6	D5	0.360	0.90	0.324	0.324	10.0	1.6	11.6	58.1	0.034	0.078	0.2	375	70.00	0.71	In pipe	0.10
				1.00	0.360	0.360				55.2	0.055							
A5	D5	D4	0.330	0.90	0.297	0.621	11.6	1.5	13.1	56.1	0.052	0.128	0.2	450	70.00	0.80	In pipe	0.12
				1.00	0.330	0.660				52.1	0.100							
A4	D4	D3	0.275	0.90	0.248	0.869	13.1	1.7	14.8	54.2	0.082	0.128	0.2	450	82.50	0.80	In pipe	0.21
				1.00	0.275	0.965				49.1	0.132							
A3	D3	D2 (STC2000)	0.165	0.90	0.149	1.136	14.8	1.3	16.1	52.9	0.104	0.192	0.2	525	66.00	0.69	In pipe	0.15
				1.00	0.165	1.282				47.1	0.165							
A2	D9	D8	0.131	0.90	0.118	0.118	10.0	2.0	12.0	57.6	0.012	0.033	0.3	250	60.00	0.66	In pipe	0.11
				1.00	0.131	0.131				54.3	0.020							
A1	D8	D2 (STC2000)	0.060	0.90	0.072	0.190	12.0	1.6	13.6	55.5	0.019	0.033	0.3	250	63.00	0.66	In pipe	0.25
				1.00	0.060	0.211				51.2	0.030							
EXIT	D2 (STC2000)	D1	0.000	0.90	0.000	1.326	13.6	0.2	13.8	53.3	0.130	0.215	0.25	525	9.50	0.99	In pipe	0.23
				1.00	0.000	1.473				50.9	0.208							
BLDG 1	BLDG 1	D12	0.630	0.90	0.567	0.567	10.0	0.0	10.0	60.6	0.064	0.118	1.5	300	4.00	1.68	In pipe	1.15
				1.00	0.630	0.630				59.3	0.104							
-	D12	D11	0.000	0.90	0.000	0.567	10.0	1.6	11.6	58.2	0.090	0.128	0.2	450	76.00	0.80	In pipe	0.11
				1.00	0.000	0.630				55.2	0.097							
BLDG 2	BLDG 2	D11	0.630	0.90	0.567	0.567	10.0	0.1	10.1	60.6	0.064	0.111	0.4	375	4.00	1.00	In pipe	0.35
				1.00	0.630	0.630				59.2	0.104							
-	D11	D10	0.000	0.90	0.000	1.134	11.6	0.5	12.1	57.5	0.118	0.215	0.25	525	28.00	0.99	In pipe	0.19
				1.00	0.000	1.260				54.2	0.190							
-	D10	D1	0.000	0.90	0.000	1.134	12.1	0.1	12.2	57.3	0.118	0.215	0.25	525	7.50	0.99	In pipe	0.19
				1.00	0.000	1.260				53.9	0.189							
-	D1	CITY	0.000	0.90	0.000	2.460	15.0	0.5	15.5	53.4	0.229	0.376	0.2	675	32.00	1.05	In pipe	0.19
				1.00	0.000	2.733				48.0	0.364							
4 UNITS	BLDG	DITCH	0.202	0.90	0.182	0.182	10.0	0.7	10.7	59.7	0.020	0.059	1	250	50.00	1.21	In pipe	0.29
				1.00	0.202	0.202				57.5	0.032							
PARKING	D3	DITCH	0.070	0.90	0.063	0.063	10.0	0.3	10.3	60.4	0.007	0.033	0.3	250	10.00	0.68	In pipe	0.04
				1.00	0.070	0.070				58.7	0.011							

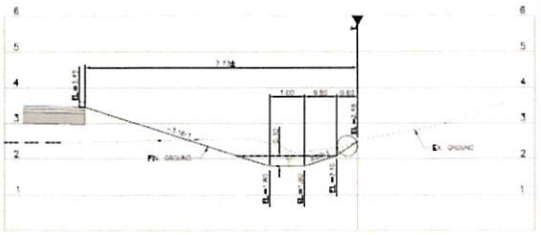
City of Port Coquitlam - Drainage System Design Calculation Sheet - Watercourse Flows

PROJECT NUMBER: 170445-C | File: 170445-C
Project Location: 1575 KINGSWAY AVE, PORT COQUITLAM | Manning's 'n': 0.03 Clean and Straight Ditch
3/12/2018 | Q5 / Q100 = RIA | IDF Curve used: Port Coquitlam

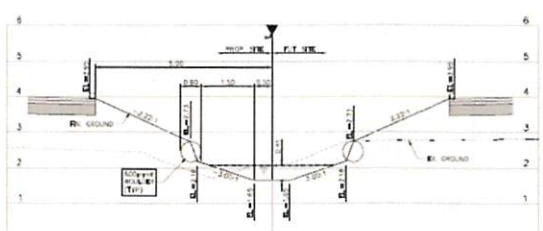
Catchment	MANHOLE		AREA	R	R*A	Cum R*A	Tc (min)			I10 / I100	Q10 / Q100	Qcap	Slope	Bottom Width	Length	Flow Depth	COMMENTS	Flow Veloc.
	From	To	(ha)				Inlet	Incr.	Total	(mm/hr)	(m3/s)	(m3/s)	(%)	(m)	(m)	(m)		(m/s)
SECTION DD (PARKING+4 UNITS)	D3+BLDG	DITCH START	0.272	0.90	0.245	0.245	10.0	2.5	12.5	60.9	0.026	0.045	0.1	1	35	0.15		0.23
				1.00	0.272	0.272				59.4	0.045							
SECTION FF (DITCH1)	DITCH START	CULVERT	0.450	0.90	0.405	0.650	12.5	1.9	14.5	56.9	0.057	0.110	0.1	1	35	0.22		0.30
				1.00	0.450	0.722				53.2	0.107							
SECTION CC (DITCH2+3UNITS+PRK	CULVERT	WATERCOURSE START	0.652	0.90	0.587	1.237	14.5	0.5	14.9	54.5	0.119	0.200	0.1	1	10	0.30		0.35
				1.00	0.652	1.374				49.6	0.189							
SECTION BB (DITCH3)	CULVERT	WATERCOURSE MIDPOINT	0.439	0.90	0.395	1.632	14.9	4.5	19.5	54.0	0.154	0.250	0.1	1	100	0.35		0.38
				1.00	0.439	1.813				48.9	0.246							
SECTION AA (DITCH4)	WATERCOURSE MIDPOINT	KINGSWAY	0.494	0.90	0.445	2.076	19.5	5.3	24.8	50.1	0.174	0.280	0.1	1	125	0.40		0.39
				1.00	0.494	2.307				43.0	0.275							



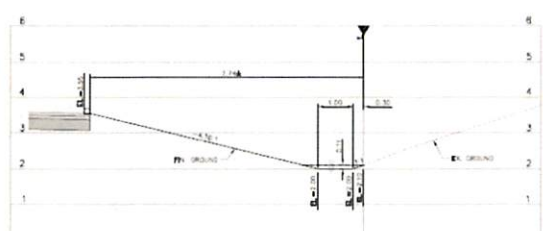
SECTION C–C



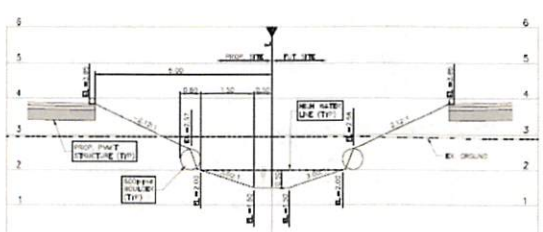
SECTION F–F



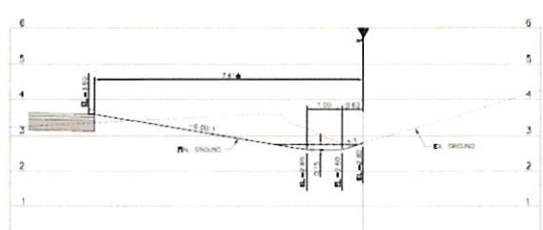
SECTION B–B



SECTION E–E



SECTION A–A



SECTION D–D

NO.	DATE	REVISION	DRN	TECH	ENG
6					
5					
4					
3	2018.03.06	REVISED PER CITY COMMENTS	MAP	JG	SIM
2	2018.03.02	REASSUED FOR DEVELOPMENT PERMIT	MAP	JG	SIM
1	2017.12.12	ISSUED FOR DEVELOPMENT PERMIT	MAP	JG	SIM

LOT 47, DISTRICT LOT 298, AND LOT 48, DISTRICT LOT 298 AND 302, BOTH OF GROUP 1, SECTION 7, BLOCK 6 NORTH, RANGE 1 EAST, NEW WESTMINSTER DISTRICT, PLAN 49119

ELEVATIONS ARE GEODETIC, SHOWN IN METRES, DERIVED FROM CITY BENCHMARK 800
ELEVATIONS:2.270m
DATUM: GVD28/UVRD, 2005

KM Civil CONSULTANTS LTD.

ABBOTSFORD OFFICE
#402 - 34077 Gladys Avenue
Abbotsford, BC V2S 2P6
Tel: 604-853-6821 Fax: 604-853-1882

VANCOUVER OFFICE
#110 - 2800 Virtue Way
Vancouver, BC V5H 3G4
Tel: 604-294-6662 Fax: 604-294-6665

CONWEST (1575 POCO) LP
#200-1311 KOOTENAY STREET,
VANCOUVER, B.C., V5K 4Y3
ATTENTION: JEREMY BERGMANN
TEL.:(294-5067 FAX.:(604)293-2474

SECTIONS

1575 KINGSWAY AVE., PORT COQUITLAM

JKO | GL | SIM | SIM | 1:50 | 1:50

170445-C

AUGUST, 2017

2

Development Permit DP000331 – 1545 and 1575 Kingsway Avenue

RECOMMENDATION:

That Smart Growth Committee approve Development Permit DP000331 to regulate an industrial development at 1545 and 1575 Kingsway Avenue.

PREVIOUS COUNCIL/COMMITTEE ACTION

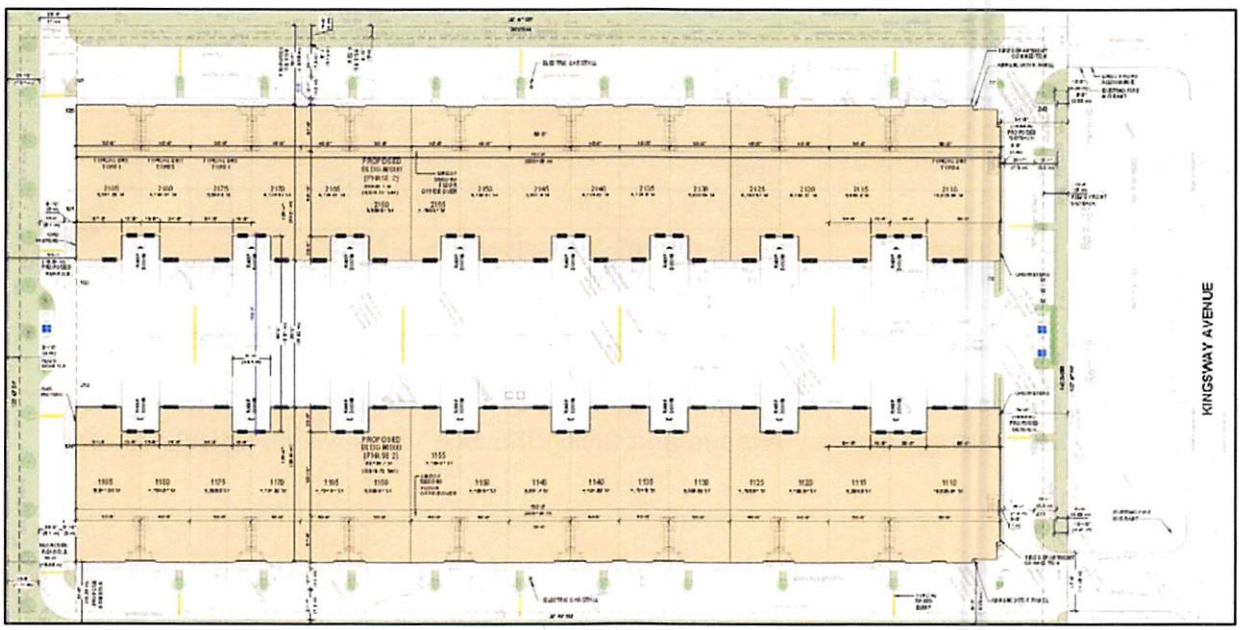
April 10, 2018 - Council approved Land Use Contract Discharge Bylaw No. 4044 (1545 & 1575 Kingsway Avenue).

REPORT SUMMARY

This report describes an application for a development permit to regulate a strata warehouse industrial project as proposed by Conwest Group of Companies for its property at 1545 and 1575 Kingsway Avenue. The project is designed to comply with the site's industrial zoning and development permit designation and the development permit is recommended for approval.

BACKGROUND

Conwest proposes to construct two large, tilt-up concrete industrial buildings with parking/loading bays and landscaping. As shown in the following drawing, unit frontages and most of the parking spaces are oriented to the side yards with loading bays between the two buildings. There are two existing driveways which connect across BC Hydro's narrow utility lot to Kingsway Avenue. The site is vacant and has been cleared in anticipation of development.



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 site's 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.

A watercourse protection development permit area designation is also applicable to the site and discussed in a separate report.

There is a "no-build" covenant registered on title pursuant to Council's recent discharge of a land use contract. This covenant requires that the owner provide design, fees and securities for offsite works and services including a sidewalk with a minimum width of three meters fronting Kingsway Avenue as well as enter into a servicing agreement with the City prior to issuance of a building permit. Once these measures are completed, the covenant can be removed.

Project Profile

	Bylaw Regulations[1]	**Proposed**[2]
Site Area	3000 sq.m. min'm	39,156 sq.m. (9.7 acre)
Total Building Area	n/a	16,627 sq.m. (178,976 ft^2)
Building Lot Coverage	60%	42 %
Setbacks:		
Front Setback (Kingsway)	6 m	16.6 m
Rear Setback (north)	3 m	16.8 m
Interior Side Setback (west)	3 m	15.5 m
Interior Side Setback (east)	3 m	19.68 m
Building Height	n/a	10 m
Parking (total)	229	240
Small car parking spaces	25% max'm (60 spaces)	3 (1%)
Loading bays	7 minimum	68
Bicycle Parking	Space for 12 bikes	Space for 12 bikes

The building will be two storeys in height and constructed of tilt-up concrete panels with a varied roofline. The façades along Kingsway Avenue and facing the side yards will be articulated, have

[1] Refer to Zoning Bylaw No. 3630 and Parking and Development Management Bylaw No. 3525 for specific regulations.
[2] Information provided by applicant.

significant portions of glazing, reveal lines, steel canopies and a colour palette of off white and gray tones, with blue accents.

The onsite (non-riparian) landscape plan calls for a mixture of grasses, shrubs, perennials, ground cover plants, and 22 retained trees along the west property boundary and 41 new trees located around the periphery of the site and in landscape strips within parking areas. A significant portion of the site area will be used for required parking, traffic circulation, and transport vehicle loading areas typical of an industrial development.

A transportation Impact Assessment report was submitted for review by Engineering and Operations staff. The report confirms the site is designed to enable passenger and transport vehicles access and circulation throughout the site.

DISCUSSION

The design of the proposed industrial buildings and landscaping meets the intent of both the industrial design guidelines and environmental conservation designation. The development is attractive and consistent with the expected high quality of character of the city's industrial area.

FINANCIAL IMPLICATIONS

None.

ENVIRONMENTAL IMPLICATIONS

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 a cool roof, high efficiency windows and skylights and selection of native and drought-resistant plant species. Greenhouse gas emissions will be reduced though the energy efficient nature of the building, use of low volatile organic compounds materials, LED lighting, and the provision of recycling space and bicycle parking.

PUBLIC CONSULTATION

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

OPTIONS

(Check = Staff Recommendation)

#	Description
1 ✓	Approve Development Permit DP000331
2	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 proposal complies with the development permit guidelines
3	Recommend rejection of the application if the Committee is of the opinion that the applications do not conform to the development permit guidelines. The applicant may then request the application be forwarded to Council for consideration.

ATTACHMENTS

Attachment #1: Location Map

Attachment #2: Draft Development Permit DP000331

ATTACHMENT 1

CITY OF PORT COQUITLAM
DEVELOPMENT APPLICATION LOCATION MAP

PROJECT ADDRESS: 1545/75 Kingsway Ave **FILE NO:** DP000331

ATTACHMENT 2

THE CORPORATION OF THE CITY OF PORT COQUITLAM

"DEVELOPMENT PROCEDURES BYLAW, 2013, NO. 3849"

DEVELOPMENT PERMIT

NO. DP000331

Issued to: CONWEST (1575 POCO) GP LTD
(Owner as defined in the Local Government Act,
hereinafter referred to as the Permittee)

Address: 250-1311 KOOTENAY ST 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:	1575 and 1545 Kingsway Avenue
Legal Description:	LOT 48, BLOCK 6N, SECTION 7, RANGE 1E, NEW WEST DISTRICT, PLAN NWP49119 DISTRICT LOT 288/382. LOT 47, BLOCK 6N, RANGE 1E, DISTRICT LOT 288, NEW WEST DISTRICT, PLAN NWP49119
P.I.D.:	006-400-817; 006-400-710

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 buildings, including the siting, height and general design, shall be as shown on drawings numbered DP000331 (1) to DP000331 (18) 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 DP000331 (12) and DP000331 (18) 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 **$196,760.00** 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 SMART GROWTH COMMITTEE THE [CLICK **HERE** - ENTER THE DAY (IE 12TH)] DAY OF [CLICK **HERE** - ENTER THE MONTH, YEAR].

SIGNED THIS [CLICK **HERE** - ENTER THE DAY (IE 12TH)] DAY OF [CLICK **HERE** - ENTER THE MONTH, YEAR].

_____
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)

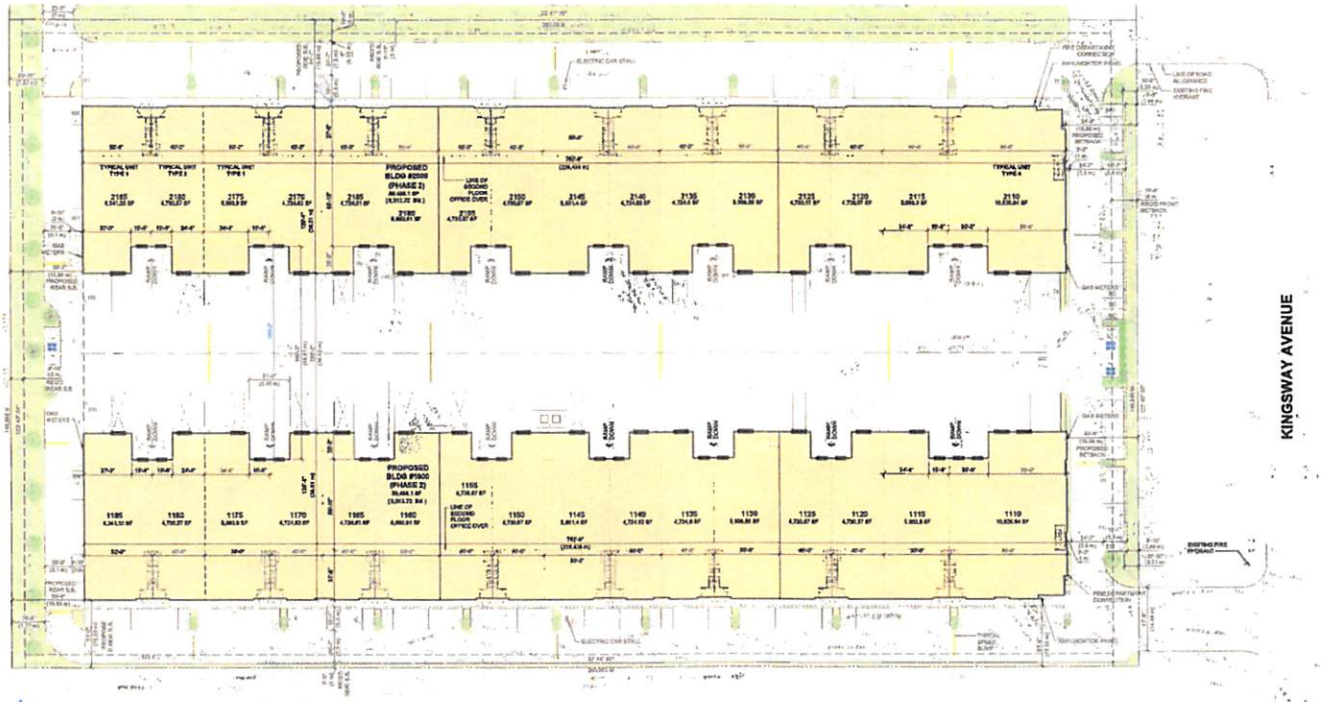
2 BLDG 1000 FRONT PERSPECTIVE
SCALE

1 BLDG 2000 FRONT PERSPECTIVE
SCALE

4 BLDG 1000 BACK PERSPECTIVE
SCALE

3 BLDG 2000 BACK PERSPECTIVE
SCALE

DP000331 (1)



Krahn GROUP OF COMPANIES

CONWEST Group of Companies

CONWEST KINGSWAY AVENUE

1545 & 1575 KINGSWAY AVENUE, PORT COQUITLAM

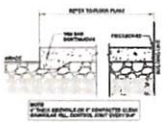
SITE PLAN

A2.1

SITE PLAN
SCALE: 1/32" = 1'-0"

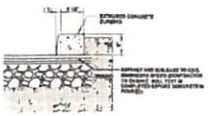
PROJECT NORTH

106

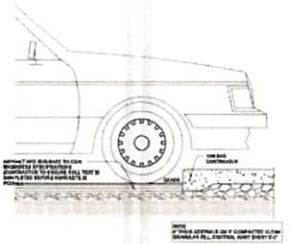


4 SIDEWALK DETAIL
SCALE: 1" = 1'-0"

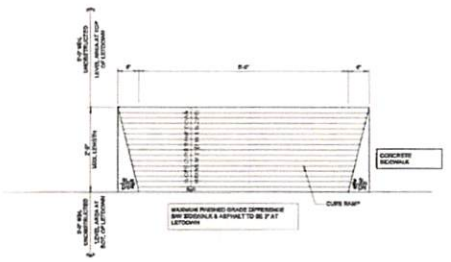
3 CONCRETE WHEEL STOP
SCALE: 1" = 1'-0"



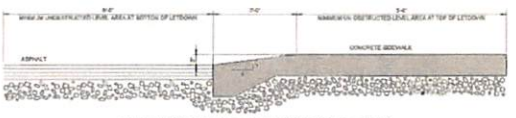
2 EXTRUDED CURB
SCALE: 1" = 1'-0"



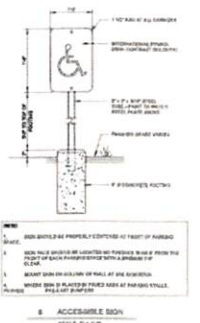
1 WH_CAR OVERHANG SIDEWALK
SCALE: 1" = 1'-0"



PLAN OF H/C SIDEWALK LETDOWN



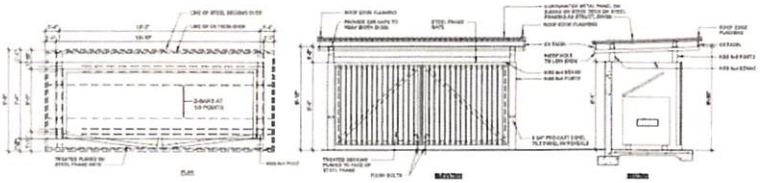
SECTION OF H/C SIDEWALK LETDOWN



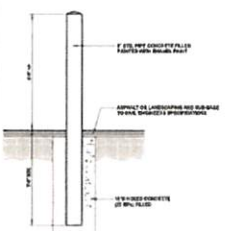
8 ACCESSIBLE SIGN
SCALE: 1" = 1'-0"

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

7 H/C SIDEWALK LETDOWN
SCALE: 1" = 1'-0"



9 GARBAGE ENCLOSURE
SCALE: 3/8" = 1'-0"



6 BOLLARD DETAIL
SCALE: 1 1/2" = 1'-0"

DP000331 (3)

Krahn GROUP OF COMPANIES

CONWEST Group of Companies

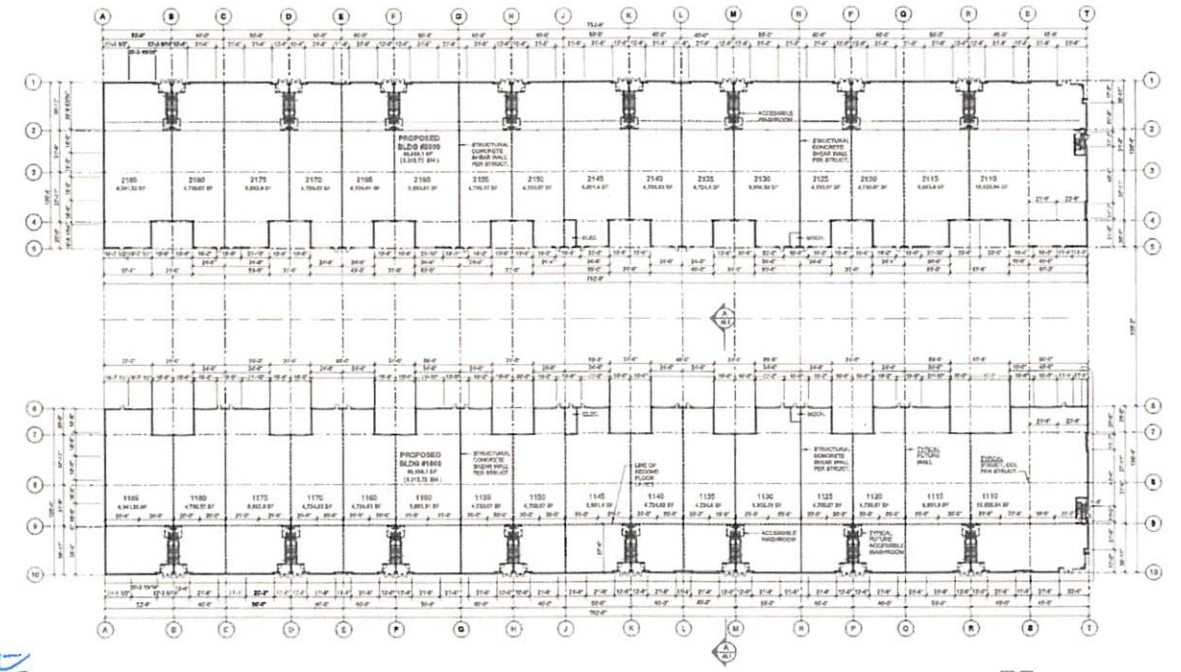
larry pedhora | architecture inc

PROJECT NAME
CONWEST KINGSWAY AVENUE

1545 & 1575 KINGSWAY AVENUE, PORT COQUITLAM

SITE DETAILS

SCALE: As indicated
DRAWING NO: A2.3



1 MAIN FLOOR PLAN
SCALE: 1/32" = 1'-0"

PROJECT NORTH

BRITISH COLUMBIA BUILDING CODE (2012) ANALYSIS - PART 3

1. 3.2.2. BUILDING CLASSIFICATION

BUSINESS AND PERSONAL SERVICES (5.6.3.1.(1)(f))F 3S - 3.2.2.76.
- SPRINKLERED, NOT MORE THAN 6 STOREYS
- UNLIMITED BUILDING AREA IF 3 STOREYS
- NON-COMBUSTIBLE CONSTRUCTION
- FLOOR: 1 HOUR RES & TO BE FRR SEPARATION
- MEZZANINE: 1 HOUR RES & TO BE FRR SEPARATION
- ALL LOAD-BEARING ASSEMBLIES OF FIRE RATED ASSEMBLIES RATED FOR MINIMUM REQUIRED FOR THE RATED ASSEMBLY

2. 3.2.2. BUILDING CLASSIFICATION

MEDIUM HAZARD INDUSTRIAL (GROUP F, DIV 3) - 3.2.2.75.
- SPRINKLERED, NOT MORE THAN 4 STOREYS
- MAXIMUM BUILDING AREA 8,000 sq.m. (F 3 STOREYS)
- NON-COMBUSTIBLE CONSTRUCTION PERMITTED
- FLOOR: 1 HOUR RES & TO BE FRR SEPARATION
- MEZZANINE: 1 HOUR RES & TO BE FRR SEPARATION
- ALL LOAD-BEARING ASSEMBLIES OF FIRE RATED ASSEMBLIES RATED FOR MINIMUM REQUIRED FOR THE RATED ASSEMBLY

DP000331 (4)

Krahn GROUP OF COMPANIES

CONWEST

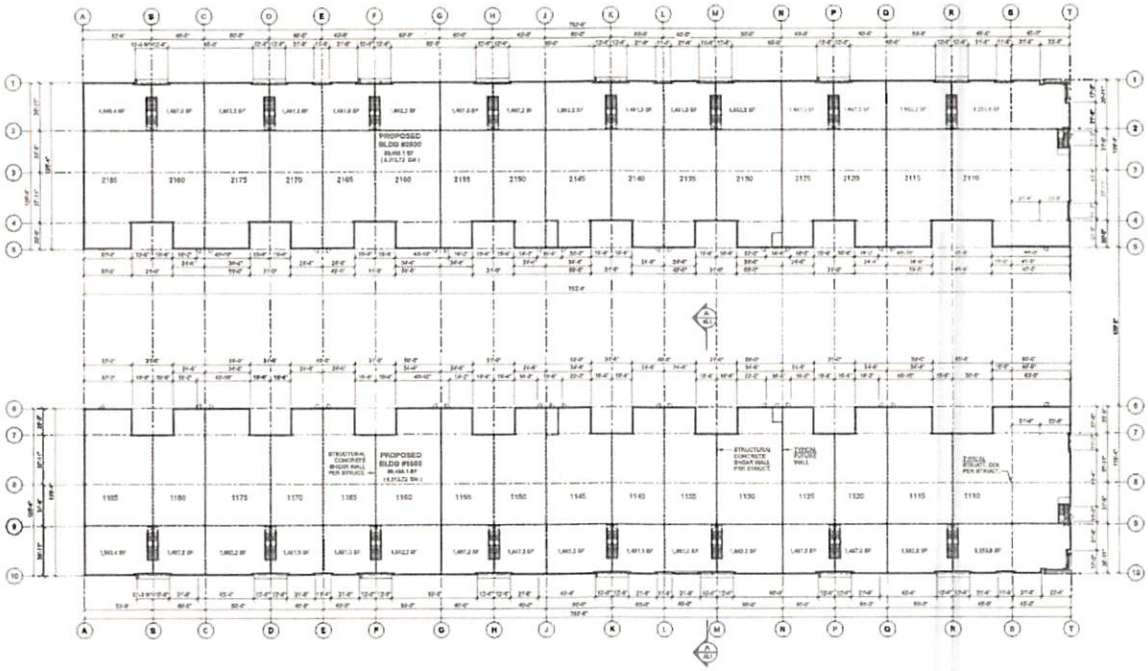
larry pedhorn | architecture inc

CONWEST KINGSWAY AVENUE

1545 & 1575 KINGSWAY AVENUE, PORT COQUITLAM

MAIN FLOOR PLAN

A3.1



1 SECOND FLOOR PLAN
SCALE: 1/32" = 1'-0"

PROJECT NORTH

Krahn GROUP OF COMPANIES

CONWEST Group of Companies

larry podhora | architecture inc

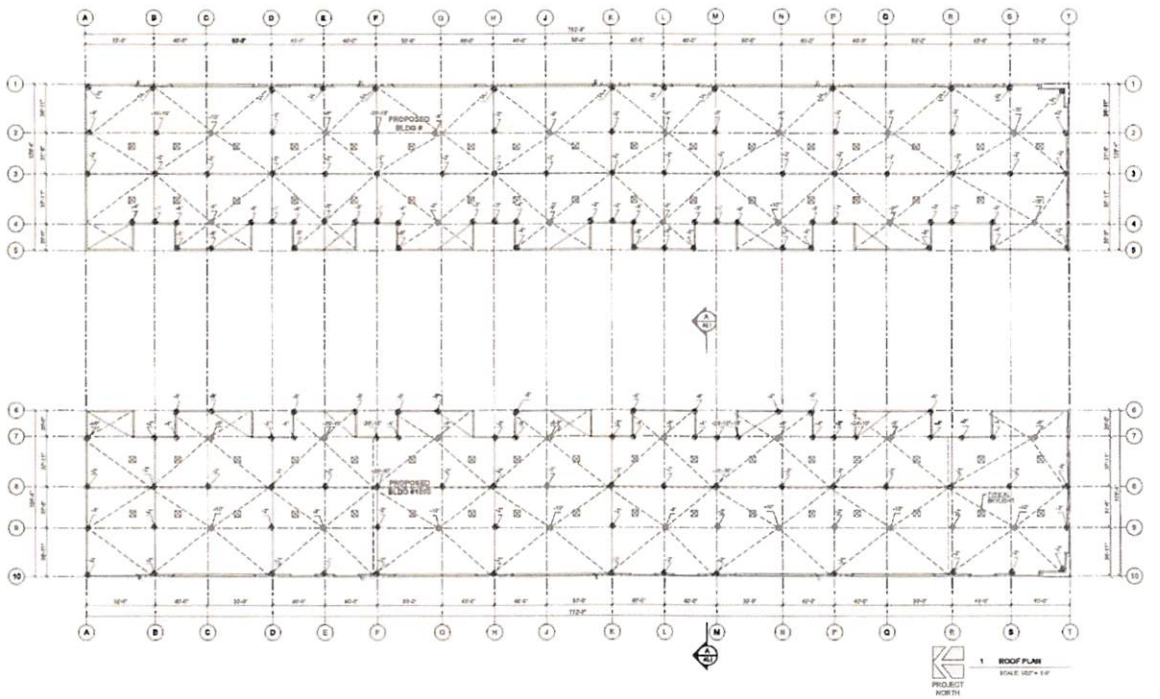
CONWEST KINGSWAY AVENUE

1245 & 1271 KINGSWAY AVENUE, PORT COQUITLAM

SECOND FLOOR PLAN

A3.2

DP000331 (S)



1 ROOF PLAN

DP000331 (6)

Krahn GROUP OF COMPANIES

CONWEST Group of Companies

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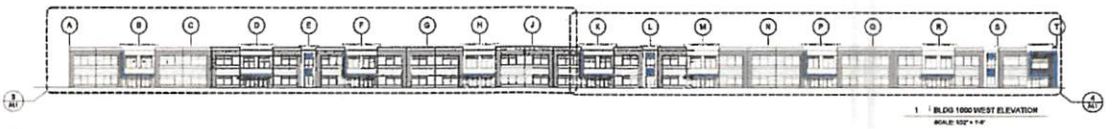
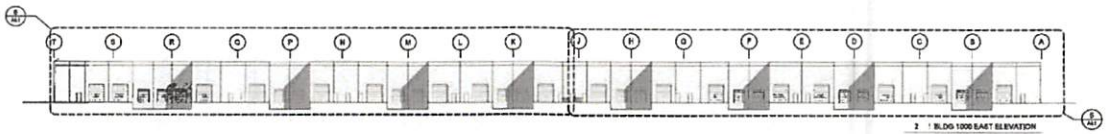
CONWEST KINGSWAY AVENUE

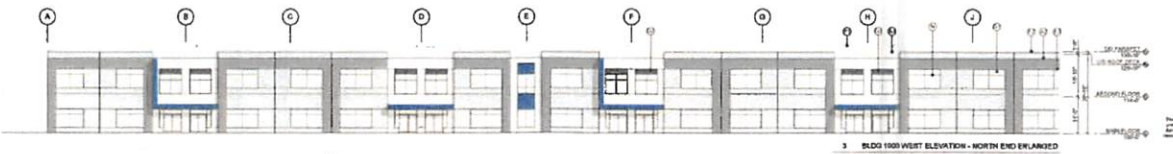
1545 & 1575 KINGSWAY AVENUE, PORT COQUITLAM

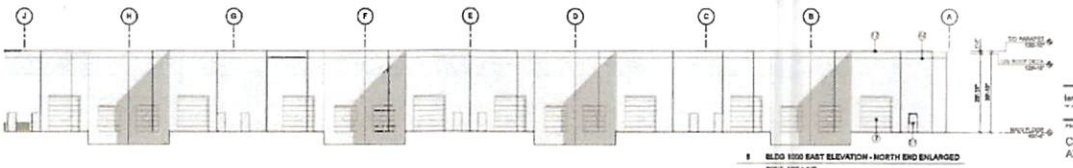
ROOF PLAN

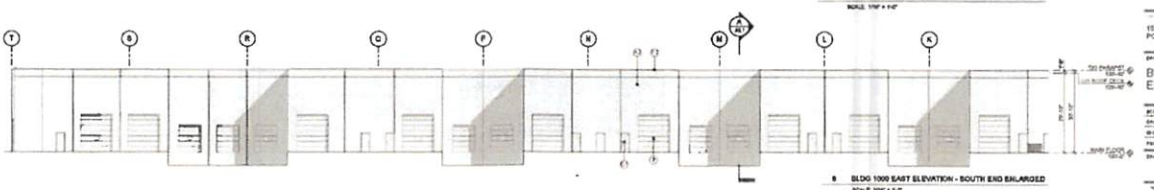
A3.6











PROJECT COLOURS

C1	BM	WEDDING VEIL	2125-70
C2	BM	MEN'S LIVING	2116-60
C3	BM	SILVER STREAK	2116-40
C4	BENJAMIN MOORE	ROMAN BLUE	

NOTE: THE ABOVE LEGEND ITEMS ARE SHOWN ONLY ON A SMALL AREA OF THE ELEVATIONS. HOWEVER, THEY APPLY TO ALL SIMILARLY MARKED AREAS THROUGHOUT THE BUILDING.

EXTERIOR FINISH LEGEND

A1	CONCRETE TILT-UP PANEL	PAINTED COLOUR C1
A2	CONCRETE TILT-UP PANEL	PAINTED COLOUR C2
A3	CONCRETE TILT-UP PANEL	PAINTED COLOUR C3
A4	RETROBOND ALUMINUM COMPOSITE PANEL	PRE-FINISHED COLOUR C4
B	SERVICE DOOR	COLOR TBC
D1	STEEL MAN DOOR	PAINTED COLOUR D2
D2	OVERHEAD DOOR	PAINTED COLOUR D2
F1	METAL FLASHING	PRE-FINISHED, COLOUR TO MATCH C1
F2	METAL FLASHING	PRE-FINISHED, COLOUR TO MATCH C2
F3	METAL FLASHING	PRE-FINISHED, COLOUR TO MATCH C3
G1	VISION GLASS	CLEAR GLASS
G2	SPANDREL GLAZING	GREY TINT
W	ALUMINUM MULLION	CLEAR ANODIZED
R	CONCRETE PANEL REVEAL	PAINTED, COLOUR TO MATCH THE PANELS
X	SUN SHADE	CLEAR ANODIZED ALUMINUM

DP000331 (1)

Krahn GROUP OF COMPANIES

CONWEST Group of Companies

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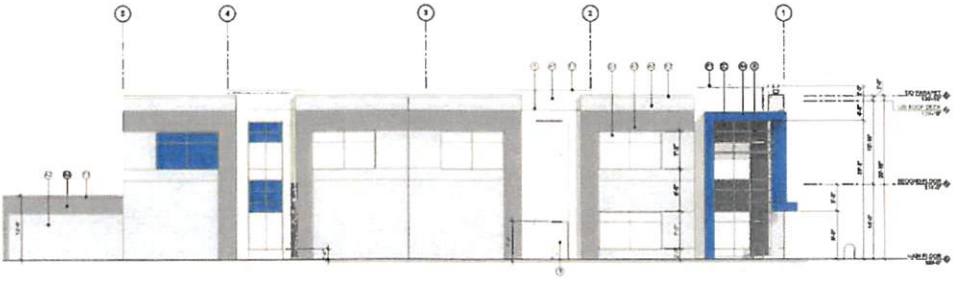
CONWEST KINGSWAY AVENUE

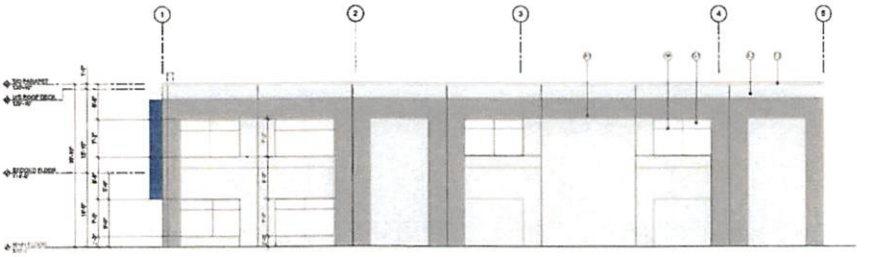
1545 & 1575 KINGSWAY AVENUE, PORT COQUITLAM

BUILDING 1000 ELEVATIONS

A4.1



1 BLDG 1000 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



2 BLDG 1000 NORTH ELEVATION
SCALE: 1/8" = 1'-0"

EXTERIOR FINISH LEGEND		
A1	CONCRETE TILT-UP PANEL	PAINTED COLOUR C1
A2	CONCRETE TILT-UP PANEL	PAINTED COLOUR C2
A3	CONCRETE TILT-UP PANEL	PAINTED COLOUR C3
A4	REYNOBOND ALUMINUM COMPOSITE PANEL	PRE-FINISHED COLOUR C4
B	BEVELS BACK	COLOR TBC
D1	STEEL MAN DOOR	PAINTED COLOUR C2
D2	OVERHEAD DOOR	PAINTED COLOUR C3
F1	METAL FLASHING	PRE-FINISHED, COLOUR TO MATCH C1
F2	METAL FLASHING	PRE-FINISHED, COLOUR TO MATCH C2
F3	METAL FLASHING	PRE-FINISHED, COLOUR TO MATCH C3
G1	VISION GLASS	CLEAR GLASS
G2	SPANDREL GLAZING	GRAY TINT
M	ALUMINUM MULLION	CLEAR ANNODIZED
N	CONCRETE PANEL REVEAL	PAINTED, COLOUR TO MATCH THE PANELS
S	SUN SHACK	CLEAR ANNODIZED ALUMINUM

PROJECT COLOURS			
C1	SM	WEDDING VEIL	2133-70
C2	SM	SILVER LINING	2119-60
C3	SM	SILVER STREAK	2119-50
C4	REYNOBOND	ROYAL BLUE	

NOTE: THE ABOVE LEGEND ITEMS ARE SHOWN ONLY ON A SMALL AREA OF THE ELEVATIONS.
HOWEVER, THEY APPLY TO ALL SIMILARLY MARKED AREAS THROUGHOUT THE BUILDING.

