

**CORPORATION OF THE CITY OF COURTENAY  
COUNCIL MEETING AGENDA**

*We respectfully acknowledge that the land on which we gather is the  
unceded traditional territory of the K'ómoks First Nation*

**DATE:** May 07, 2018  
**PLACE:** City Hall Council Chambers  
**TIME:** 4:00 p.m.

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**K'OMOKS FIRST NATION ACKNOWLEDGEMENT**

**1.00 ADOPTION OF MINUTES**

- 1 1. Adopt April 16<sup>th</sup>, 2018 Regular Council meeting minutes
- 7 2. Adopt April 30<sup>th</sup>, 2018 Special Council meeting minutes

**2.00 INTRODUCTION OF LATE ITEMS**

**3.00 DELEGATIONS**

- 9 1. Caila Holbrook, Manager of Outreach Fundraising and Mapping and Kathy Haigh, Director of Fundraising and Outreach - Project Watershed - Nomadic Tempest Kus-kus-sum Fundraiser

**4.00 STAFF REPORTS/PRESENTATIONS**

**(a) Financial Services**

- 15 1. 2017 Audited Financial Statements and presentation, Cory Vanderhorst, MNP
- 55 2. 2018/2019 RCMP Municipal Policing Contract Expenditure Cap: Final Approval

**(b) Development Services**

- 79 3. A New Liquor Licence (Match Eatery and Public House) - 361 Hunt Road
- 91 4. Development Variance Permit No. 1708 - 770 Harmston Avenue
- 119 5. Zoning Amendment Bylaw 2932 for 988 - 8<sup>th</sup> Street

**5.00 EXTERNAL REPORTS AND CORRESPONDENCE FOR INFORMATION**

**6.00 INTERNAL REPORTS AND CORRESPONDENCE FOR INFORMATION**

**7.00 REPORTS/UPDATES FROM COUNCIL MEMBERS INCLUDING REPORTS FROM COMMITTEES**

**8.00 RESOLUTIONS OF COUNCIL**

**1. In Camera Meeting**

That notice is hereby given that a Special In-Camera meeting closed to the public will be held May 7<sup>th</sup>, 2018 at the conclusion of the Regular Council Meeting pursuant to the following sub-sections of the *Community Charter*:

- 90 (1) (c) labour relations or other employee relations

**9.00 UNFINISHED BUSINESS**

**1. April 16<sup>th</sup> Delegation - Dennis Thomas, Direct Billing to Strata Corps for Service Charges**

Request for Council to consider a review of how strata service utility fees are calculated for a more equitable allocation of service fees for strata residents.

**10.00 NOTICE OF MOTION**

**11.00 NEW BUSINESS**

**12.00 BYLAWS**

**For First and Second Reading**

- 125 1. Zoning Amendment Bylaw No. 2932, 2018  
(A bylaw to rezone property at 988 – 8<sup>th</sup> Street)

**For Third Reading**

- 127 1. Zoning Amendment Bylaw No. 2893, 2018”  
(A bylaw to rezone subject lands to allow the future phase of the Buckstone Development, Phase 3A, 3420 Rhys Road)

**For Final Adoption**

- 127 1. Zoning Amendment Bylaw No. 2893, 2018”  
(A bylaw to rezone subject lands to allow the future phase of the Buckstone Development, Phase 3A, 3420 Rhys Road)

- 129 2. Election Procedures and Automated Voting Amendment Bylaw No. 2917, 2018”  
(A bylaw to incorporate legislative changes for the 2018 General Local Election)

- 133      3. “Subdivision and Development Servicing Bylaw No. 2919, February 2018”  
(A bylaw to regulate and require the provision of works and services in connection with the subdivision and development of land)
- 291      4. Harmston Avenue Road Closure Bylaw No. 2920, 2018”  
(A bylaw to close and dispose of a portion of Harmston Avenue)
- 295      5. “Tax Rates Bylaw No. 2925, 2018”  
(A bylaw to establish the property value taxation rates for 2018)

**13.00      ADJOURNMENT**





**Minutes of a Regular Council Meeting held in the City Hall Council Chambers, Courtenay B.C., on Monday, April 16, 2018 at 4:00 p.m.**

**Attending:**

**Mayor: L. V. Jangula**  
**Councillors: E. Eriksson**  
**D. Frisch**  
**D. Hillian**  
**R. Lennox**  
**M. Theos**  
**B. Wells**

**Staff:**

**D. Allen, CAO**  
**J. Ward, Director of Legislative and Corporate Services/Deputy CAO**  
**W. Sorichta, Manager of Corporate Administrative Services**  
**I. Buck, Director of Development Services**  
**T. Kushner, Director of Public Works Services**  
**R. O’Grady, Director of Engineering Services**  
**B. Parschauer, Director of Financial Services**  
**D. Snider, Director of Recreation and Cultural Services**  
**L. Zervakis, Marketing and Communications Specialist**  
**E. Gavelin, Computer Technician**

**1.00 ADOPTION OF MINUTES**

**.01** Moved by Theos and seconded by Lennox that the April 3<sup>rd</sup>, 2018  
MINUTES Regular Council meeting minutes be adopted.  
**Carried**

**2.00 ADOPTION OF LATE ITEMS**

**3.00 DELEGATIONS**

1. Dennis Thomas, Woodlands Strata, 2001 Blue Jay Place, made a presentation to Council regarding the Strata Councils opposition to direct billing of service fees to the Owners Strata and requested Council review the calculation of strata service fees for a more equitable allocation of fees for strata residents.

2. Deana Simkin, Vice President, Geoff Crawford, Business Development Manager and Lara Greasley, Marketing and Communications Manager, Comox Valley Economic Development Society (CVEDS) made a presentation to Council revealing the CVEDS Q1 2018 Strategic Priorities Plan focussed on Investment Attraction and Promotion, Economic Development Facilitation, and Communications followed by the CVEDS Q4 2017 Report Summary highlights.

**The council meeting recessed at 4:58 p.m. for the Public Hearing regarding Bylaw No. 2893. The meeting reconvened at 5:05 p.m.**

**4.00 STAFF REPORTS/PRESENTATIONS**

**.01**

COUNCIL PROCEDURE  
AND ELECTION  
BYLAW  
AMENDMENTS  
0570-01

Moved by Wells and seconded by Frisch that based on the April 16, 2018 staff report “Council Procedure and Election Bylaw Amendments”, Council approve OPTION 1 and the recommended amendments to “Council Procedure Bylaw No. 2730, 2013” and “Election Procedures and Automated Voting Bylaw No. 2545, 2008” as per attachment A to this report;

That “Council Procedure Amendment Bylaw No. 2918, 2018” and “Election Procedures and Automated Voting Amendment Bylaw No. 2917, 2018” proceed to three readings; and

That staff arrange for the required statutory advertising regarding “Council Procedure Amendment Bylaw No. 2918, 2018”.

**Carried**

**.02**

HARMSTON AVENUE  
ROAD CLOSURE AND  
PROPERTY  
DISPOSITION  
0950-20

Moved by Hillian and seconded by Frisch that based on the April 16, 2018 staff report “Harmston Avenue Road Closure and Property Disposition”, Council approve OPTION 1 and approve in principle the closure of an approximately 4.4 metre wide portion of Harmston Avenue;

That subject to public input, Council approve the disposition of the portion of closed road adjacent to the Comox Valley Regional District (CVRD) property and current School District 71 property, 567 square metres in size, to the CVRD for the appraised value of \$130,640 less the cost of any road improvements performed by the CVRD not required by the development of the new CVRD administration building;

That “Harmston Avenue Road Closure Bylaw No. 2920, 2018” proceed to first, second, and third reading; and

That statutory notice for the road closure and property disposition be published pursuant to section 94 of the Community Charter.

**Amendment motion**

Moved by Lennox seconded by Wells that the CVRD work to maintain as many mature trees on the Harmston Avenue development site as possible.

**Carried**

**The main motion was carried as amended with Mayor Jangula and Councillor Theos opposed**

**.03**

CHANGE TO EXISTING  
LIQUOR LICENCE  
(ROYAL CANADIAN  
LEGION) - 367 CLIFFE  
AVENUE  
4320-20

Moved by Frisch and seconded by Lennox that based on the April 16, 2018 staff report, 'A Change to Existing Liquor Licence (Royal Canadian Legion) – 367 Cliffe Avenue', Council approve OPTION 1 as follows:

- 1) The Council of the City of Courtenay recommends the LCLB approve the application by the Royal Canadian Legion for transitioning the licence classification from liquor primary club to liquor primary.
- 2) Council's comments on the prescribed considerations are as follows:
  - a) If the amendment application is approved, it would not result in an increase of noise in the area;
  - b) If the application is approved, it would not negatively impact the community based on the submissions received from the public;
  - c) In order to gather the views of residents, the City of Courtenay posted a notice on the City's website outlining the application. Additionally, the RCMP was contacted for comment.

**Carried**

**5.00 EXTERNAL REPORTS AND CORRESPONDENCE FOR INFORMATION**

**6.00 INTERNAL REPORTS AND CORRESPONDENCE FOR INFORMATION**

**.01**

COURTENAY  
TRANSPORTATION  
MASTER PLAN  
UPDATE AND  
PRESENTATION  
8620-21; 16014

John Steiner, Urban Systems made a presentation to Council providing an update on the consultation and engagement process, analytics and modeling works on the Courtenay Transportation Master Plan including feedback and opportunities from the community and preliminary focus regarding walking, cycling and road network strategies.

Moved by Lennox and seconded by Frisch that the April 16, 2018 Briefing Note, "Courtenay Transportation Master Plan Update", be received for information.

**Carried**

**Mayor Jangula left Council Chambers at 5:42 p.m.; Acting Mayor Wells took the chair  
Mayor Jangula returned to Council Chambers and took his seat at 5:50 p.m.**

**Councillor Lennox left Council Chambers at 5:51 p.m.**

**Councillor Lennox returned to Council Chambers and took her seat at 5:52 p.m.**

**R8/2018 – April 16, 2018**

**.02** Moved by Wells and seconded by Lennox that the Heritage  
HERITAGE ADVISORY Advisory Commission meeting minutes for February 28, 2018 be  
COMMISSION received for information.  
MEETING MINUTES **Carried**  
0360-20

Moved by Lennox seconded by Wells that Council direct staff to write a letter to the family of commission member Rob Smith who recently passed away in acknowledgment of his service on the Heritage Advisory Commission.  
**Carried**

**7.00 REPORTS/UPDATES FROM COUNCIL MEMBERS INCLUDING REPORTS FROM COMMITTEES**

Moved by Frisch and seconded by Wells that the Reports/Updates from Council be postponed until the next meeting.  
**Carried**

**8.00 RESOLUTIONS OF COUNCIL**

**.01** Moved by Lennox and seconded by Frisch that the K'ómoks First  
COUNCILLOR Nation acknowledgment on the Council agenda,  
LENNOX K'OMOKS *We respectfully acknowledge that the land on which we*  
FIRST NATION *gather is the unceded traditional territory of the K'ómoks*  
MOTION *First Nation.*  
be read aloud at the beginning of each Council meeting and  
Committee of the Whole meeting.  
**Carried**

**.02** Moved by Hillian and seconded by Wells that that a Special In-  
IN CAMERA Camera meeting closed to the public will be held April 16<sup>th</sup>, 2018 at the  
MEETING conclusion of the Regular Council Meeting pursuant to the following sub-  
sections of the *Community Charter*:  

- 90 (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.

**Carried**

**9.00 UNFINISHED BUSINESS**

**10.00 NOTICE OF MOTION**

**11.00 NEW BUSINESS**

**12.00 BYLAWS**

**.01**

BYLAW NO. 2918,  
2018  
COUNCIL PROCEDURE  
AMENDMENT BYLAW

Moved by Wells and seconded by Hillian that “Council Procedure Amendment Bylaw No. 2918, 2018” pass first, second and third reading.

**Carried**

**.02**

BYLAW NO. 2917,  
2018  
ELECTION  
PROCEDURES AND  
AUTOMATED VOTING  
AMENDMENT BYLAW

Moved by Wells and seconded by Hillian that “Election Procedures and Automated Voting Amendment Bylaw No. 2917, 2018” pass first, second and third reading.

**Carried**

**.03**

BYLAW NO. 2920,  
2018  
HARMSTON AVENUE  
ROAD CLOSURE  
BYLAW

Moved by Frisch and seconded by Hillian that “Harmston Avenue Road Closure Bylaw No. 2920, 2018” pass first, second and third reading.

**Carried with Mayor Jangula and Councillor Theos opposed**

**.04**

BYLAW NO. 2919,  
2018  
SUBDIVISION AND  
DEVELOPMENT  
SERVICING (SDS)  
BYLAW

Moved by Wells and seconded by Lennox that Council permit Murray Presley, Chair, Comox Valley Development and Construction Association (CVDCA) to address Council regarding the letter sent by the CVDCA to the attention of Mayor and Council received April 16<sup>th</sup>, 2018.

**Carried**

Moved by Wells and seconded by Theos that Council direct staff to send the March 21, 2018, SDS Stakeholder meeting summary notes to the CVDCA stakeholders and that final adoption of “Subdivision and Development Servicing Bylaw No. 2919, 2018” be postponed until the May 7<sup>th</sup>, 2018 Regular Council meeting.

**Carried**

**.05**

BYLAW NO. 2924,  
2018  
2018-2022  
CONSOLIDATED  
FINANCIAL

Moved by Hillian and seconded by Wells that “2018-2022 Consolidated Financial Bylaw No. 2924, 2018” be finally adopted.

**Carried with Mayor Jangula and Councillor Theos opposed**

**R8/2018 – April 16, 2018**

**13.00 ADJOURNMENT**

**.01**

Moved by Lennox and seconded by Wells that the meeting now adjourn at 6:43 p.m.

**Carried**

**CERTIFIED CORRECT**

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**Director of Legislative and Corporate Services**

**Adopted this 7<sup>th</sup> day of May, 2018**

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**Mayor**

Minutes of a Special Council Meeting held in the City Hall Council Chambers, Courtenay BC, on Monday, April 30, 2018 at 4:00 p.m.

**Attending:**

**Mayor:** L. V. Jangula  
**Councillors:** E. Eriksson  
D. Frisch  
D. Hillian  
R. Lennox  
M. Theos  
B. Wells via Teleconference

**Staff:**

D. Allen, CAO  
J. Ward, Director of Legislative and Corporate Services/Deputy CAO  
W. Sorichta, Manager of Corporate Administrative Services  
B. Parschauer, Director of Financial Services  
A. Guillo, Manager of Communications

**1.00 STAFF REPORTS/PRESENTATIONS**

**.01**

2018 TAX RATES  
REPORT  
1970-02

Moved by Hillian and seconded by Frisch that based on the April 30, 2018 Staff Report “2018 Tax Rates”, Council approve a Residential Tax Class rate of 3.4289 and a Commercial tax rate multiplier of 3.03986 in order to generate property tax revenues to cover the budgeted expenditures identified in the 2018 – 2022 Consolidated Financial Plan.  
**Carried with Mayor Jangula opposed**

**2.00 BYLAWS**

**.01**

BYLAW NO. 2925,  
2018  
TAX RATES (TO  
ESTABLISH 2018  
PROPERTY VALUE  
TAXATION RATES)

Moved by Frisch and seconded by Lennox that “Tax Rates Bylaw No. 2925, 2018” pass first, second and third reading.  
**Carried with Mayor Jangula opposed**

**3.00 RESOLUTIONS OF COUNCIL**

**.01**

IN CAMERA  
MEETING

Moved by Hillian and seconded by Lennox that Council now adjourn to a Special In-Camera meeting closed to the public pursuant to the following sub-sections of the *Community Charter*:

- 90 (1) (c) labour relations or other employee relations
- 90 (2) (b) the consideration of information received and held in confidence relating to negotiations between the municipality and a provincial government or the federal government or both, or between a provincial government or the federal government or both and a third party.

**Carried**

**4.00 ADJOURNMENT**

**.01** Moved by Hillian and seconded by Lennox that the meeting now  
ADJOURNMENT adjourn at 4:55 p.m.

**CERTIFIED CORRECT**

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**Director of Legislative Services**

**Adopted this 7<sup>th</sup> day of May, 2018**

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**Mayor**



# Overview of The Nomadic Tempest

Prepared by Caila Holbrook  
Comox Valley Project Watershed Society

Executive Summary	1
Details	2
Regulatory Bodies	2
Transportation Plan	2
Safety Plan	2
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Our Ask to the City of Courtenay	3
Event Poster	4
Sponsorship Info	5

## Executive Summary

Project Watershed is looking to host the Nomadic Tempest, a show performed by the Caravan Stage Company, on the Kus-kus-sum site to raise funds and awareness for the purchase and restoration of the Kus-kus-sum property. The show is performed on board a replica tall ship with a barge style flat bottom.

The Caravan Stage Company has been running The Nomadic Tempest for 48 seasons in locations all over the world. Their website <http://caravanstage.org/> includes video of the performance and other information. They have agreed to come to the Comox Valley on their tour along the coast of Vancouver Island and present the show for four nights in June/July. This will include Canada Day and could be the main evening event for Canada Day in the Comox Valley as there is no fireworks planned. Comox Valley Arts Council has agreed to be a partner of this show and cover the insurance for the event and we are in discussion with many different partners who can help make this a success.

## Details

**Location:** Kus-kus-sum Site. The ship will dock alongside the steel wall just south of the middle of the property. The audience for the show will be seated in a fenced off enclosure in front of the ship 10ft from the wall.

**Dates:** June 28, 29, 30, July 1st

**Time:** The evening performances will run from 9:30pm to 11pm. There will be daytime boat tours and we are working on an afternoon/evening program of music and art with Elevate.

**Audience:** There is room for up to 1000 people per show.

**Show details:** The Caravan Stage Company Synopsis (appended)

## Regulatory Bodies

No regulatory body requires us to have a permit for this event. We have contacted the Coast Guard, Fisheries and Oceans Canada, The Ministry of Transportation, RCMP, City of Courtenay and the Comox Harbour Authority and they are supportive of it.

## Transportation Plan

A fenced off parking area will be created onsite for parking but we will be encouraging cycling, walking and a Park and Ride system to minimize the number of cars and traffic around the site. Buses and shuttles will be used to transport people from parking locations such as the Thrifty's parking lot to the site and back to their cars. Onsite Citizen's On Patrol will manage parking.

## Safety Plan

Safety fencing will be erected to create a pathway from the entrance/parking area to an enclosed seating area. The parking area will also be fenced off from the rest of the site. LED Rope lighting along the ground will outline the path and floodlights will be employed when the show is not running. Ushers will be available to help people get to and from the seating area and will be located along the fence to make sure no one attempts to scale it. Signage will warn people of any potential hazards and precautions. If need be carpeting will be laid down along the path to minimize tripping. The RCMP will be notified of the event. St. John's Ambulance attendants will be on hand to deal with any potential human health issues.

## Partners

Comox Valley Art Council - Insurance, promotion

Elevate the Arts - Additional Art and Music before the main show

### In the Works

Interfor – Electricity

The Eagle and the Goat - Promotion

St. John's Ambulance – Safety

Citizens on Patrol – Parking and traffic control

## Potential

Comox Valley Economic Development Society - Promotion, funding

Marine Search and Rescue - Safety

RCMP – Safety

St.John's Ambulance – Safety

Rotary - In kind site clean-up and set up

Comox Air Force Base - In kind site clean-up and set up

## Our Ask to the City of Courtenay

We would like our event to be part of the City's Canada Week Celebrations.

This would include:

- promotion of the event along with the other Canada Week events planned,
- in kind donations of site clean-up (if required), temporary safety fencing and set up, Port-a-potty rentals and electrician time
- a \$2,500 contribution towards event costs.

For this Project Watershed will put on an awesome event that underscores the City of Courtenay's commitment to the Province of B.C.'s Climate Action Charter. It will also reinforce the City's support of the Kus-kus-sum initiative which in itself represents action on climate change. The City of Courtenay will receive all the benefits of Gold Sponsorship detailed in the Appendix.



# NOMADIC TEMPEST TALL SHIP CARAVAN SHOW

caravanstage.org  
CARAVAN STAGE  
COMPANY  
presents

An artistic illustration of a small yellow sailboat with a monarch butterfly on its sail, navigating through a turbulent, dark blue and green stormy sea. The sky is black with white clouds and stars. The monarch butterfly is depicted with its characteristic black and orange wings, and a human-like face with a red nose and blue eyes is visible on the sail.

*Nomadic Tempest*  
A CLIMATOPIAN SPECTACLE  
An operatic fable of monarch migrants searching for refuge on a drowned planet, sung in many tongues.

PLATINUM SPONSOR  
GOLD SPONSOR  
SILVER SPONSOR





# NOMADIC TEMPEST

— at KUS-KUS-SUM —

## EVENT SPONSORSHIP

An amazing once in a lifetime opportunity to sponsor one of our events and contribute to the purchase and restoration of Kus-kus-sum - a legacy in the heart of our community.

<b>SILVER SPONSOR</b>	<b>GOLD SPONSOR</b>	<b>PLATINUM SPONSOR</b>
\$2,500	\$5,000	\$8,000
<ul style="list-style-type: none"> <li>• Logo on our: website, posters, handbills, advertisements</li> <li>• Social media post thanking sponsor before, during and after</li> <li>• Sponsorship receipt (advertising, 100% deductible)</li> <li>• A piece of art and a contribution recognition plaque to display publicly</li> <li>• Recognition on the restored site</li> <li>• 8 Complimentary tickets</li> <li>• 2 VIP tickets</li> <li>• Onsite Parking</li> </ul>	<ul style="list-style-type: none"> <li>• Logo on our: website, posters, handbills, advertisements, event signage, onsite signage</li> <li>• Public Recognition at event</li> <li>• Social media post thanking sponsor before, during and after</li> <li>• Sponsorship receipt (advertising, 100%)</li> <li>• A piece of art and a contribution recognition plaque to display publicly</li> <li>• Recognition on the restored site</li> <li>• 16 Complimentary tickets</li> <li>• 4 VIP tickets</li> <li>• Onsite Parking</li> </ul>	<ul style="list-style-type: none"> <li>• Lead Logo on our: website, posters, handbills, advertisements, event signage, onsite signage</li> <li>• Public Recognition at event</li> <li>• Social media post thanking sponsor before, during and after</li> <li>• Sponsorship receipt (advertising, 100% deductible)</li> <li>• A piece of art and a contribution recognition plaque to display publicly</li> <li>• Recognition on the restored site</li> <li>• 24 Complimentary tickets</li> <li>• 6 VIP tickets</li> <li>• Onsite Parking</li> </ul>

### CONTACT

Caila Holbrook, Manager of Fundraising, Outreach and Mapping  
Comox Valley Project Watershed Society

250-703-2871 | [support@kuskussum.ca](mailto:support@kuskussum.ca) | [projectwatershed.ca](http://projectwatershed.ca)





THE CORPORATION OF THE CITY OF COURTENAY

## STAFF REPORT

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**To:** Council  
**From:** Chief Administrative Officer  
**Subject:** 2017 Audited Financial Statements

**File No.:** 1870-02 [2017]  
**Date:** May 7, 2018

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### PURPOSE:

The purpose of this report is to request approval of the audited financial statements for the year ended December 31, 2017.

### POLICY ANALYSIS:

Section 171 of the Community Charter requires that the municipal auditor report to Council on the annual financial statements. Council is responsible for the review and approval of the financial statements. This is one of the key roles that Council fulfils to ensure that the City's financial and organizational resources are sound.

### EXECUTIVE SUMMARY:

The firm of MNP LLP was appointed by Council to undertake the independent audit for the 2017 year. Under the terms of their engagement, the interim audit work was performed in December 2017, and final audit work undertaken in late March to the end of April 2018.

### CAO RECOMMENDATIONS:

That based on the May 07, 2018 staff report "2017 Audited Financial Statements" Council approve OPTION 1 which approves the Audited Financial Statements for the year ended December 31, 2017.

Respectfully submitted,

David Allen, BES, CLGEM, SCLGM  
Chief Administrative Officer

### BACKGROUND:

Section 171 of the Community Charter requires that the municipal auditor report to Council on the annual financial statements.

The auditor's responsibility is to report on whether the annual consolidated statements present fairly, in all material respects, the financial position, results of operations, change in net financial assets and cash flows

of the City in accordance with Canadian Public Sector Accounting Standards. In addition, their role is to provide reasonable, but not absolute, assurance of detecting misstatements, fraud or non-compliance with laws and regulations having a material effect on the consolidated financial statements as a whole.

Council is responsible for the review and approval of the annual financial statements.

#### **DISCUSSION:**

The firm of MNP LLP was appointed by Council to undertake the annual independent financial audit of the City for the 2017 calendar year. On November 20, 2017 Staff provided MNP's Audit Service Plan to Council. Audit staff was on site to complete the 2017 audit procedures in the latter part of March and continued to interact with staff through to the end of April, 2018. The Audit work is now complete and MNP, in conjunction with this report, has prepared an overview of the City's financial position as well as their opinion and approval of the 2017 consolidated financial statements.

Attached are the following documents for Council's reference:

1. Audit Findings Report for the year ended December 31, 2017 including the Audit Independence Letter, MNP LLP
2. City of Courtenay, Audited Financial Statements for the year ended December 31, 2017

#### **FINANCIAL IMPLICATIONS:**

Total fees of \$32,550 charged to the City for audit services are as quoted in the Audit Service Plan presented to Council in November 2017.

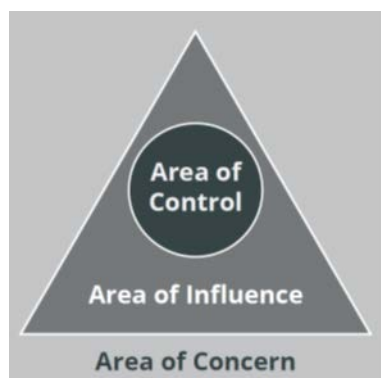
#### **ADMINISTRATIVE IMPLICATIONS:**

Upon Council review and approval of the financial statements, staff will compile and distribute the statements as required to various authorities. In addition, the financial statements will be made publically available via the City's website and incorporated into the City's 2017 Annual Report.

#### **STRATEGIC PLAN REFERENCE:**

**We focus on organizational and governance excellence**

- We support meeting the fundamental corporate and statutory obligations



- **Area of Control**  
The policy, works and programming matters that fall within Council's jurisdictional authority to act.
- ▲ **Area of Influence**  
Matters that fall within shared or agreed jurisdiction between Council and another government or party.
- **Area of Concern**  
Matters of interest outside Council's jurisdictional authority to act.



While the annual audit work and compilation of the consolidated financial statements are not specifically identified in the City's strategic plan, staff resources are used to complete this annual statutory requirement.

**OFFICIAL COMMUNITY PLAN REFERENCE:**

N/A

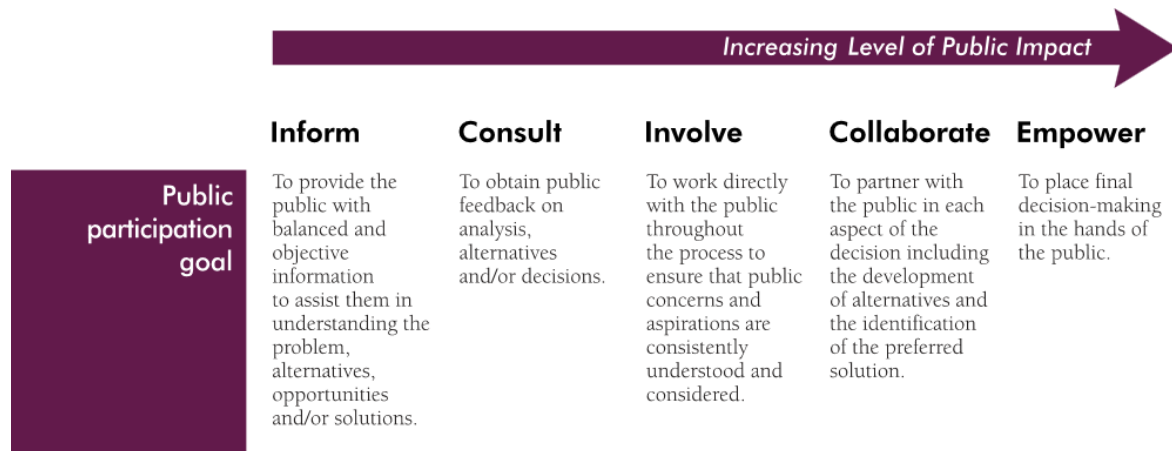
**REGIONAL GROWTH STRATEGY REFERENCE:**

N/A

**CITIZEN/PUBLIC ENGAGEMENT:**

The public will be **informed** of the outcome of Council's consideration of the 2017 Audited Financial Statements based on level one of the IAP2 Spectrum of Public Participation.

[http://c.ymcdn.com/sites/www.iap2.org/resource/resmgr/imported/IAP2%20Spectrum\\_vertical.pdf](http://c.ymcdn.com/sites/www.iap2.org/resource/resmgr/imported/IAP2%20Spectrum_vertical.pdf)



**OPTIONS:**

**OPTION 1:** That Council approve the City of Courtenay Audited Financial Statements for the year ended December 31, 2017. (Recommended)

**OPTION 2:** That staff provide a subsequent report for Council consideration.

Prepared by:

Brian Parschauer, BA, CPA-CMA  
Director, Financial Services

**Attachments:**

1. 2017 Audit Findings
2. Consolidated Financial Statements for Year Ending December 31, 2017

**City of Courtenay  
Report to Council**

*For the Year Ending December 31, 2017*  
For presentation at the Council meeting May 7, 2018

May 7, 2018

Mayor and Council of the City of Courtenay

Dear Sirs/Mesdames:

We are pleased to submit to you this report for discussion of our audit of the consolidated financial statements of City of Courtenay (the "City") as at December 31, 2017 and for the year then ended. In this report we cover those significant matters which, in our opinion, you should be aware of as Mayor and Council.

We have completed our audit of the consolidated financial statements of the City which has been carried out in accordance with Canadian generally accepted auditing standards.

Unless unforeseen complications arise, our Audit Report will provide an unqualified opinion to the Mayor and Council of the City.

This report is intended solely for the information and use of Council and management and should not be distributed to or used by any other parties than these specified parties.

The matters raised in this and other reports that will flow from the audit are only those which have come to our attention arising from or relevant to our audit that we believe need to be brought to your attention. They are not a comprehensive record of all the matters arising, and in particular we cannot be held responsible for reporting all risks in your business or all control weaknesses. This report has been prepared solely for your use and should not be quoted in whole or in part without our prior written consent. No responsibility to any third party is accepted as the report has not been prepared for, and is not intended for, any other purpose.

We would like to express our appreciation for the excellent cooperation we have received from management and employees with whom we worked.

We appreciate having the opportunity to meet with you and to respond to any questions you may have about our audit, and to discuss any other matters that may be of interest to you.

Sincerely,

*MNP LLP*

MNP LLP

**Chartered Professional Accountants**

/jvo

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## INTRODUCTION

As auditors, we report to the Mayor and Council on the results of our examination of the consolidated financial statements of City of Courtenay (the “City”) as at and for the year ended December 31, 2017. The purpose of this Audit Findings Report is to assist you, as Mayor and Council, in your review of the results of our audit. To facilitate in your understanding of our findings, Appendix A to this report summarizes our audit process.

Our report will discuss the status of our engagement, as well as communicate to you significant audit, accounting and reporting matters arising from our procedures. We hope that this report is of assistance to you, and we look forward to discussing our findings and answering your questions.

## ENGAGEMENT STATUS

We have completed our audit of the consolidated financial statements of the City and are prepared to sign our Auditors' Report subsequent to completion of the following procedures:

- Receipt of the remaining outstanding legal confirmations;
- The Council's review and approval of the consolidated financial statements.

We expect to have the above procedures completed and to release our Audit Report on May 9, 2018. Our draft report, which will provide an unqualified opinion, is attached at the end of this report.

## SIGNIFICANT AUDIT, ACCOUNTING AND REPORTING MATTERS

### CHANGES FROM AUDIT SERVICE PLAN

There were no deviations from the Audit Service Plan previously presented to you.

### AREAS OF AUDIT EMPHASIS

The following lists the key areas of our audit emphasis for your City:

- Contingencies, Lawsuits and Commitments;
- Financial Statement Presentation and Disclosure; and
- Fraud and Error.

Detailed information on Areas of Audit Emphasis is included as Appendix B to this report.

### FINAL MATERIALITY

Materiality is a concept used to assess the significance of misstatements or omissions that are identified during the audit and is used to determine the level of audit testing that is carried out. The scope of our audit work is tailored to reflect the relative size of operations of the City, and is affected by our assessment of materiality and audit risk.

Final materiality used for our audit was \$1,500,000 for December 31, 2017, calculated as approximately 2.9% of annual revenues.

## **SIGNIFICANT DEFICIENCIES IN INTERNAL CONTROL**

Our audit process focuses on understanding the controls utilized in management's reporting systems to the extent necessary to identify overall and specific financial reporting risks. This risk assessment allows us to concentrate our audit procedures on high risk areas and, where possible, place reliance on controls within the financial reporting system to reduce the extent of our testing.

It is important to note that our assessment was not, nor was it intended to be, sufficient to comment or conclude on the sufficiency of internal controls.

We are required under Canadian generally accepted auditing standards to communicate all significant deficiencies identified during an audit to Council on a timely basis. However, we may not be aware of all significant deficiencies that do, in fact, exist.

While our review of controls was not sufficient to express an opinion as to their effectiveness or efficiency, no significant deficiencies in internal control have come to our attention.

## **DIFFICULTIES ENCOUNTERED**

No significant limitations were placed on the scope or timing of our audit.

## **IDENTIFIED OR SUSPECTED FRAUD**

Due to the inherent limitations of an audit and the nature of fraud, including attempts at concealment through forgery or collusion, an audit conducted in accordance with Canadian generally accepted auditing standards cannot be relied upon to detect fraud.

While our audit cannot be relied upon to detect all instances of fraud, no incidents of fraud, or suspected fraud, came to our attention in the course of our audit.

## **IDENTIFIED OR SUSPECTED NON-COMPLIANCE WITH LAWS AND REGULATIONS**

Nothing has come to our attention that would suggest any non-compliance with laws and regulations that would have a material effect on the consolidated financial statements.

## **MATTERS ARISING IN CONNECTION WITH RELATED PARTIES**

No significant matters arose during the course of our audit in connection with related parties of the City.

## **GOING CONCERN**

We have not identified any material uncertainties related to events or conditions that may cast significant doubt on the City's ability to continue as a going concern.

We are of the opinion that the going concern assumption is appropriate in preparation of the consolidated financial statements.

## AUDITORS' VIEWS OF SIGNIFICANT ACCOUNTING PRACTICES

The application of Canadian public sector accounting standards allows and requires the City to make accounting estimates and judgments regarding accounting policies and financial statement disclosures.

As auditors, we are uniquely positioned to provide open and objective feedback regarding your City's accounting practices, and have noted the following items during the course of our audit that we wish to bring to your attention.

### **Accounting Policies**

- The accounting policies used by the City are appropriate and have been consistently applied.
- No new accounting policies, or changes in accounting policies were applied.

### **Accounting Estimates**

#### **Employee future benefits**

- Accrual made for expected future payments for employee sick leave and vacation pay.

#### **Allowance for doubtful accounts**

- Provision for the uncollectible accounts receivable.

#### **Amortization period of tangible capital assets**

- Amortized over the estimated useful life of the respective assets. All assets were amortized under the straight-line method, over 5 to 80 years.

### **Financial Statement Disclosures**

The disclosures made in the notes to the consolidated financial statements appear clear, neutral and consistent with our understanding of the entity and the amounts presented in the consolidated financial statements.

## MATTERS ARISING FROM DISCUSSIONS WITH MANAGEMENT

We would like to formally acknowledge the cooperation and assistance we received from the management and staff of the City.

There were no significant matters discussed, or subject to correspondence, with management that in our judgment need be brought to your attention.

## MATTERS ARISING IN THE AUDIT OF COMPONENTS

- There were no significant matters that arose from the audit of components that in our judgment need to be brought to your attention.

## SIGNIFICANT DIFFERENCES

No significant differences were proposed to management with respect to the December 31, 2017 consolidated financial statements. A summary of all differences is available on request.

## **MODIFICATIONS TO THE INDEPENDENT AUDITORS' REPORT**

As discussed earlier, our independent auditors' report will provide an unqualified opinion to the Mayor and Council.

## **MANAGEMENT REPRESENTATIONS**

We have requested certain written representations from management, which represent a confirmation of certain oral representations given to us during the course of our audit.

## **AUDITOR INDEPENDENCE**

We confirm to Council that we are independent of the City. Our letter to Council discussing our independence is included as part of the additional materials attached to this report.



## APPENDIX A – MNP Audit Process

Our audit was carried out in accordance with Canadian generally accepted auditing standards, and included a review of all significant accounting and management reporting systems, with each material year end balance, key transaction and other events considered significant to the consolidated financial statements considered separately.

Our audit process focused on understanding the controls utilized in management's reporting systems to the extent necessary to identify overall and specific financial reporting risks. This risk assessment enabled us to concentrate our audit procedures on the areas where differences were most likely to arise. Our assessment was not, nor was it intended to be, sufficient to conclude on the effectiveness or efficiency of internal controls.

During the course of our audit, we have:

- Examined, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements;
- Assessed the accounting principles used and significant estimates made by management;
- Obtained an understanding of the City and its environment, including management's internal controls (regardless of whether we relied on them for the purpose of the audit), sufficient to identify and assess the risks of material misstatement of the consolidated financial statements and to design and perform audit procedures;
- Reviewed and assessed those accounting systems deemed necessary to support our audit opinion;
- Evaluated the overall consolidated financial statement presentation;
- Performed a subsequent events review with management;
- Reviewed and assessed the status of contingencies, commitments and guarantees;
- Reviewed and assessed exposure to environmental liabilities.

We have obtained written representations from management, included as additional materials following this report, in order to confirm oral representations given to us and reduce the possibility of misunderstanding. Specifically, we have obtained written confirmation of significant representations provided on matters that are:

- Directly related to items that are material, either individually or in the aggregate, to the consolidated financial statements;
- Not directly related to items that are material to the consolidated financial statements, but are significant, either individually or in the aggregate, to the engagement; and
- Matters relevant to management judgments or estimates that are material, either individually or in the aggregate, to the consolidated financial statements.

## **APPENDIX B – Areas of Audit Emphasis**

### **FINANCIAL STATEMENT PRESENTATION AND DISCLOSURE**

#### Audit Procedures:

- We have reviewed the consolidated financial statements and concluded that the corresponding presentation and disclosure is in accordance with Canadian Public Sector Accounting Standards.
- We have participated in discussions with Management on all significant transactions during the course of the past 12 months, and have assisted in ensuring appropriate treatment and disclosure.

We have concluded that the City's consolidated financial statements have been appropriately presented and appropriate disclosures have been made in accordance with Canadian Public Sector Accounting Standards.

### **CONTINGENCIES, LAWSUITS AND COMMITMENTS**

#### Audit Procedures:

- We made detailed inquiries of Management and reviewed both minute books and legal files to identify contingencies, lawsuits and commitments. No items not already brought to our attention and/or disclosed in the notes to the financial statements were noted.
- We have received Management's representation letter attesting to the completeness of issues of this nature.
- We discussed claims with management and obtained legal responses with respect to likelihood of success and potential for payouts.

We have concluded that contingencies, lawsuits and commitments disclosed in the City's consolidated financial statements.

### **FRAUD AND ERROR**

#### Audit Procedures:

- Obtained from Management an assessment of the entity's susceptibility to material misstatements arising from fraud or error.
- Discussed with Management the entity's susceptibility to material misstatements arising from fraud or error.
- Obtained Management representations concerning fraud and error.

We concur with Management's assessment that the City's susceptibility to material misstatements arising from fraud or error is reasonably low.

## Independence Communication

May 7, 2018

Mayor and Council  
City of Courtenay  
830 Cliffe Avenue  
Courtenay, BC V9N 2J7

Dear Mayor and Council:

We have been engaged to audit the consolidated financial statements of City of Courtenay (the "City") as at December 31, 2017 and for the year then ended.

CAS 260 *Communication With Those Charged With Governance* requires that we communicate with you matters that are significant to our engagement. One such matter is relationships between the City and its related entities or persons in financial reporting oversight roles at the City and MNP LLP and any affiliates ("MNP") that, in our professional judgment, may reasonably be thought to bear on our independence. In determining which relationships to report, the Standard requires us to consider relevant rules and related interpretations prescribed by the appropriate professional accounting body and applicable legislation, covering such matters as:

- (a) Holding a financial interest, either directly or indirectly, in a client;
- (b) Holding a position, either directly or indirectly, that gives the right or responsibility to exert significant influence over the financial or accounting policies of a client or a related entity;
- (c) Personal or business relationships of immediate family, close relatives, partners or retired partners, either directly or indirectly, with a client or a related entity;
- (d) Economic dependence on a client; and
- (e) Provision of non-assurance services in addition to the audit engagement.

We are aware of the following relationships between the City and MNP that, in our professional judgment, may reasonably be thought to bear on our independence. The following relationships represent matters that have occurred from January 1, 2017 to the date of this letter.

MNP was engaged to perform a Financial Process Improvement Review. In order to mitigate the independence risk, separate teams were used for the consulting engagement and the audit of the financial statements. In addition, the final quality control review of the audit was performed by a MNP partner from our Abbotsford office.

This report is intended solely for the use of Mayor and Council, management and others within the City and should not be used for any other purposes.

We look forward to discussing with you the matters addressed in this letter as well as other matters that may be of interest to you. We will be prepared to answer any questions you may have regarding our independence as well as other matters.

Sincerely,

*MNP LLP*

MNP LLP  
**Chartered Professional Accountants**

/j/p



**THE CORPORATION OF  
THE CITY OF COURTENAY**

*Consolidated Financial Statements*

*Year Ending December 31, 2017*

**THE CORPORATION OF THE CITY OF COURTENAY**  
**Consolidated Financial Statements**  
**Year Ended December 31, 2017**

Management's Responsibility for Financial Reporting

Independent Auditors Report

Consolidated Statements

- A Consolidated Statement of Financial Position
- B Consolidated Statement of Operations
- C Consolidated Statement of Change in Net Financial Assets
- D Consolidated Statement of Cash Flow

Notes to Consolidated Financial Statements

Supporting Schedules

- 1 Consolidated Schedule of Segment Disclosure by Service
- 2 Consolidated Schedule of Accumulated Surplus & Reserves (Unaudited)
- 3 Consolidated Schedule of Tangible Capital Assets
- 4 Consolidated Schedule of Debenture and Other Long-Term Debt
- 5 Consolidated Schedule of Investments

## **THE CORPORATION OF THE CITY OF COURTENAY**

### **Management's Responsibility for Financial Reporting**

The preparation of information in these Consolidated Financial Statements is the responsibility of management. The consolidated financial statements have been prepared in accordance with Canadian public sector accounting standards and are outlined under "Significant Accounting Policies" in the notes to the financial statements.

Management maintains a system of internal accounting controls to provide reasonable assurance that assets are safeguarded and that transactions are authorized, recorded, and reported properly. Management also maintains a program of proper business compliance.

MNP LLP, the City's independent auditors, have audited the accompanying financial statements. Their report accompanies this statement.

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Brian Parschauer, BA, CPA, CMA  
Director of Financial Services

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Larry Jangula  
Mayor

**THE CORPORATION OF THE CITY OF COURTENAY  
CONSOLIDATED STATEMENT OF FINANCIAL POSITION  
AS AT DECEMBER 31, 2017**

**STATEMENT A**

	2017	2016
<b>FINANCIAL ASSETS</b>		
Cash on Hand and on Deposit (Schedule 5)	\$ 12,176,694	\$ 11,940,239
Receivables (Note 1i)	2,960,134	3,178,840
Term Deposits (Schedule 5)	31,487,579	31,409,482
	46,624,407	46,528,561
<b>LIABILITIES</b>		
Accounts Payable (Note 1j)	7,051,630	8,271,606
Trust and Other Deposits	4,036,811	4,742,503
Deferred Revenue - Development Cost Charges (Note 6)	5,546,196	4,481,601
Deferred Revenue - Other (Note 8)	2,221,668	1,409,770
Long-Term Debt (Schedule 4)	12,851,766	14,189,703
	31,708,071	33,095,183
<b>NET FINANCIAL ASSETS</b>	14,916,336	13,433,378
<b>NON-FINANCIAL ASSETS</b>		
Inventories	191,031	188,408
Prepaid Expenses	446,715	491,324
Tangible Capital Assets (Note 12 & Schedule 3)	139,559,441	135,242,213
	140,197,187	135,921,945
<b>ACCUMULATED SURPLUS (Schedule 2)</b>	\$ 155,113,523	\$ 149,355,323
<b>CONTINGENT LIABILITIES AND COMMITMENTS (NOTE 2)</b>	-	-

The accompanying notes are an integral part of these financial statements.

**THE CORPORATION OF THE CITY OF COURTENAY  
CONSOLIDATED STATEMENT OF OPERATIONS  
FOR THE YEAR ENDED DECEMBER 31, 2017**

REVENUE	2017 Budget (Note 13)	2017	2016
Taxes for Municipal Purposes	\$ 25,752,900	\$ 25,701,418	\$ 24,263,225
Sale of Services	14,481,948	14,934,108	13,425,663
Revenue From Own Sources	2,977,700	3,384,772	3,154,810
Federal Transfers	1,483,100	1,108,235	1,094,108
Provincial Transfers	1,709,000	1,877,196	1,383,979
Other Local Government Transfers	941,950	340,167	220,726
Contributions	573,422	3,037,373	4,118,205
DCC Revenue	-	149,539	260,138
Investment Income and Taxation Penalties	831,600	927,737	922,476
Other	727,300	739,066	682,242
Actuarial adjustment	-	-	45,551
Gain on Sale of Tangible Capital Assets	-	51,105	6,785
<b>TOTAL REVENUE</b>	<b>49,478,920</b>	<b>52,250,716</b>	<b>49,577,908</b>
EXPENSES			
General Government Services	5,930,042	5,034,969	4,730,658
Protective Services	9,743,470	8,919,927	8,125,236
Transportation Services	7,818,031	7,399,060	7,037,780
Sewer and Water Facilities	11,172,984	11,043,443	10,191,449
Environmental Health Services	3,364,948	3,389,673	3,291,499
Public Health and Welfare Services	255,297	383,499	259,991
Environmental Development Services	1,298,808	1,350,794	1,249,548
Recreational and Cultural Services	9,266,899	8,971,151	9,649,136
<b>TOTAL EXPENSES</b>	<b>48,850,478</b>	<b>46,492,516</b>	<b>44,535,297</b>
<b>ANNUAL SURPLUS (Schedule 1)</b>	<b>628,442</b>	<b>5,758,200</b>	<b>5,042,611</b>
<b>ACCUMULATED SURPLUS AT BEGINNING OF YEAR</b>	<b>149,355,323</b>	<b>149,355,323</b>	<b>144,312,712</b>
<b>ACCUMULATED SURPLUS AT END OF YEAR</b>	<b>\$ 149,983,765</b>	<b>\$ 155,113,523</b>	<b>\$ 149,355,323</b>

The accompanying notes are an integral part of these financial statements.



**THE CORPORATION OF THE CITY OF COURTENAY**  
**CONSOLIDATED STATEMENT OF CHANGE IN NET FINANCIAL ASSETS**  
**FOR THE YEAR ENDED DECEMBER 31, 2017**

STATEMENT C

	2017 Budget (Note 13)	2017	2016
ANNUAL SURPLUS	\$ 628,442	\$ 5,758,200	\$ 5,042,611
Acquisition of tangible capital assets	(11,851,600)	(7,131,998)	(5,625,947)
Amortization of tangible capital assets	4,425,000	5,183,920	4,890,442
(Gains)/losses and other adjustments to tangible capital assets		437,222	194,159
Proceeds on sale of tangible capital assets		62,811	13,675
Developer tangible capital asset contribution	-	(2,869,183)	(3,606,717)
	(7,426,600)	(4,317,228)	(4,134,388)
Acquisition of supplies inventories	-	(517,235)	(402,965)
Acquisition of prepaid expense	-	(492,414)	(714,847)
Consumption of supplies inventories	-	514,612	390,686
Use of prepaid expense	-	537,023	554,541
	-	41,986	(172,585)
CHANGE IN NET FINANCIAL ASSETS	(6,798,158)	1,482,958	735,638
NET FINANCIAL ASSETS AT BEGINNING OF YEAR	13,433,378	13,433,378	12,697,740
NET FINANCIAL ASSETS AT END OF YEAR	\$ 6,635,220	\$ 14,916,336	\$ 13,433,378

The accompanying notes are an integral part of these financial statements

**THE CORPORATION OF THE CITY OF COURTENAY  
CONSOLIDATED STATEMENT OF CASH FLOW  
FOR THE YEAR ENDED DECEMBER 31, 2017**

**STATEMENT D**

	2017	2016
<b>CASH PROVIDED BY (APPLIED TO) FINANCING TRANSACTIONS</b>		
<b>OPERATING TRANSACTIONS</b>		
Annual Surplus	\$ 5,758,200	\$ 5,042,611
Changes in non-cash items including amortization		
Increase in amortization	5,183,920	4,890,442
Change in receivables	218,706	577,012
Change in accounts payable	(1,219,976)	1,498,173
Change in trust and other deposits	(705,692)	690,148
Change in deferred revenue	1,876,493	304,415
Change in inventories	(2,623)	(8,471)
Change in prepaids	44,610	(160,306)
Net (gains)/losses and other adjustments to tangible capital assets	437,222	190,351
Developer Tangible Capital Asset Contribution	(2,869,183)	(3,606,717)
Actuarial adjustment	(386,693)	(333,874)
	8,334,984	9,083,784
<b>CAPITAL TRANSACTIONS</b>		
Cash used to acquire tangible capital assets	(7,131,998)	(5,625,947)
Proceeds on sale of tangible capital assets	62,811	13,675
	(7,069,187)	(5,612,272)
<b>INVESTING TRANSACTIONS</b>		
Proceeds from term deposits		
Term deposits	(78,097)	(15,170,361)
Other		
Cash Provided by (applied to) Investing Transactions	(78,097)	(15,170,361)
<b>FINANCING TRANSACTIONS</b>		
Repayment of long-term debt	(951,245)	(950,605)
Long-term debt proceeds	-	-
Cash applied to Financing Transactions	(951,245)	(950,605)
<b>INCREASE (DECREASE) IN CASH ON HAND AND ON DEPOSIT</b>	236,455	(12,649,454)
<b>CASH ON HAND AND ON DEPOSIT AT BEGINNING OF YEAR</b>	11,940,239	24,589,696
<b>CASH ON HAND AND ON DEPOSIT AT END OF YEAR</b>	\$ 12,176,694	\$ 11,940,239
Interest paid on outstanding debt and included in annual surplus above	\$ 635,742	\$ 713,928

**THE CORPORATION OF THE CITY OF COURTENAY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
YEAR ENDED DECEMBER 31, 2017**

**PAGE 1 OF 14**

The Corporation of the City of Courtenay was incorporated in 1915 under the provisions of the British Columbia Municipal Act. Its principal activities are the provision of local government services to the residents of the Municipality.

**1. SIGNIFICANT ACCOUNTING POLICIES**

(a) Basis of Presentation

It is the policy of the City to follow Canadian public sector accounting standards and to apply such principles consistently. The consolidated financial statements include the operations of General, Water Utility, Sewer, Capital, Reserve Funds, and the Sid Williams Theatre Society, a controlled entity. Transactions between these funds, and between the City and the Sid Williams Theatre Society, have been eliminated on consolidation. The consolidated financial statements have been prepared using guidelines issued by the Public Sector Accounting Board of CPA Canada. The financial resources and operations of the City have been consolidated for financial statement purposes and include the accounts of all of the funds and equity in tangible capital assets of the City. As part of the supplementary information, the resources and operation of the City are segregated into various funds for accounting and financial reporting purposes, each being treated as a separate entity with responsibility for the stewardship of the assets allocated to it.

(b) Revenue and Expense Recognition

Expenses are recorded in the period in which the goods or services are acquired and a liability is incurred.

Amortization is based on the estimated useful lives of tangible capital assets.

Revenue is recorded in the period in which the transactions or events that gave rise to the revenue occur. Amounts that have been received from non-government sources in advance of services being rendered are recorded as deferred revenue until the City discharges the obligations that led to the collection of funds. Following are the types of revenue received and a description of their recognition:

Taxes for Municipal Purposes are recognized in the year levied.

Sale of Services are recognized in the year that the service is provided or the amount is earned, provided the amount can be estimated and collection is reasonably assured.

Revenues from own sources are recognized in the period in which the transactions or events that gave rise to the revenue occur or are earned, provided the amount can be estimated and collection is reasonably assured.

The City recognizes a government transfer as revenue when the transfer is authorized and all eligibility criteria, if any, have been met. A government transfer with stipulations giving rise to an obligation that meets the definition of a liability is recognized as a liability. In such circumstances, the City recognizes revenue as the liability is settled. Transfers of non-depreciable assets are recognized in revenue when received or receivable.

Contributions are recorded when the event giving rise to the contribution occurs.

DCC Revenue is recorded in the year that it is used to fund a capital project and has been authorized by bylaw.

**THE CORPORATION OF THE CITY OF COURTENAY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
YEAR ENDED DECEMBER 31, 2017**

**1. SIGNIFICANT ACCOUNTING POLICIES (continued)**

Investment income, taxation penalties, and actuarial earnings are recorded in the year they are earned.

(c) **Accrued Payroll Benefits**

Earned but unpaid vacation is fully accrued and recorded in the financial statements.

Post employment benefits are accrued and recorded in the financial statements. This amount is provided by an Actuary that the City has engaged.

(d) **Use of Estimates**

The preparation of financial statements in conformity with Canadian public sector accounting standards requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Accounts Receivable are stated after evaluation of their collectability. Post employment benefits are calculated by an Actuary. Amortization is based on the estimated useful lives of tangible capital assets. These estimates and assumptions are reviewed periodically and as adjustments become necessary they are reported in earnings in the periods in which they become known. Liabilities for contaminated sites are estimated based on the best information available regarding potentially contaminated sites that the City of Courtenay is responsible for.

(e) **Inventories**

Inventories are valued at the lower of cost and replacement cost.

(f) **Tangible Capital Assets**

Tangible capital assets are recorded at cost, net of capital asset disposals, write-downs and amortization. Tangible capital asset expenditures exceeding the following thresholds per major category are capitalized. The average useful life is applied straight line to calculate amortization. In the year of acquisition and disposal, amortization is taken at one-half of the calculated amounts.

<b>Major Asset Category</b>	<b>Threshold</b>	<b>Average Useful Life</b>
Land	\$1	Indefinite
Land Improvements	\$10,000	Varies from 10 to 40 years
Building	\$10,000	Varies from 25 to 60 years
Vehicles, Machinery/Equipment	\$5,000 to \$10,000	Varies from 5 to 25 years
Engineering Structures		
Roads	\$5,000 to \$50,000	Varies from 10 to 60 years
Water	\$5000 to \$10,000	Varies from 8 to 80 years
Sewer	\$10,000	Varies from 8 to 60 years
Other – Includes Storm	\$10,000	Varies from 25 to 75 years
Other Tangible Capital Assets (includes IT software)	\$5,000	5 years

**THE CORPORATION OF THE CITY OF COURTENAY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
YEAR ENDED DECEMBER 31, 2017**

**1. SIGNIFICANT ACCOUNTING POLICIES (continued)**

Carrying costs directly attributable to the acquisition, construction or development activity, excluding interest costs, are capitalized to the point in time the asset is substantially complete and ready for use. Contributed tangible capital assets are recorded at their fair value on the date of contribution. Assets under construction are not amortized until the asset is in use.

(g) Financial Instruments

Financial Instruments consist of cash on hand and deposit, term deposits, receivables, accounts payable, trusts and other deposits, and long-term debt. It is management's opinion that the Municipality is not exposed to significant interest, currency, exchange, or credit risk arising from these financial instruments.

(h) Debt Charges

Interest payments are charged against current fund balances in the period they become payable and have been accrued to December 31, 2017. Actuarial adjustments are offset against interest charged. Principal payments are applied directly to loan balances in the period they accrue.