Krahn GROUP OF COMPANIES

CONWEST
Group of Companies

larry podhora | architecture inc

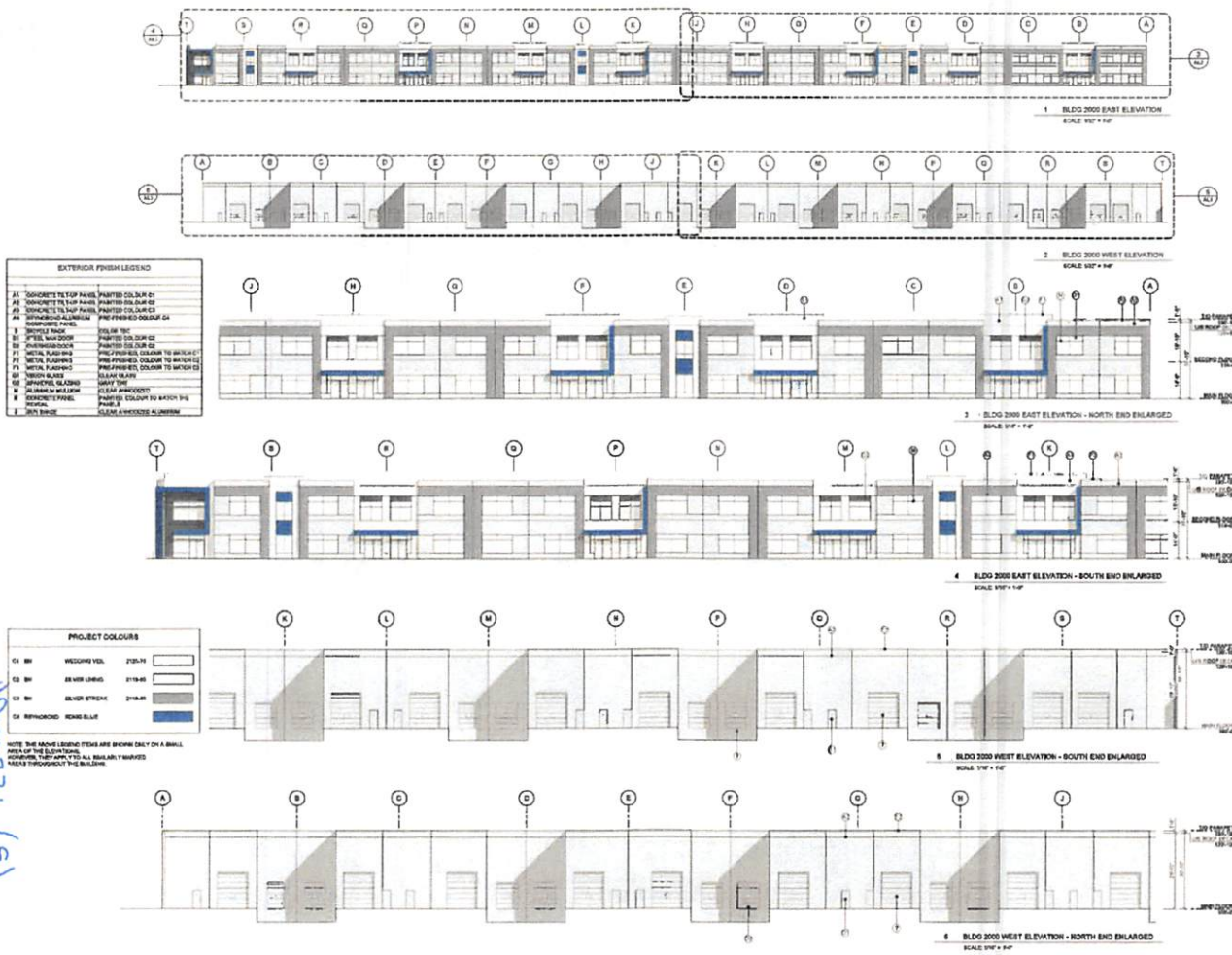
PROJECT NAME
CONWEST KINGSWAY AVENUE

1645 & 1675 KINGSWAY AVENUE, PORT COQUITLAM

DRAWING TITLE
BUILDING 1000 ELEVATIONS

SCALE 1/8" = 1'-0"
DRAWN
CHECKED
PROJECT NO. 17040
DRAWING NO.
A4.2

DP000331 (8)



Krahn GROUP OF COMPANIES

CONWEST Group of Companies

larry podhora | architecture inc

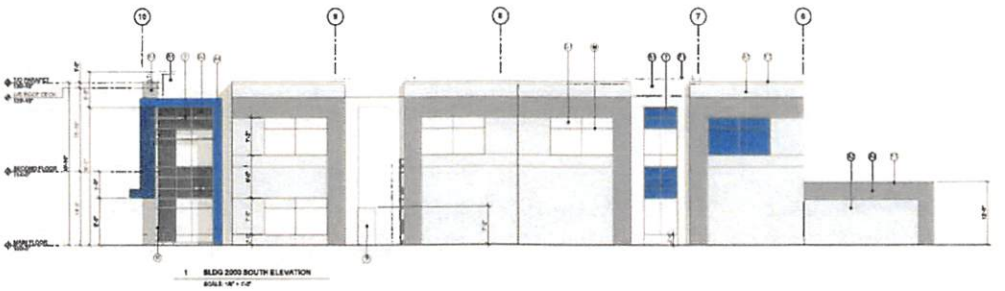
CONWEST KINGSWAY AVENUE

1545 & 1575 KINGSWAY AVENUE, PORT COQUITLAM

BUILDING 2000 ELEVATIONS

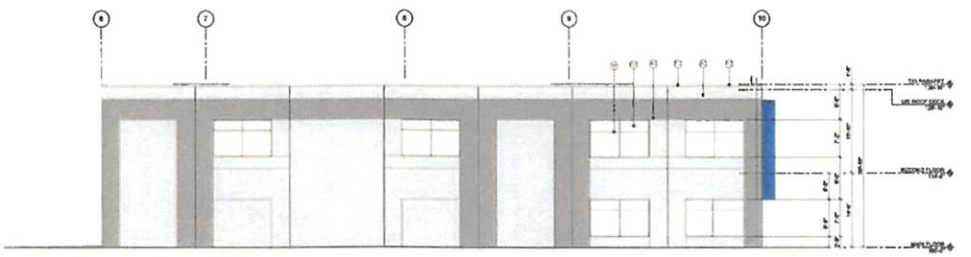
A4.3

DP000331 (9)



1 BLDG 2000 SOUTH ELEVATION

SCALE 1/8" = 1'-0"



2 BLDG 2000 NORTH ELEVATION

SCALE 1/8" = 1'-0"

EXTERIOR FINISH LEGEND		
A1	CONCRETE TILT-UP PANEL	PAINTED COLOUR C1
A2	CONCRETE TILT-UP PANEL	PAINTED COLOUR C2
A3	CONCRETE TILT-UP PANEL	PAINTED COLOUR C3
A4	REFINISHED ALUMINUM COMPOSITE PANEL	PRE-FINISHED COLOUR C4
B	BICYCLE RACK	COLOR TBC
D1	STEEL MAN DOOR	PAINTED COLOUR C2
D2	OVER-HEAD DOOR	PAINTED COLOUR C3
F1	METAL FLASHING	PRE-FINISHED, COLOUR TO MATCH C1
F2	METAL FLASHING	PRE-FINISHED, COLOUR TO MATCH C2
F3	METAL FLASHING	PRE-FINISHED, COLOUR TO MATCH C3
G1	VISION GLASS	CLEAR GLASS
G2	SPANDREL GLASS	GRAY TINT
H	ALUMINUM RAILING	CLEAR ANNODIZED
I	CONCRETE PANEL REVEAL	PAINTED, COLOUR TO MATCH THE PANELS
S	SUN SHADE	CLEAR ANNODIZED ALUMINUM

PROJECT COLOURS			
C1	BM	WEDGWOOD WEB	2105-70
C2	BM	SILVER LINING	2119-60
C3	BM	SILVER SYREN	2118-60
C4	REFINISHED	POINTE BLUE	

NOTE: THE ABOVE LEGEND SHOWS ONLY A SMALL AREA OF THE ELEVATIONS. HOWEVER, THEY APPLY TO ALL SIMILARLY MARKED AREAS THROUGHOUT THE BUILDING.

Krahn GROUP OF COMPANIES

CONWEST

larry podhora | architecture inc

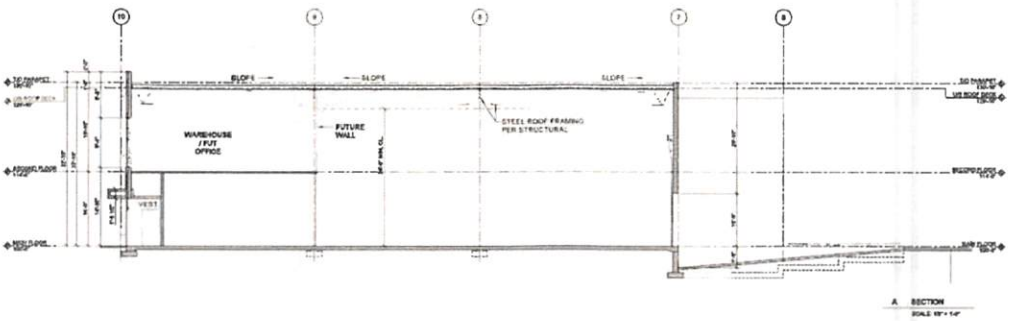
CONWEST KINGSWAY AVENUE

1545 & 1575 KINGSWAY AVENUE, PORT COQUITLAM

BUILDING 2000 ELEVATIONS

A4.4

DP000331 (10)



Krahn GROUP OF COMPANIES

CONWEST Group of Companies

larry podhora | architecture inc

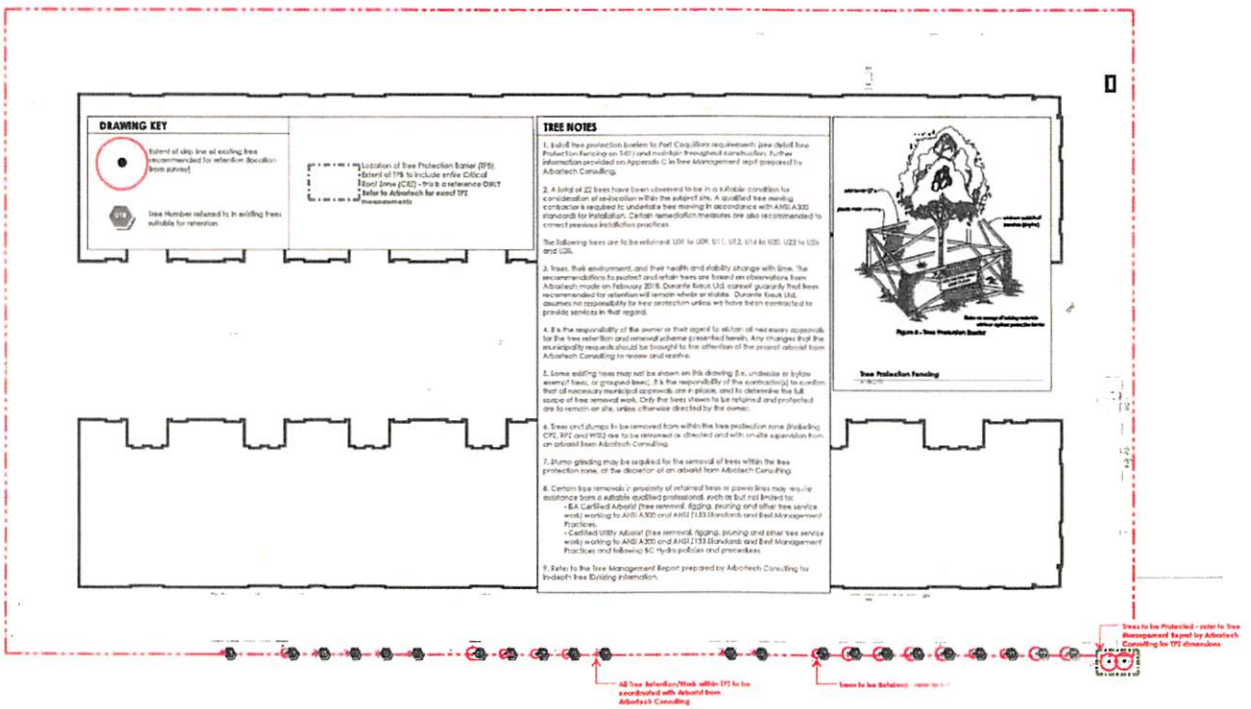
CONWEST KINGSWAY AVENUE

1645 & 1675 KINGSWAY AVENUE, PORT COQUITLAM

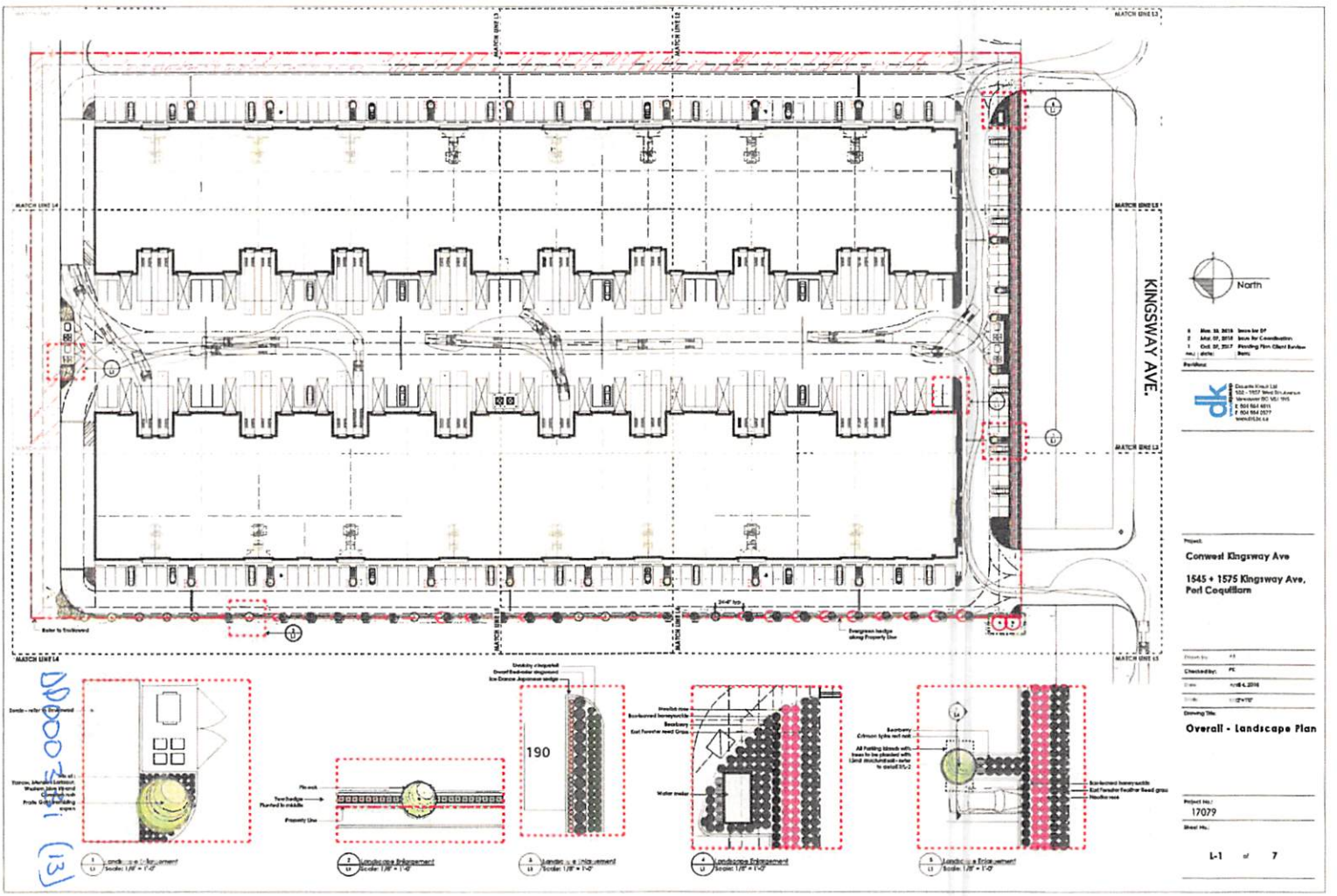
BUILDING SECTIONS

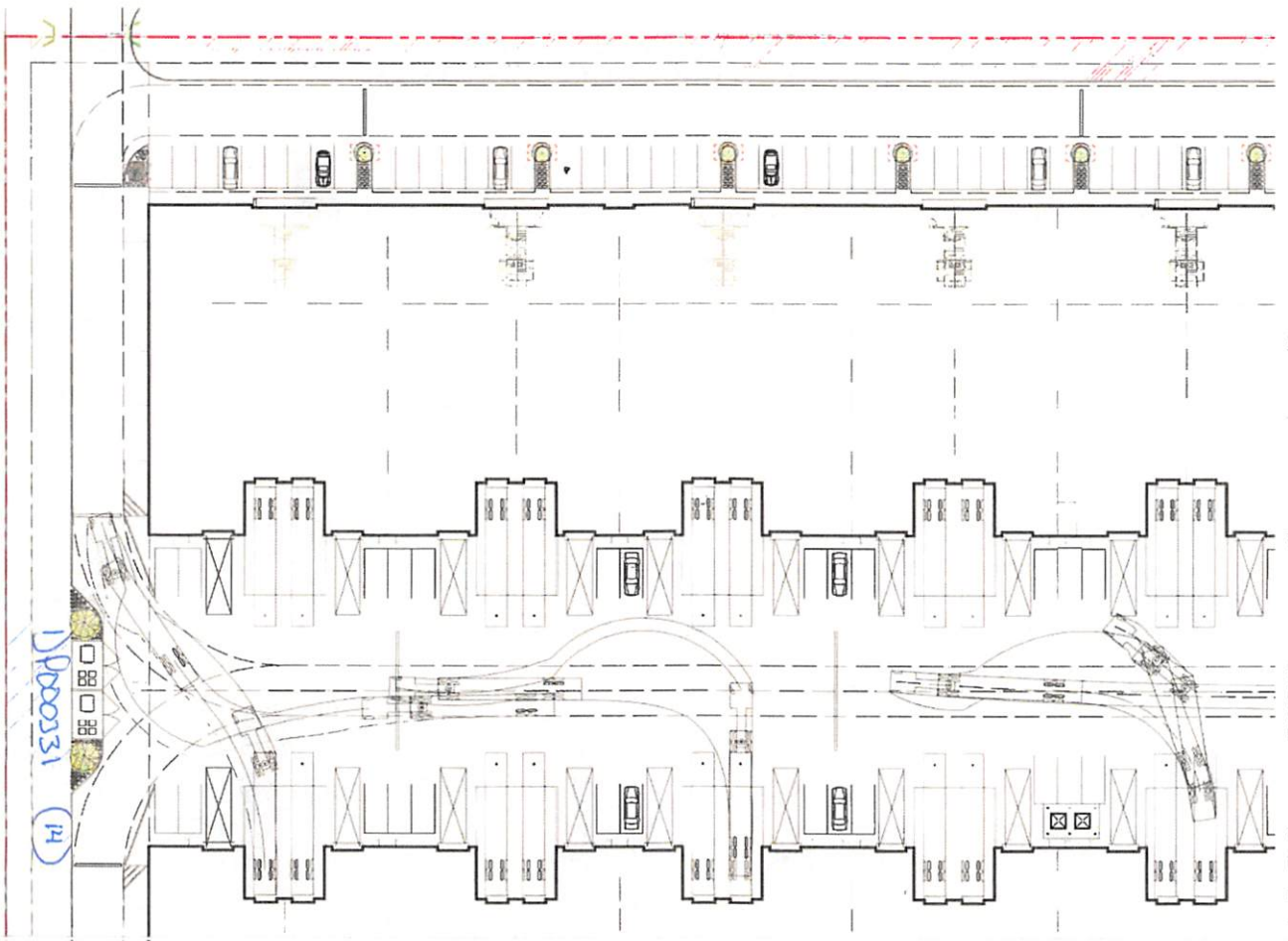
A5.1

DP000331 (1)


DRAWING KEY
Extent of drip line at existing tree recommended for retention (location from survey)
Tree Number referred to in existing trees suitable for retention
Location of Tree Protection Barrier (TPB)
- Extent of TPA to include entire Critical Root Zone (CRZ) - this is a reference ONLY. Refer to Arbortech for exact TPZ measurements
TREE NOTES
1. Install tree protection barriers to Port Coquitlam requirements (see detail Tree Protection Fencing on T-01) and maintain throughout construction. Further information provided on Appendix C in Tree Management report prepared by Arbortech Consulting.
2. A total of 22 trees have been observed to be in a suitable condition for consideration of retention within the subject site. A qualified tree moving contractor is required to undertake tree moving in accordance with ANSI A300 standards for installation. Certain remediation measures are also recommended to correct previous installation practices.
The following trees are to be retained: U09 to U09, U11, U12, U14 to U20, U22 to U26 and U28.
3. Trees, their environment, and their health and stability change with time. The recommendations to protect and retain trees are based on observations from Arbortech made on February 2018. Durante Kreuk Ltd. cannot guaranty that trees recommended for retention will remain viable or stable. Durante Kreuk Ltd. assumes no responsibility for tree protection unless we have been contracted to provide services in that regard.
4. It is the responsibility of the owner or their agent to obtain all necessary approvals for the tree retention and removal scheme presented herein. Any changes that the municipality requests should be brought to the attention of the project arborist from Arbortech Consulting to review and resolve.
5. Some existing trees may not be shown on this drawing (i.e. undersize or bylaw exempt trees, or grouped trees). It is the responsibility of the contractor(s) to confirm that all necessary municipal approvals are in place, and to determine the full scope of tree removal work. Only the trees shown to be retained and protected are to remain on site, unless otherwise directed by the owner.
6. Trees and stumps to be removed from within the tree protection zone (including CP2, RP2 and WS2) are to be removed as directed and with on-site supervision from an arborist from Arbortech Consulting.
7. Stump grinding may be required for the removal of trees within the tree protection zone, at the discretion of an arborist from Arbortech Consulting.
8. Certain tree removals in proximity of retained trees in power lines may require assistance from a suitable qualified professional, such as but not limited to:
- BA Certified Arborist (tree removal, rigging, pruning and other tree service work) working to ANSI A300 and ANSI Z133 Standards and Best Management Practices.
- Certified Utility Arborist (tree removal, rigging, pruning and other tree service work) working to ANSI A300 and ANSI Z133 Standards and Best Management Practices and following BC Hydro policies and procedures.
9. Refer to the Tree Management Report prepared by Arbortech Consulting for in-depth tree (Existing) information.
Tree Protection Fencing
Trees to be Protected - refer to Tree Management Report by Arbortech Consulting for TPZ dimensions
All Tree Retention/Work within TPZ to be coordinated with Arborist from Arbortech Consulting
KINGSWAY AVE.
This drawing shall be read in conjunction with TREE MANAGEMENT REPORT by ARBORTECH Consulting, dated February 26, 2018.
North
Project:
Conwest Kingsway Ave
1545 + 1575 Kingsway Ave, Port Coquitlam
Drawn by: AS
Checked by: PT
Date: April 4, 2019
Scale: 1/32"=1'-0"
Drawing Title:
Tree Management Plan
Project No.: 17079
Sheet No.: T-01 of 7

DP000321 (12)


KINGSWAY AVE.
North
Project
Conwest Kingsway Ave
1545 + 1575 Kingsway Ave,
Port Coquitlam
Drawing Title
Overall - Landscape Plan
Project No.
17079
Sheet No.
L-1 of 7



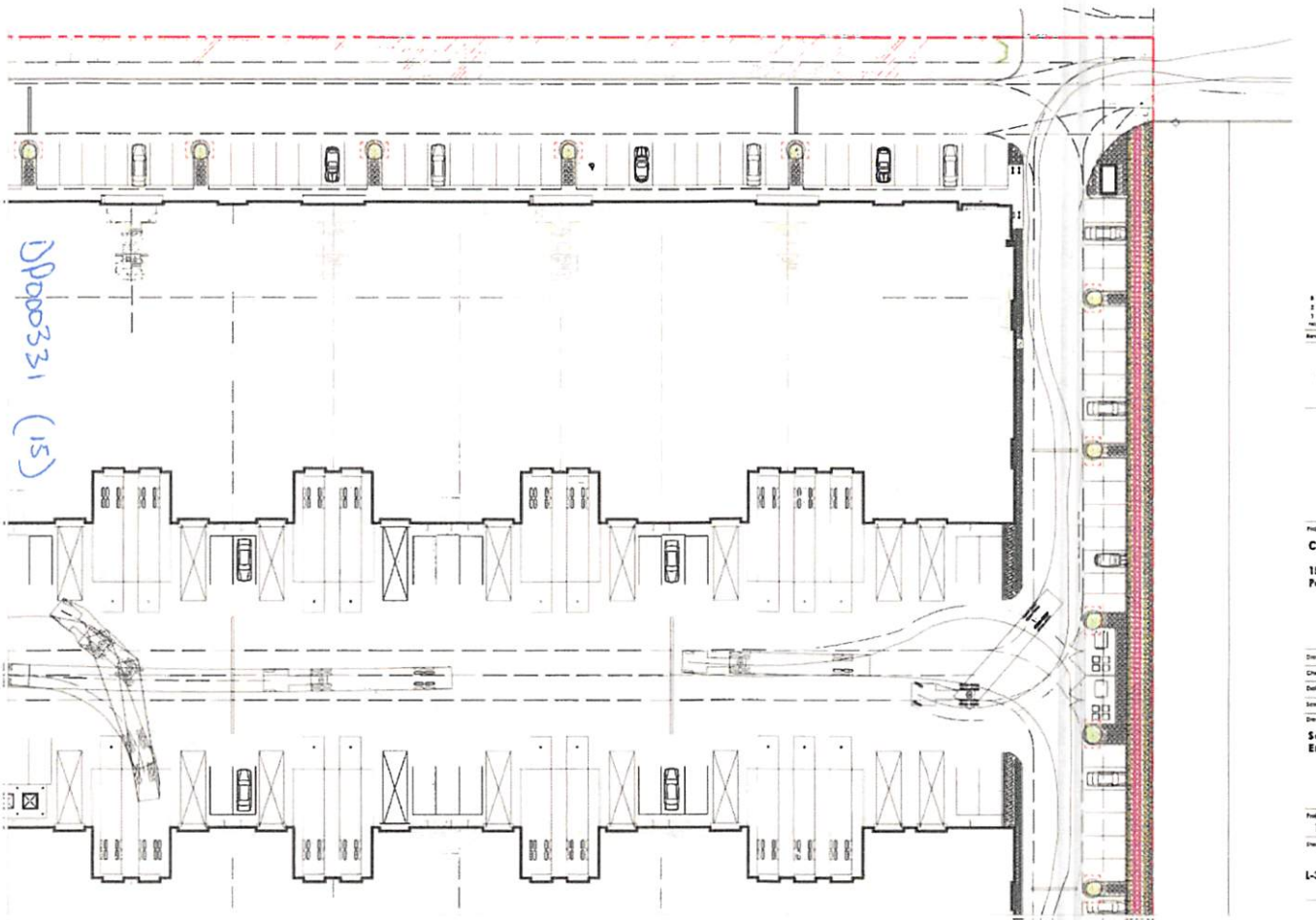
Conwest Kingsway Ave

1545 + 1575 Kingsway Ave, Port Coquitlam

Northeast - Planting Plan Enlargement

17079

L-2



North

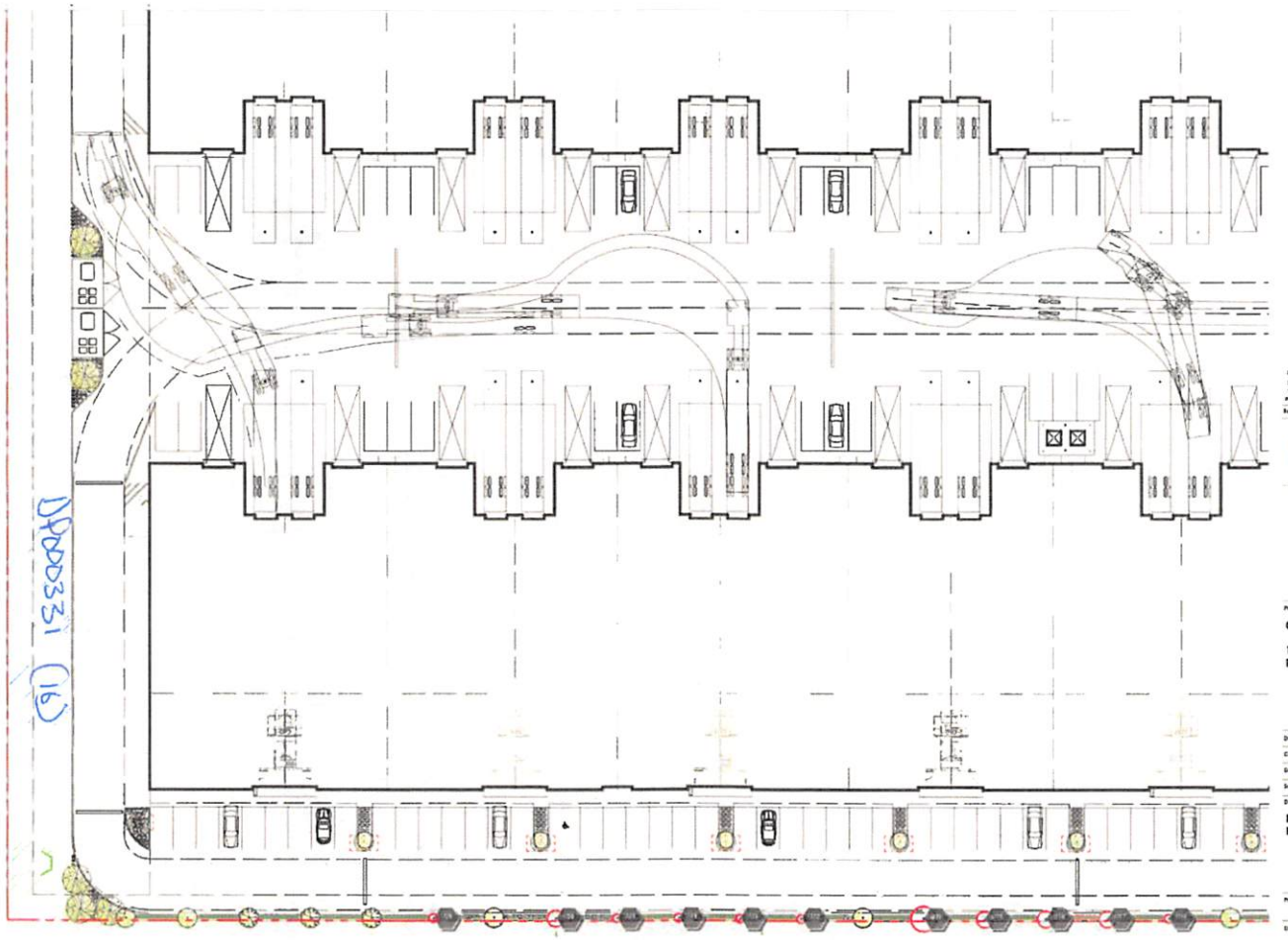
Conwest Kingsway Ave

1545 + 1575 Kingsway Ave, Port Coquitlam

Southeast - Planting Plan Enlargement

17079

L-3 of 7



DP000331 (16)

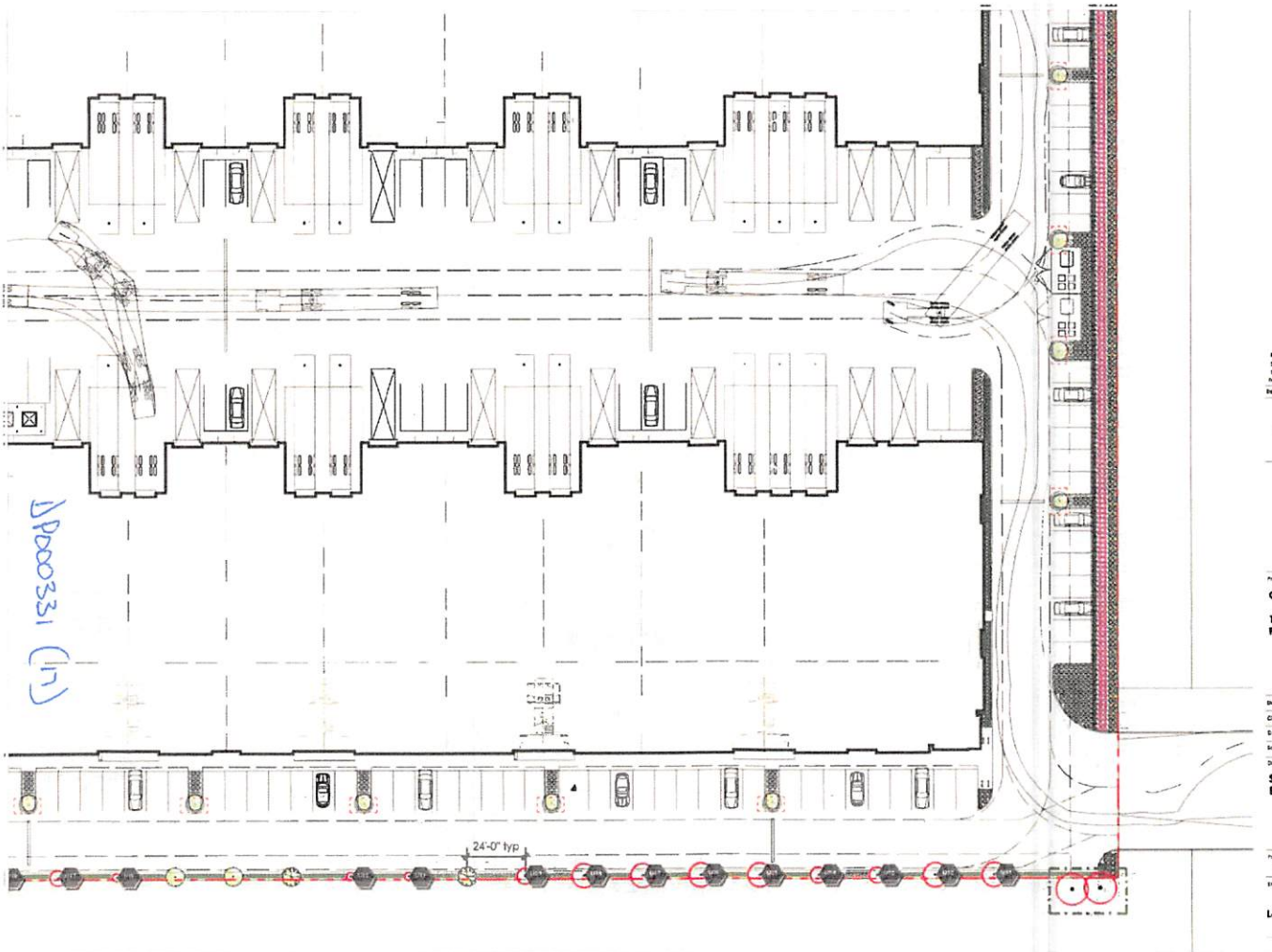
Project:
Conwest Kingsway Ave

1545 + 1575 Kingsway Ave, Port Coquitlam

Drawing Title:
North - Planting Plan Enlargement

Project No.: 17079

L-4 of 7



DP000331 (IN)

North

Conwest Kingsway Ave

1545 + 1575 Kingsway Ave, Port Coquitlam

South - Planting Plan Enlargement

17079

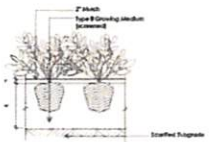
L-5

PLANT LIST

Sym	Qty	Botanical Name	Common Name	Size /Spacing / Comments
		Trees		
	72	Trees to be Retained	Retained	Refer to T-01/L-1
	2	Pinus contorta	Shore pine	2.5m ht/WB
	5	Populus tremuloides 'Prairie Gold'	Prairie Gold trembling aspen	3cm cal/WB
	23	Quercus rubra 'Colmson Spire'	Colmson Spire red oak	5cm cal/B+B/Columnar
	5	Acer rubrum	Red maple	6cm cal./B+B
	6	Quercus palustris	Pin oak	6cm cal./B+B
		Shrubs		
	74	Cornus sericea 'Kelseyi'	Dwarf Red-osier dogwood	#2 pot / 30" o.c.
	252	Lonicera pileata	Box-leafwood honeysuckle	#2 pot / 24" o.c.
	286	Taxus x media 'Hicksii'	Yew hedge	1.2m ht / B+B, #8 to #8
	394	Rosa nutkana	Nootka rose	#2 pot / 24" o.c.
		Perennials, Grasses, Groundcovers and Bio-swale		
	610	Calamagrostis acutiflora 'Karl Foerster'	Feather Reed Grass	#1 pot / 24" o.c.
	396	Calamagrostis x acutiflora 'Karl Foerster'	Karl F. Feather Reed Grass	#2 pot / 24" o.c.
	406	Potentilla fruticosa	Shrubby cinquefoil	#2 pot / 18" o.c.
	88	Carex morrowii 'Ice Dance'	Ice Dance Japanese sedge	#1 pot / 12" o.c.
	70	Achillea millefolium*	Yarrow	4" pot / 18" o.c. *
	61	Delphinium menziesii*	Menzie's Larkspur	4" pot / 18" o.c. *
	51	Iris missouriensis*	Western blue iris	4" pot / 18" o.c. *
	78	Juncus effusus*	Common rush	4" pot / 18" o.c. *
		Wetland - refer to Enviroweal drawings		

LANDSCAPE NOTES

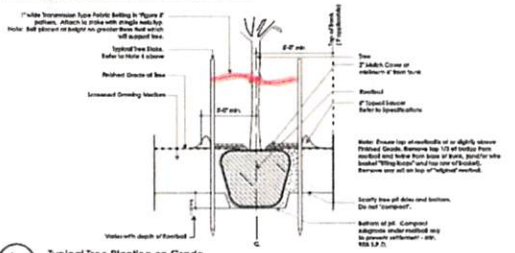
1. All work shall meet or exceed the requirements as outlined in the Current Edition of the B.C. Landscape Standard.
2. Plant sizes and related container classes are specified according to the current edition of the B.C. Landscape Standard. For container classes #3 and smaller, plant sizes shall be as 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.
3. All 'Soft Landscape Areas' are to be irrigated with a high efficiency design build irrigation system to BABC Standards, c/w rain sensor.
4. All irrigation valve boxes equipped with quick-couplers.
5. Provide at least 48 hrs notice for all plants and trees to be reviewed by landscape consultant at nursery prior to delivery to site, as per landscape specification.
6. Obtain Consultant review and acceptance of growing medium samples and test results prior to delivery to site as per landscape specifications.
7. All trees to be staked in accordance with BCNTA Standards.
8. Soil depths to meet or exceed the BCLNA Landscape Standard.
9. Hose bibs and locations, to be provided by others.
10. Plants with an asterik (*) require confirmation from Enviroweal prior to purchase.