(i) Receivables

Following is a breakdown of receivables outstanding at December 31, 2017 with 2016 comparatives:

	2017	2016
Federal Government	\$ 226,908	\$ 206,198
Provincial Government	659,170	566,788
Regional and other Local Governments	275,880	160,397
Property Taxes	955,208	1,489,508
Other	842,968	755,949
 Total Receivables	 \$ 2,960,134	 \$ 3,178,840

(j) Accounts Payable

Following is a breakdown of accounts payable and accrued liabilities outstanding at December 31, 2017 with 2016 comparatives:

	2017	2016
Federal Government	\$ 1,348,962	\$ 1,237,832
Provincial Government	78,412	362,370
Regional and other Local Governments	724,355	1,381,811
Employee Retirement Benefits (Note 10)	944,400	926,000
Trade and accrued liabilities	3,955,501	4,363,593
 Total Accounts Payable	 \$ 7,051,630	 \$ 8,271,606

**THE CORPORATION OF THE CITY OF COURTENAY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
YEAR ENDED DECEMBER 31, 2017**

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**1. SIGNIFICANT ACCOUNTING POLICIES (continued)**

(k) Liability for Contaminated Sites

A liability for remediation of a contaminated site is recognized at the best estimate of the amount required to remediate the contaminated site when; contamination exceeding an environmental standard exists, the City of Courtenay is either directly responsible or accepts responsibility, it is expected that future economic benefits will be given up, and a reasonable estimate of the amount is determinable. The best estimate of the liability includes all costs directly attributable to remediation activities and is reduced by expected net recoveries based on information available at December 31, 2017.

At each financial reporting date, the City of Courtenay reviews the carrying amount of the liability. Any revisions required to the amount previously recognized is accounted for in the period when revisions are made. The City of Courtenay continues to recognize the liability until it is settled or otherwise extinguished. Disbursements made to settle the liability are deducted from the reported liability when they are made.

(l) Recent Accounting Pronouncements

*PS 2200 Related Party Disclosures*

In March 2015, as part of the CPA Canada Public Sector Accounting Handbook Revisions Release No. 42, the Public Sector Accounting Board (PSAB) issued a new standard, PS 2200 Related Party Disclosures.

This new Section defines related party and established disclosures required for related party transactions. Disclosure of information about related party transactions and the relationship underlying them is required when they have occurred at a value different from that which would have been arrived at if the parties were unrelated, and they have, or could have, a material financial effect on the financial statements.

This section is effective for fiscal years beginning on or after April 1, 2017. Early adoption is permitted. This new Standard does not have a material effect on the consolidated financial statements.

*PS 3210 Assets*

In June 2015, new PS 3210 Assets was included in the CPA Canada Public Sector Accounting Handbook (PSA HB). The new Section provides guidance for applying the definition of assets set out in PS 1000 Financial Statement Concepts. The main features of this standard are as follows:

Assets are defined as economic resources controlled by a government as a result of past transactions or events and from which future economic benefits are expected to be obtained. Economic resources can arise from such events as agreements, contracts, other government's legislation, the government's own legislation, and voluntary contributions. The public is often the beneficiary of goods and services provided by a public sector entity. Such assets benefit public sector entities as they assist in achieving the entity's primary objective of providing public goods and services.

A public sector entity's ability to regulate an economic resource does not, in and of itself, constitute control of an asset, if the interest extends only to the regulatory use of the economic resource and does not include the ability to control access to future economic benefits.

**THE CORPORATION OF THE CITY OF COURTENAY**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**YEAR ENDED DECEMBER 31, 2017**

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**1. SIGNIFICANT ACCOUNTING POLICIES (continued)**

A public sector entity acting as a trustee on behalf of beneficiaries specified in an agreement or statute is merely administering the assets, and does not control the assets, as future economic benefits flow to the beneficiaries.

An economic resource may meet the definition of an asset, but would not be recognized if there is no appropriate basis for measurement and a reasonable estimate cannot be made, or if another Handbook Section prohibits its recognition. Information about assets not recognized should be disclosed in the notes.

The standard is effective for fiscal years beginning on or after April 1, 2017. Earlier adoption is permitted. This new Standard does not have a material effect on the consolidated financial statements.

*PS 3320 Contingent Assets*

In June 2015, new PS 3320 Contingent Assets was included in the CPA Canada Public Sector Accounting Handbook (PSA HB). The new Section establishes disclosure standards on contingent assets. The main features of this Standard are as follows:

Contingent assets are possible assets arising from existing conditions or situations involving uncertainty. That uncertainty will ultimately be resolved when one or more future events not wholly within the public sector entity's control occurs or fails to occur. Resolution of the uncertainty will confirm the existence or non-existence of an asset.

Passing legislation that has retroactive application after the financial statement date cannot create an existing condition or situation at the financial statement date.

Elected or public sector entity officials announcing public sector entity intentions after the financial statement date cannot create an existing condition or situation at the financial statement date.

Disclosures should include existence, nature, and extent of contingent assets, as well as the reasons for any non-disclosure of extent, and the bases for any estimates of extent made.

When a reasonable estimate can be made, disclosure should include a best estimate and a range of possible amounts (or a narrower range of more likely amounts), unless such a disclosure would have an adverse impact on the outcome.

The standard is effective for fiscal years beginning on or after April 1, 2017. Earlier adoption is permitted. This new Standard does not have a material effect on the consolidated financial statements.

*PS 3380 Contractual Rights*

In June 2015, new PS 3380 Contractual Rights was included in the CPA Canada Public Sector Accounting Handbook (PSA HB). This new Section establishes disclosure standards on contractual rights, and does not include contractual rights to exchange assets where revenue does not arise. The main features of this Standard are as follows:

Contractual rights are rights to economic resources arising from contracts or agreements that will result in both an asset and revenue in the future. Until a transaction or event occurs under a contract or agreement, an entity only has a contractual right to an economic resource. Once the entity has received an asset, it no longer has a contractual right. Contractual rights are distinct from contingent assets as there is no uncertainty related to the existence of the contractual right. Disclosures should include descriptions about nature, extent, and timing.

**THE CORPORATION OF THE CITY OF COURTENAY  
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
YEAR ENDED DECEMBER 31, 2017**

**1. SIGNIFICANT ACCOUNTING POLICIES (continued)**

The standard is effective for fiscal years beginning on or after April 1, 2017. Earlier adoption is permitted. This new Standard does not have a material effect on the consolidated financial statements.

*PS 3430 Restructuring Transactions*

In June 2015, new PS 3430 Restructuring Transactions was included in the CPA Canada Public Sector Accounting Handbook (PSA HB). The new Section establishes disclosure standards on contingent assets. The main features of this Standard are as follows:

A restructuring transaction is defined separately from an acquisition. The key distinction between the two is the absence of an exchange of consideration in a restructuring transaction. A restructuring transaction is defined as a transfer of an integrated set of assets and/or liabilities, together with related program or operating responsibilities that does not involve an exchange of consideration. Individual assets and liabilities transferred in a restructuring transaction are derecognized by the transferor at their carrying amount and recognized by the recipient at their carrying amount with applicable adjustments.

The increase in net assets or net liabilities resulting from recognition and de-recognition of individual assets and liabilities received from all transferors, and transferred to all recipients in a restructuring transaction, is recognized as revenue or as an expense. Restructuring-related costs are recognized as expenses when incurred.

Individual assets and liabilities received in a restructuring transaction are initially classified based on the accounting policies and circumstances of the recipient at the restructuring date. The financial position and results of operations prior to the restructuring date are not restated. Disclosure of information about the transferred assets, liabilities and related operations prior to the restructuring date by the recipient is encouraged but not required.

The Section is effective for new restructuring transactions that occur in fiscal periods beginning on or after April 1, 2018. Earlier application is encouraged. The City does not expect application of the new Standard to have a material effect on the consolidated financial statements.

**2. CONTINGENT LIABILITIES AND COMMITMENTS**

(a) Regional District debt is, under the provisions of the Local Government Act (Section 836), a direct, joint and several liability of the District and each member municipality within the District, including the Corporation of the City of Courtenay. Readers are referred to the Comox Valley Regional District 2017 Audited Financial Statements for specific information and detail.

(b) Principal repayments on long-term debt in each of the next five years are estimated as follows:

2018	\$	951,899
2019		934,845
2020		935,534
2021		885,800
2022		810,918
	<u>\$</u>	<u>4,518,996</u>



**THE CORPORATION OF THE CITY OF COURTENAY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
YEAR ENDED DECEMBER 31, 2017**

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- (c) The Municipality is obligated to collect and transmit the tax levies of the following bodies:

Provincial Government – Schools  
Comox Valley Regional District  
Comox-Strathcona Regional Hospital District  
Municipal Finance Authority  
British Columbia Assessment Authority  
Vancouver Island Regional Library  
Downtown Courtenay Business Improvement Area

These levies are not included in the revenues of the Municipality.

- (d) As at December 31, 2017, there existed outstanding claims against the City. These claims have been referred to legal counsel and to the City's liability insurers. It is not possible to determine the City's potential liability, if any, with respect to these matters. Management has determined that any potential liabilities arising from these outstanding claims are not significant.

### **3. PENSION LIABILITY**

The employer and its employees contribute to the Municipal Pension Plan (a jointly trustee pension plan). The board of trustees, representing plan members and employers, is responsible for administering the plan, including investment of the assets and administration of benefits. The plan is a multi-employer defined benefit pension plan. Basic pension benefits provided are based on a formula. As at December 31, 2016, the plan has about 193,000 active members and approximately 90,000 retired members. Active members include approximately 38,000 contributors from local government.

Every three years, an actuarial valuation is performed to assess the financial position of the plan and adequacy of plan funding. The actuary determines an appropriate combined employer and member contribution rate to fund the plan. The actuary's calculated contribution rate is based on the entry-age normal cost method, which produces the long-term rate of member and employer contributions sufficient to provide benefits for average future entrants to the plan. This rate may be adjusted for the amortization of any unfunded actuarial liability.

The most recent valuation for the Municipal Pension Plan as at December 31, 2015, indicated a \$2.224 billion funding surplus for basic pension benefits on a going concern basis. As a result of the 2015 basic account actuarial valuation surplus and pursuant to the joint trustee agreement, \$1.927 billion was transferred to the rate stabilization account and \$297 million of the surplus ensured the required contribution rates remained unchanged

The City of Courtenay paid \$939,145 (2016 - \$867,334) for employer contributions to the plan in fiscal 2017.

The next valuation will be as at December 31, 2018, with results available in 2019.

Employers participating in the plan record their pension expense as the amount of employer contributions made during the fiscal year (defined contribution pension plan accounting). This is because the plan records accrued liabilities and accrued assets for the plan in aggregate with the result that there is no consistent and reliable basis for allocating the obligation, assets and cost to the individual employers participating in the plan.

**THE CORPORATION OF THE CITY OF COURTENAY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
YEAR ENDED DECEMBER 31, 2017**

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**4. HOST FINANCIAL ASSISTANCE AGREEMENT**

The City of Courtenay is a host community for a casino gaming facility operated under agreement with the British Columbia Lottery Corporation. The City receives a percentage of the net gaming income generated by the Chances Courtenay Gaming Centre to be used for public benefit through a quarterly unrestricted transfer from the Province of British Columbia.

**5. FEDERAL GAS TAX AGREEMENT FUNDS**

Gas Tax Agreement funding is provided by the Government of Canada. The use of the funding is established by a funding agreement between the local government and the Union of British Columbia Municipalities. Gas Tax Agreement funding may be used towards designated public transit, community energy, water, wastewater, solid waste and capacity building projects, as specified in the funding agreements.

The City of Courtenay received the first contribution of Gas Tax funding in 2005 and reports the balance in a General Fund Reserve – New Works Community Gas Tax Funds (Schedule 2) until it is used to fund the specified projects outlined in the funding agreement. Interest is accrued and allocated monthly to the balance.

Following is a schedule of Gas Tax receipts and disbursements received in 2017 with comparatives to 2016.

	<u>2017</u>	<u>2016</u>
<b>Opening Balance of Unspent Funds</b>	<b>\$4,733,397</b>	<b>\$3,735,925</b>
Additions:		
Amounts Received During the Year	1,083,236	1,069,107
Interest Earned	29,466	15,865
Deductions:		
Amount Spent on Projects	<u>(2,328,724)</u>	<u>(87,500)</u>
<b>Closing Balance of Unspent Funds</b>	<b><u>\$3,517,375</u></b>	<b><u>\$4,733,397</u></b>

**THE CORPORATION OF THE CITY OF COURTENAY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
YEAR ENDED DECEMBER 31, 2017**

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**6. DEFERRED REVENUE - DEVELOPMENT COST CHARGES**

In order to conform with the Public Sector Accounting Standards of CPA Canada, the unspent development cost charges in the following financial statements have been recorded as a liability. Following is a breakdown of cash increases and decreases for the General, Water, and Sewer development costs charge reserves for 2017 and 2016.

	2017				
	General Reserve DCC BL #2840	Water Utility Reserve DCC BL #2840	Sewer Utility Reserve DCC BL #2840	Sewer Utility Reserve DCC BL #1638	2017 Total
<b>Balance Forward</b>	\$ 3,450,709	\$ 529,837	\$ 467,447	\$ 33,608	\$ 4,481,601
<b>Increases</b>					
Interest	21,924	3,265	3,147	198	28,534
Other Contributions	991,805	61,451	132,344	-	1,185,600
	1,013,729	64,716	135,491	198	1,214,134
<b>Decreases</b>					
Revenue Recognized to Fund Capital Projects	(149,539)	-	-	-	(149,539)
<b>Ending Balance Deferred Revenue - DCC</b>	<u>\$ 4,314,899</u>	<u>\$ 594,553</u>	<u>\$ 602,938</u>	<u>\$ 33,806</u>	<u>\$ 5,546,196</u>
	2016				
	General Reserve DCC BL #2840	Water Utility Reserve DCC BL #2840	Sewer Utility Reserve DCC BL #2840	Sewer Utility Reserve DCC BL #1638	2016 Total
<b>Balance Forward</b>	\$ 3,049,041	\$ 463,577	\$ 327,170	\$ 33,474	\$ 3,873,262
<b>Increases</b>					
Interest	13,300	1,967	1,511	134	16,912
Other Contributions	638,568	73,593	139,404	-	851,565
	651,868	75,560	140,915	134	868,477
<b>Decreases</b>					
Revenue Recognized to Fund Capital Projects	(250,200)	(9,300)	(638)	-	(260,138)
<b>Ending Balance Deferred Revenue - DCC</b>	<u>\$ 3,450,709</u>	<u>\$ 529,837</u>	<u>\$ 467,447</u>	<u>\$ 33,608</u>	<u>\$ 4,481,601</u>

**THE CORPORATION OF THE CITY OF COURTENAY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
YEAR ENDED DECEMBER 31, 2017**

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**7. TRUST AND ENDOWMENT FUNDS**

- (a) The Cemetery Perpetual Care Fund has been assigned to the City to be administered as directed by statute. The City holds the assets for the benefit of, and stands in fiduciary relationship to, the beneficiary. Following is a summary of the financial position and activities for 2017 and 2016, which has been excluded from the City's financial statements.

CEMETERY PERPETUAL CARE FUND FINANCIAL POSITION	2017	2016	CEMETERY PERPETUAL CARE FUND FINANCIAL ACTIVITIES	2017	2016
<b>Financial Assets</b>			<b>Revenue</b>		
Cash on Hand	\$ 88,440	\$ 82,201	Fees Levied	\$ 10,590	\$ 9,711
Investments - MFA	<u>238,312</u>	<u>236,023</u>	Interest Revenue	<u>3,242</u>	<u>2,608</u>
<b>Liabilities</b>			<b>Expenditure</b>		
Interest Payable to City	<u>3,242</u>	<u>5,303</u>	Interest Expense	<u>3,242</u>	<u>2,608</u>
<b>Net Financial Position</b>	<u><u>\$ 323,510</u></u>	<u><u>\$ 312,921</u></u>	<b>Excess Revenue over Expenditure</b>	<u><u>\$ 10,590</u></u>	<u><u>\$ 9,711</u></u>

- (b) The Sid Williams Theatre has endowment funds on deposit with the Comox Valley Community Foundation in the amount of \$423,132 (2016 - \$384,442). The principal amount of this endowment cannot be utilized or withdrawn and as such are not considered assets of the City of Courtenay. The endowment funds are not reported as an asset on the statement of financial position.

**8. DEFERRED REVENUE – OTHER**

Other Deferred Revenue recorded in the Liability section of the City's Financial Statements consists of the revenues related to business license revenue levied and to be recognized in future years, Government transfers received prior to revenue recognition criteria being met, and gift certificates issued and to be redeemed in future years at the Sid Williams Theatre. Following is a breakdown of the change in this balance for 2017 and 2016:

	2017	2016
<b>Opening Balance</b>	<b>\$ 1,409,770</b>	<b>\$ 1,713,694</b>
Additions to Deferred Revenue	2,221,668	1,406,868
Revenue Recognized	(1,409,770)	(1,710,791)
<b>Ending Balance Deferred Revenue Other</b>	<u><u>\$ 2,221,668</u></u>	<u><u>\$ 1,409,770</u></u>

**THE CORPORATION OF THE CITY OF COURTENAY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
YEAR ENDED DECEMBER 31, 2017**

**9. MFA DEBT RESERVE FUNDS**

The City secures its long term borrowing through the Municipal Finance Authority. As a condition of these borrowings a portion of the debenture proceeds are retained by the Authority as a debt reserve fund. These funds are not reported in the financial statements as they are eliminated upon consolidation. As at December 31, 2017 the City had debt reserve funds of \$333,765 (\$327,368 in 2016).

**10. EMPLOYEE RETIREMENT BENEFIT LIABILITY**

Employees with 10 years of continuous service retiring under the terms of the Municipal Superannuation Act are entitled to a payout of up to 72 days of their accumulated unused sick leave bank and up to a maximum of 8 additional severance days for each year of service in which the employee used no sick leave. Additionally, upon death of the employee, the bank, up to a maximum of 72 days, will be payable to the employee's life benefit beneficiary. The value of this liability is calculated by an Actuary engaged by the City and reflects the likelihood that all eligible City employees will become entitled to this benefit. Actuarial valuation assumptions for 2017 were based on an interest (discount) rate of 3.0% per annum (2016 - 3.3%) and an inflation rate of 2.5% for both 2017 and 2016. The total estimated employee retirement benefit liability at December 31, 2017 is \$944,400 (\$926,000 in 2016) and is included in the accounts payable balance on Statement A. Following is a breakdown of the benefit liability:

	2017	2016
Accrued benefit liability at beginning of year	926,000	875,700
Expense	100,861	124,300
Benefit Payments	(82,461)	(74,000)
Accrued benefit liability at end of year	\$ 944,400	\$ 926,000

## **11. CONSOLIDATED SEGMENT DISCLOSURE BY SERVICE**

The City of Courtenay Consolidated Financial Statements includes the financial activities of various services made available to the community. Following is a description of the types of services included in each of the main service segments of the City's financial statements. A detailed summary of the 2017 revenues and expenses with 2016 comparatives for each segment can be found in Schedule 1 of the accompanying financial statements.

### **General Government Services**

Provide services related to general corporate and legislative administration as well as human resources, information technology, financial management, and revenues received from the Province related to gaming.

### **Protective Services**

Includes services related to providing fire protection, bylaw enforcement, and building inspection to the City, as well as the City's share of expenses related to providing police protection to the Comox Valley.

### **Transportation Services**

Includes the delivery of municipal public works services related to planning, development and maintenance of roadway systems, street lighting, and other public works and engineering related services.

### **Environmental Health Services**

Includes services related to the collection of garbage, recycling, and yard waste, as well as environmental testing and monitoring.

### **Public Health and Welfare Services**

Includes cemetery services.

### **Environmental Development Services**

Includes services related to planning, zoning, sustainability, and hotel taxes, as well as actions relating to homelessness.

### **Recreational and Cultural Services**

Provides recreation and leisure services to the community and includes parks and facilities that allow for fitness, aquatic, cultural, and other activities for the public to enjoy.

### **Water Utility Services**

Provides for the delivery of water to users and includes the planning, development and maintenance of the City's water infrastructure.

### **Sewer Utility Services**

Provides for the delivery of sewerage removal and includes the planning, development and maintenance of the City's sewer infrastructure.

### **Other Services**

Includes the operations of the Sid Williams Theatre.

**THE CORPORATION OF THE CITY OF COURTENAY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
YEAR ENDED DECEMBER 31, 2017**

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**12. TANGIBLE CAPITAL ASSET DETAILS**

(See Schedule 3 for further details)

Contributed capital assets received and recognized in the year from developers, for various infrastructure works and related land and parks, and recorded on the financial statements in 2017 is \$2,869,183 (\$3,606,717 in 2016).

Tangible capital assets include land under the City's roads, recorded at a nominal amount.

Art and historic treasures are displayed at various city facilities and consist of paintings, historical photographs, sculptures, carvings, and other cultural artefacts. These items have not been included in tangible capital assets due to the inability of estimating future benefits associated with such property.

**THE CORPORATION OF THE CITY OF COURTENAY  
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
YEAR ENDED DECEMBER 31, 2017**

**13. RESTATEMENT OF 2017 BUDGET**

The budget amounts presented throughout these financial statements are based upon the Five Year Financial Plan approved by Council on May 8, 2017 except in regard to budget amounts for amortization, tangible capital assets, and the use of debt, reserves and prior year surpluses.

The summary below shows the adjustments to the May 8, 2017 budget approved by Council and reflected in these financial statements:

**Adjustments to 2017 Budgeted Annual Surplus**

<b>Budgeted Surplus per Council approved Budget</b>	<b>\$</b>	<b>-</b>
Sid Williams Theatre		8,942
Purchase of Capital Assets		11,851,600
Amortization Budgeted		(4,425,000)
Transfer from Reserves		(10,563,000)
Transfer to Reserves		4,201,900
Use of Prior Year Surplus		(1,397,200)
Debt principle repayments in Financial Plan		951,200
<b>Budgeted Surplus per Consolidated Statement of Operations</b>	<b>\$</b>	<b><u>628,442</u></b>



THE CORPORATION OF THE CITY OF COURTENAY  
 CONSOLIDATED SCHEDULE OF SEGMENT DISCLOSURE BY SERVICE  
 YEAR ENDED DECEMBER 31, 2017  
 (Audited)

SCHEDULE 1  
 (Note 11)  
 Page 1 of 2

	General Government Services		Protective Services		Transportation Services		Environmental Health Services		Public Health and Welfare Services	
	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
<b>REVENUE:</b>										
Taxation	\$ 22,816,507	\$ 21,603,976								
Sales of Services			933,633	887,972			3,201,028	3,073,262		
Revenue from Own Sources			682,622	858,811	130,868	47,356			103,870	88,353
Government Transfers	1,359,000	1,196,053	300,373	76,006	1,259,640	1,158,804			167,440	128,455
Other Revenue	87,010	94,430			141,500	132,218				
Other Contributions					2,357,482	2,306,421		661,925		
Interest Earned	804,432	848,349	3,735	2,106	49,964	27,320				
Actuarial Adjustment	9,369	45,549								
Gain on sale of TCA			1,920,363	1,825,095	33,336	6,585	3,201,028	3,735,187	271,310	216,808
<b>Total Revenues</b>	<b>25,076,318</b>	<b>23,788,357</b>	<b>1,920,363</b>	<b>1,825,095</b>	<b>3,972,790</b>	<b>3,678,704</b>	<b>3,201,028</b>	<b>3,735,187</b>	<b>271,310</b>	<b>216,808</b>
<b>EXPENSES</b>										
Salaries and Benefits	3,365,498	3,090,741	2,081,233	1,905,934	2,382,224	2,357,809	51,637	55,009	233,328	162,794
Goods and Services	1,186,907	1,260,600	6,467,288	5,835,208	1,811,402	1,806,460	3,011,456	2,909,185	122,419	72,805
Amortization Expense	240,240	170,291	352,012	345,789	2,743,677	2,618,140	315,948	318,718	27,752	24,392
Debt Servicing	(35,375)	16,080	2,355	35,907	199,953	236,551				
Other Expenditures	277,699	191,383		2,398	640	15,323	8,000	430		
Loss on Disposal of TCA		1,563	17,039	2,398	261,164	3,497	2,632	8,157		
<b>Total Expenses</b>	<b>5,034,969</b>	<b>4,730,658</b>	<b>8,919,927</b>	<b>8,125,236</b>	<b>7,399,060</b>	<b>7,037,780</b>	<b>3,389,673</b>	<b>3,291,499</b>	<b>383,499</b>	<b>259,991</b>
<b>ANNUAL SURPLUS</b>	<b>20,041,349</b>	<b>19,057,699</b>	<b>(6,999,564)</b>	<b>(6,300,141)</b>	<b>(3,426,270)</b>	<b>(3,359,076)</b>	<b>(188,645)</b>	<b>443,688</b>	<b>(112,189)</b>	<b>(43,183)</b>

**THE CORPORATION OF THE CITY OF COURTENAY**  
**CONSOLIDATED SCHEDULE OF SEGMENT DISCLOSURE BY SERVICE**  
**YEAR ENDED DECEMBER 31, 2017**  
(Audited)

SCHEDULE 1  
(Note 11)  
Page 2 of 2

	Environmental Development Services		Recreational and Cultural Services		Water Utility Services		Sewer Utility Services		Other Services		Consolidated	
	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
<b>REVENUE:</b>												
Taxation												
Sales of Services		510,715	1,690,319	1,612,910	\$ 922,220	\$ 709,738	\$ 1,962,691	\$ 1,949,511			\$ 25,701,418	\$ 24,263,225
Revenue from Own Sources	28,958	20,000	180,547	82,097	5,826,949	4,956,600	4,338,650	3,883,643			14,934,108	13,425,663
Government Transfers	324,581	290,282	18,535	24,857	220,792	122,574	43,944	2,445			3,384,772	3,154,810
Other Revenue	41,000	233,188	118,068	141,459		12,000		10,000			3,325,598	2,698,813
Other Contributions			5,046	14,139		379,007	243,033	475,163			739,066	682,242
Interest Earned	4,821	3,539			18,322	6,952	20,222	5,547			3,186,912	4,378,343
Actuarial Adjustment			8,400								927,737	922,476
Gain on sale of TCA											51,105	6,785
<b>Total Revenues</b>	<b>1,015,587</b>	<b>1,057,724</b>	<b>2,020,915</b>	<b>1,875,462</b>	<b>7,367,290</b>	<b>6,312,139</b>	<b>6,608,540</b>	<b>6,326,309</b>	<b>796,575</b>	<b>762,121</b>	<b>52,250,716</b>	<b>49,577,908</b>
<b>EXPENSES</b>												
Salaries and Benefits	804,788	712,196	4,152,743	4,304,997	648,115	681,696	444,095	449,920			14,829,265	14,364,987
Goods and Services	427,386	440,246	2,681,291	2,752,573	4,574,027	2,915,963	850,299	943,956			21,359,172	19,312,996
Amortization Expense	2,533	2,533	842,040	800,883	403,958	371,577	255,758	238,117			5,183,918	4,890,440
Debt Servicing			69,364	118,425	824	7,451	11,928	20,334			249,049	434,748
Other Expenditures	116,087	94,573	309,529	644,699	144	37,158	3,670,687	4,484,685			4,382,786	5,470,649
Less on Disposal of TCA			23,883	7,668	183,608	18,497		22,095			488,326	61,477
<b>Total Expenses</b>	<b>1,350,794</b>	<b>1,249,548</b>	<b>8,078,850</b>	<b>8,629,245</b>	<b>5,810,676</b>	<b>4,032,342</b>	<b>5,232,767</b>	<b>6,159,107</b>	<b>892,301</b>	<b>1,019,891</b>	<b>46,492,516</b>	<b>44,535,297</b>
<b>ANNUAL SURPLUS</b>	<b>\$ (335,207)</b>	<b>\$ (191,824)</b>	<b>\$ (6,057,935)</b>	<b>\$ (6,753,783)</b>	<b>\$ 1,556,614</b>	<b>\$ 2,279,797</b>	<b>\$ 1,375,773</b>	<b>\$ 167,202</b>	<b>\$ (95,726)</b>	<b>\$ (257,770)</b>	<b>\$ 5,758,200</b>	<b>\$ 5,042,611</b>

SCHEDULE 2

THE CORPORATION OF THE CITY OF COURTENAY  
 CONSOLIDATED SCHEDULE OF ACCUMULATED SURPLUS & RESERVES  
 YEAR ENDED DECEMBER 31, 2017  
 (Unaudited)

	<u>2017</u>	<u>2016</u>
<b>SURPLUS</b>		
Invested in Tangible Capital Assets	\$ 126,707,678	\$ 121,052,517
General Operating Fund	4,298,104	4,693,224
General Capital Fund	1,724,304	1,724,307
Water Utility Operating Fund	1,334,835	677,363
Water Utility Capital Fund	108,869	108,869
Sewer Utility Operating Fund	1,220,160	944,924
Sewer Utility Capital Fund	21,706	21,706
Sid Williams Theatre Society	306,861	220,987
Gaming Fund	1,706,495	1,515,339
Total Surplus	<u>137,429,012</u>	<u>130,959,236</u>
<b>RESERVES</b>		
General Fund Reserves:		
Machinery and Equipment	1,551,970	1,478,260
Land Sale	150,621	149,738
New Works and Equipment	3,412,220	3,969,896
New Works - Community Gas Tax Funds (Note 5)	3,517,375	4,733,397
General Asset Management Reserve	654,306	650,474
Risk Reserve	100,992	100,401
Public Parking	48,805	44,068
Parkland Acquisition	210,250	209,019
Police Contingency Reserve	417,602	
Assessment Appeal	50,038	
Housing Amenity	492,421	449,161
Tree Reserve	4,538	4,012
Amenity	299,581	286,744
	<u>10,910,719</u>	<u>12,075,170</u>
Water Utility Reserves:		
Water Utility	1,557,915	1,516,303
Water Asset Management Reserve	1,298,207	1,322,838
Machinery and Equipment	284,643	253,053
	<u>3,140,765</u>	<u>3,092,194</u>
Sewer Utility Reserves:		
Sewer Utility	488,983	476,139
Sewer Asset Management Reserve	2,437,517	2,125,000
Machinery and Equipment	706,527	627,584
	<u>3,633,027</u>	<u>3,228,723</u>
Total Reserves	<u>17,684,511</u>	<u>18,396,087</u>
ACCUMULATED SURPLUS (Statement A)	<u>\$ 155,113,523</u>	<u>\$ 149,355,323</u>

THE CORPORATION OF THE CITY OF COURTENAY  
 CONSOLIDATED SCHEDULE OF TANGIBLE CAPITAL ASSETS  
 FOR THE YEAR ENDED DECEMBER 31, 2017  
 (Audited)

	Land	Land Improvements	Buildings	Equipment/ Furniture/ Vehicles	Engineering Structures				Other Tangible Capital Assets	Total	2016
					Roads	Water	Sewer	Other			
Opening Balance Construction-in-progress (CIP)	-	153,365	178,647	199,496	709,508	62,138	11,653	24,240	20,242	\$ 1,359,289	5,380,573
Add: Construction-in-progress (CIP)	-	40,544	175,453	168,561	245,608	95,312	(11,653)	8,000	8,000	733,478	660,814
Less: Transfers into Service	-	(16,762)	(44,304)	(209,106)	(254,397)	(24,389)	(11,653)	-	-	(543,849)	(4,682,098)
Less: Writedowns & Reallocations	-	177,147	309,796	(7,121)	(166,370)	133,061	-	24,240	28,242	(190,253)	-
Closing Balance Construction-in-progress	-	177,147	309,796	151,830	534,349	133,061	-	24,240	28,242	1,358,665	1,359,289
Opening Balance Tangible Capital Assets	21,609,649	6,579,867	30,007,859	16,700,686	90,184,974	19,041,144	10,477,712	21,423,210	754,068	216,779,169	204,147,360
Add: Opening Adjustment	-	-	-	-	-	-	-	-	-	-	(133,603)
Add: Additions (including Transfers into Service)	410,000	103,842	817,439	1,248,419	3,624,667	2,150,109	420,489	633,072	403,514	9,811,551	13,254,951
Less: Disposals	-	-	-	(293,147)	(749,405)	(313,816)	-	(7,520)	(64,607)	(1,428,495)	(489,539)
Closing Balance Tangible Capital Assets and CIP	22,019,649	6,860,856	31,135,094	17,807,788	93,594,585	21,010,498	10,898,201	22,073,002	1,121,217	226,520,890	218,138,458
Opening Balance	-	2,588,859	10,516,382	9,997,477	43,221,167	6,517,509	1,685,566	7,689,093	680,192	82,896,245	78,423,934
Add: Writedown	-	-	-	-	-	-	-	-	-	-	3,040
Add: Amortization	238,369	701,683	786,387	786,387	2,319,763	373,026	198,966	502,626	63,100	5,183,920	4,890,442
Less: Accum Amortization on Disposals	-	2,827,228	11,218,340	(264,677)	(654,611)	(130,208)	(4,888)	(4,888)	(64,607)	(1,118,716)	(421,171)
	-	2,827,228	11,218,340	10,519,187	44,886,319	6,760,327	1,884,532	8,186,831	678,685	86,961,449	82,896,245
Net Book Value for year ended December 31, 2017	\$ 22,019,649	\$ 4,033,628	\$ 19,916,754	\$ 7,288,601	\$ 48,708,266	\$ 14,250,171	\$ 9,013,669	\$ 13,886,171	\$ 442,532	\$ 139,559,441	\$ 135,242,213

ACCUMULATED AMORTIZATION

Opening Balance	-
Add: Writedown	-
Add: Amortization	275
Less: Accum Amortization on Disposals	(275)

Net Book Value for year ended December 31, 2017

SCHEDULE 4

THE CORPORATION OF THE CITY OF COURTENAY  
 CONSOLIDATED SCHEDULE OF DEBENTURE AND OTHER LONG-TERM DEBT  
 YEAR ENDED DECEMBER 31, 2017  
 (Audited)

Bylaw Number	Maturity Date	Interest Rate	Principal Outstanding Dec 31/16	Current Year Borrowing	Actuarial Adjustment/Princ. Reduction	Principal Outstanding Dec 31/17
<b>General Capital Fund</b>						
Debenture Debt						
2171 Library	2021	3.05	868,521	-	157,180	711,341
2266 Infrastructure Works - MFA	2018	4.78	68,521	-	33,425	35,096
2266 Fifth Street Bridge	2023	5.15	246,973	-	31,269	215,704
2304 Lerwick Road Ext. Prop. Acquisition	2029	4.86	666,497	-	37,628	628,869
2227 City Hall Retaining Wall	2020	5.00	52,236	-	12,301	39,935
2354 Repaving Program	2025	5.75	256,258	-	25,691	230,567
2355 Lerwick Road Extension	2030	5.75	473,316	-	25,875	447,441
2356 City Hall Renovation	2020	5.50	277,506	-	65,351	212,155
2425 Lerwick Road Construction	2026	4.66	429,706	-	35,791	393,915
2453 Police Property Acquisition	2026	4.43	853,146	-	71,060	782,086
2458 Public Works Maintenance Building	2022	4.52	742,586	-	111,953	630,633
2539 Capital Infrastructure Work	2023	4.13	1,907,484	-	207,015	1,700,469
2538 Native Sons Hall Renovation	2025	4.50	401,245	-	37,915	363,330
2680 Lewis Centre Renovation	2027	2.90	3,309,293	-	245,381	3,063,912
2681 Infrastructure Works - Road Paving	2027	2.90	1,229,166	-	91,141	1,138,025
TOTAL GENERAL CAPITAL FUND			11,782,454	-	1,188,976	10,593,478
<b>Water Capital Fund</b>						
Debenture Debt						
2424 Water Extension - Lerwick Road	2026	4.66	358,088	-	29,825	328,262
TOTAL WATER CAPITAL FUND			358,088	-	29,825	328,262
<b>Sewer Capital Fund</b>						
Debenture Debt						
2305 Sewer Extension	2029	4.86	499,873	-	28,220	471,653
2353 Sewer Extension	2030	5.00	1,332,047	-	72,822	1,259,225
2423 Sewer Extension - Lerwick Road	2026	4.66	217,240	-	18,094	199,146
TOTAL SEWER CAPITAL FUND			2,049,161	-	119,136	1,930,024
TOTAL ALL CAPITAL FUNDS			14,189,703	-	1,337,937	12,851,766

**THE CORPORATION OF THE CITY OF COURTENAY  
CONSOLIDATED SCHEDULE OF INVESTMENTS  
FOR THE YEAR ENDED DECEMBER 31, 2017  
(Audited)**

**SCHEDULE 5**

	2017	2016
<b>GENERAL OPERATING FUND</b>		
Cash on Hand	\$ 9,671,192	\$ 10,224,738
<b>GAMING FUND</b>		
Cash on Hand	\$ 1,986,037	\$ 1,322,459
<b>SID WILLIAMS THEATRE SOCIETY</b>		
Cash on Hand	\$ 519,465	\$ 393,042
Total Cash on Hand and on Deposit	\$ 12,176,694	\$ 11,940,239
 <b>GENERAL OPERATING FUND TERM DEPOSITS</b>		
Municipal Finance Authority, Money Market Fund at fluctuating rate, no maturity date	16,945	16,773
Raymond James, various guaranteed investment certificates	7,624,910	20,095,914
The Bank of Nova Scotia, various guaranteed investment certificates	6,273,400	11,296,795
Coast Capital Credit Union, various guaranteed investment certificates	17,572,324	-
Total Term Deposits	31,487,579	31,409,482
<b>TOTAL CASH AND INVESTMENTS</b>	\$ 43,664,273	\$ 43,349,721



THE CORPORATION OF THE CITY OF COURTENAY

## STAFF REPORT

**To:** Council

**File No.:** 1660-20

**From:** Chief Administrative Officer

**Date:** May 7, 2018

**Subject:** 2018/19 RCMP Municipal Policing Contract Expenditure Cap: Final Approval

### PURPOSE:

The purpose of this report is for Council to consider and provide final approval to the City of Courtenay RCMP municipal policing expenditure cap for the 2018/19 contract year.

### POLICY ANALYSIS:

In April 2012, the City of Courtenay renewed its Provincial Municipal Police Unit Agreement for the employment of the Royal Canadian Mounted Police in the provision of policing services within the City. This agreement has a twenty year term and will provide policing services until March 31, 2032.

### EXECUTIVE SUMMARY:

Each year the City is required to provide final approval of the current year's municipal expenditure cap for RCMP services by the latter part of April or early May of the current contract year.

On June 12, 2017 Council reviewed a staff report requesting "approval in principle" for the 2018/19 RCMP Municipal Policing Expenditure Cap of \$6,066,563, of which Courtenay is responsible for 90% or \$5,459,906. Council postponed its decision and requested a meeting with the local RCMP Inspector requesting an explanation as to why the staffing increase was necessary. Council met with him on February 19, 2018 but did not recommend adding new staff for consideration in the 2018 Financial Plan.

The number of Full Time Equivalents (FTE's) recorded in the 2018 Financial Plan is 27.42 members, the same number utilized in the 2017 Financial Plan. Accommodation charges, DNA Analysis and the cost for Public Sector Employees are also included in the 2018 Financial Plan. Gaming Funds, Traffic Fine revenue and Prior Year's surplus are used to reduce the tax impact of policing costs for 2018.

### CAO RECOMMENDATIONS:

That based on the May 7, 2018 staff report "2018/19 RCMP Municipal Contract Expenditure Cap: Final Approval" Council approves OPTION 1, granting final approval of the 2018/19 Municipal Policing Contract expenditure cap of \$4,887,300 based on an established number of 27.42 members for Courtenay.

Respectfully submitted,

David Allen, BES, CLGEM, SCLGM  
Chief Administrative Officer

**BACKGROUND:**

The Comox Valley RCMP Detachment is a combined Provincial/Municipal detachment providing police protection services for the entire Comox Valley from its facility on Ryan Road. Of the 63 members currently staffed in the detachment, 21 are funded by the Province, 30.4 are funded by Courtenay, and 11.6 are funded by Comox.

In compliance with the terms of the Municipal Policing Agreement, the preliminary letter of “approval in principle” for the 2018/19 Municipal Policing Expenditure Cap was provided to Council last year on June 12, 2017. From that meeting, Council passed the following resolution:

<p><b>.06</b> 2018/2019 RCMP MUNICIPAL POLICING CONTRACT – APPROVAL IN PRINCIPLE 1660-20</p>	<p>Moved by Wells and seconded by Eriksson that based on the June 12, 2017 staff report “2018/2019 RCMP Municipal Policing Contract: Approval in Principle”, Council approve OPTION 2 and Council defer “Approval in Principle” of the 2018/19 Municipal Policing Contract for further discussion; and That Council request a meeting with the RCMP regarding the increased staffing complement. <b>Carried</b></p>
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**DISCUSSION:**

The 2018/19 Municipal Policing Expenditure Cap did not receive Council’s approval in principle as it was conditional upon meeting with the local RCMP Inspector. Inspector Walton from the RCMP met with Council on February 19, 2018 and the following resolution was recorded.

<p><b>.01</b> INSPECTOR TIM WALTON RCMP GENERAL DUTY STAFFING ANALYSIS &amp; RESOURCE REQUEST 1660-02/1700-01</p>	<p>Inspector Tim Walton, Comox Valley RCMP, made a presentation to Council regarding General Duty Staffing Analysis and a request for resources consisting of 4 additional General Duty members \$165,200 per position (90%) and 1 additional municipal support Clerk \$70,000 (100%).</p>
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There was no subsequent Council resolution passed to increase the budget to include more RCMP staff in the 2018 Financial Plan.



The Municipal Contract policing expenditure cap for the past several years is detailed below:

**Table # 1:**

<b>Contract</b>	<b>Expenditure Cap</b>	<b>Courtenay Share</b>	<b>Number of</b>
<b>Year</b>	<b>100%</b>	<b>90%</b>	<b>Members</b>
2010/11	4,289,117	3,860,205	28.4
2011/12	4,893,656	4,404,290	30.4
2012/13	5,104,007	4,593,606	30.4
2013/14	5,370,530	4,833,477	30.4
2014/15	5,325,081	4,792,573	30.4
2015/16	5,493,584	4,944,226	30.4
2016/17	5,718,216	5,146,394	30.4
2017/18	6,020,724	5,418,652	31.4
2018/19	6,066,563	5,459,907	31.4

The 2017/18 Expenditure Cap was approved in principle but the additional member was not supported.

**FINANCIAL IMPLICATIONS:**

When developing the 2018 budget for policing, Staff used the May 11, 2017 correspondence from 'E' Division to draft the 2018 Police budget (Attachment # 1). It estimated a budget of \$6,066,563 for the Police contract of which Courtenay would be responsible for 90% or \$5,459,906.

A per-member dollar amount was determined and applied to the cost for 27.42 members. This resulted in the City's 2018 budget for the police contract being established at \$4,887,300.

In addition to the police contract, the City's total 2018 policing budget includes:

- 1. Public Sector Employees \$650,000
- 2. Accommodation Charges \$288,000
- 3. DNA Analysis \$16,000

Total 2018 Policing Budget with police contract is \$5,841,300

Gaming Funds, Traffic Fine revenue and Prior Years surplus are used to mitigate the taxation impact for 2018.

If Council chooses to add staff to the RCMP FTE contingency, the total cost for a regular member is about \$165,000 and a support staff employee costs approximately \$70,000. This is equivalent to a 1.1% tax increase. Any decision to add staff would, at the earliest, impact the 2019 budget-financial plan.

In 2017 a new Police Contingency Reserve was approved by Council. As of December 31, 2017, the balance in the reserve is \$417,600. This Reserve can be used to offset policing cost increases, such as payment for new members.

### ADMINISTRATIVE IMPLICATIONS:

Staff will provide the RCMP with the final confirmation letter for 2018/19 based on Council's decision. Managing the 2018/19 policing contract requires approximately 20 hours of staff time which includes reviews of the monthly financial statements, payment of quarterly invoices, and various reports to Council.

### STRATEGIC PLAN REFERENCE:

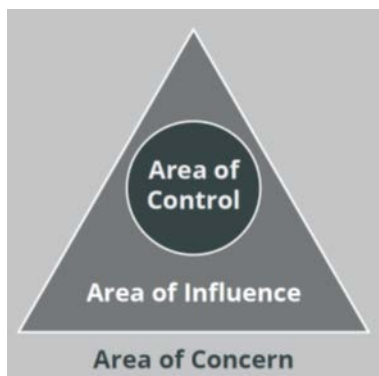
The 2016 – 2018 Strategic Priorities do not directly address the policing contract and related expenditures, however it relates to organizational and governance excellence and investing in key relationships.

#### We focus on organizational and governance excellence

- We responsibly provide services at a level which the people we serve are willing to pay

#### We invest in our key relationships

- ▲ We advocate and cooperate with other local governments and senior governments on regional issues affecting our city



- **Area of Control**  
The policy, works and programming matters that fall within Council's jurisdictional authority to act.
- ▲ **Area of Influence**  
Matters that fall within shared or agreed jurisdiction between Council and another government or party.
- **Area of Concern**  
Matters of interest outside Council's jurisdictional authority to act.

### OFFICIAL COMMUNITY PLAN REFERENCE:

4.11.4 Police Protection

Police services are provided by the R.C.M.P. from the detachment located on Ryan Road.

### REGIONAL GROWTH STRATEGY REFERENCE:

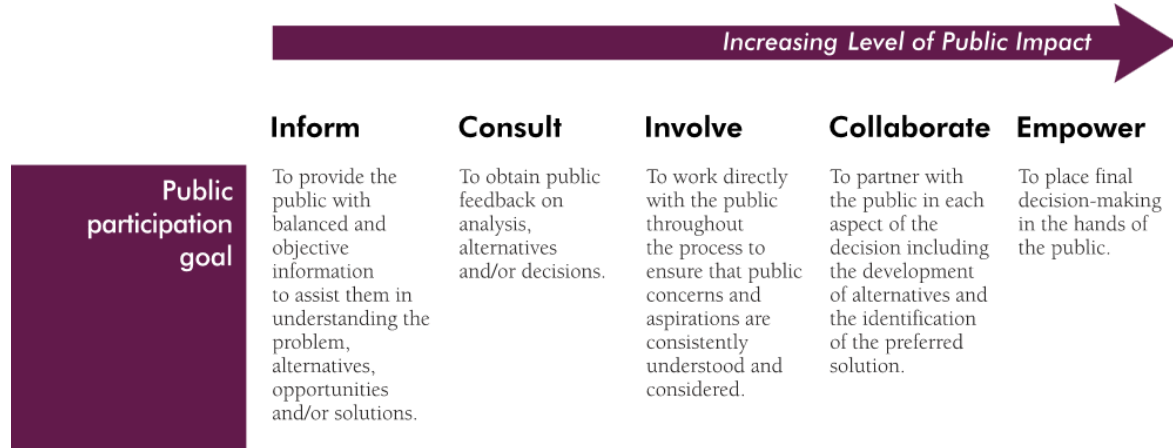
N/A

### CITIZEN/PUBLIC ENGAGEMENT:

While citizen engagement specific to the policing contract and the annual expenditure cap is not required, the public has the opportunity to provide comment regarding budgeted police protection costs during the Citizen Budget process and when the annual General Fund Budget-Financial Plan is presented and reported on the City's webpage.

In this way the public is **informed** of the outcome of Council’s consideration of municipal policing costs. This is based on level one of the IAP2 Spectrum of Public Participation adopted as an element of Sound Project Design for the Corporate Workplan.

[http://c.ymcdn.com/sites/www.iap2.org/resource/resmgr/imported/IAP2%20Spectrum\\_vertical.pdf](http://c.ymcdn.com/sites/www.iap2.org/resource/resmgr/imported/IAP2%20Spectrum_vertical.pdf)



**OPTIONS:**

OPTION 1: That Council grant final approval of the 2018/19 Municipal Policing Contract expenditure cap of \$4,887,300 based on an established number of 27.42 members for Courtenay. [RECOMMENDED]

OPTION 2: That Council defer final approval of the 2018/19 Municipal Policing Contract expenditure cap for further discussion at a future meeting.

Prepared by:

Brian Parschauer BA, CPA-CMA  
Director, Financial Services

Attachment: 2018/19 RCMP Expenditure Forecast



Royal  
Canadian  
Mounted  
Police

Gendarmerie  
royale  
du  
Canada

Security Classification/Designation  
Classification/désignation sécuritaire



May 11, 2017

David Allen  
Chief Administrative Officer  
Corp. of the City of Courtenay  
830 Cliffe Ave.  
Courtenay, BC V9N 2J7

Your File    Votre

Our File    Notre  
E753-28-1

Dear Mr. Allen:

**Re: Municipal Contract Policing Multi-Year Plan – (2018/19)**

In keeping with the *Municipal Police Service Agreement* of 2012, we are communicating with our Municipal Partners to establish projections of our human and financial resource needs in **2018/19**.

We are asking that you meet with your Detachment Commander to discuss the police service needs of the community and the related human and financial resource requirements.

Some of these requirements have been discussed at different meetings/forums such as the Government Finance Officers Association of BC's (GFOABC) annual budget meetings, Lower Mainland CAO/PPC meetings, and local presentations before Mayor and Council. The next GFOABC meeting is on June 15, 2017 in Victoria, BC. We hope to see you or your representative there. If you have questions, or would like a custom presentation on your 5-year municipal plan, please contact Autumn Longley, Senior Financial Manager, Contract Policing at 778-290-4804.

Attached for your information are:

- a. Our five year budget for your RCMP Municipal Policing costs. This is a detailed listing of actual costs for fiscal year 2015/16, pre-final costs for 2016/17, current year budget for 2017/18, and budget estimates for 2018 – 2023 inclusive (see Schedules 1, 2 and 3 for 2018/19).
- b. Five year budget for Division Administration Costs (Schedule 4);
- c. Sample Response Letter (Schedule 5)
- d. Sample Request Letter to Decrease/Increase Authorized Strength (Schedule 6)

A number of items remain under discussion between the Provincial and Federal Governments, including:

Division Administration costs associated to Green Timbers: While this item is currently still under discussion, the provisional amount of \$900 per member has been included in the Division Administration estimate.

Severance Liquidation: As of April 1, 2012, severance no longer accumulates for members who resign or retire, but will continue to accrue for lay-off, death, and disability. For budgeting purposes, an estimated amount of \$1,023 per full time equivalent (FTE) has been included. The payment amount and schedule for severance liquidation is currently being discussed between the Provincial and Federal Governments.

Member Pay: On April 5, 2017, a new pay package for regular members was approved by the Treasury Board. The approved increases are:

January 1, 2015: 1.25%  
January 1, 2016: 1.25%  
April 1, 2016: 2.30%

Retroactive pay adjustments are expected to be paid by the end of September 2017. The estimated retroactive pay related will be approximately \$8,100 per member, including pension impacts. Retroactive pay is not included in 2017/18 budgets.

The 2017/18 in-year pay impact of the approved raises will be approximately \$5,800 per member, including pension. Budgets for 2017/18 included pay raise estimates of 2.5% per year. The net impacts in 2017/18 of the new pay package will vary by municipality, depending on the rank and tenure of detachment members.

It should be noted that the pay package did not include a pay increase for 2017. Municipalities should plan for retroactive pay in future years related to 2017.

An estimated pay increase of 1.25% per year has been included in this five year budget for federal public servants where applicable. Retroactive payments have not been included and will be payable once new agreements have been negotiated.

Lower Mainland Integrated Teams: If applicable, this 5-year plan includes your municipality's share of costs for Lower Mainland Integrated Teams. These costs represent proposed budgets based on current information. You will have the opportunity to discuss this budget, ask questions and provide input at an upcoming CAO/PPC meeting.

Letters: We recognize that your calendar year Budget Cycles are not synchronized with the Government of Canada's fiscal year, however, we are requesting that you provide information earlier than the Municipal Budget Cycle normally requires. This is to ensure that the Federal Treasury Board can secure their share of the Municipal Contract costs within the federal budget cycle time lines.



Please submit a "Letter of Approval in Principle" by **June 9, 2017**. The letter should address all increases for fiscal year 2018/19, including:

- Proposed establishment increase in regular and/or civilian members;
- Estimated Municipal Policing Budget at 100% costs;
- If applicable, estimates for Integrated Units, RTIC and Accommodation at 100% costs; and
- If applicable, approval in principle and basis of payments for any equipment costing \$150,000 or more per item.

We would like to emphasize that this "Letter of Approval in Principle" ("AIP") is for **planning purposes only** to address the Federal Government's Annual Reference Level Update (ARLU) process. It is important to include any anticipated increases in establishment at the AIP stage, as this impacts both recruitment and financial planning at the federal government level. However, the AIP is not a final commitment on your part for the additional personnel or for the increased financial budget indicated. A copy of a sample response is provided for your reference (Schedule 5).

To affect an actual change in authorized strength, a letter to the provincial minister requesting an amendment to Annex A of the Agreement(s) to increase/decrease strength is required (Sample provided as Schedule 6).

**First Reply Letter:**

**Approval in Principle Letter for 2017/18**

**Due: June 9, 2017**

A) Please address the letter to:

Mr. Clayton Pecknold  
**Assistant Deputy Minister and Director of Police Services**  
Ministry of Justice  
P.O. Box 9285 Stn Prov Govt.  
Victoria, BC V8W 9J7

B) Please forward a copy to the RCMP addressed to:

Mr. Max Xiao  
**Regional Director of Finance, RCMP "E" Division**  
Mailstop #908, 14200 Green Timbers Way  
Surrey, BC Canada V3T 6P3

**Second Reply Letter:**

**Final Confirmation Letter for 2018/19**

**Due: April 30, 2018**

By **April 30, 2018**, please forward a second letter to confirm the 2018/19 budget to:

**A) Assistant Deputy Minister and Director of Police Services**

**B) Regional Director of Finance, RCMP "E" Division**

When you decide to change human resources (authorized strength changes) to your detachment strength, please be advised that a third letter is required that outlines your request. (Sample provided as Schedule 6).

A) Please address the letter to:  
The Honourable Mike Morris  
**Solicitor General & Minister of Public Safety**  
P.O. Box 9010 Stn Prov Gov't.  
Victoria, BC V8W 9L5

B) Please forward a copy of the letter to:

**a) Regional Director of Finance, RCMP "E" Division**

**b) C/Supt. Ray Bernoties, District Commander, Island District**

If you have any questions regarding your municipal budget or your contractual obligations, please contact Autumn Longley, Senior Manager Contract Policing at 778-290-4804.

Yours truly,



Robert H. Jorssen  
Executive Director,  
Corporate Management & Comptrollership Branch  
Royal Canadian Mounted Police, Pacific Region  
Mailstop # 906, 14200 Green Timbers Way  
Surrey, BC Canada V3T 6P3

Cc: Mayor Larry Jangula, Corp. of the City of Courtenay  
C/Supt. Ray Bernoties, District Commander, Island District  
OIC Comox Valley Detachment  
Max Xiao, Regional Director of Finance, RCMP "E" Division

**Canada** 

RCMP E Division  
Finance Section, Mailstop #908  
14200 Green Timbers Way  
Surrey, BC Canada V3T 6P3

<b>COURTENAY</b>	17/18	18/19	\$	%	
2017-18 to 2018-19 Fiscal Estimates	<b>Budget</b>	<b>Estimates</b>	<b>Change</b>	<b>Change</b>	<b>Notes</b>
Contract Strength	31.4	31.4		-	
Funded Strength	31.4	31.4		-	
<b>COST ELEMENT GROUP (CEG)</b>					
<b>01 - PERSONNEL</b>					
REGULAR PAY	2,887,526	2,931,048	43,523	1.5%	Estimated pay increase of 2.5%
<b>OVERTIME - MEMBERS</b>	<b>315,000</b>	<b>322,900</b>	<b>7,900</b>	<b>2.5%</b>	
PAYROLL ALLOWANCES *	183,800	190,900	7,100	3.9%	
OTHER PAYROLL ITEMS	120,000	135,400	15,400	12.8%	Estimated pay for reservists
<b>01 - PERSONNEL: TOTAL</b>	<b>3,506,326</b>	<b>3,580,248</b>	<b>73,923</b>	<b>2.1%</b>	
<b>02 - TRANSPORT &amp; TELECOM</b>	<b>72,479</b>	<b>74,300</b>	<b>1,821</b>	<b>2.5%</b>	
<b>03 - INFORMATION</b>	<b>775</b>	<b>800</b>	<b>25</b>	<b>3.2%</b>	
<b>04 - PROFESSIONAL &amp; SPEC SVCS</b>	<b>141,738</b>	<b>145,300</b>	<b>3,562</b>	<b>2.5%</b>	
<b>05 - RENTALS</b>	<b>11,612</b>	<b>25,300</b>	<b>13,688</b>	<b>117.9%</b>	Addition of annual licence fees and iBook licences
<b>06 - PURCHASE, REPAIR AND MAINT</b>	<b>52,015</b>	<b>53,000</b>	<b>985</b>	<b>1.9%</b>	
<b>07 - UTIL, MATERIAL AND SUPP</b>	<b>176,228</b>	<b>179,750</b>	<b>3,523</b>	<b>2.0%</b>	
<b>09 - MACHINERY &amp; EQUIPMENT</b>	<b>162,819</b>	<b>187,530</b>	<b>24,711</b>	<b>15.2%</b>	
<b>12 - OTHER SUBSIDIES &amp; PMTS</b>	<b>5,000</b>	<b>5,000</b>	<b>0</b>	<b>-</b>	
<b>TOTAL DIRECT COST</b>	<b>4,128,992</b>	<b>4,251,228</b>	<b>122,237</b>	<b>3.0%</b>	
COST OF RM PENSIONS	686,908	586,545	(100,363)	(14.6%)	Decrease in pension rate from 22.70% to 19.07%
COST OF DIVISIONAL ADMINISTRATION	828,960	825,820	(3,140)	(0.4%)	
COST OF OTHER INDIRECT COSTS	376,064	402,969	26,905	7.2%	Primarily due to increase in training and recruiting rates from \$4,918 to \$5,641
<b>TOTAL INDIRECT COST</b>	<b>1,891,932</b>	<b>1,815,334</b>	<b>(76,597)</b>	<b>(4.0%)</b>	
<b>TOTAL COSTS (Direct + Indirect )</b>	<b>6,020,924</b>	<b>6,066,563</b>	<b>45,639</b>	<b>0.8%</b>	
FEDERAL COST 10 %	602,092	606,656	4,564	0.8%	
<b>MUNICIPAL POLICING COSTS 90%</b>	<b>5,418,831</b>	<b>5,459,906</b>	<b>41,075</b>	<b>0.8%</b>	
<b>ESTIMATED COST PER RM (90%)</b>	<b>172,574</b>	<b>173,882</b>	<b>1,308</b>	<b>0.8%</b>	

<b>PSE &amp; ACCOMMODATION ESTIMATES @ 100%</b>	
PUBLIC SERVICE EMPLOYEES	700,818
ACCOMMODATION	279,830
<b>TOTAL PSE &amp; ACCOMMODATION</b>	<b>980,648</b>

based on 9 FTEs

\* Allowances and Benefits include: Service Pay, Senior Constable, Occupational Clothing, and Shift Differential  
 \*\* 2017/18 budgets do not include an amount for Retroactive Pay.



COURTENAY 2018/19 to 2022/23 Fiscal Estimates	COURTENAY 15/16 Final	COURTENAY 16/17 Pre-Final	COURTENAY 17/18 Budget	COURTENAY 18/19 Estimates	COURTENAY 19/20 Estimates	COURTENAY 20/21 Estimates	COURTENAY 21/22 Estimates	COURTENAY 22/23 Estimates
CONTRACT STRENGTH ACTUAL / FUNDED STRENGTH	30.40	30.4	31.4	31.4	31.4	31.4	31.4	31.4
COST ELEMENT GROUP (CEG)	27.12	25.08	31.4	31.4	31.4	31.4	31.4	31.4

**STD OBJ. 01 - PERSONNEL**

CE 501107 EXPENSES/CHARGES FOR INTERCHANGE CANADA								
<b>CEG 30 - PAY - MEMBERS:</b>								
CE 500110 - REGULAR PAY	2,287,096	2,106,497	2,887,526	2,931,048	3,004,325	3,079,433	3,156,419	3,235,329
CE 500112 - RETROACTIVE PAY								
CE 500113 - ACTING PAY	13,928	18,274	15,000	15,400	15,800	16,200	16,600	17,000
CE 500114 - SERVICE PAY	66,024	64,465	73,500	82,700	83,100	83,500	83,900	84,300
CE 500117 - SHIFT DIFFERENTIAL	32,441	28,015	35,000	35,900	36,800	37,700	38,600	39,600
CE 500119 - PERFORMANCE AWARD								
CE 500164 - SENIOR CST ALLOWANCE	60,100	53,948	65,000	62,000	63,500	65,100	66,700	68,400
CE 501194 - REGULAR TIME RESERVISTS	120,827	142,152	105,000	120,000	123,000	126,100	129,300	132,500
CE 501198 - BILINGUAL BONUS - Current	2,697	334						
CE 502103 - OPERATIONAL CLOTHING ALLOWANCE	15,532	6,234	10,300	10,300	10,600	10,900	11,200	11,500
MISC. CE's incl. under CEG 30	10,871							
<b>CEG 30 - PAY - MEMBERS - TOTAL</b>	<b>2,609,515</b>	<b>2,430,516</b>	<b>3,191,326</b>	<b>3,257,348</b>	<b>3,337,125</b>	<b>3,418,933</b>	<b>3,502,719</b>	<b>3,588,629</b>
<b>CEG 31 - OVERTIME - MEMBERS</b>	<b>328,574</b>	<b>246,792</b>	<b>315,000</b>	<b>322,900</b>	<b>329,400</b>	<b>336,000</b>	<b>342,700</b>	<b>349,600</b>
CEG 32 - PAY - MEMBERS (POLICY CENTRE) Credit Item	7,881							
CEG 33 - RCMP PAY - OTHER								
CEG 40 - ALLOWANCES - INTRA MEMBERS (Credit Item)	21,177	20,527						
CEG 41 - ALLOWANCES - INTER MEMBERS (Credit Item)								
CEG 45 - PERSONNEL - OPERATIONAL CONTINGENCY								
<b>TOTAL STD OBJ. 01 - PERSONNEL</b>	<b>2,967,148</b>	<b>2,697,836</b>	<b>3,506,326</b>	<b>3,580,248</b>	<b>3,666,525</b>	<b>3,754,933</b>	<b>3,845,419</b>	<b>3,938,229</b>

**STD OBJ. 02 - TRANSPORTATION & TELECOM**

<b>CEG 50 - TRAVEL</b>	<b>21,307</b>	<b>10,927</b>	<b>29,705</b>	<b>30,300</b>	<b>30,900</b>	<b>31,500</b>	<b>32,100</b>	<b>32,700</b>
CEG 51 - TRAVEL ADVANCES								
CEG 52 - TRAINING TRAVEL (DCCEG)	23,519	22,198	22,100	22,900	23,700	24,500	25,400	26,300
<b>CEG 53 - TRAINING TRAVEL (POST)</b>	<b>7,862</b>	<b>4,374</b>	<b>11,940</b>	<b>12,200</b>	<b>12,200</b>	<b>12,600</b>	<b>13,000</b>	<b>13,500</b>
CEG 54 - IPA & FSD TRAVEL								
CEG 55 - CENTRALIZED TRAINING TRAVEL								
CEG's 60-66 - TRANSFER COSTS (Credit Item)	176,249	137,425						
<b>CEG 70 - FREIGHT, POSTAGE, ETC.</b>	<b>7,538</b>	<b>4,878</b>	<b>8,734</b>	<b>8,900</b>	<b>8,900</b>	<b>9,200</b>	<b>9,500</b>	<b>9,800</b>
CEG 100 - TELEPHONE SERVICES (DCCEG)								
<b>CEG 101 - TELEPHONE SERVICES (POST)</b>								
CEG 140 - COMPUTER COMM SERVICES								
<b>TOTAL STD OBJ. 02 - TRANSPORT &amp; TELECOM</b>	<b>236,474</b>	<b>179,801</b>	<b>72,479</b>	<b>74,300</b>	<b>75,700</b>	<b>77,800</b>	<b>80,000</b>	<b>82,300</b>

**STD OBJ. 03 - INFORMATION**

<b>CEG 120 - ADVERTISING</b>	<b>580</b>	<b>7</b>	<b>600</b>	<b>600</b>	<b>600</b>	<b>600</b>	<b>600</b>	<b>600</b>
<b>CEG 130 - PUBLICATIONS SERVICES</b>	<b>154</b>	<b>1,035</b>	<b>175</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>200</b>
<b>TOTAL STANDARD OBJ. 03 - INFORMATION</b>	<b>735</b>	<b>1,042</b>	<b>775</b>	<b>800</b>	<b>800</b>	<b>800</b>	<b>800</b>	<b>800</b>

**STD OBJ. 04 - PROFESSIONAL & SPEC. SVCS**

CEG 160 - LEGAL SERVICES (Credit Item)	17,823	7,166						
CEG 170 - CONTRACTED SERVICES (DCCEG)		0						
<b>CEG 171 - CONTRACTED SERVICES (Post)</b>		<b>460</b>						
CEG 190 - TRAINING & SEMINARS (DCCEG)	53,881	49,983	55,000	56,900	58,900	61,000	63,100	65,300
<b>CEG 191 - TRAINING &amp; SEMINARS (POST)</b>	<b>92</b>	<b>2,393</b>	<b>3,090</b>	<b>3,200</b>	<b>3,300</b>	<b>3,400</b>	<b>3,500</b>	<b>3,600</b>
CEG 192 - OFFICIAL LANGUAGE TRAINING								
<b>CEG 219 - PROFESSIONAL SERVICES</b>	<b>32,296</b>	<b>33,150</b>	<b>35,000</b>	<b>35,700</b>	<b>36,400</b>	<b>37,100</b>	<b>37,800</b>	<b>38,600</b>
<b>CEG 220 - OTHER SERVICES</b>	<b>6,906</b>	<b>2,655</b>	<b>6,798</b>	<b>6,900</b>	<b>7,000</b>	<b>7,100</b>	<b>7,200</b>	<b>7,300</b>
CEG 221 - OTHER SERVICES IM/IT	2,517	2,591	36,350	37,000	37,700	38,500	39,300	40,100
CEG 223 - RADIO COMMUNICATION SYSTEMS	38,215	35,391	5,500	5,600	5,700	5,900	6,100	6,300
CEG 228 - CAD/C SPENDING OF PROCEEDS								
CEG 229 - CAD/C ALLOCATED	-9,915	-1,873						
<b>TOTAL STANDARD OBJ. 04 - PROFESSIONAL &amp; SPEC SVCS</b>	<b>141,816</b>	<b>131,915</b>	<b>141,738</b>	<b>145,300</b>	<b>149,000</b>	<b>153,000</b>	<b>157,000</b>	<b>161,200</b>

**STD OBJ. 05 - RENTALS**

CEG 240 - RENTAL-LAND,BLDG & WORKS (DCCEG)		0						
<b>CEG 241 - RENTAL-LAND,BLDG &amp; WORKS (POST)</b>	<b>3,615</b>	<b>1,751</b>						
CEG 250 - RENTAL COMNS EQUIP (DCCEG)								
<b>CEG 251 - RENTAL COMNS. EQUIP (POST)</b>								
<b>CEG 258 - RENTAL MOTORIZED VEHICLES</b>	<b>1,015</b>	<b>1,776</b>						
CEG 265 - LEASED VEHICLES								
CEG 280 - RENTAL COMPUTER EQUIP	1,813	7,493	2,060	15,500	15,800	16,100	16,400	16,700
<b>CEG 290 - RENTAL - OTHERS</b>	<b>6,739</b>	<b>6,571</b>	<b>9,552</b>	<b>9,800</b>	<b>10,100</b>	<b>10,400</b>	<b>10,600</b>	<b>10,800</b>
<b>TOTAL STANDARD OBJ. 05 - RENTALS</b>	<b>13,182</b>	<b>17,591</b>	<b>11,612</b>	<b>25,300</b>	<b>25,900</b>	<b>26,500</b>	<b>27,000</b>	<b>27,500</b>

**STD OBJ. 06 - PURCHASE, REPAIR AND MAINT**

CEG 310 - REPAIR OF BUILDINGS & WORKS		358						
<b>CEG 311 - REPAIR OF BUILDINGS &amp; WORKS</b>								
<b>CEG 370 - REPAIR OF VEHICLES</b>	<b>35,586</b>	<b>40,923</b>	<b>46,350</b>	<b>47,300</b>	<b>48,200</b>	<b>49,200</b>	<b>50,200</b>	<b>51,200</b>
<b>CEG 380 - REPAIR OF OFFICE &amp; LAB EQUIP</b>								
<b>CEG 390 - REPAIR OF MISC. EQUIP</b>	<b>5,075</b>	<b>1,975</b>	<b>5,150</b>	<b>5,200</b>	<b>5,300</b>	<b>5,400</b>	<b>5,500</b>	<b>5,600</b>
CEG 392 - REPAIR OF AFIS EQUIP								
CEG 393 - REPAIR OF EDP EQUIPMENT	468		515	500	500	500	500	500
<b>TOTAL STANDARD OBJ. 06 - PURCHASE, REPAIR AND MAIN</b>	<b>41,129</b>	<b>43,256</b>	<b>52,015</b>	<b>53,000</b>	<b>54,000</b>	<b>55,100</b>	<b>56,200</b>	<b>57,300</b>

**STD OBJ. 07 - UTIL, MATERIAL AND SUPPLIES**

CEG 400 - UTILITIES								
<b>CEG 430 - FUEL</b>	<b>50,572</b>	<b>42,876</b>	<b>61,800</b>	<b>63,000</b>	<b>64,300</b>	<b>65,600</b>	<b>66,900</b>	<b>68,200</b>
<b>CEG 470 - PHOTOGRAPHIC GOODS</b>	<b>391</b>	<b>3,937</b>	<b>2,500</b>	<b>2,550</b>	<b>2,601</b>	<b>2,653</b>	<b>2,706</b>	<b>2,760</b>
CEG 500 - STATIONERY	14,345	13,761	26,265	26,800	27,300	27,800	28,400	29,000
CEG 510 - CLOTHING & KIT	12,566	15,676	20,000	20,400	20,800	21,200	21,600	22,000
<b>CEG 530 - LAB SUPPLIES</b>								
<b>CEG 540 - POST BUDGET EXPENDITURES</b>	<b>32,580</b>	<b>56,445</b>	<b>65,663</b>	<b>67,000</b>	<b>68,300</b>	<b>69,700</b>	<b>71,100</b>	<b>72,500</b>
<b>CEG 550 - HOUSE FURNISHINGS</b>								
<b>TOTAL STD OBJ. 07 - UTIL, MATERIAL AND SUPP</b>	<b>110,453</b>	<b>132,695</b>	<b>176,228</b>	<b>179,750</b>	<b>183,301</b>	<b>186,953</b>	<b>190,706</b>	<b>194,460</b>



COURTENAY 2018/19 to 2022/23 Fiscal Estimates	COURTENAY 15/16 Final	COURTENAY 16/17 Pre-Final	COURTENAY 17/18 Budget	COURTENAY 18/19 Estimates	COURTENAY 19/20 Estimates	COURTENAY 20/21 Estimates	COURTENAY 21/22 Estimates	COURTENAY 22/23 Estimates
CONTRACT STRENGTH ACTUAL / FUNDED STRENGTH COST ELEMENT GROUP (CEG)	30.40 27.12	30.4 25.08	31.4 31.4	31.4 31.4	31.4 31.4	31.4 31.4	31.4 31.4	31.4 31.4

**STD OBJ. 09 - MACHINERY & EQUIP ACQ<\$10,000**

<b>CEG 440 - TRANSPORT SUPPLIES</b>	557	4,984	5,573	5,700	5,800	5,900	6,000	6,100
CEG 441 - VEHICLE CHANGEOVERS	18,112	26,823	24,750	25,500	26,250	26,250	26,250	26,250
CEG 450 - COMMS PARTS & CONSUMABLES	2,551		2,781	1,700	1,700	1,700	1,700	1,700
CEG 480 - FIREARMS & AMMUNITION	20,118	17,159	9,418	20,000	20,400	20,800	21,200	21,600
CEG 770 - COMMS. SYSTEMS (CAPITAL)	14,538		16,480	17,000	17,300	17,600	18,000	18,400
CEG 771 - COMMS. EQUIPMENT	341		417	430	400	400	400	400
<b>CEG 820 - PHOTOGRAPHIC EQUIP</b>								
CEG 821 - AFIS EQUIP	24,250							
CEG 822 - IDENT EQUIP.								
<b>CEG 830 - FURNITURE &amp; FIXTURES</b>								
CEG 840 - COMPUTER EQUIPMENT (CAPITAL)								
CEG 841 - COMPUTER EQUIP.	11,905	26,090	16,600	19,000	19,600	20,200	20,800	21,400
CEG 842 - COMPUTER S/WARE - INFORMATICS								
CEG 845 - SPECIALIZED EQUIPMENT								
<b>CEG 850 - AUDIO VISUAL AIDS</b>		5,188						
<b>CEG 860 - INVESTIGATIONAL EQUIP.</b>			5,150	5,300	5,500	5,700	5,900	6,100
CEG 890 - VEHICLES (CAPITAL)	105,935	58,656	66,000	68,000	70,000	70,000	70,000	70,001
CEG 891 - MISC. VEHICLES								
<b>CEG 900 - OTHER EQUIP.</b>		455	4,502	4,600	4,700	4,800	4,900	5,000
<b>CEG 910 - OFFICE MACHINES</b>	6,912	13,873	10,000	10,300	10,600	10,900	11,200	11,500
CEG 920 - SECURITY EQUIP.		10,825	1,148	10,000	10,300	10,600	10,900	11,200
<b>TOTAL STD OBJ. 09 - MACHINERY &amp; EQUIPMENT</b>	<b>205,218</b>	<b>164,291</b>	<b>162,819</b>	<b>187,530</b>	<b>192,550</b>	<b>194,850</b>	<b>197,250</b>	<b>199,651</b>

**STD OBJ. 12 - OTHER SUBSIDIES & PAYMENTS**

CEG 570 - PRISONER EXPENSES								
CEG 580 - SECRET EXPENSES	3,393	5,200	5,000	5,000	5,000	5,000	5,000	5,001
CEG 581 - SPECIAL "I" EXPENDITURES								
<b>CEG 590 - MISC EXPEND</b>	<b>26</b>							
CEG 591 - DISCOUNT FOR EARLY PAYMENT								
CEG 592 - PAYMENT IN LIEU OF TAXES								
CEG 620 - CLAIMS and COMP.SETTLEMENTS (Credit Item)	191,389	59,536						
CEG 650 - WRITE-OFF								
<b>TOTAL STD OBJ. 12 - OTHER SUBSIDIES &amp; PMTS</b>	<b>194,809</b>	<b>64,736</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,001</b>

**LESS - YEAR TO DATE CREDITS**

SO 01 - CEG 32 - Medical Leave / Suspension > 30 days	7,881							
SO 01 - CEG 40 & 41 - Transfer Allowances	21,177	20,527						
SO 02 - CEG's 60-66 Transfer Cost	176,249	137,425						
100% SHARED SERVICES CANADA - (Various CEGs)		1						
SO 04 - CEG 160 - Legal Services	17,823	7,166						
SO 04 - CEG's 200, 201 & 202 - Health Services								
SO12 - CEG 620 - Compensation Claims/Ex-Gratia	191,389	59,536						
ICBC Repairs to Police Vehicles Credit								
Refund of Credits under CE 1691	615							
<b>TOTAL CREDITS</b>	<b>415,135</b>	<b>224,654</b>						

**TOTAL DIRECT COSTS**

<b>TOTAL DIRECT COSTS</b>	<b>3,495,828</b>	<b>3,208,509</b>	<b>4,128,992</b>	<b>4,251,228</b>	<b>4,352,776</b>	<b>4,454,936</b>	<b>4,559,375</b>	<b>4,666,442</b>
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**INDIRECT COSTS (Summary)**

1) RM Pensions	548,413	505,130	686,908	586,545	600,881	615,586	630,648	646,097
2) RM CPP	67,700	63,924	82,343	84,099	86,201	88,356	90,565	92,829
3) Employer's Contr. to E.I. for R/M's	31,039	28,062	37,753	36,919	37,842	38,788	39,758	40,752
4) Division Administration (per cap x avg.# RM's)	647,909	626,888	828,960	825,820	857,220	888,620	923,160	957,700
5) Recruitment & Training	105,915	110,257	154,425	177,127	186,579	186,579	186,579	186,579
6) National Programs	67,796	62,122	79,496	79,349	79,432	79,515	79,601	79,687
7) Police Dog Service Training	19,672	18,803	17,663	17,713	17,835	17,835	17,835	17,835
8) Amortization of Equipment > \$150,000 @ 10%								
9) Reservists - CPP & EI	5,603	5,845	4,383	7,762	7,956			
<b>TOTAL INDIRECT COST</b>	<b>1,494,046</b>	<b>1,421,032</b>	<b>1,891,932</b>	<b>1,815,334</b>	<b>1,873,945</b>	<b>1,915,279</b>	<b>1,968,145</b>	<b>2,021,478</b>

<b>TOTAL COSTS (Direct + Indirect) @ 100%</b>	<b>4,989,874</b>	<b>4,629,541</b>	<b>6,020,924</b>	<b>6,066,563</b>	<b>6,226,721</b>	<b>6,370,215</b>	<b>6,527,520</b>	<b>6,687,920</b>
FEDERAL COST 10 %	498,987	462,954	602,092	606,656	622,672	637,022	652,752	668,792
<b>MUNICIPAL POLICING COSTS 90%</b>	<b>4,490,887</b>	<b>4,166,587</b>	<b>5,418,831</b>	<b>5,459,906</b>	<b>5,604,049</b>	<b>5,733,194</b>	<b>5,874,768</b>	<b>6,019,128</b>
MUNICIPAL COSTS - 100 % (Schedule 3B & 3C)	774,597	835,760	877,589	980,648	985,552	990,479	995,432	1,000,409
<b>TOTAL MUNICIPAL POLICING COSTS 90% &amp; 100%</b>	<b>5,265,483</b>	<b>5,002,347</b>	<b>6,296,420</b>	<b>6,440,555</b>	<b>6,589,601</b>	<b>6,723,673</b>	<b>6,870,200</b>	<b>7,019,537</b>

COURTENAY 2018/19 to 2022/23 Fiscal Estimates	COURTENAY 15/16 Final	COURTENAY 16/17 Pre-Final	COURTENAY 17/18 Budget	COURTENAY 18/19 Estimates	COURTENAY 19/20 Estimates	COURTENAY 20/21 Estimates	COURTENAY 21/22 Estimates	COURTENAY 22/23 Estimates
CONTRACT STRENGTH ACTUAL / FUNDED STRENGTH COST ELEMENT GROUP (CEG)	30.40 27.12	30.4 25.08	31.4 31.4	31.4 31.4	31.4 31.4	31.4 31.4	31.4 31.4	31.4 31.4

INDIRECT COSTS - REGULAR & CIVILIAN MEMBERS								
1) Pensions (Total Pensionable Earnings)	2,415,917	2,225,244	3,026,026	3,075,748	3,150,925	3,228,033	3,307,019	3,388,029
Pension Rate	22.70%	22.70%	22.70%	19.07%	19.07%	19.07%	19.07%	19.07%
Total Cost of RM/CM Pension	548,413	505,130	686,908	586,545	600,881	615,586	630,648	646,097
2) CPP (Pensionable Earnings) on a Per Capita Cost	2,496	2,549	2,622	2,678	2,745	2,814	2,884	2,956
Total Cost (Per Capita x FTE Utilization)	67,700	63,924	82,343	84,099	86,201	88,356	90,565	92,829
3) Employer's Contr. to E.I. on a Per Capita Cost	1,144	1,119	1,202	1,176	1,205	1,235	1,266	1,298
Total Cost (Per Capita x FTE Utilization)	31,039	28,062	37,753	36,919	37,842	38,788	39,758	40,752
4) Division Administration on a Per Capita Cost	23,888	25,000	26,400	26,300	27,300	28,300	29,400	30,500
Total Cost of Div. Administration	647,909	626,888	828,960	825,820	857,220	888,620	923,160	957,700
5) Recruitment & Training								
Per Capita Cost of Recruitment	2,880	3,267	3,560	4,392	4,600	4,600	4,600	4,600
Per Capita Cost of Training	1,025	1,130	1,358	1,249	1,342	1,342	1,342	1,342
Total Cost of Recruitment & Trng	105,915	110,257	154,425	177,127	186,579	186,579	186,579	186,579
6) Other National Indirects Per Capita (Addendum 'A')	2,500	2,477	2,532	2,527	2,530	2,532	2,535	2,538
Total Cost (Per Capita x FTE Utilization)	67,796	62,122	79,496	79,349	79,432	79,515	79,601	79,687
7) Police Dog Svc. Trng. as a Per Cap. cost	27,983	26,862	25,233	25,304	25,478	25,478	25,478	25,478
Total Cost (Per cap X PD Teams) - COURTENAY=70%	19,672	18,803	17,663	17,713	17,835	17,835	17,835	17,835
<b>TOTAL INDIRECT COSTS - RM's &amp; CM's</b>	<b>1,488,444</b>	<b>1,415,187</b>	<b>1,887,549</b>	<b>1,807,572</b>	<b>1,865,990</b>	<b>1,915,279</b>	<b>1,968,145</b>	<b>2,021,478</b>

INDIRECT COSTS - RESERVISTS								
	FTE	1.47	1.52	1.10	1.22	1.22	1.22	1.22
a) CPP for Reservist on a Per Capita Cost..	2,496	2,549	2,622	2,678	2,745	2,814	2,884	2,956
Total Cost (Per Capita x FTE)	3,673	3,876	2,873	5,147	5,275	5,408	5,544	5,682
b) Employer's Contr. to E.I. on a Per Capita Cost..	1,311	1,295	1,378	1,361	1,395	1,430	1,466	1,502
Total Cost (Per Capita x FTE)	1,930	1,970	1,509	2,615	2,681	2,748	2,817	2,887
<b>TOTAL INDIRECT COSTS - RESERVISTS</b>	<b>5,603</b>	<b>5,845</b>	<b>4,383</b>	<b>7,762</b>	<b>7,956</b>	<b>8,156</b>	<b>8,362</b>	<b>8,569</b>

<b>TOTAL INDIRECT COSTS</b>	<b>1,494,046</b>	<b>1,421,032</b>	<b>1,891,932</b>	<b>1,815,334</b>	<b>1,873,945</b>	<b>1,923,435</b>	<b>1,976,507</b>	<b>2,030,048</b>
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ADDENDUM 'A'								
<b>OTHER INDIRECT COSTS</b>								
Public Complaints Committee (PCC)	480	445	494	489	489	489	489	489
Legal Advisory Services	168	170	174	175	178	181	184	186
Enhanced Reporting & Accountability	118	118	120	118	118	118	118	118
Estimated Annual Severance	1,023	1,023	1,023	1,023	1,023	1,023	1,023	1,023
<b>CONSOLIDATED SERVICES</b>								
Shared Services Canada (SSC)	710	721	721	721	721	721	721	721
Accounting Operations								
Pay & Compensation								
<b>TOTAL PER CAPITA COST (Indirects #6)</b>	<b>2,500</b>	<b>2,477</b>	<b>2,532</b>	<b>2,527</b>	<b>2,530</b>	<b>2,532</b>	<b>2,535</b>	<b>2,538</b>

FISCAL YEAR TO CALENDAR YEAR CONVERSION TABLE								
Calendar Year	2015	2016	2017	2018	2019	2020	2021	2022
Fiscal Year Total Current	5,265,483	5,002,347	6,296,420	6,440,555	6,589,601	6,723,673	6,870,200	7,019,537
Fiscal per Qtr Current	1,316,371	1,250,587	1,574,105	1,610,139	1,647,400	1,680,918	1,717,550	1,754,884
Fiscal Year Total Prior Year	4,814,836	5,265,483	5,002,347	6,296,420	6,440,555	6,589,601	6,723,673	6,870,200
Fiscal per Qtr Prior Year	1,203,709	1,316,371	1,250,587	1,574,105	1,610,139	1,647,400	1,680,918	1,717,550
<b>Calendar</b>								
Jan - Mar	1,203,709	1,316,371	1,250,587	1,574,105	1,610,139	1,647,400	1,680,918	1,717,550
Apr - June	1,316,371	1,250,587	1,574,105	1,610,139	1,647,400	1,680,918	1,717,550	1,754,884
Jul - Sept	1,316,371	1,250,587	1,574,105	1,610,139	1,647,400	1,680,918	1,717,550	1,754,884
Oct - Dec	1,316,371	1,250,587	1,574,105	1,610,139	1,647,400	1,680,918	1,717,550	1,754,884
<b>City Calendar Year Total</b>	<b>5,152,821</b>	<b>5,068,131</b>	<b>5,972,902</b>	<b>6,404,521</b>	<b>6,552,339</b>	<b>6,690,155</b>	<b>6,833,568</b>	<b>6,982,203</b>

Colour Legend  
 Red = Post Budget CEG controlled by OIC  
 Black = Division Controlled CEG (DCCEG)  
 Blue lettering = Standard Object (SO)  
 Blue background = CEG credited to Direct Costs

**NOTES & ASSUMPTIONS for 2018/19  
Municipal Contracts**

Our terminology for the grouping of General Accounts:

- Cost Element Group (CEG)
- Cost Element (CE)

**NOTES ON DIRECT COSTS**

**CEG 30 - RCMP Members Pay**

**CE 110 - Regular Pay**

- Approved member pay raises are:
  - 1.25% as of January 1, 2015
  - 1.25% as of January 1, 2016
  - 2.30% as of April 1, 2016
- 2.50% estimated salary increase for each future year
- The Civilian Member (CM) category of employee will be deemed to be appointed under the Public Service Employment Act as of April 26, 2018 under Bill C-42. As of 2018/19, pay and pension will be charged at Public Service Employee (PSE) rates, billable to municipalities at 100%. Other indirect costs will continue to be charged on a per FTE basis.

**CE 1127 – Retro Pay – Prior Years**

Retroactive payments will be made in the 2017/18 fiscal year. A provision for this was not included in the 2017/18 budget, but it was communicated in the 2017/18 Multi-Year Plan package.

**CEG 190 – Training**

The 2018/19 increase over 2017/18 budget is due to the reallocation of administrative overhead of the Pacific Region Training Centre. This was previously included in Division Administration. The current plan reflects the full cost of all mandatory training. Mandatory training includes Operational Skills Training, AFQ, Immediate Action Rapid Deployment (IARD), Carbine, PRIME, and CORE (e.g. investigational).

**CEG 480 – Firearms/Ammunition**

The 2018/19 increase over 2017/18 budget is due to the fact that the 2017/18 budget was underestimated. The 2018/19 forecast is based on prior year usage and is higher due to increases in carbines and handguns.

**CEG 100 – Telephone Services**

The forecast includes such costs as bandwidth increases and satellite phones.



**CEG 280 – Rental Computer Equipment**

The forecast includes increases due to recent trend for annual software license fees. iBooks purchased in 16/17 will be implemented in 2017/18 and 2018/19. Implementation of iBooks will result in reduction of costs for LiveScans and CardScans.

**CEG 221 – Other Services IMIT**

The forecasts for PRIME levy and RTID levy are now included in CEG 221, instead of CEG 223, starting in 2017/18.

**CEG 223 – Radio Communications**

Forecasts for ECOMM are included here. Those municipalities on ECOMM will see a slight increase related to replacing loan radios. Municipal radio repair technician charges are also included here.

**CEG 920 – Security Equipment**

Installation and equipment costs for Closed Circuit Video Equipment (CCVE) will be included here.

**DIRECT COST DEDUCTIONS**

These are deducted from the Total Direct Cost for each municipality.

Non-billable costs are deducted and paid by the Federal Government:

- CEGs 40 & 41 - Transfer Allowances.
- CEGs 60-66 – Relocation Costs.
- CEG 160 - Legal Services.
- CEG 620 - Claims and Compensation Settlements.

These costs are deducted and included in the Division Administration Costs in the Indirect Costs:

- CEG 32 – Pay Members (Severance, Maternity and Parental allowances).
- CEGs 200-202 - Health Services.

**INDIRECT COSTS**

With the exception of Member Pension, all costs listed below are charged on a per FTE basis for members.

- Member Pension – 19.07% of pensionable cost element items
- Member Canada Pension Plan - \$2,678
- Employment Insurance - \$1,175
- Division Administration - \$26,300 – (Please refer to attached schedule 4) - Includes an estimate for E Division HQ @ \$900 per FTE

## SCHEDULE 2

- A separate calculation is listed for EI and CPP with respect to Reservists (if used).
- Other Indirect Costs:
  - Civilian Review and Complaints Commission (formerly PCC) - \$489
  - Legal Advisory Services - \$175
  - Enhanced Reporting & Accountability - \$118
  - Estimated Annual Severance – Based on annual liability - \$1,023

Shared Services Canada (SSC) - \$721 – SSC provides telecommunication and email services, networks, data centres, and servers to the RCMP. This rate is based on the historical costs for certain covered services. Units requesting additional services will be billed separately for those services.

Training & Recruiting: Forecasted as a national program starting in 2015/16. For 2018/19 rates are estimated at \$4,392 per FTE for the Cadet Training Program and \$1,249 per FTE for recruiting.

Police Dog Service Training: Forecasted as a national program starting 2015/16 based on established PDS teams in each contract jurisdiction. For 2018/19, the cost is estimated at \$25,304 per PDS team. For Lower Mainland District municipalities, this cost will be included in the Integrated Teams budget.

### **COSTS BILLABLE AT 100%**

The following are some of the items that are billable at 100% per the policing contract:

- Accommodation costs (including occupancy charge) for municipal units in federally owned buildings.
- PS Support staff costs (including backfills, overtime, severance, pension, CPP, etc.).
- Furniture and fixtures.
- House Furnishings
- Prisoner costs (including mattresses and blankets for cells).
- Kit and Clothing for auxiliaries.

### Courtenay - 5 Year Salary Forecast

RMs	2017-18	2018-19		2019-20			2020-21			2021-22			2022-23			
Annual Raise	2.50%	2.50%		2.50%			2.50%			2.50%			2.50%			
Effective Increm	2.50%	2.50%		2.50%			2.50%			2.50%			2.50%			
<i>(April to March: applying 9 months @ current year raise + 3 months following year raise)</i>																
	Avg Salary	FTE	Avg Salary	Cost	FTE	Avg Sal	Cost	FTE	Avg Sal	Cost	FTE	Avg Sal	Cost	FTE	Avg Sal	Cost
Spl CST	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CST	89,119	24.70	91,346	2,256,258	24.70	93,630	2,312,664	24.70	95,971	2,370,481	24.70	98,370	2,429,743	24.70	100,829	2,490,486
CPL	95,991	4.00	98,390	393,562	4.00	100,850	403,401	4.00	103,371	413,486	4.00	105,956	423,823	4.00	108,605	434,418
SGT	104,801	2.00	107,421	214,842	2.00	110,107	220,213	2.00	112,859	225,719	2.00	115,681	231,361	2.00	118,573	237,146
<b>Regular Members</b>		<b>30.7</b>		<b>\$ 2,864,661</b>	<b>30.7</b>		<b>\$ 2,936,278</b>	<b>30.7</b>		<b>\$ 3,009,685</b>	<b>30.7</b>		<b>\$ 3,084,927</b>	<b>30.7</b>		<b>\$ 3,162,050</b>
<b>Civilian Members</b>																
ESS		0.70		\$ 66,387	0.70		\$ 68,047	0.70		\$ 69,748	0.70		\$ 71,492	0.70		\$ 73,279
<b>Grand Total</b>		<b>31.4</b>		<b>\$ 2,931,048</b>	<b>31.4</b>		<b>\$ 3,004,325</b>	<b>31.4</b>		<b>\$ 3,079,433</b>	<b>31.4</b>		<b>\$ 3,156,419</b>	<b>31.4</b>		<b>\$ 3,235,329</b>
<b>Average \$/FTE</b>				<b>\$ 93,345</b>			<b>\$ 95,679</b>			<b>\$ 98,071</b>			<b>\$ 100,523</b>			<b>\$ 103,036</b>

**CITY OF COURTENAY**  
**COST of PUBLIC SERVICE EMPLOYEES**

	2016/17 ACTUALS	2017/18 BUDGET	2018/19 ESTIMATE
FTEs	9.74	9.0	9.0
<b>DIRECT COSTS:</b>			
CEG 10 - PAY - PUBLIC SERVICE EMPLOYEES			
CE 500100 REGULAR PAY F/T IND. PSE	322,608	362,000	369,200
CE 500136 REG. PAY P/T IND. PSE	25,860	32,325	33,000
CE 500141 PSE CASUALS	86,917	75,000	76,500
CE 500142 PSE TERM > 6 MONTHS	53,797		30,000
CE 500180 VACATION PAY TERM/CASUAL	4,499	-	4,000
CE 500301 PREMIUM PAY & ALLOWANCES	6,866		5,000
CE 501154 GOVT EMPL COMPENSATION	1,580		
CEG 11 - OVERTIME - PS	31,162	33,257	33,900
CEG 12 - PSE ALLOWANCES	23,707	-	30,000
<b>TOTAL DIRECT COSTS</b>	<b>556,996</b>	<b>502,582</b>	<b>611,600</b>
<b>INDIRECT COSTS:</b>			
A) COST OF PS PENSIONS (CE 100, 136,142)	402,265	394,325	432,200
PENSION RATE	10.73%	11.80%	10.73%
TOTAL COST OF PS PENSIONS	43,163	46,530	46,375
B) COST OF PS CPP			
AS A PER CAPITA COST	2,549.25	2,622.40	2,678.31
X PSE UTILIZATION	9.74	9.00	9.0
TOTAL COST OF PS CPP	24,832	23,602	24,105
C) COST OF EMPLOYERS CONTRIB. to E.I.			
AS A PER CAPITA COST	1,295.46	1,377.78	1,361.04
X PSE UTILIZATION	9.74	9.00	9.0
TOTAL COST OF E.I. CONTRIBUTIONS	12,619	12,400	12,249
D) COST OF SHARED SERVICES			
AS A PER CAPITA COST	726	721	721
X PSE UTILIZATION	9.74	9.00	9.0
TOTAL COST OF SSC	7,074	6,489	6,489
<b>TOTAL INDIRECT COSTS</b>	<b>87,688</b>	<b>89,021</b>	<b>89,218</b>
<b>TOTAL COST OF PUBLIC SERVICE EMPLOYEES</b>	<b>644,683</b>	<b>591,603</b>	<b>700,818</b>



**Municipal Contract Accommodation Estimate 2018-19  
as of March 31, 2017**

**City of Courtenay**

**Direct Operating Costs:**

CEG		2016-17 PRE-FINAL	2017-18 ORG. EST	2017-18 FORECAST	2018-19 ESTIMATE
700170	Contracted Services - Real Property	44,898	70,000	70,000	72,100
700171	Contracted Services - Real Property - Unit Commander Authority	1,643	-	-	-
700218	Contaminated Sites	-	-	-	-
700240	Rental of Buildings, Land & Works	3,823	5,300	5,300	5,800
700310	Repair of Buildings & Works	4,200	14,000	14,000	14,000
700311	Repair of Buildings & Works - Unit Commander Authority	-	-	-	-
700400	Utilities	14,626	18,900	18,900	19,300
700592	Payment in Lieu of Taxes	16,643	26,100	26,100	26,900
<b>Total O&amp;M Charge</b>		<b>85,834</b>	<b>134,300</b>	<b>134,300</b>	<b>138,100</b>

**Occupancy Charge Calculation:**

RCMP Municipal Contract EST	32.4	39.4	39.4	39.4
Municipal Employee EST	2.0	2.0	2.0	2.0
Total Municipal EST (RM plus ME)	34.4	41.4	41.4	41.4
Total EST in building (RM plus support)	122.5	121.0	121.0	121.0
Municipal percentage of total building EST	28.1%	34.2%	34.2%	34.2%
Building Gross Interior Space (sq. m)	1,687.7	1,936.6	1,936.6	1,936.6
Prorated space charged to Municipal Contract	473.9	662.6	662.6	662.6
x Provincial rate per square meter	213.90	213.90	213.90	213.90
<b>Occupancy Charge</b>	<b>101,367</b>	<b>141,730</b>	<b>141,730</b>	<b>141,730</b>

<b>Total Property Cost Estimates for Municipal Contract:</b>	<b>187,201</b>	<b>276,030</b>	<b>276,030</b>	<b>279,830</b>
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**NOTES:**

- (1) 2016-17 original estimate from Municipal Contract Policing Resource Requests - was prepared and sent in May 2015
- (2) 2017-18 - The basis of calculations will change to be consistent with the PPSA/MPSA and reflect the actual establishment for Courtenay (30.4 RM + 9 PS + 2 ME). In previous years and up to 2016/17, the establishment was adjusted down by approx. 6 positions due to a previous detachment level arrangement that should have ended in 2011/12 for location 130B 19th Ave .

# RCMP - E Div - Divisional Administration

	Final	Pre-Final	Forecast	Budget	Budget	Budget	Budget	Budget	Budget	Budget
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23		
<b>A. Administration &amp; Overhead Costs</b>	\$ 40,221,588	\$ 46,898,800	\$ 51,173,475	\$ 51,135,554	\$ 51,875,986	\$ 52,387,040	\$ 53,248,392	\$ 53,811,484		
<b>B. Special Leave Costs</b>	\$ 65,287,915	\$ 83,100,281	\$ 87,189,522	\$ 89,173,516	\$ 93,468,393	\$ 97,924,501	\$ 102,597,293	\$ 107,497,257		
<b>C. Health Services Costs</b>	\$ 22,794,959	\$ 22,854,347	\$ 23,997,065	\$ 25,196,918	\$ 26,456,764	\$ 27,779,602	\$ 29,168,582	\$ 30,627,011		
<b>Total Costs</b>	\$ 128,304,462	\$ 152,853,428	\$ 162,360,061	\$ 165,505,988	\$ 171,801,143	\$ 178,091,326	\$ 185,014,267	\$ 191,935,752		
Administration & Overhead Costs Per Capita Rate	\$ 6,544	\$ 7,453	\$ 8,132	\$ 8,126	\$ 8,243	\$ 8,325	\$ 8,462	\$ 8,551		
Special Leave Costs Per Capita Rate	\$ 10,622	\$ 13,205	\$ 13,855	\$ 14,170	\$ 14,853	\$ 15,561	\$ 16,303	\$ 17,082		
Health Services Costs Per Capita Rate	\$ 3,709	\$ 3,632	\$ 3,813	\$ 4,004	\$ 4,204	\$ 4,414	\$ 4,635	\$ 4,867		
<b>Total Per Capita Rate</b>	\$ 20,875	\$ 24,289	\$ 25,800	\$ 26,300	\$ 27,300	\$ 28,300	\$ 29,400	\$ 30,500		

**Details**

<b>A. Administration &amp; Overhead:</b>										
Pay, O&M and Capital (Divisional Units)	28,384,226	31,065,056	32,174,483	32,824,786	33,483,349	33,911,176	34,687,360	35,163,863		
Accounting Operations	2,413,053	1,521,328	1,666,475	1,637,040	1,637,040	1,637,040	1,637,040	1,637,040		
RM Compensation	2,183,829	2,146,991	2,477,018	2,311,782	2,311,782	2,311,782	2,311,782	2,311,782		
PSE Compensation	585,235	631,799	680,771	661,508	661,508	661,508	661,508	661,508		
Shared Services Canada	1,053,277	1,053,277	1,053,277	1,053,277	1,053,277	1,053,277	1,053,277	1,053,277		
Employee Assistance Services	315,096	322,548	319,383	319,383	319,383	319,383	319,383	319,383		
NCO Promotion Unit	662,733	920,176	1,043,354	1,043,354	1,043,354	1,043,354	1,043,354	1,043,354		
Disability Management Program	-	2,241,214	1,990,740	1,754,132	1,754,132	1,754,132	1,754,132	1,754,132		
Members Pension/CPP/EI	-	2,287,493	2,001,984	2,001,984	2,035,073	2,068,735	2,102,980	2,137,820		
PSEs Pension/CPP/EI	-	2,521,083	2,567,981	2,615,809	2,664,587	2,714,336	2,765,075	2,816,826		
E Div HQ Accommodations	5,055,000	5,347,500	5,347,500	5,347,500	5,347,500	5,347,500	5,347,500	5,347,500		
Non-Billable & Credits (Legal, Interdivision, Prior Year Refund)	(430,860)	(872,173)	(435,000)	(435,000)	(435,000)	(435,000)	(435,000)	(435,000)		
<b>Total Administration &amp; Overhead</b>	40,221,588	46,898,800	51,173,475	51,135,554	51,875,986	52,387,223	53,248,392	53,811,484		
<b>B. Special Leave:</b>										
Mat/Pat	7,590,834	6,471,976	6,795,575	7,135,354	7,492,121	7,866,727	8,260,064	8,673,067		
Pay in Lieu of Leave	3,169,800	4,170,196	4,371,321	4,536,832	4,661,218	4,739,842	4,817,849	4,894,897		
Medical Leave, Gradual Return to Work, Other LWP	54,527,281	57,289,725	60,154,212	63,161,922	66,320,018	69,636,019	73,117,820	76,773,711		
Members Pension/EI/CPP (on Leave)	-	15,168,383	15,868,414	14,339,408	14,995,036	15,681,912	16,401,561	17,155,582		
<b>Total Special Leave Cost</b>	65,287,915	83,100,281	87,189,522	89,173,516	93,468,393	97,924,501	102,597,293	107,497,257		
<b>C. Total Health Services Costs</b>	22,794,959	22,854,347	23,997,065	25,196,918	26,456,764	27,779,602	29,168,582	30,627,011		
<b>Total Costs</b>	128,304,462	152,853,428	162,360,061	165,505,988	171,801,143	178,091,326	185,014,267	191,935,752		
Divisional Component FTEs (RM / CM) - Note 1	6,173	6,293	6,293	6,293	6,293	6,293	6,293	6,293		
<b>Divisional Component of Per Capita Div Admin Rate</b>	20,786	24,289	25,800	26,300	27,300	28,300	29,400	30,500		

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
<b>Reference Information</b>								
Estimated Annual Severance Liability	6,323,766	6,323,766	6,323,766	6,323,766	6,323,766	6,323,766	6,323,766	6,323,766
Estimated Annual Severance Per Capita Rate - Note 2	1,023	1,023	1,023	1,023	1,023	1,023	1,023	1,023

## RCMP - E Div - Divisional Administration

Variables (Growth)	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Personnel	4 Year Average	1.02	1.02	1.02	1.02	1.02
O&M	4 Year Average	1.02	1.02	1.02	1.02	1.02
Mat/Pat	1.05	1.05	1.05	1.05	1.05	1.05
Pay in Lieu of Leave	1.05	1.04	1.03	1.02	1.02	1.02
Medical Leave, Gradual Return to Work, Other LWP	1.05	1.05	1.05	1.05	1.05	1.05
Health Services Costs	1.05	1.05	1.05	1.05	1.05	1.05

**Note 1:** Divisional FTEs = Total Members (RM / CM) less Members on Leave (RM / CM) less Div Admin Members (RM / CM).

**Note 2:** Severance - For budgeting purposes, we are continuing to identify an annual estimate of the severance liability.

**Note 3:** Civilian Members (CM) will be deemed to be Public Service Employees effective April 26, 2018. All CM positions at that point in time will continue to be treated as members for Div Admin calculations even after deeming.

## Schedule 5

City of XXXXXX  
XXXXX Ave  
XXXXXX, BC

### **Municipality Over 15,000 Sample Response**

June 9, 2017

Mr. Clayton Pecknold  
Assistant Deputy Minister and Director of Police Services  
Ministry of Justice  
P.O. Box 9285 Stn Prov Govt,  
Victoria, British Columbia  
V8W 9J7

Dear Sir:

Re: Municipal Contract Policing Resource Request – 2018 /19

This Letter of Approval in Principle is issued to conform to the Federal Treasury Board requirements to enable the Federal Government to set aside sufficient financial resources to cover their share of the Municipal RCMP contract costs.

The City of XXXXXX anticipates that we will require the addition of ### (#) members to our detachment strength of ## to bring the total detachment strength to ## for the 2018/19 fiscal year. The budget estimate that is approved in principle is \$XX.X million at 100% (that our municipality is responsible for the 90%). It includes \$XXX of capital equipment costing (>\$150K).

As outlined above, this letter provides an “approval in principle” and is issued for planning purposes only. It should not be taken as approval to add the anticipated ## of members to the detachment. City Council will be meeting on XXX, 2017 to confirm the 2018/19 budget and the number of additional human resources. We will inform you of that decision once it is made.

If you have any questions, please give me a call at 604-XXX-XXXX.

Sincerely,

John Doe  
Treasurer/Deputy Administrator

cc: XXXXXXXX RCMP Detachment  
Max Xiao, Regional Director, Finance Section, E & M Divisions, Corporate Management & Comptrollership Branch

City of XXXXXX  
XXXXX Ave  
XXXXXX, BC

Month, Date Year

The Honourable Mike Morris  
Solicitor General & Minister of Public Safety  
P.O. Box 9010 Prov. Govt.  
Victoria, British Columbia V8W 9L5

Dear Minister Morris:

**RE: Request for Decrease/Increase in Member(s) to [Municipality Name] Authorized Strength**

The Council of the [Municipality Name] has authorized a decrease/increase of one (1) regular member to its municipal policing establishment for the 2018/2019 fiscal year, effective September 1, 2018. The current [Municipality Name] establishment is nine (9) members. With the increase/decrease of one position, the authorized establishment will be ten (10).

I confirm our incremental financial commitment for the costs for the requested increase/decrease.

Since establishment increases/decreases require amendments to Annex "A" of the Federal/Provincial Agreement, please take the necessary steps to amend the Annex "A" by contacting the Solicitor General of Canada.

Thank you for your attention to this matter.

[Name/signature]

Cc:  
Officer in Charge, [Local Detachment]  
Michelle Lee, Establishment Coordinator, RCMP "E" Division Headquarters  
Max Xiao, Regional Director, Financial Management, RCMP "E" Division Headquarters





# STAFF REPORT

**To:** Council

**File No.:** 4320-20

**From:** Chief Administrative Officer

**Date:** May 7, 2018

**Subject:** A New Liquor Licence (Match Eatery and Public House) – 361 Hunt Road

**PURPOSE:**

The purpose of the report is to provide Council with information for a resolution to the Liquor Control and Licencing Board (LCLB) with respect to the Playtime Gaming Group’s application for a new liquor primary licence for the above referenced business and location.

**CAO RECOMMENDATIONS:**

THAT, based on the May 7, 2018 staff report, “A New Liquor Licence (Match Eatery and Public House) – 361 Hunt Road”, Council approve OPTION 1 and direct staff to post notice on the City’s website requesting public input on the proposed new liquor primary licence application for Council consideration at the regular meeting scheduled for May 22, 2018.

Respectfully submitted,

David Allen, BES, CLGEM, SCLGM  
Chief Administrative Officer

**BACKGROUND:**

Playtime Gaming Group Inc. has applied to the the Liquor Control and Licencing Branch (LCLB) for a new liquor primary licence with a Family Foodservice Term and Condition for their new food establishment called “Match Eatery and Public House”. This liquor licence application is explicitly for the service area established within the existing building at the subject property. The intent is to open the new restaurant as soon as the new licence is granted. Although the City has approved the development permit for the patio, this licence application excludes the patio area.

Proposed Hours of Service:

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
<b>Open</b>	10 AM	10 AM	10 AM	10 AM	10 AM	10 AM	10 AM
<b>Close</b>	2:00 AM	2:00 AM	2:00 AM	2:00 AM	2:00 AM	2:30 AM	2:30 AM

Pursuant to section 38 (3)(c) of the *Liquor Control and Licencing Act*, the local government must gather the views of residents when the applicant has given the local government for the area in which the establishment is proposed to be located or is located notice of the application. In order to gather the views

of residents, the City will post notice of the application on the City's main website for two weeks. Then, Council sends a resolution in writing to the LCLB Victoria Head Office for their final decision.

**DISCUSSION:**

The applicant attempted to apply for a new liquor primary licence for "Match Eatery and Public House" including a patio last year. Subsequently, they made several changes to their development plan by modifying service area and loading capacity. The change includes separating the proposed patio off from the original plan and creating a new liquor primary licence for "Match Eatery and Public House" with a Family Foodservice Terms and Condition (accompanied minors permitted until 10 PM). If a new licence is granted by the LCLB, the applicant's plan is to open and operate the restaurant entirely within the existing building.

The proposed use is permitted under the current zoning and meets all other requirements including the required number of parking stalls.

Section 71 (9) of the *Liquor Control and Licensing Regulation* states that a local government or first nation that wishes to provide comments and recommendations for the LCLB under section 38 (3) of the Act must do so in accordance with the following requirements:

- (a) the comments and recommendations must be in writing;
- (b) the comments must include the views of the local government or first nation on
  - (i) the impact of noise on the community in the immediate vicinity of the establishment unless subparagraph (ii) or (iii) apply,
  - (ii) in the case of an application that involves a temporary use area endorsement, the impact of noise on the community in the immediate vicinity of the proposed locations of event sites under corresponding temporary use area authorizations,
  - (iii) in the case of an application that involves a lounge or special event area endorsement, the impact of noise on the community in the immediate vicinity of the location of the service area under the endorsement,
  - (iv) the general impact on the community, and
- (c) if the local government or first nation has gathered the views of residents under section 38 (3) (c) of the Act, the comments must include
  - (i) the views of the residents, and
  - (ii) a description of the method used to gather those views;
- (d) the recommendations must include whether the application should be approved or rejected;

With respect to the requirement in section 38 (3) (c) of the *Liquor Control and Licensing Act*, staff is of the opinion that a notice on the City's website will satisfy the requirements of the LCLB for a simple application like this and this has been normal practice in the past years. Once Council receives public input on the application, a resolution addressing these points will be forwarded to the LCLB for final consideration. A proposed resolution in the correct format will be presented to Council for consideration at the regular Council meeting scheduled on May 22, 2018.

**FINANCIAL IMPLICATIONS:**

There is no direct financial implication related to this application.



**ADMINISTRATIVE IMPLICATIONS:**

Administration of liquor licencing is included in the City’s general statutory duties. To date, staff has spent four hours to process the application.

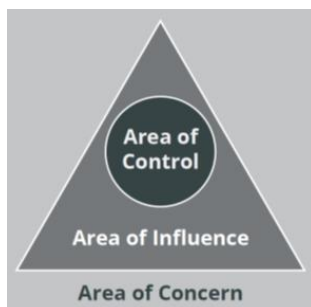
**ASSET MANAGEMENT IMPLICATIONS:**

There is no direct asset management implications related to this application.

**STRATEGIC PRIORITIES REFERENCE:**

**We focus on organizational and governance excellence**

- We support meeting the fundamental corporate and statutory obligations



- **Area of Control**  
 The policy, works and programming matters that fall within Council’s jurisdictional authority to act.

**OFFICIAL COMMUNITY PLAN REFERENCE:**

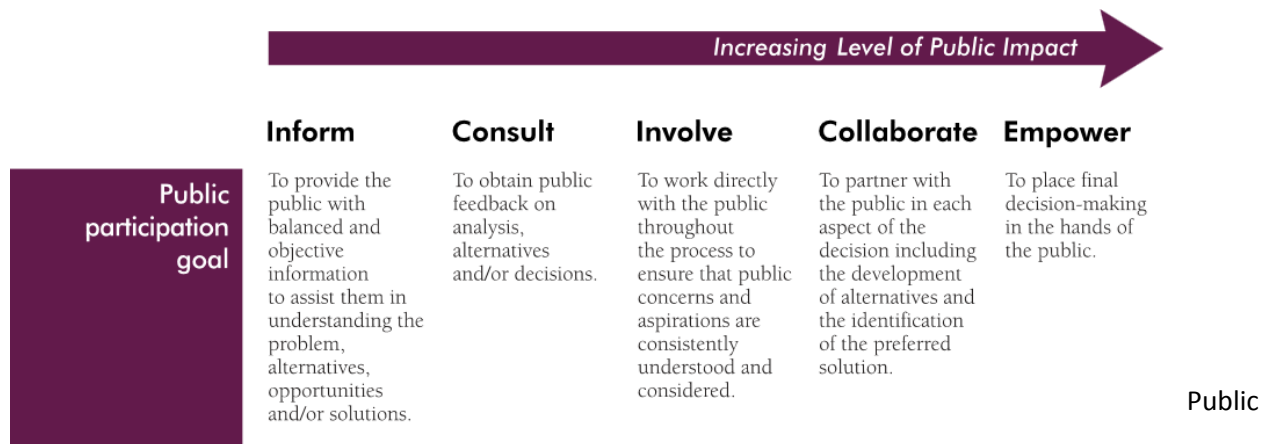
There is no direct reference related to this application.