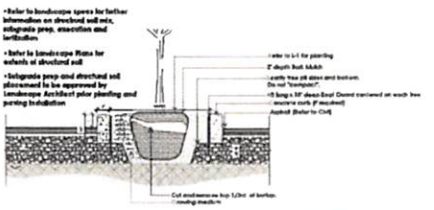
1 / L-1 Typical Shrub Planting on Grade
Scale: 1" = 1'-0"

Depth of Growing Medium Total (mm)	Area (m2)	Variation 1 Size of Surface Square	Variation 2 Size of Surface Circle
460	11.11	3.3 M x 3.3 M	3.80 M Ø
490	8.61	2.9 M x 2.9 M	3.25 M Ø
730	6.47	2.6 M x 2.6 M	2.90 M Ø

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



1 / L-1 Typical Tree Planting on Grade
Scale: NTS



SUBGRADE PREPARATION FOR STRUCTURAL SOIL PITS

1. BEFORE INSTALLING STRUCTURAL SOIL, VERIFY THAT THE SUB BASE IS COMPACTED AS REQUIRED AND AT THE CORRECT ELEVATIONS, VERIFY THAT DRAINS ARE INSTALLED AS DETAILED AND SPECIFIED. DO NOT PLACE GROWING MEDIUM UNTIL CONSULTANT HAS REVIEWED AND APPROVED SUBGRADE.
2. Recompact subgrade as necessary to areas to support load conditions and features, such as concrete, asphalt, or soil pavers.

PLACING STRUCTURAL SOIL (TYPE 'P')

1. BEFORE INSTALLING STRUCTURAL SOIL, VERIFY THAT THE SUB BASE IS COMPACTED AS REQUIRED AND AT THE CORRECT ELEVATIONS, VERIFY THAT DRAINS ARE INSTALLED AS DETAILED AND SPECIFIED. DO NOT PLACE GROWING MEDIUM UNTIL CONSULTANT HAS REVIEWED AND APPROVED SUBGRADE.
2. PLACE STRUCTURAL SOIL OVER SUB BASE TO MINIMUM DEPTHS AS OTHERWISE DETAILED, COMPACTED TWICE IN TWO EQUAL LIFTS, DO NOT OVERWORK THE MATERIAL, TYE WORK IT IS MIXED AND MINIMIZE THE LOAD STRUCTURAL IT BECOMES. COMPACT AS REQUIRED TO MEET ENGINEERING REQUIREMENTS FOR SUBSEQUENT PAVING AND HARD LANDSCAPE ITEMS AS DETAILED. GRADE AS REQUIRED TO PROVIDE PROPER SUBGRADE FOR SUBSEQUENT PAVING, ETC.
3. PLANT TREE AS DETAILED AND ADD GROWING MEDIUM IF REQUIRED.

3 / L-1 Parking Island: Tree Planting with Structural Soil
Scale: 1" = 1'-0"

3	Mar. 23, 2018	Issue for DP
2	Mar. 07, 2018	Issue for Coordination
1	Oct. 07, 2017	Planting Plan Client Review
no.	date	item

Revisions

Dicanio Yoest Ltd.
502 - 1937 West 5th Avenue
Vancouver BC V6J 1N5
T 604 984 4631
F 604 684 0827
www.dyla.ca

Project:
Conwest Kingsway Ave

1545 + 1575 Kingsway Ave, Port Coquitlam

Drawn by:	AS
Checked by:	PL
Date:	April 6, 2018
Scale:	As shown

Drawing Title:
Landscape Planting Plan + Details

Project No.:
17079

Sheet No.:
L-6 of 7

DP000331 (18)

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 adjacent to 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	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
LED lighting will be used to reduce energy consumption	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, 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 Arbourist
Minimum depth of soil for planting areas will be 45cm	DP and BP stage; staff review of landscape drawing, site inspection by Landscape Architect and City Arbourist
High efficiency automated 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
Watercourses along the north and east boundary of the site will be enlarged and enhanced. A portion of the roof and surface drainage will be directed to the watercourse to improve water volume and quality	DP and BP stage; staff review of drawings

GHG Reduction:

Conservation Measure	Verification Method
Building will use low volatile organic compound (VOC) paints	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
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

Gates Park Softball Field Fencing

RECOMMENDATION:

That Committee of Council direct staff to proceed with the addition of new fencing, safety netting, landscaping and pathway decommissioning at Gates Park as outlined in Option 2 of this report; and

That Committee of Council approve the funding request of $200,000, as outlined in Option 2 of this Report, and that the cost be included in the 2019 financial plan.

PREVIOUS COUNCIL/COMMITTEE ACTION

None.

REPORT SUMMARY

In 2017 the City requested the Municipal Insurance Association of British Columbia (MIABC) conduct a risk control survey of Gates Park regarding on-going concerns of balls leaving fields # 1 and #2 during games and practices potentially impacting park walkway users or vehicles in the adjacent parking lot. The subsequent report made several recommendations for mitigating that risk.

In 2018 Staff implemented the recommendations from the MIABC report including the addition of warning signage for park users, as well as informing user groups of the risk of balls leaving the field and instructing them to not hold batting practice in the direction of the outfield fencing.

Subsequent to implementing the recommendations of the risk survey, safety concerns related to balls leaving the field of play continue to be communicated by park users; this report provides additional options for consideration that would further mitigate public safety concerns related to balls leaving the field of play at the two fields.

BACKGROUND

In 2017 the City requested the Municipal Insurance Association of British Columbia (MIABC) conduct a risk control survey of Gates Park regarding on-going concerns of balls leaving fields # 1 and #2 during games and practices potentially impacting park walkway users or vehicles in the adjacent parking lot. The MIABC risk control survey for Gates Park dated October 2017 made two recommendations related to the safety of park users from balls leaving the field of play including;

1. *(2017-01) It is recommended that all baseball User Groups be informed or sign a waiver that instructs teams to not move up in the field area (closer to the fence) for batting practice.*

This will help reduce the number of balls leaving the field. In addition, all User Groups doing pop fly practice should move this practice to across the field (From LF to CF or RF to CF) in order to reduce balls from leaving the field.

2. *(2017-02) It is recommended that additional signage be placed around the field warning the public that "Baseballs may leave the field of play. Please be alert at all times."*

Subsequent to Staff implementing the recommendations of the MIABC risk control survey, Public Works retained R.F. Binnie Sports & Recreation Group (Binnie) to provide additional options for consideration to mitigate safety concerns identified at Fields #1 & #2.

DISCUSSION

Binnie modelled typical flightpaths of hardballs and softballs hit by adult males and youth hitting from a pitching machine, to develop batted flight path graphs (trajectories) for adult and youth. The trajectory graphs were overlaid with the outfield fence locations as well as the parking lot location to illustrate the potential of ball impacts outside of the field of play (refer to Attachment #1- Gates Park Schematic Design). The graphs also illustrate potential heights of fencing and or netting required to limit balls from leaving the fields. The modelling illustrates that for both adult softball and hardball play, balls have a high potential to leave the field of play beyond the existing fencing. In addition, the modelling illustrates that youth softball play can be accommodated on the fields without the same potential for balls leaving the play of field beyond the existing fencing.

Based on the ball trajectory modelling, Binnie considered multiple options to mitigate risk, however given costs and spatial limitations, the following two options are provided for consideration. A third option of deferring improvements to a future year would also be a consideration. Costs are preliminary Class D estimates (potential cost estimate variance of up to 40%).

Option 1 is the addition of safety netting on poles at the outfield fence line (refer to Attachment #2). Based on the trajectory modelling, and distances to the parking lot and practice field, approximately 250 lineal meters safety netting mounted on 55' high engineered poles would be required. The poles would have engineered footings to accommodate wind and weight loads. Preliminary costs for this approach are estimated at $625,000 based on 2018 costs of a similar installation at Newton Athletic Park in Surrey.

Option 2 (recommended) is to decommission the existing pathway between the fields, adding fencing and landscaping (refer to Attachment #2), in addition, adding 85 lineal meters of safety netting on 40' high engineered poles along the edge of the parking lot to protect vehicles as well as along the edge of the practise field to protect field users. The cost for this option is estimated at $200,000.

Options that were explored, but not recommended due to costs, impracticalities or spatial limitations included;

A. Re-allocate fields to youth only play: In 2018 there was approximately 2,000 hours allocated to adult usage at the Gates #1 and #2, March through October. There would be significant impact to adult softball, in particular the ability to schedule adult recreation slo-pitch leagues, tournaments and women's fastball. In addition, the current field inventory does not offer viable options for relocation given the following;

    - fields are too small (i.e. Terry Fox, Aggie)
    - adult allocations are later starting (no lights to support play March through June)
    - McLean Park is allocated as the home of Poco Minor Softball

B. Re-aligning the fields to increase the outfield dimensions of field #2, while reducing the outfield of field #1, to develop one adult sized field and one junior sized field (refer to ABC). The costs for this option are estimated at approximately $500,000- $600,000 given the need to remove and replace existing field lighting, fencing, drainage and irrigation. This option was ultimately eliminated as the potential extra outfield length would still not meet the required distance to accommodate adult users and safety netting would still be recommended at the parking lot and practise field.

C. Netting over the pathway with fencing/netting at the practice field and parking lot: This option was rejected as the costs would be higher than Option 2 above with similar outcomes.

D. Extending the height of the existing outfield fencing: Given the trajectory modelling, the height of the fencing would need to be more than 50' which would require new engineered poles. Option 1 above was determined to be less costly and preferred.

E. Add safety netting to the existing light poles: Given the height, age and lack of information related to the light pole footings, combined with the weight and wind load requirements to add netting, this option was rejected.

Staff is recommending that Option 2 be approved, and that the funding request of $200,000, as outlined in this report be approved.

FINANCIAL IMPLICATIONS

The cost of Option #2 is estimated at $200,000, and could be paid for from accumulated surplus.

OPTIONS

(Check = Staff Recommendation)

#	Description
1 ✓	Proceed with the addition of new fencing, safety netting, landscaping and pathway decommissioning at Gates Park as outlined in Option 2 of this Report. Approve the funding request of $200,000, as outlined in Option 2 of this Report, and that the cost be included in the 2019 financial plan.
2	Defer improvements to a future year.
3	Take no action.

ATTACHMENTS

Attachment #1: 18-1002- Gates Park Schematic Design- Binnie January 29, 2019

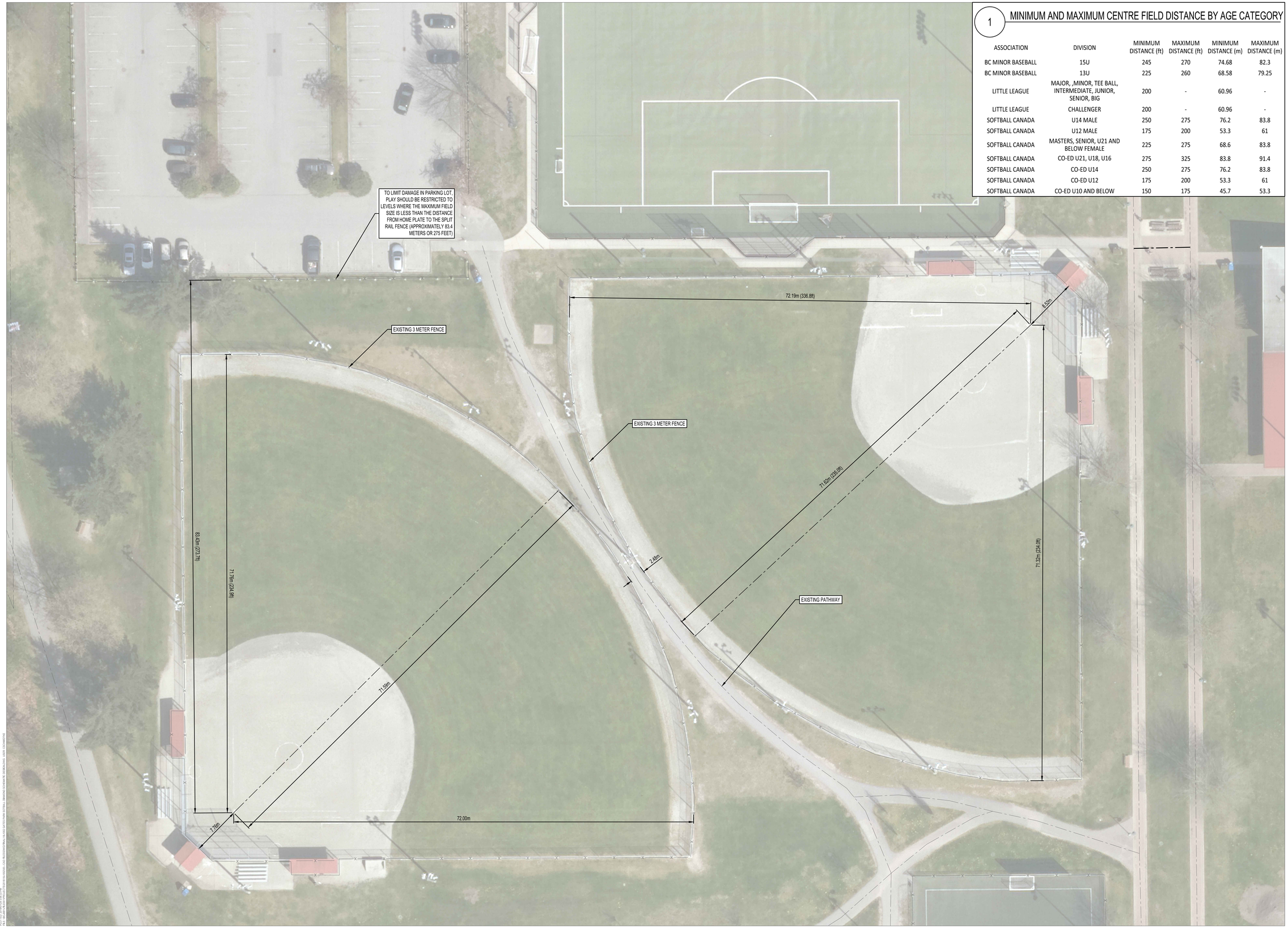
Attachment #2 18-1002- Gates Park Softball Diamond Layout Options 2&3-BA- Binnie February 14, 2019

Attachment #3: 18-1002- Gates Park Design Memo- Final, February 14, 2019

Attachment #4: MIABC Gates Park Risk Control Survey, October 2017

Lead authors: Douglas Rose, Mitchell Guest

Contributing author: Glenn Mitzel



1 MINIMUM AND MAXIMUM CENTRE FIELD DISTANCE BY AGE CATEGORY

ASSOCIATION	DIVISION	MINIMUM DISTANCE (ft)	MAXIMUM DISTANCE (ft)	MINIMUM DISTANCE (m)	MAXIMUM DISTANCE (m)
BC MINOR BASEBALL	15U	245	270	74.68	82.3
BC MINOR BASEBALL	13U	225	260	68.58	79.25
LITTLE LEAGUE	MAJOR, ,MINOR, TEE BALL, INTERMEDIATE, JUNIOR, SENIOR, BIG	200	-	60.96	-
LITTLE LEAGUE	CHALLENGER	200	-	60.96	-
SOFTBALL CANADA	U14 MALE	250	275	76.2	83.8
SOFTBALL CANADA	U12 MALE	175	200	53.3	61
SOFTBALL CANADA	MASTERS, SENIOR, U21 AND BELOW FEMALE	225	275	68.6	83.8
SOFTBALL CANADA	CO-ED U21, U18, U16	275	325	83.8	91.4
SOFTBALL CANADA	CO-ED U14	250	275	76.2	83.8
SOFTBALL CANADA	CO-ED U12	175	200	53.3	61
SOFTBALL CANADA	CO-ED U10 AND BELOW	150	175	45.7	53.3

CLIENT

CITY OF PORT COQUITLAM

2580 SHAUGHNESSY STREET,
PORT COQUITLAM, BC, V3C 2A8

PROJECT

GATES PARK SOFTBALL DIAMOND SCHEMATIC DESIGN

No.	DESCRIPTION	DATE	BY
0	ISSUED FOR DISCUSSION	2019-01-23	RB

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EXISTING CONDITIONS

0 1:250 10m

project no. 18-1002
date January 29, 2019
scale 1:250

L1/5

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CITY OF PORT COQUITLAM

2580 SHAUGHNESSY STREET,
PORT COQUITLAM, BC, V3C 2A8

PROJECT

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SOFTBALL DIAMOND LAYOUT

0 1:250 10m

project no. 18-1002
date January 29, 2019
scale 1:250

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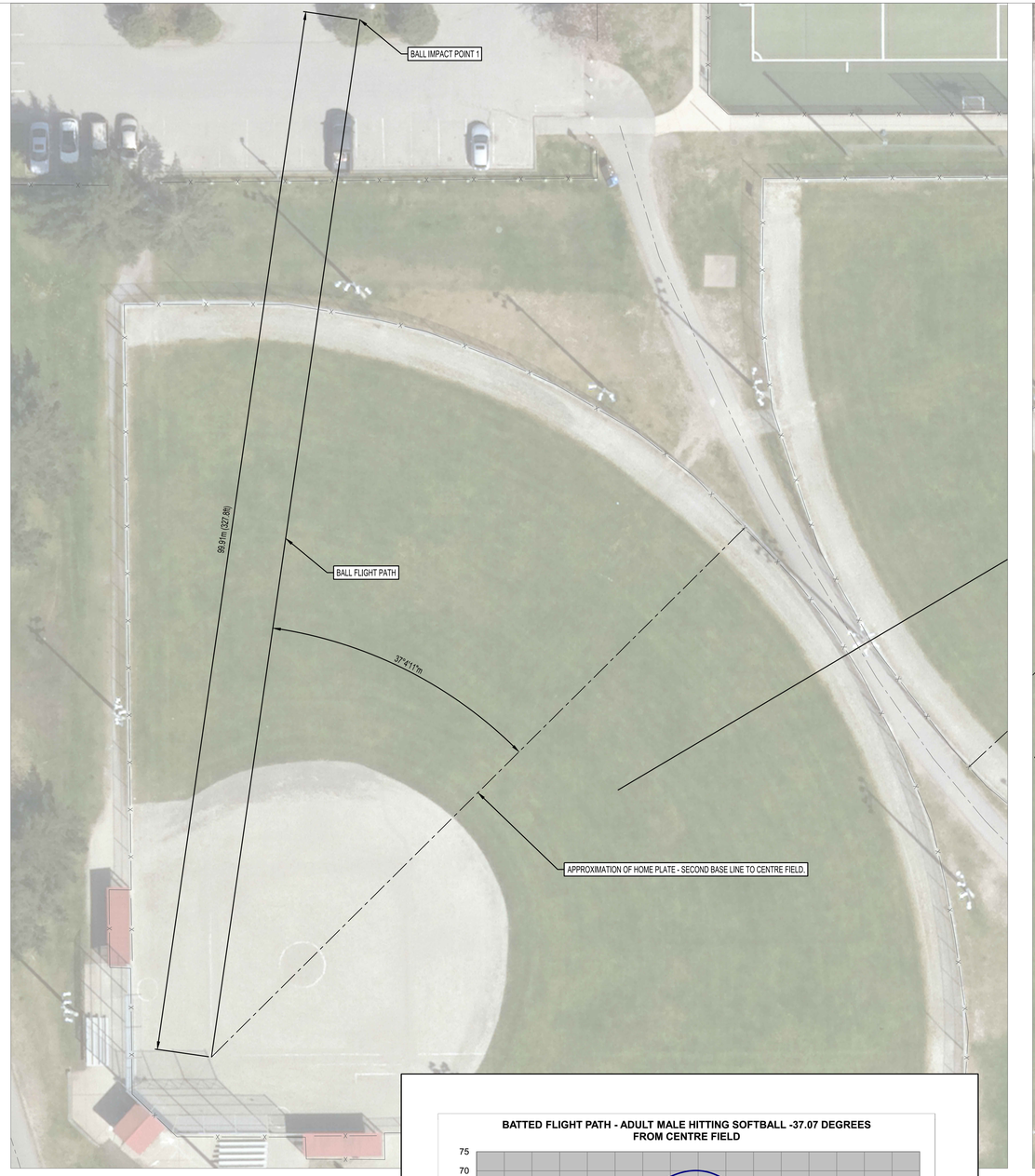
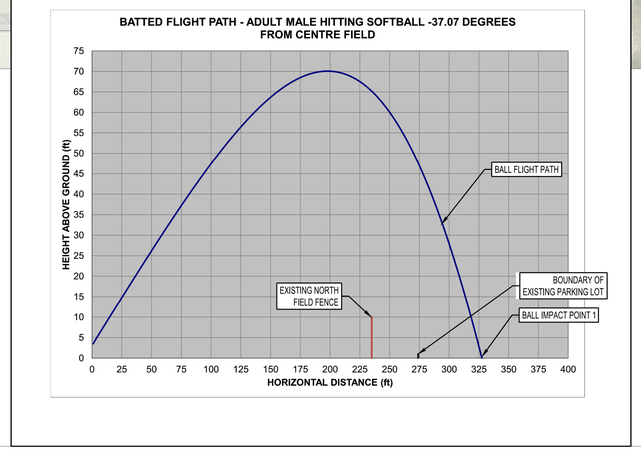


1 NORTH FIELD BALL TRAJECTORY ANALYSIS

PLAN: 1:250 SECTION: NTS



NOTES AND ASSUMPTIONS

1. BATTED BALL FLIGHT PATH ANALYSIS BASED ON BALL DEPARTURE ANGLE OF 25 DEGREES ABOVE HORIZON.
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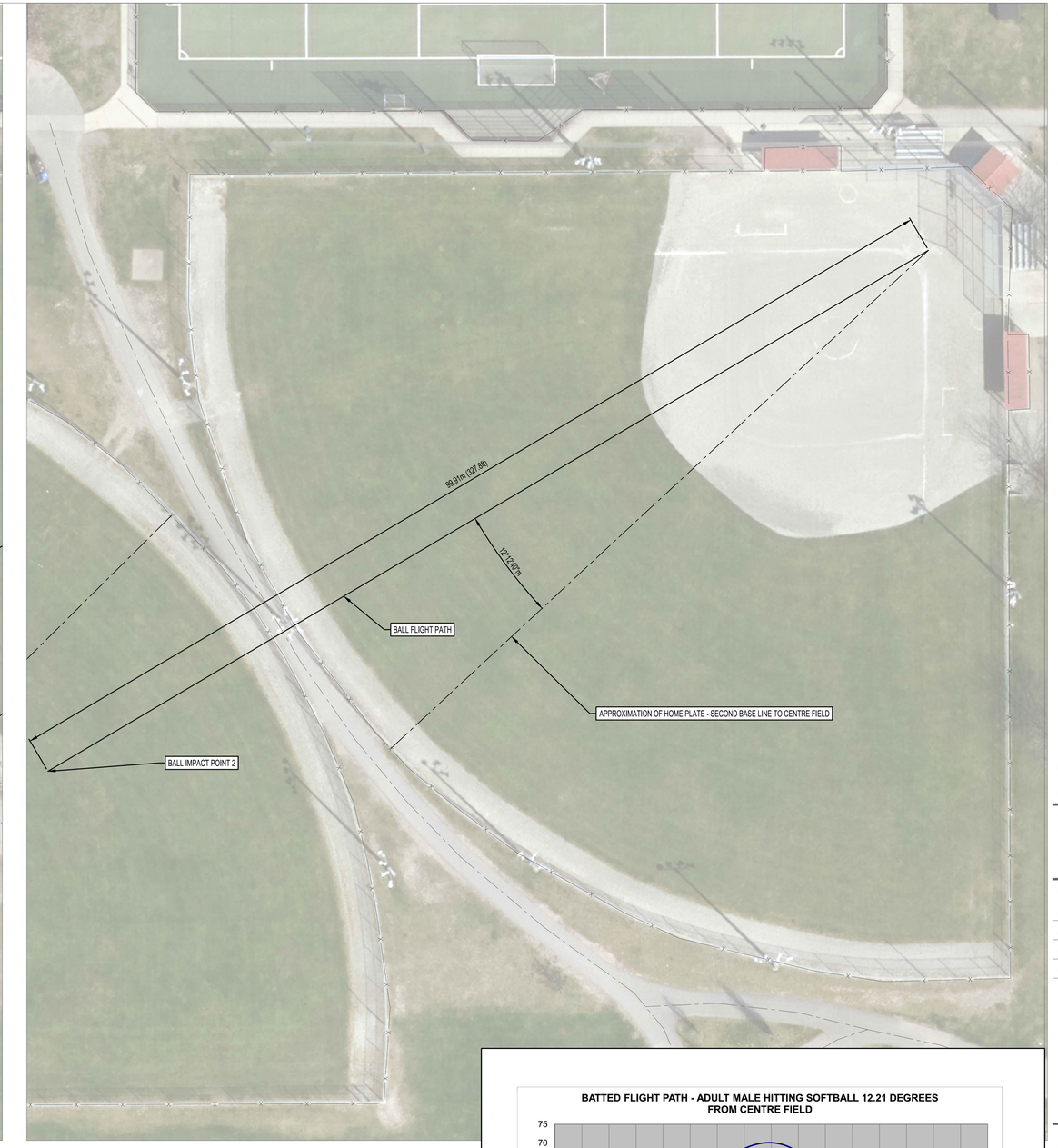
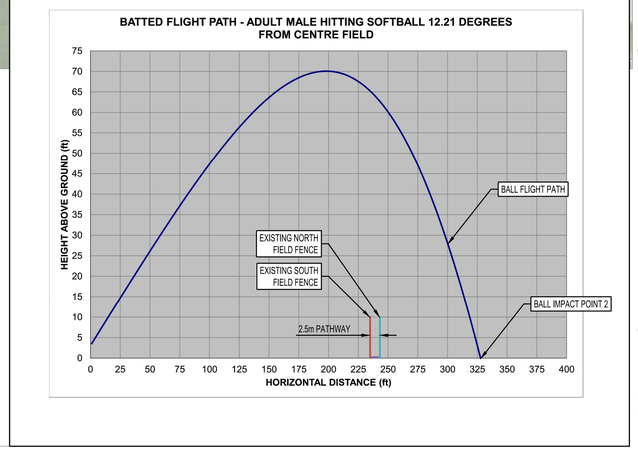


2 SOUTH FIELD BALL TRAJECTORY ANALYSIS

PLAN: 1:250 SECTION: NTS



CLIENT

CITY OF PORT COQUITLAM

2580 SHAUGHNESSY STREET,
PORT COQUITLAM, BC, V3C 2A8

PROJECT

GATES PARK SOFTBALL DIAMOND SCHEMATIC DESIGN

No.	DESCRIPTION	DATE	BY
0	ISSUED FOR DISCUSSION	20190123	RB

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DRAWING TITLE

BALL TRAJECTORY ANAYLSIS- ADULT MALE SOFTBALL

0 1:250 10m

project no. 18-1002
date January 29, 2019
scale 1:250

L3/5

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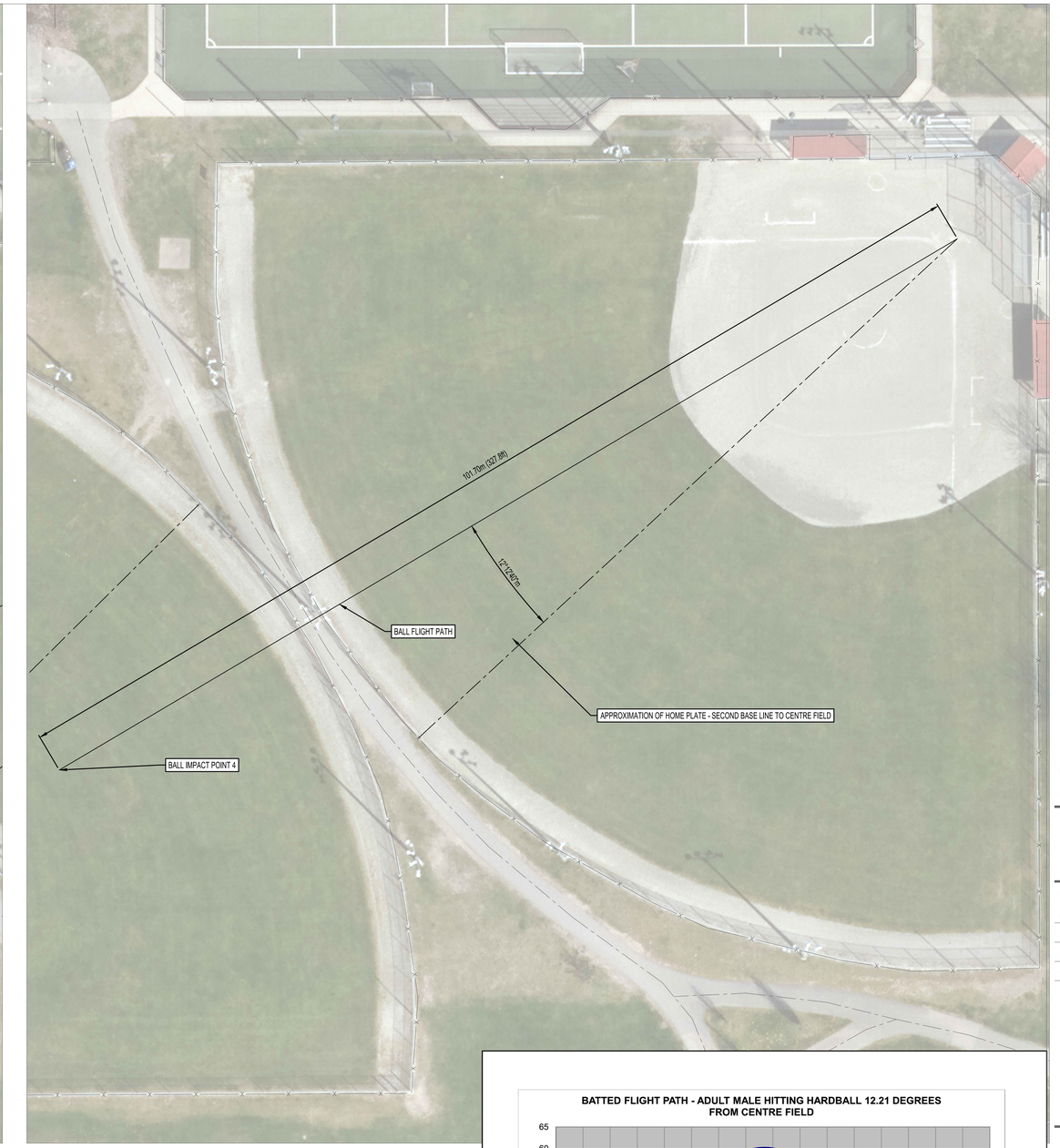
3 NORTH FIELD BALL TRAJECTORY ANALYSIS

PLAN: 1:250 SECTION: NTS



4 SOUTH FIELD BALL TRAJECTORY ANALYSIS

PLAN: 1:250 SECTION: NTS

NOTES AND ASSUMPTIONS

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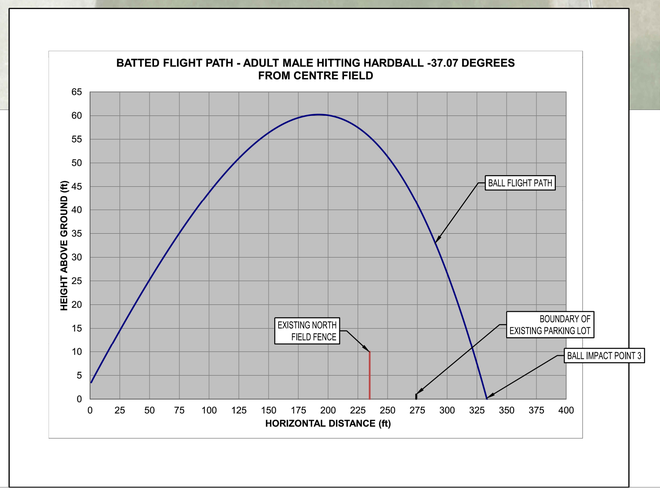

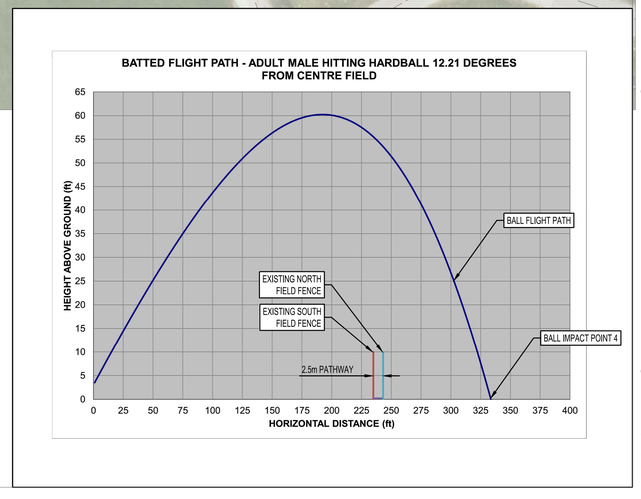

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PROJECT

GATES PARK SOFTBALL DIAMOND SCHEMATIC DESIGN

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DRAWING TITLE

BALL TRAJECTORY ANAYLSIS - ADULT MALE HARDBALL

0 1:250 10m

project no. 18-1002
date January 29, 2019
scale 1:250

L4/5

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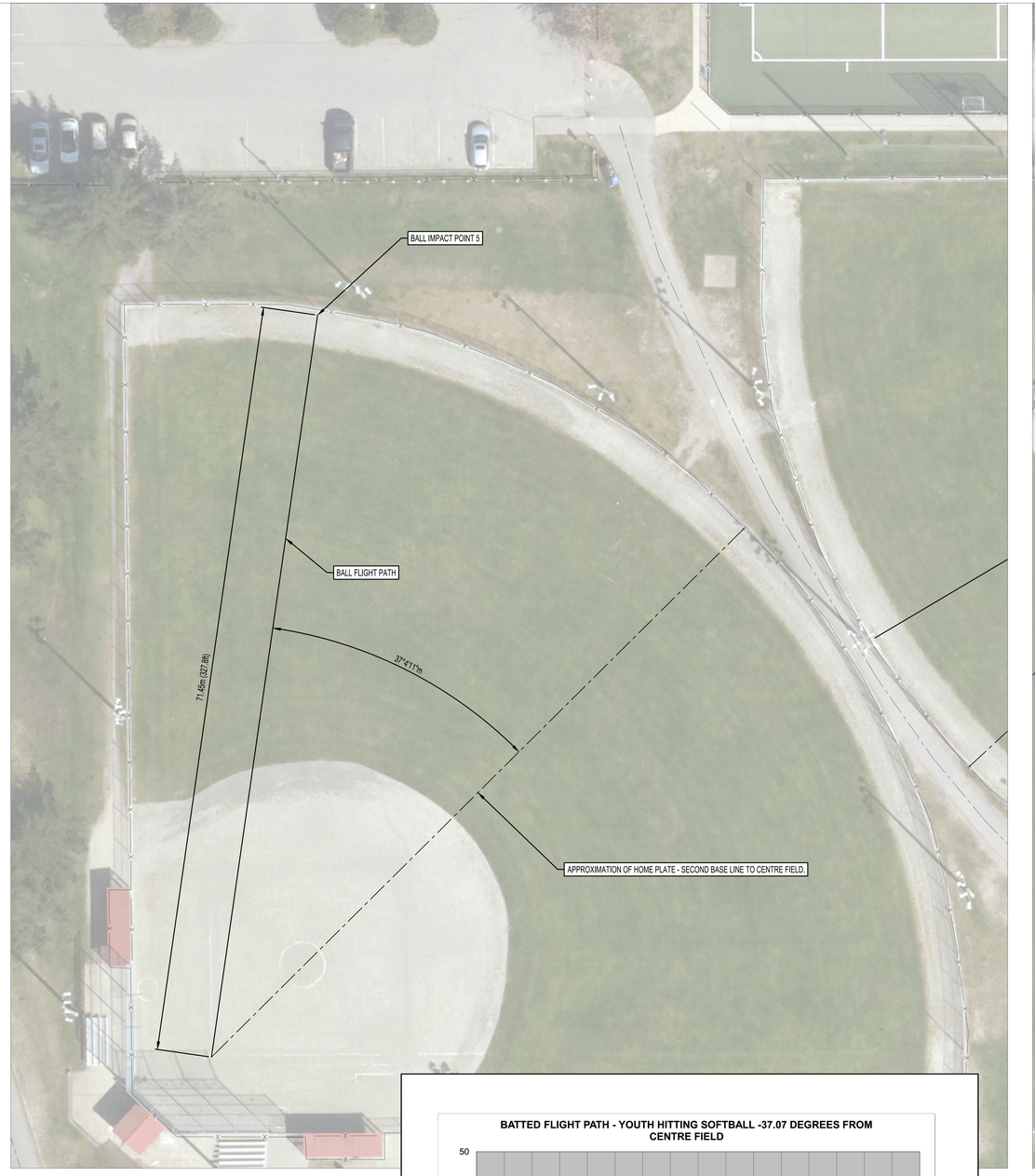
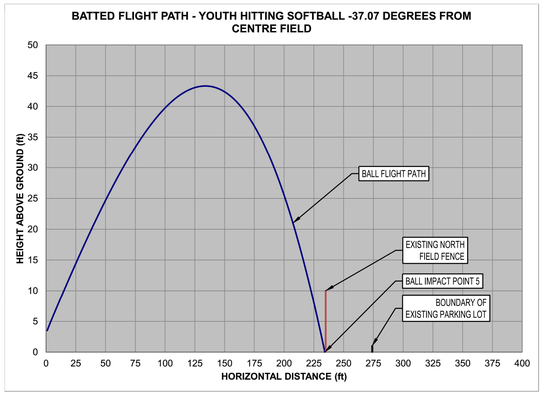


5 NORTH FIELD BALL TRAJECTORY ANALYSIS

PLAN: 1:250 SECTION: NTS



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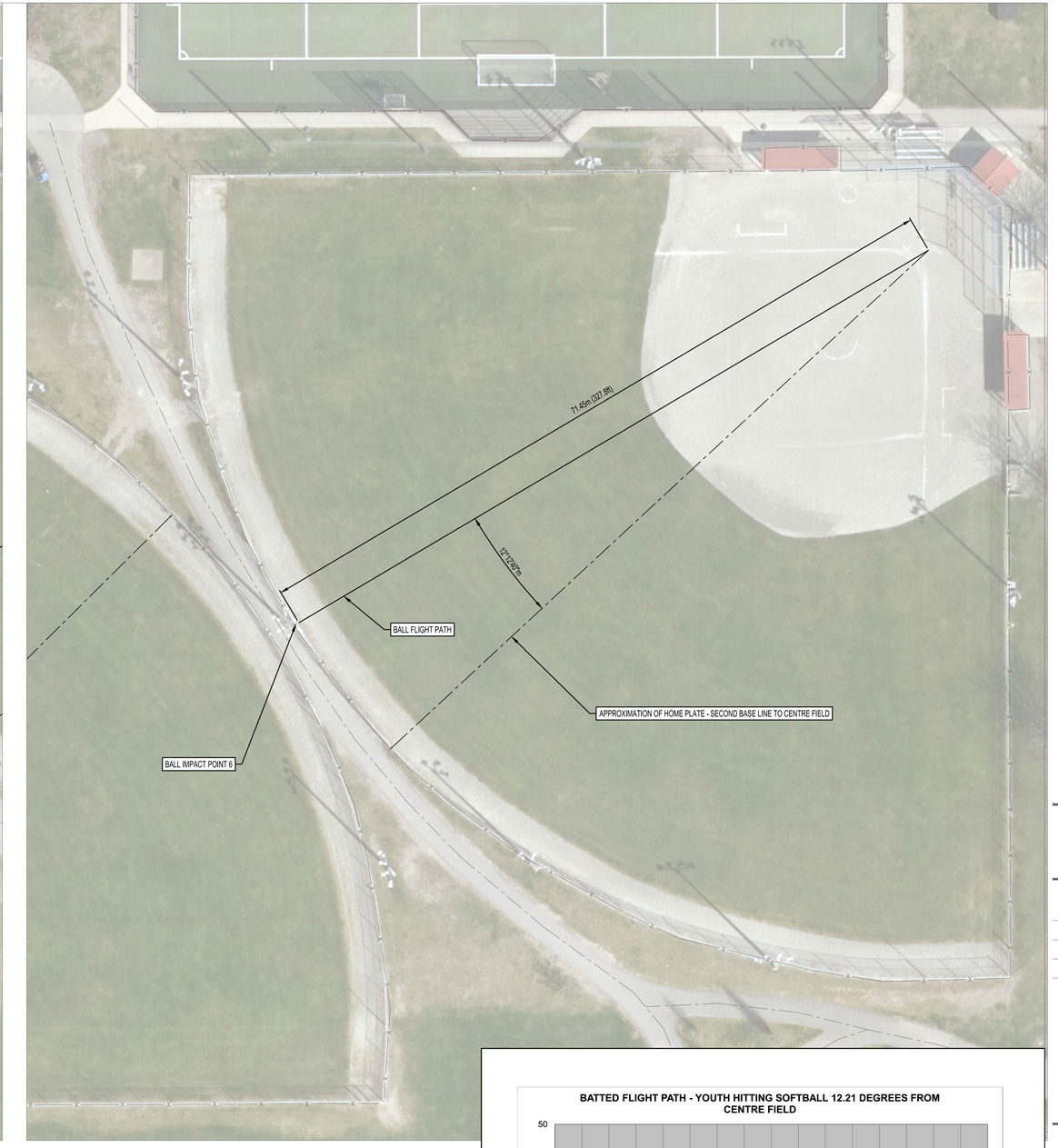
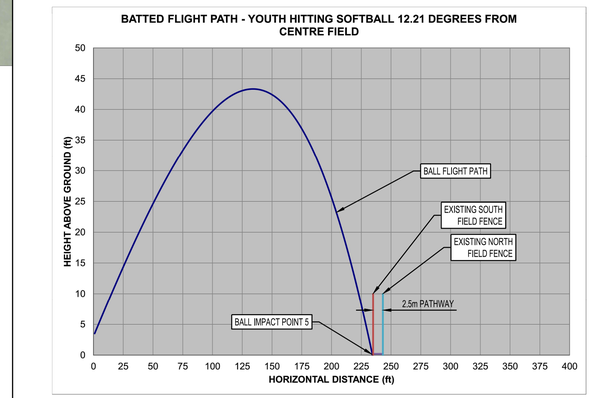


6 SOUTH FIELD BALL TRAJECTORY ANALYSIS

PLAN: 1:250 SECTION: NTS



CLIENT

CITY OF PORT COQUITLAM

2580 SHAUGHNESSY STREET,
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PROJECT

GATES PARK SOFTBALL DIAMOND SCHEMATIC DESIGN

No.	DESCRIPTION	DATE	BY
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DRAWING TITLE

BALL TRAJECTORY ANAYLSIS - YOUTH SOFTBALL

0 1:250 10m

project no. 18-1002
date January 29, 2019
scale 1:250

L5/5

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PROJECT

GATES PARK SOFTBALL DIAMOND SCHEMATIC DESIGN

No.	DESCRIPTION	DATE	BY
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DRAWING TITLE

LAYOUT - OPTION 2 - DECOMMISSION PATH

0 1:250 10m

project no. 18-1002
date February 8, 2019
scale 1:250

01/2

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CITY OF PORT COQUITLAM

2580 SHAUGHNESSY STREET,
PORT COQUITLAM, BC, V3C 2A8

PROJECT

GATES PARK SOFTBALL DIAMOND SCHEMATIC DESIGN

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DRAWING TITLE

LAYOUT - OPTION 3 - OUTFIELD NETTING

0 1:250 10m

project no.	18-1002
date	February 8, 2019
scale	1:250

02/2

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Burnaby, BC V5G 4K6
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Memorandum

To:	Doug Rose, MCSLA	**From:**	Riley Brown, EIT
Cc:	Mitchell Guest	**Date:**	February 14, 2019
Project Title:	**Gates Park – Diamond Netting Assessment**	**File No.:**	18-1002-05
Re:	Gates Park Softball Diamond Ball Trajectory Review		

The City of Port Coquitlam ("City") has requested Binnie evaluate potential options for reducing the hazard of errant fly balls into pedestrian areas/walkways and the Wilson Avenue parking lot from two softball diamonds located within Gates Park (2300 Reeve Street, Port Coquitlam, BC). Preliminary design options were evaluated using dimensional and batted ball trajectory analysis of existing conditions and preliminary cost estimates of proposed solutions.

1 PROJECT DESCRIPTION

The project site consists of two softball diamonds located west of the Wilson Avenue parking lot and Artificial Turf Field 2. The diamonds face one another in a north to south orientation with their center fields approximately aligned. A three meter height outfield fence is located on both fields, and a 2.5-meter-wide pathway runs in a northeast to southwest alignment between the outfield fences to allow pedestrians to walk from the main parking lot to other park amenities.

The City undertook an independent Risk Control Survey in September 2017 by Risk Management Services Inc, in which the recommendations outlined in the report related to errant fly balls have been completed thus far. It is understood that fly balls are a consistent hazard for pedestrians moving along the pathway along the outfield fence. Additionally, damage to cars parked adjacent to the north diamond in the parking lot has been reported due to fly balls. Binnie completed a ball trajectory analysis on the existing conditions to determine the contributing factors that has resulted in the increased hazard to pedestrian and property damage at the Gates Park softball diamonds.

2 ANALYSIS OF EXISTING CONDITIONS

Data regarding existing conditions was gathered from the City's GIS database. On-site field measurements were completed to confirm fence height and distance from home plate to the outfield fencing.

Analysis of the existing conditions was performed by comparing the typical dimensions of each diamond against the recommended field layout for softball and baseball, as determined by the governing bodies for each sport, and through modelling the trajectory of a ball batted from home plate.

2.1 Dimensional Analysis

The primary measurement for determining whether a baseball or softball field meets regulations for play is the center field distance, which is defined as the distance from home plate to center field. Both the north and south diamond at Gates Park were found to have a center field distance of 235 feet (71.6 meters). The 2.5-meter-wide pathway is immediately adjacent to the outfield fence of both

diamonds. The Wilson Avenue parking lot was determined to be approximately 273 feet (83.4 meters) from home plate of the North Diamond.

The Softball Canada 2011/2012 Official Guide and Rule Book recommends that the minimum and maximum center field distance for Co-Ed U21, U18, and U16 levels of play be 275 feet (83.8 meters) and 325 feet (91.4m) respectively. The center field pathway is located within the minimum center field distance for adult co-ed play and is a contributing factor for the frequency of City reported fly ball conflicts. Similarly, the Wilson Avenue parking lot located approximately at the minimum distance to centerfield for the noted age levels is a contributing factor for potential property damage resulting from a home run.

2.2 Batted Ball Trajectory Analysis

To further understand the potential reach of a batted ball from home plate, a ball trajectory analysis was used to predict the flight path of the ball. The assumptions used for the analysis included an experienced, male softball player and a skilled youth batter using data from academic sports science studies. The analysis included the ball trajectory review of both a softball and a hardball.

Results of the trajectory analysis confirmed that the parking lot and pathway fell well within the area where fly balls could be expected.

Results from the dimensional and trajectory analysis were used to evaluate potential solutions.

3 POTENTIAL SOLUTIONS

Based on the results of the dimensional and ball trajectory analysis, three options were developed for further analysis.

3.1 Option 1: Outfield High Mast Netting

Option 1 is to install independent high mast netting near the existing outfield fencing. Based on the results of the ball trajectory analysis, the high mast netting would have to be approximately 55 feet (16.76 meter) tall to restrict home run balls. Further, preliminary layouts show that approximately 250 linear meters of netting would be required. (Refer to Drawing “01 – Layout - Option 1 – Outfield Netting”)

Cost Implications: Based on 2017 and 2018 market pricing, pricing for 40’ (12 meter) tall fencing showed a range of approximately $1,500 to $2,000 per linear meter. An estimated price adjustment of $2,500 per linear meter for 55’ (16.76 meter) tall fencing was used to determine a preliminary cost of $625,000 for Option 1. Additional budget allowances should be made for mobilization and restoration if this option is selected.

3.2 Option 2: Decommission Center Field Pathway

Option 2 included decommissioning the center field pathway and adding independent high mast netting further away from the outfield fence. The netting would be placed to protect the practice area to the west of the south diamond and the Wilson Avenue parking lot to the east of the north diamond. Under this option, trajectory analysis shows approximately 85 linear meters of 40’ (12 meter) tall netting would be required. (Refer to Drawing “02 – Layout – Option 2 – Decommission Path”)

Cost Implications: Based on 2017 and 2018 market pricing, pricing for 40’ (12 meter) tall fencing showed a range of approximately $1,500 to $2,000 per linear meter. An estimated price of $2,000 per linear meter for 40’ (12 meter) tall fencing was used to determine a preliminary cost of $170,000 for Option 2. Further, preliminary layouts indicate that approximately 250m² of pathway would be decommissioned and restored with landscape. An additional 110m² of pathway could be retained near

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center field of the diamonds for storage with the inclusion of gates or removed. Based on all works, it is recommended that a preliminary budget of $200,000 be retained.

3.3 Option 3: Restrict Play

Option 3 would be to restrict the age level of play allowed at the diamonds. This option would not require any infrastructure changes but would have to be accommodated with programming across the entire field inventory.

It is recommended that the allowable age levels be determined based on the assumption that home runs are rare in normal play for the maximum allowable center field distance as determined by the sport's governing body. Based on the dimensional analysis, bookings should be restricted to age groups with maximum allowable field sizes less than or similar to 235 feet (71.6 meters). This restriction would allow all Little League baseball levels below Senior league (ages 13 to 16) be permitted, and Softball Canada regulations would allow all male, female and co-ed leagues below U14 to be permitted.

Cost Implications: As no infrastructure changes are required for this option, no cost implications are expected.

4 CONCLUSION

We trust that the analysis and options presented will be helpful in informing future decisions regarding improvements at Gates Park. If you have any questions or comments on the information contained in this report, please do not hesitate to contact the undersigned.

Prepared by:

Riley Brown, EIT
Project Engineer

Reviewed by:

Blair Arbuthnot, MBCSLA,
LEED Green Associate
Manager, LASR Division, Associate

DRAFT

Risk Control Survey

MUNICIPAL INSURANCE ASSOCIATION OF BRITISH COLUMBIA

City of Port Coquitlam

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Risk Management Services Inc.
3999 Henning Dr.
Suite 101
Burnaby, BC V5C 6P9

Tel. (604) 609-4146
(800) 655-5661
Fax (604) 688-6986
www.scm-rms.ca

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Surveyed by: Kyle Martin

Reference #: 2149034

1.0 FACILITY GENERAL INFORMATION

LOCAL GOVERNMENT NAME	City of Port Coquitlam
LOCATION	Gates Park
PERSON CONTACTED	Todd Gross
TITLE OF CONTACT	Manager of Park Services
INITIAL INSPECTION DATE	29-SEP-17
ASSESSMENT TYPE	☐ BOAT LAUNCH ☐ CAMPGROUNDS ☐ LANDFILL/TRANSFER SITE ☒ PLAYGROUNDS ☒ PLAYFIELDS ☐ PUBLIC BUILDINGS ☐ PUBLIC WORKS ☐ RECREATIONAL CENTRE/COMMUNITY HALLS ☐ RECREATIONAL TRAILS ☐ SKATEBOARD/BMX/BIKE PARKS ☐ SWIMMING POOL/ICE ARENA ☐ WATERFRONTS ☐ WATER SPRAY PARK ☐ WATER SYSTEM

SUMMARY AND GENERAL DESCRIPTION OF OPERATIONS

The City of Port Coquitlam requested an re-inspection of Gates Park as part of this years MIA program as they had some additional concerns regarding baseballs leaving the park during games and practices. Gates Park is a large open park with a number of facilities for the general pubic. There are 4 baseball diamonds, 3 artifical fields used for soccer, 6 tennis courts, a playground, as well as an outdoor fitness area. Parking is provided on the front end of the park and within the middle area of the park.

RISK EVALUATION

The following recommendations were made:

2017-01 - Implement a waiver/requirement for user groups of the baseball diamond
2017-02 - Install a sign warning the public of baseballs
2017-03 - Playground signage missing
2017-04 - Secure soccer posts
2017-05 - Install a rear guard on the bleachers
2017-06 - Address water metre tripping hazard
2017-07 - Remove storage container onsite
2017-08 - Repair broken fence
2017-09 - Address uneven pavers by the baseball stadium

2.0 RECOMMENDATIONS

NUMBER OF RECOMMENDATIONS	9

RMS reports, prepared in compliance with commonly accepted risk control standards existing at the time services are rendered, are developed from an inspection of the premises and/or from data supplied by or on behalf of the Purchaser. RMS does not purport to list all hazards. While changes and modifications referred to in the reports are designed to upgrade protection and loss prevention of the premises, RMS assumes no responsibility for management and control of these activities. RMS will not be responsible to the Purchase for any losses or damages, whether consequential or other, however caused, incurred or suffered, as a result of the services being provided.

2.1 RECOMMENDATION

Hazard Description

Baseball User Groups are hitting balls out of the park.

Cause and Effect

Balls leaving the field could hit a member of the public leading to injury.

Hazard Location

Gates Park

RECOMMENDATION REFERENCE ID	2017-01
RECOMMENDATION SUB-TYPE	[X] ACT/REGULATION
RECOMMENDATION	It is recommended that all baseball User Groups be informed or sign a waiver that instructs teams to not move up in the field area (closer to the fence) for batting practice. This will help reduce the number of balls leaving the field. In addition, all User Groups doing pop fly practice should move this practice to across the field (From LF to CF or RF to CF) in order to reduce balls from leaving the field.
ADEQUACY OF EXISTING CONTROLS	[ ] LOW [X] MEDIUM [ ] HIGH
CONSEQUENCE RATING	[ ] 1 [ ] 2 [ ] 3 [X] 4 [ ] 5
LIKELIHOOD RATING	[ ] 1 [X] 2 [ ] 3 [ ] 4 [ ] 5
RISK SCORE-LEVEL OF RISK	[ ] 1-3 INSIGNIFICANT [ ] 3-5 LOW [X] 5-10 MEDIUM [ ] 10-15 HIGH [ ] 15-25 EXTREME
RECOMMENDATION STATUS	[X] OPEN NEW [ ] REPEAT [ ] PENDING [ ] IN PROGRESS [ ] CLOSED
CODE REFERENCE	Good loss control practice

2.2 RECOMMENDATION

Hazard Description

Baseballs are leaving the field during practice or games.

Cause and Effect

A baseball may hit a member of the public leading to significant injury.

Hazard Location

Gates Park

RECOMMENDATION REFERENCE ID	2017-02
RECOMMENDATION SUB-TYPE	[X] LIFE SAFETY
RECOMMENDATION	It is recommended that additional signage be placed around the field warning the public that "Baseballs may leave the field of play. Please be alert at all times."
ADEQUACY OF EXISTING CONTROLS	[ ] LOW [X] MEDIUM [ ] HIGH
CONSEQUENCE RATING	[ ] 1 [ ] 2 [ ] 3 [X] 4 [ ] 5
LIKELIHOOD RATING	[ ] 1 [X] 2 [ ] 3 [ ] 4 [ ] 5
RISK SCORE-LEVEL OF RISK	[ ] 1-3 INSIGNIFICANT [ ] 3-5 LOW [X] 5-10 MEDIUM [ ] 10-15 HIGH [ ] 15-25 EXTREME
RECOMMENDATION STATUS	[X] OPEN NEW [ ] REPEAT [ ] PENDING [ ] IN PROGRESS [ ] CLOSED
CODE REFERENCE	Good loss control practice

2.3 RECOMMENDATION

Hazard Description

The playground at this location did not have informational signage installed.

Cause and Effect

Playground signage may provide important safety and maintenance information for users.

Hazard Location

Gates Park

RECOMMENDATION REFERENCE ID	2017-03
RECOMMENDATION SUB-TYPE	[X] PLAYGROUND GENERAL

RECOMMENDATION

In order to protect the public from personal injury, each playstructure or group of playing equipment should be provided with visible and readable labels/signage stating the following: a) Level of supervision provided, b) Age group that the equipment playstructure is intended to, c) Manufacturers name and phone number (for new structures), d) A phone number where maintenance issues can be brought to attention, and e) A phone number in case of injury (E.G. 911) f) location of playground.

ADEQUACY OF EXISTING CONTROLS	[ ] LOW	[X] MEDIUM
	[ ] HIGH	
CONSEQUENCE RATING	[ ] 1	[X] 2
	[ ] 3	[ ] 4
	[ ] 5	
LIKELIHOOD RATING	[ ] 1	[X] 2
	[ ] 3	[ ] 4
	[ ] 5	
RISK SCORE-LEVEL OF RISK	[ ] 1-3 INSIGNIFICANT	[X] 3-5 LOW
	[ ] 5-10 MEDIUM	[ ] 10-15 HIGH
	[ ] 15-25 EXTREME	
RECOMMENDATION STATUS	[ ] OPEN NEW	[X] REPEAT
	[ ] PENDING	[ ] IN PROGRESS
	[ ] CLOSED	

CODE REFERENCE

CAN/CSA-Z614-07 "Children's Playspaces and Equipment" Chapter 16

2.4 RECOMMENDATION

Hazard Description

The portable soccer nets installed at this location are not restrained.

Cause and Effect

The design of the nets may allow them to be tipped over onto persons in the area resulting in significant injuries.

Hazard Location

Gates Park

RECOMMENDATION REFERENCE ID	2017-04
RECOMMENDATION SUB-TYPE	[X] LIFE SAFETY
RECOMMENDATION	Portable soccer goal posts can cause serious injury or death if they are inadvertently tipped over. Accordingly, portable goal posts should be effectively anchored at all times to ensure the structures cannot tip.
ADEQUACY OF EXISTING CONTROLS	[ ] LOW [X] MEDIUM [ ] HIGH
CONSEQUENCE RATING	[ ] 1 [ ] 2 [ ] 3 [X] 4 [ ] 5
LIKELIHOOD RATING	[ ] 1 [X] 2 [ ] 3 [ ] 4 [ ] 5
RISK SCORE-LEVEL OF RISK	[ ] 1-3 INSIGNIFICANT [ ] 3-5 LOW [X] 5-10 MEDIUM [ ] 10-15 HIGH [ ] 15-25 EXTREME
RECOMMENDATION STATUS	[ ] OPEN NEW [X] REPEAT [ ] PENDING [ ] IN PROGRESS [ ] CLOSED
CODE REFERENCE	Good loss control practice

2.5 RECOMMENDATION

Hazard Description

The bleacher pictured has not been provided with a rear guard.

Cause and Effect

Consideration should be made that they be brought up to the current standard to reduce risk of injury and liability.

Hazard Location

Gates Park

RECOMMENDATION REFERENCE ID	2017-05
RECOMMENDATION SUB-TYPE	[X] LIFE SAFETY
RECOMMENDATION	Some of the bleachers do not have guards in place to prevent rear fall injuries. The code calls for backs and ends of bleacher seats more than 1200 mm above the floor that are not adjacent to a wall shall be protected with a guard not less than 1070 mm high above an adjacent surface or foot rest; and not less than 920 mm high above the center of an adjacent seat board.
ADEQUACY OF EXISTING CONTROLS	[ ] LOW [X] MEDIUM [ ] HIGH
CONSEQUENCE RATING	[ ] 1 [ ] 2 [X] 3 [ ] 4 [ ] 5
LIKELIHOOD RATING	[ ] 1 [X] 2 [ ] 3 [ ] 4 [ ] 5
RISK SCORE-LEVEL OF RISK	[ ] 1-3 INSIGNIFICANT [ ] 3-5 LOW [X] 5-10 MEDIUM [ ] 10-15 HIGH [ ] 15-25 EXTREME
RECOMMENDATION STATUS	[ ] OPEN NEW [X] REPEAT [ ] PENDING [ ] IN PROGRESS [ ] CLOSED
CODE REFERENCE	NFPA 101 "Life Safety Code"

2.6 RECOMMENDATION

Hazard Description

A water meter was protruding out of the ground.

Cause and Effect

This is creating a trip and fall hazard.

Hazard Location

Gates Park

RECOMMENDATION REFERENCE ID	2017-06
RECOMMENDATION SUB-TYPE	[X] SLIP, TRIP AND FALL
RECOMMENDATION	It is recommended that the area be smoothed out in order to reduce possible exposure.
ADEQUACY OF EXISTING CONTROLS	[ ] LOW [X] MEDIUM [ ] HIGH
CONSEQUENCE RATING	[ ] 1 [X] 2 [ ] 3 [ ] 4 [ ] 5
LIKELIHOOD RATING	[ ] 1 [X] 2 [ ] 3 [ ] 4 [ ] 5
RISK SCORE-LEVEL OF RISK	[ ] 1-3 INSIGNIFICANT [X] 3-5 LOW [ ] 5-10 MEDIUM [ ] 10-15 HIGH [ ] 15-25 EXTREME
RECOMMENDATION STATUS	[ ] OPEN NEW [X] REPEAT [ ] PENDING [ ] IN PROGRESS [ ] CLOSED
CODE REFERENCE	Good loss control practice

2.7 RECOMMENDATION

Hazard Description

An older storage container was found onsite.

Cause and Effect

The rusted container was not being utilized well and was in poor condition.

Hazard Location

Gates Park

RECOMMENDATION REFERENCE ID	2017-07
RECOMMENDATION SUB-TYPE	[X] VANDALISM GENERAL
RECOMMENDATION	The storage container should be removed from this location to reduce possible injuries from members of the public getting cut on the container, or falling off it as it was indicated that children have been known to climb it. If the container is required, it is recommended that it be cleaned up and moved into a safer location away from general public traffic.
ADEQUACY OF EXISTING CONTROLS	[ ] LOW [X] MEDIUM [ ] HIGH
CONSEQUENCE RATING	[ ] 1 [ ] 2 [ ] 3 [X] 4 [ ] 5
LIKELIHOOD RATING	[ ] 1 [X] 2 [ ] 3 [ ] 4 [ ] 5
RISK SCORE-LEVEL OF RISK	[ ] 1-3 INSIGNIFICANT [ ] 3-5 LOW [X] 5-10 MEDIUM [ ] 10-15 HIGH [ ] 15-25 EXTREME
RECOMMENDATION STATUS	[X] OPEN NEW [ ] REPEAT [ ] PENDING [ ] IN PROGRESS [ ] CLOSED
CODE REFERENCE	Good loss control practice

2.8 RECOMMENDATION

Hazard Description

A section of broken fence was found near the soccer field.

Cause and Effect

The broken section was creating a liability hazard.

Hazard Location

Gates Park

RECOMMENDATION REFERENCE ID	2017-08
RECOMMENDATION SUB-TYPE	[X] MAINTENANCE [ ] TRAINING [ ] HEIGHT OF HOCKEY GLASS/NETTING [ ] SECURITY [ ] INSPECTION [ ] ATTRACTIVE NUISANCE
RECOMMENDATION	It is recommended that the fence be repaired in order to reudce possible liability exposure.
ADEQUACY OF EXISTING CONTROLS	[ ] LOW [X] MEDIUM [ ] HIGH
CONSEQUENCE RATING	[ ] 1 [X] 2 [ ] 3 [ ] 4 [ ] 5
LIKELIHOOD RATING	[ ] 1 [X] 2 [ ] 3 [ ] 4 [ ] 5
RISK SCORE-LEVEL OF RISK	[ ] 1-3 INSIGNIFICANT [X] 3-5 LOW [ ] 5-10 MEDIUM [ ] 10-15 HIGH [ ] 15-25 EXTREME
RECOMMENDATION STATUS	[X] OPEN NEW [ ] REPEAT [ ] PENDING [ ] IN PROGRESS [ ] CLOSED
CODE REFERENCE	Good loss control practice

2.9 RECOMMENDATION

Hazard Description

Pavers around the baseball stadium were found to be uneven.

Cause and Effect

The uneven pavers are creating a trip and fall hazard.

Hazard Location

Gates Park

RECOMMENDATION REFERENCE ID	2017-09
RECOMMENDATION SUB-TYPE	[X] SLIP, TRIP AND FALL
RECOMMENDATION	It is recommended that the pavers be reset and leveled out in order to reduce possible trip and fall accidents.
ADEQUACY OF EXISTING CONTROLS	[ ] LOW [X] MEDIUM [ ] HIGH
CONSEQUENCE RATING	[ ] 1 [X] 2 [ ] 3 [ ] 4 [ ] 5
LIKELIHOOD RATING	[ ] 1 [X] 2 [ ] 3 [ ] 4 [ ] 5
RISK SCORE-LEVEL OF RISK	[ ] 1-3 INSIGNIFICANT [X] 3-5 LOW [ ] 5-10 MEDIUM [ ] 10-15 HIGH [ ] 15-25 EXTREME
RECOMMENDATION STATUS	[X] OPEN NEW [ ] REPEAT [ ] PENDING [ ] IN PROGRESS [ ] CLOSED
CODE REFERENCE	Good loss control practice

3.0 PLAYGROUNDS AND PLAY AREAS

3.1 PLAYGROUND

NAME OF PLAYGROUND	Gates Park
EQUIPMENT	[X] SWINGS [ ] SLIDES [ ] TEETER-TOTTERS [ ] MERRY-GO-ROUNDS [ ] CLIMBERS [ ] ROCKING EQUIPMENT [X] COMPOSITE PLAY STRUCTURE
DESCRIBE OTHER EQUIPMENT	None
TYPE OF SURFACING AND CONDITION Wood chips found to be in good condition.	
DISTANCE BETWEEN EQUIPMENT APPEARS ADEQUATE	[X] YES [ ] NO
DESCRIBE GENERAL PLAYGROUND SITE CONDITION The playground is well maintained with minimal issues noted.	
TYPE OF PLAYGROUND	Public
SUPERVISED	[ ] YES [X] NO [ ] NOT APPLICABLE
DESCRIBE SIGNAGE	See recommendation 2017-03
PLAYGROUND SHARED WITH OTHER FACILITIES Located in Gates Park that contains tennis courts, baseball diamonds and soccer fields.	
DESCRIBE ANY UNSATISFACTORY FEATURES	Signage (2017-03);
REMARKS	None

3.2 CONTRACT USER AGREEMENT

CONTRACT USER AGREEMENT IN PLACE	[ ] YES [ ] NO [X] NOT APPLICABLE

4.0 SPORTFIELDS

4.1 PLAY AREA AND ATHLETIC FIELD

4.1 PLAY AREA AND ATHLETIC FIELD

LOCATION OF SPORTFIELD	Gates Park	
DESCRIBE FIELD Gates Park is a large outdoor facility containing 6 tennis courts, 3 artificial fields, grass field, 4 baseball diamonds and an outdoor fitness area.		
DESCRIBE CONDITION The general condition of the park was very good. A few recommendations were made.		
RUNNING TRACK	☐ YES	☒ NO
JUMPING PITS	☐ YES	☒ NO
ATHLETIC FIELDS	☒ YES	☐ NO
GOAL POSTS	☒ YES	☐ NO
PAINTED WHITE	☒ YES	☐ NO
CONSTRUCTION	☐ WOOD ☐ OTHER	☒ METAL
GOAL POST CONDITION	Posts were well maintained.	
MOVABLE GOAL POSTS	☒ YES ☐ NOT APPLICABLE	☐ NO
DO MOVABLE GOAL POSTS MEET DESIGN AND CONSTRUCTION GUIDELINES	☒ YES ☐ NOT APPLICABLE	☐ NO
BLEACHERS IN USE	☒ YES	☐ NO
CONDITION Bleachers were found in good condition, however some were missing rear guards (2017-05).		
PARKING LOTS	☒ YES	☐ NO
DESCRIBE	Well spaced and marked.	
REMARKS Additional recommendations were made regarding the Citiy's concern about baseballs leaving the field. See recommendations 2017-01 and 2017-02.		

4.2 CONTRACT USER AGREEMENT

CONTRACT USER AGREEMENT IN PLACE	☐ YES ☒ NOT APPLICABLE	☐ NO

Photographs

See recommendation 2017-01

Fence between parks

Photographs

Bleachers

Settling pavers (2017-09)

Photographs

Cleaned up vandalism

January Community Centre Update

RECOMMENDATION:

None.

REPORT SUMMARY

Monthly reports are being provided from the Community Centre Project Team to ensure Committee is updated regularly on the status of the project. This report will cover the project status to the end of January 2019.

BACKGROUND

For this period, the following reports are attached:

Owner's Representative Progress Report #22 – Tango, dated January 2019

DISCUSSION

During January numerous meetings, co-ordination, procurement, design and construction activities took place. The Design-Builder continues with Phase 1AB mechanical and electrical fit-out, roofing, envelope and Rink 2 preparation. Phase 1C concrete structure and underground mechanical is ongoing.

The status of work can be summarized as follows:

- Rink 2: slab preparation is complete. Fit-out (work required to make the interior spaces suitable for occupation) has commenced.
- Rink 3: slab preparation is ongoing. Fit-out has commenced.
- Library: exterior glazing is ongoing.
- Aquatic and fitness centre, all age and administration areas: foundation formwork; rebar and concrete placement; suspended slabs; mechanical and electrical rough-ins; and, glulam installation is ongoing. Roof deck installation and external framing has commenced.

The Design-Builder provided an updated schedule dated February 15, 2019 which forecasts occupancy of Phase 1A (rink 2, rink 3, and library) in late summer and followed by occupancy of 1B and 1C (1B - admin and all age multipurpose areas, 1C - fitness and aquatic areas). The critical path items to achieve occupancy of Phase 1BC are fire alarm installation and certification, the occupancy process and timely completion of the offsite servicing work. The offsite servicing required for the rinks appears to be on schedule, however, Phase 1B and 1C remain on the critical path. Specific activities of occupancy for Phase 1 have been identified in the schedule and are being coordinated with City staff. Tango continues to closely monitor the schedule, focusing on the critical path activities and risks that may impact substantial performance.

During February 2019, key construction activities scheduled include exterior glazing, mechanical and electrical rough in, fire alarm installation, completion of Rink 3 slab, change room tiling and drywall. Staff are working on the review of Phase 2 design, planning for procurement of FFE items (furniture, fixtures and equipment), and preparing future Committee update report content related to the new Community Centre including admission fees, initial scope of programs and services offered, facility allocation policy updates, and facility space naming, advertising and sponsorship.

Based on the information contained in the Monthly Progress Report #22, Tango believes the Project can be completed by the Substantial Performance Date of October 31, 2021 for the Project Budget of $132,100,000, provided the current critical path milestone dates can be achieved.

FINANCIAL IMPLICATIONS

Financing for the Community Centre includes an estimated $52 million in long term debt. Staff reviewed interest rates and cash flow requirements, and anticipate borrowing for the 2019 fall debt issuance.

A summary of the total project costs expensed as of January 2019 is as follows:

Item	Total Expenses to Date	Original Budget	Revised Budget
Ventana Pre-Contract Work	$983,000	$983,000	$983,000
Ventana Design-Build Contract*	$48,653,144	$116,717,000	$119,915,697**
Project Management	$918,155	$1,500,000	$2,200,000
Legal	$49,813	Incl. above	$150,000
Furniture, Fixtures and Equipment	$0	$3,900,000	$3,750,000
Off-Site Improvements	$287,814	$3,000,000	$2,730,002
Onsite works (service fees, etc)	$33,162	Incl. in other	$150,000
Communications/Signage	$12,314	Incl. in other	$30,000
Contingency/Other		$6,000,000	$2,191,301
Total Project	**$50,937,402**	**$132,100,000**	**$132,100,000**

*Prepayment amount of $5M has been paid as per the contract and is not included in above totals.
**Change order 6, valued at $55,875 was also approved for additional offsite design services. This pertains to the separate capital project for water and sewer upgrades on Kelly Avenue which are not part of the scope of the Community Centre, but because they must be completed in conjunction with the construction of the plaza and centre work, it is most efficient to have this work managed and constructed by Ventana and their team. It is therefore an increase to the design build contract, but is not included above as it will be charged directly to the water/sewer capital project (as will construction) and does not impact the rec complex budget.

PUBLIC CONSULTATION

The following communication activities were undertaken through January 2019:

- Ongoing in-person and email communication between staff and facility users on any changes related to programming, parking and general construction activity updates.
- Four mornings per week from 9am-noon volunteer facility hosts provide program, parking and other updates to patrons at an information desk in the lobby.
- Information boards and info sheet continue to be available at facilities and at City events.
- Biweekly update meetings involving Recreation Managers, Library Manager and Ventana Site Supervisors, to share information about weekly construction site and facility activities.
- Signage is posted regularly to ensure patrons are aware of any parking or facility access changes and information is shared with the Wilson members and arena user groups. When possible, affected user groups are notified of any short notice parking or access issues due to construction.
- Ongoing communications and advertising to inform residents that the facility is open during construction, including ads in Leisure Guide, local paper, social media and on new digital billboards and transit shelters.
- A stakeholder group meeting was held on February 27, 2019 at 5:30pm in the Michael Wright Gallery.

The updated project dashboard, which will be available on the City website, is attached to Tango's latest monthly report.

FACILITY OPERATION UPDATES

Terry Fox Library

Participation increased by 20% in January 2019 compared to 2018, with 56 programs offered and attendance recorded at 1408.

Arena

Participation in registered programs for winter 2019 is similar to winter 2018. Drop-in participation for January 2019 compared to January 2018 was less by 734 participants (a 26% decrease), largely due to the reallocation of ice which resulted in fewer drop-in opportunities being offered by the City. January ice rental increased by 19 bookings, resulting in $2,000 more rental revenue from January 2018.

Children and Preschool

January 2019 registered program participation and revenue was similar to 2018.

Youth
There was an average of 6 youth in attendance at the drop-in centre per day of operation throughout January 2019. The Friday night Late Night Skates continue to be well attended, with an average of 111 youth in attendance per session.

Wilson Seniors
Seniors' registered programs and drop-in attendance increased slightly in January 2019 compared to 2018. Wilson membership renewals for January 2019 declined by 28%, or 51 fewer renewals compared to 2018. Staff continue to reach out to past members by phone and email in order to inform and encourage participation in Wilson Centre events and programs.

Concession Sales
Food service sales (Wilson Centre kitchen and concession offerings) were up by $2000 or 24% for January 2019 over 2018.

FACILITY MAINTENANCE & SERVICE DISRUPTIONS

No significant facility repairs were required in January.

ATTACHMENTS

Attachment #1: Owner's Representative Progress Report #22 – Tango, January 2019

PORT COQUITLAM COMMUNITY RECREATION CENTRE

Owner's Representative Progress Report #22

January 2019

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APPENDICES

Appendix 1 – Port Coquitlam Community Recreation Centre Complex – Owner's Schedule: February 15th 2018 - Update

Appendix 2 – Progress Photographs: January 2018

Appendix 3 - Site Inspection Reports: January 2018

Appendix 4 – Certificate of Payment No.25: February 19, 2019

Appendix 5 – Owners Meeting Minutes #17: January 15, 2019

Appendix 6 - Project Dash Board: January 31, 2019

Appendix 7 – Architecture 49 Site Report #28: February 4, 2019

1.0 INTRODUCTION

Tango Management ("Tango") has been engaged by the City of Port Coquitlam ("Owner") to provide Owner's Representative Services for the design and construction of a new Community Recreation Complex in Port Coquitlam, BC ("Project").

Tango is pleased to submit its Monthly Progress Report #22 to the Owner. This report represents a summary of key project activities and issues that occurred up to January 31, 2019.

This report is for the sole and confidential use and reliance of the Owner. Tango, its directors, staff, sub-consultants or agents do not make any representation or warranty as to the factual accuracy of the information provided to us on behalf of the Owner, their Contractors, their sub-contractors or agents, upon which this report is based. This report shall not be reproduced or distributed to any party other than the recipients outlined above, without the express permission of Tango. Any use of this report which a third party makes, or any reliance on or decisions made based on it, are the responsibility of such third parties. Tango accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

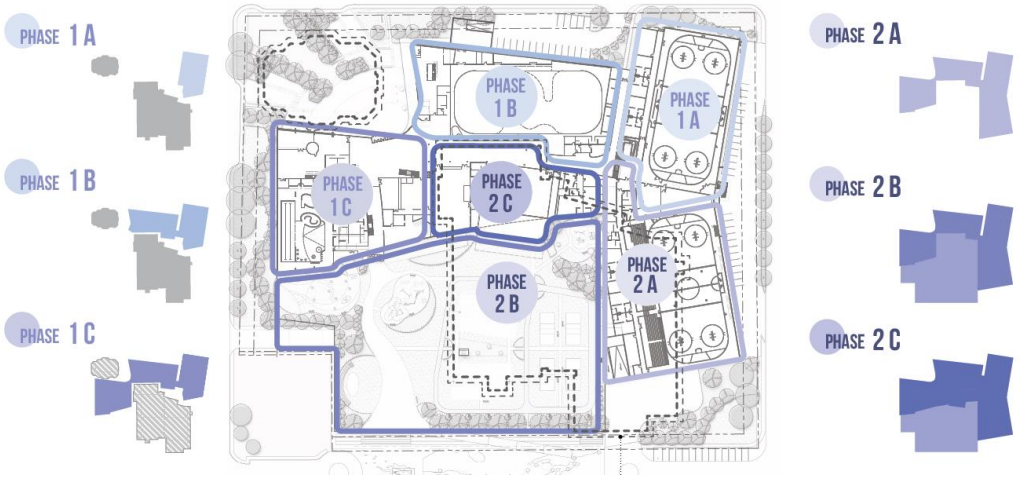
Any advice, opinions or recommendations within this report should be read and relied upon only in the context of this report as a whole. The contents of this report do not provide legal, insurance or tax advice or opinion.

2.0 EXECUTIVE SUMMARY

During January 2019 numerous meetings, co-ordination, procurement, design and construction activities have taken place. The Design-Builder continues with Phase 1AB roofing, envelope and rink 2 preparation and M&E fit-out. Phase 1C concrete structure and underground mechanical is ongoing. Glulam installation is near completion. Based on the information contained in this Monthly Progress Report #22 and during this reporting period, Tango believes the Project can be completed by the Substantial Performance Date of October 31, 2021 for the Project Budget of $132,100,000, provided the current critical path milestone dates can be achieved.

3.0 PROJECT SCOPE

The project scope involves a phased replacement and addition to the Port Coquitlam Recreation Complex, Wilson Centre and Terry Fox Library. This scope will provide a vibrant community hub with three sheets of ice, an indoor leisure pool, new fitness facilities, a new library, a spacious outdoor plaza, and underground parking. The size of the new facility with be 205,000 SQF.

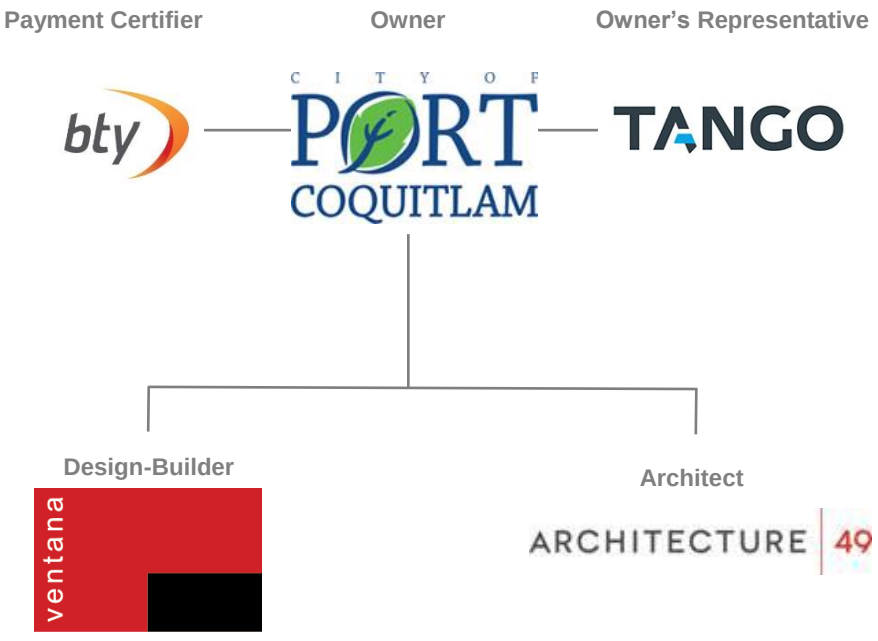


4.0 PROJECT TEAM

The following team members have been appointed to the Project:

Owner	**City of Port Coquitlam**
Owner's Representative	**Tango Management**
Design-Builder	**Ventana Construction (POCO) Corp**
Architect	**Architecture 49**
Civil Engineer	**Hub Engineering**
Structural Engineer	**BMZ**
Mechanical Engineer	**WSP Canada**
Electrical Engineer	**Smith & Anderson**
Payment Certifier	**BTY Group**

City of Port Coquitlam Community Recreation Complex Project Team



5.0 DESIGN AND APPROVALS STATUS

Conceptual Design

Conceptual design is complete. Please refer to our Pre-Construction Due Diligence Report (v1.2), dated October 24, 2016 for comments on the Conceptual Design.

Schematic Design

Schematic design is complete. Please refer to our Pre-Construction Due Diligence Report (v1.2), dated October 24, 2016 for comments on the Schematic Design.

Design Development & Working Drawings and Construction Documents

The Design-Builder is developing design packages in phases. These include design packages for Building Permits, Tendering and Issued for Construction.