**REGIONAL GROWTH STRATEGY REFERENCE:**

There is no direct reference related to this application.

**CITIZEN/PUBLIC ENGAGEMENT:**

Staff will consult members of the public based on the IAP2 Spectrum of Public Participation:  
[http://c.ymcdn.com/sites/www.iap2.org/resource/resmgr/imported/IAP2%20Spectrum\\_vertical.pdf](http://c.ymcdn.com/sites/www.iap2.org/resource/resmgr/imported/IAP2%20Spectrum_vertical.pdf)



comment gathering period is open between May 8 and May 22, 2018 on the City's main website. Any comments received from the public and the standard referral procedure will be attached to staff report for the Council meeting on May 22, 2018.

**OPTIONS:**

- Option 1: Direct staff to publish notice on the City's website requesting public input on the proposed change of liquor service hours for Council consideration at the regular meeting scheduled for May 22, 2018. (Recommended)
- Option 2: Direct staff to obtain public input through an alternative method
- Option 3: Direct staff not to proceed with the application and advise the LCLB that the City does not support the request

Prepared by:



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Tatsuyuki Setta, MCIP, RPP  
Manager of Planning

Approved by:



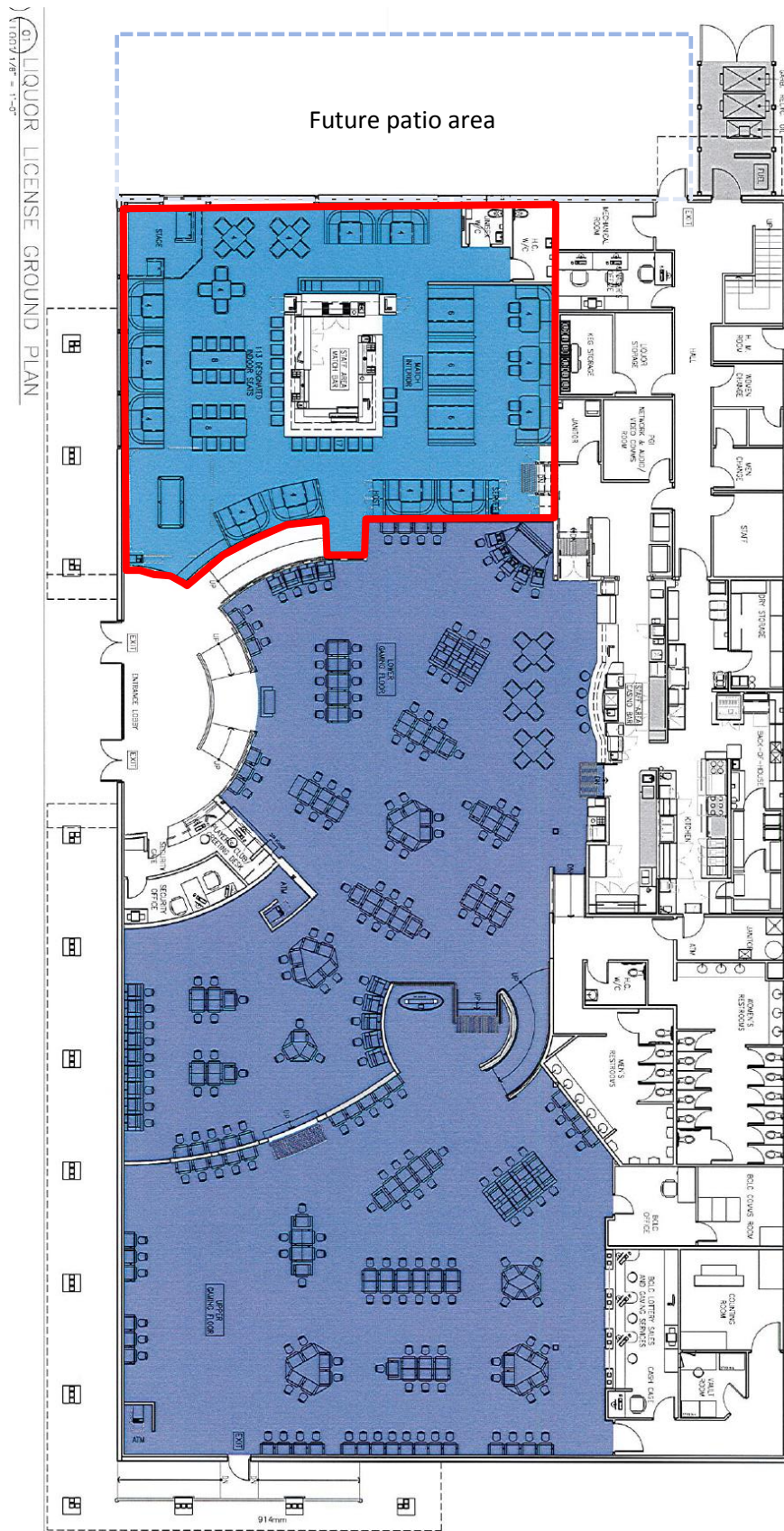
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Ian Buck, MCIP, RPP  
Director of Development Services

**ATTACHMENTS:**

- Attachment No. 1: Proposed Licenced Area  
Attachment No. 2: The applicant's Letter of Intent

Attachment No. 1: Proposed Licenced Area



The area to include in the Licence



**GATEWAY**  
CASINOS & ENTERTAINMENT LIMITED

Attachment No. 2: The applicant's Letter of Intent

April 24, 2017

City of Courtenay  
Development Services  
City Hall - 830 Cliffe Avenue  
Courtenay, BC, V9N 2J7

## Letter of Intent

**RE: New Liquor Primary Licence with Family Foodservice Term and Condition**

### **Business Identification Information**

Chances Courtenay & Match Eatery & Public House  
361 Hunt Road  
Courtenay B.C. V9N 9B8  
Phone: 250-334-4531  
Email: [info@playtimegaming.com](mailto:info@playtimegaming.com)

### **General Manager**

Kent Hockley  
Office: 250-334-4531 ext. 108  
Email: [khockley@playtimegaming.com](mailto:khockley@playtimegaming.com)

### **Introduction**

Gateway Casinos & Entertainment Limited ("Gateway") has identified an opportunity to enhance the customer experience by modernizing and expanding the layout of its Courtenay site's liquor service areas. This modernization includes:

1. removing the Match Eatery & Public House ("Match") liquor service area from the current Liquor Primary Licence;
2. adding a patio to Match; and
3. creating a new Liquor Primary Licence for Match with a Family Foodservice Term and Condition.

### **Opportunity (Target Market)**

With an opportunity to add a Family Foodservice Term and Condition (Accompanied Minors Permitted until 10pm) to a Liquor Primary Licence, Gateway would like to expand its offerings at Match to families while still excluding minors' access to gaming products and services.

To take advantage of this opportunity, Gateway is requesting the Liquor Control and Licensing Branch (“LCLB”) and the City of Courtenay to approve:

- the creation a new Liquor Primary Licence with a Family Foodservice Term and Condition for Match and its to-be-built patio with a total occupant load of 235 (115 interior; 120 Patio).

An LCLB application is being submitted at the same time to reduce the Chances Liquor Primary Licence occupant load from 735 to 649.

- The existing licence shows an occupant load of 419, however, an LCLB Structural Change Application currently in progress and, as approved already by City of Courtenay Council, increases the Occupant Load to 735 with the interior build of Match.

### **Primary Business Focus**

Match Eatery & Public House is a contemporary-themed public house offering a dining destination and premium sports viewing experience. Energetic, attentive and confident staff will serve pub staples, with a local gastro flare.

### **Entertainment**

Throughout the week, Match will show events people want to watch, and families will be able to dine and enjoy. As the week graduates into the weekend, Match will become more energetic and vibrant with sporting PPV events, bands, DJ’s and dancing. A variety of activities such as pool, foosball & shuffleboard will provide additional entertainment options.

### **Food Service**

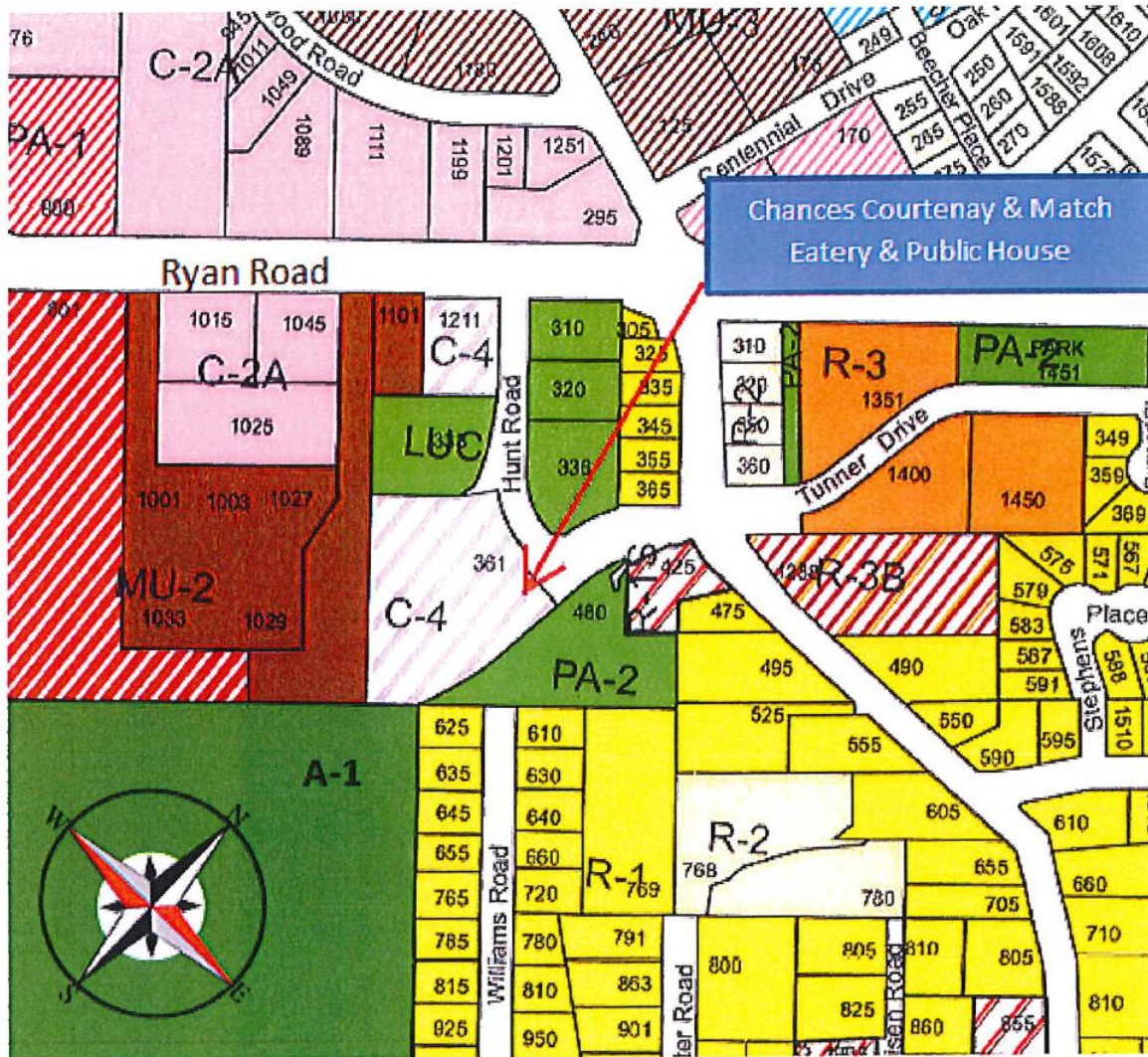
Match will offer full service menus with signature pub staples and a kids menu during all hours of operation. Menus are standardized throughout Gateway’s seven (7) other Match Eatery & Public House locations and can be viewed online.

### **Composition of the Neighbourhood**

The location site of Match Eatery & Public House is zoned as commercial along with the land to the west of the site. The closest residential property to Match is approximately 100 metres to the east.

The below is a zoning map of the site and surrounding areas.





Legend:

- A – Agriculture
- C – Commercial
- LUC – Land Use Contracts
- MU – Multiple Use (Commercial & Residential)
- PA – Public Use & Assembly
- R – Residential

Noise

Upon request by the City of Courtenay, Gateway contracted BKL Consultants Ltd to conduct a Noise Impact Assessment for the planned renovations that include an outdoor patio and a performance stage in the restaurant area.

### ***Recommendations and Conclusion from the Noise Impact Assessment:***

#### **Recommendations**

*To minimize the noise impact of the site, we recommend restaurant windows are closed after 10 pm on nights when the band is performing.*

*The assessment assumes that the music speakers have a relatively flat frequency response, i.e., that the bass is not louder than the rest of the music. To ensure this occurs on site, we recommend avoiding the use of subwoofers outdoors and that the sound systems are commissioned prior to use and equalized to ensure a flat frequency response.*

*If a permanent roof for the patio is installed, this has the potential to provide noise shielding for some of the elevated apartment units. However, there is also the potential that patrons will raise their voices further in order to hear each other as the patio will be a semi-enclosed space. To minimize this risk, we recommend adding an acoustically absorptive treatment with a minimum NRC of 0.9 to the underside of the patio roof.*

#### **Conclusions**

*Predicted noise levels from the proposed outdoor patio and break-out noise from the restaurant are expected to be below both the daytime and nighttime project noise criterion for most receivers, provided noise source levels are within the expected range.*

*Patio and restaurant noise is predicted to exceed the nighttime criteria for some receivers in the apartment building west of the site, specifically those on the east facade and for some of the apartments facing into the courtyard. For these receivers, the project noise levels are expected to exceed the nighttime criteria when windows are open. With windows closed, we expect the internal noise level criteria to be achieved.*

*The significance of the noise impact at the apartment receivers will depend on the current noise levels that they are exposed to, including noise from the existing venue to the west of the apartment building. We note this venue has an existing patio area. Noise impacts can be minimized by following our recommendations noted above.*

Gateway commits to following all recommendations made by BKL Consultants Ltd.

#### **Parking**

Regular Stalls	236
Disabled	12
Motorcycle	2
Total	250

### **Security & Surveillance**

Gateway's security personnel at its facilities provide an extremely secure environment for its customers and employees.

1. Security will immediately respond when notified by surveillance or by an employee via the radio to attend due to a specified situation.
2. Gateway staff are mandated to ask for two pieces of ID per LCLB regulations when verifying an individual's age.
3. Security is stationed at the entrance to the gaming facility and conducts ID checks on everyone who looks under 30 years of age. Gateway's standard exceeds LCLB's "19 years of age" and BCLC's "25 years of age" ID requirements.

Additional surveillance cameras are installed to provide increased surveillance camera coverage of interior and exterior facility areas.

### **Serving It Right Training**

All facility food and beverage employees, all gaming employees, all Security Officers, and all facility management are required to complete BC's Serving It Right Certification.

### **Gateway Liquor Service Policies**

Gateway has well-established house liquor service policies which all Gateway employees are mandated to follow. Gateway has a "3-Tier" policy system:

1. House Liquor Service Policy (Tier 1) is posted for patrons and employees at all of its facilities, both in Alberta and British Columbia;
2. Responsible Liquor Service Policy (Tier 2) is reviewed and signed off by all food and beverage and gaming employees to ensure liquor service is provided in a responsible, courteous, lawful and professional manner to ensure a safe working environment for employees and a safe and enjoyable social environment for customers; and
3. Alcohol Regulations - Responsibilities Policy (Tier 3) is reviewed and signed off by Management, Food & Beverage Department, Security Department, Surveillance Department, and the Human Resources Department at each Gateway property to assign responsibility for ensuring employees follow all laws as they relate to the sale and service of alcohol.

### **Family Foodservice Term and Condition**

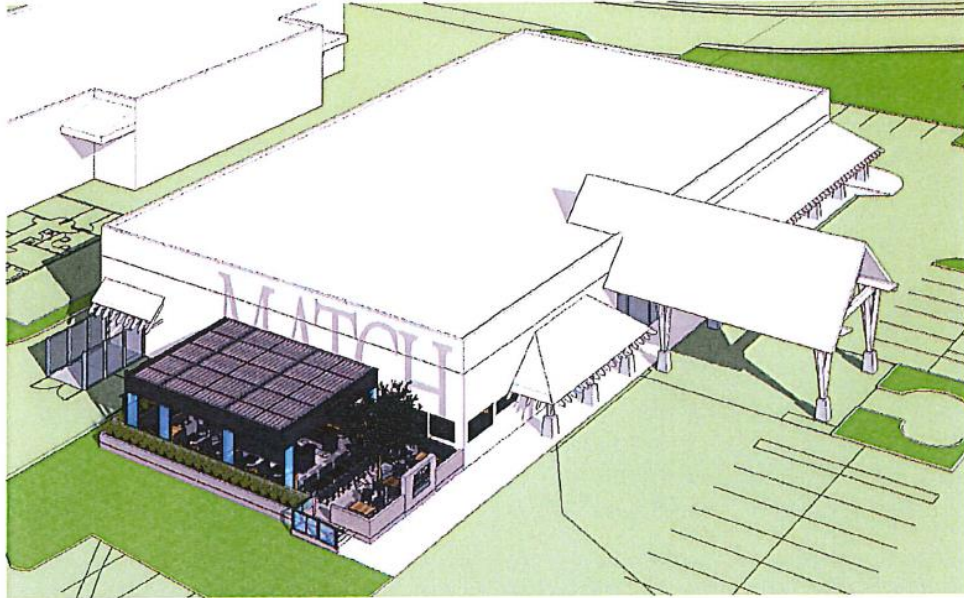
Gateway is requesting LCLB approve a "Family Foodservice Term and Condition" for the new Liquor Primary Licence for Match Eatery & Public House.



Appropriate signage and procedures will be in place to ensure no minors are in Match after 10PM.

**Exterior – Renderings**

Below are renderings of the facility's Match Eatery & Public House and its proposed patio:





### Daily Operating Schedule

The anticipated schedule of Match Eatery & Public House is:

Sunday to Thursday 11:00am to 12:00am  
Friday and Saturday 10:00am to 1:00am

The above may be subject to change due to increased demand. Operating times for the patio will be seasonal. It is expected that the patio will be open approximately 40% of the year from 11am to midnight, 7 days a week.

If you have any questions or require additional information, please contact me directly at (604) 296-5020 or by email at [gatchison@gatewaycasinos.com](mailto:gatchison@gatewaycasinos.com).

A handwritten signature in blue ink, which appears to read "Glenn Atchison".

Glenn Atchison, CPA, CGA  
Manager of Compliance  
Gateway Casinos & Entertainment Limited  
4331 Dominion Street  
Burnaby, BC V5G 1C7  
[gatchison@gatewaycasinos.com](mailto:gatchison@gatewaycasinos.com)



## STAFF REPORT

**To:** Council

**File No.:** 3090-20-1708

**From:** Chief Administrative Officer

**Date:** May 7, 2018

**Subject:** Development Variance Permit No. 1708 – 770 Harmston Avenue

### PURPOSE:

The purpose of this report is for Council to consider issuing a Development Variance Permit (DVP) for the construction of an institutional building on the land legally described as Lot A, Section 61, Comox District, Plan EPP 689170 (770 Harmston Avenue). Variances are being sought to reduce the side yard building setbacks, the landscape area along the property's frontage and to increase the percentage of on-site small car parking.

### CAO RECOMMENDATIONS:

That based on the May 7, 2018 staff report "Development Variance Permit No. 1708 – 770 Harmston Avenue" Council approve Development Variance Permit No. 1708 (OPTION 1).

Respectfully submitted,

David Allen, BES, CLGEM, SCLGM  
Chief Administrative Officer

### BACKGROUND:

The Comox Valley Regional District (CVRD) has applied to construct a new building that will house the CVRD administration offices, a boardroom and a regional emergency operations centre.

The property is approximately 3158 m<sup>2</sup> in size, is zoned Public Use and Assembly One Zone (PA-1) and is vacant of buildings and structures. The site has road access from Grant and Harmston Avenues.

Council sold the site to the CVRD in 2016 for the proposed use as part of a tri-party agreement between the City, the CVRD and



**Figure No. 1**  
**Development Site (outlined in red)**



School District 71. In exchange the City received the Harmston Park lands.

The subject site is situated close to Courtenay’s Downtown District within a mixed use neighborhood containing park, commercial, residential and institutional uses.

The development is a two-storey building that contains office space, meeting rooms, washrooms, kitchen facilities, a first aid room, a boardroom and an emergency operations centre. Similar to adjacent buildings along Harmston, the building is setback from fronting roads to accommodate curbing, street trees, landscaping and parking (*Schedule No. 1 of the draft permit*).

The applicant is requesting variances to the side yard building setbacks, the landscape area along Grant and Harmston Avenues and the percentage of small car parking. Table 1 compares the applicant’s proposal with the requirements in the PA-1 zone and the small car parking regulations contained in Division 7 of the zoning bylaw.

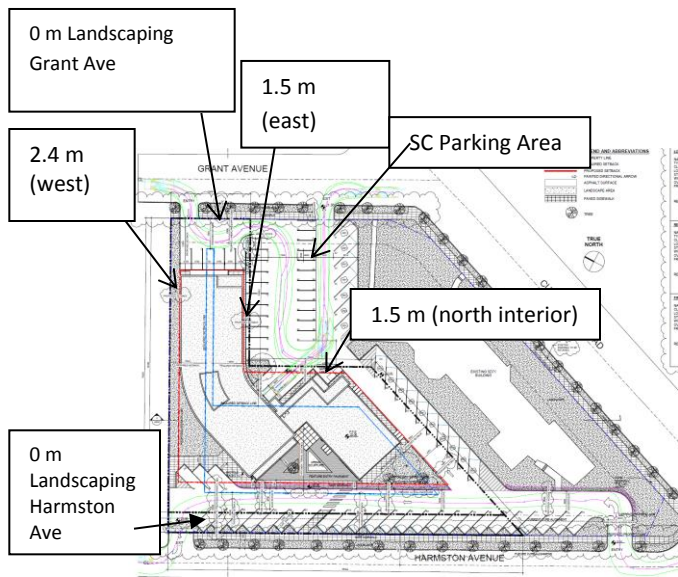


Figure No. 2: Site Plan illustrating Variances

Zoning Criteria	Proposal
Section 8.26.5(3) Side Yard Setback – 9 m	Side yard (west) – 2.4 m Side Yard (north interior) – 1.5 m Side Yard (east) – 1.5 m
Section 8.26.10(2) Landscaped With Area along Frontages 6m	0 m
Section 7.1.10(1) For every parking area required to accommodate 20 or more vehicles; 10% is permitted to be small car parking stalls	12 stalls; 16% of total parking areas to be small car parking stalls

Table No. 1: Summary of Zoning Criteria and the Proposal

**DISCUSSION:**

Official Community Plan Review

The property is designated as Public/Institutional use in the OCP. The OCP promotes locating government offices and facilities within or close to Courtenay’s Downtown District and encourages the provision of accessible community services for residents. A number of government offices have already established themselves within the Downtown District including the Provincial Court House, School District No. 71 administration offices and the City of Courtenay municipal offices and fire department.

Regarding form and character of the structure, the buildings are set back from fronting streets to accommodate boulevards, curbing, street trees, landscaping and parking. Visual interest is created by providing variations in massing. The awnings, light fixtures and canopies have been architecturally integrated in the design of the building. As an institutional use the development is not subject to a development permit.

#### Harmston Avenue Road Closure Bylaw

As part of the this project, the CVRD has requested to purchase a 4.4 metre wide portion of Harmston Avenue from the City to provide safe entry and exit to and from the site, landscaping and on-site parking.

*On April 16, 2018 Council passed a resolution:*

1. *“that the disposition the portion of closed road adjacent to the Comox Valley Regional District (CVRD) property and current School District 71 property, 567 square metres in size, to the CVRD for the appraised value of \$130,640 less the cost of any road improvements performed by the CVRD not required by the development of the new CVRD administration building; and*
2. *that “Harmston Avenue Road Closure Bylaw No. 2920, 2018” proceed to first, second, and third reading of; and that a statutory notice for the road closure and property disposition be published pursuant to section 94 of the Community Charter.”*

The parking calculations and building setbacks discussed in this report assume the requested portion of the road has been closed. It is acknowledged that if the road closure and sale of land does not occur the applicant will be required to obtain further variances to the number of parking stalls and the rear yard setback prior to building permit approval.

#### Zoning Review

Government office is a permitted use in the PA-1 Zone. The development meets all other requirements for: building height, front and rear yard setbacks, lot coverage and number of parking stalls. As mentioned earlier, the project contains multiple variances; below is a description and evaluation of each variance.

#### Width of Landscaped Buffer Area Along Grant Avenue and Harmston Avenue frontages.

A landscape area 6.0 m in width is required along the frontages of the property in the PA-1 Zone. The applicant is proposing to reduce the landscape buffer to 0 metres to accommodate vehicular access, the safe movement of vehicles and off-street parking.

Although the six metre buffer cannot be achieved the applicant is required to remove and replace sidewalks along the frontages of Harmston and Grant Avenues as part of the off-site works.

An evaluation of the landscaping has been carried out from an aesthetics and functional perspective. Staff feels that the proposed is consistent with landscape treatments on neighboring properties and of downtown developments generally.

### Side Yard Setbacks

Zoning Bylaw No. 2500, 2007 requires that buildings in the PA-1 Zone be setback 9.0 metres from side yard property lines. The applicant is requesting that the building be setback 2.4 metres from western side yard parcel line and 1.5 m from the northern and eastern side yard parcel lines (Figure No. 2). These variances are being sought to accommodate the building envelope and building projections (i.e. awnings, canopies and roof overhangs).

The subject property is irregularly shaped. Therefore it makes development more challenging without varying some setback requirements. Staff believes that the requested variances will improve building design and orientation. Also, the side yard variances are adjacent to surface parking lots and the existing School District No. 71 building so there will be no impacts on adjacent residential properties. These setbacks are also consistent with the setbacks of the existing commercial buildings across Grant Avenue.

### Parking

Parking for the development is proposed in the front, side and rear yards of the property. The applicant is required to provide 55 parking stalls for the CVRD building and is providing 74 parking stalls on both the subject property and the adjacent School District property. Of the 74 stalls 17 are required for the existing School District building. A covenant securing the parking spaces and an easement agreement for the shared access and uses will be required prior to building permit issuance.

### Allowable Small Car Parking

According to the Zoning Bylaw, parking areas that accommodate 20 or more vehicles are permitted to have up to 10 per cent of the total parking be small car parking. In order to improve site circulation and the efficiency of parking areas, the applicant has applied to increase the allowable small car parking from 10 percent (7 stalls) to 16 percent (12 spaces). The small car parking is located north of the proposed building in the eastern side yard.

Compared to the dimensions for regular parking stalls, small car parking stalls have reduced widths and length (2.5 m X 4.6 m). The CVRD transportation consultant has also noted that the following sub-compact, compact and small SUV classes have typical dimensions of 4.6 metres in length or less: the Mazda2, Honda Fit; Toyota Corolla, Ford Focus and small SUV including the Ford Escape, Toyota Rav-4. In a recent survey conducted by Watt Consulting for the City of Nanaimo's parking bylaw review suggests that vehicles in these classes represent over half the vehicles on the road (Attachment No. 4).

Staff has no objection to the proposed increase, as indicated by the Transportation Consultant, it is common practice in many other municipalities on Vancouver Island to allow 25 percent or more of a site's parking allowance as small car parking including Comox and Campbell River.

### Parking Study

The applicant retained Watt Consulting to conduct a parking study that outlines parking requirements, on-street parking conditions and parking utilization within 200-300 metres of the development site. The report indicates that there are approximately 400 parking spaces in the immediate area, 77% which provide unrestricted parking. A majority of these parking spaces are located at the south end of Harmston Avenue on the east and west side of the street. Additional unrestricted parking is made available at the north end of Harmston Avenue and the west side of Grant Avenue.

During the study period from 9:30am to 2:30pm on May 5, 2017 the peak period demand was only 44% of the spaces occupied indicating there is a significant on-street parking supply in the immediate area.

### FINANCIAL IMPLICATIONS:

There are no direct financial implications related to the processing of this development variance permit application as the fees are designed to offset the administrative costs. The fee for a development permit with variances for this specific development is \$1,500.

Should Development Variance Permit No. 1708 be approved, the applicant will be required to pay Development Cost Charges at the time of building permit application.

### ADMINISTRATIVE IMPLICATIONS:

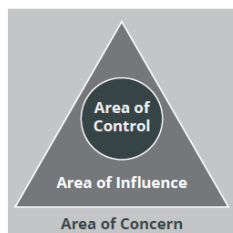
The processing of development applications is included in the current work plan as a statutory component. Staff has spent 25 hours reviewing the application, conducting a site visit and meeting with the applicant to request additional and revised application submissions. Additional staff time will be required for processing and issuing a sign and a building permit, and related inspections.

### ASSET MANAGEMENT IMPLICATIONS:

As a result of this development the CVRD will be responsible for upgrading the road frontages of the development including new sidewalk and a landscaped buffer strip with street trees.

### STRATEGIC PRIORITIES REFERENCE:

Development applications fall within Council's Area of Control and specifically aligns with the strategic priority to support meeting the fundamental corporate and statutory obligations of the City.



- **Area of Control**  
The policy, works and programming matters that fall within Council's jurisdictional authority to act.
- ▲ **Area of Influence**  
Matters that fall within shared or agreed jurisdiction between Council and another government or party.
- **Area of Concern**  
Matters of interest outside Council's jurisdictional authority to act.

We focus on  
**organizational and  
governance excellence**

- We support meeting the  
fundamental corporate and  
statutory obligations

### OFFICIAL COMMUNITY PLAN REFERENCE:

#### Goals:

4.1.2 (1) - *Strengthen the role of the downtown as the primary business district and the centre for culture, entertainment, government and tourism.*

4.1.2 (9) - *Direct major office space including government offices and services to the Downtown.*

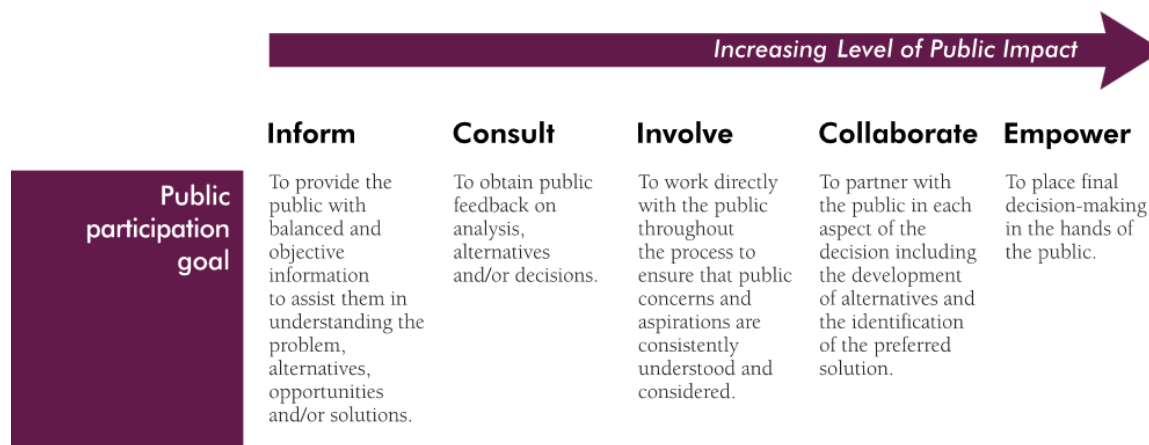
#### Policies

4.1.3 (1) - *Council supports and promotes a downtown location for the primary location of major offices and government facilities within the City.*

### REGIONAL GROWTH STRATEGY REFERENCE:

4.4 (14) - *Promote and support the overall economic viability of the municipal areas so that they can continue to provide primary base for residential, commercial and institutional activities.*

**CITIZEN/PUBLIC ENGAGEMENT:**



The level of public engagement proposed is “Consult”. The applicant held a public information meeting on December 20, 2017 at the School District Offices located at 607 Cumberland Road and five people attended. At the meeting concerns were expressed by residents regarding the availability of parking in the immediate neighbourhood, particularly during the summer months.

To date, a total of 2 written responses have been received. Concerns expressed by residents centre around the building’s siting, the landscape variance along Grant Avenue and the lack of parking in the immediate area.

A copy of the public information summary report and comments from residents are included as **Attachment No. 3**.

In accordance with the *Local Government Act*, the City also has notified property owners and occupants within 30 metres of the subject property of the requested variance. To date, staff has received two responses.

**OPTIONS:**

**OPTION 1:** (Recommended) Approve Development Variance Permit No. 1708.

**OPTION 2:** Defer consideration of Development Variance Permit No. 1708 pending receipt of further information.

**OPTION 3:** Not approve Development Variance Permit No. 1708.

Prepared by:

Dana Beatson, MCIP, RPP

Reviewed by:

Ian Buck, MCIP, RPP



Land Use Planner

Director of Development Services

*Attachments:*

1. *Attachment No. 1: Development Variance Permit and Associated Schedules*
2. *Attachment No. 2: Applicant's Submissions*
3. *Attachment No. 3: Summary of Public Information Meeting and Public Comments*
4. *Traffic Consultant Rationale for Small Car Parking Variance*

**Attachment No. 1:**  
*Draft Development  
Variance Permit*

**THE CORPORATION OF THE CITY OF COURTENAY**

**Permit No.** 3090-20-1708

**DEVELOPMENT VARIANCE PERMIT**

May 7, 2018

**To issue a Development Permit**

**To:** Name: Comox Valley Regional District  
Address: 600 Comox Road  
Courtenay, British Columbia  
V9N 3P6

**Property to which permit refers:**

Legal: Lot A, Section 61, Comox District, Plan EPP69170  
Civic: 770 Harmston Avenue

**Conditions of Permit:**

Permit issued to allow the construction of a new institutional building with the following variances to the City of Courtenay Zoning Bylaw No. 2500, 2007:

**8.26.5(3) Setbacks**

- Reduce the western side yard setback from 9.0 metres to 2.4 metres;
- Reduce the northern and eastern side yard setbacks from 9.0 metres to 1.5 metres;

**8.26.10(2) Landscaping and Screening**

- Reduce the required landscaped area along the property's frontages from 6.0 metres to 0 metres;
- and;

**7.1.10(1) Small Car Parking**

- Increase the allowable percentage of small car parking stall from 10% (7 stalls) to 16% (12 stalls).

Development Variance Permit No. 1708 is subject to the following conditions:

1. That development shall be in conformance with the plans, drawn by KMBR Architect and Planners Inc. dated on February 5<sup>th</sup> and February 27<sup>th</sup>, 2018 contained in **Schedule No. 1;**
2. All new and upgraded street lighting in the existing and proposed development must use Full Cut Off/Flat Lens (FCO/FL) luminaries to light roads, parking, loading and pedestrian areas. Exterior building lighting must have FCO lighting fixtures;
3. A sign permit shall be obtained prior to any signage being installed on the property;

4. All parking lots must be developed in accordance with Zoning Bylaw No. 2500, 2007, Division 7, Off-Street Parking and Loading Spaces;
5. The minimum depth of topsoil or amended organic soil on all landscaped areas to be as follows: shrubs – 450 mm, groundcover and grass - 300 mm and trees 300 mm around and below the rootball;
6. All parking lots that accommodate two or more vehicles must be surfaced with a bituminous or other dust free surface; and
7. In accordance with Zoning Bylaw No. 2500, 2007, Division 7, Off-Street Parking and Loading Spaces; a parking a covenant must be registered on Lot 1, Section 61, Comox District, Plan 81217 prior to the issuance of a building permit.

**Time Schedule of Development and Lapse of Permit**

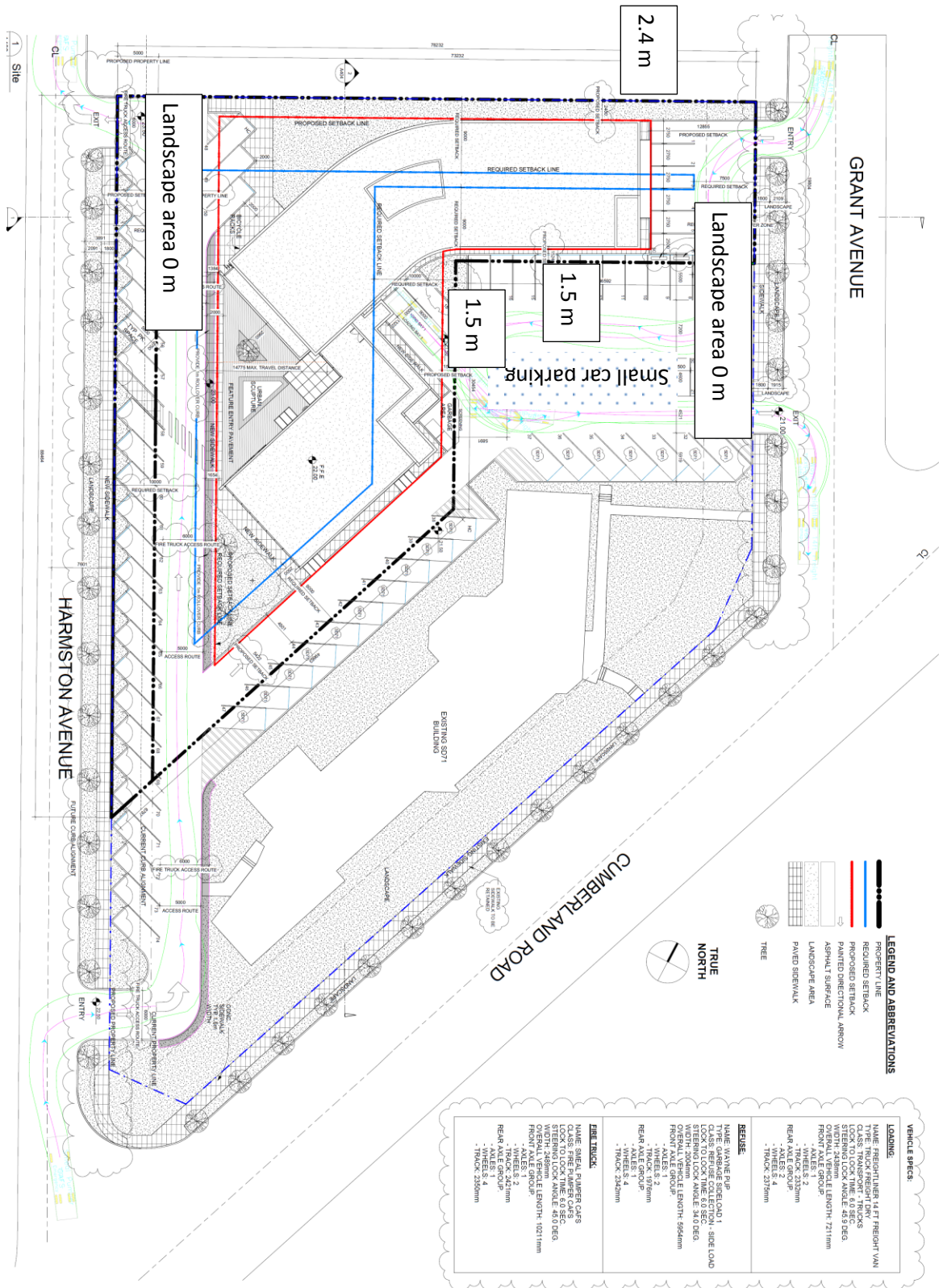
That if the permit holder has not substantially commenced the construction authorized by this permit within (12) months after the date it was issued, the permit lapses.

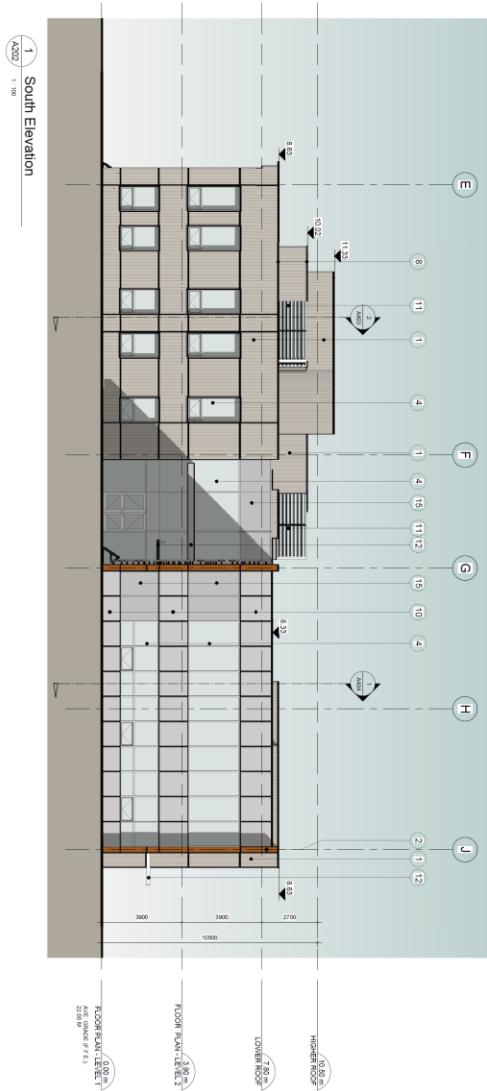
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Date

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Director of Legislative Services



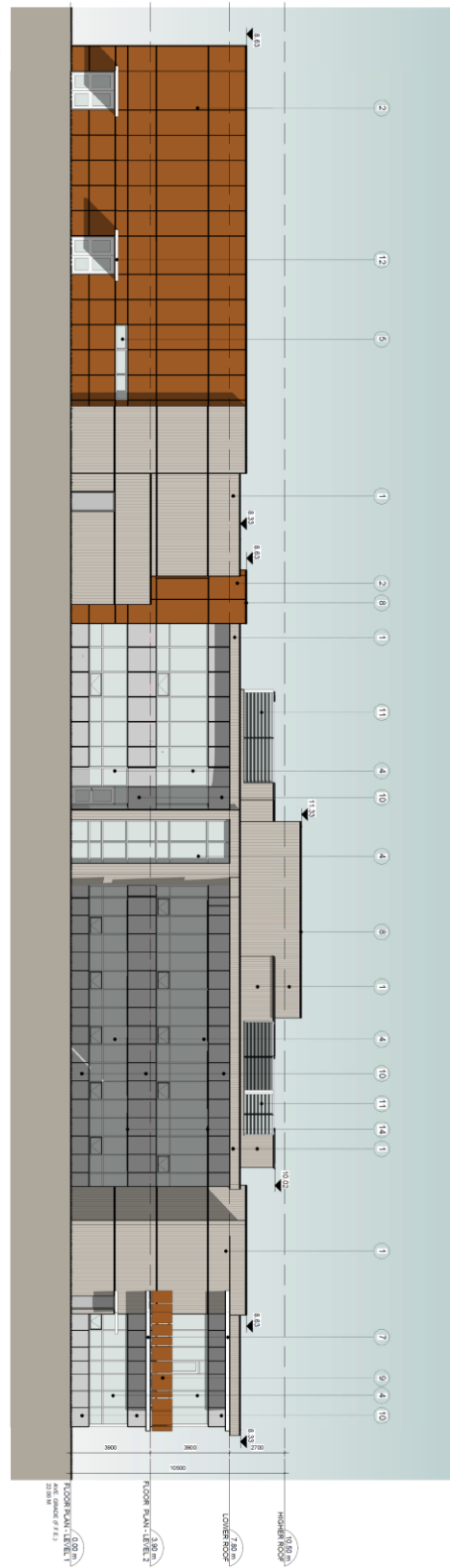


**1** South Elevation  
 1/8" = 1'-0"

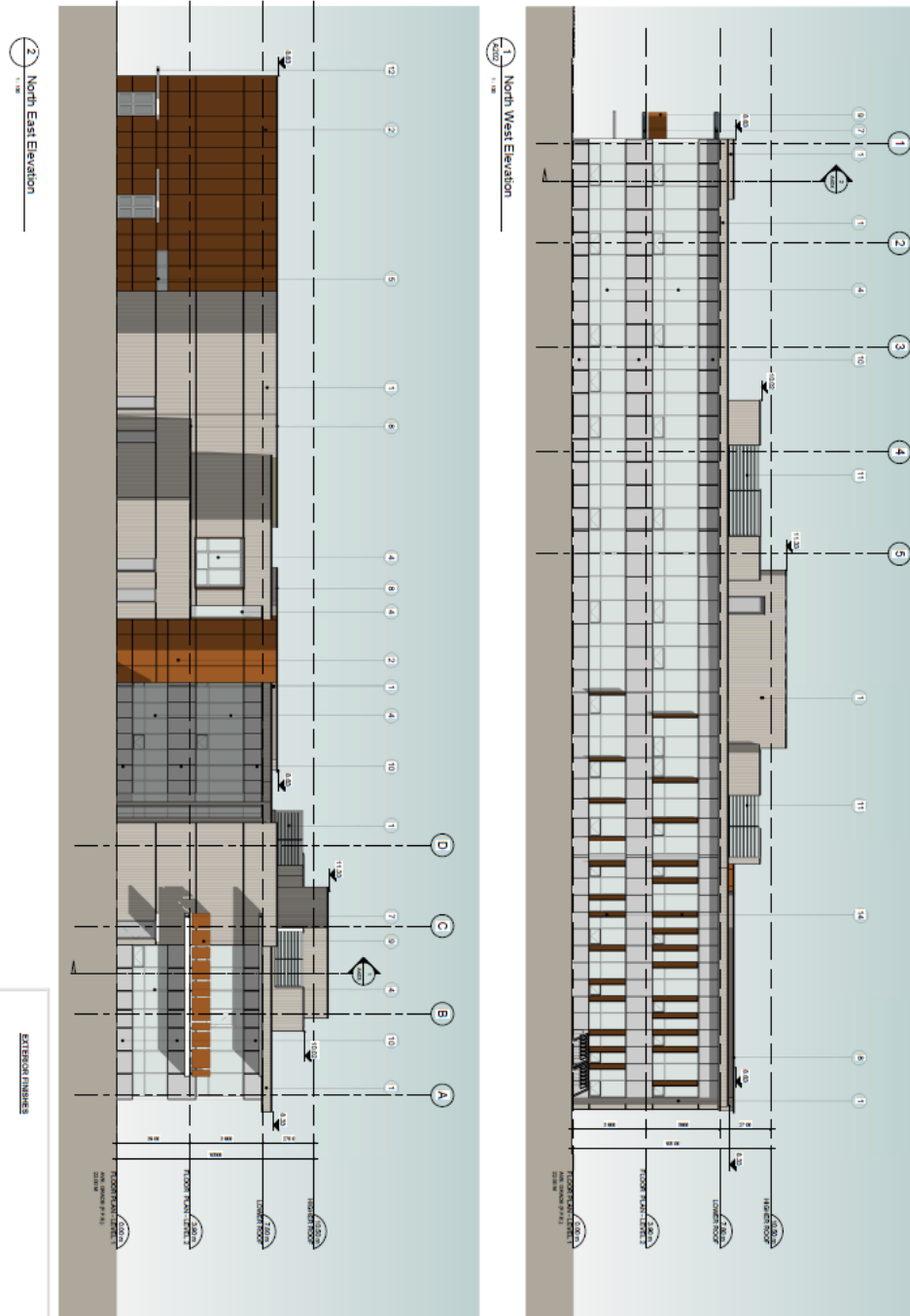
**2** East Elevation  
 1/8" = 1'-0"

**EXTERIOR FINISHES**

1	CONCRETE WITH CLADDING	8	ROCK AND ALUMINUM SIDING
2	PAINTED METAL CLADDING	9	ROCK AND ALUMINUM SIDING
3	CONCRETE	10	ROCK AND ALUMINUM SIDING
4	PAINTED METAL CLADDING	11	ROCK AND ALUMINUM SIDING
5	PAINTED METAL CLADDING	12	ROCK AND ALUMINUM SIDING
6	PAINTED METAL CLADDING	13	ROCK AND ALUMINUM SIDING
7	PAINTED METAL CLADDING	14	ROCK AND ALUMINUM SIDING
8	PAINTED METAL CLADDING	15	ROCK AND ALUMINUM SIDING



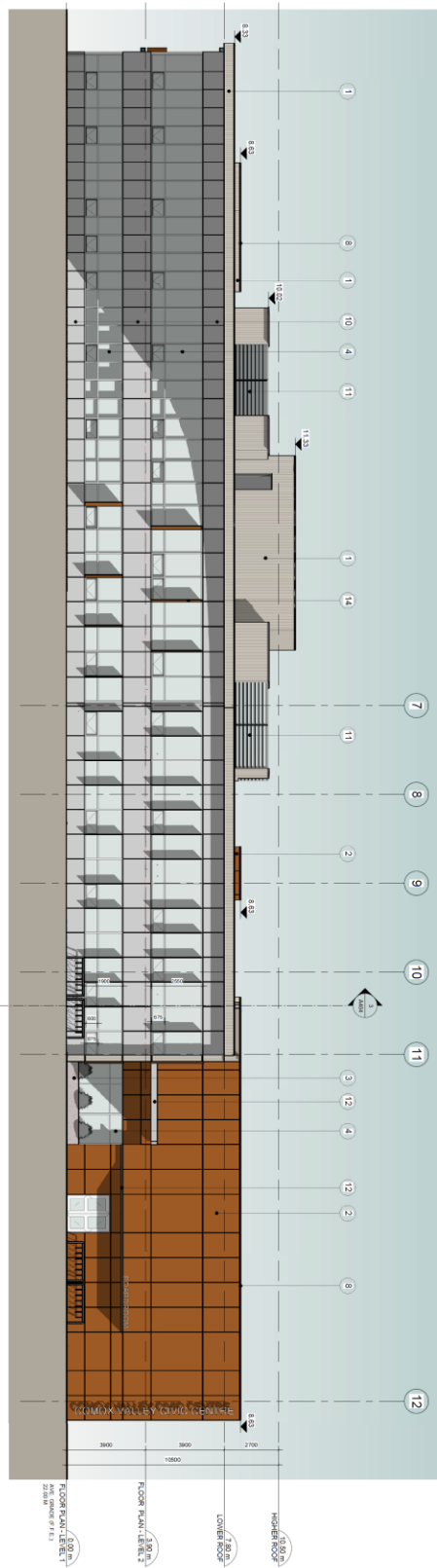
Schedule No. 1



Schedule No. 1

U:\user\m\m\Documents\16834 Dixie Valley\_Regional District Civic Centre\_01\Plans\_Centrol\_2017.mxd 2/27/2018 5:00:36 PM

1 West Elevation  
 A202 1/8" = 1'-0"



Schedule No. 1

**EXTERIOR FINISHES**

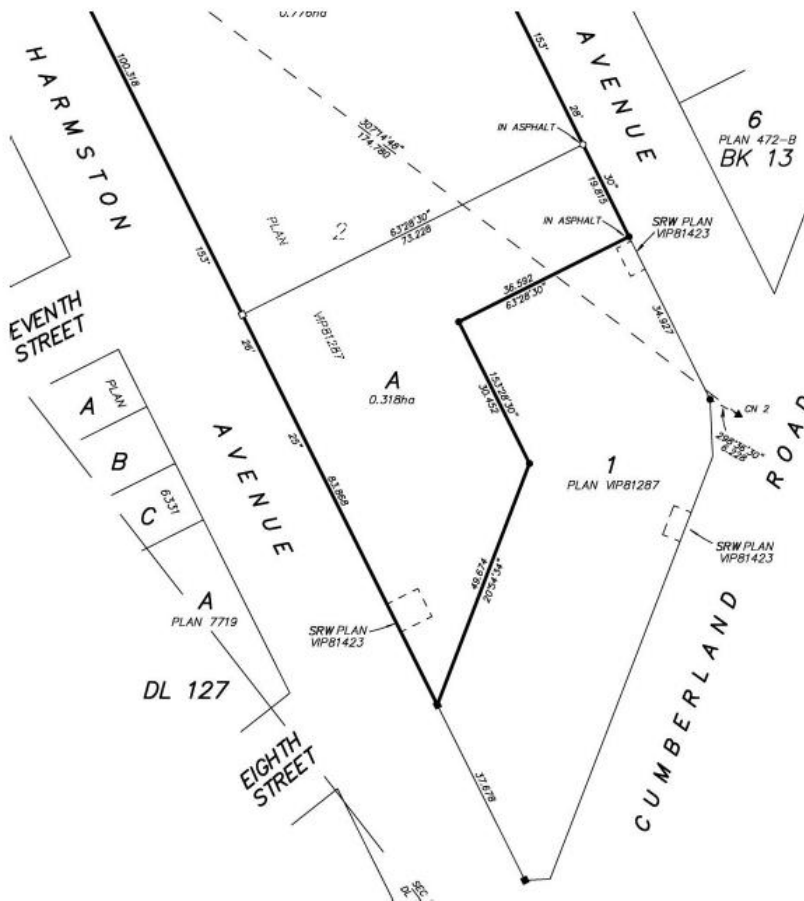
1	COMPOSITIONAL METAL CLADDING	4	WOOD AND ALUMINUM CLADDING
2	PAINTED COMPOSITE PANELS WITH ALUMINUM WINDOW FINISH	5	BRICKWORK
3	CONCRETE	6	METAL SCREENS
4	SMALL TYPED GLAZING IN PERFORMANCE ALUMINUM CURTAIN WALLS	7	CONCRETE
5	SMALL TYPED GLAZING IN PERFORMANCE ALUMINUM WINDOW FINISH	8	HORIZONTAL/VERTICAL FINISHED GLAZING
6	PAINTED COMPOSITE PANELS WITH ALUMINUM WINDOW FINISH	9	SPRINKLER PANEL, COLOR 700
7	PERFORMANCE METAL PANELS	10	PERFORMANCE METAL PANELS
8	PERFORMANCE METAL PANELS	11	PERFORMANCE METAL PANELS
9	PERFORMANCE METAL PANELS	12	PERFORMANCE METAL PANELS

Attachment No. 2:  
*Applicants' Rationale & Submissions*

**The Site:**

The CVRD has purchased the subject land parcel through a tri-party agreement with the City of Courtenay and the School District #71 (SD71) The subject parcel (Lot A) is 3,182 m<sup>2</sup> in area, located behind the existing School District 71 office building, and spans from Harmston Avenue to Grant Avenue, and is sloping about 2 m from Harmston to Grant. The proposed site was the previous home of the Old Courtenay Junior School and it currently remains undeveloped. The SD71 current site (Lot 1) was also included in the purchase agreement and will be transferred to the CVRD in 2021.

The site is currently zoned PA-1 which permits "Government Offices"





## **Rationale for Variances:**

### **1. Setbacks:**

The site, as shown below is irregular and trying to comply with the zoning setbacks proved to be extremely difficult. The design team went through a few options but determined that for the building to perform its functions, be located in downtown Courtenay and be attractive, some setback variances will be required. It was important for CVRD to locate the building in downtown Courtenay and moving to a larger property would have forced CVRD to find a property elsewhere. The design team did consider a building that would not require any setbacks and the result would have been an unattractive, taller square mass. This type of building was not preferred based on neighbourhood feedback which led to the design being more aesthetically pleasing, lower, articulated mass.

The 2 main street setbacks (A and E) will be as per the zoning bylaw as they are the 2 sides with the most potential impact to the public. The variances for side yard setbacks (B, C, D and F) were considered reasonable given that CVRD will own the adjacent SD71 property on one side and the opposite side is owned by the City of Courtenay.

There are also current negotiations between the City of Courtenay and the CVRD to acquire approximately a 5m frontage of the Harmston Ave road right of way (A).  
The required setback variances are for sides B, C, D and F as indicated on the drawings.