Below is an updated summary of the key design milestone submissions, as per the revised project schedule - updated February 15, 2019:

Drawing Package	Planned Date	Actual Date	Status	Comments
Ground Works / Piling (1ABC)				
BP Submission	24-Feb-17	13-Apr-17	Complete	Construction Ongoing
IFT Drawings	24-Feb-17	6-Apr-17	Complete	Construction Ongoing
IFC Drawings	10-Apr-17	18-Aug-17	Complete	Construction Ongoing
Phase 1ABC - Structure				
IFT Drawings (F/R/C)	31-Aug-17	6-Oct-17	Complete	Construction Ongoing
IFC Drawings (F/R/C)	26-Oct-17	12-Dec-17	Complete	Construction Ongoing
IFT Drawings (S/Steel)	19-Oct-17	19-Dec-17	Complete	Construction Ongoing
IFC Drawings (S/Steel)	30-Nov-17	10-Jan-18	Complete	Construction Ongoing
Phase 1ABC Balance of Design				
BP Submission	14-Jul-17	28-Sep-17	Complete	Construction Ongoing
IFT Drawings	5-Oct-17	3-Oct-17	Complete	Construction Ongoing
IFC Drawings	16-Nov-17	31-Jan-18	Complete	Construction Ongoing
Phase 2ABC - Design				
BP Submission	19-Jan-18		Ongoing	2-Feb-19
IFT Drawings	18-Mar-18		Ongoing	21-May-19
IFC Drawings	12-Jul-18		Ongoing	31-May-19

5.0 Design and Approval Status (continued)

Permits / Regulatory Approvals

The following Building Permits have been issued for the construction works:

Regulatory Approval	Planned Date	Award Date	Status	Comments
Conservation Permit	1-Mar-17		Awarded	
Phase 1ABC Ground Works	24-Feb-17	19-Apr-17	Awarded	BP011873
Phase 1ABC Full BP	28-Sep-17	11-Oct-17	Awarded	BP011897
Phase 2ABC Full BP	18-Mar-18	11-Oct-17	Awarded	BP011897

A Development Permit was issued on August 18, 2017.

An Environmental Conservation Development Permit was scheduled to be issued to the Design-Builder on March 1, 2017. We understand this has now been issued.

Note – a part demolition permit (BP011822) was issued on March 9, 2017 for the part demolition of the Wilson Centre.

A Building Permit (BP011822) was issued to the Design-Builder on October 17, 2017. This Building Permit covers all phases of the Project. The Design-Builder will continue to submit design submissions in phases to the Owner, as per the design schedule.

6.0 PROCUREMENT & CONTRACT ADMINISTRATION

Procurement Summary

We understand that procurement and tendering is ongoing. The Design-Builder has confirmed that we will not be receiving a detailed procurement schedule, as part of their monthly reporting. The Design-Builder has included a summary of the trades awarded to date in their monthly progress report, dated February 15, 2019:

Bulk and detailed excavation Phases 1ABC;
Piling Phases 1ABC;
Mechanical and Electrical;
Refrigeration;
Formwork Phases 1AB;
Reinforcement Phases 1ABC;
Cladding;
Steel Stud;
Doors & Hardware;
Tile;
Rink Slabs;
Public Address;
Glazing;
Roofing;
Metal Decking;
Pump / Place / Finish;
Structural Steel;
Soil Anchors;
Insulated Metal Panels;
Paint;
Flooring;
Dasher Boards;
Overhead Doors;
Washroom Accessories, Partitions, & Lockers.;

6.0 Procurement & Contract Administration (continued)

Millwork;
Concrete Polishing;
Countertops.
Fireplace;
Pool Specialities; and

The following procurement milestones have been identified in the Design-Builder's schedule:

Phases 1ABC & 2ABC

- Phase 2ABC Tendering Complete by May 21, 2019.

  NOTE – The Design-Builder previously indicated that this will be complete by July 26, 2018.

Furniture, Fixtures and Equipment (FF&E) Procurement

A Master Procurement Schedule has been developed that identifies all items with vendors, lead-in times, delivery and installation details. We are coordinating with the Design-Builder to ensure all enabling works and infrastructure requirements get incorporated into the design. An FF&E Coordination follow up meeting was held on August 10, 2017, that finalized the draft list. We submitted a revised FF&E list to the Design-Builder on October 18, 2017 for review and coordination. Final feedback was received on October 12, 2018.

Final points of clarification are being worked through and coordinated in-line with the Design-Builder's schedule.

An FF&E Budget is currently being developed and finalized.

Project Coordination / Meeting

The Owner's Meeting #7 was held on January 15, 2019. Please refer to Appendix 5 of this Monthly Progress Report for a copy of the Owners Meeting Minutes #17.

The next Owner's Meeting is scheduled for February 19, 2019.

7.0 PROJECT BUDGET

Project Budget Summary

The Project Budget is summarized below:

Design and Construction	Dollar Value
Design-Builder Pre Contract Costs	$983,000
Design-Builder Contract Price	$116,717,000
Approved Changes	$5,173,558
Current (Revised) Contract Price	$121,890,558
Work Certified as Completed (Base Contract)	$49,803,088
Current Cost to Complete (Base Contract)	$72,087,470
Lien Holdback (Base Contract)	$4,480,309

Non-Contract Costs	Dollar Value
Furniture, Fixtures & Equipment (FF&E)	$3,750,000
Off-Site	$940,876
Professional Services	$2,200,000
Communications	$30,000
Project Contingency	$2,305,566

Total Project Budget	$132,100,000

The Design and Construction Budget was prepared by the Design-Builder and forms part of their CCDC14 Design-Build Stipulated Price Contract (2013).

Payment Certification

BTY Group, the Payment Certifier has issued Certificate of Payment No. 25 dated February 19, 2019, which certifies the current payment due to the Design-Builder, under the terms of the Design-Build Contract ("DBC") for the period ending January 31, 2019.

In summary, the current payment liabilities of the Owner are:

Item	Dollar Value
Current Net	$3,465,051
Current GST (5.0%)	$173,253
Total Current Payable to the Design-Builder	**$3,638,304**
Total Current Builders Lien Holdback	$4,865,314

Please refer to Appendix 4 of this report for a copy of Certificate of Payment No. 25.

7.0 Project Budget (continued)

Change Order Management

A summary of the approved Change Orders relative to the Project Budget between the Owner and the Design-Builder up to January 31, 2019 is as follows:

CO#	Description	Dollar Value	Contingency Allocation
1	Bonding Requirements	$1,800,000	Project Contingency
2	Temporary Power to Site	$34,751	Project Contingency
3	Floor Area Changes	$1,003,236	Project Contingency
4	Off Site Design Services	$269,998	Off Sites
5	Additional Back-Up Power	$90,713	Project Contingency
6	Additional Off Site Design Services	$55,875	Off Sites
7	Card Readers and Key Pads	$16,698	Project Contingency
8	Library User Group Changes	$86,287	Project Contingency
9	Accessible Washroom Emergency Alert	$28,204	Project Contingency
10	Auto Door Openers	$55,440	Project Contingency
11	Daycare - Card Readers & Alarms	$9,834	Project Contingency
12	Additional CCTV	$24,024	Project Contingency
MOU	Offsite Scope of Work (Phase 1A)	$1,698,500	Off Sites
	TOTAL	**$5,173,558**	

Project Contingency

Design and Construction Contingency – The design and construction contingency is being managed by the Design-Builder and forms part of the DBC. Any changes to the Design and Construction Budget will have been a result of an Owner originated Change Order.

Project Contingency – The Owner is currently carrying $2,305,566 in revised Project Contingency.

Claims Management

There were no formal claims that we are aware of during this reporting period.

8.0 PROJECT SCHEDULE

Construction Progress (January End 2019)

We conducted site inspections on January 2, 8, 21 & 28, 2019. At the time of the inspections the status of work can be summarized as follows:

- **Phase 1A: Participant Ice**: Site strip, bulk excavation and backfill is complete. Steel piling is complete. Foundation and suspended slab formwork, rebar and concrete placement is complete. Mechanical & Electrical rough-in is ongoing. Structural Steel is complete. Roof deck, masonry, internal/external framing, glazing and densglass is ongoing. Refrigeration is ongoing. Insulated Metal Panels are complete. Rink slab preparation is complete. Fit-out has commenced.
- **Phase 1B: Leisure Ice and Library**: Site strip, bulk excavation and backfill is complete. Steel piling is complete. Foundation formwork, rebar and concrete placement is near completion. Mechanical & Electrical rough-in is ongoing. Structural steel is complete. Masonry is ongoing. Internal and external framing is ongoing. Rink slab preparation is ongoing. Fit-out has commenced.
- **Phase 1C Aquatic and Fitness Centre, All Age and Admin Areas**: Foundation formwork, rebar and concrete placement is ongoing. Suspended slabs are ongoing. Mechanical and electrical rough-in is ongoing. Glulam installation is ongoing. Roof deck installation and external framing has commenced.

We received a copy of the Design-Builder's updated schedule – ***"Port Coquitlam Community Recreation Complex – Owner's Schedule: February 15th 2019 - Update".***

This schedule remains very "aggressive" and there is zero margin for error and all critical path milestone dates need to be achieved in order for the schedule to be successful. The critical path items for Phase 1AB are now fire alarm installation and certification, and the Occupancy process. The Design-Builder deems there to be minimum risks to the balance of the remaining construction activities. This schedule forecasts that Phase 1AB scope will be available for Occupancy at the end of the Summer and Occupancy of 1C in the Fall. The Design-Builder has included specific activities of Occupancy for Phase 1AB in this schedule which is being coordinated with the City.

We will continue to monitor the schedule very closely, focusing on the critical path activities and any associated risks that may impact Substantial Performance.

Please refer to Appendix 2 of this report for progress photographs recording construction activities during January 2019.

8.0 Project Schedule (continued)

Monthly Look Ahead

During February 2019, the following key construction activities are scheduled (based on ***"Port Coquitlam Community Recreation Complex – Owner's Schedule: December 15th 2019 - Update"***.

- **Phase 1ABC – Rinks 2&3, Library and Div 9**
  - Complete Div 5, 6, 7 & 8 Roofing;
  - Complete interior walls in level 1 elevator 2 lobby;
  - Complete Div 6 corridor metal cladding;
  - Complete Rink 3 sand and insulation;
  - Commence Rink 3 pipe installation;
  - Complete Rink 3 exterior glazing;
  - Complete Rink 2 & refrigeration masonry;
  - Commence Roll Up door installation;
  - Continue with Div 9 M&E rough-In;
  - Continue with Div 9 fire alarm installation;
  - Commence M&E finishes Install; and
  - Complete Div 9 stud & drywall.

- **Phase 1C – Aquatics and Fitness Area**
  - Complete exterior steel stud and densglass;
  - Commence roofing / metal cladding & glazing; and
  - Continue with change room tile.

Please refer to Appendix 1 of this report for a copy of the revised Design-Builder's Owner's Schedule: February 15th 2019 - Update.

9.0 QUALITY ASSURANCE & QUALITY CONTROL

Construction Inspection & Monitoring

The Design-Builder is implementing a Quality Assurance and Quality Control (QAQC) program through the design and construction of the project. We are working closely with the Design-Builder and provide random audits of that program, review and opine on independent testing, physically review the quality of the construction activities, identify key inspections and tests that are completed, witness critical construction activities and collaborate with the Design-Builder to ensure optimum quality is achieved and maintained at all stages of the project.

We received a copy of Architect 49's Site Report 28, dated February 4, 2019. Numerous actions have been noted to be remedied by the Design-Builder. The Lead Consultant has confirmed that the works on site are progressing generally in accordance with the IFC drawings, specifications and building permits issued to date. A copy of the Assurance Statement dated January 2, 2019 is included in Appendix 7 of this report.

9.0 Quality Assurance & Quality Control (continued)

We did not receive copies of any concrete testing reports during this reporting period from the Design-Builder.

We received a copy of BMZ's Construction Review Memos dated January 3 & 8, 2019. Actions have been noted to be remedied by the Design-Builder.

We received a copy of Smith and Anderson's Job Report, dated January 28, 2019. Actions have been noted to be remedied by the Design-Builder.

We received a copy of WSP's Plumbing Field Report, dated January 30, 2019. Actions have been noted to be remedied by the Design-Builder.

We performed site inspections on January 2, 8, 21 & 28, 2019 to witness and monitor the progress of the works. Please refer to Appendix 3 of this report for copies of the Site Inspection Reports for this reporting period. Please refer to historic monthly progress reports for commentary on various QAQC inspection and monitoring activities, relative to specific reporting periods.

10.0 SAFETY AND ENVIRONMENTAL

We are not aware of any major Health & Safety incidents during this reporting period.

The Design-Builder is implementing a robust and professional Health and Safety program on site.

11.0 AREAS OF CONCERN & OUTSTANDING ISSUES

In general, all issues and actions raised within meetings and communications during January 2019 have been addressed or remain ongoing as part of the forthcoming design, procurement and construction phases.

The Design-Builder issued an updated schedule, ***"Port Coquitlam Community Recreation Complex – Owner's Schedule: February 15th 2019 - Update"*** during this reporting period. This schedule remains aggressive and targets a late summer Occupancy for Phase 1AB scope of work. The timely completion of the offsite servicing work that will service the project is critical in order to achieve Occupancy of the spaces.

APPENDIX 1

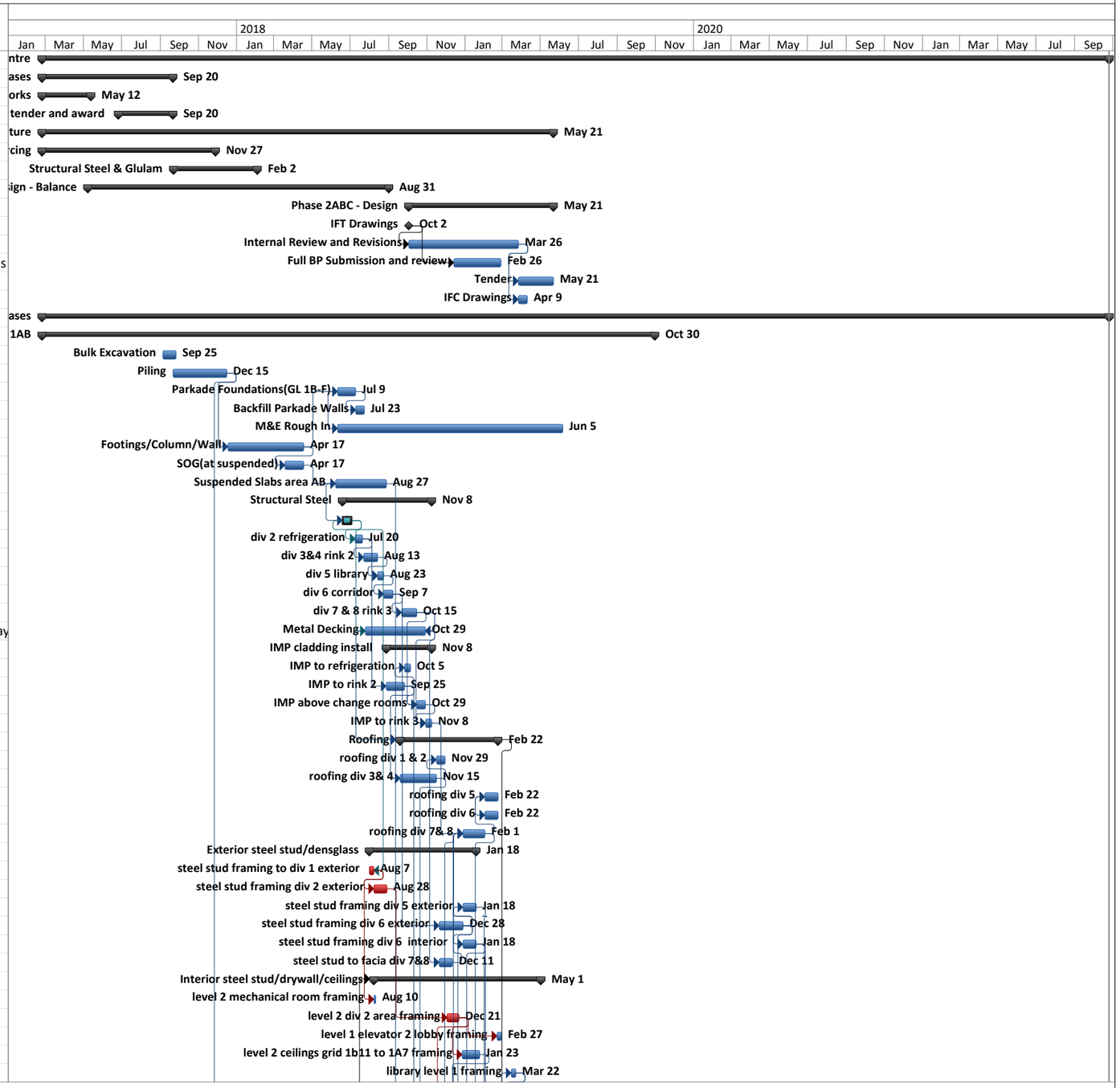
Port Coquitlam Community Recreation Centre Complex – Owner's Schedule: February 15th 2019 - Update

PORT COQUITLAM COMMUNITY RECREATION COMPLEX - OWNER'S SCHEDULE

February 15th 2019 - Update

Ventana Construction Corporation
3875 Henning Dr. || Burnaby, BC || V5C 6N5
Office 604.291.9000
Fax 604.291.9992
Web VentanaConstruction.com

ID	Task Name	Duration	Start	Finish	% Compl	Predecessors
1	**1 Port Coquitlam Recreation Centre**	**1194 days?**	**Fri 2/24/17**	**Mon 10/25/21**	**0%**	
2	**1.1 Design Phases**	**144 days**	**Fri 2/24/17**	**Wed 9/20/17**	**0%**	
3	**1.1.1 Phase 1ABC - Groundworks**	**55 days**	**Fri 2/24/17**	**Fri 5/12/17**	**0%**	
9	**1.1.2 Pile tender and award**	**60 days**	**Mon 6/26/17**	**Wed 9/20/17**	**0%**	
13	**1.2 Phase 1ABC - Design - Structure**	**560 days**	**Fri 2/24/17**	**Tue 5/21/19**	**0%**	
14	**1.2.1 Formwork/Reinforcing**	**190 days**	**Fri 2/24/17**	**Mon 11/27/17**	**0%**	
19	**1.2.2 Structural Steel & Glulam**	**90 days**	**Fri 9/22/17**	**Fri 2/2/18**	**0%**	
24	**1.2.3 Phase 1ABC - Design - Balance**	**329 days**	**Mon 5/8/17**	**Fri 8/31/18**	**0%**	
34	**1.2.4 Phase 2ABC - Design**	**160 days**	**Tue 10/2/18**	**Tue 5/21/19**	**0%**	
35	1.2.4.1 IFT Drawings	0 days	Tue 10/2/18	Tue 10/2/18	0%	32FS+7 mons
36	1.2.4.2 Internal Review and Revisions	6 mons	Wed 10/3/18	Tue 3/26/19	0%	35
37	1.2.4.3 Full BP Submission and review	50 days	Fri 12/14/18	Tue 2/26/19	0%	35FS+2.5 mons
38	1.2.4.4 Tender	40 days	Wed 3/27/19	Tue 5/21/19	0%	36
39	1.2.4.5 IFC Drawings	10 days	Wed 3/27/19	Tue 4/9/19	0%	36
40	**1.3 Construction Phases**	**1194 days?**	**Fri 2/24/17**	**Mon 10/25/21**	**0%**	
41	**1.3.1 Phase 1AB**	**676 days?**	**Fri 2/24/17**	**Wed 10/30/19**	**0%**	
42	1.3.1.1 Bulk Excavation	15 days	**Tue 9/5/17**	Mon 9/25/17	0%	
43	**1.3.1.2 Piling**	**60 days**	**Thu 9/21/17**	**Fri 12/15/17**	0%	12
44	1.3.1.3 Parkade Foundations(GL 1B-F)	20 days	Mon 6/11/18	Mon 7/9/18	0%	47
45	1.3.1.4 Backfill Parkade Walls	10 days	Tue 7/10/18	Mon 7/23/18	0%	44
46	1.3.1.5 M&E Rough In	250 days	Mon 6/11/18	Wed 6/5/19	0%	44SS
47	1.3.1.6 Footings/Column/Wall	80 days	Mon 12/18/17	Tue 4/17/18	0%	43
48	1.3.1.7 SOG(at suspended)	20 days	Mon 3/19/18	Tue 4/17/18	0%	47FS-20 days
49	1.3.1.8 Suspended Slabs area AB	55 days	Fri 6/8/18	Mon 8/27/18	0%	48
50	**1.3.1.9 Structural Steel**	**98.5 days**	**Tue 6/19/18**	**Thu 11/8/18**	**0%**	
51	1.3.1.9.1 div 1	10 days	Tue 6/19/18	Tue 7/3/18	0%	49SS+7 days
52	1.3.1.9.2 div 2 refrigeration	10 days	Mon 7/9/18	Fri 7/20/18	0%	51
53	1.3.1.9.3 div 3&4 rink 2	3 wks	Mon 7/23/18	Mon 8/13/18	0%	52
54	1.3.1.9.4 div 5 library	1.5 wks	Tue 8/14/18	Thu 8/23/18	0%	53
55	1.3.1.9.5 div 6 corridor	2 wks	Thu 8/23/18	Fri 9/7/18	0%	54
56	1.3.1.9.6 div 7 & 8 rink 3	3 wks	Fri 9/21/18	Mon 10/15/18	0%	55FS+2 wks
57	1.3.1.9.7 Metal Decking	65 days	Wed 7/25/18	Mon 10/29/18	0%	51,56FF+10 day
58	**1.3.1.9.8 IMP cladding install**	**50.5 days**	**Tue 8/28/18**	**Thu 11/8/18**	**0%**	
59	1.3.1.9.8.1 IMP to refrigeration	1.5 wks	Wed 9/26/18	Fri 10/5/18	0%	60
60	1.3.1.9.8.2 IMP to rink 2	4 wks	Tue 8/28/18	Tue 9/25/18	0%	52FS+5 wks
61	1.3.1.9.8.3 IMP above change rooms	2 wks	Mon 10/15/18	Mon 10/29/18	0%	60,56
62	1.3.1.9.8.4 IMP to rink 3	8 days	Mon 10/29/18	Thu 11/8/18	0%	61,57
63	**1.3.1.10 Roofing**	**107.5 days**	**Wed 9/19/18**	**Fri 2/22/19**	**0%**	**57SS+30 days**
64	1.3.1.10.1 roofing div 1 & 2	10 days	Fri 11/16/18	Thu 11/29/18	0%	65
65	1.3.1.10.2 roofing div 3& 4	40 days	Wed 9/19/18	Thu 11/15/18	0%	60FS-1 wk
66	1.3.1.10.3 roofing div 5	15 days	Fri 2/1/19	Fri 2/22/19	0%	68
67	1.3.1.10.4 roofing div 6	15 days	Fri 2/1/19	Fri 2/22/19	0%	66SS
68	1.3.1.10.5 roofing div 7& 8	25 days	Fri 12/28/18	Fri 2/1/19	0%	73,62,75
69	**1.3.1.11 Exterior steel stud/densglass**	**115.5 days**	**Wed 8/1/18**	**Fri 1/18/19**	**0%**	
70	1.3.1.11.1 steel stud framing to div 1 exterior	4 days	Wed 8/1/18	Tue 8/7/18	0%	51SF+5 days
71	1.3.1.11.2 steel stud framing div 2 exterior	3 wks	Wed 8/8/18	Tue 8/28/18	0%	70
72	1.3.1.11.3 steel stud framing div 5 exterior	3 wks	Fri 12/28/18	Fri 1/18/19	0%	73
73	1.3.1.11.4 steel stud framing div 6 exterior	5 wks	Tue 11/20/18	Fri 12/28/18	0%	55FS+10 wks
74	1.3.1.11.5 steel stud framing div 6 interior	3 wks	Fri 12/28/18	Fri 1/18/19	0%	73
75	1.3.1.11.6 steel stud to facia div 7&8	15 days	Tue 11/20/18	Tue 12/11/18	0%	57FS+3 wks
76	**1.3.1.12 Interior steel stud/drywall/ceilings**	**185 days**	**Wed 8/8/18**	**Wed 5/1/19**	**0%**	**128SS**
77	1.3.1.12.1 level 2 mechanical room framing	3 days	Wed 8/8/18	Fri 8/10/18	0%	70
78	1.3.1.12.2 level 2 div 2 area framing	3 wks	Mon 12/3/18	Fri 12/21/18	0%	71FS+13 wks
79	1.3.1.12.3 level 1 elevator 2 lobby framing	5 days	Thu 2/21/19	Wed 2/27/19	0%	78FS+8 wks
80	1.3.1.12.4 level 2 ceilings grid 1b11 to 1A7 framing	20 days	Thu 12/27/18	Wed 1/23/19	0%	78
81	1.3.1.12.5 library level 1 framing	5 days	Fri 3/15/19	Fri 3/22/19	0%	126



PORT COQUITLAM COMMUNITY RECREATION COMPLEX - OWNER'S SCHEDULE

February 15th 2019 - Update

Ventana Construction Corporation
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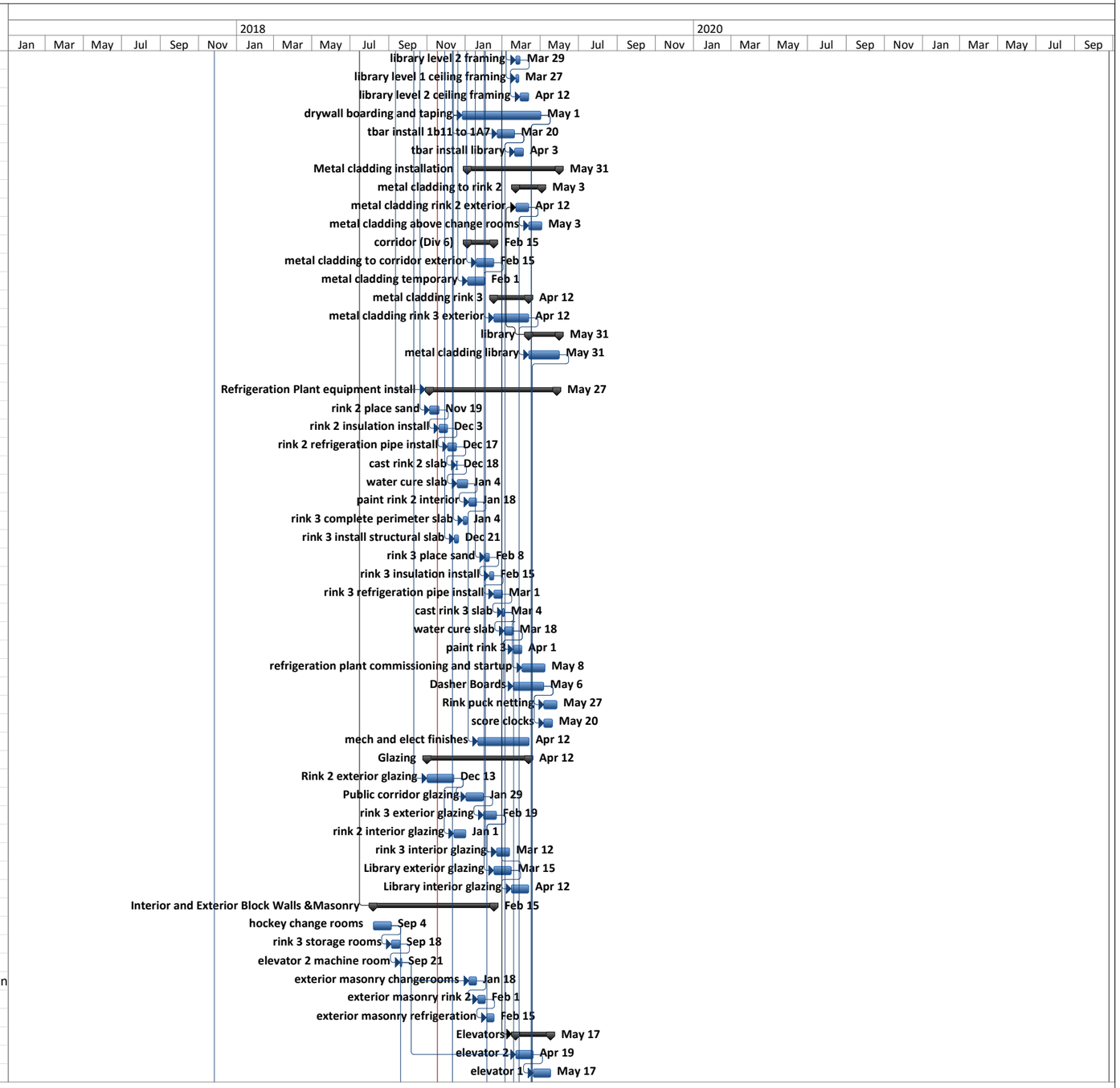
ID	Task Name	Duration	Start	Finish	% Compl	Predecessors
82	1.3.1.12.6 library level 2 framing	5 days	Fri 3/22/19	Fri 3/29/19	0%	81
83	1.3.1.12.7 library level 1 ceiling framing	3 days	Fri 3/22/19	Wed 3/27/19	0%	81
84	1.3.1.12.8 library level 2 ceiling framing	10 days	Fri 3/29/19	Fri 4/12/19	0%	82
85	1.3.1.12.9 drywall boarding and taping	90 days	Thu 12/27/18	Wed 5/1/19	0%	80FS-20 days
86	1.3.1.12.10 tbar install 1b11 to 1A7	20 days	Thu 2/21/19	Wed 3/20/19	0%	85SS+40 days
87	1.3.1.12.11 tbar install library	10 days	Thu 3/21/19	Wed 4/3/19	0%	86
88	**1.3.1.13 Metal cladding installation**	**105 days**	**Fri 1/4/19**	**Fri 5/31/19**	**0%**	
89	**1.3.1.13.1 metal cladding to rink 2**	**30 days**	**Fri 3/22/19**	**Fri 5/3/19**	**0%**	
90	1.3.1.13.1.1 metal cladding rink 2 exterior	15 days	Fri 3/22/19	Fri 4/12/19	0%	97SS-3 wks
91	1.3.1.13.1.2 metal cladding above change rooms	15 days	Fri 4/12/19	Fri 5/3/19	0%	90
92	**1.3.1.13.2 corridor (Div 6)**	**30 days**	**Fri 1/4/19**	**Fri 2/15/19**	**0%**	
93	1.3.1.13.2.1 metal cladding to corridor exterior	20 days	Fri 1/18/19	Fri 2/15/19	0%	74
94	1.3.1.13.2.2 metal cladding temporary	20 days	Fri 1/4/19	Fri 2/1/19	0%	73FS+5 days
95	**1.3.1.13.3 metal cladding rink 3**	**40 days**	**Fri 2/15/19**	**Fri 4/12/19**	**0%**	
96	1.3.1.13.3.1 metal cladding rink 3 exterior	40 days	Fri 2/15/19	Fri 4/12/19	0%	93
97	**1.3.1.13.4 library**	**35 days**	**Fri 4/12/19**	**Fri 5/31/19**	**0%**	
98	1.3.1.13.4.1 metal cladding library	35 days	Fri 4/12/19	Fri 5/31/19	0%	96
99	1.3.1.14 Refrigeration plant &rinks 2&3				0%	
100	**1.3.1.15 Refrigeration Plant equipment install**	**141.5 days**	**Mon 11/5/18**	**Mon 5/27/19**	**0%**	**49FS-10 days**
101	1.3.1.15.1 rink 2 place sand	10 days	Mon 11/5/18	Mon 11/19/18	0%	65FS-8 days
102	1.3.1.15.2 rink 2 insulation install	10 days	Tue 11/20/18	Mon 12/3/18	0%	101
103	1.3.1.15.3 rink 2 refrigeration pipe install	2 wks	Tue 12/4/18	Mon 12/17/18	0%	102
104	1.3.1.15.4 cast rink 2 slab	1 day	Tue 12/18/18	Tue 12/18/18	0%	103
105	1.3.1.15.5 water cure slab	2 wks	Wed 12/19/18	Fri 1/4/19	0%	104
106	1.3.1.15.6 paint rink 2 interior	10 days	Mon 1/7/19	Fri 1/18/19	0%	105
107	1.3.1.15.7 rink 3 complete perimeter slab	5 days	Fri 12/28/18	Fri 1/4/19	0%	68SS
108	1.3.1.15.8 rink 3 install structural slab	5 days	Fri 12/14/18	Fri 12/21/18	0%	68SS-7 days
109	1.3.1.15.9 rink 3 place sand	5 days	Fri 2/1/19	Fri 2/8/19	0%	68
110	1.3.1.15.10 rink 3 insulation install	5 days	Fri 2/8/19	Fri 2/15/19	0%	109
111	1.3.1.15.11 rink 3 refrigeration pipe install	2 wks	Fri 2/15/19	Fri 3/1/19	0%	110
112	1.3.1.15.12 cast rink 3 slab	1 day	Fri 3/1/19	Mon 3/4/19	0%	111
113	1.3.1.15.13 water cure slab	2 wks	Mon 3/4/19	Mon 3/18/19	0%	112
114	1.3.1.15.14 paint rink 3	10 days	Mon 3/18/19	Mon 4/1/19	0%	113
115	1.3.1.15.15 refrigeration plant commissioning and startup	27 days	Mon 4/1/19	Wed 5/8/19	0%	112FS+1 mon
116	1.3.1.15.16 Dasher Boards	35 days	Mon 3/18/19	Mon 5/6/19	0%	113
117	1.3.1.15.17 Rink puck netting	15 days	Mon 5/6/19	Mon 5/27/19	0%	116
118	1.3.1.15.18 score clocks	10 days	Mon 5/6/19	Mon 5/20/19	0%	116
119	1.3.1.15.19 mech and elect finishes	60 days	Mon 1/21/19	Fri 4/12/19	0%	106
120	**1.3.1.16 Glazing**	**112.5 days**	**Thu 11/1/18**	**Fri 4/12/19**	**0%**	
121	1.3.1.16.1 Rink 2 exterior glazing	30 days	Thu 11/1/18	Thu 12/13/18	0%	60FS+5 wks
122	1.3.1.16.2 Public corridor glazing	20 days	Wed 1/2/19	Tue 1/29/19	0%	121FS+2 wks
123	1.3.1.16.3 rink 3 exterior glazing	3 wks	Wed 1/30/19	Tue 2/19/19	0%	122
124	1.3.1.16.4 rink 2 interior glazing	2 wks	Fri 12/14/18	Tue 1/1/19	0%	121
125	1.3.1.16.5 rink 3 interior glazing	3 wks	Wed 2/20/19	Tue 3/12/19	0%	74,123
126	1.3.1.16.6 Library exterior glazing	4 wks	Fri 2/15/19	Fri 3/15/19	0%	72FS+1 mon
127	1.3.1.16.7 Library interior glazing	4 wks	Fri 3/15/19	Fri 4/12/19	0%	126
128	**1.3.1.17 Interior and Exterior Block Walls &Masonry**	**133 days**	**Tue 8/7/18**	**Fri 2/15/19**	**0%**	
129	1.3.1.17.1 hockey change rooms	4 wks	Tue 8/7/18	Tue 9/4/18	0%	
130	1.3.1.17.2 rink 3 storage rooms	2 wks	Wed 9/5/18	Tue 9/18/18	0%	129
131	1.3.1.17.3 elevator 2 machine room	3 days	Wed 9/19/18	Fri 9/21/18	0%	130
132	1.3.1.17.4 exterior masonry changerooms	10 days	Mon 1/7/19	Fri 1/18/19	0%	131FS+3.5 mon
133	1.3.1.17.5 exterior masonry rink 2	10 days	Mon 1/21/19	Fri 2/1/19	0%	132
134	1.3.1.17.6 exterior masonry refrigeration	10 days	Mon 2/4/19	Fri 2/15/19	0%	133
135	**1.3.1.18 Elevators**	**40 days**	**Fri 3/22/19**	**Fri 5/17/19**	**0%**	**63FS+20 days**
136	1.3.1.18.1 elevator 2	4 wks	Fri 3/22/19	Fri 4/19/19	0%	131
137	1.3.1.18.2 elevator 1	4 wks	Fri 4/19/19	Fri 5/17/19	0%	136



PORT COQUITLAM COMMUNITY RECREATION COMPLEX - OWNER'S SCHEDULE

February 15th 2019 - Update

Ventana Construction Corporation
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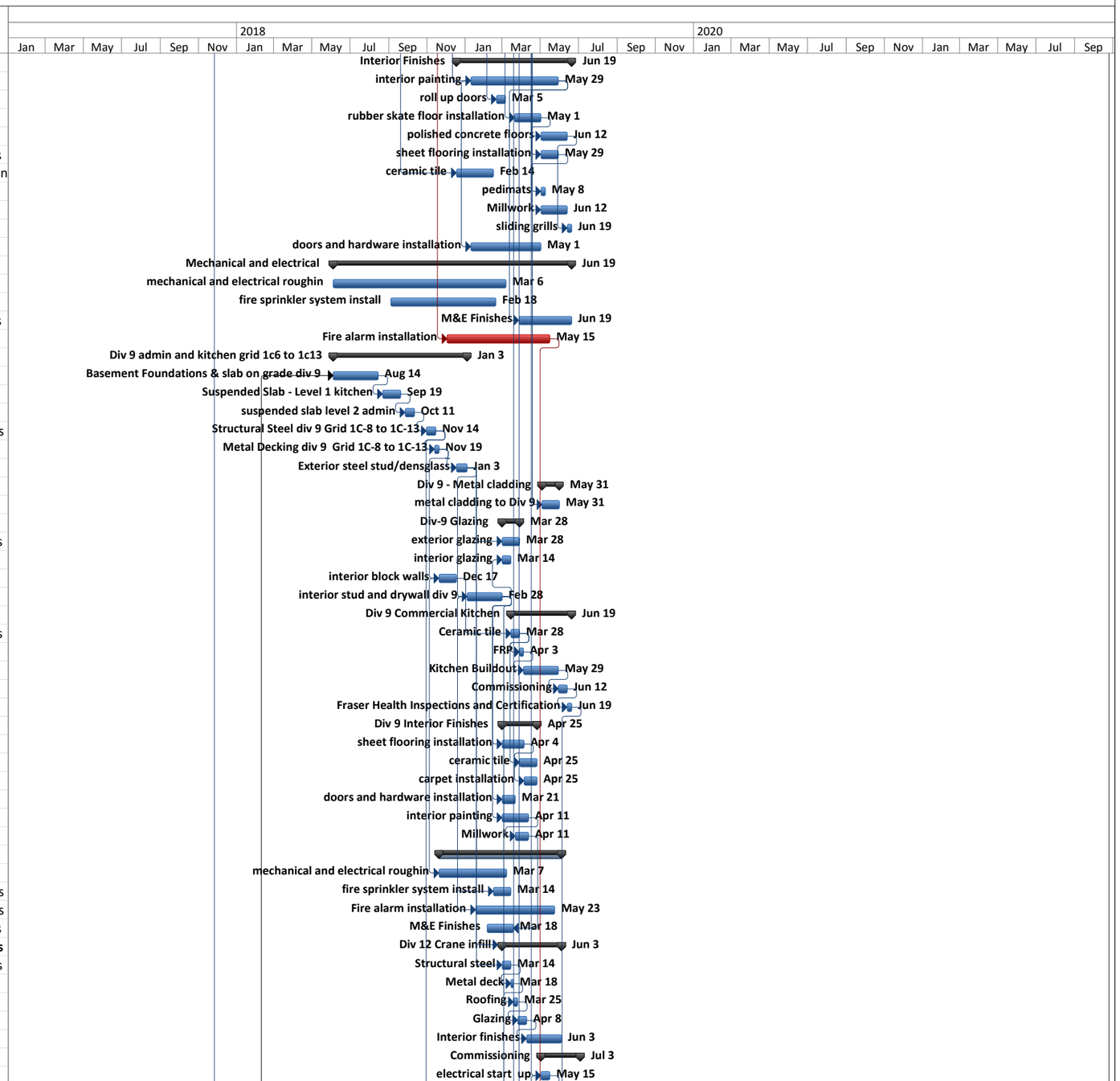
ID	Task Name	Duration	Start	Finish	% Compl	Predecessors
138	**1.3.1.19 Interior Finishes**	**129 days**	**Tue 12/18/18**	**Wed 6/19/19**	**0%**	
139	1.3.1.19.1 interior painting	100 days	Thu 1/10/19	Wed 5/29/19	0%	85SS+2 wks
140	1.3.1.19.2 roll up doors	2 wks	Wed 2/20/19	Tue 3/5/19	0%	123
141	1.3.1.19.3 rubber skate floor installation	6 wks	Thu 3/21/19	Wed 5/1/19	0%	86
142	1.3.1.19.4 polished concrete floors	6 wks	Thu 5/2/19	Wed 6/12/19	0%	85
143	1.3.1.19.5 sheet flooring installation	4 wks	Thu 5/2/19	Wed 5/29/19	0%	139FS-20 days
144	1.3.1.19.6 ceramic tile	8 wks	Tue 12/18/18	Thu 2/14/19	0%	129FS+3.6 mon
145	1.3.1.19.7 pedimats	5 days	Thu 5/2/19	Wed 5/8/19	0%	141
146	1.3.1.19.8 Millwork	30 days	Thu 5/2/19	Wed 6/12/19	0%	143FS-1 mon
147	1.3.1.19.9 sliding grills	1 wk	Thu 6/13/19	Wed 6/19/19	0%	142
148	1.3.1.19.10 doors and hardware installation	4 mons	Thu 1/10/19	Wed 5/1/19	0%	139SS
149	**1.3.1.20 Mechanical and electrical**	**265 days**	**Mon 6/4/18**	**Wed 6/19/19**	**0%**	
150	1.3.1.20.1 mechanical and electrical roughin	190 days	Mon 6/4/18	Wed 3/6/19	0%	
151	1.3.1.20.2 fire sprinkler system install	115 days	Tue 9/4/18	Mon 2/18/19	0%	
152	1.3.1.20.3 M&E Finishes	60 days	Thu 3/28/19	Wed 6/19/19	0%	139FS-45 days
153	1.3.1.20.4 Fire alarm installation	115 days	Mon 12/3/18	Wed 5/15/19	0%	78FS-3 wks
154	**1.3.1.21 Div 9 admin and kitchen grid 1c6 to 1c13**	**146 days**	**Mon 6/4/18**	**Thu 1/3/19**	**0%**	
155	1.3.1.21.1 Basement Foundations & slab on grade div 9	50 days	Mon 6/4/18	Tue 8/14/18	0%	219
156	1.3.1.21.2 Suspended Slab - Level 1 kitchen	20 days	Wed 8/22/18	Wed 9/19/18	0%	155FS+5 days
157	1.3.1.21.3 suspended slab level 2 admin	10 days	Thu 9/27/18	Thu 10/11/18	0%	156FS+5 days
158	1.3.1.21.4 Structural Steel div 9 Grid 1C-8 to 1C-13	10 days	Wed 10/31/18	Wed 11/14/18	0%	157FS+13 days
159	1.3.1.21.5 Metal Decking div 9 Grid 1C-8 to 1C-13	5 days	Tue 11/13/18	Mon 11/19/18	0%	158FS-2 days
160	1.3.1.21.6 Exterior steel stud/densglass	2 wks	Tue 12/18/18	Thu 1/3/19	0%	159FS+1 mon
161	**1.3.1.22 Div 9 - Metal cladding**	**20 days**	**Fri 5/3/19**	**Fri 5/31/19**	**0%**	
162	1.3.1.22.1 metal cladding to Div 9	20 days	Fri 5/3/19	Fri 5/31/19	0%	98FS-1 mon
163	**1.3.1.23 Div-9 Glazing**	**20 days**	**Fri 3/1/19**	**Thu 3/28/19**	**0%**	
164	1.3.1.23.1 exterior glazing	4 wks	Fri 3/1/19	Thu 3/28/19	0%	160FS+2 mons
165	1.3.1.23.2 interior glazing	2 wks	Fri 3/1/19	Thu 3/14/19	0%	167
166	1.3.1.24 interior block walls	20 days	Tue 11/20/18	Mon 12/17/18	0%	159
167	1.3.1.25 interior stud and drywall div 9	40 days	Fri 1/4/19	Thu 2/28/19	0%	160
168	**1.3.1.26 Div 9 Commercial Kitchen**	**69 days**	**Fri 3/15/19**	**Wed 6/19/19**	**0%**	
169	1.3.1.26.1 Ceramic tile	10 days	Fri 3/15/19	Thu 3/28/19	0%	166FS+3 mons
170	1.3.1.26.2 FRP	4 days	Fri 3/29/19	Wed 4/3/19	0%	169
171	1.3.1.26.3 Kitchen Buildout	2 mons	Thu 4/4/19	Wed 5/29/19	0%	170
172	1.3.1.26.4 Commissioning	2 wks	Thu 5/30/19	Wed 6/12/19	0%	171
173	1.3.1.26.5 Fraser Health Inspections and Certification	1 wk	Thu 6/13/19	Wed 6/19/19	0%	172
174	**1.3.1.27 Div 9 Interior Finishes**	**40 days**	**Fri 3/1/19**	**Thu 4/25/19**	**0%**	
175	1.3.1.27.1 sheet flooring installation	25 days	Fri 3/1/19	Thu 4/4/19	0%	167
176	1.3.1.27.2 ceramic tile	20 days	Fri 3/29/19	Thu 4/25/19	0%	169
177	1.3.1.27.3 carpet installation	15 days	Fri 4/5/19	Thu 4/25/19	0%	175
178	1.3.1.27.4 doors and hardware installation	15 days	Fri 3/1/19	Thu 3/21/19	0%	167
179	1.3.1.27.5 interior painting	30 days	Fri 3/1/19	Thu 4/11/19	0%	167
180	1.3.1.27.6 Millwork	15 days	Fri 3/22/19	Thu 4/11/19	0%	179FS-3 wks
181	**1.3.1.28 Div 9 Mechanical and electrical**	**137 days**	**Tue 11/20/18**	**Mon 6/3/19**	**0%**	
182	1.3.1.28.1 mechanical and electrical roughin	75 days	Tue 11/20/18	Thu 3/7/19	0%	166SS
183	1.3.1.28.2 fire sprinkler system install	20 days	Fri 2/15/19	Thu 3/14/19	0%	167SS+30 days
184	1.3.1.28.3 Fire alarm installation	90 days	Fri 1/18/19	Thu 5/23/19	0%	167SS+10 days
185	1.3.1.28.4 M&E Finishes	30 days	Tue 2/5/19	Mon 3/18/19	0%	180FF-18 days
186	**1.3.1.28.5 Div 12 Crane infill**	**67 days**	**Fri 3/1/19**	**Mon 6/3/19**	**0%**	**160FS+2 mons**
187	1.3.1.28.5.1 Structural steel	2 wks	Fri 3/1/19	Thu 3/14/19	0%	160FS+2 mons
188	1.3.1.28.5.2 Metal deck	2 days	Fri 3/15/19	Mon 3/18/19	0%	187
189	1.3.1.28.5.3 Roofing	1 wk	Tue 3/19/19	Mon 3/25/19	0%	188
190	1.3.1.28.5.4 Glazing	2 wks	Tue 3/26/19	Mon 4/8/19	0%	189
191	1.3.1.28.5.5 Interior finishes	2 mons	Tue 4/9/19	Mon 6/3/19	0%	190
192	**1.3.1.29 Commissioning**	**45 days**	**Thu 5/2/19**	**Wed 7/3/19**	**0%**	
193	1.3.1.29.1 electrical start up	10 days	Thu 5/2/19	Wed 5/15/19	0%	85



PORT COQUITLAM COMMUNITY RECREATION COMPLEX - OWNER'S SCHEDULE

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Ventana Construction Corporation
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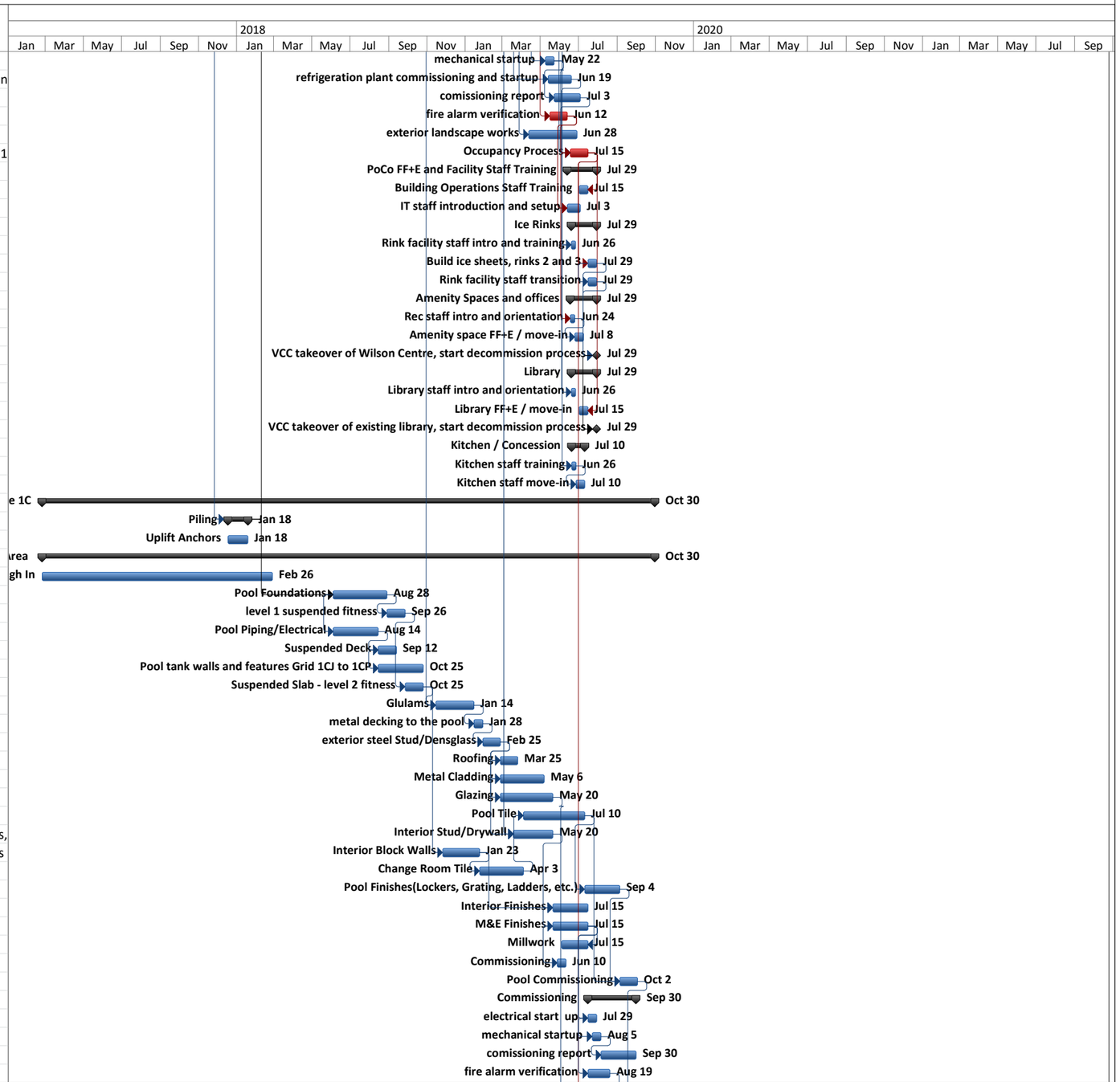
ID	Task Name	Duration	Start	Finish	% Compl	Predecessors
194	1.3.1.29.2 mechanical startup	10 days	Thu 5/9/19	Wed 5/22/19	0%	193SS+5 days
195	1.3.1.29.3 refrigeration plant commissioning and startup	27 days	Mon 5/13/19	Wed 6/19/19	0%	112FS+2.5 mon
196	1.3.1.29.4 comissioning report	30 days	Thu 5/23/19	Wed 7/3/19	0%	194
197	1.3.1.29.5 fire alarm verification	20 days	Thu 5/16/19	Wed 6/12/19	0%	153
198	1.3.1.30 exterior landscape works	55 days	Fri 4/12/19	Fri 6/28/19	0%	90
199	1.3.1.31 Occupancy Process	20 days	Tue 6/18/19	Mon 7/15/19	0%	197FS+3 days,1
200	**1.3.1.32 PoCo FF+E and Facility Staff Training**	33 days	Thu 6/13/19	Mon 7/29/19	0%	
201	1.3.1.32.1 Building Operations Staff Training	2 wks	Tue 7/2/19	Mon 7/15/19	0%	199FF
202	1.3.1.32.2 IT staff introduction and setup	3 wks	Thu 6/13/19	Wed 7/3/19	0%	197
203	**1.3.1.32.3 Ice Rinks**	**28.5 days**	**Wed 6/19/19**	**Mon 7/29/19**	**0%**	
204	1.3.1.32.3.1 Rink facility staff intro and training	1 wk	Wed 6/19/19	Wed 6/26/19	0%	195
205	1.3.1.32.3.2 Build ice sheets, rinks 2 and 3	2 wks	Tue 7/16/19	Mon 7/29/19	0%	199
206	1.3.1.32.3.3 Rink facility staff transition	2 wks	Tue 7/16/19	Mon 7/29/19	0%	205SS
207	**1.3.1.32.4 Amenity Spaces and offices**	**30 days**	**Tue 6/18/19**	**Mon 7/29/19**	**0%**	
208	1.3.1.32.4.1 Rec staff intro and orientation	1 wk	Tue 6/18/19	Mon 6/24/19	0%	199SS
209	1.3.1.32.4.2 Amenity space FF+E / move-in	2 wks	Tue 6/25/19	Mon 7/8/19	0%	208
210	1.3.1.32.4.3 VCC takeover of Wilson Centre, start decommissio	0 days	Mon 7/29/19	Mon 7/29/19	0%	206,205
211	**1.3.1.32.5 Library**	**28.5 days**	**Wed 6/19/19**	**Mon 7/29/19**	**0%**	
212	1.3.1.32.5.1 Library staff intro and orientation	1 wk	Wed 6/19/19	Wed 6/26/19	0%	204SS
213	1.3.1.32.5.2 Library FF+E / move-in	2 wks	Tue 7/2/19	Mon 7/15/19	0%	199FF
214	1.3.1.32.5.3 VCC takeover of existing library, start decommissio	0 days	Mon 7/29/19	Mon 7/29/19	0%	210SS
215	**1.3.1.32.6 Kitchen / Concession**	**15 days**	**Thu 6/20/19**	**Wed 7/10/19**	**0%**	
216	1.3.1.32.6.1 Kitchen staff training	1 wk	Thu 6/20/19	Wed 6/26/19	0%	173
217	1.3.1.32.6.2 Kitchen staff move-in	2 wks	Thu 6/27/19	Wed 7/10/19	0%	216
218	**1.3.1.33 Phase 1C**	**676 days**	**Fri 2/24/17**	**Wed 10/30/19**	**0%**	
219	**1.3.1.33.1 Piling**	**20 days**	**Mon 12/18/17**	**Thu 1/18/18**	**0%**	**43**
220	1.3.1.33.1.1 Uplift Anchors	20 days	Mon 12/18/17	Thu 1/18/18	0%	
221	**1.3.1.33.2 pool and fitness Area**	**676 days**	**Fri 2/24/17**	**Wed 10/30/19**	**0%**	
222	1.3.1.33.2.1 M&E Rough In	250 days	Fri 2/24/17	Mon 2/26/18	0%	
223	1.3.1.33.2.2 Pool Foundations	60 days	Mon 6/4/18	Tue 8/28/18	0%	219
224	1.3.1.33.2.3 level 1 suspended fitness	20 days	Wed 8/29/18	Wed 9/26/18	0%	223
225	1.3.1.33.2.4 Pool Piping/Electrical	50 days	Mon 6/4/18	Tue 8/14/18	0%	223SS
226	1.3.1.33.2.5 Suspended Deck	20 days	Wed 8/15/18	Wed 9/12/18	0%	225
227	1.3.1.33.2.6 Pool tank walls and features Grid 1CJ to 1CP	50 days	Wed 8/15/18	Thu 10/25/18	0%	226SS
228	1.3.1.33.2.7 Suspended Slab - level 2 fitness	20 days	Thu 9/27/18	Thu 10/25/18	0%	224
229	1.3.1.33.2.8 Glulams	40 days	Thu 11/15/18	Mon 1/14/19	0%	158,228
230	1.3.1.33.2.9 metal decking to the pool	10 days	Tue 1/15/19	Mon 1/28/19	0%	229
231	1.3.1.33.2.10 exterior steel Stud/Densglass	20 days	Tue 1/29/19	Mon 2/25/19	0%	230
232	1.3.1.33.2.11 Roofing	20 days	Tue 2/26/19	Mon 3/25/19	0%	231
233	1.3.1.33.2.12 Metal Cladding	50 days	Tue 2/26/19	Mon 5/6/19	0%	231
234	1.3.1.33.2.13 Glazing	60 days	Tue 2/26/19	Mon 5/20/19	0%	233SS
235	1.3.1.33.2.14 Pool Tile	70 days	Thu 4/4/19	Wed 7/10/19	0%	238
236	1.3.1.33.2.15 Interior Stud/Drywall	45 days	Tue 3/19/19	Mon 5/20/19	0%	232SS+15 days,
237	1.3.1.33.2.16 Interior Block Walls	40 days	Mon 11/26/18	Wed 1/23/19	0%	228FS+20 days
238	1.3.1.33.2.17 Change Room Tile	50 days	Thu 1/24/19	Wed 4/3/19	0%	237
239	1.3.1.33.2.18 Pool Finishes(Lockers, Grating, Ladders, etc.)	40 days	Thu 7/11/19	Wed 9/4/19	0%	235
240	1.3.1.33.2.19 Interior Finishes	40 days	Tue 5/21/19	Mon 7/15/19	0%	236,237
241	1.3.1.33.2.20 M&E Finishes	40 days	Tue 5/21/19	Mon 7/15/19	0%	240SS
242	1.3.1.33.2.21 Millwork	30 days	Tue 6/4/19	Mon 7/15/19	0%	241FF
243	1.3.1.33.2.22 Commissioning	10 days	Tue 5/28/19	Mon 6/10/19	0%	241SS+5 days
244	1.3.1.33.2.23 Pool Commissioning	20 days	Thu 9/5/19	Wed 10/2/19	0%	235,239
245	**1.3.1.33.2.24 Commissioning**	**55 days**	**Tue 7/16/19**	**Mon 9/30/19**	**0%**	
246	1.3.1.33.2.24.1 electrical start up	10 days	Tue 7/16/19	Mon 7/29/19	0%	241
247	1.3.1.33.2.24.2 mechanical startup	10 days	Tue 7/23/19	Mon 8/5/19	0%	246SS+5 days
248	1.3.1.33.2.24.3 comissioning report	40 days	Tue 8/6/19	Mon 9/30/19	0%	247
249	1.3.1.33.2.24.4 fire alarm verification	25 days	Tue 7/16/19	Mon 8/19/19	0%	241



PORT COQUITLAM COMMUNITY RECREATION COMPLEX - OWNER'S SCHEDULE

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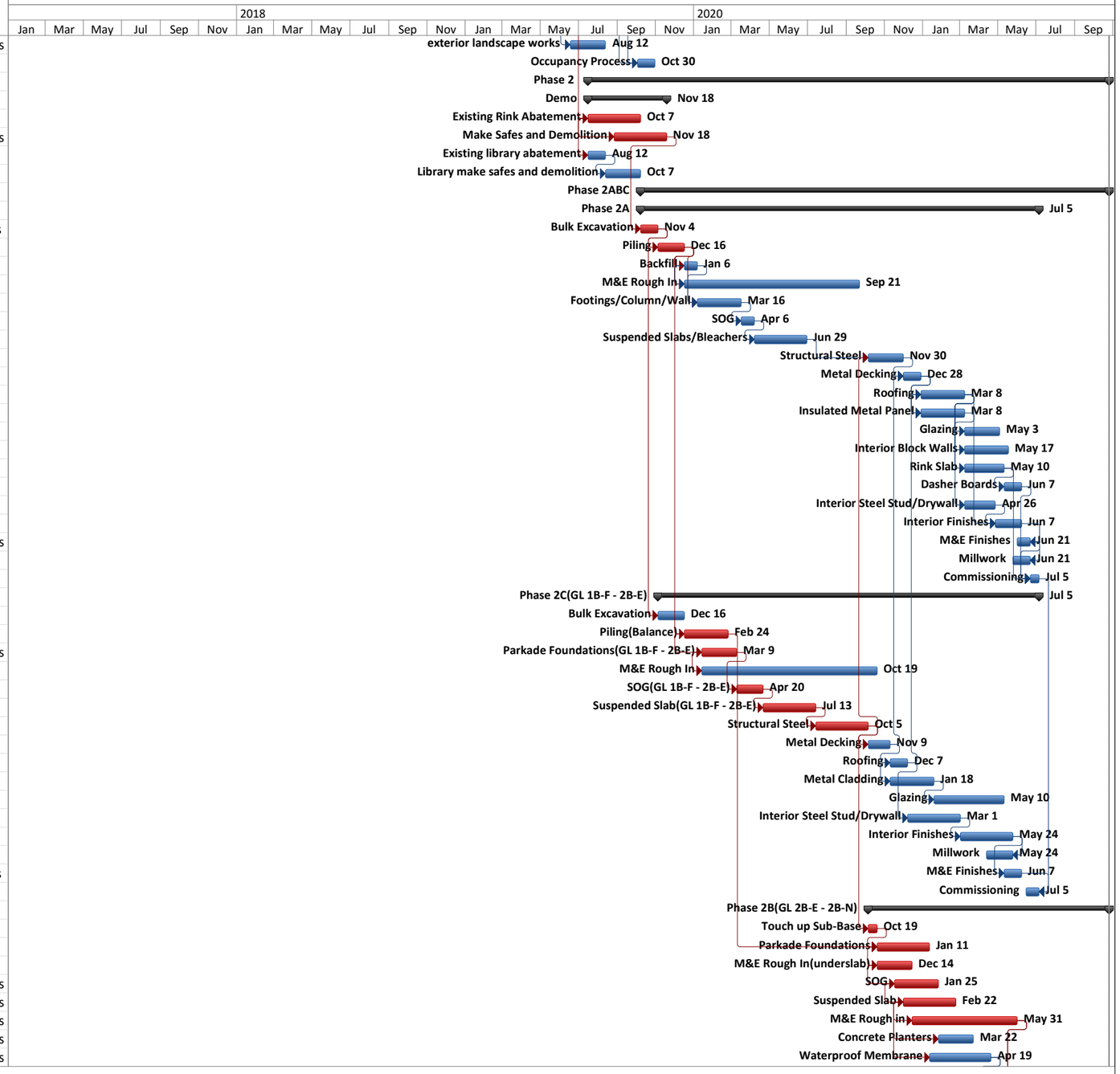
ID	Task Name	Duration	Start	Finish	% Compl	Predecessors
250	1.3.1.33.2.25 exterior landscape works	40 days	Tue 6/18/19	Mon 8/12/19	0%	234FS+20 days
251	1.3.1.33.2.26 Occupancy Process	20 days	Thu 10/3/19	Wed 10/30/19	0%	249,244
252	**1.3.2 Phase 2**	**595 days**	**Tue 7/16/19**	**Mon 10/25/21**	**0%**	
253	**1.3.2.1 Demo**	**90 days**	**Tue 7/16/19**	**Mon 11/18/19**	**0%**	
254	1.3.2.1.1 Existing Rink Abatement	60 days	Tue 7/16/19	Mon 10/7/19	0%	199
255	1.3.2.1.2 Make Safes and Demolition	60 days	Tue 8/27/19	Mon 11/18/19	0%	254SS+30 days
256	1.3.2.1.3 Existing library abatement	4 wks	Tue 7/16/19	Mon 8/12/19	0%	254SS
257	1.3.2.1.4 Library make safes and demolition	2 mons	Tue 8/13/19	Mon 10/7/19	0%	256
258	**1.3.2.2 Phase 2ABC**	**535 days**	**Tue 10/8/19**	**Mon 10/25/21**	**0%**	
259	**1.3.2.2.1 Phase 2A**	**455 days**	**Tue 10/8/19**	**Mon 7/5/21**	**0%**	
260	1.3.2.2.1.1 Bulk Excavation	20 days	Tue 10/8/19	Mon 11/4/19	0%	255FS-30 days
261	1.3.2.2.1.2 Piling	30 days	Tue 11/5/19	Mon 12/16/19	0%	260
262	1.3.2.2.1.3 Backfill	15 days	Tue 12/17/19	Mon 1/6/20	0%	261
263	1.3.2.2.1.4 M&E Rough In	200 days	Tue 12/17/19	Mon 9/21/20	0%	262SS,261
264	1.3.2.2.1.5 Footings/Column/Wall	50 days	Tue 1/7/20	Mon 3/16/20	0%	262,261
265	1.3.2.2.1.6 SOG	15 days	Tue 3/17/20	Mon 4/6/20	0%	264
266	1.3.2.2.1.7 Suspended Slabs/Bleachers	60 days	Tue 4/7/20	Mon 6/29/20	0%	265
267	1.3.2.2.1.8 Structural Steel	40 days	Tue 10/6/20	Mon 11/30/20	0%	266,287
268	1.3.2.2.1.9 Metal Decking	20 days	Tue 12/1/20	Mon 12/28/20	0%	267,288
269	1.3.2.2.1.10 Roofing	50 days	Tue 12/29/20	Mon 3/8/21	0%	268,289
270	1.3.2.2.1.11 Insulated Metal Panel	50 days	Tue 12/29/20	Mon 3/8/21	0%	268,269SS
271	1.3.2.2.1.12 Glazing	40 days	Tue 3/9/21	Mon 5/3/21	0%	270
272	1.3.2.2.1.13 Interior Block Walls	50 days	Tue 3/9/21	Mon 5/17/21	0%	269
273	1.3.2.2.1.14 Rink Slab	45 days	Tue 3/9/21	Mon 5/10/21	0%	269
274	1.3.2.2.1.15 Dasher Boards	20 days	Tue 5/11/21	Mon 6/7/21	0%	273
275	1.3.2.2.1.16 Interior Steel Stud/Drywall	35 days	Tue 3/9/21	Mon 4/26/21	0%	269
276	1.3.2.2.1.17 Interior Finishes	30 days	Tue 4/27/21	Mon 6/7/21	0%	269,275
277	1.3.2.2.1.18 M&E Finishes	15 days	Tue 6/1/21	Mon 6/21/21	0%	276FF+10 days
278	1.3.2.2.1.19 Millwork	20 days	Tue 5/25/21	Mon 6/21/21	0%	277FF
279	1.3.2.2.1.20 Commissioning	10 days	Tue 6/22/21	Mon 7/5/21	0%	273,274,277
280	**1.3.2.2.2 Phase 2C(GL 1B-F - 2B-E)**	**435 days**	**Tue 11/5/19**	**Mon 7/5/21**	**0%**	
281	1.3.2.2.2.1 Bulk Excavation	30 days	Tue 11/5/19	Mon 12/16/19	0%	260
282	1.3.2.2.2.2 Piling(Balance)	50 days	Tue 12/17/19	Mon 2/24/20	0%	261
283	1.3.2.2.2.3 Parkade Foundations(GL 1B-F - 2B-E)	40 days	Tue 1/14/20	Mon 3/9/20	0%	282SS+20 days
284	1.3.2.2.2.4 M&E Rough In	200 days	Tue 1/14/20	Mon 10/19/20	0%	283SS
285	1.3.2.2.2.5 SOG(GL 1B-F - 2B-E)	30 days	Tue 3/10/20	Mon 4/20/20	0%	283
286	1.3.2.2.2.6 Suspended Slab(GL 1B-F - 2B-E)	60 days	Tue 4/21/20	Mon 7/13/20	0%	285
287	1.3.2.2.2.7 Structural Steel	60 days	Tue 7/14/20	Mon 10/5/20	0%	286
288	1.3.2.2.2.8 Metal Decking	25 days	Tue 10/6/20	Mon 11/9/20	0%	287
289	1.3.2.2.2.9 Roofing	20 days	Tue 11/10/20	Mon 12/7/20	0%	288
290	1.3.2.2.2.10 Metal Cladding	50 days	Tue 11/10/20	Mon 1/18/21	0%	289SS
291	1.3.2.2.2.11 Glazing	80 days	Tue 1/19/21	Mon 5/10/21	0%	290
292	1.3.2.2.2.12 Interior Steel Stud/Drywall	60 days	Tue 12/8/20	Mon 3/1/21	0%	289
293	1.3.2.2.2.13 Interior Finishes	60 days	Tue 3/2/21	Mon 5/24/21	0%	292
294	1.3.2.2.2.14 Millwork	30 days	Tue 4/13/21	Mon 5/24/21	0%	293FF
295	1.3.2.2.2.15 M&E Finishes	20 days	Tue 5/11/21	Mon 6/7/21	0%	293FS-10 days
296	1.3.2.2.2.16 Commissioning	15 days	Tue 6/15/21	Mon 7/5/21	0%	279FF,295FF
297	**1.3.2.2.3 Phase 2B(GL 2B-E - 2B-N)**	**275 days**	**Tue 10/6/20**	**Mon 10/25/21**	**0%**	
298	1.3.2.2.3.1 Touch up Sub-Base	10 days	Tue 10/6/20	Mon 10/19/20	0%	287
299	1.3.2.2.3.2 Parkade Foundations	60 days	Tue 10/20/20	Mon 1/11/21	0%	298,282
300	1.3.2.2.3.3 M&E Rough In(underslab)	40 days	Tue 10/20/20	Mon 12/14/20	0%	299SS
301	1.3.2.2.3.4 SOG	50 days	Tue 11/17/20	Mon 1/25/21	0%	300SS+20 days
302	1.3.2.2.3.5 Suspended Slab	60 days	Tue 12/1/20	Mon 2/22/21	0%	301SS+10 days
303	1.3.2.2.3.6 M&E Rough in	120 days	Tue 12/15/20	Mon 5/31/21	0%	302SS+10 days
304	1.3.2.2.3.7 Concrete Planters	40 days	Tue 1/26/21	Mon 3/22/21	0%	302SS+40 days
305	1.3.2.2.3.8 Waterproof Membrane	70 days	Tue 1/12/21	Mon 4/19/21	0%	302SS+30 days



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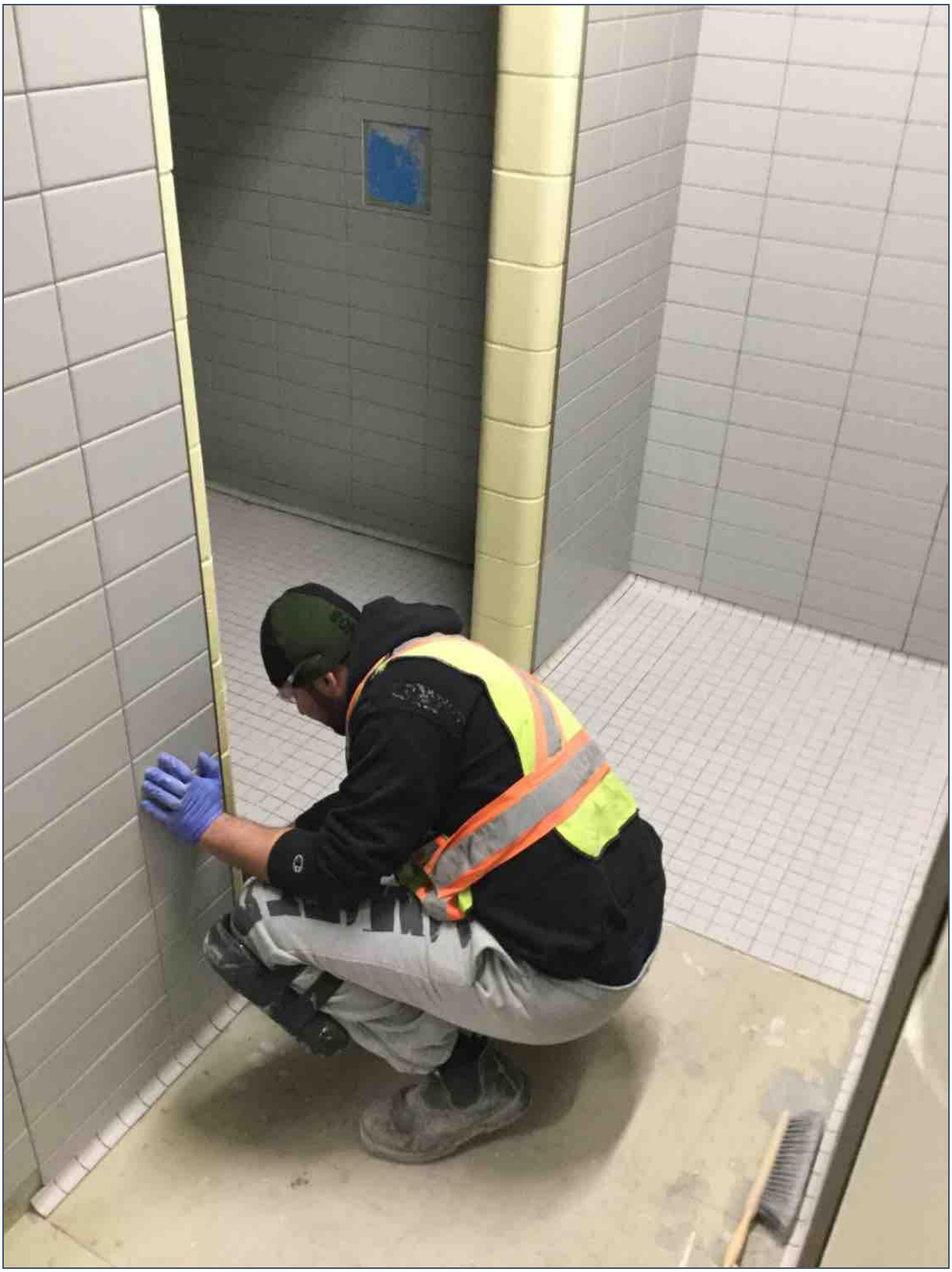
ID	Task Name	Duration	Start	Finish	% Compl	Predecessors
306	1.3.2.2.3.9 Sports Courts	120 days	Tue 4/20/21	Mon 10/4/21	0%	305
307	1.3.2.2.3.10 Line Painting	20 days	Tue 6/1/21	Mon 6/28/21	0%	303
308	1.3.2.2.3.11 Hard / Soft Landscaping	120 days	Tue 4/20/21	Mon 10/4/21	0%	305,306SS
309	1.3.2.2.3.12 M&E Finishes	60 days	Tue 6/1/21	Mon 8/23/21	0%	303
310	1.3.2.2.3.13 Commissioning and life safety testing	30 days	Tue 8/24/21	Mon 10/4/21	0%	309
311	1.3.2.2.3.14 Occupancy Process	15 days	Tue 10/5/21	Mon 10/25/21	0%	310

APPENDIX 2

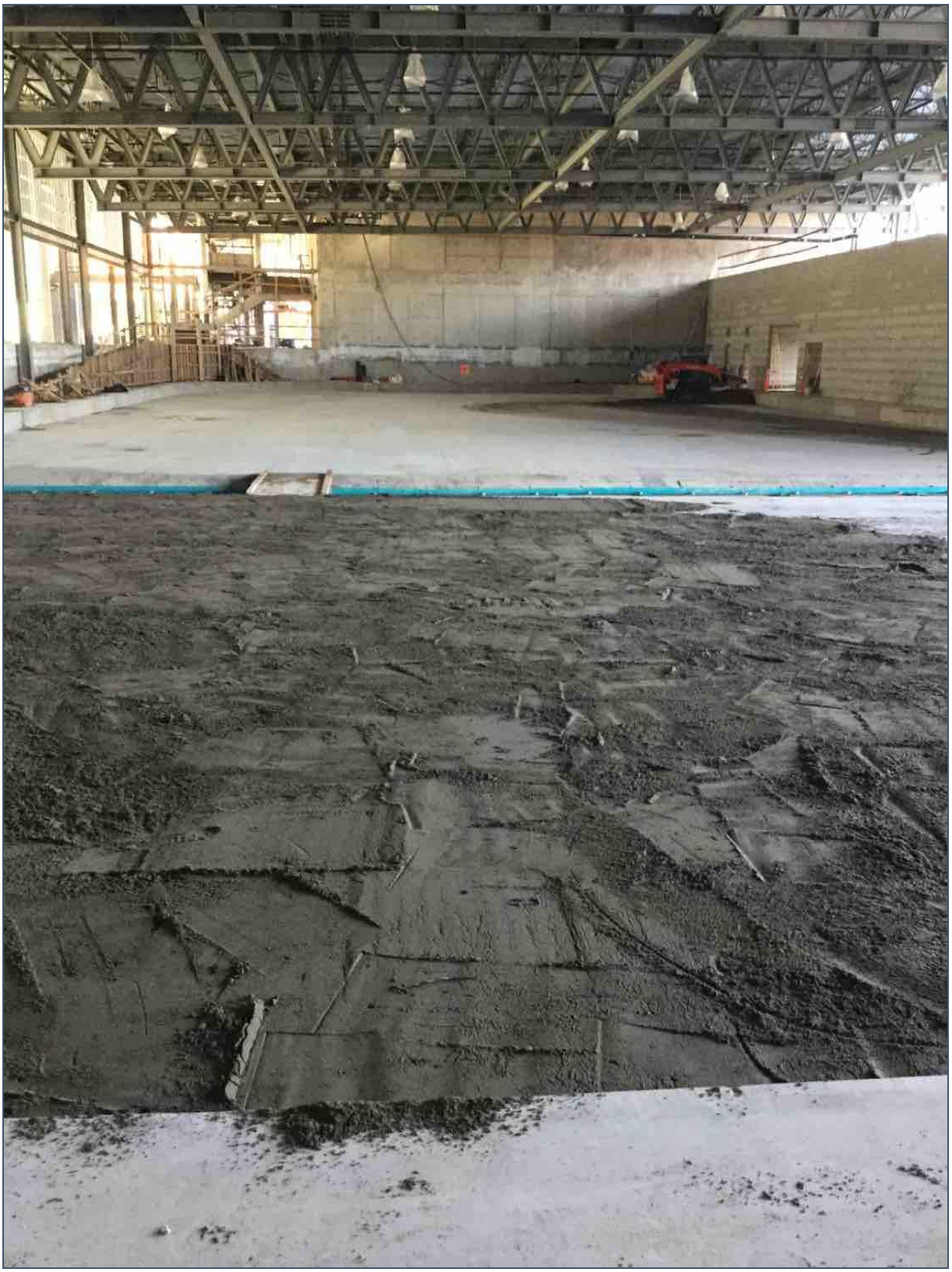
Progress Photographs – January 2019

Phase 1A - Wall boarding to W wall of concessions

Phase 1A – Refrigeration ongoing

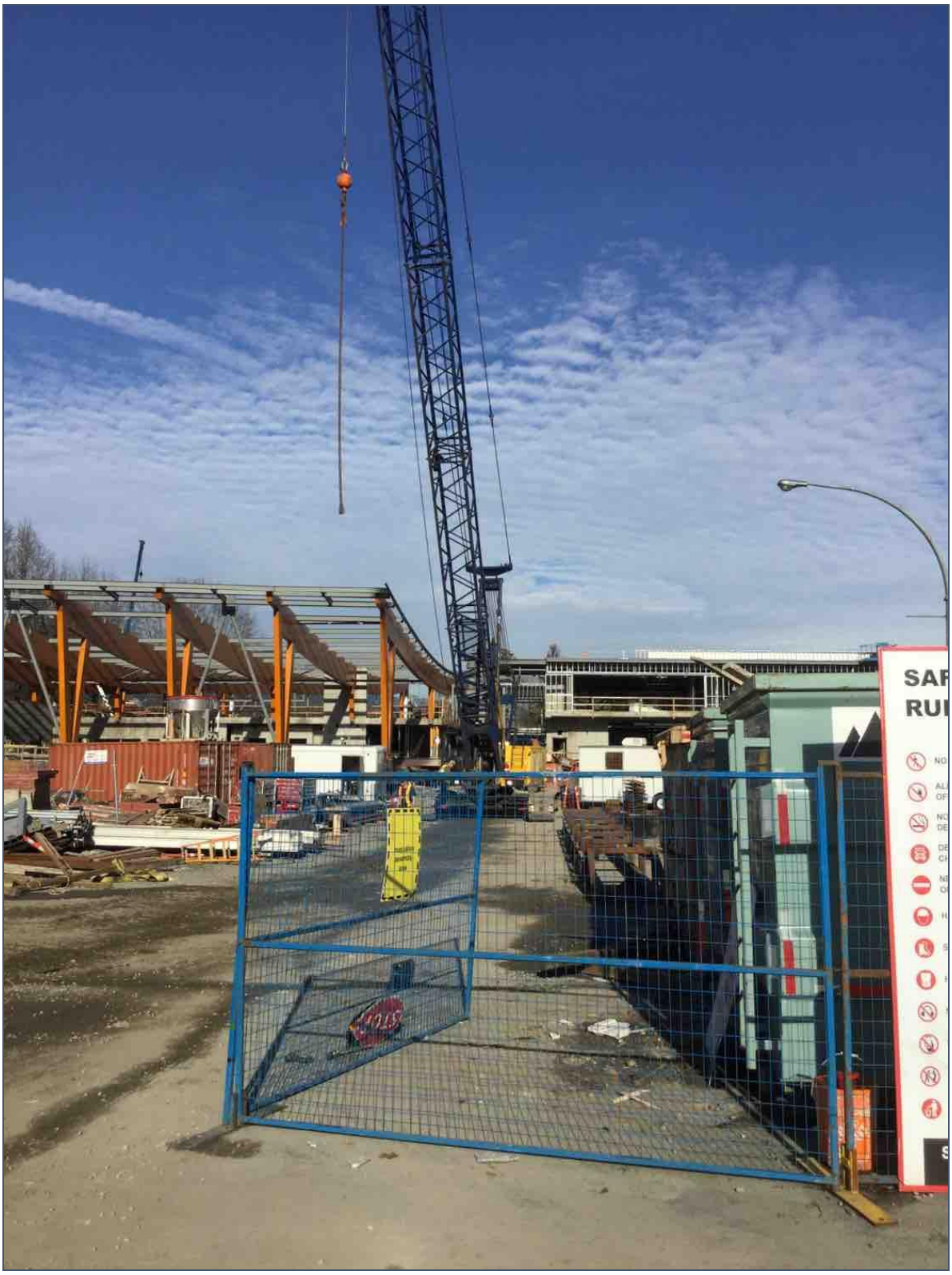


Phase1B – Cove base and floor tile to changeroom showers



Phase 1B – View of rink from skate rental office

Phase 1C – Metal deck to roof commenced over weight room



Phase 1C – Piling rig set up

APPENDIX 3

Site Inspection Reports: January 2019

Field Review Report

Project: City of Port Coquitlam Community Recreation Complex

Reporting Date: 2019-01-02

Prepared By: Alun Lewis

Weather: Sunny: ____ Cloudy: x | Rain: x | Snow: ____ | Wind: ____ | Other: ____ | **Temperature:** High of: 6 Low of: 4

Tango's Staff: (# on site)		Trade's Manpower: (# on site)					
Superintendents	1	Demolition		Waterproofing		Painting	1
Engineers		Site Work	3	Insulation		Misc. Specialties	
Office Staff		Landscaping		Spray Insul/Fire Proof		Cleaners	
CSO / First Aid		Paving		Caulking/Firestopping		Plumbing	14
Carpenters		Concrete Formwork	17	Roofing	6	Mechanical	6
Labourers		Rink prep / conc		Doors & Hardware		Refrigeration	5
Operators		Reinforcing Steel		Windows/Glazing	5	Sprinklers	4
		Structural Steel	10	Exterior Cladding	5	Electrical	12
		Metal Decking		SS/Drywall	7	Controls	2
		Masonry	5	Drywall Taper		Pool Piping	
		Rough Carpentry		Resilient Tile			
		Finish Carpentry		Ceramic Tile	4	Tango's Subtotal	
		Millwork		Elevator		Trade's Subtotal	106
						SITE TOTAL	

JOB DELAYS OR POSSIBLE DELAYS:

Reporting against newly updated Dec 12th schedule

Item 48 - Phase 1B NE foundation wall to complete (access point), pile caps to be poured

Item 55 - Div 5 library steelwork (complete Aug 23) - Steelwork to multi purpose room to be completed. Bolts to be installed to main floor

Item 56 - Div 6 corridor steelwork (complete Sept 7). Window opening & cat ladder steelwork being welded

Item 60 - IMP to concessions - SW corner to be completed (sched completion Oct 05 '18)

Items 65 & 66 - Roofing to div 1-4. Parapets & caps to be completed / installed

Item 67 - Roofing to div 5 (library) peal & stick commenced (sched Feb 01 - Feb 22)

Item 68 - Roofing to div 6 (public corridor) peal & stick commenced (sched Oct 12th, Nov 01 - Nov 22, Nov 19th sched Nov 20 - Dec 11, Dec12th sched, now showing Feb 01 - Feb 22)

Item 74 - Steelstud to complete to public corridor (schedule Oct 12th as Oct 15th - 29th, moved from Sept sched of Sept 21 - Oct 05, Nov 19th sched moved to complete Nov 13, now showing Nov 20 - Dec 28). Densglass nearing completion

Item 75 - Steelstud to interior public corridor to be commenced (sched Oct 12th start Oct 29, Nov 19th sched Nov 13 - Dec 4, now sched Dec 28 - Jan 18)

Item 80 - Steelstud not commenced to elevator lobby (previous sched Aug 13 - 17, now sched Feb 21 - Feb 27).