### **2. Small Car Parking:**

Despite the challenging site shape and the size constraints, the design team was directed by the CVRD to try to comply with the total parking number on the site (Lot A and Lot 1) due to the feedback received from the public engagement process conducted by the CVRD. The design team was successful in providing the total 74 stalls required by the Zoning Bylaw, however, a minor variance is required to increase the number of small car stalls from 7 to 13. Some of the required 74 spaces will be located on Lot B and CVRD will secure this use through a covenant and easement with SD71.

600 Comox Road, Courtenay, BC V9N 3P6  
Tel: 250-334-6000 Fax: 250-334-4358  
Toll free: 1-800-331-6007  
www.comoxvalleyrd.ca



**Attachment No. 3:**  
*Summary of Public Information  
Meeting and Public Comments*

File: 0890-20

December 20, 2017

Sent via email to: dbeatson@courtenay.ca

City of Courtenay  
830 Cliffe Avenue  
Courtenay, BC V9N 2J7

Attention: Dana Beatson, MCIP, RPP

Dear Dana:

**Re: CVRD Civic Centre Public Information Meeting Summary Report**

On December 5, 2017 the Comox Valley Regional District hosted a Civic Centre Development Variance Permit Information Meeting at the School District 71 Boardroom (607 Cumberland Road) from 4:00 to 7:00pm. The meeting was advertised by way of addressed letters handed to Canada post on November 21, 2017 and were delivered to residents within a 100 metre radius of the proposed new office. The Comox Valley Record included two advertisements on November 28 and 30, 2017.

Information provided at the meeting was

- Sign in sheet
- Comment sheets
- Site plan
- Public information poster boards
- Copies of Traffic Impact Assessment and Parking Study reports by Watt Consulting

There were a total of five attendees at the meeting and the major discussion points and questions raised were as follows:

- An inquiry regarding the narrowing of Harmston Avenue to accommodate for angle parking.
- An inquiry as to the plans for the School District 71 building if the School District decided to relocate to the Civic Center.
- An inquiry as to why there were no City of Courtenay staff at the meeting.
- Concern was raised regarding the availability of parking in the neighbourhood, particularly in the summer. A resident noted that during the summer the parking in the area is very full.
- A comment that the development on this underdeveloped site is a positive move to help make the neighbourhood more attractive.

- An inquiry about who will use the onsite parking spaces.

Should you need any additional information please don't hesitate to contact me at any time.

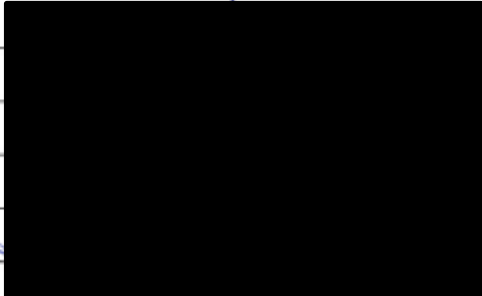
Sincerely,

*M. Zbarsky*

Michael Zbarsky, B.Sc. AScT  
Manager of Transit and Sustainability

Enclosures: Public sign in sheet  
Comox Valley Record Ads  
Public Information Posters

**PUBLIC INFORMATION MEETING**  
**December 5**  
**SIGN IN SHEET**  
**FOR**  
**Comox Valley Civic Centre 770 Harmston Avenue**

NAME (Please Print)	ADDRESS
	712 - 7 <sup>TH</sup> ST
	728 7 <sup>TH</sup> ST.
	2618 <del>Comox</del> Dismuir Cnch.
	1085 1 <sup>ST</sup> ST Courtenay
	707 HARMSTON AV. Courtenay.

Development Services Dept.  
City of Courtenay  
830 Cliffe Ave,  
Courtenay, BC V9N 2J7

12 Dec 2017

Re: The Comox Valley Civic Centre Project

Dear Sir/Madam,

I have attended the Public Information Meeting on 05 December 2017 and I have the following comments and questions regarding the construction of this new building.

1. Firstly, I felt somewhat misled as the artist's illustration of the new building showed a four storey building, and only a two storey building is slated to be built. How is one to come to an opinion on the new building when it is not correctly represented?
2. As to the height of the new building I believe that building a two storey office space is not only inadequate, but insufficient for its stated use. A minimum of three stories would be adequate and allow for future expansion that will inevitably occur. As well, a more suitable location should be considered. One that offers better and easier access, parking, and expansion. And one that does not negatively impact the surrounding area as this project will.
3. As to the Traffic Impact Assessment, well your traffic analysis software doesn't live here, I do. Your conclusions are wanting, and do not correctly demonstrate the traffic conditions in the area. Let alone a forward outlook to the years 2025 and 2040. Traffic in the area can be substantial at times; case in point: 08 December 2017: traffic was heavy with vehicular and pedestrian traffic accessing Fitzgerald Ave, Cumberland Rd, McPhee Ave, 5th St, 6th St, 7th St, 8th St, Grant and Harmston Avenues. I know because I watched it not only from my home, but I drove the area as well.

You mentioned the safety at the intersection of Harmston Ave and 6th St., and the near misses there. I would like to know just when, day and time of day, these were reported. As there is a marked increase in pedestrian traffic by street people on certain days, and by the Day Care Centre located at that intersection, office workers take breaks in the park, and people use the park to let their dogs run off leash which can lead to traffic problems. As well, there are seniors living in the area, and transiting the area to downtown, and they may not have noticed oncoming vehicular traffic due to their age (narrowing the intersection with the use of Curb Extension will not change this situation). And I do disagree with your plan of Curb Extensions at Harmston Ave and 6th Street. This will in my opinion be another pinch point on Harmston Ave.

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DEC 14 2017  
CITY OF COURTENAY

Quite frankly, I have noticed more "sudden stops" (vehicles having to stop quickly for pedestrians) at the intersection of Harmston Ave and Cumberland Rd due to that intersection being pinched (narrowed).

As to pedestrian and bicycle traffic: existing sidewalks are well established - I agree. As to bicycle traffic, you stated that they can be accommodated on-street along Harmston Ave and Grant Ave. Well, as long as the streets are not congested by vehicular traffic (due to the new Civic Centre and a narrowing of the road), otherwise you will have an increase in near misses.

Further, your traffic plans push an increase in vehicular and pedestrian traffic into, and onto, the surrounding streets and avenues - my living area. This will no doubt cause an increase in noise and pollution and diminish the quiet that I, and others living in the area enjoy.

In closing I must disagree with your Traffic Impact Assessment.

4. As to the Parking Study, well where does one begin? The subject site is too small for its intended use and required parking. Your parking survey was done on 05 May 2016 between the hours of 9:30 AM and 2:30 PM at one hour increments. Can you explain to me just how you get a good sample of the street parking in the area by looking at just one day? Well, if it's one day then here is my survey: 08 December 2017:

A. Harmston Avenue:

- Harmston Ave from 5th St. to 6th St.: there were "No" parking spaces available at all - it was full.
- Harmston Ave between 6th and 7th - "No" spaces available on either side of the road.
- There were seventeen (17) parking available from 7th St. to 8th St. (in front of residences and the Old Church Theatre).
- There was one (1) parking space available from 8th St. to Cumberland Rd (in front of the Berkshire Manor - an apartment complex).
- There were fourteen (14) parking spaces available along Harmston Ave on the School Board side of the avenue.

B: 5th Street:

- There were "No" parking spaces available at all along 5th Street between Harmston Ave and Fitzgerald Ave - it was completely full.

C: Fitzgerald Avenue:

- There was one (1) parking space available along Fitzgerald Ave between 5th St. and Cumberland Rd.

D: Cumberland Rd:

- There were four (4) parking spaces available along Cumberland Rd between Grant Ave and Harmston Ave.

**E: 8th Street:**

- There were twelve (12) parking spaces available in this residential area consisting of the GreenBrier Apartment complex, duplexes and single family homes. A taxi was present picking up/dropping off passengers to the GreenBrier apartment complex.

**F: 7th Street:**

- There were six (6) parking spaces available in this residential area between Harmston Ave and McPhee Ave.

**G: 6th Street:**

- The street was almost full, with only two (2) spaces available between Harmston Ave and Kilpatrick Ave and two (2) more from Kilpatrick Ave to McPhee Ave (residential area).

**H: Grant Avenue:**

- There was only one (1) parking space available on Grant Ave - it was located immediately in front of the medical facility there.

It has been stated that the CVRD requires approximately 90 staff parking spaces and fleet parking of 19 spaces, along with 65 members of the public that visit the CVRD on a typical day. There will also be School Board, EOC (Emergency Operational Centre), and others that require parking. I'm at a loss to understand just how you imagine all these vehicles will have parking in this residential area without annoying those living there and causing considerable congestion, noise and pollution.

**Notes:**

Harmston Avenue is a connector between Cumberland Rd and 5th Street and is well used for this purpose. The Courtenay Fire Department uses it for this purpose as an example. They also do Fire Rescue practices in Harmston Street Park. The RCMP has used the Harmston Street Park to train (run) their dogs. As well the avenue is used by commercial drivers learning the profession due to the avenue's width.

Harmston Ave is also where The Old Church Theatre is located and this facility is used by many for recitals, plays, weddings and other functions thus requiring parking day and night.

Further, Harmston Ave is part of a pedestrian (and bicycle) corridor. In the mornings people walk/bicycle down 7th St, turn onto Harmston Ave and then turn onto 6th St heading towards Fitzgerald Ave. In the afternoons this flow is reversed. This traffic increases as the weather improves.



Fitzgerald Ave is also a connector between 5th St and the businesses located near or at the Driftwood Mall. It is heavily used in this regard with constant traffic. McPhee Ave is also used as a connector and is well used in this regard as well.

There are a few people that live in their vehicles and use Harmston Ave and the surrounding area as their home; moving in (parking) for a few days, then leaving for a day or two and then once again returning.

Plus, the Harmston Avenue Park is used by many; one group in particular is the people who bring their dog(s) to the park in the morning, at lunch hour and in the evening for an off leash run and a bathroom break. The lunch hour people are the most numerous. Some get out of their vehicles and throw a ball, while others simply let their dog(s) out and remain in the vehicle eating and/or reading. And yes, they park on 6th St, Harmston Ave, and 7th Street etc. Others use the park as well; some walk and others drive there. The park has been used for car shows from time to time.

Further, be advised that the activity in the park and surrounding areas increases in the summer months when the people become more active. This also increases the traffic load, vehicular, bicycle and pedestrian in the area as well. In addition, in the summer time you will notice vehicles with a bicycle carrier attached to the rear of the vehicle. These carriers can hold multiple bicycles and extend the length of the vehicle 0.6 meters or so thus requiring additional parking space.

...

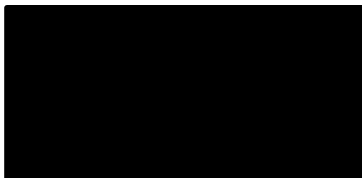
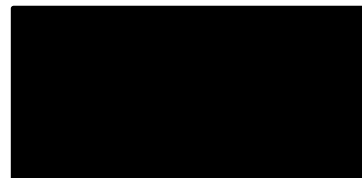
Your intention to narrow Harmston Ave by moving the center line; why this is not a good idea: I came home on the evening (7:30 PM) of 09 December 2017 from shopping only to find the avenue filled with numerous vehicles sticking out onto the road - I made a right hand turn from Cumberland Rd onto Harmston Ave. There was a function on at the Old Church Theatre and vehicles lined both sides of Harmston Ave (there was spill over onto 8th and 7th Streets). Not all stuck out onto the street (Harmston), but many did. These vehicles were what is referred to as extended cab, club cab and crew cab pickup trucks, along with other larger vehicles (SUV's and Vans). I do not wish to dissuade someone from purchasing a larger vehicle, but these vehicles require additional parking room. This has been evident for some time as I try to park within the City of Courtenay (downtown), at Shoppers Drug Mart, The Real CDN Super Store, Thrifty's Foods, Wal Mart, and the Driftwood Mall to mention a few. These larger vehicles act as bottlenecks at exits and intersections when parked in close proximity. And when backed into a parking space (as along Harmston Ave) they overhang the side walk. Or when parked in a mall parking lot, or city parking lot, the parking space on the opposite side is diminished as the front of the vehicle encroaches on the adjoining space. Plus, when parked within the allotted space, their rear bumper and/or accompanying trailer hitch sticks out into the flow of traffic. At other times they take up a space and a half to avoid traffic flow difficulties. These vehicles are also wider when compared to a compact vehicle.



When I returned home in the evening of 09 December 2017 this requirement for extra room was quite evident as these larger vehicles stuck out onto the road and noticeably reduced its width. Their effect, as mentioned, was quite noticeable and concerning. Now, if you plan to move the centre line on Harmston Ave to allow for the creation of parking spaces and a boulevard at the new civic centre please bear this in mind. There are numerous larger vehicles about that require additional parking room, and they will cause added parking difficulties for the civic centre and along Harmston Ave etc as I have noted; configuring parking for vehicles the size of a compact car will simply lead to frustration and annoyance in general. Shifting the parking to the surrounding areas, residential and on-street, will do the same.

As the Comox Valley grows traffic will increase necessitating an increase in parking. The downtown area is already congested, and this proposal along with the required parking simply adds to the problem.

Should you wish to discuss these matters further please feel free to contact me. Thank you for your time and consideration in this matter.



April 3<sup>rd</sup> 2017  
1330 Aster Place  
Comox, BC.  
V9M1A4

City of Courtenay  
830 Cliffe Avenue  
Courtenay, BC.

City of Courtenay, Council Meeting  
April 3<sup>rd</sup> 2018

Good Evening,

Re: Development Variance Permit Application  
770 Harmston Avenue, File No: 3090-20-1708

I am a property owner in the above neighbourhood.

I do not support any change for “ reducing the required width of the landscaped area extending along the frontage of the above property (Grant Avenue) and reducing the required side yard building setbacks. I do not support a Development Variance Permit.

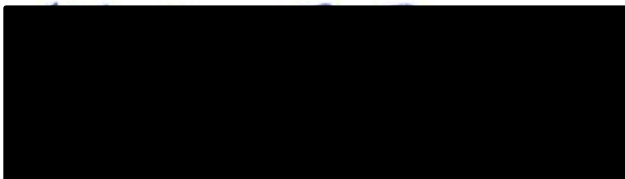
I recognize this is an unique shape of lot. Building on this lot is probably difficult because of the lot shape. There are many unique shaped lots in Courtenay. This does not give the property owner the automatic right to change side yard landscaping setbacks.

Perhaps the CVRD should have thought of this earlier in the planning stage.

Perhaps the proposed plan should be scaled back to meet the existing regulations.

Perhaps the CVRD should instruct their Architects to come up with a design that meets all the zoning regulations instead of assuming they can change them.

Thank you for your consideration,



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CITY OF COURTENAY

May 3<sup>rd</sup> 2018  
1330 Aster Place  
Comox, BC V9M 1A4

City of Courtenay  
830 Cliffe Avenue  
Courtenay, BC

Good Afternoon,

Re: Road Closure, Disposition of Land  
Closure Bylaw No.2920, 2018  
4.4 Metre Strip, Harmston Avenue, Courtenay

As a property owner in this area, I cannot support the council proposal to sell a 4.4metre strip of Harmston Avenue to the CVRD. This section of Harmston is wider than normal and has the potential of being developed into something very creative. To my knowledge this road width is unique in Courtenay with the survey plan is one of the original surveys in the municipality.

Just thoughts:

1. This is an older neighbourhood in Courtenay with Historical significance
2. The grass park is relatively large and prime for community ideas.
3. The commercial core of Courtenay is a few blocks away.

This section of Harmston could have a centre boulevard, something unique for the city; provide a walkway corridor destination from the downtown core, provide a venue overflow destination for community events in conjunction with the community park and downtown commercial core. For example, large trucks for a special community event could park here...movie sets.

I would support a planning review of this bylaw. The plan should address the changing surrounding neighbourhood. the potential for long term change ; community events etc.

The City is so particular on building design and landscaping. This is a good thing.

Please tell the CVRD to scale back their proposed building to meet existing bylaws. This is an architecture design problem for the CVRD. This is not a bylaw problem for the City of Courtenay.

Thank you for your consideration.

Respectfully submitted,



**Beatson, Dana**

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**From:** [REDACTED]  
**Sent:** April-27-18 6:31 AM  
**To:** PlanningAlias  
**Subject:** Harmston Area Community Proposal

Good morning,

I am writing to enquire who the point of contact at the City of Courtenay is for the following:

A group of neighbours in the Harmston area are concerned about changes to traffic flow / patterns with the new CVRD building. We are wondering how we go about proposing traffic calming measures for adjacent neighbourhood streets.

If a petition with signatures is required, as a starting point, what information should be included?

What are the best steps forward?

Thank you so much for your time,

[REDACTED]

**Attachment No. 4: Traffic Consultant  
Rationale for Small Car Parking Variance**


**Michael Zbarsky**

**HTT**

**From:** Michael Zbarsky  
**Sent:** March 29, 2018 10:11 AM  
**To:** 'Beatson, Dana'  
**Cc:** 'Maryam Teshakor'  
**Subject:** FW: CVRD small car variance

Hi Dana, see below rationale for our small car variance provided by Watt Consulting. I hope this is sufficient, please let me know if you need anything further.

Sincerely, Mike

Michael Zbarsky, B.Sc. ASCT  
Manager of Transit and Sustainability  
Comox Valley Regional District  
600 Comox Road  
Courtenay, B.C. V9N 3P6  
Tel: 250-334-6037; Fax: 250-334-4358  
Toll free: 1-800-331-6007  


**From:** Daniel Casey [mailto:DCasey@wattconsultinggroup.com]  
**Sent:** March 28, 2018 10:27 AM  
**To:** Michael Zbarsky <mzbarsky@comoxvalleyrd.ca>  
**Subject:** RE: CVRD small car variance

Hi Mike,

Thanks for forwarding this to our attention and yes, you are correct, we were not retained to look specifically at on-site parking. Having said that, we are happy to provide the following rationale for an increase in small car parking spaces from the 10% permitted by the City to 18% (13 of 72 spaces):

1. The City's small car parking space dimensions allows for a reduction from 5.5m to 4.6m long. The Sub-Compact (i.e., Mazda2, Honda Fit), Compact (i.e., Toyota Corolla, Ford Focus), and Small SUV (i.e., Ford Escape, Toyota RAV-4) vehicle classes all have typical vehicle dimensions of 4.6m long or less. A survey of 1,100+ vehicles in Nanaimo determined that the Sub-Compact, Compact, and Small SUV classes represent approximately 59% of all vehicles. This suggests that over half the vehicles on the road are reasonably accommodated within the City's small car parking dimensions.
2. It is common in local municipalities to allow 25% or more of the required parking supply as small car spaces. Five of the eight Vancouver Island communities north of the Capital Region and in excess of 5,000 people allow for 25% or more of a site's parking allowance as small cars.

Please let me know if anything else needed. As discussed, we can elaborate or formalize these comments in a letter if required.

Thanks,





THE CORPORATION OF THE CITY OF COURTENAY

## STAFF REPORT

**To:** Council

**File No.:** 3360-20-1809

**From:** Chief Administrative Officer

**Date:** May 7, 2018

**Subject:** Zoning Amendment Bylaw 2932 for 988 8<sup>th</sup> Street

### PURPOSE:

The purpose of this report is for Council to consider Zoning Amendment Bylaw 2932 to permit a care facility with meal services, 24/7 support and staffing services for individuals who are homeless or are at risk of homelessness at 988 8<sup>th</sup> Street.

### CAO RECOMMENDATIONS:

That based on the May 7, 2018 staff report "Zoning Amendment Bylaw 2932 for 988 8<sup>th</sup> Street" Council approve OPTION 1 and proceed to First and Second Readings of Zoning Amendment Bylaw No. 2932; and

That Council direct staff to schedule and advertise a statutory Public Hearing with respect to Bylaw No. 2932 on May 22, 2018 at 5:00 p.m. in City Hall Council Chambers.

Respectfully submitted,

David Allen, BES, CLGEM, SCLGM  
Chief Administrative Officer

### BACKGROUND:

The subject property located at 988 8<sup>th</sup> Street is owned by the City of Courtenay, is 0.677 hectares in area and is zoned Public Use and Assembly One (PA-1) zone. The PA-1 zone is designed for public and institutional uses including schools, hospitals, churches and care facilities.

The City owned Public Works yard is immediately to the south, Abbeyfield House is to the west, Courtenay Kiwanis Village is to the north and a narrow strip of parkland and the rail corridor is to the east.

### DISCUSSION:

At the February 19 Regular Council meeting, Council passed the following resolution

*That WHEREAS supportive housing is a critical need in the Courtenay area and the Provincial Government has indicated willingness to provide funding contingent on the provision of City land; and*

*WHEREAS Council has been approached by the Homelessness Coalition stressing the urgency of both the housing need and of initiating an application for the limited available funding; and*

*WHEREAS the City has land that may be suitable for this purpose;*

*THEREFORE be it resolved that Council approve in principle the provision of City land for a supportive housing project and direct staff to initiate immediate discussion with BC Housing to facilitate the implementation of a supportive housing project at the earliest practicable date.*

Based on this direction staff undertook a review of City owned properties that were large enough to facilitate the development of a multi-residential building, were serviced or close to existing City services, and were in proximity to social service providers. The subject property located at 988 8<sup>th</sup> Street was considered a good fit and staff contacted BC Housing to initiate discussion.

BC Housing responded favourably and began discussion of funding modular units under their Rapid Response to Homelessness program. A Memorandum of Understanding (MOU) has been entered into to consider the development of a 46 unit permanent modular housing project for persons at risk of homelessness.

The current zoning for the site permits a “care facility” which is defined as “a use or facility in which food, lodging and care or supervision is provided, with or without charge, to persons unrelated to the operator of the facility, who on account of age, infirmity, physical or mental disability, require special care”. Care facilities include uses such as seniors housing, group homes, drug and alcohol rehabilitation facilities or women’s shelters as examples.

The project is proposed to consist of 46 modular units between 275 and 395 square feet. According to the MOU, the building is intended to include amenity space such as a medical room, program space with communal kitchen and attached dining areas and client interaction space.



*Sample modular housing project. The Courtenay project is still in the design stage.*

BC Housing will provide support services that will include a 24/7 staffing model, a meal program and non-clinical supports. The project will be operated by the John Howard Society.



In order to ensure the project is open to the largest group of individuals as possible, Staff are recommending a minor text amendment to the “care facility” definition for the 988 8<sup>th</sup> Street property. In this regard, the current “care facility” definition would limit occupants of the building to those who are homeless **and** are reliant on care because of age, infirmity (including substance abuse issues) or mental disability. By expanding the definition of “care facility” to include individuals who are homeless or at risk of homelessness without the limitations noted above would allow units to be available for individuals who are experiencing homelessness as a result of difficult economic circumstances and not because of other physical or mental conditions.

#### **FINANCIAL IMPLICATIONS:**

As a City initiated zoning amendment there are no fees associated with this application.

With regard to the project itself, it is 100% funded through the Provincial Rapid Response to Homelessness program. The land valued at approximately \$550,000 will be leased to BC Housing for a period of 25 years with options for renewal.

#### **ADMINISTRATIVE IMPLICATIONS:**

Consultation with BC Housing, review of the necessary agreements, development review and preparation of this report has taken approximately 15 hours to date.

#### **ASSET MANAGEMENT IMPLICATIONS:**

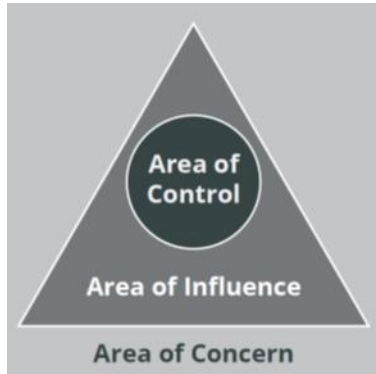
There are no direct asset management implications with this zoning amendment.

#### **STRATEGIC PRIORITIES REFERENCE:**

This project aligns with Council’s Strategic Priority to support diversity in housing and reasoned land use planning.

#### **We support diversity in housing and reasoned land use planning**

- Support densification aligned with community input and regional growth strategy
- Assess how city-owned lands can support our strategic land acquisitions and disposals
- ▲ Support initiatives and incentives to encourage lower cost housing
- Proactively pursue housing diversity and advocate for senior government support



- **Area of Control**  
 The policy, works and programming matters that fall within Council’s jurisdictional authority to act.
- ▲ **Area of Influence**  
 Matters that fall within shared or agreed jurisdiction between Council and another government or party.
- **Area of Concern**  
 Matters of interest outside Council’s jurisdictional authority to act.

**OFFICIAL COMMUNITY PLAN REFERENCE:**

The provision of non-profit housing as a means of increasing the supply of rental housing is strongly encouraged. Preference is for affordable and social housing to be dispersed throughout the City and not concentrated in one area.

Ensure the provision and integration of special needs and affordable housing.

Encourage housing opportunities and convenient community services for individuals having special housing requirements.

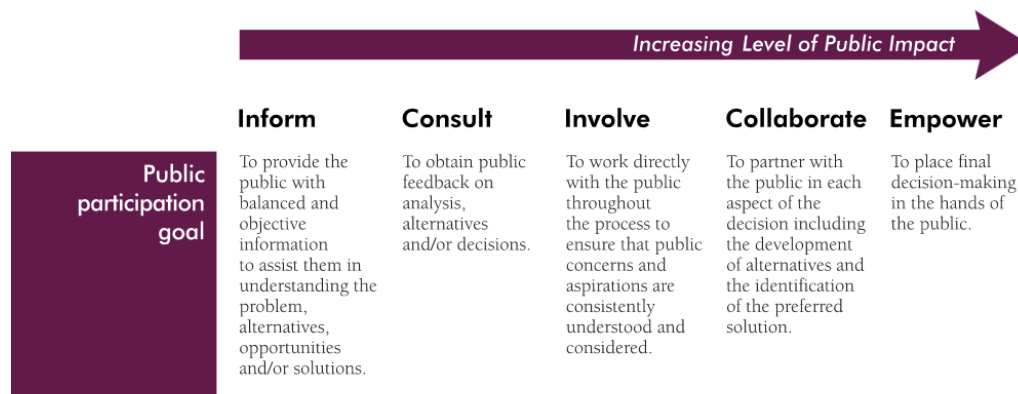
**REGIONAL GROWTH STRATEGY REFERENCE:**

Ensure a diversity of housing options to meet evolving demographics and needs.

Encourage residential multi-unit or multi-lot developments to contribute to affordable housing options including, but not limited to a range of unit sizes and types, lot sizes, multifamily or attached-unit buildings, rental units and secondary suites. These contributions could take the form of land, cash, buildings or other such items as supported by the local governments.

**CITIZEN/PUBLIC ENGAGEMENT:**

Staff will **consult** the public based on the IAP2 Spectrum of Public Participation:



Should Bylaw 2932 pass First and Second Readings a public hearing will be scheduled for May 22 to obtain public feedback on the proposed amendment.

In addition to the standard Public Hearing Notice, a letter has also been sent to the neighbourhood on behalf of the City, BC Housing and John Howard Society advising them of the proposed project.

**OPTIONS:**

- OPTION 1:** That Council approve OPTION 1 and proceed to First and Second Readings of Zoning Amendment Bylaw No. 2932; and
- That Council direct staff to schedule and advertise a statutory public hearing with respect to Bylaw No. 2932 on May 22, 2018 at 5:00 p.m. in City Hall Council Chambers.
- OPTION 2:** That Council postpone consideration of Zoning Amendment Bylaw No. 2932 with a request for more information.
- OPTION 3:** That Council not proceed with Zoning Amendment Bylaw No. 2932.

Prepared by:



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Ian Buck, MCIP, RPP

Director of Development Services



**THE CORPORATION OF THE CITY OF COURTENAY**

**BYLAW NO. 2932**

**A bylaw to amend Zoning Bylaw No. 2500, 2007**

The Council of the Corporation of the City of Courtenay in open meeting assembled enacts as follows:

1. This bylaw may be cited for all purposes as **“Zoning Amendment Bylaw No. 2932, 2018”**.
2. That “Zoning Bylaw No. 2500, 2007” be hereby amended as follows:
  - (a) By adding subsection 8.26.1 (11) as follows:

Notwithstanding the provisions of this bylaw a care facility, with meal services, 24/7 support and staffing services for individuals who are homeless or are at risk of homelessness is permitted on the property legally described as Lot 1, District Lot 127, Comox District, Plan EPP81814 (988 8<sup>th</sup> Street).

3. This bylaw shall come into effect upon final adoption hereof.

Read a first time this	day of	, 2018
Read a second time this	day of	, 2018
Considered at a Public Hearing this	day of	, 2018
Read a third time this	day of	, 2018
Finally passed and adopted this	day of	, 2018

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Mayor

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Director of Legislative Services



**THE CORPORATION OF THE CITY OF COURTENAY**

**BYLAW NO. 2893**

**A bylaw to amend Zoning Bylaw No. 2500, 2007**

The Council of the Corporation of the City of Courtenay in open meeting assembled enacts as follows:

1. This bylaw may be cited for all purposes as **“Zoning Amendment Bylaw No. 2893, 2018”**.
2. That “Zoning Bylaw No. 2500, 2007” be hereby amended as follows:
  - (a) by rezoning parts Lot B, District Lot 153, Comox District, Plan EPP19353 from R-3 to CD-21 and from CD-21 to R-3 as shown in bold outline on Schedule A;
  - (b) by rezoning parts Lot B, District Lot 153, Comox District, Plan EPP19353 from CD-21 to PA-2 and from PA-2 to CD-21 as shown in bold outline on Schedule A; and
  - (c) That Schedule No. 8 be amended accordingly.
3. This bylaw shall come into effect upon final adoption hereof.

Read a first time this 3<sup>rd</sup> day of April, 2018

Read a second time this 3<sup>rd</sup> day of April, 2018

Considered at a Public Hearing this 16<sup>th</sup> day of April, 2018

Read a third time this \_\_\_\_\_ day of \_\_\_\_\_, 2018

Finally passed and adopted this \_\_\_\_\_ day of \_\_\_\_\_, 2018

\_\_\_\_\_  
Mayor

\_\_\_\_\_  
Director of Legislative Services





# THE CORPORATION OF THE CITY OF COURTENAY

## BYLAW NO. 2917

### A bylaw to amend Election Procedures and Automated Voting Bylaw No. 2545, 2008

The Council of the Corporation of the City of Courtenay, in open meeting of Council, enacts as follows:

1. That “*Election Procedures and Automated Voting Bylaw No. 2545, 2008*” be hereby amended as follows:

(a) That *Section 1 - DEFINITIONS - General Voting Day* be hereby repealed and substituted therefore by the following:

**General Voting Day** means

- (a) for a general local election, the 3<sup>rd</sup> Saturday of October in the year of the election;
- (b) for other elections, the date set under sections 54 (5), 55 (1), or (3) or 152 (5) of the *Local Government Act*; and
- (c) for other voting, the date set under section 174 of the *Local Government Act*.

(b) That *Section 3 (a)* be hereby repealed and substituted therefore by the following:

3. (a) As authorized under section 76 of the *Local Government Act*, the most current list of voters prepared under the *Election Act* existing at the time an election or other voting is to be held, is deemed to be the register of resident electors for the municipality.

(c) That *Section 4 (d)* be hereby repealed and substituted therefore by the following:

4. (d) At least six but not more than thirty days before a required advance voting opportunity, the chief election officer must give notice in accordance with section 50 of the *Local Government Act* of

- (i) the date, location of the voting places and the voting hours for the voting opportunity;
- (ii) the documents that will be required in order for a person to register as an elector at the time of voting; and
- (iii) the place where persons may apply on an advance voting day for non-resident property elector certificates required in order to register at the time of voting.

- (d) That *Section 5* be hereby repealed and substituted therefore by the following:
5. As authorized under section 108 of the *Local Government Act*, Council authorizes the chief election officer to establish additional advance voting opportunities for each election to be held in advance of general voting day and to designate the voting places, establish the date and the voting hours for these voting opportunities.
- (e) That *Section 7 (a)* be hereby repealed and substituted therefore by the following:
7. (a) Pursuant to Section 109 of the *Local Government Act*, the Chief Election Officer is hereby authorized to establish special voting opportunities in order to give electors who may otherwise be unable to vote, an opportunity to do so.
- (f) That *Section 13* be hereby repealed and substituted therefore by the following:
13. In addition to public access to election documents required under the *Local Government Act* Council authorizes the publication of the following electronically via the Internet:
- (a) nomination documents under section 87 of the *Local Government Act* from as soon as practicable after the time of delivery to the chief election officer until 30 days after the declaration of the official election results.
- (g) That *Section 15* be hereby repealed and substituted therefore by the following:
15. In the event of a tie vote after a judicial recount, the tie vote will be resolved by conducting a lot in accordance with section 151 of the *Local Government Act*.
- (h) That *Section 16* be hereby repealed and substituted therefore by the following:
16. The order of names of candidates on the ballot will be determined by lot in accordance with section 117 of the *Local Government Act*.
- (i) That *Section 17* be hereby repealed and substituted therefore by the following:
17. As authorized under Section 120 (2) (d) of the *Local Government Act*, the number of scrutineers for each candidate that may attend at an election is a maximum of one scrutineer for each automated vote counting system in use.
3. This bylaw may be cited for all purposes as “**Election Procedures and Automated Voting Amendment Bylaw No. 2917, 2018**”.

Read a first time this 16<sup>th</sup> day of April, 2018

Read a second time this 16<sup>th</sup> day of April, 2018

Read a third time this 16<sup>th</sup> day of April, 2018

Finally passed and adopted this    day of                    , 2018

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Mayor

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Corporate Officer





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**THE CORPORATION OF THE CITY OF COURTENAY**

**BYLAW NO. 2919**

**A bylaw to regulate and require the provision of works and services in connection with the subdivision and development of land**

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The Council of the Corporation of the City of Courtenay, in open meeting assembled, enacts as follows:

1. In this bylaw,

“Approving Officer” means the person appointed to that position under the *Land Title Act*, or a designate.

“Building Inspector” means a person designated to that position by the City of Courtenay.

“City” means the Corporation of the City of Courtenay.

“Construct” when used with respect to Works and Services referred to herein, means build, erect, install, repair, alter, add, enlarge, move, locate, relocate, rebuild, upgrade, demolish, remove, excavate or shore.

“Construction Costs” means the estimated construction costs of Works and Services as determined by the Qualified Professional and accepted by the Development Engineer.

“Contractor” means a person having a contract with a Developer or the City to construct Works and Services required by this Bylaw.

“Council” means the Council of the Corporation of the City of Courtenay.

“Developer” means the owner of land, or appointed agent for the owner, in respect of which a subdivision application or building permit application has been made.

“Development Engineer” means the person designated the Manager of the department responsible to approve subdivisions by the City of Courtenay, or a designate.

“Inspector” means a person who shall make inspections and tests, on behalf of the Developer, of any Works and Services being carried out to ensure compliance with this Bylaw.

“Master Municipal Construction Documents” means the most recent version of the Platinum Edition documents of that name issued by the Master Municipal Construction Documents Association including any revisions issued by the Association, as of the date of application for a subdivision or building permit referred to in Section 3 or Section 5 of this bylaw, respectively, which documents are incorporated into and form part of this bylaw.



“Qualified Professional” means a Professional Engineer who is registered or licensed to practice in British Columbia under the provisions of the *Engineers and Geoscientists Act*, who is responsible for the design, construction, supervision and certification of all Works and Services on behalf of the Developer.

“Security” means cash or a clean, unconditional, irrevocable and automatically renewing letter of credit drawn on a chartered bank or credit union having a branch in the City at which demand may be made on the letter of credit.

“Servicing Agreement” means an agreement between the Developer and the City for the construction and installation of Works and Services required under this Bylaw and pursuant to the *Local Government Act*.

“Subdivide” or “Subdivision” means:

- (a) a *subdivision* as defined in the *Land Title Act* including the adjustment of existing parcel boundaries; or
- (b) a *subdivision* as defined in the *Strata Property Act*.

“Works and Services” means the works and services a Developer is required to provide under this Bylaw, including all design, construction, installation and certification.

2. All *Works and Services* shall be designed by a *Qualified Professional* in accordance to this Bylaw, and adhere to all other *City Bylaws*, Provincial and Federal Regulations.
3. No person shall *subdivide* land in the *City* unless:
  - (a) the *Works and Services* required by this bylaw have been provided by the *Developer* to the satisfaction of the *Development Engineer*; or
  - (b) the *Developer* has entered into an agreement with the *City* to *construct* and install the required *Works and Services* by a date specified in the agreement, and provided to the *City security* in the amount determined by the *Development Engineer*, having regard to the cost of installing and paying for the *Works and Services*.
4. Section 3 does not apply:
  - (a) in relation to underground wiring, conduit and vaults, in the case of any *subdivision* resulting in the creation of fewer than 2 additional parcels in an area zoned for single-family residential use only, where the electrical and telephone services abutting the parcel being subdivided and all immediately abutting parcels are above-ground; or
  - (b) in relation to *Works and Services* of any type, in cases where the *Development Engineer* determines that the need for the *Works or Services* is not directly attributable to the *subdivision*, or to buildings likely to be constructed in the *subdivision*.
5. No person shall *construct* a building or structure in the *City* for which a building permit is required unless:



- (a) the *Works and Services* required by this bylaw have been constructed by the *Developer* to the satisfaction of the *Development Engineer*; or
- (b) the *Developer* has entered into an agreement with the *City* to *construct* and install the required *Works and Services* by a date specified in the agreement, and provided to the *City* *security* in the amount determined by the *Development Engineer*, having regard to the cost of installing and paying for the *Works and Services*.

6. Section 5 does not apply:

- (a) in relation to a building permit authorizing the construction of a single family dwelling whether or not the dwelling contains a secondary suite, or in relation to the construction of a two-family dwelling; or
- (b) in relation to *Works and Services* of any type, in cases where the *Development Engineer* determines that the need for the *Works and Services* is not directly attributable to the building for which a building permit application has been made.

7. The *Development Engineer* may:

- (a) from time to time, prescribe the form of *servicing agreement* referred to in sections 3 and 5, provided that each such agreement shall require the *Developer* to:
  - i. repair any deficiencies in design, materials or workmanship in the *Works and Services* that may arise during the Warranty Period following the completion of construction;
  - ii. provide to the *City* throughout the construction period performance, *security* in the amount of up to 125 percent of the *construction costs* in relation to the construction of the *Works and Services*;
  - iii. pay all applicable fees and charges associated with the application, review, administration and compliance of the *Works and Services*;
  - iv. carry third party liability insurance in an amount and form acceptable to the *City*, naming the *City* as an additional insured, in respect of claims arising out of death, personal injury or damage arising from the construction of the *Works and Services*; and
  - v. indemnify the *City* and save it harmless in respect of all costs and expenses it may incur as a result of faulty workmanship or defective material in the *Works and Services*, in respect of which the *City* has provided notice to the *Developer* prior to the *City's* final acceptance of the *Works and Services*;
- (b) execute and deliver such agreements on behalf of the *City*, and



- (c) require that such agreements be drafted in a form that is registrable under s. 219 of the *Land Title Act* against title to the land being subdivided or built upon.
8. The *Works and Services* required by this bylaw are the following:
- (a) highways and lanes, boulevards including, without limitation, street trees, boulevard landscaping, irrigation, culverts, transit bays, sidewalks, walkways and pathways, cycling facilities, fences, bridges, retaining walls, curbs and gutters, traffic signs and signals, street lighting and conduit and vaults for underground wiring;
  - (b) water distribution systems connected to the *City's* water distribution system including, without limitation, pipes, service connections, fire hydrant systems, valves and valve chambers, meters and meter chambers, pump stations and reservoirs;
  - (c) sewage collection systems connected to the *City's* sewage collection system including, without limitation, pipes, service connections, inspection chambers, lift stations, manholes and sewage holding facilities; and
  - (d) drainage collection systems connected to the *City's* drainage collection system including, without limitation, pipes, service connections, inspection chambers, catch basins, manholes, ditches, gates, stormwater retention and detention facilities, and environmental control facilities.
9. The *Works and Services* described in section 8 must, in all cases, be provided on that portion of any highway or lane immediately adjacent to the parcel that is the subject of the *subdivision* or building permit application, as the case may be, unless additional requirements are imposed under section 14.
10. The *Works and Services* required by sections 3 and 5 and under section 14 must be constructed and installed at the cost of the *Developer* to the standards set out in this Bylaw including its Schedules, and using only those materials and products as identified in the *City's* Approved Products List, as amended from time to time.
11. If *Works and Services* of the type described in section 8 are already in existence on or in the highway or lane adjacent to a parcel being subdivided or on which a building is proposed to be constructed, and the *Works and Services* do not comply with the standards specified in section 10, the *Developer* must alter the *Works and Services* so that they comply with the standards, and the provisions of sections 3 and 5 regarding agreements and *security* apply to the alterations.
12. The *Development Engineer* may require a *Developer* to pay to the *City*:
- (a) In lieu of constructing or altering *Works and Services* required by this bylaw, cash in the amount approved by the *Development Engineer* to be the cost of constructing or altering the *Works and Services* as of the time of approval of the *subdivision* or issuance of the building permit, if the *Development Engineer* determines on the basis of sound civil engineering practice or cost considerations that the works should be constructed or





altered at a later time or concurrently with the construction or alteration of *Works and Services* serving adjacent or nearby parcels of land, and in such cases the *City* shall deposit the funds into a reserve fund established for the construction or alteration of the *Works and Services*.

- (b) In the case of boulevard trees required by this bylaw, the *Developer* must pay to the *City*, in lieu of installing the trees, cash in the amount determined by the *Development Engineer* as the cost to procure and install the trees, which the *City* shall deposit into a reserve fund established for the installation of boulevard trees and apply to the cost of installing the trees, maintenance and replacement if the tree does not survive, at such time following the completion of all construction associated with the *subdivision* or development as the *Development Engineer* may determine. The *Developer* shall have no further obligations under this bylaw in respect of such boulevard trees after providing the cash payment required by the *Development Engineer*.
13. The *Works and Services* required by this bylaw shall be provided in dedicated highways, unless the *Development Engineer* has approved the location of the *Works and Services* in a statutory right of way granted to the *City*, in which case the statutory right of way, including any required plan of right of way, must be prepared at the cost of the *Developer*, in terms satisfactory to the *Development Engineer* and the *City Solicitor*, and deposited concurrently with the deposit of the *subdivision* plan in the case of a *subdivision* application and prior to the issuance of an occupancy permit in the case of a building permit application.
14. Any *Works and Services* required by this bylaw within an existing highway right-of-way shall be provided, at a minimum, to the centre line of the highway along the entire frontage of the property, except that all required utility upgrades for water, sanitary sewer, stormwater, natural gas, electrical, street lighting or telecommunications shall be provided within the entire right-of-way regardless of its location.
15. The *Council* delegates to the *Development Engineer* the powers of the *Council* under the *Local Government Act* to:
- (a) require a *Developer* to *construct* excess or extended services as defined in Sections 507 of the *Local Government Act* other than any excess or extended services that are required by this bylaw in respect of all *subdivision* and building permit applications;
  - (b) determine whether the cost to the *City* to provide the excess or extended services would be excessive and, in that event, that the cost must be paid by the *Developer*;
  - (c) determine the benefit of the excess or extended service that may be attributed to each of the parcels of land that will be served by the services; and
  - (d) impose latecomer charges under Section 508 of the *Local Government Act* including interest at a rate determined by the *City* and established in the *City of Courtenay Fees and Charges Bylaw No. 1673, 1992 as amended*.



- 16. For the purpose of section 15, the *Development Engineer* may require the *Developer's Qualified Professional* to provide information specifying parcels of land that will be served by the excess or extended services and the benefit that each such parcel derives from the services, and execute and deliver on behalf of the *City* agreements with *Developers* regarding the collection and remittance of latecomer charges, which agreements may be combined with *Works and Services* agreements as referred to in sections 3 and 5.
- 17. All *Works and Services* shall be completed in accordance with the following portions of the *Master Municipal Construction Documents*, unless specifically modified herein.
  - (a) Volume II Master Municipal Specifications – Division 01, 03, 06, and 31 to 34 inclusive including any relevant definitions in the Master Municipal General Conditions and excluding all provisions pertaining to measurement and payment;
  - (b) Volume II Standard Detail Drawings; and
  - (c) MMCD Design Guidelines.
- 18. The following schedules are attached to and form part of this Bylaw:
  - Schedule 1 – Supplementary Design Guidelines
  - Schedule 2 – Supplementary Construction Specifications
  - Schedule 3 – Supplementary Standard Detail Drawings
  - Schedule 4 – Standards for Sanitary Lift Stations
- 19. The City of Courtenay Subdivision Control Bylaw No. 1401, 1986 as amended, is hereby repealed.
- 20. This bylaw may be cited as “Courtenay Subdivision and Development Servicing Bylaw No. 2919”.

Read a first time this 19<sup>th</sup> day of February, 2018.

Read a second time this 19<sup>th</sup> day of February, 2018.

Read a third time this 3<sup>rd</sup> day of April, 2018.

Finally passed and adopted this     day of     , 2018.

\_\_\_\_\_  
Mayor

\_\_\_\_\_  
Corporate Officer



# SUBDIVISION AND DEVELOPMENT SERVICING BYLAW 2919

APRIL 16, 2018

**SCHEDULE 1**  
**SUPPLEMENTARY DESIGN GUIDELINES**

## **SUPPLEMENTARY DESIGN GUIDELINES**

This schedule contains supplementary design guidelines to be applied in conjunction with the Design Guideline Manual of the Master Municipal Construction Documents, dated 2014, both of which shall apply to all Works and Services constructed within the City of Courtenay.

Supplementary Design Guidelines contained within this Schedule supplement or supersede the Master Municipal Construction Document (MMCD). Where the City of Courtenay Supplementary Design Guidelines are in conflict with the MMCD, the City of Courtenay Supplementary Design Guidelines shall take precedence.

Section number and clause numbers in the City of Courtenay Supplementary Design Guidelines coincide with the MMCD numbering protocol.

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**SUPPLEMENTARY DESIGN GUIDELINES  
GENERAL DESIGN CONSIDERATIONS**





**1.0 GENERAL DESIGN CONSIDERATIONS**

- |                                  |                   |  |
|----------------------------------|-------------------|--|
| <b>1.2 Independent Utilities</b> | Add Section 1.2.1 | Design for location and relocation of Canada Post Mailbox shall be coordinated with Canada Post. |
|----------------------------------|-------------------|--|

**SUPPLEMENTARY DESIGN GUIDELINES  
WATER DISTRIBUTION**



**2.0 WATER DISTRIBUTION**

**2.2 Metering**

Replace Section

For all single family residential homes without fire sprinklers the water meter setter size shall be 25mm except in the case where there is a demonstrated need for a larger meter. All other meters must be sized in accordance with AWWA M22 and form contained in Appendix A. It should be noted that this methodology is based on the fixture value method and not the fixture unit method employed in the BC Building Code for piping within buildings.

The maximum operating range for a water meter shall be less than 80% of the maximum instantaneous flow capacity as outlined by the meter manufacturer, with a maximum pressure loss of 48 kPa at the design flow rate. The size selection must not compromise the operating range or the long term life of the meter and must ensure that pressures supplied to property are appropriate for the intended use.

For developments that are proposed to be phased, the meter chamber and piping must be sized for the meter required for the ultimate buildout of the development. However, the initial meter installed must also be sized to accurately capture the range of flows for the first phase.

The Qualified Professional must ensure the meter selection and installation requirements are appropriate for the designed application.

A Qualified Professional must provide detailed sealed drawings and shop drawings of the installation and relevant calculations, to demonstrate the appropriateness of the sizing of the meter, for approval prior to installing the chamber.

**2.3 Per Capita Demand**

Replace Section

In the absence of reliable water consumption records, the following per capita demands shall be applied to future residential development:

- ADD: 635 L/c/d
- Peak Day: 2100 L/c/d
- Peak Hour: 3000 L/c/d



<b>2.9</b>	<b>Minimum Pipe Diameter</b>	Delete	Service Connections: 19mm
		Replace with	Service Connections: 25mm
<b>2.14</b>	<b>Valves</b>	Delete	<ul style="list-style-type: none"> <li>The valves shall be the same diameter as the watermain up to 300mm diameter</li> <li>The main line valves on mains 350 mm and 400 mm diameter may be smaller by one (10 size with the use of proper reducers</li> <li>The main line valves on mains 450 mm diameter and larger may be smaller by two (2) sizes with the use of proper reducers</li> </ul>
		Replace with	<ul style="list-style-type: none"> <li>The main line valves on mains of all sizes shall be of the same nominal diameter as the watermain.</li> </ul>
<b>2.15</b>	<b>Hydrants</b>	Add Bullet	<ul style="list-style-type: none"> <li>STORZ connection must face the road or cul-de-sac at 90 degrees.</li> </ul>
<b>2.18</b>	<b>Air Valves</b>	Replace Section	<p>Combination air valves must be installed at the summits of all mains of 200 mm diameter and larger, except as follows:</p> <ul style="list-style-type: none"> <li>Where the difference in elevation between the summit and valley is less than 600 mm.</li> <li>Where it can be shown that air pockets will be carried by typical flows.</li> <li>Where active service connections are suitably located to dissipate trapped air.</li> </ul>

Typical air valve sizes, subject to design analysis, are as follows (Table 2.18)

**Table 2.18 Typical Air Valve sizes**

Watermain Size	Valve Size
200 mm to 300 mm	25 mm
350 mm to 600 mm	50 mm
Larger than 600 mm	Special Design

Air Valves located in a flood plain shall be of a manual permanent blow type

<b>2.21</b>	<b>Service Connections</b>	Add to Section	Every legal lot and each unit of residential duplex must be provided with a separate service connection.
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**2.25.2 Design Features**      Replace Section

General requirements for pressure reducing stations shall be as follows:

- Include a dual Pressure Reduction Valve (PRV) arrangement with separate domestic and fire flow PRV's.
  - Epoxy coated valve bodies both inside and out.
  - Fire flow PRV must be equipped with a position indicator (limit switch).
  - Domestic flow PRV must be equipped with position indicator and insertion flow meter.
  - Filters shall be provided on all valve control piping.
  - All piloting shall be set to fail close.
- Include a surge/high pressure relief valve with stainless steel mesh dechlorination basket (capable of housing a minimum of 8 – 65mm dechlorination pucks).
- Pressure relief valves and surge relief valves to include anti-cavitation trim where recommended by the manufacturer based on site specific differential pressures.
- Each PRV and surge relief valve must be provided with isolating valves such that individual components can be removed for repair and each component can be operated independently.
- Pressure gauges and pressure transducers complete with snubbers and isolating valves must be included to register both upstream and downstream pressure.
- All piping and fittings, including control piping, must be stainless steel;
- Grooved couplings must be included to assist in disassembly of piping as required.
- All equipment and controls must be mounted in an above ground secure, lockable cabinet, on a concrete foundation. The cabinet shall be as follows:
  - Include two separate compartments, including one for the electrical controls and another for the mechanical piping and valves. All compartments must be heated, lighted and the controls enclosure must be ventilated.
  - Include removable roof hatch above the Mechanical compartment.



- Fabricated from powder coated aluminum.
- Include a rubber gasket between the aluminum kiosk and the concrete to prevent water leakage into the kiosk.
- The PRV station include 8 hours of uninterruptible power (UPS) and a user control interface (HMI).
- The PRV station must be integrated with the City's SCADA system via ethernet or cellular telephone connection to monitor at a minimum:
  - PRV valve position.
  - Utility failure.
  - Access intrusion.
  - Limits switches.
  - High pressure relief.
  - Flow data.

**SUPPLEMENTARY DESIGN GUIDELINES  
SANITARY SEWERS**



### 3.0 SANITARY SEWERS

<b>3.2 Per Capita Flow</b>	Replace Section	In the absence of sanitary sewer flow records, sanitary sewer system design should be based on an average daily dry weather flow (ADWF) of 360 litres per day per capita (L/d/c).
<b>3.8 Flow Velocities</b>	Delete  Replace with	<ul style="list-style-type: none"><li>▪ Force mains: 0.75 m/s</li> <li>▪ Force mains: 0.9 m/s</li></ul>
<b>3.10 Minimum Pipe Diameter</b>	Replace Section	<p>The minimum pipe diameter is 200mm.</p> <p>Sewers must be designed to satisfy the following parameters:</p> <ul style="list-style-type: none"><li>▪ 200mm diameter and less: <math>d/D &lt; 0.5</math>.</li><li>▪ 250mm diameter: <math>d/D &lt; 0.7</math>.</li><li>▪ 300mm diameter and greater: <math>d/D &lt; 0.8</math>.</li></ul>
<b>3.12 Curved Sewers</b>	Replace Section	<p>On straight roads, sanitary sewers shall be installed in straight runs such that sewer mains and manholes are entirely under the road pavement and no closer than 1m to the curb. Curvilinear sewers are permitted on horizontal curves and shall have a constant offset from property line. The radius of curve shall not exceed 50% of the manufacturer's recommended maximum and shall not be less than 60m. The minimum grade shall be 1% and each joint shall be located by survey. Manholes are to be installed at the beginning and end of horizontal curve sections. Curvilinear sewers are not permitted on vertical curves</p> <p>The minimum design velocity design velocity in curved sewers is 0.9 m/s.</p>
<b>3.14.1 Locations</b>	Replace Section	<p>Manholes are required at the following locations:</p> <ul style="list-style-type: none"><li>▪ Every change of pipe size.</li><li>▪ Every change in grade.</li><li>▪ Every change in direction.</li><li>▪ Every pipe intersection except for 100 mm and 150 mm service connections and junctions with trunk sewers 900 mm diameter and larger.</li><li>▪ Every future pipe intersection.</li></ul>





- 150 m maximum spacing for pipe diameters up to 450 mm.
- 300 m maximum spacing for pipe diameter of 450 mm and larger.
- Every beginning and end of horizontal curves.

**3.14.2 Hydraulic Details** Replace Table 3.14

**Table 3.14 Drop Structures**

Invert Difference	Structure
Up to 0.25 m	Inside Ramp
0.25 to 0.90 m	Outside Ramp
Greater than 0.90 m	Outside Drop*
*Inside drop structures are not permitted	

Delete Sentence If a manhole drop cannot be avoided, an inside drop pipe is required.

**3.16.3 Grade** Delete

- 100 mm diameter pipe: 1.50%

Replace with

- 100mm diameter pipe: 2% min.

**3.16.4 Details** Replace Section

Use standard wye fittings for connections to new mains. For connections to existing mains, strap on saddle and insertable tees are permitted.

The service connection centreline must not be below the sewer main centreline.

Residential service connections are not to be connected to manholes. All wye connections to be a minimum of 1.0 m downstream from manhole.

Inspection chambers are required on residential connections. Control manholes are required on industrial connections and commercial connections. Inspection manholes are required on service connections 200mm diameter and larger. Connections exceeding 30 m in length will be treated as mains.

**3.18 Pump Stations** Replace Section

Replace this section with the document “Standards for Sanitary Lift Stations”, provided in Schedule 4.

**SUPPLEMENTARY DESIGN GUIDELINES  
STORMWATER MANAGEMENT**



## 4.0 STORMWATER MANAGEMENT

**4.1.1 Drainage Planning** Add Section 4.1.1 The Developer shall prepare such plans prior to approval of the development applications. Such plans shall provide an in-depth review of stormwater opportunities and constraints on a specific watershed, and take into consideration the potential impacts and remediation measures for the affected watercourses.

Submission requirements for Developers are in accordance with 2014 MMCD Design Guideline Manual Stormwater Management Section 4.2: Stormwater Control Plan.

**4.1.2 Master Drainage Plan** Add Section 4.1.2 The Master Drainage Plan (MDP), Watershed Plan (WP) or Integrated Stormwater Management Plan (ISMP) proposes an optimum drainage servicing strategy that meets the ultimate land use in the watershed. If a City MDP is not available, developments with a cumulative phased development area greater than 5 hectares are required to provide an acceptable MDP. The proposed MDP must address all identified constraints and provide the following information as required:

- Conceptual schemes for storm drainage servicing including trunk storm sewers, catchment detention ponds, minor and major flow routes, and erosion protection.
- Department of Fisheries & Oceans and BC Ministry of Forests, Lands, Natural Resource Operations and & Rural Development review.
- Hydrological and hydraulic model of pre-development and ultimate development condition.
- Bio-inventory of creeks and watercourses.
- Hydrogeological Impact Assessment (in areas where DFO and MOE jointly require its consideration).
- Inventory of watercourses and trunk drainage facilities.
- Sizes and performance requirements of catchment detention areas.
- Priority of MDP recommendations.