Item 81 - Level 2 ceilings, not commenced (Nov 19th sched Dec 04 - Dec 18, now sched Dec 27 - Jan23)

Items 82 & 83 - Steelstud to appear nearing completion & ahead of schedule

Item 84 - Main level of library ceiling framing not commenced (Oct 12 sched Nov 13 - Nov 20, Nov 19th sched Feb 8 - Feb 13, now 22 - March 27)

Item 110 - Place sand (Nov 19th sched Dec 18 - Dec 28, now Feb 1 - Feb 8). Requires heating lines to be placed

Item 123 - Public corridor glazing (Nov 19th sched Dec 14 - Jan 15, now Jan 2 - Jan 29), appears ahead of schedule

Item 125 - Phase 1A interior glazing (Nov 19th sched Nov 30 - Dec 13, now Dec 14 - Jan 1). Glass required to be installed to frames to public viewing area

Item 127 - Library glazing (sched Feb 15 - March 15). Ahead of schedule with frames for N elevation 2nd floor being installed

Item 133 - Exterior masonry to refrigeration not commenced (Oct 12th sched Oct 17 - Oct 30, Nov 19th sched Dec 19 - Jan 4, now Jan 7 - Jan 18)

Item 134 - Exterior masonry to Phase 1A rink not commenced (Oct 12th sched Oct 31 - Nov 14, Nov 19th sched Jan 7 - Jan 18, now Jan 21 - Feb 1)

Item 140 - Interior painting (Nov 19th sched Nov 20 - Apr 12, now Jan 10 - May 29). Painting to change rooms commenced

Item 145 - Cermaic tile prep works commenced (Nov 19th Sept 05 - Oct 31, now Dec 18 - Feb 14)

Item 156 - Div 9 basement foundations & SOG not complete, being used as access for erection (sched completion Aug 14 '18). Pile cap excavation to this area, recommenced Dec 18

Item 157 - Suspended slab (div 9) main floor to be commenced (see item 156) (sched Aug 22 '18 - Sept 19 '18)

Item 158 - Suspended slab (div 9) 2nd floor to be commenced (see items 156 & 157) (sched Sept 27 '18 - Oct 11 '18)

Item 161 - Structural steel (div 9) to be commenced (see items 156, 157 & 158) (Nov 19th sched Dec 6 - Dec 12, now Dec 13 - Dec 19)

Item 162 - Metal deck (div 9) to be commenced (see items 156, 157, 158 & 161) (Nov 19 sched Dec 6 - Dec 12, now Dec 20 - Dec 31)

Item 163 - Exterior steelstud & densglass not commenced (Nov 19 sched Nov 20 - Jan 10, now Jan 01 - Feb 18)

Item 164 - Roofing (Nov 19 sched Dec 11 - Jan 17, now Jan 22 0 Feb 25), has half of roof peal & stick installed
Item 170 - Interior block walls (Nov 20 - Dec 17) to be completed at S wall of kitchen
Item 180 - Ceramic tile (Nov 19 sched Dec 18 - Jan 17), not commenced and will be some considerable time as building not enclosed
Item 204 - Pool piping progressing (schedule completion shown as Aug 14). Drain bodies to leisure & lap pool installed. Some supply piping installed
Item 205 - Main pool suspended deck not commenced (schedule start shwon Aug 15 '18 & completion Sept 12 '18). Majority of pool dekc has been poured with the exception of the SE corner
Item 206 - Pool walls progressing but behind schedule (schedule completion shown as Oct 25 '18). Hot tub walls being closed in
Item 208 - Glulams (Nov 15 - Jan 14). Install progressing but may not meet end schedule date
Item 216 - Interior CMU to pool & fitness progressing (sched Nov 26 - Jan 23), appear slightly behind schedule
QAQC
As previously noted and discussed with Ventana

GENERAL COMMENTS: (Job progress-schedule items started, not started etc.)

		Comments
Site work	3	Phase 1C - Excavate for underslab parakde drainge at slab infill location
Formwork	17	Phase 1C - Strip forms to W wall of pool. Re&re of shear walls. Foermwork to stair 1C3. Sacking
		of shear wall to offices.
Structural Steel	10	Phase 1B - Install and weld steelwork for cat ladder from rink to public corridor roof. Weld steel
		beams for galzing openings along N elevation of public corridor above rink roof
		Phase 1C - Install glulam columns and beams
Masonry	5	Phase 1A - Commence exterior brickwork to electrical room
		Phase 1C - CMU walsl to staff cahngerooms and corridor walls
Roofing	6	Phase 1B - Commence insulation and membrance to rink roof
Glazing	5	Phase 1B - Commence prep above thermal panels to N elevation of stores. Install frame to N
		elevation of 2nd floor library
Exterior cladding	5	Phase 1B - Tyvek vapour barrier and framing along S elevation of public corridor
Steelstud	7	Phase 1B - Steelstud to W wall of skate lobby / E wall of rink. Parapets to library.
		Phase 1C - Layout walls to 2nd floor offices
Ceramic tile	4	Phase 1A - Floor prep & wall tiling to showers
		Phase 1B - Floor prep & wall tiling to showers
Painting	1	Phase 1A - Painting CMU & shear walls to changerooms
Plumbing	14	Phase 1C - Install supply & drain pipe to leisure pool. Plumbing rough in to changeroom walls
		Phase 1A - Install wc floor flanges
Mechanical	6	Phase 1C - Install HVAC to changerooms & weight room main floor.
		Phase 1B - Insulation to HVAC
Refrigeration	5	Phase 1A - Piping in refrigeration room
		Phase 1B - Install header for heating pipes to rink
Sprinkler	4	Phase 1C - Install sprinkler to main floor
Electrical	12	Phase 1A - Pulling wiring. Work on panels in electrical room
		Phase 1B - Wirng to panels in electrical rooms to N of rink & in parkade under main entrance
		Phase 1C - Install panels to parkad electrical room
Controls	2	Phase 1A - Controls programming

Field Review Report

Project: City of Port Coquitlam Community Recreation Complex

Reporting Date: 2019-01-08

Prepared By: Alun Lewis

Weather: Sunny: ____ Cloudy: x | Rain: x | Snow: ____ | Wind: ____ | Other: ____ | **Temperature:** High of: 5 Low of: 2

Tango's Staff: (# on site)		Trade's Manpower: (# on site)					
Superintendents	1	Demolition		Waterproofing		Painting	
Engineers		Site Work	4	Insulation		Misc. Specialties	
Office Staff		Landscaping		Spray Insul/Fire Proof		Cleaners	
CSO / First Aid		Paving		Caulking/Firestopping		Plumbing	18
Carpenters		Concrete Formwork	26	Roofing	8	Mechanical	6
Labourers		Rink prep / conc		Doors & Hardware		Refrigeration	6
Operators		Reinforcing Steel	3	Windows/Glazing	3	Sprinklers	3
		Structural Steel	8	Exterior Cladding	5	Electrical	13
		Metal Decking		SS/Drywall	13	Controls	
		Masonry	8	Drywall Taper		Pool Piping	
		Rough Carpentry		Resilient Tile			
		Finish Carpentry		Ceramic Tile	4	Tango's Subtotal	
		Millwork		Elevator		Trade's Subtotal	128
						SITE TOTAL	

JOB DELAYS OR POSSIBLE DELAYS:

Reporting against newly updated Dec 12th schedule

Item 60 - IMP to concessions - SW corner to be completed (sched completion Oct 05 '18)

Items 65 & 66 - Roofing to div 1-4. Parapets & caps to be completed / installed

Item 67 - Roofing to div 5 (library) peal & stick commenced (sched Feb 01 - Feb 22)

Item 68 - Roofing to div 6 (public corridor) peal & stick commenced (sched Oct 12th, Nov 01 - Nov 22, Nov 19th sched Nov 20 - Dec 11, Dec12th sched, now showing Feb 01 - Feb 22)

Item 74 - Steelstud to complete to public corridor (schedule Oct 12th as Oct 15th - 29th, moved from Sept sched of Sept 21 - Oct 05, Nov 19th sched moved to complete Nov 13, now showing Nov 20 - Dec 28). Densglass nearing completion

Item 75 - Steelstud to interior public corridor commenced (sched Oct 12th start Oct 29, Nov 19th sched Nov 13 - Dec 4, now sched Dec 28 - Jan 18)

Item 80 - Steelstud not commenced to elevator lobby (previous sched Aug 13 - 17, now sched Feb 21 - Feb 27).

Item 81 - Level 2 ceilings, not commenced (Nov 19th sched Dec 04 - Dec 18, now sched Dec 27 - Jan23)

Items 82 & 83 - Steelstud to appear nearing completion & ahead of schedule

Item 84 - Main level of library ceiling framing not commenced (Oct 12 sched Nov 13 - Nov 20, Nov 19th sched Feb 8 - Feb 13, now 22 - March 27)

Item 110 - Place sand (Nov 19th sched Dec 18 - Dec 28, now Feb 1 - Feb 8). Requires heating lines to be placed

Item 123 - Public corridor glazing (Nov 19th sched Dec 14 - Jan 15, now Jan 2 - Jan 29), appears ahead of schedule

Item 125 - Phase 1A interior glazing (Nov 19th sched Nov 30 - Dec 13, now Dec 14 - Jan 1). Beauty caps to be installed rink side

Item 127 - Library glazing (sched Feb 15 - March 15). Ahead of schedule with frames for N elevation 2nd floor being installed

Item 133 - Exterior masonry to refrigeration not commenced (Oct 12th sched Oct 17 - Oct 30, Nov 19th sched Dec 19 - Jan 4, now Jan 7 - Jan 18)

Item 134 - Exterior masonry to Phase 1A rink commenced (Oct 12th sched Oct 31 - Nov 14, Nov 19th sched Jan 7 - Jan 18, now Jan 21 - Feb 1)

Item 140 - Interior painting (Nov 19th sched Nov 20 - Apr 12, now Jan 10 - May 29). Painting to change rooms commenced

Item 145 - Cermaic tile prep works progressing (Nov 19th Sept 05 - Oct 31, now Dec 18 - Feb 14). See notes below in QA/QC section about temperature. Walls not finished - issue with schluters

Item 156 - Div 9 basement foundations & SOG not complete, being used as access for erection (sched completion Aug 14 '18). Pile cap excavation to this area, recommenced Dec 18

Item 157 - Suspended slab (div 9) main floor to be commenced (see item 156) (sched Aug 22 '18 - Sept 19 '18)

Item 158 - Suspended slab (div 9) 2nd floor to be commenced (see items 156 & 157) (sched Sept 27 '18 - Oct 11 '18)

Item 161 - Structural steel (div 9) to be commenced (see items 156, 157 & 158) (Nov 19th sched Dec 6 - Dec 12, now Dec 13 - Dec 19)

Item 162 - Metal deck (div 9) to be commenced (see items 156, 157, 158 & 161) (Nov 19 sched Dec 6 - Dec 12, now Dec 20 - Dec 31)

Item 163 - Exterior steelstud & densglass not commenced (Nov 19 sched Nov 20 - Jan 10, now Jan 01 - Feb 18)

Item 164 - Roofing (Nov 19 sched Dec 11 - Jan 17, now Jan 22 0 Feb 25), has half of roof peal & stick installed

Item 170 - Interior block walls (Nov 20 - Dec 17) to be completed at electrical closet & stair 1C1

Item 180 - Ceramic tile (Nov 19 sched Dec 18 - Jan 17), not commenced and will be some considerable time as building not enclosed

Item 204 - Pool piping progressing (schedule completion shown as Aug 14). Drain bodies to leisure & lap pool installed. Some supply

piping installed
Item 205 - Main pool suspended deck not commenced (schedule start shwon Aug 15 '18 & completion Sept 12 '18). Majority of pool
dekc has been poured with the exception of the SE corner
Item 206 - Pool walls progressing but behind schedule (schedule completion shown as Oct 25 '18). Hot tub walls completed
Item 208 - Glulams (Nov 15 - Jan 14). Install progressing but steelwork still to be completed and all bolts to be isntalled and torqued
Item 216 - Interior CMU to pool & fitness progressing (sched Nov 26 - Jan 23)
QAQC
As previously noted and discussed with Ventana
Temps appear low for painting and tiling works to progress with the exception of the male & female washrooms, adj to the skate lobby
which are being heated. No heat in any other areas, to allow full curing time of installed works

GENERAL COMMENTS: (Job progress-schedule items started, not started etc.)		
		Comments
Site work	3	Phase 1B - Excavate for incoming electrical duct install to electrical room along N elevation
Formwork	26	Phase 1C - Formwork to stair 1C3. Sacking walls. Re&re works to shear walls
		Phase 1B - Formwork to SW corner of rink
Rebar	3	Phase 1B - Rebar to rink apron E & N elevations
Structural Steel	8	Phase 1C - Install roof beams between glulams. Install steelwork to overhanging roof along E
		elevation. Install glulam bolts
Masonry	8	Phase 1C - CMU wall to electrica closet & under stair 1C1. CMU walls to steam, sauna,
		changerooms & to first aid, office & lunch room
Roofing	6	Phase 1B - Insulation and membrane to rink roof
Glazing	3	Phase 1B - Work on glazing install to N elevation
Exterior cladding	5	Phase 1A - Insulation and metal cladding to 2nd floor concession soffit
Steelstud	13	Phase 1B - Steelstud above public corridor windows. Steelstud to N wall of public corridor &
		to 2nd floor library W elevation
		Phase 1C - Steelstud to 2nd floor offices
Ceramic tile	4	Phase 1B - Wall tiling to male and female washroom adj to skate lobby
Plumbing	18	Phase 1C - Rough in to changerooms and CMU walls. Work to boiler room
Mechanical	6	Phase 1C - HVAC & insulation install to main floor weights room
Refrigeration	6	Phase 1A - Progressing works to refrigeration room
Sprinklers	3	Phase 1C - Sprinkler lines to main floor lounge
Electrical	13	Phase 1A - Wiring to 2nd floor electrical room panels
		Phase 1B - Install underground ducts for electrica lrrom feed to N elevation. Wiring to panels in
		electrical room to N of rink and to electrical room under main entrance. Pulling wire through
		conduits
		Phase 1C - Install conduit to boiler room

Field Review Report

Project: City of Port Coquitlam Community Recreation Complex

Reporting Date: 2019-01-21

Prepared By: Alun Lewis

Weather: Sunny: x Cloudy: x Rain: Snow: Wind: Other: **Temperature:** High of: 7 Low of: 0

Tango's Staff: (# on site)		Trade's Manpower: (# on site)					
Superintendents	1	Demolition		Waterproofing		Painting	3
Engineers		Site Work		Insulation		Misc. Specialties	
Office Staff		Landscaping		Spray Insul/Fire Proof		Cleaners	
CSO / First Aid		Paving		Caulking/Firestopping		Plumbing	22
Carpenters		Concrete Formwork	20	Roofing	8	Mechanical	3
Labourers		Rink prep / conc		Doors & Hardware		Refrigeration	4
Operators		Reinforcing Steel		Windows/Glazing	14	Sprinklers	2
		Structural Steel	7	Exterior Cladding	4	Electrical	11
		Metal Decking		SS/Drywall	15	Controls	2
		Masonry	6	Drywall Taper		Pool Piping	
		Rough Carpentry		Resilient Tile			
		Finish Carpentry		Ceramic Tile	3	Tango's Subtotal	
		Millwork		Elevator		Trade's Subtotal	
						SITE TOTAL	

JOB DELAYS OR POSSIBLE DELAYS:

Reporting against newly updated Dec 12th schedule

Items 65 & 66 - Roofing to div 1-4. Parapets & caps to be completed / installed

Item 67 - Roofing to div 5 (library) peal & stick complete & insulation & membrane commenced (sched Feb 01 - Feb 22). Ahead

Item 68 - Roofing to div 6 (public corridor) peal & stick commenced (sched Oct 12th, Nov 01 - Nov 22, Nov 19th sched Nov 20 - Dec 11, Dec12th sched, now showing Feb 01 - Feb 22). Sloped wood parapet cap being installed. Ahead

Item 75 - Steelstud to interior public corridor commenced (sched Oct 12th start Oct 29, Nov 19th sched Nov 13 - Dec 4, now sched Dec 28 - Jan 18)

Item 80 - Steelstud not commenced to elevator lobby (previous sched Aug 13 - 17, now sched Feb 21 - Feb 27).

Item 81 - Level 2 ceilings - Bulkhead framing commenced (sched Dec 27 - Jan 23)

Items 82 & 83 - Steelstud to appear nearing completion & ahead of schedule

Item 84 - Main level of library ceiling framing not commenced (Oct 12 sched Nov 13 - Nov 20, Nov 19th sched Feb 8 - Feb 13, now 22 - March 27)

Item 86 - Dywall boarding and taping (sched Dec 27 - May 01). 2nd floor M&E rooms Phase 1A complete and changeroom ceilings boarded

Item 107 - Paint rink 2 - Ongoing (sched Jan 7 - Jan 18)

Item 110 - Place sand (Nov 19th sched Dec 18 - Dec 28, now Feb 1 - Feb 8). Due to commence this week (ahead of sched)

Item 123 - Public corridor glazing (Nov 19th sched Dec 14 - Jan 15, now Jan 2 - Jan 29), to be completed to S elevation & N elevation

Item 127 - Library glazing (sched Feb 15 - March 15). Ahead of schedule with frames for N elevation 2nd floor being installed

Item 133 - Exterior masonry to changerooms (Oct 12th sched Oct 17 - Oct 30, Nov 19th sched Dec 19 - Jan 4, now Jan 7 - Jan 18) Insulation now installed to walls

Item 134 - Exterior masonry to Phase 1A rink not commenced (Oct 12th sched Oct 31 - Nov 14, Nov 19th sched Jan 7 - Jan 18, now Jan 21 - Feb 1)

Item 140 - Interior painting (Nov 19th sched Nov 20 - Apr 12, now Jan 10 - May 29). Painting to change rooms commenced

Item 145 - Cermaic tile prep works progressing (Nov 19th Sept 05 - Oct 31, now Dec 18 - Feb 14). Appear back on sched, if not ahead

Item 149 - Doors & hardware - Some doors and hardware installed to Phase 1A & 1B

Item 156 - Div 9 basement foundations & SOG not complete, being used as access for erection (sched completion Aug 14 '18). Pile cap & grade beams poured & stripped. Underslab services being placed prior to backfill for SOG

Item 157 - Suspended slab (div 9) main floor to be commenced (see item 156) (sched Aug 22 '18 - Sept 19 '18)

Item 158 - Suspended slab (div 9) 2nd floor to be commenced (see items 156 & 157) (sched Sept 27 '18 - Oct 11 '18)

Item 161 - Structural steel (div 9) to be commenced (see items 156, 157 & 158) (Nov 19th sched Dec 6 - Dec 12, now Dec 13 - Dec 19)

Item 162 - Metal deck (div 9) to be commenced (see items 156, 157, 158 & 161) (Nov 19 sched Dec 6 - Dec 12, now Dec 20 - Dec 31)

Item 163 - Exterior steelstud & densglass commenced to E elevation (Nov 19 sched Nov 20 - Jan 10, now Jan 01 - Feb 18)

Item 164 - Roofing (Nov 19 sched Dec 11 - Jan 17, now Jan 22 - Feb 25), has majority roof peal & stick installed

Item 180 - Ceramic tile (sched Dec 18 - Jan 17), not commenced and will be some considerable time as building not enclosed

Item 204 - Pool piping progressing (schedule completion shown as Aug 14). Drain bodies to leisure & lap pool installed. Some supply piping installed. No advancement this last two weeks within the pool or the pool equipment room in three weeks

Item 205 - Main pool suspended deck not commenced (schedule start shwon Aug 15 '18 & completion Sept 12 '18). Majority of pool

deck has been poured with the exception of the SE corner
Item 206 - Pool walls progressing but behind schedule (schedule completion shown as Oct 25 '18). Requires suspended slab for
features to be commenced
Item 208 - Glulams (Nov 15 - Jan 14). Install progressing but steelwork still to be completed and all bolts to be installed and torqued
Item 216 - Interior CMU to pool & fitness progressing (sched Nov 26 - Jan 23)
QAQC
As previously noted and discussed with Ventana

GENERAL COMMENTS: (Job progress-schedule items started, not started etc.)		
		Comments
Formwork	20	Phase 1B - Formwork to ramp at SW corner of rink. Sacking walls
		Phase 1C - Strip forms and clean up. Sacking walls
Structural Steel	7	Phase 1B - Erect steelwork to main entrance canopy
		Phase 1C - Bolt up glulam & steelwork connections. Align & weld S elevation steelwork
Masonry	6	Phase 1B - Install insulation to changeroom exterior wall.
		Phase 1C - CMU walls to changerooms
Roofing	8	Phase 1B - Roof inuslation and membrane to library roof
Glazing	14	Phase 1B - Window frames along N elevation of public corridor at roof level. Commence frame
		install to main floor NW corner of library. Commence insulated infill panels to 2nd floor N elevation
		of library
Cladding	4	Phase 1B - Tyvek air barrier & cladding panels along S elevation of public corridor.
Steelstud	15	Phase 1B - Boarding to S wall of public corridor. Steelstud infill to S elevation of main entrance at
		roof elevation of Phase 1C offices
		Phase 1C - Steelstud install to E elevation exterior wall
Ceramic tile	3	Phase 1B - Wall tiling to changerooms
Painting	3	Phase 1A - Painting to rink roof deck and steelwork
Plumbing	22	Phase 1A - Copper water lines to concessions area
		Phase 1B - Complete cast iron pipe connections through rink area at roof
		Phase 1C - Rough in ahead of masons. Install underslab parkade drainage around pilecaps &
		grade beams to infill area
Mechanical	3	Phase 1C - HVAC install to changerooms in conjunction with masons
		Phase 1B - HVAC to ice resurface room
Refrigeration	4	Phase 1A - Ongoing works to refrigeration room
Sprinklers	2	Phase 1C - Branch install through changerooms
Electrical	11	Phase 1A, B & C - Wiring to electrical room panels
Controls	2	Phase 1A - Controls programming in electical room

Field Review Report

Project: City of Port Coquitlam Community Recreation Complex

Reporting Date: 2019-01-28

Prepared By: Alun Lewis

Weather: Sunny: x Cloudy: x Rain: Snow: Wind: Other: **Temperature:** High of: 10 Low of: 0

Tango's Staff: (# on site)		Trade's Manpower: (# on site)					
Superintendents	1	Demolition		Waterproofing		Painting	3
Engineers		Site Work	4	Insulation		Misc. Specialties	
Office Staff		Landscaping		Spray Insul/Fire Proof		Cleaners	
CSO / First Aid		Paving		Caulking/Firestopping		Plumbing	20
Carpenters		Concrete Formwork	23	Roofing	5	Mechanical	3
Labourers		Rink prep / conc	4	Doors & Hardware		Refrigeration	5
Operators		Reinforcing Steel		Windows/Glazing	12	Sprinklers	2
		Structural Steel	8	Exterior Cladding		Electrical	12
		Metal Decking	4	SS/Drywall	16	Controls	1
		Masonry	8	Drywall Taper		Pool Piping	
		Rough Carpentry		Resilient Tile			
		Finish Carpentry		Ceramic Tile	2	Tango's Subtotal	
		Millwork		Elevator		Trade's Subtotal	132
						SITE TOTAL	

JOB DELAYS OR POSSIBLE DELAYS:

Reporting against newly updated Dec 12th schedule

Items 65 & 66 - Roofing to div 1-4. Parapets & caps to be completed / installed

Item 67 - Roofing to div 5 (library) Parapets & caps to be completed / installed (sched Feb 01 - Feb 22). Ahead

Item 68 - Roofing to div 6 (public corridor) (sched Oct 12th, Nov 01 - Nov 22, Nov 19th sched Nov 20 - Dec 11, now Feb 01 - Feb 22)

Insulation placement commenced today. Ahead

Item 80 - Steelstud not commenced to elevator lobby (previous sched Aug 13 - 17, now sched Feb 21 - Feb 27).

Item 81 - Level 2 ceilings - Bulkhead framing commenced (sched Dec 27 - Jan 23)

Items 82 & 83 - Steelstud to appear nearing completion & ahead of schedule

Item 84 - Main level of library ceiling framing not commenced (Oct 12 sched Nov 13 - Nov 20, Nov 19th sched Feb 8 - Feb 13, now 22 - March 27)

Item 86 - Dywall boarding and taping (sched Dec 27 - May 01). 2nd floor M&E rooms Phase 1A complete and changeroom ceilings boarded, concessions progressing

Item 107 - Paint rink 2 - Ongoing (sched Jan 7 - Jan 18). Behind schedule

Item 110 - Place sand (Nov 19th sched Dec 18 - Dec 28, now Feb 1 - Feb 8). Commenced today (ahead of sched)

Item 123 - Public corridor glazing (Nov 19th sched Dec 14 - Jan 15, now Jan 2 - Jan 29), to be completed to N elevation

Item 127 - Library glazing (sched Feb 15 - March 15). Ahead of schedule with frames for N elevation 2nd floor being installed. N glazaed. W elevation 2nd floor frames to be installed. Main floor frames being installed. Ahead

Item 133 - Exterior masonry to changerooms (Oct 12th sched Oct 17 - Oct 30, Nov 19th sched Dec 19 - Jan 4, now Jan 7 - Jan 18) Masonry commenced today. Behind schedule

Item 134 - Exterior masonry to Phase 1A rink not commenced (Oct 12th sched Oct 31 - Nov 14, Nov 19th sched Jan 7 - Jan 18, now Jan 21 - Feb 1).

Item 140 - Interior painting (Nov 19th sched Nov 20 - Apr 12, now Jan 10 - May 29). Painting to change rooms commenced

Item 145 - Cermaic tile prep works progressing (Nov 19th Sept 05 - Oct 31, now Dec 18 - Feb 14). Appear back on sched, if not ahead

Item 149 - Doors & hardware - Some doors and hardware installed to Phase 1A & 1B

Item 157 - Suspended slab (div 9) main floor commenced today (sched Aug 22 '18 - Sept 19 '18). Behind schedule

Item 158 - Suspended slab (div 9) 2nd floor to be commenced (see item 157) (sched Sept 27 '18 - Oct 11 '18). Behind schedule

Item 161 - Structural steel (div 9) to be commenced (see items 156, 157 & 158) (Nov 19th sched Dec 6 - Dec 12, now Dec 13 - Dec 19)

Item 162 - Metal deck (div 9) to be commenced (see items 156, 157, 158 & 161) (Nov 19 sched Dec 6 - Dec 12, now Dec 20 - Dec 31)

Item 163 - Exterior steelstud & densglass commenced to E elevation (Nov 19 sched Nov 20 - Jan 10, now Jan 01 - Feb 18)

Item 164 - Roofing (Nov 19 sched Dec 11 - Jan 17, now Jan 22 - Feb 25), has majority roof peal & stick installed

Item 170 - Interior block walls (sched Nov 20 - Dec 17). CMU walls ongoing (stair 1C1 ongoing today). Behind schedile

Item 180 - Ceramic tile (sched Dec 18 - Jan 17), not commenced and will be some considerable time as building not enclosed

Item 204 - Pool piping (schedule completion shown as Aug 14). Drain bodies to leisure & lap pool installed. Some supply piping installed

No advancement this last three weeks within the pool or the pool equipment room in four weeks

Item 205 - Main pool suspended deck not commenced (schedule start shwon Aug 15 '18 & completion Sept 12 '18). Majority of pool deck has been poured with the exception of the SE corner

Item 206 - Pool walls & features behind schedule (schedule completion shown as Oct 25 '18). Requires suspended slab for features

to be commenced
Item 208 - Glulams (Nov 15 - Jan 14). Install progressing but steelwork still to be completed and all bolts to be installed and torqued
Item 209 - Metal deck to pool (Jan 15 - Jan 28). Not commenced and requires item above to be completed
Item 216 - Interior CMU to pool & fitness progressing (sched Nov 26 - Jan 23) but requires infill slab (item 157) to be cast
QAQC
As previously noted and discussed with Ventana
Ceramic tiling to base of bull nosed CMU walls. At present, tile cuts are parallel and grout joint is splayed. Suggested tile should be
splayed and grout joint parallel. Ventana were asked to confirm with consultant which way to proceed. Ventana followed up to confirm
they are continuing with the suggested, splayed tile, parallel grout joint

GENERAL COMMENTS: (Job progress-schedule items started, not started etc.)		
		Comments
Piling	4	Deliver & offload piles to be used for emergency fire exit area
Formwork	23	Phase 1B - Sacking to concrete walls
		Phase 1C - Main floor suspended slab falsework to slab infill. Place rebar to columns from
		parkade to main floor infill
Rink prep	4	Phase 1B - Import and place bottom layer of sand, for hetaing lines to be placed on
Structural steel	8	Phase 1C - Bolt up steelwork to glulams. Nailing of splice plates to glulams. Bolting up glulams
Metal decking	4	Phase 1C - Offload & commence metal deck roof above weight room
Masonry	8	Phase 1C - CMU wall to stair 1C1
		Phase 1B - Commence masonry to changerooms at N elevation
Roofing	5	Phase 1B - Commence insulation install above public corridor
Glazing	12	Phase 1B - Install frames to library main floor. Place glass and blanking panels to 2nd floor N
		elevation of library. Measure for frames to N elevation of public corridor / main entrance at library
		roof location
Steelstud	16	Phase 1A - Boarding to concessions area. Steelstud to E elevation of skate lobby
		Phase 1C - Steelstud to multi purpose rooms
Ceramic tile	2	Phase 1B - Floor tiling to changerooms
Painting	3	Phase 1A - Painting within rink
Plumbing	20	Phase 1A - Copper and cast iron lines within concessions area. Work to 2nd floor mech room
		Phase 1B - Copper lines to library walls
Mechanical	3	Phase 1C - HVAC through main floor at reception and weight room
Refrigeration	5	Phase 1A - Progress refrigeration room
Sprinklers	2	Phase 1B - Install sprinkler lines and bracing to elevator lobby at parkade elevation
Electrcial	12	Phase's 1A, 1B & 1C - Wiring to electrical panels in electrical rooms
Controls	1	Phase 1A - Programming within main electrical room

APPENDIX 4

Certificate of Payment No.25: February 19, 2019

CERTIFICATE OF PAYMENT 25 (Progress Claim 26)

PROJECT:	City of Port Coquitlam Community Recreation Complex	**FILE:**	3 - 9308
LOCATION:	2579 - 188th Street	**INSPECTION DATE:**	04-Feb-19
	Surrey, BC	**CERTIFICATE DATE:**	19-Feb-19

Owner	**Design-Builder**
The City of Port Coquitlam	Ventana Construction (Poco) Corp.
2580 Shaughnessy St	3875 Henning Dr.
Port Coquitlam, BC V3C 3G3	Burnaby, BC V5C 6N5
Attention: Ms. Kristen Dixon	**Attention: Mr. Andrew Cameron**

		Contract Price	Change orders	Revised Contract Price
Total Contract Amount		**$ 116,717,000**	**$ 5,173,558**	**$ 121,890,558**

PAYMENT CALCULATION	**Gross Amount to Date**	**Previous Period**	**Gross Amount This Period**	**Holdback**	**Net Payment This Period**
Total Work Completed	$ 53,653,144	$ 49,803,088	$ 3,850,056	$ 385,006	$ 3,465,051
Total Work Completed	**$ 53,653,144**	**$ 49,803,088**	**$ 3,850,056**	**$ 385,006**	**$ 3,465,051**
Add: Holdback Released	$ 0	$ 0	$ 0	$ 0	$ 0
Current Net Payable			**$ 3,850,056**	**$ 385,006**	**$ 3,465,051**
Plus GST (5.0%) on Net Payable					$ 173,253
Total Current Payable Amount					**$ 3,638,303**
Holdback Retained to Date (incl. this Certificate)					$ 4,865,314
Total GST Paid to Date (incl. this Certificate)					$ 2,189,391
PROJECT COST TO COMPLETE					**$ 68,237,414**

This is to Certify that, for the Port Coquitlam Community Recreational Centre, a payment of $3,638,303 (incl. GST) will be due to the Design Builder after the City of Port Coquitlam's Representative has given approval for payment for the work completed during the period ending January 31, 2019. As per the Builder's Lien Act, a 10% Holdback amount has been deducted amounting to $385,006. The total Holdback retained to date is $4,865,314 and the total GST paid to date is $2,189,391 (not including the pre-payment costs). The Adjusted Project Cost to Complete is $68,237,414 (Not incl. GST & holdback).

CERTIFIED BY:	**REVIEWED BY:**
Neil Murray, MRICS	Rob Wilson, MRICS, PQS
Associate Director	Director

APPENDIX 5

Owner’s Meeting Minutes #17: January 15, 2019

Ventana Construction (POCO) Corp.
3875 Henning Dr.
Burnaby, BC V5C 6N5

Office 604.291.9000
Fax 604.291.9992
Web VentanaConstruction.com

Date Issued	2019-01-21
Project	Port Coquitlam Community Recreation Complex, 2150 Wilson Ave, Port Coquitlam
Meeting	Owners Meeting Minutes #17
Meeting Held On	2019-01-15

Present:

Lori Bowie	City of Port Coquitlam	POCO	604.927.5411	bowiel@portcoquitlam.ca
Lewis Reilly	Tango Managment	TM	604.734.6416	lreilly@tangomanagement.ca
Andrew Cameron	Ventana Construction (Poco) Corporation	VCC	604.291.9000	acameron@ventanaconstruction.com
Jerry Brouwer	Ventana Construction (Poco) Corporation	VCC	604.291.9000	jbrouwer@ventanaconstruction.com
Joseph Lenz	Ventana Construction (Poco) Corporation	VCC	604.291.9000	jlenz@ventanaconstruction.com
Tallon O'Neill	Ventana Construction (Poco) Corporation	VCC	604.291.9000	TONeill@ventanaconstruction.com

Copies To:

Kristen Dixon	City of Port Coquitlam	POCO	604.927.5411	dixonk@portcoquitlam.ca
Alun Lewis	Tango Managment	TM	604.734.6416	alewis@tangomanagement.ca
John Bowser	Tango Managment	TM	604.734.6416	bowser@tangomanagement.ca
Dan Marsolais	Ventana Construction (Poco) Corporation	VCC	604.291.9000	dmarsolais@ventanaconstruction.com
Haley Hartley	Ventana Construction (Poco) Corporation	VCC	604.291.9000	hhartley@ventanaconstruction.com
Lloyd Froome	Ventana Construction (Poco) Corporation	VCC	604.291.9000	lfroome@ventanaconstruction.com
Matt Fraser	Ventana Construction (Poco) Corporation	VCC	604.291.9000	mfraser@ventanaconstruction.com
Marco Bordignon	Ventana Construction Corporation	VCC	604.291.9000	mbordignon@ventanaconstruction.com

Old Business

	DESCRIPTION	ACTION BY	REQUIRED BY
1.01 SAFETY			
17.1	**No Safety or security incidents to report.**	Info	-
1.02 DESIGN			

14.1	Play Structure- VCC to RFI types to Tango. Meeting 15 - Tango RFI via owner RFI 85. JL to review with MB. Meeting 16- Poco advised the play structure is to be fenced in with lockable gate.		-
15.3	POCO/ Tango to review if daycare demographic will require structure, and if age-group prompts a specific structure.	POCO, TM	2018-12-19
17.1	**POCO to review phase 2 drawings; after VCC reviews/comments.**		-
17.2	**VCC to provide net floor area of child care space to POCO for Fraser Health review.**	VCC	2019-01-22
17.3	**Millwork: Poco to review millwork email from VCC(Joseph) and confirm millwork revision by way of Owner RFI in order for A49 to proceed with design.**	POCO, TM	-

1.04 SCHEDULE

17.1	**VCC noted the following milestones:** • **Temp wall cladding is at 50%** • **VCC noted glazing install is in progress, next area of install is Rink 3/Library.** • **VCC advised roof to rink 3 nearly complete and progress to follow AVM membrane install as weather permits.** • **Main electrical room commissioning is complete.** • **P1A mechanical room build-out in progress** • **Tile work in P1A change rooms is well underway, floor tile remains** • **Masonry in pool area in progress** • **Rink 3 structural slab is poured** • **Painting to P1A has commenced** • **Div 9 (Admin/Kitchen) steel stud is underway.** • **Hydro work on Kingsway complete. VCC waiting for Hydro tie-in.**		-

1.05 CITY/STAKE HOLDERS MEETING

17.1	**Next stakeholder meeting to be held Feb 27/19 and a site walk through will take place.**	Info	-

1.07 OFFSITE WORK

17.1	**VCC/POCO held a meeting Jan 14/19 to review phase 2 approval and phase 1 traffic management plans. VCC to forward pricing for overnight work and creating a temporary roadway.**	VCC	-

7.02 TERRY FOX ITEMS

8.1	POCO to advise on Terry Fox items and where they are to be located in the main entry/corridor. POCO to advise if additional power/data is required. POCO requested for a meeting with A49 to envision the design, VCC to arrange meeting and mark up the drawings showing location. Once the meeting the sketch is complete POCO is to meet with Terry Fox Family. VCC advised that this all needs to be a decision on this within 3 weeks. Meeting 11- VCC confirmed they provided a QCO for electrical rough in and arch design coordination. Tango confirmed display cases are already specified. Meeting 12- VCC to have A49 provide break down and review the amount of hours. Meeting 13- Signed QCO is still outstanding. VCC to send sketches. Meeting 14- VCC advised on upcoming meeting with A49 to review CSCR and will forward to Tango for final approval. Meeting 15- VCC advised this will be reviewed with A49, then advise on any revisions of consultant service change request. Meeting 16- VCC to finalize with A49 and advise on change order amount. Meeting 17- VCC meeting with A49 to review change orders.	VCC	2018-10-31

8.01 FFE P1C

15.1	Tango to forward FFE final comments to VCC for coordination as they are relatively minor in nature. Meeting 16- Tango to finalize P1AB FFE mark-ups before the xmas break, all other area FFE comments to be provided in the New Year. **Meeting 17- P1ABC mark-ups received. Spec's for scoreboards is pending POCO finalization of FFE budget**	POCO, TM	2019-01-22

8.03 FT. DRESSING RM.

9.1	VCC to review feature dressing room at Langley Event Centre for sqft. Tango to review Coquitlam Rec Centre, together decide feasibility of feature room for the rec centre. Meeting 10- POCO noted that proceeding with the feature change room is dependent on stake holder buy in. Meeting 12- VCC noted sketch is to be per Arch progress set. Meeting 13- BTY is reviewing rough order of magnitude. Meeting 14- VCC to review with BTY. Meeting 15- Done. A49 to comment on design rough-in hours. **Meeting 17- Tango to forward VCC response to BTY for finalization**	TM	2019-01-22

9.01 OWNER RFI'S

17.1	**VCC to forward critical owner RFI's to Tango for action.**	VCC	2019-01-22

10.02 TREE REMOVAL

17.1	**VCC to review milled wood completion with Silverback Jan 21st. Post review- VCC to advise of potential uses of wood.**	VCC	2019-01-25

11.01 GLAZING REDUCTION AT S. SIDE OF GYMNASIUM

11.1	VCC to look into reduction of glazing or alternate glazing material at South side of the gymnasium in phase 2 to reduce glare facing score board.	VCC	2018-08-21
15.1	A49 has requested opportunity to present semi-opaque glazed walls. VCC/Tango to arran	VCC, TM	2018-12-06
16.1	After VCC receives CPI material slideshow, VCC will forward to Poco/Tango for review.		-
17.1	**Tango/POCO to advise by end of January if CPI is preferable. VCC to review costing and advise if cost-neutral.**	VCC, POCO, TM	2019-01-31

11.03 OWNER DELIVERABLES

14.2	LED Signage- Tango to provide direction on LED building signage by Oct 19/18. Meeting 15- Tango review direction with PoCO and advise. Meeting 16- Approved. ASI/ESI will be produced. **Meeting 17- ASI received, pending pricing.**	Info	-
16.1	Keyway manufacturer finalization pending review by Poco (Rana) **Meeting 17- Sargent approved by POCO per email dated Dec 20/18.**	Info	-
17.1	**Snooker Task Lighting: POCO to provide VCC with the snooker task lighting specs. VCC to review revised layout with A49 and send to POCO (Lori).**	VCC, POCO	-

11.05 FIBRE OPTIC

16.1	VCC to provide as-builts of additional conduit/fibre lines that have been located. Tango to have Poco IT (Robin) review.	VCC	-
17.1	**VCC to coordinate as-builts as they become available. POCO requested Hub's CAD offsite files.**	VCC	-

15.01 ACTIVENET

16.1	VCC to advise when the gate- kicker is required for electrical rough in.	VCC	-

New Business

DESCRIPTION	ACTION BY	REQUIRED BY

17.01 PHASE 2 CITY PARKING

17.1	**VCC to review probability for utilization of existing library lot for phase 2 City parking.**	VCC	2019-02-01

17.02 NEXT MEETING

17.1	**The next meeting will be held February 19, 2019 at 11:00am.**	All	2019-02-19

These minutes are believed to be a true and accurate record of all items discussed. Any errors and/or omissions should be reported, in writing, to Ventana Construction (POCO) Corp. as soon as possible.