<b>4.3.1 The Minor System</b>	Replace Section	Consists of pipes, gutters, catch basins, driveway culverts, open channels, watercourses and stormwater management “best management practices” (BMPs) designed to capture, convey, treat or modify flows up to and including the 1 in 10 year return period storm event.
<b>4.3.2 The Major System</b>	Replace Section	Consists of surface flow paths, roadways culverts, watercourses, and stormwater management facilities designed to capture, convey, treat or modify larger flows up to and including the 1 in 100 year return period storm event.  If required to accommodate low building elevations, and if approved, a piped minor system may be enlarged or supplemented to accommodate major flows.
<b>4.3.3 Stormwater Detention Release Rates</b>	Add Section 4.3.3	All stormwater detention facilities shall be designed to limit post-development peak flows to equal to the corresponding pre-development peak flows for the 1 in 2, 1 in 5, 1 in 10 and 1 in 25 year return period storm events. Overland escape routes must be provided to account for greater storms up to 1 in 100 year return period in a manner which does not result in flooding of any properties. Design rainfall intensities have been increased by 15% as indicated in Section 4.4.  The total volume of runoff generated during storms can also have a significant impact on receiving watercourses. To the extent possible, the total runoff generated from storms should be minimized through the application of site adaptive planning and the use of source controls. Site adaptive planning focuses on limiting total imperviousness at development sites and preserving natural features such as wetlands, forests and native soils. Source controls focus on reducing volume by retaining or enhancing opportunities for infiltration and evapotranspiration on development sites.  Discharge shall be controlled such that the downstream watercourses receiving outflow from detention facilities are protected from surcharge and erosion. Where stability cannot be maintained, measures to avoid or mitigate erosion shall be proposed.



**4.4 Runoff Analysis** Delete Bullet

- Hydrograph Method: Applicable for all areas larger than 10 hectares, more hydrologically complex catchments, and where stormwater management systems require more than basic conveyances. The computer program proposed for use is subject to approval by the local authority. The program should be selected to suit the complexity of the watershed and the hydrologic processes that need to be considered (e.g. detention, groundwater recharge and infiltration, evapotranspiration, continuous simulation, etc.) The most widely used programs (or software packages) are those that are SWMM based, however are constantly evolving, it is inappropriate for this guide document to state or endorse any particular ones.

Replace with

- Hydrograph Method: Applicable for complex systems involving multiple catchments with highly variable land use conditions, where flow attenuation features are involved (eg. detention pond, constructed wetland), or for gross areas exceeding 10 hectares. Computer models shall be based on the U.S. Environmental Protection Agency’s SWMM software.

Add Bullet

- Mass Balance: Volumetric based computations may be used to supplement flow analysis for the design of water quality treatment BMPs and BMPs intended for stormwater detention.

Add to Section

Computer stormwater models shall utilize the 10 and 100 year return period design storm hyetographs provided in Table 4.4.2. These hyetographs have been derived using the Modified Chicago Distribution for a 24 hour storm duration. The hyetographs have also been adjusted to reflect a 15% increase in rainfall intensities.

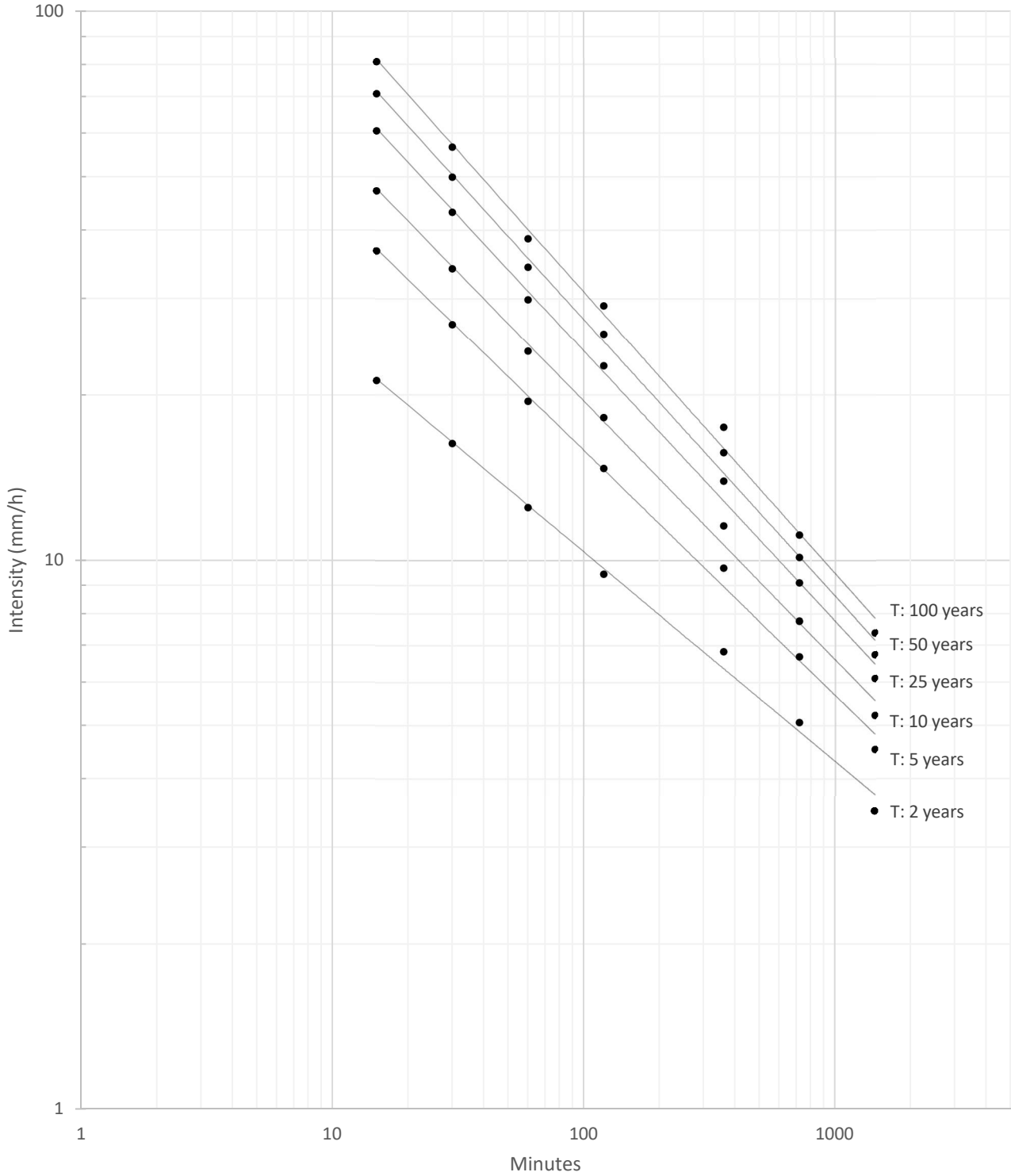
**Note:** Performance of the drainage systems may be under the influence of ocean levels and pump stations, and therefore may surcharge under certain conditions. Aside from the runoff analysis method



applied, hydraulic grade lines shall be indicated in design drawings and associated system performance shall consider governing downstream hydraulic boundary conditions.



**Figure 4.4: Intensity Duration Frequency Curves – Courtenay Puntledge BCHP ID: 1021990  
15% Increase from Historical Intensities (mm/hr)  
Years of Record: 1964-1995 (35 Years)**





**Table 4.4.1: IDF Curve Intensity Table Summary  
15% Increase from Historical Intensities (mm/hr)**

Time		Return Frequency					
Minutes	Hours	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr
15	0.25	21.3	36.7	47.2	60.7	70.8	80.9
30	0.5	16.3	26.9	34.1	43.1	49.9	56.7
60	1	12.5	19.5	24.1	29.9	34.3	38.6
120	2	9.5	14.7	18.2	22.6	25.9	29.1
360	6	6.8	9.7	11.6	14.0	15.7	17.5
720	12	5.1	6.7	7.8	9.1	10.1	11.1
1440	24	3.5	4.5	5.2	6.1	6.8	7.4

Note: 15 and 30 minute durations have been extrapolated from historical IDF Curve

**Table 4.4.2: Interpolation Equation of IDF Curve – Historical Data  
 $R = A * T^B$  where: R = Rainfall (mm/hr), A and B = Coefficients, based on return period**

Parameters	Return Frequency					
	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr
A	11.0	17.5	21.9	27.3	31.4	35.5
B	-0.386	-0.452	-0.477	-0.499	-0.511	-0.521

Note: Coefficients are based on Historical Data - 15% must be added to resulting intensities





**Table 4.4.3: Modified Chicago Distribution – 24 Hr Design Storm Data (10 Minute Increment)  
15% Increase from Historical Intensities (mm/hr)  
Years of Record: 1964-1995 (35 Years)**

Time (min)	Return Frequency				
	2 year	5 year	10 year	25 Year	100 year
0	2.29	2.64	2.91	3.24	3.76
10	2.31	2.66	2.94	3.28	3.80
20	2.33	2.69	2.98	3.32	3.85
30	2.35	2.72	3.01	3.36	3.90
40	2.38	2.76	3.05	3.40	3.95
50	2.40	2.79	3.09	3.45	4.01
60	2.43	2.82	3.13	3.49	4.07
70	2.45	2.86	3.17	3.54	4.12
80	2.48	2.90	3.21	3.59	4.19
90	2.51	2.93	3.26	3.65	4.25
100	2.54	2.97	3.30	3.70	4.32
110	2.57	3.02	3.35	3.76	4.39
120	2.60	3.06	3.40	3.82	4.46
130	2.63	3.11	3.46	3.88	4.54
140	2.67	3.15	3.52	3.95	4.62
150	2.70	3.21	3.58	4.02	4.71
160	2.74	3.26	3.64	4.10	4.80
170	2.78	3.32	3.71	4.17	4.89
180	2.83	3.38	3.78	4.26	5.00
190	2.87	3.44	3.85	4.35	5.11
200	2.92	3.51	3.93	4.44	5.22
210	2.97	3.58	4.02	4.54	5.35
220	3.03	3.66	4.11	4.65	5.48
230	3.08	3.74	4.21	4.77	5.62
240	3.15	3.83	4.31	4.89	5.78
250	3.21	3.92	4.43	5.03	5.94
260	3.29	4.03	4.55	5.18	6.13
270	3.37	4.14	4.69	5.34	6.33
280	3.45	4.27	4.84	5.52	6.55
290	3.55	4.41	5.00	5.71	6.79
300	3.65	4.56	5.19	5.93	7.07
310	3.77	4.73	5.39	6.18	7.38
320	3.90	4.93	5.63	6.46	7.73
330	4.05	5.15	5.90	6.79	8.13
340	4.23	5.41	6.21	7.17	8.61
350	4.43	5.72	6.59	7.62	9.18
360	4.68	6.09	7.04	8.17	9.87
370	4.98	6.56	7.61	8.86	10.74
380	5.37	7.16	8.34	9.76	11.88
390	5.89	7.98	9.36	11.00	13.47
400	6.66	9.22	10.90	12.90	15.90
410	8.00	11.43	13.68	16.37	20.39
420	11.84	18.14	22.30	27.33	34.86
430	25.10	44.93	58.80	76.25	103.14
440	12.39	19.06	23.47	28.80	36.78
450	9.84	14.55	17.65	21.37	26.93
460	8.54	12.33	14.82	17.79	22.24
470	7.71	10.93	13.05	15.57	19.35
480	7.11	9.94	11.80	14.02	17.34

Time (min)	Return Frequency				
	2 year	5 year	10 year	25 Year	100 year
490	6.65	9.19	10.86	12.86	15.84
500	6.28	8.60	10.12	11.94	14.67
510	5.97	8.11	9.52	11.20	13.72
520	5.72	7.70	9.02	10.58	12.93
530	5.49	7.35	8.59	10.06	12.26
540	5.30	7.05	8.22	9.60	11.68
550	5.13	6.79	7.89	9.20	11.17
560	4.98	6.55	7.60	8.85	10.73
570	4.84	6.34	7.34	8.54	10.33
580	4.72	6.15	7.11	8.25	9.97
590	4.60	5.98	6.90	8.00	9.65
600	4.50	5.82	6.71	7.76	9.35
610	4.40	5.67	6.53	7.55	9.08
620	4.31	5.54	6.36	7.35	8.84
630	4.23	5.41	6.21	7.17	8.61
640	4.15	5.29	6.07	7.00	8.39
650	4.08	5.19	5.94	6.84	8.19
660	4.01	5.08	5.82	6.69	8.01
670	3.94	4.99	5.70	6.55	7.84
680	3.88	4.90	5.59	6.42	7.67
690	3.83	4.81	5.49	6.30	7.52
700	3.77	4.73	5.39	6.18	7.37
710	3.72	4.66	5.30	6.07	7.24
720	3.67	4.58	5.22	5.97	7.11
730	3.62	4.51	5.13	5.87	6.99
740	3.58	4.45	5.05	5.77	6.87
750	3.53	4.39	4.98	5.68	6.76
760	3.49	4.33	4.91	5.60	6.65
770	3.45	4.27	4.84	5.52	6.55
780	3.42	4.21	4.77	5.44	6.45
790	3.38	4.16	4.71	5.36	6.36
800	3.34	4.11	4.65	5.29	6.27
810	3.31	4.06	4.59	5.22	6.18
820	3.28	4.01	4.53	5.15	6.10
830	3.25	3.97	4.48	5.09	6.02
840	3.21	3.92	4.43	5.03	5.94
850	3.18	3.88	4.38	4.97	5.87
860	3.16	3.84	4.33	4.91	5.80
870	3.13	3.80	4.28	4.85	5.73
880	3.10	3.76	4.24	4.80	5.66
890	3.08	3.73	4.19	4.75	5.60
900	3.05	3.69	4.15	4.70	5.54
910	3.03	3.66	4.11	4.65	5.48
920	3.00	3.62	4.07	4.60	5.42
930	2.98	3.59	4.03	4.56	5.36
940	2.96	3.56	3.99	4.51	5.31
950	2.93	3.53	3.96	4.47	5.26
960	2.91	3.50	3.92	4.43	5.20
970	2.89	3.47	3.89	4.39	5.15



Time (min)	Return Frequency				
	2 year	5 year	10 year	25 Year	100 year
980	2.87	3.44	3.85	4.35	5.10
990	2.85	3.41	3.82	4.31	5.06
1000	2.83	3.38	3.79	4.27	5.01
1010	2.81	3.36	3.76	4.23	4.97
1020	2.80	3.33	3.73	4.20	4.92
1030	2.78	3.31	3.70	4.16	4.88
1040	2.76	3.28	3.67	4.13	4.84
1050	2.74	3.26	3.64	4.10	4.80
1060	2.73	3.24	3.61	4.06	4.76
1070	2.71	3.21	3.58	4.03	4.72
1080	2.69	3.19	3.56	4.00	4.68
1090	2.68	3.17	3.53	3.97	4.64
1100	2.66	3.15	3.51	3.94	4.61
1110	2.65	3.13	3.48	3.91	4.57
1120	2.63	3.11	3.46	3.88	4.54
1130	2.62	3.09	3.44	3.86	4.51
1140	2.60	3.07	3.41	3.83	4.47
1150	2.59	3.05	3.39	3.80	4.44
1160	2.58	3.03	3.37	3.78	4.41
1170	2.56	3.01	3.35	3.75	4.38
1180	2.55	2.99	3.32	3.73	4.35
1190	2.54	2.97	3.30	3.70	4.32
1200	2.52	2.96	3.28	3.68	4.29
1210	2.51	2.94	3.26	3.65	4.26
1220	2.50	2.92	3.24	3.63	4.23
1230	2.49	2.91	3.22	3.61	4.20
1240	2.47	2.89	3.21	3.59	4.18
1250	2.46	2.87	3.19	3.56	4.15
1260	2.45	2.86	3.17	3.54	4.12
1270	2.44	2.84	3.15	3.52	4.10
1280	2.43	2.83	3.13	3.50	4.07
1290	2.42	2.81	3.12	3.48	4.05
1300	2.41	2.80	3.10	3.46	4.03
1310	2.40	2.78	3.08	3.44	4.00
1320	2.39	2.77	3.06	3.42	3.98
1330	2.38	2.76	3.05	3.40	3.95
1340	2.37	2.74	3.03	3.38	3.93
1350	2.36	2.73	3.02	3.37	3.91
1360	2.35	2.72	3.00	3.35	3.89
1370	2.34	2.70	2.99	3.33	3.87
1380	2.33	2.69	2.97	3.31	3.84
1390	2.32	2.68	2.96	3.29	3.82
1400	2.31	2.66	2.94	3.28	3.80
1410	2.30	2.65	2.93	3.26	3.78
1420	2.29	2.64	2.91	3.25	3.76
1430	2.28	2.63	2.90	3.23	3.74
1440	0.00	0.00	0.00	0.00	0.00



<b>4.9.6 Minimum Pipe Diameter</b>	Replace Section	▪ Storm Sewer	250 mm
		▪ Culvert:	
		-Crossing Roads	450 mm
		-Crossing Driveways	300 mm
		▪ Catch Basin Leads	200 mm
		▪ Service Connections:	
-Residential	150 mm		
-Commercial/industrial	150 mm		

Downstream pipe sizes are not to be reduced unless the downstream pipe is 600 mm diameter or larger and increased grade provides adequate capacity. Detailed hydraulic analysis is required. That maximum reduction is two pipe sizes.

<b>4.9.8 Curved Sewers</b>	Replace Section	On straight roads, storm sewers shall be installed in straight runs such that sewer mains and manholes are entirely under the road pavement and no closer than 1m to the curb. Curvilinear sewers are permitted on horizontal curves and shall have a constant offset from property line. The radius of curve shall not exceed 50% of the manufacturer’s recommended maximum and shall not be less than 60m. The minimum grade shall be 1% and each joint shall be located by survey. Manholes are to be installed at the beginning and end of horizontal curve sections. Curvilinear sewers are not permitted on vertical curves
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The minimum design velocity in curved sewers is 0.9 m/s.

Sewers larger than 600 mm diameter may include deflections formed by mitred bends to a maximum mitre of 45°.

<b>4.9.10 Pipe Joints</b>	Replace Section	All pipe joints shall be gasketed and water tight.
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<b>4.9.14 Service Connections</b>	Delete	▪ Details
		Use standard wye fittings for connections to new mains. For connections to existing mains, use wye saddles or, if approved, insertable tees.
		Service connections may be permitted into manholes if:



- The connection is not oriented against the flow in the main.
- Manhole hydraulic requirements are met.

Replace with

- Details

Use standard wye fittings for connections to new PVC and HDPE mains. For connections to existing PVC and HDPE mains, strap on saddle and insertable tees are permitted. For connections to new or existing concrete mains, a cored tee is required.

The service connection centreline must not be below the sewer main centreline.

No services shall be directly connected to manholes, all wye connections must be a minimum of 1.0 m downstream from manholes.

**4.10.3 Surface Flow Capacity**

Add to Section

Surface swale shall only traverse three lots downstream before directing into a surface inlet. The swale shall be included in an across lot drainage easement.

**4.11.2 Underground Storage**

Add to Section

Other detention facilities such as underground storage will be considered for approval at the discretion of the City.

**4.11.3 Dry Detention Ponds**

Add to Section

**Design Details for Dry Ponds**

Dry ponds are an effective method of stormwater quantity control, and are typically not intended as water quality improvement facilities. Dry ponds may be constructed in areas where it is not feasible to include a wet pond due to topography or site plan constraints. Generally, dry ponds are used to control larger, less frequent flows while allowing smaller flows to pass through uncontrolled. A sedimentation forebay is required upstream of dry ponds to promote settlement of suspended solids.

a) Land Dedication Requirements

Dry ponds to be operated by the City of Courtenay are to be located on public property, which is to



encompass all lands subject to inundation from the 24 hour 1 in 25 year return period design high water level and shall encompass all maintenance access roads as outlined in Section i) below.

If the slope integrity may be jeopardized by cutting or filling of priority lots, a restrictive covenant will be placed on lots abutting the dry pond to control lot development so as not to compromise design requirements at the HWL. This is to ensure an adequate freeboard is maintained.

b) Minimum Pond Size

The City discourages the proliferation of large numbers of small ponds, with the resultant higher maintenance cost and lower efficiency impact. The storage size is determined on the basis of outflow control requirements as presented in this document.

c) Frequency of Operation

All dry ponds shall be off-line storage areas designed to temporarily detain excess runoff and thereby reduce the peak outflow rates to the connected downstream system. These facilities may be subject to prolonged inundation during winter due to the rainfall pattern in Courtenay.

d) Drain Time

Ponds shall be generally designed to completely drain within 40 hours of reaching maximum water surface level, but in no case longer than 72 hours.

e) Side Slopes

Side slopes subject to inundation upon filling of the dry pond shall have a maximum slope of 4 (horizontal) to 1 (vertical) within public property. A freeboard allowance of 0.6 m is required for all dry ponds.

f) Depth of Ponding

The maximum live storage limit in a dry pond is for 3.0 m for the 1 in 25-year return period storm event and



1.5 m for the 1 in 10-year event, as measured from the invert elevation of the outlet pipe.

g) Bottom Grading and Drainage

The dry pond shall be graded to properly drain all areas after its operation. The dry pond bottom shall have a minimum slope of 0.5% and a slope of 0.7% or greater is recommended where feasible. Lateral slopes for the pond bottom shall be 0.5% or greater. French drains or similar means may be required where it is anticipated that these slopes will not properly drain the dry pond bottom, or where dictated by multiple use or other special considerations.

h) Safety Provisions at Inlets and Outlets

All inlet and outlet structures associated with dry ponds shall have grates provided over their openings to restrict access. A maximum clear bar spacing of 0.150 m shall be used for gratings. Grated outlet structures, are to be designed with a hydraulic capacity of at least twice the required capacity to allow for possible plugging. Further, the arrangement of the structures and the location of the grating shall be such that the velocity of the flow passing through the grating will not exceed 1.0 m/s.

Appropriate fencing and guard-rails are to be provided to restrict access and reduce the hazard presented by structure head and wing walls.

i) Maintenance Access Requirements

A minimum 4.0 m wide, all-weather vehicle access shall be constructed from a public road to the inlet, sediment sump, outlet, emergency overflow and other works requiring maintenance. The maximum grade of the access shall be 8%. The surface shall be finished with gravel topped with path chip, geogrid, or rigid grass suitable for all weather maintenance truck access. A vehicle access route shall also be provided to the edge of all stormwater management ponds suitable to carry maintenance vehicles. This access shall also extend to the pond static (normal) water level. The access surface shall include a 1.0 m buffer from top of pond and an additional 1.0 m from edge of



access road to the edge of dedicated lands, and shall be accessible from and extend to a public road right-of-way. Sharp bends in this access route are to be avoided. Vehicle turning movements must accommodate a tandem axle 60,000lb flush truck and tandem axle dump truck.

j) Landscaping

Landscaping plans shall be submitted as part of the Engineering Drawings for dry ponds, and the completion of landscaping will be considered part of the improvement construction. The minimum requirement for landscaping of dry ponds shall be the establishment of grass cover. Preference should be given to use of native plant materials and, in no case, should non-native, aggressive (“invasive”) plant materials be used.

k) Sediment Control

Use of storm ponds for sediment control is acceptable during construction of the first phase of a development, and must be remediated prior to acceptance of the Works and Services by the City of Courtenay. The City may accept the use of storm ponds for sediment control for multiple phases of a development if the appropriate maintenance agreement is established and the appropriate security is provided by the developer. The required security is 125% of the estimated remediation cost.

l) Operation and Maintenance Manual

Three copies of an operation and maintenance manual shall be submitted when the facility is completed and transferred to the Municipality and include:

- Record drawings of the completed facility.
- Brief description of the facility operation including design flows, design depths, and schematic diagrams of the inlet and outlet structures, connections, controls, valves, bypass, overflows, etc.
- List of manufacturer's operation, service and repair instructions and parts lists.



- Volume-stage-discharge relationships of all control structures.
- General maintenance requirements and emergency procedures.
- Copies of senior government environmental approvals if applicable.

**4.11.4 Wet Detention Ponds**

Add to Section

**Design Details for Wet Ponds**

Wet ponds are well suited for both quality and quantity control of stormwater runoff. Wet ponds incorporate a permanent pool which rises in response to rainfall events. Extended storage durations and strategic planting in the active storage zone can further improve water quality. Sedimentation forebays should still be incorporated upstream of wet ponds for preliminary settlement of larger suspended solids.

a) Land Dedication Requirements

Wet ponds to be operated by the City of Courtenay are to be located on Public property which is to encompass all lands subject to inundation from the 24 hour 1 in 25 year return period design high water level plus the edge treatment. This designation will also apply to all rights-of-way for access to and protection of inlet and outlet sewers and flow control facilities, maintenance access routes to the pond, and to a certain proportion of the lands fronting on the pond, from the upper edge of the area containing the edge treatment to the limit of the water's edge when the water surface is at the design high water elevation.

A restrictive covenant and/or a limit for the Minimum Building Elevation (MBE) will be placed upon those lots abutting the pond to guide lot development that design requirements of the stormwater storage facility are not compromised and that an adequate freeboard is maintained.

b) Minimum Pond Size

The City discourages the proliferation of large numbers of small ponds, with the resultant higher





maintenance cost and lower efficiency impact. The storage size is determined on the basis of outflow control requirements as presented in this document.

c) Drain Time

Ponds shall be generally designed to drain to normal water surface level within 40 hours of reaching maximum water surface level, but in no case longer than 72 hours.

d) Side Slopes

Areas covered by water, from the design high water level down to the normal water level shall have a maximum slope of 7 (horizontal) and 1 (vertical) and extend at a maximum slope of 7:1 (H:V), from normal water level to a depth of 0.43 m (i.e., a distance of 3 m horizontally into the pond for safety needs). Steeper side slopes, up to 4:1 (H:V), may be considered for areas separated from the public by a Concrete Rail Fence. A slope of 4:1 (H:V) shall be used from the 0.43 m depth point (below normal water level) to the pond bottom.

e) Minimum Depth

The minimum depth from normal water level to pond bottom (beyond the side slope area) shall be 1.5 m. The maximum live storage limit in a wet pond is for 3.0 m for the 1 in 25-year return period storm event and 1.5 m for the 1 in 10-year event, as measured from the invert elevation of the outlet pipe. A freeboard allowance of 0.6 m is required for all wet ponds.

f) Pond Bottom Material

For areas where the ground water table is below the Normal Water Level (NWL), the pond bottom and side slopes are to be composed of impervious material with a suitably low permeability (e.g. with a permeability coefficient in the order of  $1 \times 10^{-6}$  cm/s).

For areas where the groundwater table is expected to be near or above the NWL, the pond bottom may be of a pervious material as dictated by geotechnical considerations.



g) Circulation Requirements

Narrow and/or dead bay areas where floating debris may accumulate are to be excluded at the design stage. Inlets and outlets should be located with consideration of the need to maximize detention time and circulation within the pond water body.

h) Inlet and Outlet Requirements

▪ Submergence of Inlets and Outlets

Inlet and outlet pipe inverts are to be a minimum 0.1 m above the pond bottom. Forebays are to be constructed on pond bottom to accommodate extra depth requirements for placing inlet/outlet structures, as required.

▪ Provision for Free Outfall from Inlets to Ponds

Where feasible, the invert elevation at the first manhole upstream from the pond in a minor system or the connecting or interconnecting pipe system, shall be at or above the normal water level of the pond to avoid deposition of sediments in the inlet pipe. To avoid backwater effects on the upstream sewers leading to the pond, the invert of the inlet sewer at the first manhole upstream from the pond shall be at or above the pond level for the 1 in 10-year return period storm event. A drop structure upstream from the pond will generally be required to achieve this. "Inlet" and "outlet" control calculations are required to verify the mode of operation of the pond inlets. In cases where grades set limits on the above, special maintenance needs, such as periodic flushing/cleaning must be identified.

▪ Provisions for Water Level Measurements

To permit direct measurement of water level in the pond, a manhole is to be provided hydraulically connected to the pond such that the level of water in the manhole will mimic the pond water surface level.



- Provisions for Lowering the Pond Level

The provision of the means to drain the pond completely by gravity drainage is desirable. Where a gravity drain is not feasible, provisions are to be made in association with the outlet works or otherwise, so that mobile pumping equipment may be installed and used to drain the pond.

- i) Sediment Removal Provisions

The pond design shall include an approved sedimentation removal process for control of heavy solids, which may be washed to the pond during the construction period associated with the development of the contributing drainage catchment.

Sediment basins shall be provided at all inlet locations for continued use after completion of the subdivision development. Stormwater storage/detention ponds shall not take the place of a development's sediment control storage basin.

- j) Pond Edge Treatment

Edge treatment or shore protection is required and shall be compatible with the adjacent land use. The treatment used shall meet criteria for low maintenance, safety and habitat requirements. The edge treatment is to cover ground surfaces exposed or covered by water during a pond level fluctuation to 0.3 m below or above the normal water elevation, and shall be adequate to prevent erosion of the pond edge due to wave action. The typical acceptable edge treatment shall be, but is not limited to, a 250 mm deep layer of well graded washed rock with a 75 mm minimum size or alternatively appropriate edge vegetation.

- k) Maintenance Access Requirements

A minimum 4.0 m wide, all-weather vehicle access shall be constructed from a public road to the inlet, sediment sump, outlet, emergency overflow and other works requiring maintenance. The maximum grade of the access shall be 8%. The surface shall be finished



with gravel topped with path chip, geogrid, or rigid grass suitable for all weather maintenance truck access. A vehicle access route shall also be provided to the edge of all stormwater management ponds suitable to carry maintenance vehicles. This access shall also extend to the pond static (normal) water level. The access surface shall include a 1.0 m buffer from top of pond and an additional 1.0 m from edge of access road to the edge of dedicated lands, and shall be accessible from and extend to a public road right-of-way. Sharp bends in this access route are to be avoided. Vehicle turning movements must accommodate a tandem axle 60,000lb flush truck and tandem axle dump truck.

l) Landscaping Requirements

Landscaping plans for areas bounding the pond shall be submitted as part of the Engineering Drawings. Landscaping of all proposed public lands included for purposes of the pond and of all proposed lands dedicated to the City for storm ponds on proposed private property, including all areas from the pond edge treatment to the limit of inundation when the pond is filled to the design high water level, is to be part of the pond construction requirement. The minimum requirement for landscaping shall be the establishment of grass cover. Native plant materials must be used.

m) Sediment Control

Use of storm ponds for sediment control is acceptable during construction of the first phase of a development, and must be remediated prior to acceptance of the Works and Services by the City of Courtenay. The City may accept the use of storm ponds for sediment control for multiple phases of a development if the appropriate maintenance agreement is established and the appropriate security is provided by the developer. The required security is 125% of the estimated remediation cost.



n) Operation and Maintenance Manual

Three copies of an operation and maintenance manual shall be submitted when the facility is completed and transferred to the Municipality and include:

- Record drawings of the completed facility.
- Brief description of the facility operation including design flows, design depths, and schematic diagrams of the inlet and outlet structures, connections, controls, valves, bypass, overflows, etc.
- List of manufacturer's operation, service and repair instructions and parts lists.
- Volume-stage-discharge relationships of all control structures.
- General maintenance requirements and emergency procedures.
- Copies of senior government environmental approvals if applicable.

**4.11.5 Subsurface Disposal / Infiltration Systems**

Delete

- May be located on-site or off-site

Replace With

- Must be located on-site

**4.11.8 Oil and Grit Separators**

Replace Section

Oil and Grit Separators are required for sites with parking for 11 or more vehicles. Oil and Grit Separators must be in compliance with Building Bylaw 2323 and Storm Sewer Bylaw 1402, as amended. The maximum hydraulic loading rate (HLR) will be 27 L/s/m<sup>2</sup>. At the target HLR, the unit will be capable of settling coarse particles of D<sub>50</sub> > 0.115mm at 5 C and specific gravity of 2.65, and capturing free oil droplets of D<sub>50</sub> > 0.465mm at 5 °C and assuming a specific gravity of 0.88 for a “typical” motor oil. The target effluent shall meet a TSS removal rate of 85%.

**4.11.10 Alternate Design Standards**

Add Section 4.11.10

The application of Sustainability Considerations, as described in Section 8.0 of the MMCD Design Guidelines 2014, as well as the Province’s “Stormwater Planning: A Guide for British Columbia” (May 2002), will be considered on a case by case basis by the City where practical.



**4.12 Erosion and  
Sediment Control  
(ESC)**

Add to Section

Project specific ESC plans shall be prepared by a Qualified Professional and included with engineering drawing submissions. ESC plans are to include, at minimum:

- ESC plan drawing clearly indicating types and locations of BMP installations
- Notes describing any BMP phasing, inspection and documentation requirements, and good housekeeping practices
- Detail drawings of BMPs with specific material and installation requirements





**5.0 ROADS**

**5.3 Cross-Section Elements** Replace Section Refer to the Courtenay Supplementary Standard Drawings for typical road cross sections for each road classifications. Typical road cross sections are to be applied where identified in the Official Community Plan – Bylaw No. 2387, Road Network – Map No. 3. Design speeds of the typical road sections are provided in Table 5.4 below.

**5.4.2 Vertical Curves** Replace Table 5.4 Replace Table 5.4 as follows:

**Table 5.4 Alignment Standards**

Classification	Design Speed (km/h)	Min. Radius (m)	Grade (%)		K-Value				Minimum Sight Distance (m)	
					Crest Curves		Sag Curves			
			Min	Max	Min.	Desir.	Min.	Desir.	Stopping	Decision
Arterial Road Section: B	60	120	0.5	8	10	13	8	9	95-235	95-235
Collector Road Section: Urban – P	50	85	0.5	10	6	7	5	6	75-200	75-200
Collector Road Section: Urban – B	50	85	0.5	10	6	7	5	6	75-200	75-200
Collector Road Section: Residential – C	50	85	0.5	10	6	7	5	6	75-200	75-200
Collector Road Section: Residential – B	50	85	0.5	10	6	7	5	6	75-200	75-200
Collector Road Section: Residential	50	85	0.5	10	6	7	5	6	75-200	75-200
Collector Road Section: Rural	60	120	0.5	10	10	13	8	9	95-235	95-235
Local Road Section	50	35	0.5	12	6	7	5	6	75-200	75-200
Lane	30	25	1.0	12	2	4	2	4	45	-
Driveway Multi-Family	30	-	0.5	12	2	4	2	4	45	-
Driveway Single Family	-	-	0.5	15	-	-	-	-	-	-
Emergency Access <sup>8</sup>	30	12	1.0	15	2	4	2	4	45	-
Pedestrian Ramps	-	-	1.0	8.3 <sup>6</sup>	-	-	-	-	-	-

**5.7 Railway Grade Crossings** Replace Section Locations and details of railway grade crossings are subject to requirements included in the latest edition of the Transportation Canada Grade Crossing Standards.





			Railway crossing signs and pavement marking shall be in accordance with Transportation Canada Grade Crossing Standards.
<b>5.8</b>	<b>Traffic Control Devices</b>	Replace Section	Traffic control devices, signs, and pavement marking must be in accordance with the Manual of Uniform Traffic Control Devices for Canada. Pavement markings shall be thermoplastic and should be installed within 7 days of the final pavement lift on a clean and dry surface.
<b>5.9</b>	<b>Culs-De-Sac</b>	Delete	The maximum road length for a cul-de-sac, as measured from the edge of the intersecting through road to the centre of the cul-de-sac bulb, is 200m
		Replace with	The maximum road length for a cul-de-sac, as measured from the edge of the intersecting through road to the centre of the cul-de-sac bulb, is 300m
<b>5.9.1</b>	<b>Temporary Turnaround</b>	Add Section 5.9.1	Where a road terminates and there is future access to lands beyond; a turnaround shall be provided in a form acceptable to the City, and may be located on private property if protected by a right-of-way and covenant registered in favour of the City. The turnaround shall be signed as a 'fire access' with no parking allowed. The right-of-way and covenant shall be discharged when the road connection is completed.
<b>5.10.1</b>	<b>Traffic Barriers at Temporary Cul-De-Sac and Turnarounds</b>	Add Section 5.10.1	A concrete barrier shall be located at the end of a temporary cul-de-sac and turnarounds.
<b>5.11.1</b>	<b>Sidewalk</b>	Replace Section	Sidewalk location and width shall be as per Courtenay Standard Detail Drawings for typical road cross sections for different road classifications. Minimum cross fall for sidewalk shall be 2% towards the gutter, except at driveway letdowns.
<b>5.11.2</b>	<b>Pedestrian Crossings</b>	Replace Section	The warrant for pedestrian crossings must be considered as part of a broader analysis process which should include an understanding of existing site conditions, pedestrian and traffic volumes, and pedestrian accessibility. This can be evaluated utilizing TAC Pedestrian Crossing Control Guide.



The pedestrian crossing width can range from a minimum of 2.5 m to as wide as 4.0 m. (TAC Design Guidelines, Section 2.3.14.1). The pavement marking and signage configuration for crossings must be designed in accordance with TAC.

Wheel chair ramps from sidewalks, medians and traffic islands to crosswalks must be provided at intersections and multiuse pathways. Locations and details of ramps and related pedestrian safety features must be in accordance with local bylaws and the TAC Geometric Design Guide.

Sidewalks, crosswalks, and pedestrian facilities must be designed in accordance with the following guidelines:

- TAC Geometric Design Guideline, 1999 (Section 2.2.6, Section 2.3.14, Section 3.3)
- TAC – Pedestrian Crossing Control Manual, 2012
- Pedestrian Crossing Control Manual for British Columbia, Second Edition, 1994  
BC Ministry of Transportation – Manual of Standard Traffic Signs & Pavement Markings

<b>5.14.4 Driveway Grades</b>	Delete Sentence	For the first 10 m on private property, the maximum driveway grade is 15% if accessing a local or collector road.
	Replace with	For the first 10 m on private property, the maximum driveway grade is 12% if accessing a local or collector road.
<b>5.14.8 Driveway Surface</b>	Add Section 5.14.8	New or altered driveways shall be concrete or asphalt within the road right-of-way.
<b>5.15.3 Signs and Poles</b>	Delete Sentence	Use of minimum clearance should be justified by safety appurtenances such as poles with break-away or frangible bases or sign poles of light weight fabrication.
<b>5.15.4 Trees</b>	Replace Section	Provide 1 boulevard tree per single residential or duplex dwelling lot where required. For all other developments provide 1 boulevard tree per 15-22m of lot frontage and/or flankage.

Boulevard trees are required on the same side of the street as sidewalks and are not required on rural roads.



Boulevard trees are to be located where there is a minimum space of 1.5m between the sidewalk and back of curb. Horizontal clearance from edge of driveway, curb return or above ground utility to tree trunk is 2.5m. Boulevard trees are to be located no closer than 6m from the adjacent street right of way at intersections.

Boulevard trees are to be a minimum of 3cm caliper.

The cost for each boulevard tree shall be \$800.00. The cost includes the price of the tree, installation that may include root barriers, maintenance and replacement if the tree does not survive.

The Developer shall provide a boulevard tree layout plan showing the location and number of trees and the location of utilities, prepared by a Qualified Professional to the satisfaction of the Development Engineer.

<b>5.16</b>	<b>Underground Utility Locations</b>	Replace Section	Underground utility locations within a road right-of-way will vary with the road cross section. Refer to the Courtenay Supplementary Standard Drawings for the general location of underground utilities and minimum separation requirements within the various cross sections.
<b>5.17.3</b>	<b>Pavement Alternatives</b>	Replace Section	Pavement structure design must be based on site specific recommendations provided by a Qualified Professional and shall include the minimum pavement structure identified in the City of Courtenay Supplementary Standard Detail Drawing for the relevant road classification.
<b>5.21</b>	<b>Street Parking</b>	Replace Section	Refer to the Courtenay Standard Drawings for parking configuration for different road classifications.
<b>5.22</b>	<b>Retaining Walls</b>	Add Section 5.22	Retaining wall shall be a maximum of 2.4 m in height. Where larger retaining walls heights are required, they must be constructed as a stepped wall. The step must have a minimum width of 1.8 meters or 75% of the height of the highest adjacent wall.

**SUPPLEMENTARY DESIGN GUIDELINES  
ROADWAY LIGHTING**



**6.0 ROADWAY LIGHTING**

<b>6.1 General</b>	Add to Section	Relevant publications of the Illuminating Society of North America (IESNA) including RP-8-14
<b>6.2.2 Standards and Guidelines</b>	Add to Section	IESNA – Illuminating Engineering Society of North America IDA – International Dark-Sky Association
<b>6.5.1 Light Sources and Luminaires</b>	Delete	Light sources shall be LED, Induction, High Pressure Sodium or Pulse Start Metal Halide. The selection process shall be based on a review of energy efficiency, cost/benefit (installation and operational) and optical performance which shall be undertaken in consultation with the jurisdiction that will own and operate the lighting.
	Replace with	Light sources shall only be LED. The selection process shall be undertaken in consultation with the City of Courtenay and will only include luminaire manufacturers listed in the current version of the City’s Approved Product List. All streetlights shall include flat lenses.  If BC Hydro lease lights are used, they shall meet BC Hydro requirements.
<b>6.7 Sidewalk Lighting</b>	Delete	Sidewalk lighting levels for various pedestrian activity levels are defined in Figure 6.3, Sidewalk Illuminance Table below.
	Replace with	Sidewalk lighting levels for various pedestrian activity levels are defined in Figure 6.7, Sidewalk Illuminance Table below.
<b>6.8 Intersection Lighting</b>	Delete	Intersection lighting levels for various street types and pedestrian activity levels are defined in the Intersection Horizontal Illuminance Table 6.4 below.
	Replace with	Intersection lighting levels for various street types and pedestrian activity levels are defined in Figure 6.8 Horizontal Illuminance Table below.
<b>6.9 Crosswalk Lighting</b>	Delete	This can be achieved by placing poles in advance of the crosswalk (see Figure below) to create high levels of



			vertical illumination thus improving driver visibility of pedestrians.
		Replace with	This can be achieved by placing poles in advance of the crosswalk (see Figure 6.5 below) to create high levels of vertical illumination thus improving driver visibility of pedestrians.
<b>6.13 Poles</b>	Delete		For rural roads, if approved by the local authority and the power company, lights may be installed on power poles.
		Replace with	Luminaires may be installed on power poles, if approved by the City and BC Hydro.
<b>6.14 Pole Foundations</b>	Delete		Where soil conditions are in question a geotechnical engineer must be consulted to define the suitability of the base for the given soil's condition.
		Replace with	Where standard MMCD foundations are not suitable for site soil conditions, custom foundations will be required, and shall be designed, signed and sealed by a Qualified Professional registered as a Professional Engineer in the province of British Columbia.
<b>6.15 Luminaires</b>	Delete		<ul style="list-style-type: none"> <li>▪ Colour temperature shall not exceed 4500 kelvin.</li> </ul>
		Replace with	<ul style="list-style-type: none"> <li>▪ LED luminaire colour temperature shall not exceed 3000 kelvin.</li> </ul>
<b>6.16 Power Supply and Distribution</b>	Delete		Lighting system shall be fed via a service base or pole mounted cabinet which shall contain panel boards, breakers, lighting contactor(s) and photocell bypass switch as per MMCD Standard Specifications and Drawings.
		Replace with	Lighting system shall be fed via a pad mount or pole mount cabinet which shall contain panel boards, breakers, lighting contactor(s) and bypass switch as per MMCD Standard Detail Drawings and Specifications.
		Delete	Power is generally supplied by the utility through an un-metered service when servicing only streetlights and traffic signals; however, some utility power providers may require metered services.



	Replace with	Power is generally supplied by the utility through an un-metered service when servicing only streetlights and traffic signals unless metering is required by BC Hydro.
	Delete	Services are to be “Underground Dip” type as shown on the MMCD Standard Specifications and Drawings unless otherwise accepted by the local Municipality/City
	Replace with	Services are to be “Underground Dip” type as shown on the MMCD Standard Specifications and Drawings or overhead drops, as specified on the design drawings.
<b>6.17.4 Drawing Requirements</b>	Add to Section	<ul style="list-style-type: none"><li>▪ Design submissions for City approval shall include relevant load calculators for signal and sign poles as well as other relevant engineering calculations and design drawings</li><li>▪ Record drawings submissions shall include 3 - ½ size paper copy sets of drawings as well as pdf and AutoCAD electronic files of drawings</li></ul>
	Delete	Design drawings shall be submitted for approval along with signed and sealed computer lighting calculations.

**SUPPLEMENTARY DESIGN GUIDELINES  
TRAFFIC SIGNALS**





**7.0 TRAFFIC SIGNALS**

**7.3.1 Codes, Rules and Regulations** Add to Section 

- BC Motor Vehicle Act, Motor Vehicle Act Regulations, Division 23

**7.4 Signal Heads** Replace Figure 7.4.2 Replace Figure 7.4.2 as follows:

**Table 7.4.2 Signal Head Sizes**

Signal Head Type	Area Classification Lens Size and Shape
Primary	300 mm round
Secondary and Auxiliary	300 mm round
	300 mm round
Pedestrian	Combination walk/don't walk indication 300 mm square

**7.8 Signal Pre-Emption** Add to Section The City utilizes siren actuated emergency pre-emption equipment. Pre-emption equipment to be located 1 m right of the left most signal head.

**7.9 Audible Pedestrian Signals** Add to Section The City utilizes Accessible Pedestrian Signals.

**7.11 Detection Methods** Replace Section Traffic detection for signal actuation is accomplished by:

- Vehicle detector loops (induction)
- A vehicle detector loop is a coil of wire buried in the road surface. The coil detects the presence of a vehicle by the change in electrical induction. This change is sensed by the detector module in the traffic control cabinet. Detector loop details are indicated in the MMCD Standard Detail Drawings.

**7.15 Poles and Foundations** Add to Section Where standard MMCD foundations are not suitable for site soil conditions, custom foundations will be required, and shall be designed, signed and sealed by a Qualified Professional registered as a Professional Engineer in the province of British Columbia

**7.18 Power Supply and Distribution** Add to Section Traffic signal systems shall be fed via a pad mount or pole mount cabinet which shall contain panel boards, breakers, lighting contactor(s) and bypass switch as per MMCD Standard Detail Drawings and Specifications



			<p>Power is generally supplied by the utility through an un-metered service when servicing only streetlights and traffic signals unless metering is required by BC Hydro.</p> <p>Services are to be “Underground Dip” type as shown on the MMCD Standard Detail Drawings and Specifications or overhead drops, as specified on the design drawings.</p>
<b>7.19</b>	<b>Uninterruptible Power Supplies (UPS’s)</b>	Delete	<p>UPS’s are required where traffic signals are interconnected by grade crossing warning systems as per Transport Canada. UPS’s shall be considered where power outages are a concern or the intersection is in a high collision or a high risk area.</p>
		Replace with	<p>Uninterruptible power supplies shall be utilized at all new traffic signal installations.</p>
<b>7.21</b>	<b>Drawing Requirements</b>	Add bullets	<ul style="list-style-type: none"><li>▪ Design submissions for City approval shall include relevant load calculators for signal and sign poles as well as other relevant engineering calculations and design drawings</li><li>▪ Record drawings submissions shall include 3 - ½ size paper copy sets of drawings as well as pdf and AutoCAD electronic files of drawings</li></ul>

**SCHEDULE 2**  
**SUPPLEMENTARY CONSTRUCTION SPECIFICATIONS**



### CONSTRUCTION SUPPLEMENTARY SPECIFICATIONS

This schedule contains supplementary specifications to be applied in conjunction with the Specifications of the Master Municipal Construction Documents, dated 2009, both of which shall apply to all Works and Services constructed within the City of Courtenay.

Supplementary Specifications contained within this Schedule supplement or supersede the Master Municipal Construction Document (MMCD). Where the City of Courtenay Supplementary Specifications are in conflict with the MMCD, the City of Courtenay Supplementary Specifications shall take precedence.

Section number and clause numbers in the City of Courtenay Supplementary Specifications coincide with the MMCD numbering protocol.

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<u>31 05 17S</u>	AGGREGATES AND GRANULAR MATERIALS
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<u>34 41 13S</u>	TRAFFIC SIGNALS



MMCD Section 01 55 00S TRAFFIC CONTROL, VEHICLE ACCESS AND PARKING

1.0 GENERAL

Add 1.0.6

The Contractor is responsible for all temporary traffic control required to complete the Work. The Contractor will be responsible to provide a Traffic Management Plan (TMP) for review and acceptance by the City (10) ten working days prior to any travel lane closures taking place. TMP is to be prepared by a qualified professional.

The TMP shall outline the approach to traffic management, show recognition and minimization of risks indicates signing locations, identify Traffic Control Persons (TCP) stations, show lane shifting and proposed closures.

The TMP is to be revised and resubmitted as required during the progress of the work



MMCD Section 01 57 01S

ENVIRONMENTAL PROTECTION

1.0 GENERAL

1.2 Temporary Erosion and Sediment Controls

Add 1.2.1.4

An Erosion & Sediment Control (ESC) Plan must be prepared by a Certified Professional in Erosion and Sediment Control. The ESC Plan is to be reviewed by the City prior to the start of construction. Protection of the site and watercourses to which it drains, directly or indirectly, against erosion and siltation must be maintained in accordance with the ESC Plan until the *Works* are completed or as directed by the *Contract Administrator*.

The *Contractor* is responsible for all damage that may be caused by water backing up or flowing over, through from or along any part of the *Work* or otherwise resulting from their operations.

Add 1.2.1.5

Keep existing culverts, drains, ditches and watercourses affected by the *Work* clear of excavated material at all times. When it is necessary to remove or alter any existing drainage structure, provide suitable alternative measures for handling the drainage. Adequately support culverts and drainpipes across trenches to prevent displacement and interference with the proper flow of water due to trench settlement.

Add 1.2.1.6

Sweep streets, and clean catch basins, manhole sumps, detention tanks, and maintain siltation controls as often as the *Contract Administrator* deems necessary.

Add 1.2.1.7

Follow all Federal and Provincial regulations and guidelines respecting protection of fish, fish habitat, and watercourses.

1.4 Environmental Protection

Add 1.4.3.5

Immediately contain and clean up any leaks and spills of prohibited materials at the *Place of Work*.





MMCD Section 26 56 01S

ROADWAY LIGHTING

2.0 PRODUCTS

2.1	General	Delete 2.1.2 and replace with the following	All products supplied to be new, in accordance with Contract Documents. All products are to meet Canadian Electrical Code requirements and be certified by either CSA, ULC, or Intertek Testing Systems (Warnock Hersey) and be supplied with the certifier's label.
2.8	Conductors and Cables	Delete 2.8.1 and replace with the following	Single Conductors: 600V, conductor size (AWG) as noted on contract drawings, stranded copper or aluminum type with RW90 polyethylene insulation, to conform to CSA C22.2 No. 38, 90 °C and colour coded per CEC.
		Add 2.8.5	<p>Minimum conductor size to be as follows, unless specified otherwise on Contract Drawings:</p> <ul style="list-style-type: none"> <li>.1 No 8 AWG copper or No 6 AWG aluminum for feeder conductors in conduit.</li> <li>.2 No 8 AWG copper or No 6 AWG aluminum for bond conductors in conduit.</li> <li>.3 No 12 AWG copper for luminaire conductors in poles.</li> </ul>
2.14	Luminaires	Delete 2.14.1 and replace with the following	LED luminaires shall be listed on the current edition of the City of Courtenay Approved Products list.
		Delete 2.14.2	
		Delete 2.14.5 and replace with the following	<p>Decorative luminaires to have:</p> <ul style="list-style-type: none"> <li>.1 Vandal resistant features</li> <li>.2 Photo-control receptacle</li> <li>.3 Powder coat finish</li> <li>.4 Quick disconnect terminations</li> </ul>
2.19	Service Panels	Add 2.19.1	Type 40A 120/240V, 60A 120/240V roadway lighting and 100A 120/240V combination roadway lighting / traffic signal, per Contract Drawings to include items listed within the Section 34 41 13 - Traffic Signals - 2.11.2 and Standard Detail Drawing E7.1 to E7.9





3.0 EXECUTION

3.3	Concrete Bases	Add 3.3.7	All concrete bases shall be pre-cast concrete only, unless noted on Contract Drawings or directed by the Contract Administrator.
3.4	Junction Boxes and Vaults	Add 3.4.5	All junction boxes shall be provided with RPVC bars to support electrical connections and fuse holders. The RPVC bars shall be attached into the junction box side walls with the electrical connections/fuse holders tie-wrapped in place and installed in the up-right position.
3.5	Underground Conduit	Add 3.5.6	Conduits shall be blown out with compressed air, from both ends if necessary, then swabbed with the appropriate size mandrel to remove stones, dirt, water and other material which may have entered during installation.
		Add 3.5.7	Conduit shall not be bent in the field. Only factory bends will be accepted.
3.8	Wiring	Delete 3.8.11 and replace with the following	Bond all luminaires and receptacles with No. 12 RW90 copper green conductor, and steel junction box lids with No. 8 RW90 copper green conductor.
		Add 3.8.12	Aluminum conductors shall be spliced with H-Tap compression connections or equivalent. Spliced connections shall be completed using an anti-oxidant compound complete with split bolt connector. Spliced connections shall be wrapped with self-fusing rubberized tape and then completely covered with PVC tape.
3.13	Pole Finish Application	Delete 3.13 and replace with the following	.1 Pole finish: Hot dip galvanized or powder coat .2 Power coat colour to be confirmed with City



MMCD Section 31 05 17S    AGGREGATES AND GRANULAR MATERIALS

2.0    PRODUCTS

2.11    Recycled Aggregate Material    Delete 2.11.1 and replace with the following    Aggregates containing recycled material may be utilized if approved by the Contract Administrator. A maximum of 25% recycled aggregate may be used in sub-base gravel, and a maximum of 15% recycled aggregate is permitted in base gravel. In addition to meeting all other conditions of this specification, recycled material should not reduce the quality of construction achievable with quarried materials. Recycled material shall consist only of aggregates, crushed portland cement concrete, or asphalt that is free of impurities.

2.13    Path Chip    Add Clause 2.13.1: To be crushed gravel conforming to following gradations:

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Sieve Designation	Percent Passing		
9.5mm			100
4.75mm	80	–	100
2.36mm	40	–	60
1.18mm	20	–	40
0.6mm	10	–	30
0.3mm	8	–	20
0.15mm	5	–	15
0.075mm	3	–	10

---



MMCD Section 33 11 01S

WATERWORKS

1.0 GENERAL

1.7	Scheduling of Work	Delete 1.7.5 and replace with the following	Notify Contract Administrator, fire department and City of Courtenay Public Works Office of any planned or accidental interruption of water supply. After hours phone number to be identified at the project initiation meeting.
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2.0 PRODUCTS

2.1	General	Delete 2.1.1 and replace with the following	Pipe material as shown on Contract Drawings, excluding main pipe within chambers or structures, which shall be stainless steel, and leads to fire hydrants which shall be PVC.
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2.2	Mainline Pipe, Joints and Fittings	Delete 2.2.4.8.1 and replace with the following	Flange gaskets to be manufactured from black natural rubber 3.175mm thick.
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Delete 2.2.4.14.1.8 and replace with the following	Tapping machine must have provision for pressure testing.
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2.3	Valves and Valve Boxes	Delete 2.3.6.2 and replace with the following	Valve box riser to be 150mm diameter PVC C900.
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2.5	Service Connections, Pipe, Joints and Fittings	Delete 2.5.5 and replace with the following	Copper tubing joints to be compression type suitable for 1100 kPa working pressure.
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2.6	Hydrants	Delete 2.6.1.6.3 and replace with the following	Pump nozzle shall be "quick connect" STORZ type.
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Delete 2.6.2 and replace with the following	Colour: As specified in the approved products list
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3.0 EXECUTION

3.17	General Procedure Flushing, Testing, and Disinfection	Add 3.17.7	Contractor shall record locations of installed testing point locations as per paragraph 1.7.2.2 under Section 01 33 01 Project Record Documents.
3.18	Cleaning and Preliminary Flushing	Delete 3.18.2 and replace with the following	Isolation of existing water system where required will be performed by the City. Do not operate any existing valves.
3.23	Connection to Existing Mains	Delete 3.23.1 and replace with the following	Connections to the existing waterworks system will be made by the City or by the Contractor under supervision of the City. Contractor to make all necessary scheduling arrangements with the City to prevent construction delays.
		Add 3.23.2	Isolation of existing water system where required will be performed by the City. The Contractor shall not operate any existing valves.
		Add 3.23.3	The contractor is to schedule a “pre-construction” meeting to occur a minimum of one (1) week prior to connection to the existing waterworks system. This meeting will include, at minimum, the Contractor, Contract Administrator, and City of Courtenay Public Works in attendance. The purpose of this meeting is to review all pre-connection documentation, public notifications, and works to be completed by both the Contractor and City of Courtenay.



MMCD Section 33 30 01S

SANITARY SEWERS

1.0 GENERAL

1.1 Related Work      Add the following      .5 CCTV Inspection of Pipelines      Section 33 01 30.1  
to 1.1

2.0 PRODUCTS

2.3 Service      Delete 2.3.8.2  
Connections

3.0 EXECUTION

3.8 Connections to      Delete 3.8.3      Connection to existing PVC mainline sewers to be as  
Existing Mainline      and replace with      shown on Contract Documents or approved by  
Pipes      the following      Contract Administrator. Coring of pipe to be done  
with the proper size and type of coring bit. Use  
saddle for connections more than two sizes smaller  
than mainline. For less than two sizes, manufactured  
we shall be used.

3.18 Video Inspection      Add the following      The Contractor shall complete CCTV video inspection  
to 3.18.1      prior to completing paving works and again prior to  
the expiry of the maintenance period. CCTV Video  
inspection shall be completed for all gravity mains  
including service connections.



MMCD Section 33 40 01S

STORM SEWERS

2.0 PRODUCTS

2.6	Service Connections	Delete 2.6.1 and replace with the following	Storm sewer service connections to be 150 mm minimum diameter; maximum diameter as specified on Contract Drawings
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3.0 EXECUTION

3.12	Inspection and Testing	Add 3.12.4	The Contractor shall complete CCTV video inspection prior to completing paving works and again prior to the expiry of the maintenance period. CCTV Video inspection shall be completed for all gravity mains including service connections.
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MMCD Section 33 44 01S

MANHOLES AND CATCHBASINS

1.0 GENERAL

- |     |              |           |  |
|-----|--------------|-----------|--|
| 1.1 | Related Work | Add 1.1.6 | Hot Mix Asphalt Concrete Pavement Section 32 12 16 |
|     |              | Add 1.1.7 | Portland Cement Concrete Pavement Section 32 13 13 |

3.0 EXECUTION

- |     |                      |  |  |
|-----|----------------------|--|--|
| 3.3 | Manhole Installation | Delete 3.3.15 and replace with the following | Install drop structures where required to Standard Detail Drawings S3. Inside drop structure shall not be permitted. |
|-----|----------------------|--|--|



MMCD Section 34 41 13S

TRAFFIC SIGNALS

2.0 PRODUCTS

2.1	General	Delete 2.1.2 and replace with the following	All products supplied to be new, in accordance with Contract Documents. All products are to meet Canadian Electrical Code requirements and be certified by either CSA, ULC, or Intertek Testing Systems (Warnock Hersey) and be supplied with the certifier's label.
2.16	Traffic and Pedestrian Signals	Delete 2.16.2 and replace with the following	Yellow as indicated on the contract drawings, complete with 50 mm wide ASTM VI retro-reflective tape around the outer edge.
2.20	Audible Signals	Delete 2.20.1 and replace with the following	The City utilizes APS audible signals which are specified in the current edition of the City's Approved Product list.
2.22	Luminaires	Delete 2.22.1 and replace with the following  Delete 2.22.2  Delete 2.22.5 and replace with the following	LED luminaires are specified in the current edition of the City's Approved Products list.   Decorative luminaires to have: 1. Vandal resistant features 2. Photo-control receptacle 3. Powder coat finish 4. Quick disconnect terminations
2.27	Video Detection System	Delete 2.27	
3.0 EXECUTION			
3.3	Concrete Bases	Add 3.3.7	All concrete bases shall be pre-cast concrete only, unless noted on Contract Drawings or directed by the Contract Administrator.
3.4	Junction Boxes and Vaults	Add 3.4.5	All junction boxes shall be provided with RPVC bars to support electrical connections and fuse holders. The RPVC bars shall be attached into the junction box side walls with the electrical connections/fuse holders tie-wrapped in place and installed in the up-right position.





3.5	Underground Conduit	Add 3.5.6	Conduits shall be blown out with compressed air, from both ends if necessary, then swabbed with the appropriate size mandrel to remove stones, dirt, water and other material which may have entered during installation.
		Add 3.5.7	All conduits entering traffic controller cabinets shall be sealed with "Duct Seal".
		Add 3.5.8	Conduit shall not be bent in the field. Only factory bends will be accepted.
3.7	Traffic and Pedestrian Signal Head Mounting	Delete 3.7.4 and replace with the following	Completely cover all traffic and pedestrian signal heads with dark coloured pre-manufactured signal cover bags from the time they are installed until system startup.
3.16	Traffic Controller	Add 3.16.8	Traffic cabinet interior shall be kept dry during inclement weather.
3.22	Pole Finish Application	Delete 3.22.1 and replace with the following	Pole finish: Hot dip galvanized or powder coat. Powder coat colour to be confirmed with the City

**SCHEDULE 3**  
**SUPPLEMENTARY STANDARD DETAIL DRAWINGS**

## SUPPLEMENTARY STANDARD DETAIL DRAWINGS

This schedule contains supplementary standard detail drawings to be applied in conjunction with the Standard Detail Drawings of the Master Municipal Construction Documents, dated 2009, both of which shall apply to all Works and Services constructed within the City of Courtenay.

Supplementary Standard Detail Drawings contained within this Schedule supplement or supersede the Master Municipal Construction Document (MMCD). Where the City of Courtenay Supplementary Standard Detail Drawings are in conflict with the MMCD, the City of Courtenay Supplementary Standard Detail Drawings shall take precedence.

Drawing numbers in the City of Courtenay Supplementary Standard Detail Drawings coincide with the MMCD numbering protocol.

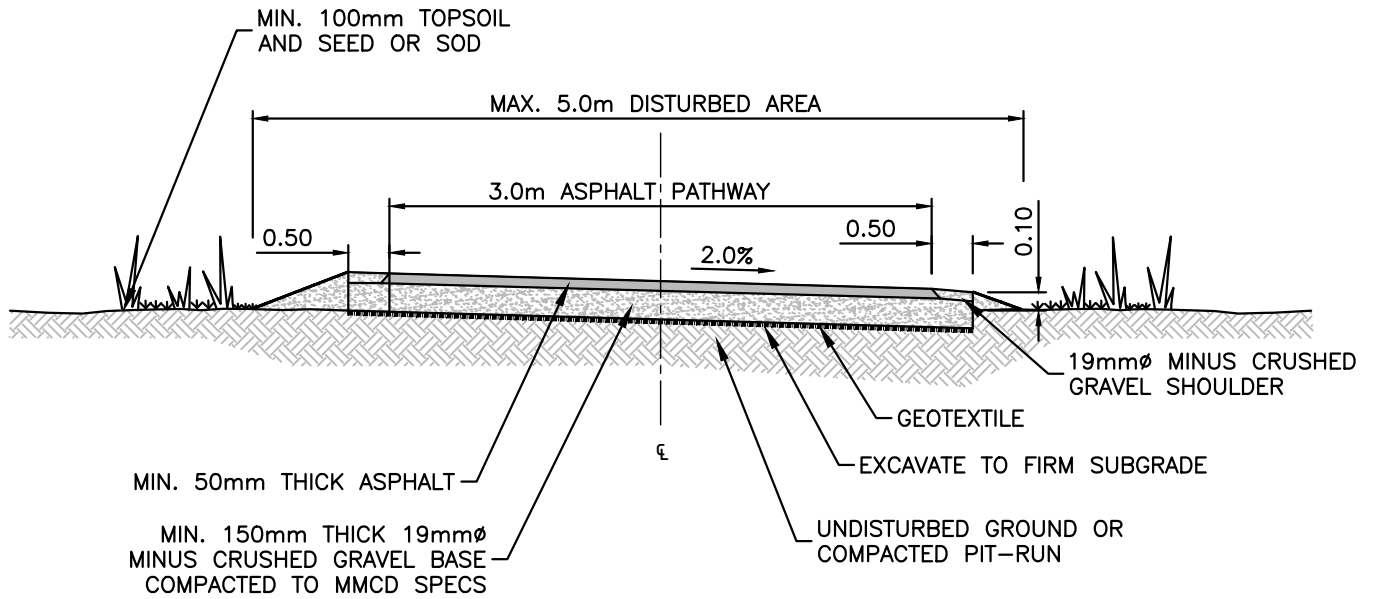
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**CITY OF COURTENAY**  
**SUPPLEMENTARY STANDARD DETAIL DRAWING**



**NOTE:**

1. GRAVEL DEPTH TO SUIT GROUND CONDITIONS.
2. 150 $\phi$  DR-28 PVC DRAIN TO BE INSTALLED WHERE REQUIRED.
3. MATERIALS AND CONSTRUCTION TO MEET CURRENT CITY OF COURTENAY SPECIFICATIONS.
4. THE CONTRACTOR IS RESPONSIBLE FOR EROSION AND SEDIMENT CONTROLS AS REQUIRED TO COMPLETE THE WORK. THE CONTRACTOR IS TO SUPPLY A "SEDIMENT & EROSION CONTROL PLAN" FOR REVIEW BY THE CITY PRIOR TO CONSTRUCTION.
5. ALL MATERIALS TO BE SUPPLIED & CONSTRUCTED AS PER THE MOST RECENT VERSION OF THE MASTER MUNICIPAL CONTRACT DOCUMENTS (MMCD).
6. IF ACCESS REQUIRED BY CITY PUBLIC WORKS, PATHWAY MUST INCLUDE A MINIMUM UNOBSTRUCTED ACCESS OF 4.0m.
7. WHERE PATHWAY INTERSECTS WITH CITY ROAD OR SIDEWALK, THE FIRST 5.0m IS TO BE CONSTRUCTED OF CONCRETE COMPLETE WITH REMOVABLE BOLLARD PER DETAIL CSSD C12. SEE DETAIL CSSD C10 FOR DETAILS.

NOVEMBER, 2017



**ALTERNATIVE DESIGN STANDARD 1**  
**MULTI-USE PATH**

DRAWING NUMBER

**CSSD A1**

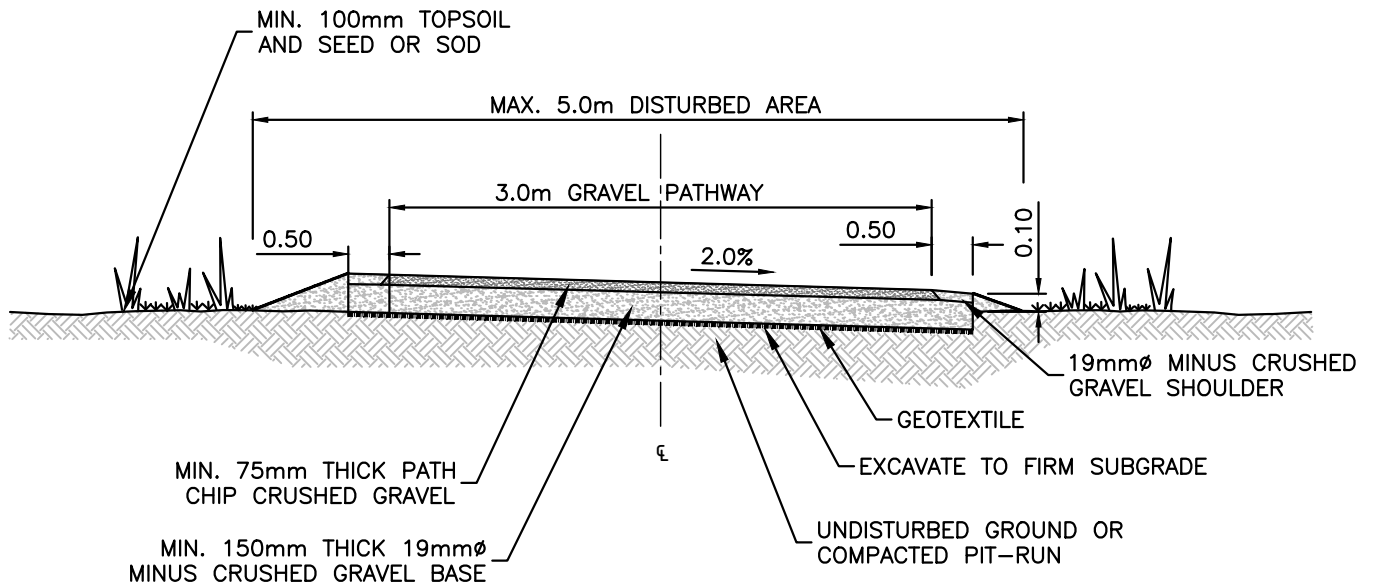
REVISION NUMBER

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SCALE

**205**

**CITY OF COURTENAY**  
**SUPPLEMENTARY STANDARD DETAIL DRAWING**



**NOTE:**

1. GRAVEL DEPTH TO SUIT GROUND CONDITIONS.
2. 150 $\emptyset$  DR-28 PVC DRAIN TO BE INSTALLED WHERE REQUIRED.
3. MATERIALS AND CONSTRUCTION TO MEET CURRENT CITY OF COURTENAY SPECIFICATIONS.
4. THE CONTRACTOR IS RESPONSIBLE FOR EROSION AND SEDIMENT CONTROLS AS REQUIRED TO COMPLETE THE WORK. THE CONTRACTOR IS TO SUPPLY A "SEDIMENT & EROSION CONTROL PLAN" FOR REVIEW BY THE CITY PRIOR TO CONSTRUCTION.
5. ALL MATERIALS TO BE SUPPLIED & CONSTRUCTED AS PER THE MOST RECENT VERSION OF THE MASTER MUNICIPAL CONTRACT DOCUMENTS (MMCD).
6. WHERE PATHWAY INTERSECTS WITH CITY ROAD OR SIDEWALK, THE FIRST 5.0m IS TO BE CONSTRUCTED OF CONCRETE COMPLETE WITH REMOVABLE BOLLARD PER DETAIL CSSD C12. SEE DETAIL CSSD C10 FOR DETAILS.
7. TRAIL WIDTH MAY BE REDUCED TO 1.5m IN RIPARIAN AREAS, BUT NOT WHERE REQUIRED FOR MAINTENANCE ACCESS.

NOVEMBER, 2017



**ALTERNATIVE DESIGN STANDARD 2**  
**GRAVEL TRAIL**

DRAWING NUMBER

**CSSD A2**

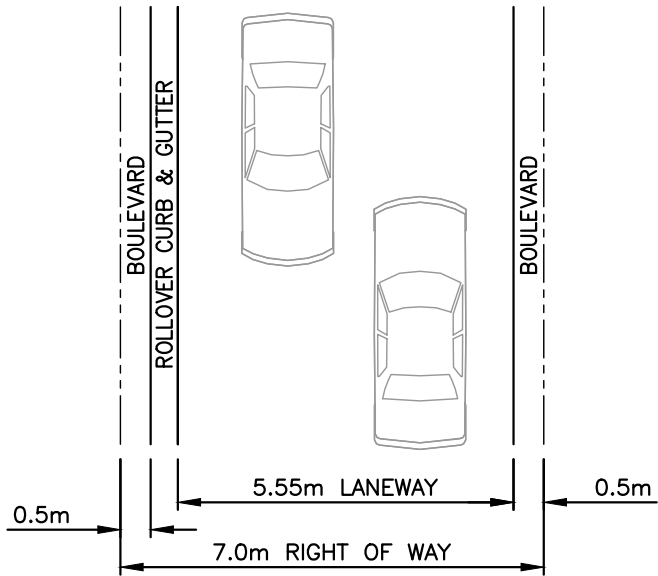
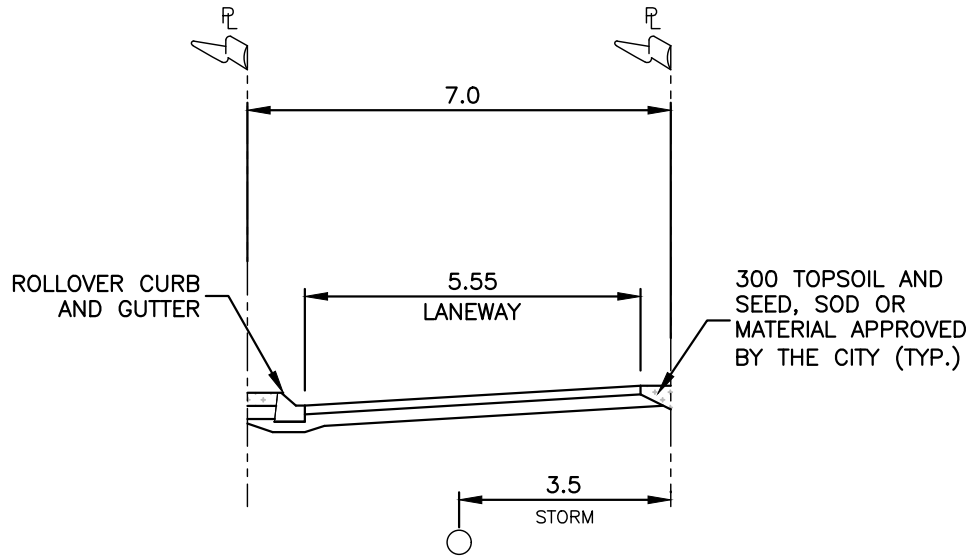
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SCALE

**206**

**CITY OF COURTENAY**  
**SUPPLEMENTARY STANDARD DETAIL DRAWING**



NOVEMBER, 2017



**ALTERNATIVE DESIGN STANDARD 3**  
**LANE**

DRAWING NUMBER

**CSSD A3**

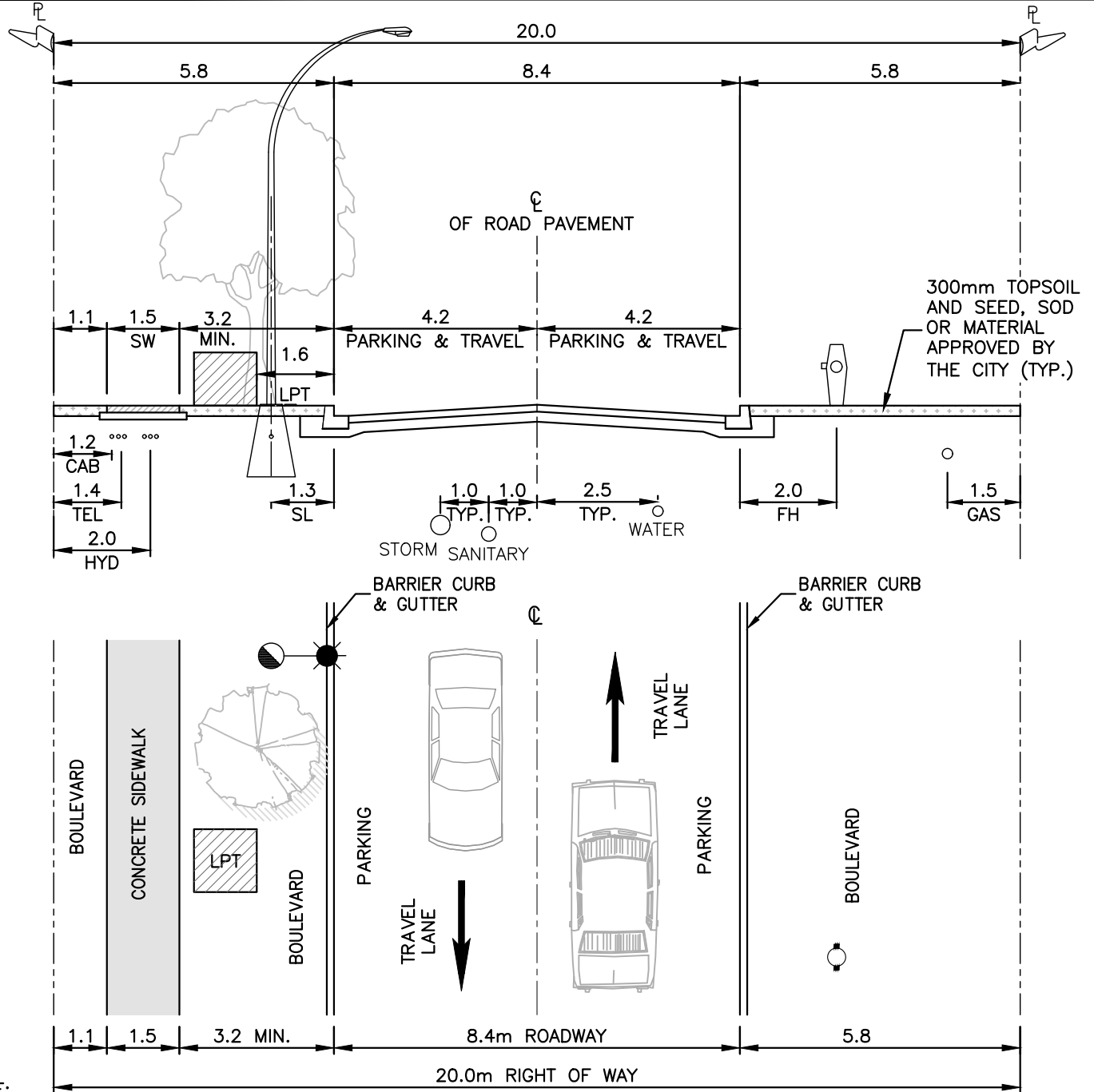
REVISION NUMBER

0

SCALE

**207**

# CITY OF COURTENAY SUPPLEMENTARY STANDARD DETAIL DRAWING



NOTE:

1. PAVEMENT MARKINGS NOT REQUIRED FOR THE CENTRE LINES, INTERSECTION APPROACHES AND FOG LINES.
2. 3rd PARTY UTILITY DESIGN TO BE PROVIDED BY THE RESPECTIVE UTILITIES.
3. THE STRUCTURAL ROAD ELEMENTS SHOWN ARE MINIMUM REQUIREMENTS. ROAD STRUCTURE TO BE DESIGNED BASED ON SITE CONDITIONS BY A QUALIFIED GEOTECHNICAL ENGINEER.
4. SIDEWALK TO BE LOCATED ON NORTH OR WEST SIDE OF ROAD.
5. HYDRO SERVICE BOX TO INCLUDE A STORM SEWER SERVICE CONNECTION AS PER CSSD S8. INSPECTION CHAMBER TO BE LOCATED 300mm FROM SERVICE BOX.
6. TREES TO BE CENTRED IN BOULEVARDS.

NOVEMBER, 2017



## LOCAL ROAD SECTION

DRAWING NUMBER

**CSSD L1**

REVISION NUMBER

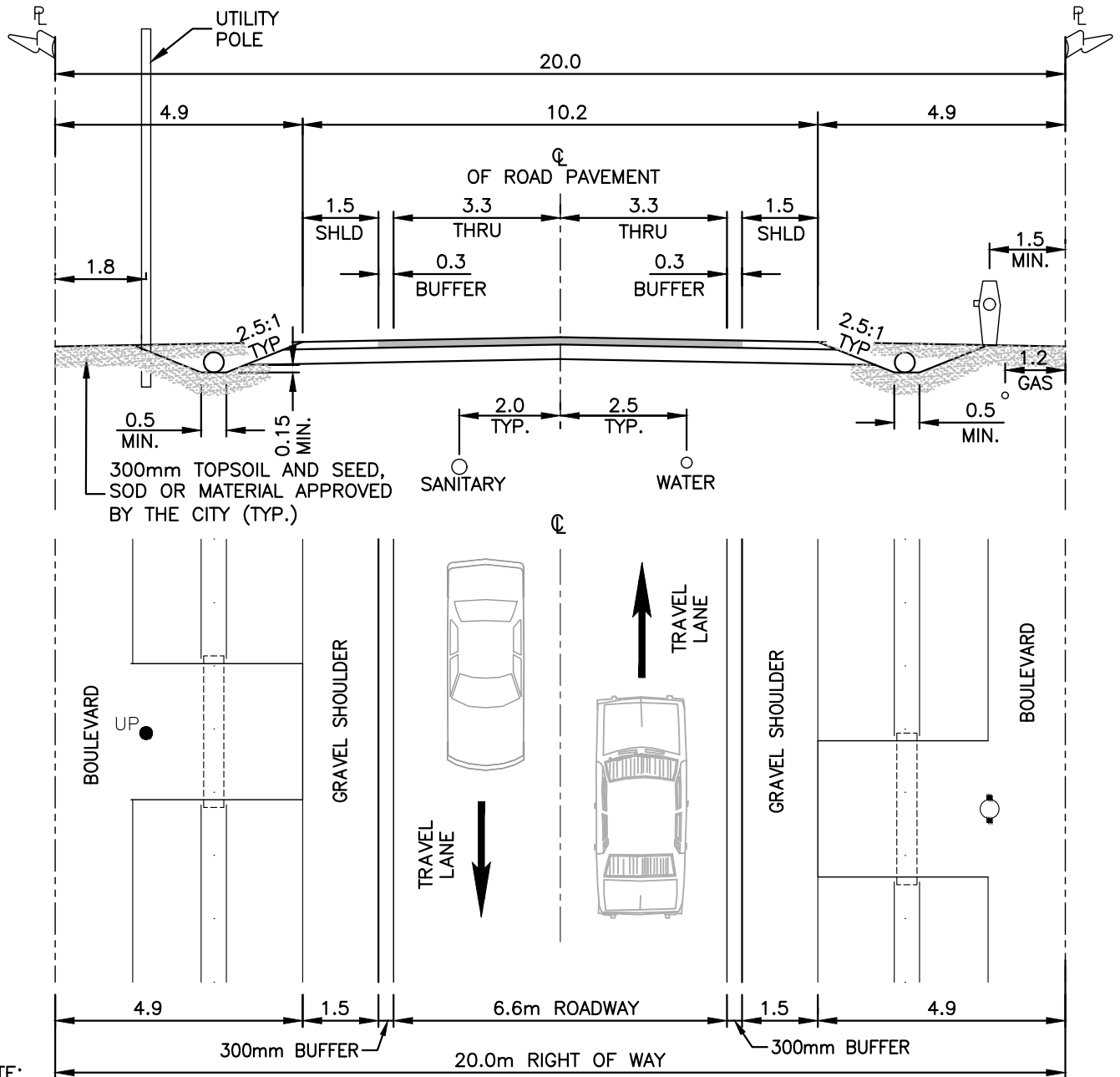
0

SCALE

**208**



# CITY OF COURTENAY SUPPLEMENTARY STANDARD DETAIL DRAWING



NOTE:

1. DESIGNATED BIKE ROUTE TO HAVE 1.5m PAVED AND 0.5m GRAVEL SHOULDER ON BOTH SIDES.
2. PAVEMENT MARKINGS TO INCLUDE: CENTRE LINE AND FOG LINES TO TAC STANDARD.
3. 3.0m LONG CULVERT CROSSING TO BE INSTALLED IN FRONT OF HYDRANT (C/W HEADWALLS), SIZED APPROPRIATELY FOR DRAINAGE FLOWS (MIN. 300mm).
4. REQUIREMENT FOR ROADSIDE BARRIER TO BE DETERMINED AS PER TAC WARRANT.
5. ADDITIONAL 0.75m ASPHALT WIDTH TO BE ADDED TO SHOULDER WIDTH IF ROADSIDE BARRIER IS REQUIRED.
6. 3rd PARTY UTILITY DESIGN TO BE PROVIDED BY THE RESPECTIVE UTILITIES.
7. IF UTILITY POLE LOCATED WITHIN DITCH PROFILE, 3.0m LONG CULVERT TO BE INSTALLED IN FRONT OF UTILITY POLE.

## COLLECTOR ROAD SECTION RURAL

DRAWING NUMBER

CSSD CRu

REVISION NUMBER

0

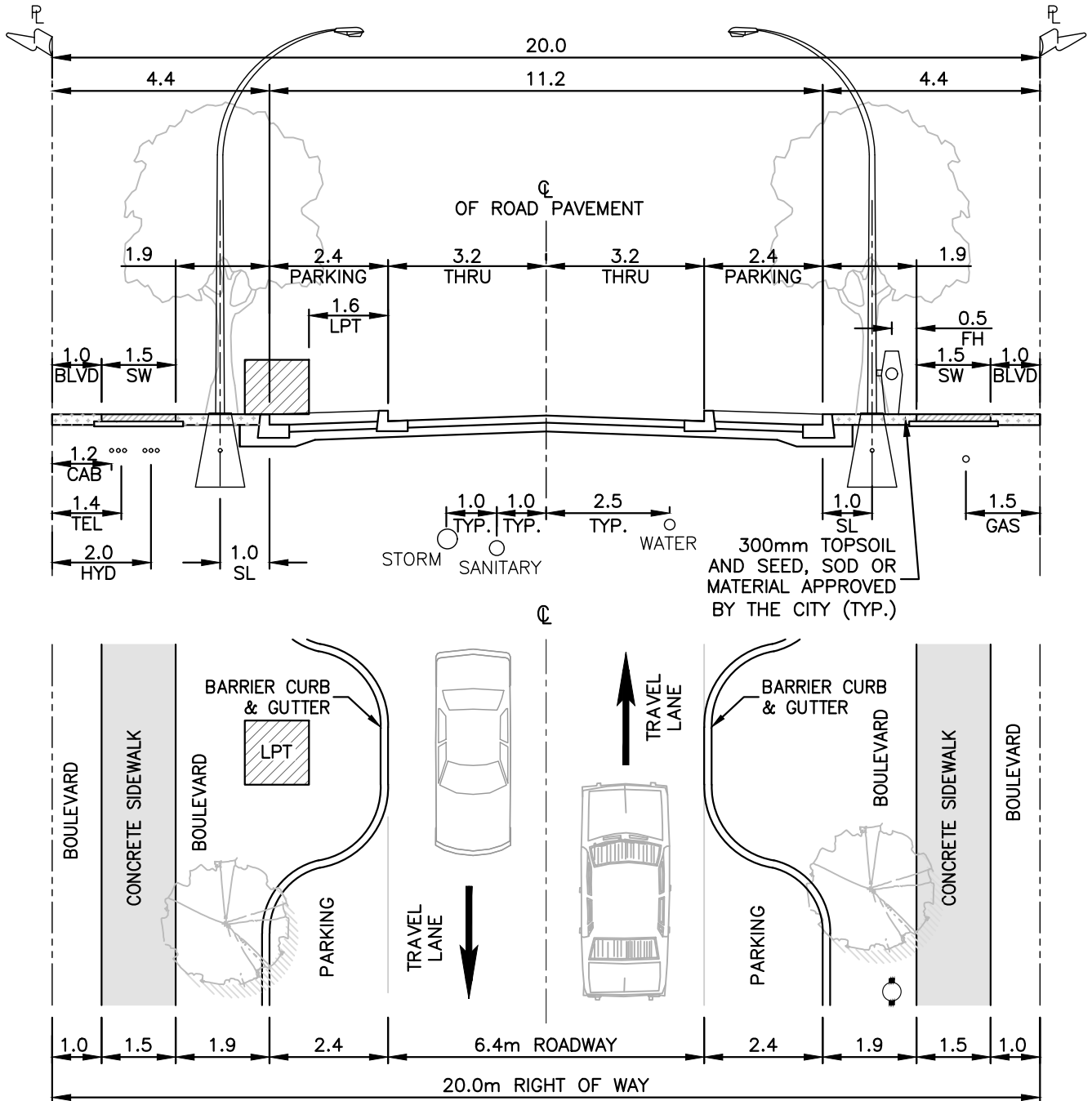
SCALE

**209**

NOVEMBER, 2017



# CITY OF COURTENAY SUPPLEMENTARY STANDARD DETAIL DRAWING



NOTE:

1. PAVEMENT MARKINGS TO INCLUDE: CENTRE LINE, LANE LINE, AND TRANSVERSE ROAD MARKINGS TO TAC STANDARD.
2. 3rd PARTY UTILITY DESIGN TO BE PROVIDED BY THE RESPECTIVE UTILITIES.
3. BULB OUTS TO BE LOCATED AT LPTS, CROSSWALKS AND INTERSECTIONS TO DELINEATE PARKING POCKETS.
4. HYDRO SERVICE BOX TO INCLUDE A STORM SEWER SERVICE CONNECTION AS PER CSSD S8. INSPECTION CHAMBER TO BE LOCATED 300mm FROM SERVICE BOX.
5. TREES TO BE CENTRED IN BOULEVARDS.

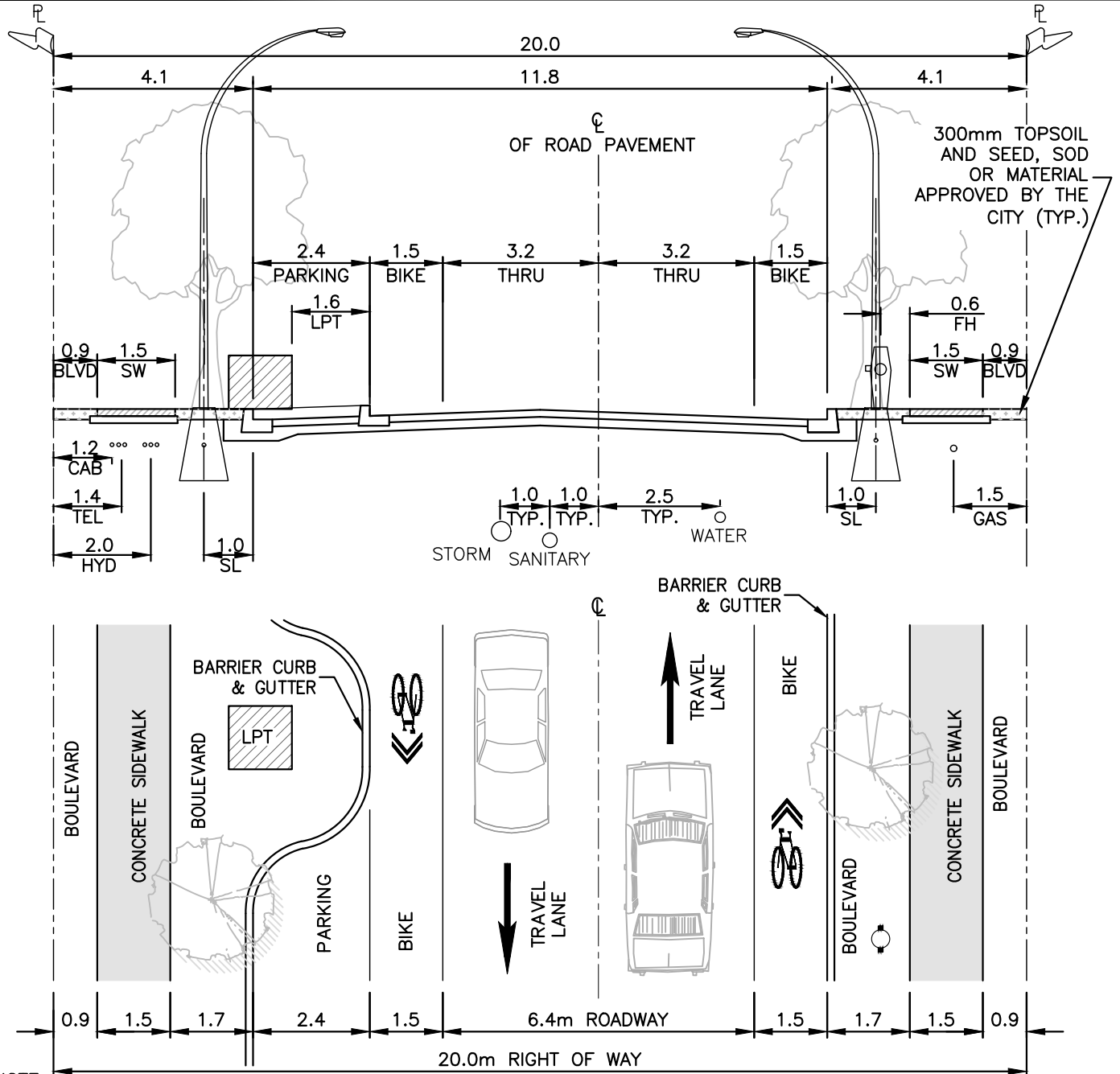
NOVEMBER, 2017



## COLLECTOR ROAD SECTION RESIDENTIAL

DRAWING NUMBER	<b>CSSD CRe</b>
REVISION NUMBER	0
SCALE	<b>2:10</b>

**CITY OF COURTENAY  
SUPPLEMENTARY STANDARD DETAIL DRAWING**



NOTE:

1. PAVEMENT MARKINGS TO INCLUDE: CENTRE LINE, LANE LINES, BIKE LANES AND ALL TRANSVERSE MARKINGS TO TAC STANDARD.
2. 3rd PARTY UTILITY DESIGN TO BE PROVIDED BY THE RESPECTIVE UTILITIES.
3. BULB OUTS TO BE LOCATED AT LPTS, CROSSWALKS AND INTERSECTIONS TO DELINEATE PARKING POCKETS.
4. PARKING PROVISION TO BE ON NORTH OR WEST SIDE OF ROAD.
5. HYDRO SERVICE BOX TO INCLUDE A STORM SEWER SERVICE CONNECTION AS PER CSSD S8. INSPECTION CHAMBER TO BE LOCATED 300mm FROM SERVICE BOX.
6. TREES TO BE CENTRED IN BOULEVARDS.

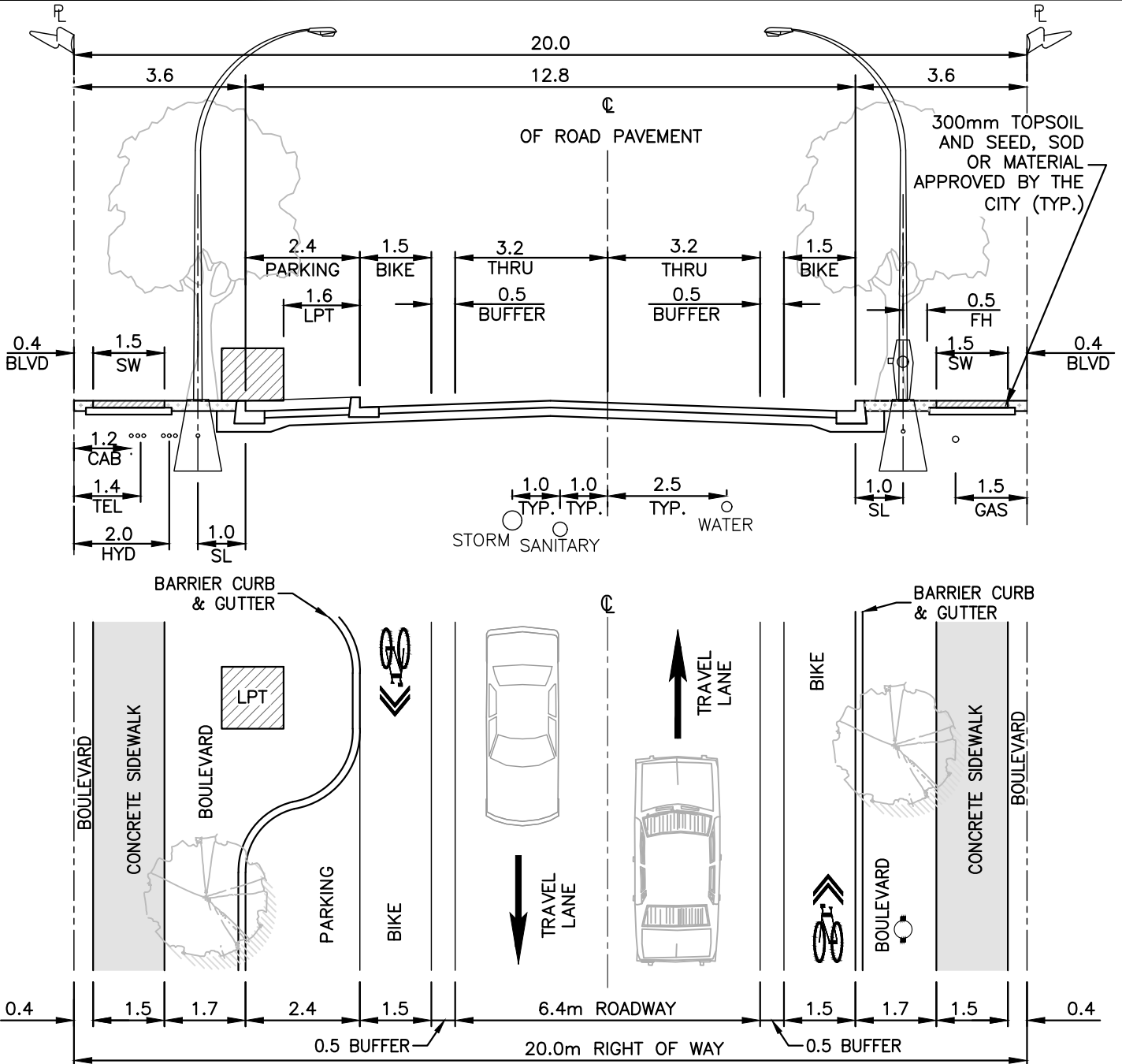
NOVEMBER, 2017



**COLLECTOR ROAD SECTION  
RESIDENTIAL – B**

DRAWING NUMBER	CSSD CRB
REVISION NUMBER	0
SCALE	<b>2:1</b>

# CITY OF COURTENAY SUPPLEMENTARY STANDARD DETAIL DRAWING



NOTE:

1. PAVEMENT MARKINGS TO INCLUDE: CENTRE LINE, LANE LINES, BIKE LANES, AND TRANSVERSE ROAD MARKINGS TO TAC STANDARD.
2. BIKE LANE BUFFER TO BE HATCHED / GORE TO TAC STANDARD.
3. 3rd PARTY UTILITY DESIGN TO BE PROVIDED BY THE RESPECTIVE UTILITIES.
4. BULB OUTS TO BE LOCATED AT LPTS, CROSSWALKS AND INTERSECTIONS TO DELINEATE PARKING POCKET.
5. HYDRO SERVICE BOX TO INCLUDE A STORM SEWER SERVICE CONNECTION AS PER CSSD S8. INSPECTION CHAMBER TO BE LOCATED 300mm FROM SERVICE BOX.
6. TREES TO BE CENTRED IN BOULEVARDS.

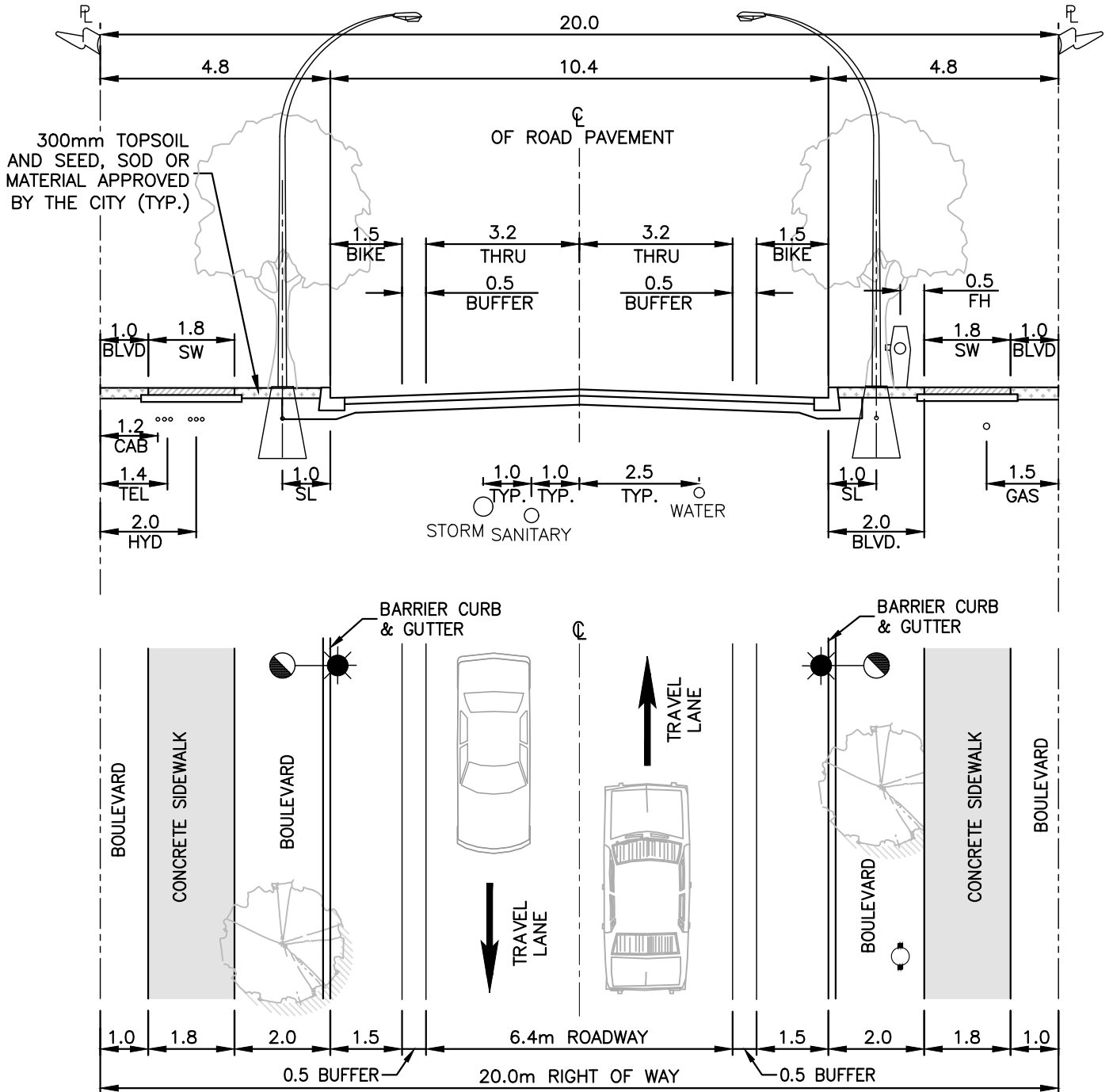
NOVEMBER, 2017



## COLLECTOR ROAD SECTION RESIDENTIAL - C

DRAWING NUMBER	<b>CSSD CRC</b>
REVISION NUMBER	0
SCALE	<b>212</b>

**CITY OF COURTENAY  
SUPPLEMENTARY STANDARD DETAIL DRAWING**



**NOTE:**

1. PAVEMENT MARKINGS TO INCLUDE: CENTRE LINE, BIKE LANES AND TRANSVERSE ROAD MARKINGS TO TAC STANDARD.
2. BIKE LANE BUFFER TO BE HATCHED / GORE TO TAC STANDARD.
3. 3rd PARTY UTILITY DESIGN TO BE PROVIDED BY THE RESPECTIVE UTILITIES.
4. THIS ROAD SECTION ASSUMES NO HYDRO LOADS OR LPT.
5. TREES TO BE CENTRED IN BOULEVARDS.

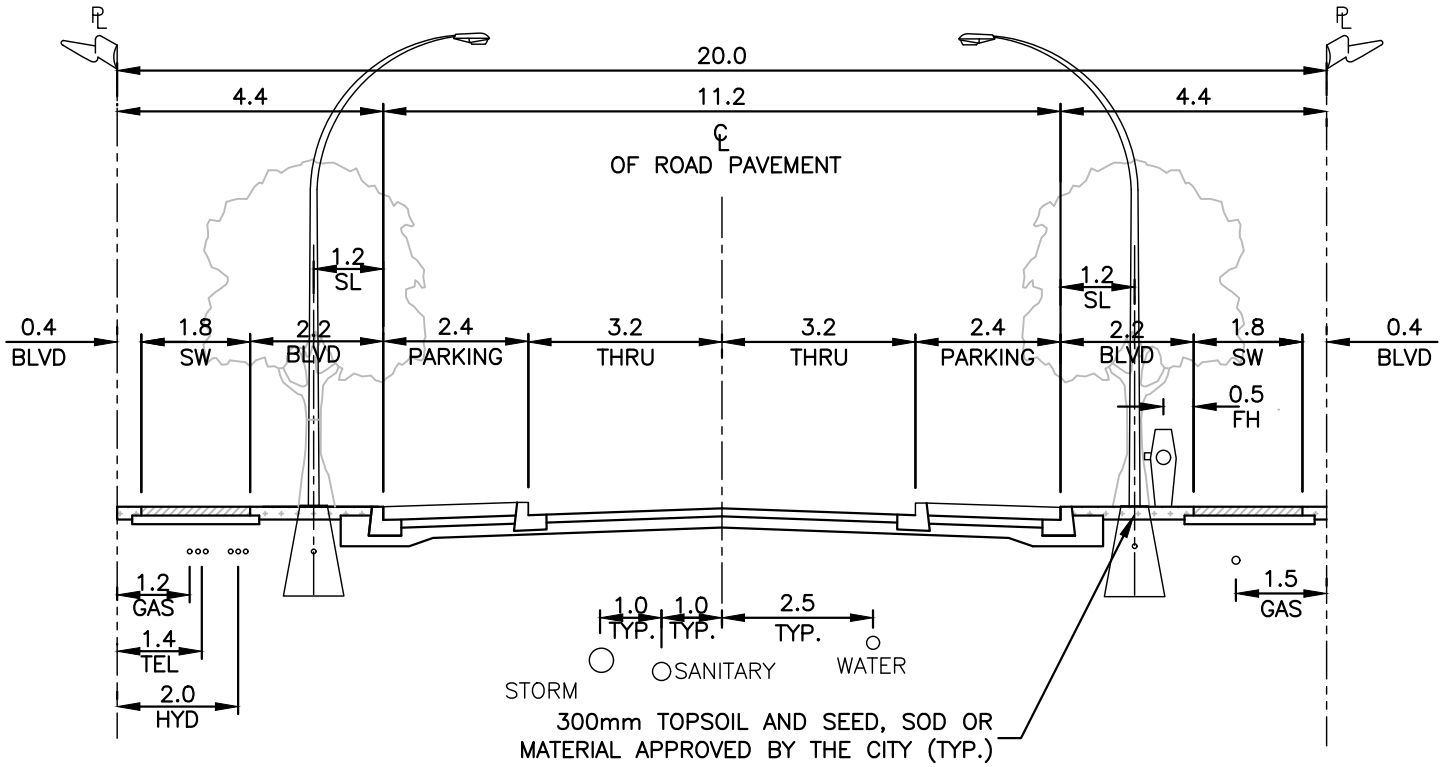
NOVEMBER, 2017



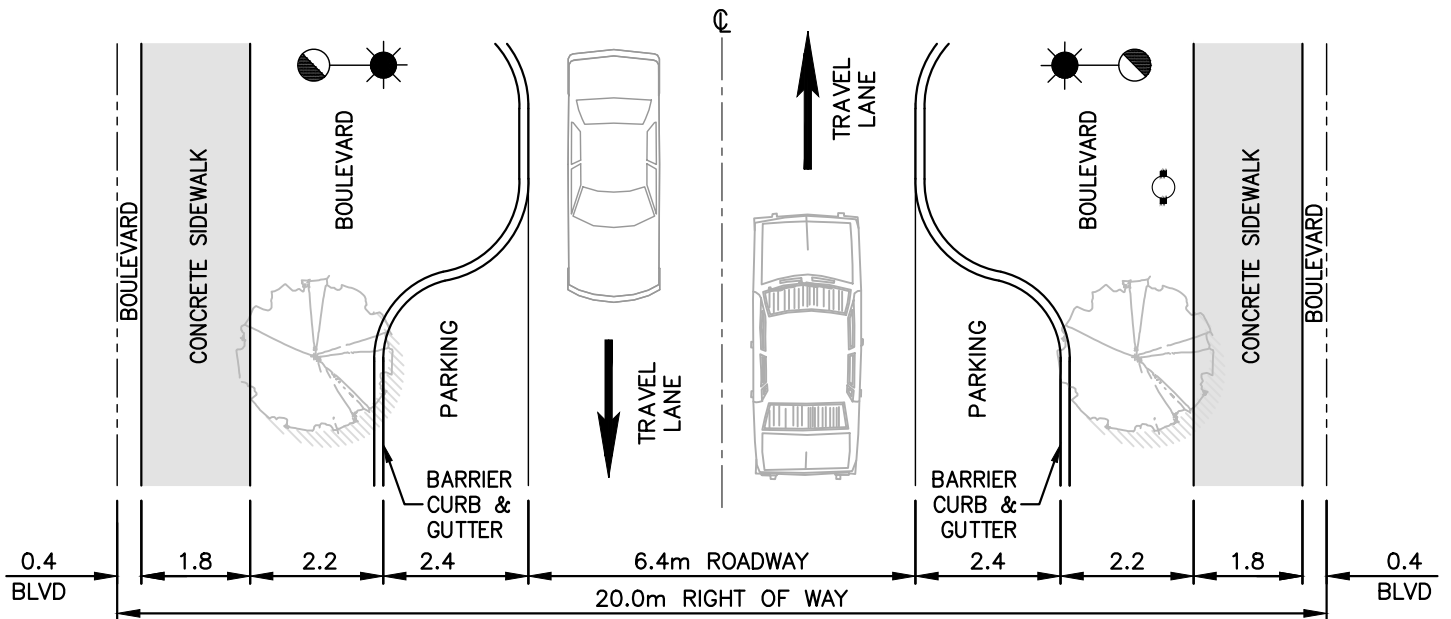
**COLLECTOR ROAD SECTION  
URBAN – B**

DRAWING NUMBER	<b>CSSD CUB</b>
REVISION NUMBER	0
SCALE	<b>213</b>

# CITY OF COURTENAY SUPPLEMENTARY STANDARD DETAIL DRAWING



300mm TOPSOIL AND SEED, SOD OR MATERIAL APPROVED BY THE CITY (TYP.)



**NOTE:**

1. PAVEMENT MARKINGS TO INCLUDE: CENTRE LINE, BIKE LANES AND TRANSVERSE ROAD MARKINGS TO TAC STANDARD.
2. 3rd PARTY UTILITY DESIGN TO BE PROVIDED BY THE RESPECTIVE UTILITIES.
3. THIS ROAD SECTION ASSUMES NO HYDRO LOADS OR LPT.
4. BULB OUTS TO BE LOCATED AT INTERSECTIONS.
5. TREES TO BE CENTRED IN BOULEVARDS.