Recorded by:
Ventana Construction (POCO) Corp.
Tallon O'Neill

APPENDIX 6

Project Dash Board: January 31, 2019

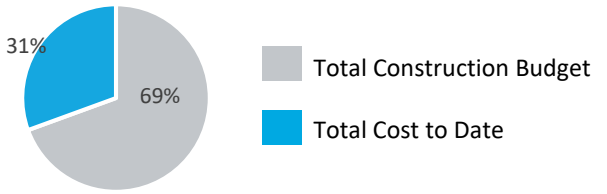
PROJECT DASH BOARD

Updated: 2018-12-31

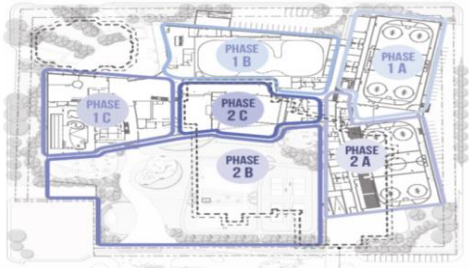
PROJECT SCHEDULE

Task / Activity	Start	Finish
Design	Dec-16	Jan-19
Permits	Feb-17	Feb-19
Procurement	Feb-17	May-19
Phase 1A - Participant Ice	Mar-17	Jul-19
Phase 1B - Leisure Ice & Library	Apr-17	Jul-19
Phase 1C - Aquatics, Fitness, All Age & Admin	Aug-17	Oct-19
Phase 2A - Spectator Ice	Oct-19	Jul-21
Phase 2B - Underground Parking	Oct-20	Oct-21
Phase 2C - MP, Flex Hall & Child Care	Jan-20	Jul-21

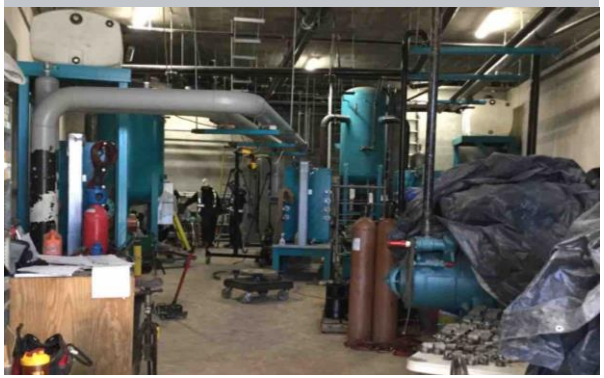
CONSTRUCTION BUDGET



PHASING PLAN



PHASE 1A - Overview



PHASE 1B - Overview

PHASE 1C - Overview

APPENDIX 7

Architecture 49 Site Report #28: February 4, 2019

Architecture49 Inc.
270 - 1075 West Georgia
Vancouver BC
V6E 3C9

T 1.604.736.5329
F 1.604.736.1519
architecture49.com

February 04, 2019

Tango Management Group
2288 Manitoba Street
Vancouver, BC V5Y 4B5

Attention: Lewis Reilly, Director
lreilly@tangomanagment.ca

Reference: Port Coquitlam Community Recreation Complex, Port Coquitlam, BC

To whom it may Concern:

We reviewed the project on-site on January 31, 2019 and via photographs, and based on the visit, review, photos, inspection reports and ongoing correspondence with the site supervisor to date, we verify that to the best of knowledge the work is progressing generally in accordance with the project's IFC drawings, specifications and building permits issued to date.

Sincerely,
ARCHITECTURE49 INC.

Stella Nicolet, Architect AIBC, AAA, AIA, LEED AP BD+C, CCCA, CCA
Managing Principal

ARCHITECTURE 49

SITE REPORT

Date: February 04, 2019

FR No.: 028

Contractor: Ventana Construction (Poco) Corp.
Attn: Joseph Lenz
Email: jlenz@ventanaconstruction.com

From: Dave Maté
Architecture49 Inc.
270 – 1075 West Georgia
Vancouver, BC, V6J 4Y3
Tel: (604) 736-5329
Fax: (604) 736-1519

Owner: City of Port Coquitlam
c/o: Tango Management Group
Email: lreilly@tangomanagement.ca

Attachments **No. of Pages: 26**

Project/File: 159-00406-02 Field Reports

Project: Port Coquitlam Community Recreation Complex

Location: Port Coquitlam, B.C.

Copies to:

☒ To:	Ventana Construction	Attn:	Andrew Cameron	email	acameron@ventanaconstruction.com
			Tallon O'Neill		toneill@ventanaconstruction.com
			Jerry Brouwer		jbrouwer@ventanaconstruction.com
			Matt Fraser		mfraser@ventanaconstruction.com
☒ To:	Tango Management Group	Attn:	Lewis Reilly	email	lreilly@tangomanagement.ca
☒ To:	Architecture49 Inc	Attn:	Stella Nicolet	email	Stella.Nicolet@architecture49.com
			Simon Mellor		Simon.mellor@architecture49.com
			Antonio Rigor		Antonio.rigor@architecture49.com

Date of Visit: Jan 29 & 31, 2019	**Weather:** Jan 29 – Sunny & Jan 31Overcast	**Temperature:** Jan 29 +8 & Jan 31 +7° C	

Observations (General Work):

- Site works appears in general compliance with the construction documents.
- Health and site safety measures observed to be in place.

Work in Progress:

- Rink 2 structural steel coating.
- Phase 1B north exterior wall Change Room/Water Entry Room masonry. Wall type W1.
- Phase 1AB Change Rooms Drying area tiling.
- Level 2 Storage 1A216 south shaft wall and steel stud north wall. 2hr FRR
- Level 2 Corridor 1A213 north shaft wall. 2hr FRR
- Level 2 Corridor 1A213 east wall. Wall type FR152
- Level 2 Concession GWB along GL1A-2.6- . Wall type W7.
- Public Corridor 1B118 north exterior wall GL 1B-F AVB. Wall type W5
- Public Corridor 1B118 roofing. Roof type R1

- Rink 3 under rink heat piping and backfill
- Rink 3 ramp wall/fireplace concrete finishing
- Rink 3 north face Curtain Wall glazing and spandrel panels between GL 1B-9 & 1B-11-
- Library concrete finishing
- Library north and west face glazing.
- Library west face mullions.
- GL 1C-13.Exterior sheathing. Wall type W7a
- Phase 1C Level 1 formwork from1C-E to 1C-N between 1C-7 to 1C-9
- Phase 1C Level 1 masonry walls, Storage Room 1C124B
- Phase 1C Level 2 steel framing

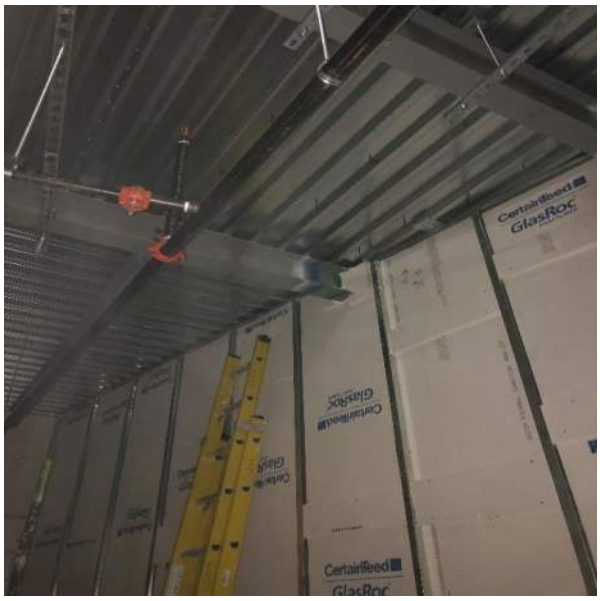
Attachments:

- None

Information or Action required (carried forward):

Level 2 north wall along GL 1A-H between 1A-1 & 1A-2+ AVB to be sealed. Wall type 7.

Level 2 north wall along GL 1A-H between 1A-1 & 1A-2+ AVB to be sealed. Wall type 7.



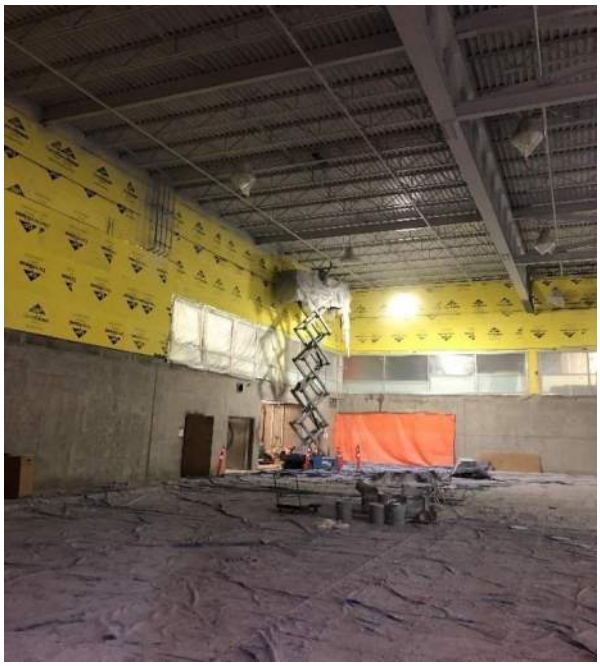
Level 2 Storage 1A216 south shaft wall firestopping to be completed. 2hr FRR

Level 2 Storage 1A216 south shaft wall firestopping to be completed. 2hr FRR

Site Photos:

Rink 2 structural steel coating

Rink 2 structural steel coating



Rink 2 structural steel coating

Phase 1B north exterior wall Change Room/Water Entry Room masonry looking southeast. Wall type W1.

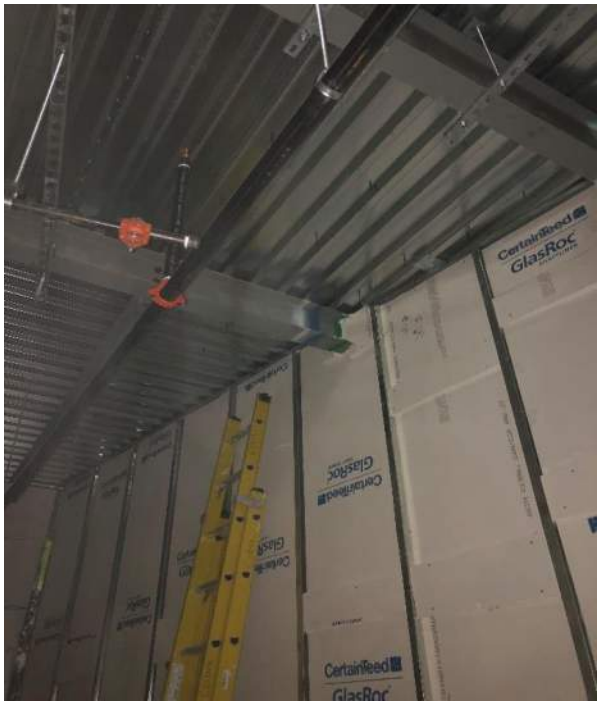
Phase 1B north exterior wall Change Room/Water Entry Room masonry. Wall type W1.

Phase 1AB Change Rooms Drying area tiling.

Phase 1AB Change Rooms Drying area tiling.

Phase 1AB Change Rooms Drying area tiling.

Phase 1AB Change Rooms Drying area tiling.



Level 2 Storage 1A216 south shaft wall and steel stud north wall. 2hr FRR

Level 2 Storage 1A216 south shaft wall and steel stud north wall. 2hr FRR

Level 2 Corridor 1A213 north shaft wall. 2hr FRR

Level 2 Corridor 1A213 east wall. Wall type FR152

Level 2 Concession looking east

SITE REPORT

Level 2 Concession looking east.

Level 2 Concession GWB along GL1A-2.6- . Wall type W7.

Level 2 Public Space 1A200 looking south.

Public Corridor 1B118 north exterior wall GL 1B-F AVB. Wall type W5

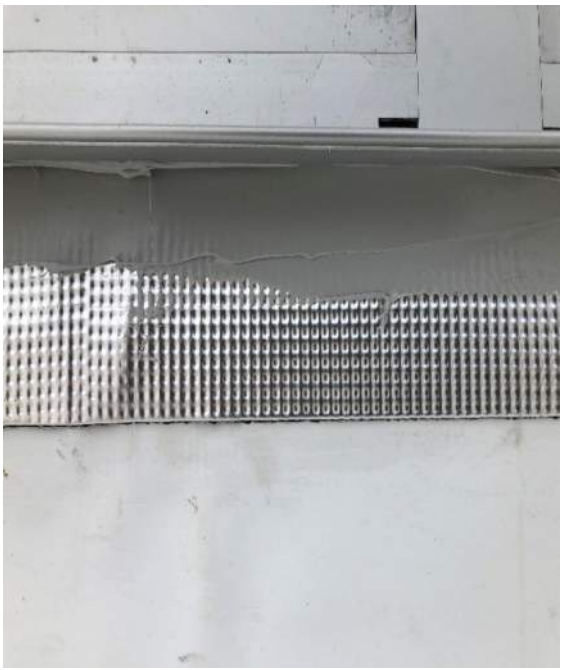
Public Corridor 1B118 north exterior wall GL 1B-F AVB. Wall type W5

Public Corridor 1B118 north exterior wall GL 1B-F AVB. Wall type W5

Public Corridor 1B118 north exterior wall GL 1B-F AVB. Wall type W5

Public Corridor 1B118 north exterior wall GL 1B-F looking southeast

Public Corridor 1B118 north exterior wall GL 1B-F, mullion backer rod and sealant.



Public Corridor 1B118 north exterior wall GL 1B-F, mullion backer rod and sealant.

Corridor east exterior wall along GL 1B-14 sheathing looking south. Wall type W5.

Public Corridor 1B118 roofing membrane and welding. Roof type R1.

Public Corridor 1B118 roofing membrane and welding. Roof type R1

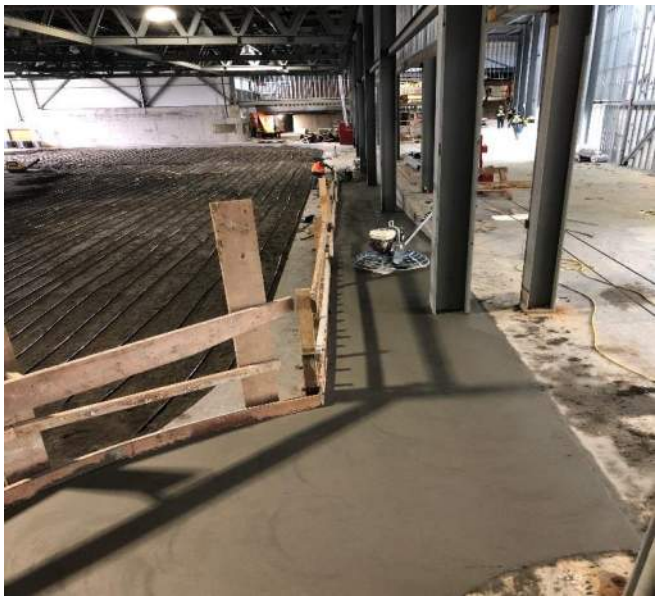
Public Corridor 1B118 roofing membrane. Roof type R1

Public Corridor 1B118 roofing membrane. Roof type R1

Public Space 1A200 south exterior wall. Wall type W7

Rink 3 under rink heat piping and backfill

Rink 3 under rink heat piping and backfill



Rink 3 ramp/fireplace concrete finishing looking east

Rink 3 ramp/fireplace concrete finishing looking northwest

Rink 3 north face Curtain Wall glazing between GL 1B-9 & 1B-11- looking north.

Rink 3 north face Curtain Wall glazing and spandrel panels between GL 1B-9 & 1B-11- looking southeast.

Rink 3 north face Curtain Wall glazing and spandrel panels between GL 1B-9 & 1B-11- .

Library concrete finishing at north entrance

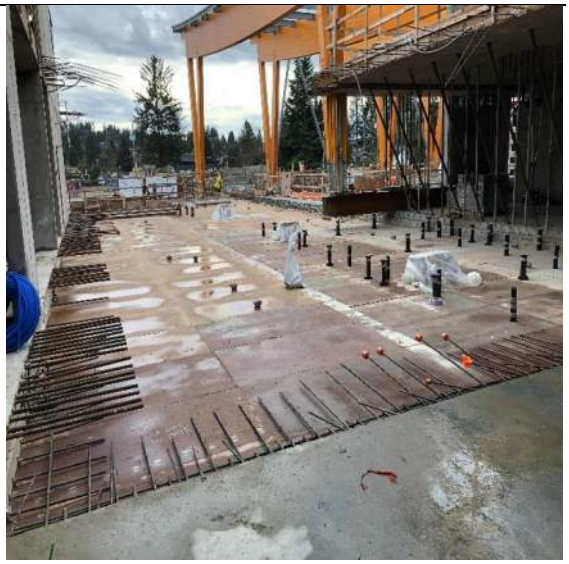
Library north face glazing.

Library west face glazing.

Library west face mullions

Library west face mullions

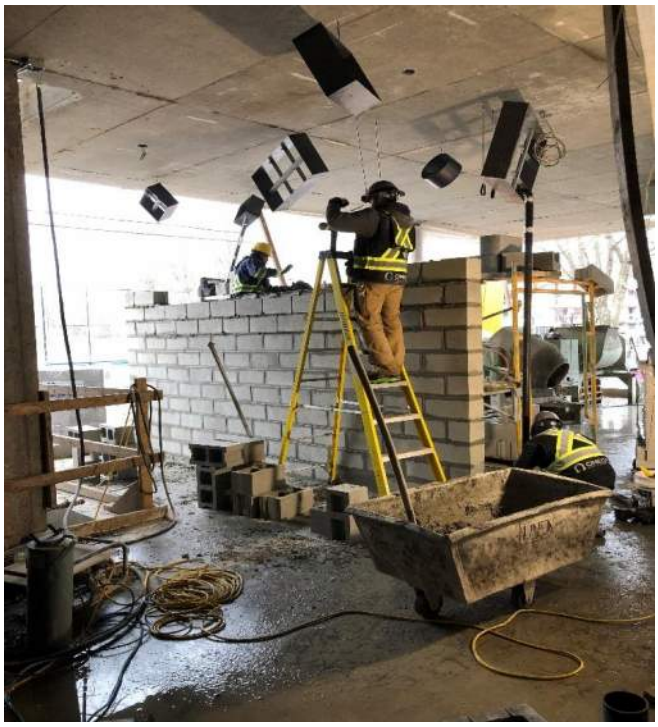
Library west face glazing.



Phase 1C Level 1 formwork from1C-E to 1C-N between 1C-7 to 1C-9

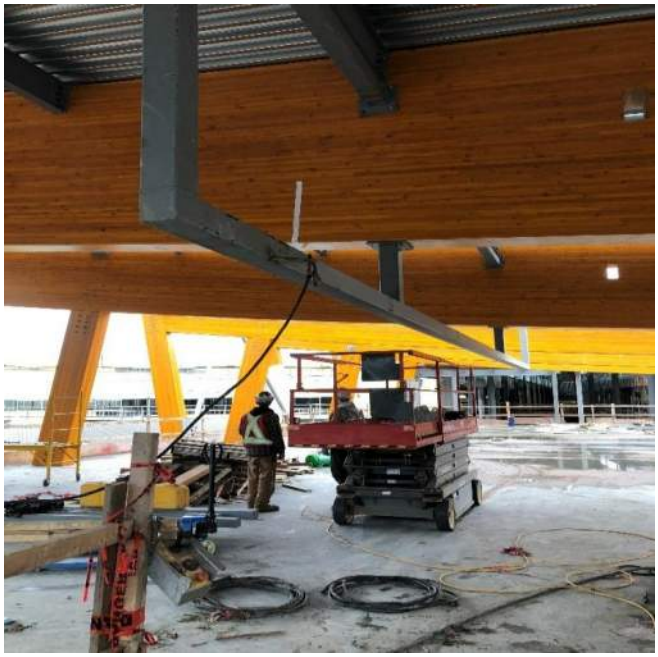
GL 1C-13.Exterior sheathing looking west. Wall type W7a

GL 1C-13.Exterior sheathing looking south. Wall type W7a



Phase 1C Level 1 masonry walls, Storage Room 1C124B

Phase 1C Level 2 steel framing



Phase 1C Level 2 steel framing

ARCHITECTURE 49

SITE REPORT

Issued by the Consultant:

Dave Maté Sr. Contract Administrator		February 04, 2019
Name and title of person signing	*Signature*	*Date*

BRYSON MARKULIN ZICKMANTEL
STRUCTURAL ENGINEERS

Reviewed by SER:
Initials

Suite #501 – 510 Burrard Street, Vancouver, B.C. V6C 3A8 • (604) 685-9533 • **www.bmzse.com**

CONSTRUCTION REVIEW MEMO

BC Rec Centre

PROJECT: POCO **JOB #:** 80058-01 **DATE:** Jan 3

Grade Beam ℄ 1B-A from 1B10+ to 1B11

1 Pile cap PC1 ℄ 1BB+/~~to~~ 1B10

Generally conforms to dwg

BMZ:

Note: This memo reports observations made during construction review, only. Any comments requiring action by the contractor are to assist the contractor to comply with the contract documents and are not to be taken as a contract change notice. These observations do not, in any way, relieve the contractor of the sole responsibility to construct the work in accordance with the contract documents, nor do these observations in any way, represent a complete list of all work needed to comply with the contract documents. The contractor is required to independently check all his own work, and is not to rely on these observations, in any way, as relieving him of this important responsibility.

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PoCo Rec

CONSTRUCTION REVIEW MEMO

PROJECT: Wilson Ave PoCo **JOB #:** 80058-01 **DATE:** Jan 8/19

300 mm thick Slab on piles outside ~~west~~ East 1/2 of Ring Beam Rink 3

Stairs Main to 2nd

1CC to 1CD 1CA to 1C2 —

→ 1) add keyway at landing

2) Carry C-bars into keyway

Generally conforms to dwgs + spec)

BMZ:

Note: This memo reports observations made during construction review, only. Any comments requiring action by the contractor are to assist the contractor to comply with the contract documents and are not to be taken as a contract change notice. These observations do not, in any way, relieve the contractor of the sole responsibility to construct the work in accordance with the contract documents, nor do these observations in any way, represent a complete list of all work needed to comply with the contract documents. The contractor is required to independently check all his own work, and is not to rely on these observations, in any way, as relieving him of this important responsibility.

MECHANICAL AND PLUMBING FIELD REPORT

DATE:	January 30, 2019	**FR NO.:**	MP.14
Contractor	Ventana Construction	**FROM:**	Arnie Saito/Seann Caldwell WSP Canada Inc. 840 Howe Street Vancouver BC V6Z 2A9
ATTN:	Andrew Cameron		
Cameron	acameron@ventanaconstruction.com		
Mechanical:	Omega Mechanical Ltd.		
ATTN:	Mitch Kelly/Nick Sciankowy		
EMAIL:	mitch@omegamechanical.com		
PROJECT:	**Port Coquitlam Recreation Complex**	**PROJECT NO.:**	159-00406-02
ATTACHMENTS:		**LOCATION:**	2150 Wilson Ave, Port Coquitlam

Distributed to:

☒	Omega	Attn:	Gary Martin/Kyle Parhar	Email:	gmartin@omegamechanical.ca

Date of Inspection: **January 10, 2019**
January 24, 2019 **Weather:** **Cloudy/Rainy** **Temperature:** **7°C**

General Note: Strike-thru items are completed or fully addressed and will be deleted in the next report.
General (Work Reviewed):

1. **1A Water Entry Room and Mechanical Rooms to date.**
2. **Plumbing piping and rough-ins installed in 1ABC to date.**
3. **Mechanical piping and HVAC in 1ABC to date.**

Work in Progress:

1. **Rough-in of Phase 1ABC plumbing piping (Water, Sanitary and Venting)**
2. **Phase 1ABC Storm piping from roof drains down to tie-in points above grade.**
3. **Phase 1ABC Gas piping mains inside building.**
4. **Phase 1AB hydronic piping.**
5. **Phase 1ABC Sheet metal ductwork inside building**
6. **Phase 1ABC sprinkler piping inside building**

Observations:

1. **Phase 1C, Pool Area: Slab is completely poured below the pool. WSP discussed with Omega that domestic hot and cold for the foot shower could be fed from the Phase 1C mechanical room, thru the pool equipment room and**

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follow the same routing as the pool piping serving the water park. WSP to issue SI after confirming details with A49. Pipe coring thru foundation wall has been made to accommodate piping serving shower. Pool wood framing is being built-up ~~– no piping installed as of yet~~. Deck Drainage openings are installed. Update: Pool Equipment piping install is progressing, approximately 25% complete.

2. Phase 1A, Rink 2: ~~Most of the sprinkler piping and heads are installed. RWLs and vent piping serving floor drains have been installed for Rink 2. Piping has been pressure tested – submit report for consultant records.~~
3. Phase 1A, Changerooms: Dropped ceilings are being installed where domestic water, Zamboni Water, sanitary, storm and vent mains are installed in the Change Room areas. 4" cold water main has been changed to stainless steel from copper. Some insulation has been added to the domestic water piping. Most of the sprinkler mains, branches and heads have been installed.
4. Phase 1A, Changerooms: Plumbing rough-in for individual fixtures has been completed. Sheet metal ductwork installation is progressing and mostly complete. Drywall ceilings have been added within shower areas.
5. Phase 1A: Level 2 storm piping has been installed and connected to roof drains above.
6. Phase 1A, Mechanical Room (second floor): ~~Concrete pads have been formed in mechanical room.~~ Most of the equipment are on concrete pads. Equipment includes Boilers B-1, B-2, domestic hot water heaters, tanks, pumps, and heat pump heat exchanger (Photo #1,2, and #3). Concrete Pads have 12" wide depressions on them with floor drains for equipment drainage. Hydronic main piping installation has been progressing (approximately 50% installed) at the ceiling level – contractor to confirm structural approval has been provided prior to full install (photo #2 and #13).
7. Phase 1ABC: Gas Meter at NE corner of Rink 2 installed. A portion of the gas piping downstream of the meter (inside building) has been installed and connected. Gas is being used for temporary heat (photo #4-gas meter).
8. Phase 1A, Rink 2: Gas lines serving Rink 2 radiant heaters have been installed and roof openings provided for flue connections.
9. Phase 1B, Library Area: Heat pumps serving Phase 1A and 1B are all mostly installed on level 1W and 2W (photo #5). Hydronic piping mains serving heat pumps installed on level 1.
10. Phase 1B: Library Area: Domestic water, storm, sanitary and vent line at ground floor ceiling level have been installed. Piping not yet insulated. Plumbing fixture rough-ins on level 1 have been installed.
11. Phase 1B, Rink 3: Storm RWLs installed in Rink 3. Roof drain in Rink 3 have been revised to dual drains. Most of the hydronic heating mains at ceiling level have been installed. Gas mains are partially installed. Most of the sprinkler piping and heads are installed.
12. Phase 1AB: Most main ductwork and branches installed in phase 1AB. (photo #6).
13. Phase 1A, Rink 2: Piping and concrete rink slab are installed (photo #7A).
14. Phase 1B, Rink 3: Depressed Concrete floor slab has been poured for the ice rink. Heating header installed above depressed slab (Photo #7B). Radiant tubing is being stored on the NE corner of Rink 3.
15. Phase 1A, Refrigeration Room: 200mm heating main risers from refrigeration room to second floor are complete.
16. ~~Phase 1ABC (Mechanical Equipment): The following HVAC equipment is on site and in storage: Boilers B-3, B-4, 38 heat pumps for phase 1AB, domestic hot water heaters, pumps, expansion tanks, roof curbs, and fire dampers.~~
17. Phase 1C: 150mm storm piping at phase 1C at the north side between gridlines 1C6 and 1C13 will have a potential conflict with 3300mm height dropped ceiling. A-49 has confirmed ceiling will be dropped to accommodate storm piping. The RWL drop shown at the corner of Facility Manager office 1C120 will also need to be relocated due to a wall layout change during construction.
18. ~~Phase 1C: Sheet metal for phase 1C, electrical room is complete.~~

19. Phase 1C, Mechanical Room: Boilers, expansion tanks and heat exchanger are located in the mechanical room on concrete pads (photo #8 and #9). Domestic Water Heaters are palleted inside. Hole has been cored thru exterior mechroom wall for future water main install.
20. Phase 1C, Weight room, Level 1: Sheet metal duct mains in the process of being installed. A portion of the ductwork has been insulated. Plumbing piping partially installed.
21. Phase 1C, West Side Changerooms: Some openings provided thru CMU walls for pipes and ducts. Plumbing piping install in progress.
22. Phase 1C, East Side Changerooms and Commercial Kitchen: Most of the duct mains and majority of open ended branch ducts are installed. Commercial Kitchen area has NFPA 96 exhaust ducting going up to level 2 space above.
23. Phase 1C, Multipurpose Rooms on Level 2: Steel-stud partitions going up. Storm piping from roof drains installed.
24. Makeup air unit MUA-1 is installed on roof (photo #10).
25. Exhaust Fans EF-16, EF-018, EF-40, Fluid cooler and DH-2 condensing unit are installed on roof (photo #11).
26. Dehumidifier DH-2 and heat recovery unit HRV-5 are installed on roof (photo #12).
27. Mechanical and plumbing components to-date installed as per contract documents.

Photos:

Photo 1: Level 2 Mech Room, Boilers B-1, B-2

Photo 2: Level 2 Mech Room, Pumps P-1, P-2

Photo 3: Level 2 Mech Room, Domestic Water Heaters (WHs)

Photo 4: Gas Meter at Phase 1A, outside of Rink #2

Photo 5: Heat Pump and ductwork, P-1AB Library.

Photo 6: Ductwork in Phase 1AB (Level 2 Library)

Photo 7A: Rink 2 Slab concrete topping

Photo 7B: Rink 3 Heating Main on depressed slab

Photo 8: P1C Mech Room, Boilers B-3, B-4

Photo 9 :P1C Mech Room, Tanks/Heat Exchangers

Photo 10: MUA-1 on roof

Photo 11: EF-16, 18, 40, Fluid Cooler, DH-2, Condensing Unit on roof

Photo 12: DH-2 and HRV-5 on roof

Photo 13: Hydronic Piping and duct mains suspended from roof/ceiling structure above in second floor Mech Rm.

Information or Action Required:

1. **Items are currently in progress; Submit pipe pressure test reports for Consultant Records.**
2. **Further discussion/confirmation is needed for storm piping potentially interfering with 3300mm ceiling (item 20 above).**
3. ~~**Ensure trap primers are installed for all sanitary p-traps as per contract documents**~~**.**
4. **Ensure temporary heaters provide a minimum of 10 deg. Space temperature or as required by the structural engineer when pouring and curing the concrete rink slabs.**
5. **Maintain record as-built redline drawings on site.**
6. **Ensure there is space in mechanical room 1A202 for condenser for phase 2.**
7. **Provide seismic slack cables on suspended equipment such as heat pumps. Provide seismic anchoring of other equipment.**

8. **DH-2 ductwork will have to be revised for modified unit orientation.**
9. **Omega to confirm insulation is also being provided for rectangular ductwork in areas where round duct is externally insulated.**
10. **Fastening of large pipes in mechanical room 1A202 to underside of ceiling deck (photo #13) is not acceptable by structural engineer.**

Issued by the Consultant:

Arnie Saito, AScT Seann Caldwell, P. Eng		January 30, 2019
Name and Title	Signature	Date

Smith + Andersen
338 – 6450 Roberts Street Burnaby British Columbia V5G 4E1
604 294 8414 f 604 294 6405 smithandandersen.com

JOB REPORT

PROJECT NAME: Port Coquitlam Recreation Center

COMPANY: A49

ATTENTION: Antonio Rigor, David Mate

PROJECT NO.: 16590.000 DATE: 2019-01-28

JOB REPORT NO.: E-12 ISSUED BY: Ryan Blaney

General review is being performed in accordance with the requirements of the BRITISH COLUMBIA BUILDING CODE and Standard Guidelines of the Professional Engineers of BRITISH COLUMBIA to ensure that the work is generally being performed in accordance with the Contract Documents.

This list is submitted to assist the Contractor and must not be construed as being a complete list of non-conforming items for the purpose of determining whether the requirements of the Contract Documents have been met.

It is the responsibility of the Contractor to carry out their own inspection to determine that the Contract is being performed in accordance with the requirements of the Contract Documents.

The site was visited on 2019-01-24 to review the Electrical installations. The following observations have been made:

1.1 GENERAL OBSERVATIONS

1.1.1 Electrical installation is ongoing.

1.1.2 2nd level concession roughed-in.

1.1.3 Electrical Room #2 equipment installed and terminations commencing.

1.1.4 Electrical Room #6 installation is ongoing.

1.1.5 Electrical Room #7 equipment has been installed.

1.1.6 Phase 1C Kitchen rough-in has begun.

1.1.7 Electrical Room #5 equipment has been installed.

1.1.8 Main Distribution prepared for final terminations.

1.2 ITEMS REQUIRING ATTENTION-ITEMS WILL BE REMOVED UPON COMPLETION

1.2.1 Coverplates in Main Electrical room have been installed. These plates' shop drawings were specifically rejected by the engineer and present a safety hazard while being worked on. They should be cut and reconfigured into manageable pieces prior to allowing personnel to work on them as was suggested by the superintendent.

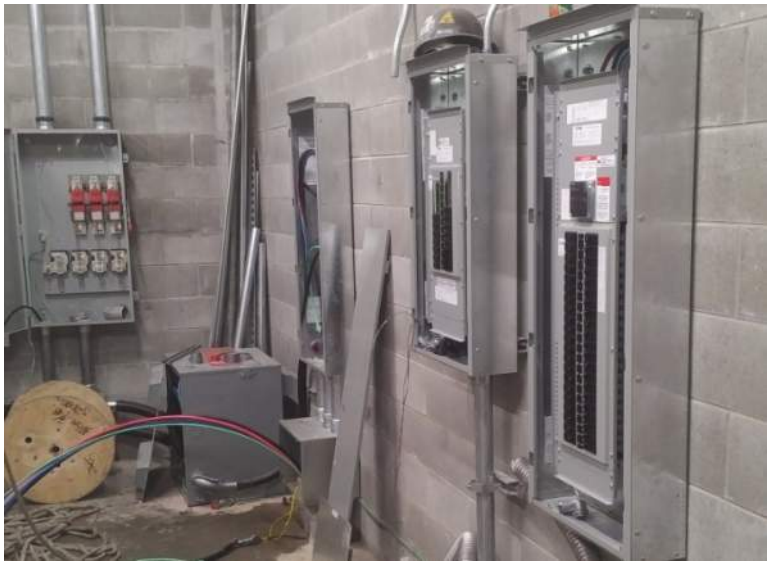
1.3 DISCUSSIONS WITH CONTRACTOR

1.3.1 City inspector to arrive for inspection and main distribution to be connected on the following day. Single line diagram was provided for placement in Main Electrical Room.

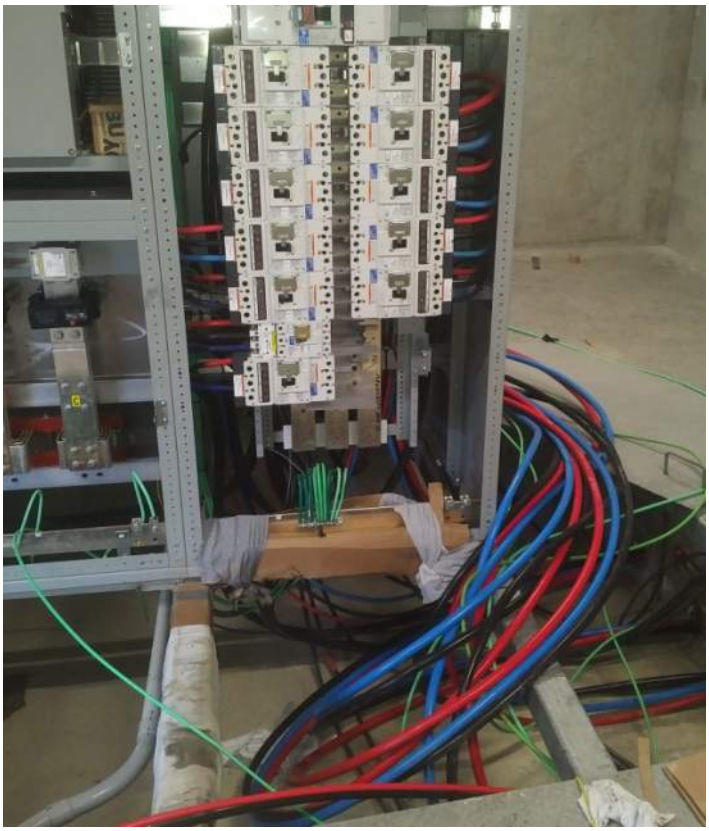
Item 1.1.2

Item 1.1.3

Item 1.1.5



Item 1.1.7



Item 1.1.8

END OF ELECTRICAL JOB REPORT #E-12

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