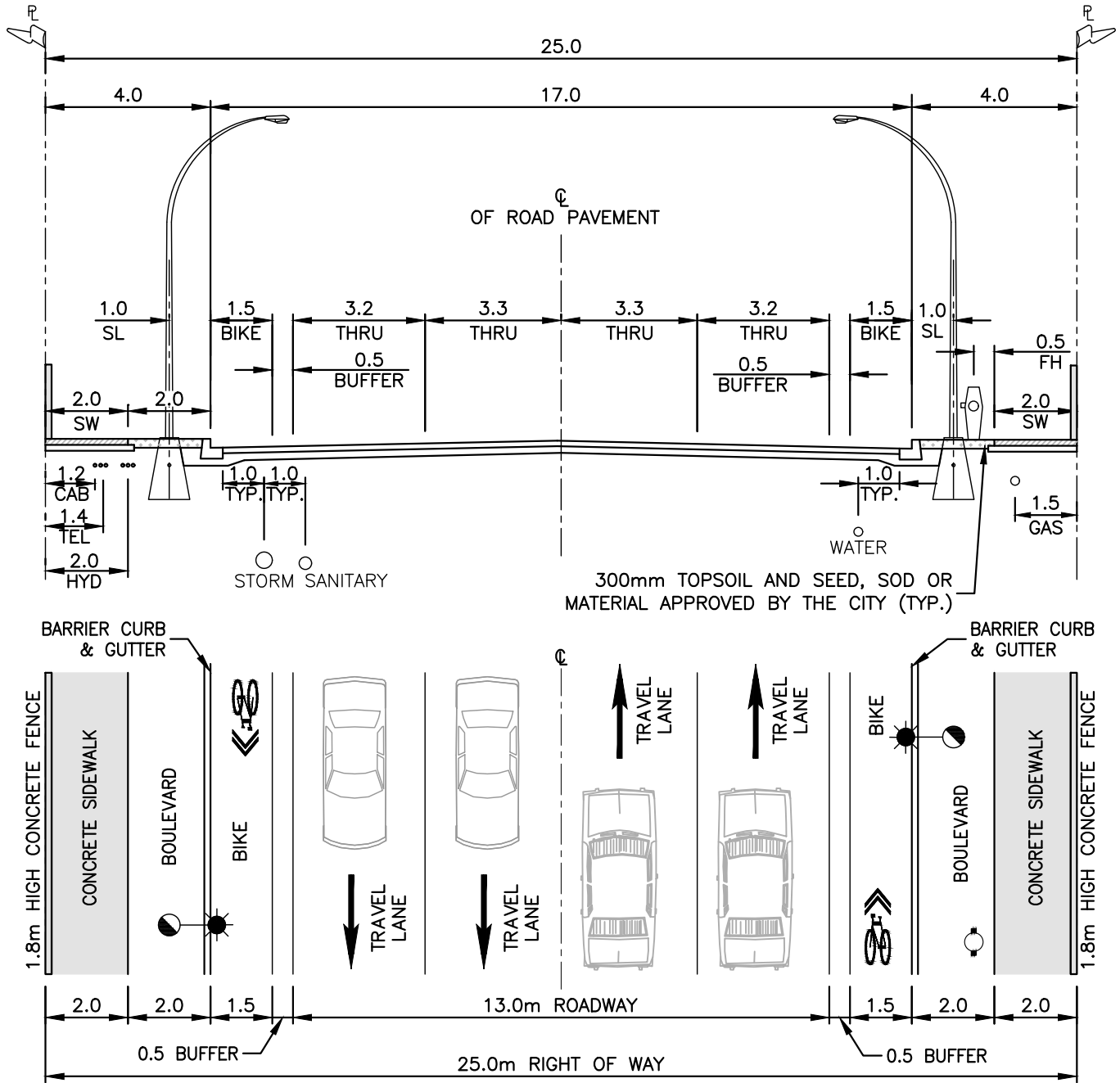
NOVEMBER, 2017



## COLLECTOR ROAD SECTION URBAN - P

DRAWING NUMBER	<b>CSSD CUP</b>
REVISION NUMBER	0
SCALE	<b>214</b>

# CITY OF COURTENAY SUPPLEMENTARY STANDARD DETAIL DRAWING



**NOTE:**

1. PAVEMENT MARKINGS TO INCLUDE: CENTRE LINE, THRU LANES, BIKE LANES AND TRANSVERSE ROAD MARKINGS TO TAC STANDARD.
2. BIKE LANE BUFFER TO BE HATCHED / GORE TO TAC STANDARD.
3. 3rd PARTY UTILITY DESIGN TO BE PROVIDED BY THE RESPECTIVE UTILITIES.
4. HYDRO SERVICE BOX TO INCLUDE A STORM SEWER SERVICE CONNECTION AS PER CSSD S8. INSPECTION CHAMBER TO BE LOCATED 300mm FROM SERVICE BOX.

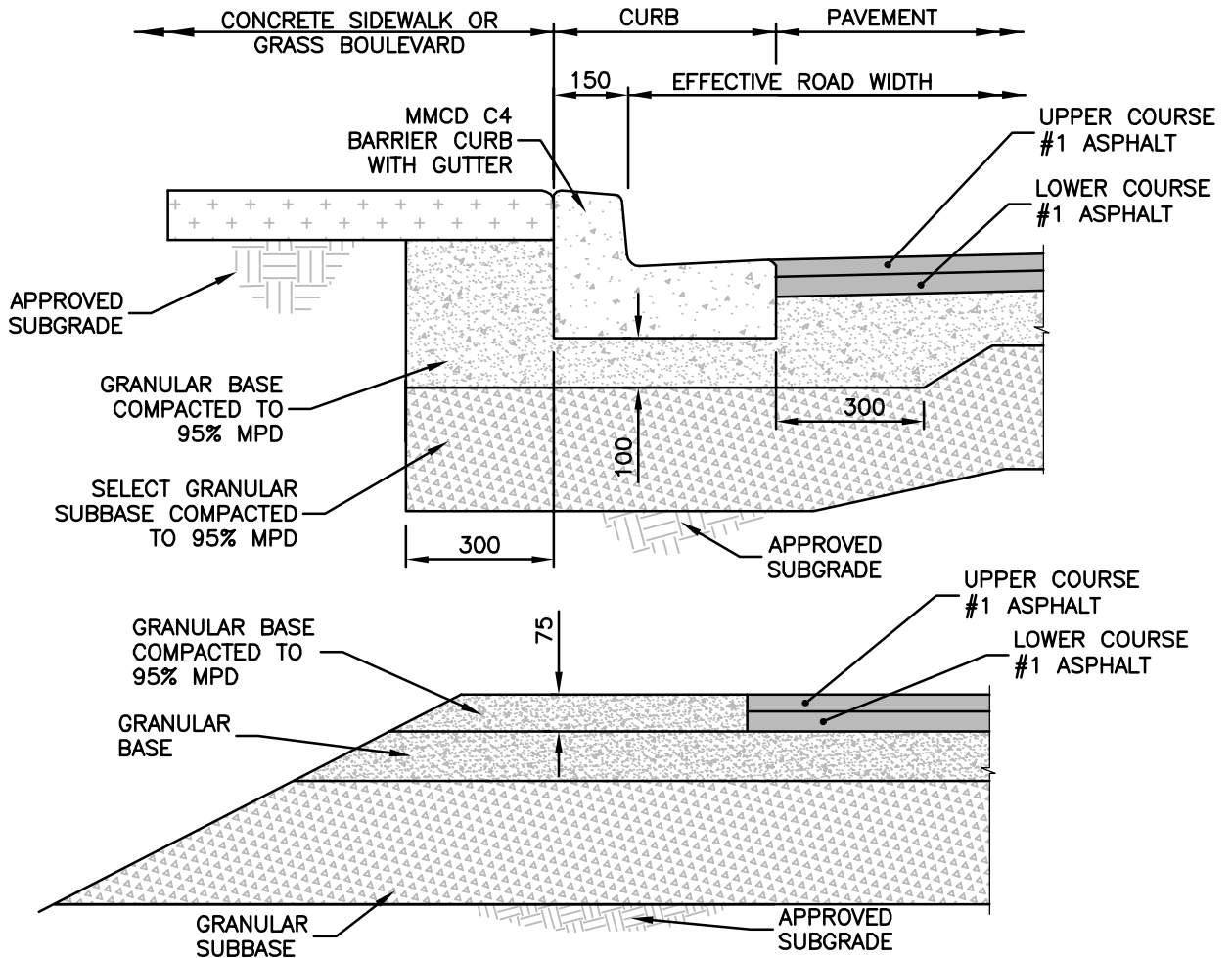
NOVEMBER, 2017



## ARTERIAL ROAD SECTION B

DRAWING NUMBER	<b>CSSD AB</b>
REVISION NUMBER	0
SCALE	<b>215</b>

# CITY OF COURTENAY SUPPLEMENTARY STANDARD DETAIL DRAWING



STANDARD DETAIL	ROAD CLASSIFICATION	UPPER COURSE #1 ASPHALT	LOWER COURSE #1 ASPHALT
CSSD L1	LOCAL ROAD SECTION	50	
CSSD CRu	COLLECTOR ROAD SECTION: RURAL	35	40
CSSD CRe	COLLECTOR ROAD SECTION: RESIDENTIAL	35	40
CSSD CRB	COLLECTOR ROAD SECTION: RESIDENTIAL - B	35	40
CSSD CRC	COLLECTOR ROAD SECTION: RESIDENTIAL - C	50	50
CSSD CUB	COLLECTOR ROAD SECTION: URBAN - B	35	40
CSSD CUC	COLLECTOR ROAD SECTION: URBAN - C	50	50
CSSD CUP	COLLECTOR ROAD SECTION: URBAN - P	50	50
CSSD AB	ARTERIAL ROAD SECTION: B	50	50
CSSD A3	ALTERNATIVE DESIGN STANDARD 3: LANE	50	N/A

**NOTE:**

1. THE STRUCTURAL ROAD ELEMENTS SHOWN ARE MINIMUM REQUIREMENTS. ROAD STRUCTURE TO BE DESIGNED BASED ON SITE CONDITIONS BY A QUALIFIED GEOTECHNICAL ENGINEER.

MARCH, 2017



## MINIMUM PAVEMENT STRUCTURE REQUIREMENTS

DRAWING NUMBER

**CSSD R2**

REVISION NUMBER

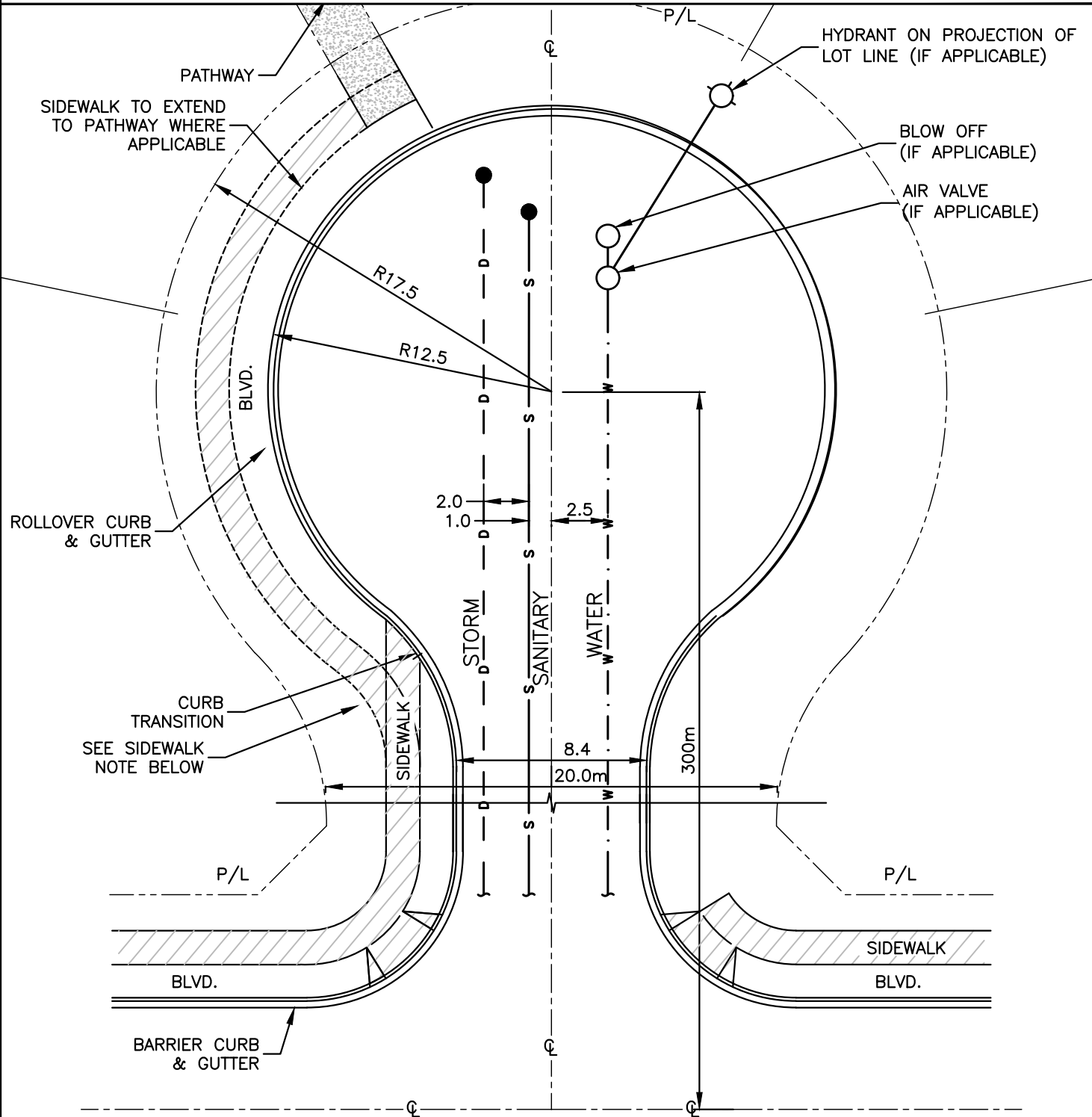
0

SCALE

**2:16**



# CITY OF COURTENAY SUPPLEMENTARY STANDARD DETAIL DRAWING



NOTE:

1. CUL-DE-SAC HAVING MORE THAN 10 LOTS INCLUDING THE CORNER LOTS TO BE PROVIDED WITH A SIDEWALK.
2. THE MAXIMUM PERMITTED PROFILE GRADE ON THE TURNAROUND OF A CUL-DE-SAC IS 6%.

NOVEMBER, 2017



## CUL-DE-SAC

DRAWING NUMBER

CSSD R3

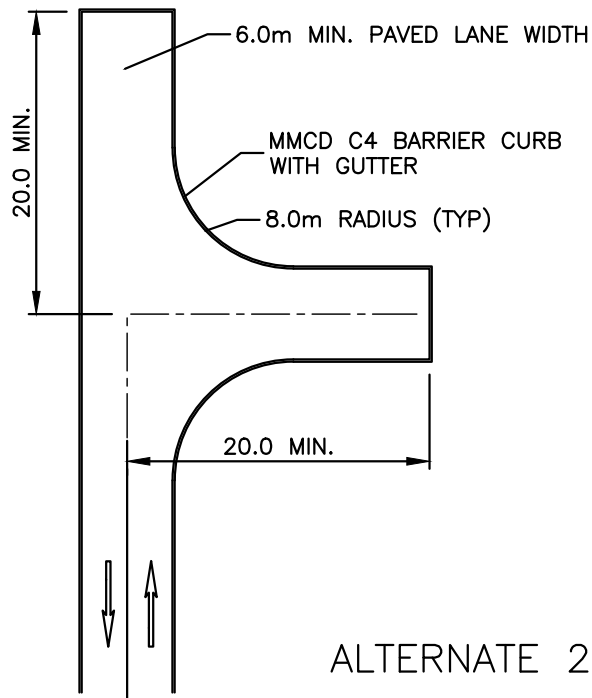
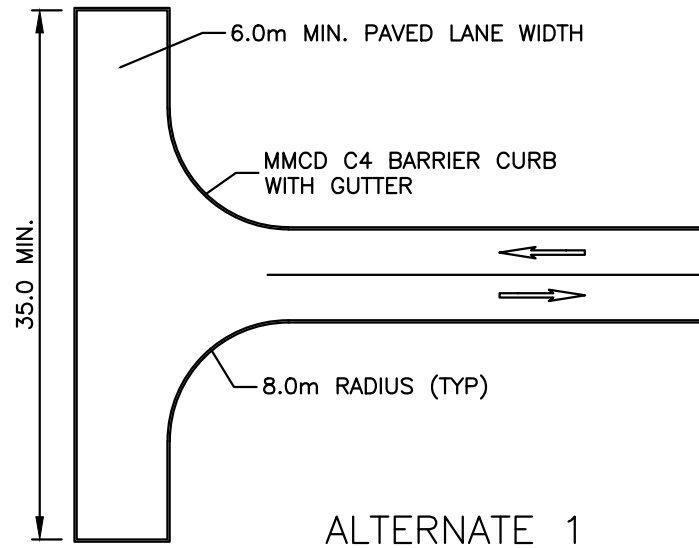
REVISION NUMBER

0

SCALE

2:1

CITY OF COURTENAY  
 SUPPLEMENTARY STANDARD DETAIL DRAWING



NOTE:

1. ALL DIMENSIONS ARE REQUIRED MINIMUMS

NOVEMBER, 2017



HAMMERHEAD TURNAROUND  
 (PRIVATE ROADS)

DRAWING NUMBER

CSSD R4

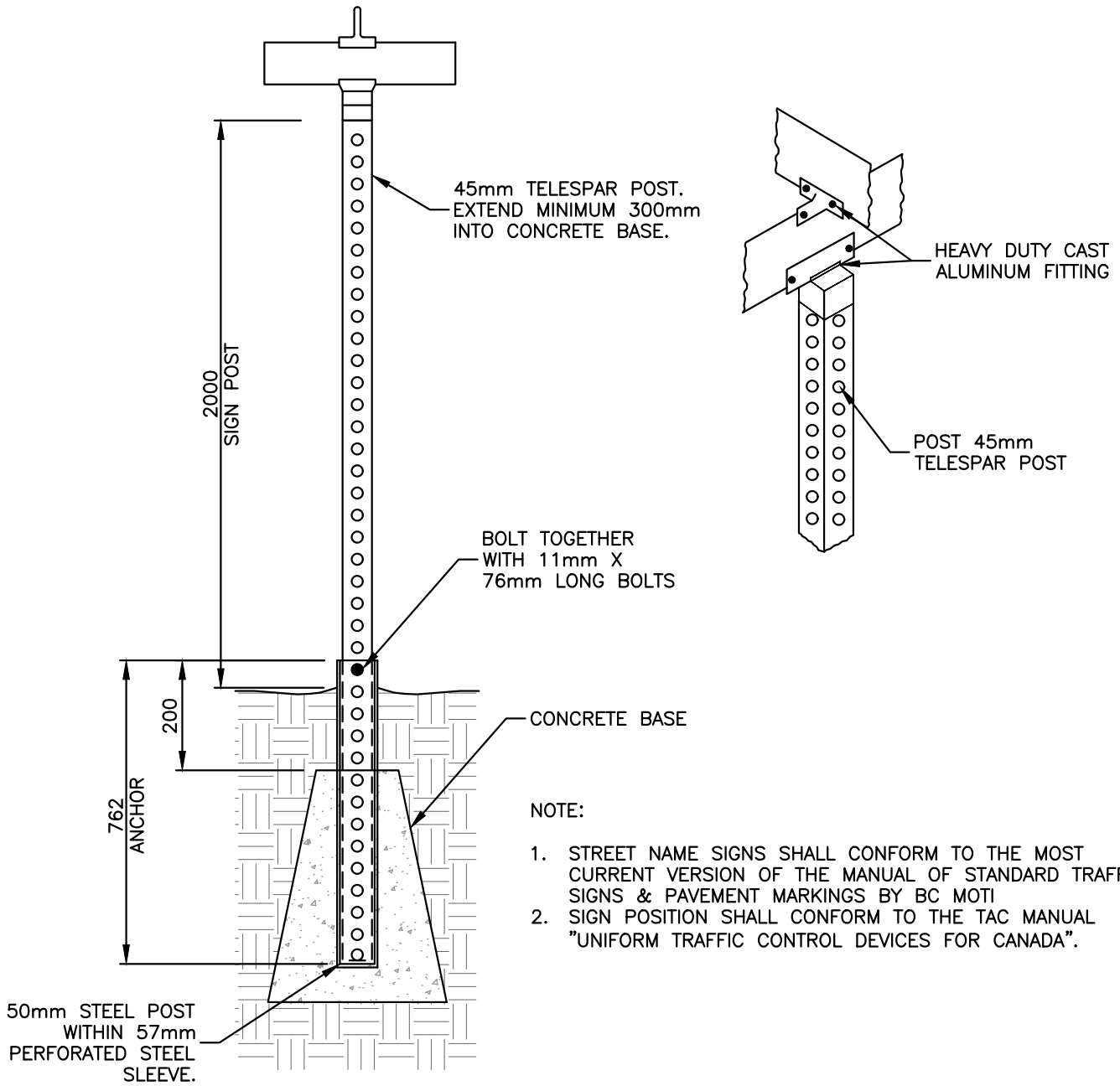
REVISION NUMBER

0

SCALE

**2:18**

CITY OF COURTENAY  
 SUPPLEMENTARY STANDARD DETAIL DRAWING



NOVEMBER, 2017



STREET NAME SIGN AND BASE DETAIL

DRAWING NUMBER

CSSD R5

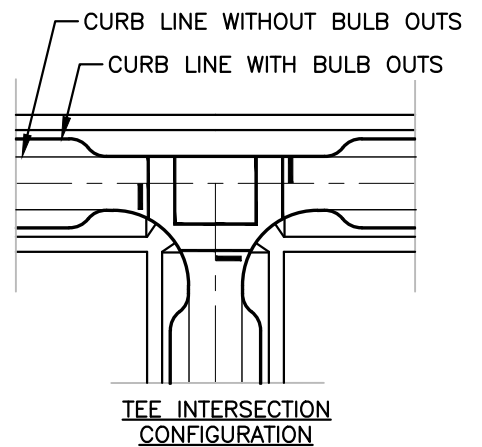
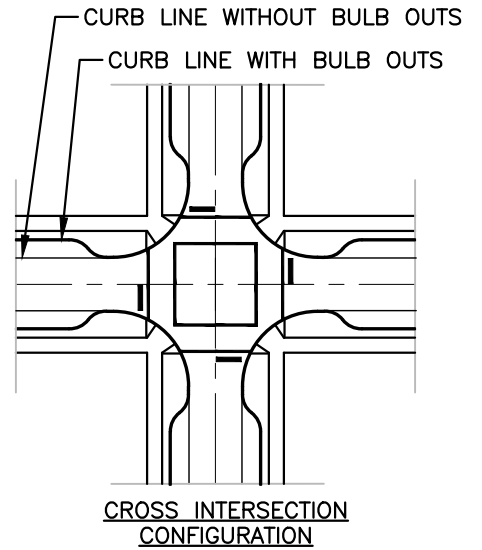
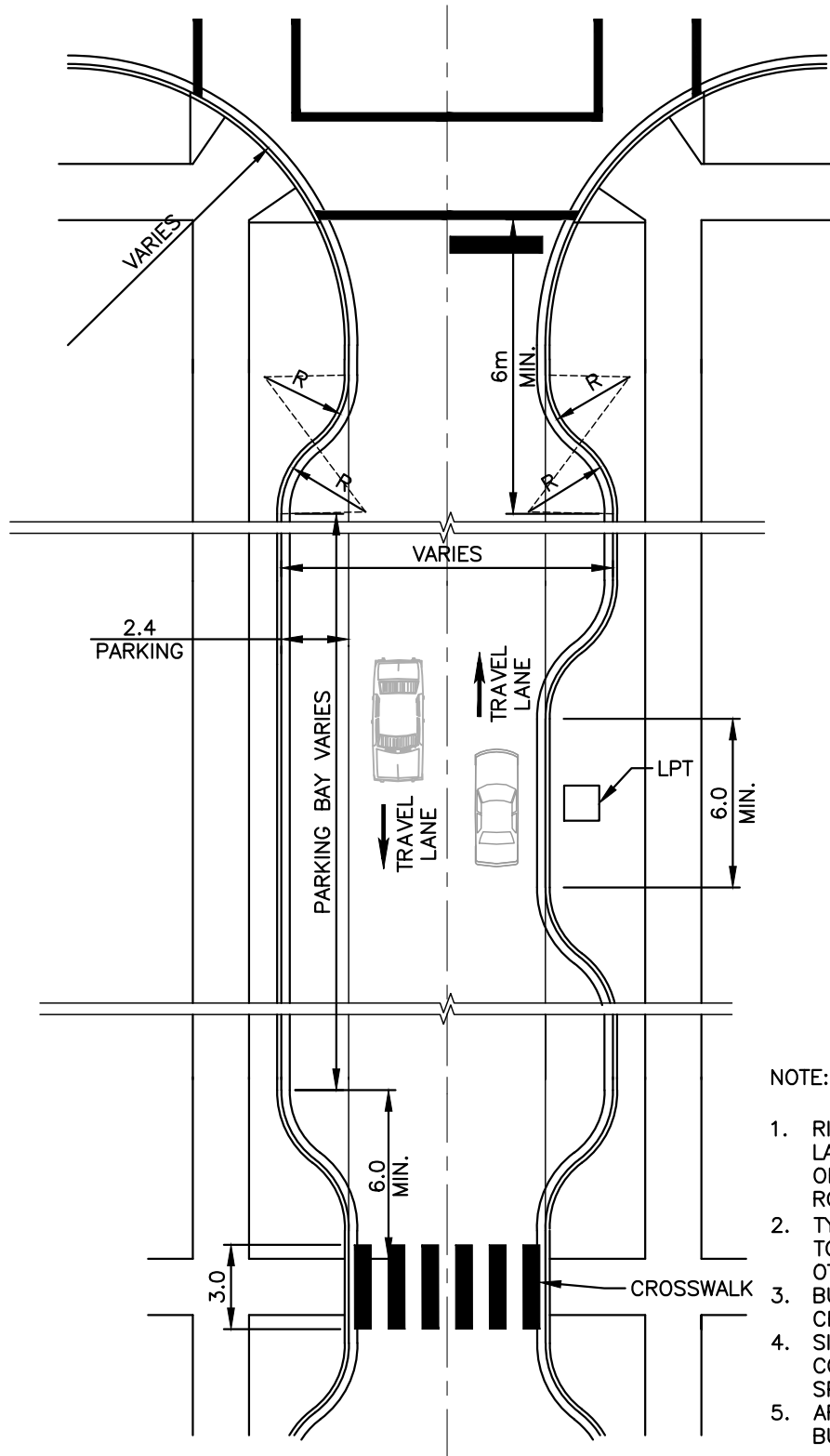
REVISION NUMBER

0

SCALE

219

CITY OF COURTENAY  
 SUPPLEMENTARY STANDARD DETAIL DRAWING



NOTE:

1. RIGHT OF WAY WIDTHS, NUMBER OF LANES AND INCLUSION OF BIKE LANES OR BUFFERS VARIES AS PER SPECIFIED ROAD CLASSIFICATION.
2. TYPICAL PARKING BAY FLARE RADII "R" TO BE 3.0m UNLESS SPECIFIED OTHERWISE.
3. BULB-OUT LENGTHS AT MID-BLOCK CROSSWALKS VARIES AS REQUIRED.
4. SIDEWALK & BOULEVARD WIDTHS AND CONFIGURATION VARIES AS PER SPECIFIED ROAD CLASSIFICATION.
5. ARTERIAL ROADWAYS SHALL NOT HAVE BULB OUTS.

NOVEMBER, 2017



TYPICAL BULB OUT  
 LOCATION AND DETAILS

DRAWING NUMBER

CSSD R6

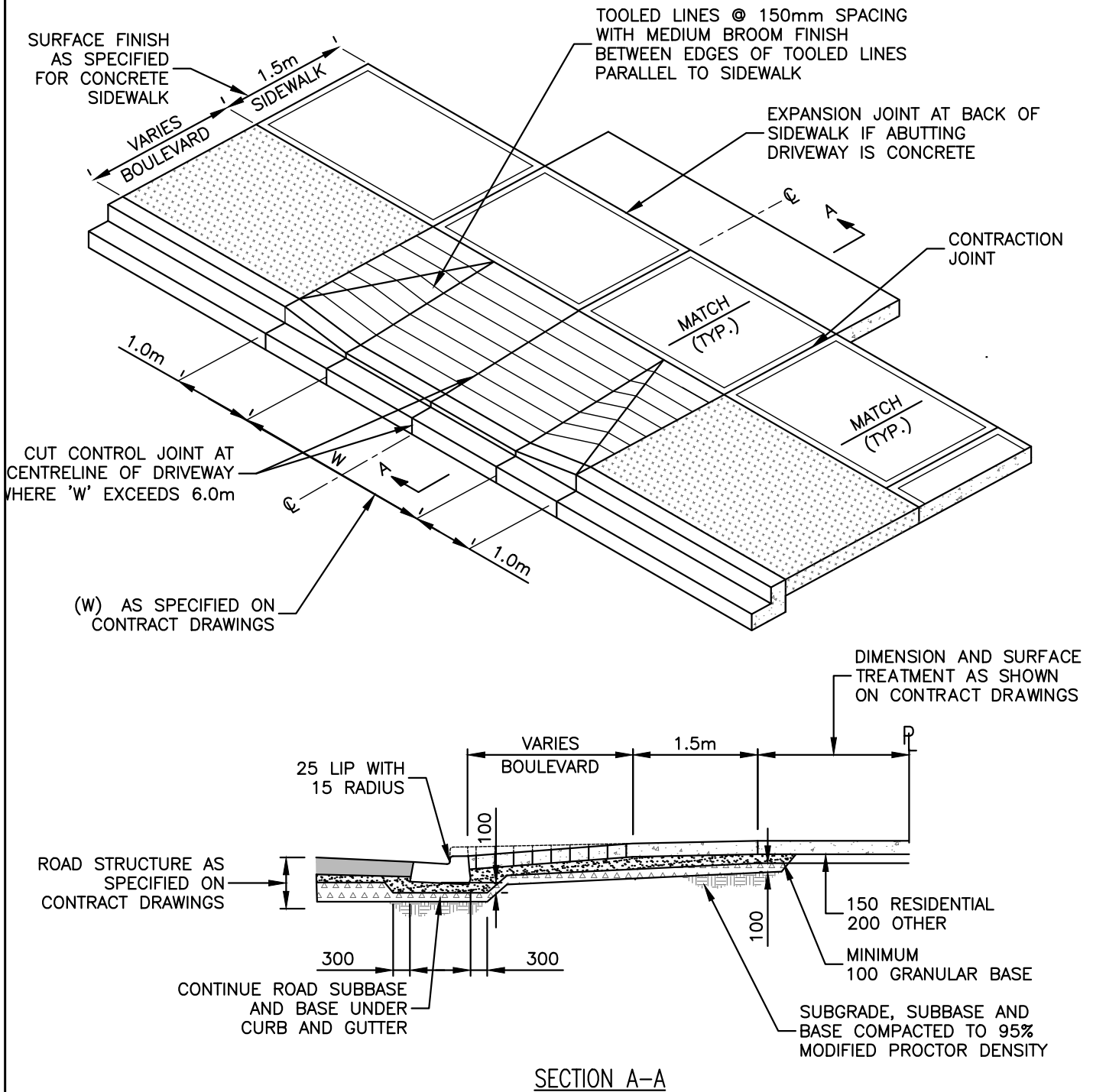
REVISION NUMBER

0

SCALE

2:20

**CITY OF COURTENAY  
SUPPLEMENTARY STANDARD DETAIL DRAWING**



NOTE:

1. DRIVEWAYS ORIENTATED AT 90° TO CURB, UNLESS SPECIFIED OTHERWISE ON CONTRACT DRAWINGS.

NOVEMBER, 2017



**DRIVEWAY CROSSING FOR BARRIER CURBS  
TYPE 2**

DRAWING NUMBER

**CSSD C7b**

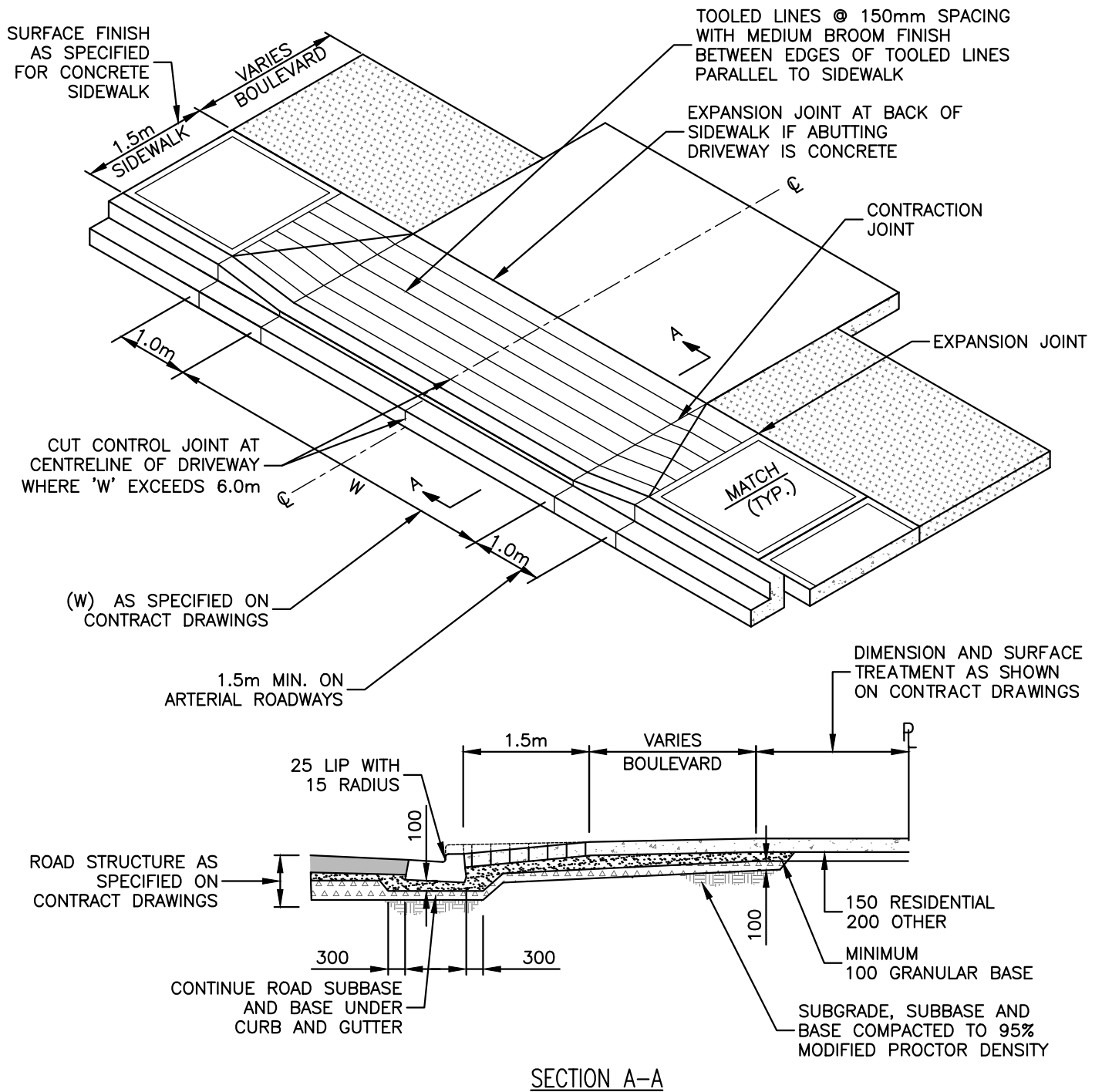
REVISION NUMBER

0

SCALE

**2:1**

# CITY OF COURTENAY SUPPLEMENTARY STANDARD DETAIL DRAWING



NOTE:

1. DRIVEWAYS ORIENTATED AT 90° TO CURB, UNLESS SPECIFIED OTHERWISE ON CONTRACT DRAWINGS.

NOVEMBER, 2017



## DRIVEWAY CROSSING FOR BARRIER CURBS TYPE 3

DRAWING NUMBER

CSSD C7c

REVISION NUMBER

0

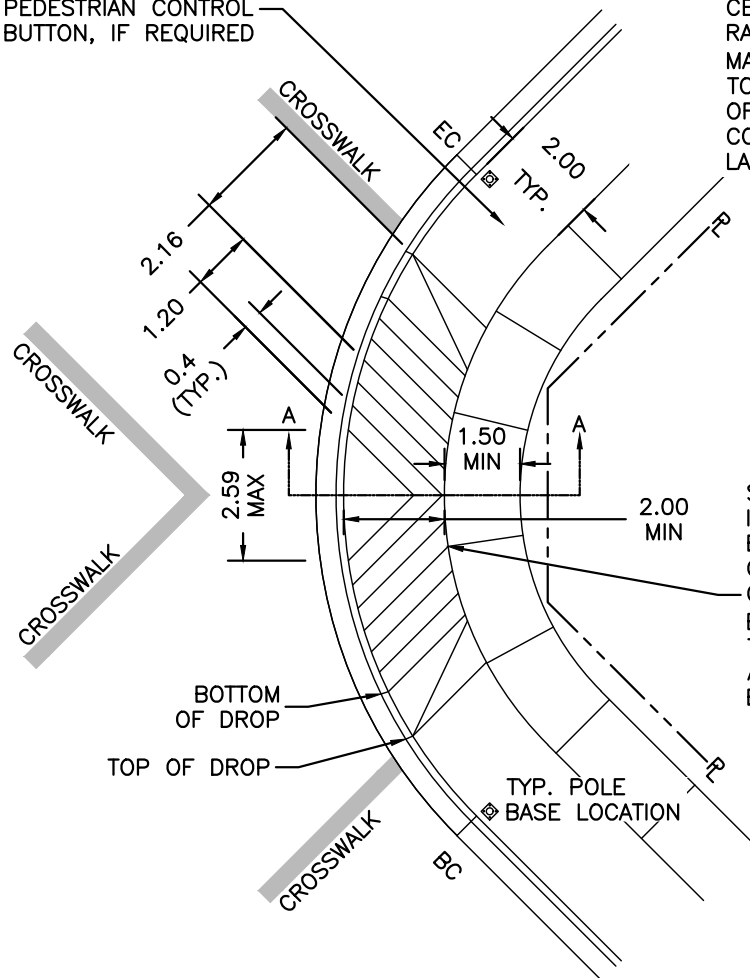
SCALE

**2:22**

**CITY OF COURTENAY**  
**SUPPLEMENTARY STANDARD DETAIL DRAWING**

CONCRETE AREA FOR  
 PEDESTRIAN CONTROL  
 BUTTON, IF REQUIRED

NOTE: STANDARD RAMP LENGTH: 2.0m AT  
 CENTRE OF RAMP. RECOMMENDED  
 RAMP SLOPE: 7.1% ± 1.2%.  
 MAX. SLOPE 8.3% (12H:1V) WHERE  
 TOPOGRAPHY PERMITS. ADJUST LENGTH  
 OF RAMP AS REQUIRED WHEN SITE  
 CONDITIONS DO NOT PERMIT TYPICAL  
 LAYOUT.



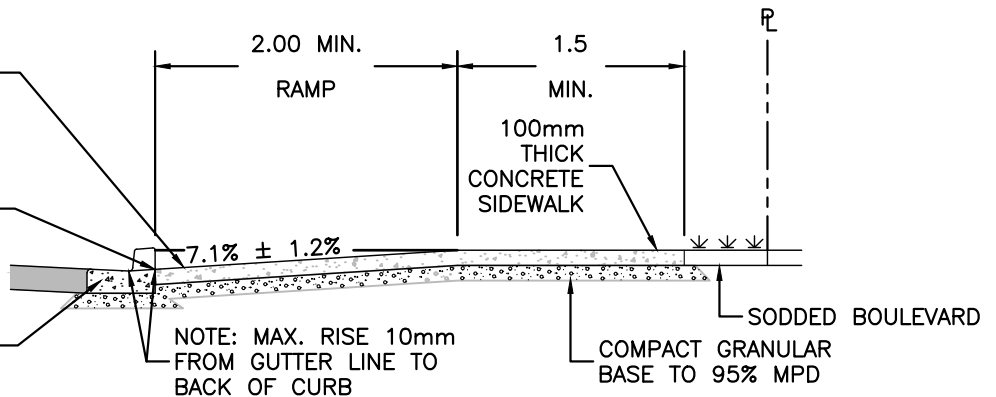
SCORE LINES MUST LINE UP  
 IN DIRECTION OF TRAVEL AND  
 BE PARALLEL WITH THE  
 CROSSING OR MARKED  
 CROSSWALK. SCORE LINES TO  
 BE 40cm APART. USE 3/8"  
 TROWEL. TROWEL EDGE TO BE  
 AS FLUSH AS POSSIBLE WITH  
 BROOM FINISH.

**SINGLE RAMP**

RAMP SHALL BE UNIFORM  
 THICKNESS OF 100mm  
 FROM TOP OF LIP TO TOP  
 OF SIDEWALK

TRANSITION FROM  
 CURB TO RAMP  
 SHALL BE FLUSH

BARRIER  
 CURB & GUTTER



**SECTION A-A CURB RAMP**

**WHEELCHAIR RAMP FOR SIDEWALK,  
 INFILL AND BARRIER CURBS**

DRAWING NUMBER

**CSSD C8a**

REVISION NUMBER

0

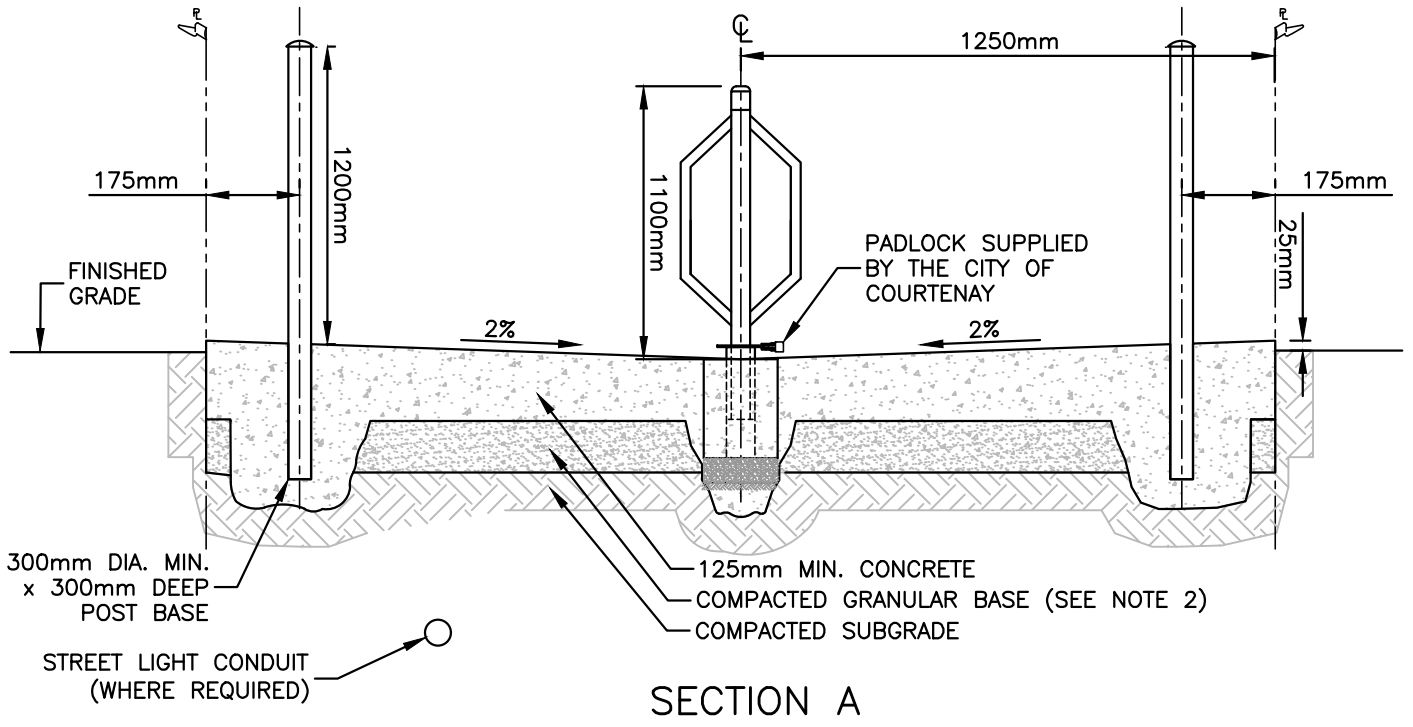
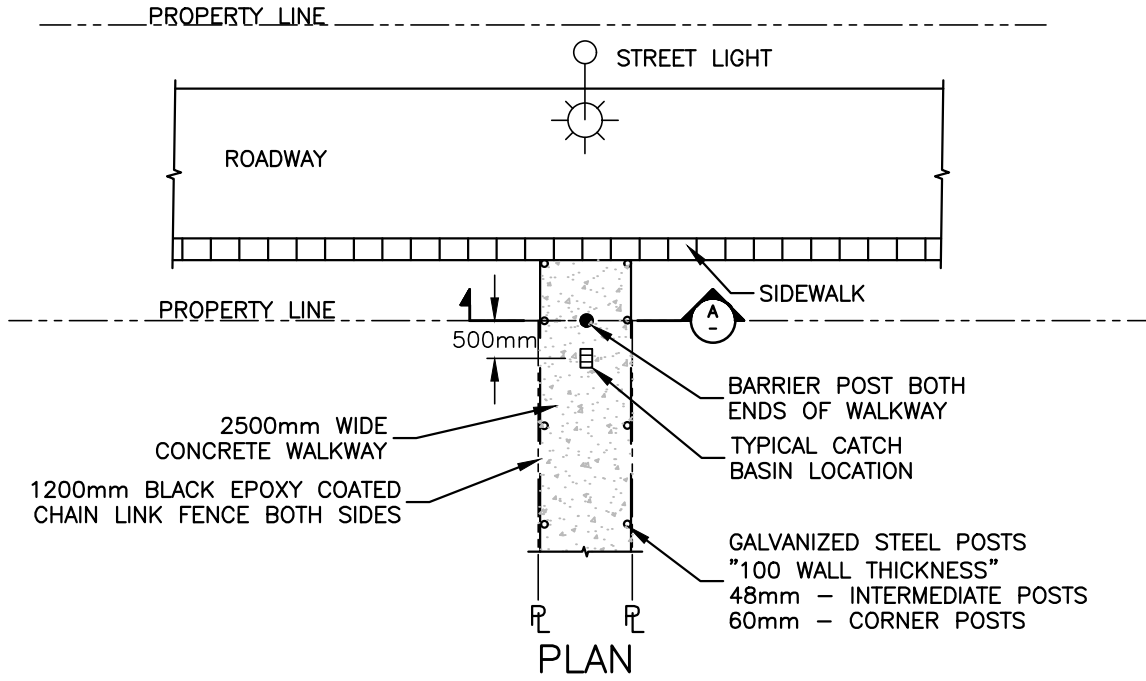
SCALE

**223**

NOVEMBER, 2017



# CITY OF COURTENAY SUPPLEMENTARY STANDARD DETAIL DRAWING



**NOTE:**

1. THE STRUCTURAL WALKWAY ELEMENTS SHOWN ARE MINIMUM REQUIREMENTS. WALKWAY STRUCTURE TO BE DESIGNED BASED ON SITE CONDITIONS BY A QUALIFIED GEOTECHNICAL ENGINEER.
2. CONCRETE THICKNESS TO BE 150mm MINIMUM WHEN WALKWAY USED TO ACCESS UTILITIES. GRANULAR BASE THICKNESS TO BE DETERMINED BY QUALIFIED GEOTECHNICAL ENGINEER.

FEBRUARY, 2016



## CONCRETE WALKWAY

DRAWING NUMBER

**CSSD C10**

REVISION NUMBER

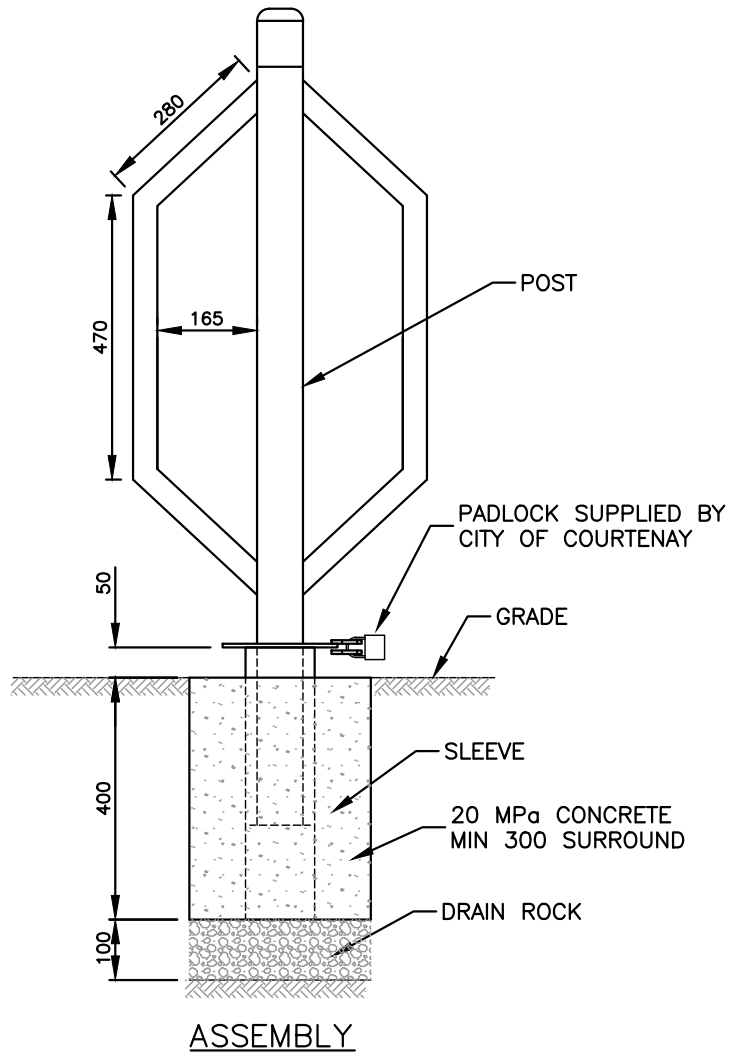
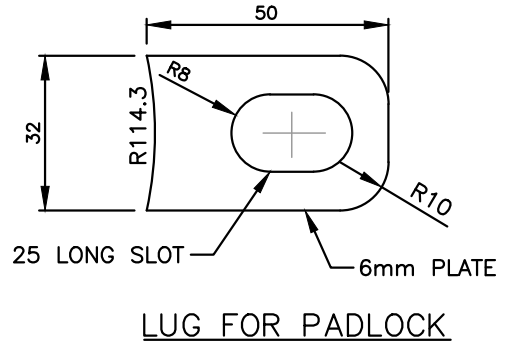
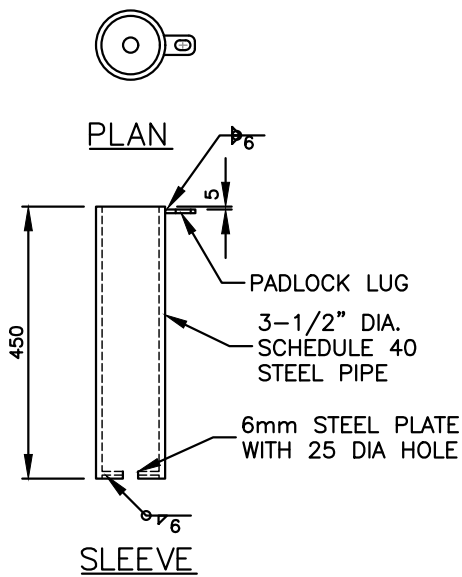
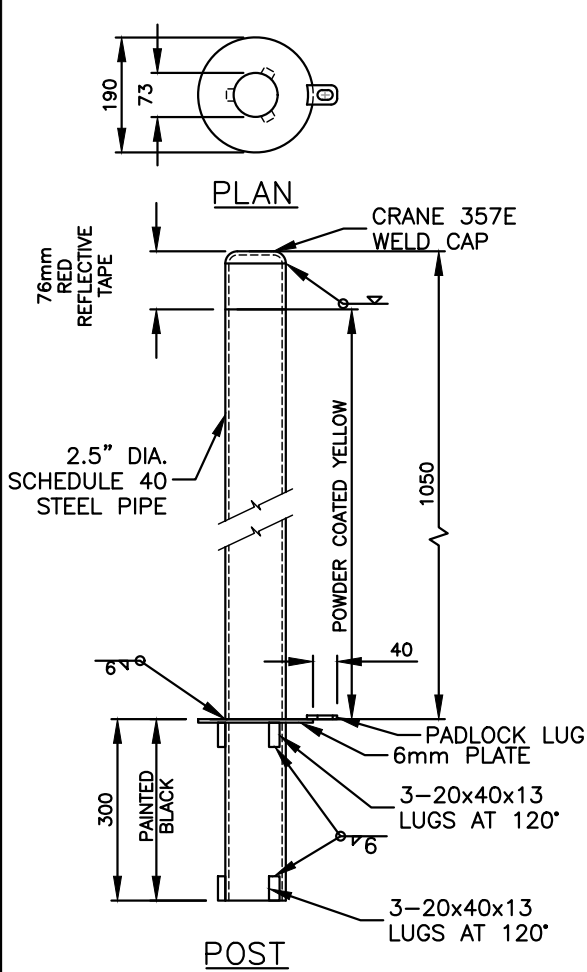
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SCALE

**224**



**CITY OF COURTENAY**  
**SUPPLEMENTARY STANDARD DETAIL DRAWING**



NOTE:

1. FOR USE ON MULTI-USE PATHWAYS AND TRAILS WHEN NECESSARY TO PREVENT VEHICLE ACCESS.
2. ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED.

NOVEMBER, 2017



**REMOVABLE BOLLARD**

DRAWING NUMBER

**CSSD C12**

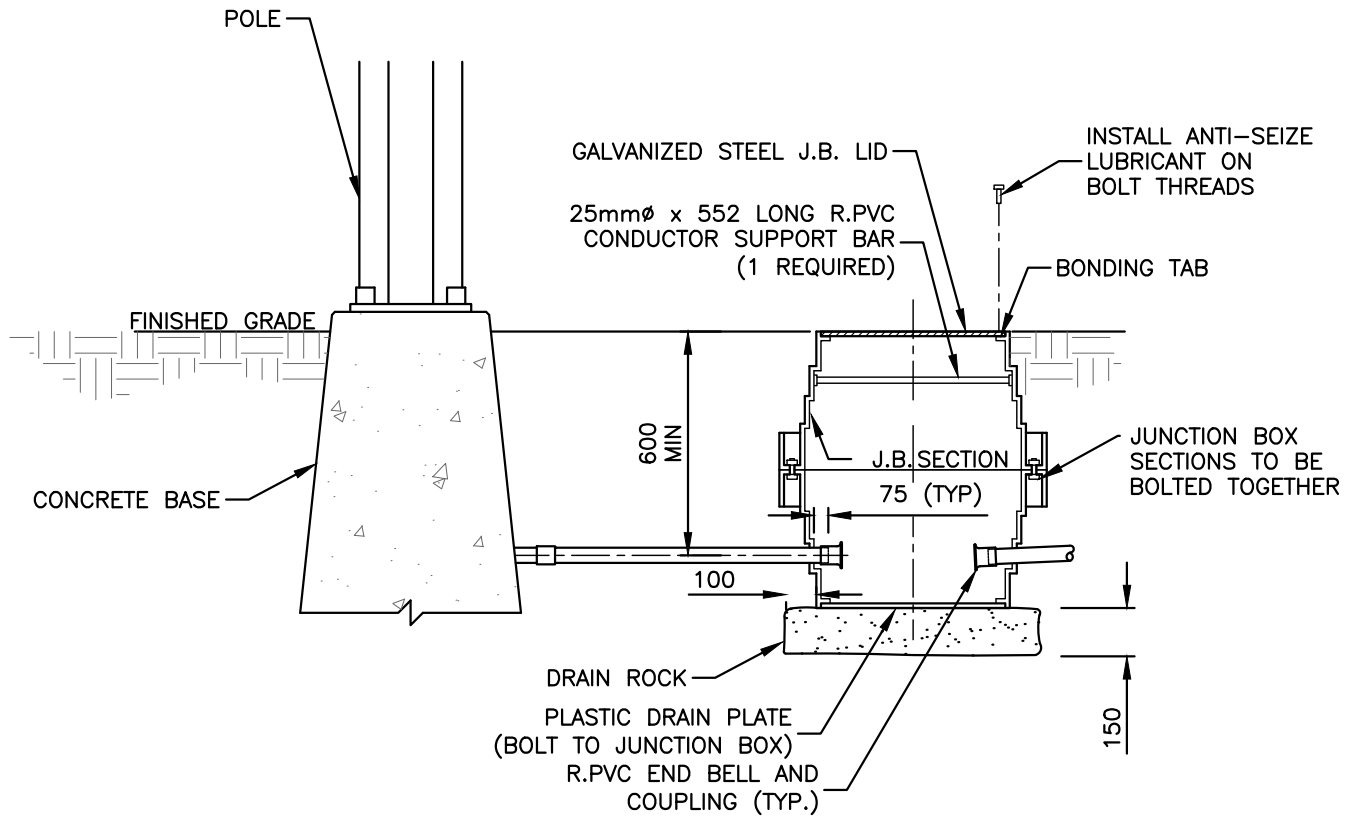
REVISION NUMBER

0

SCALE

**225**

**CITY OF COURTENAY**  
**SUPPLEMENTARY STANDARD DETAIL DRAWING**



JUNCTION BOX  
 TWO J.B. SECTIONS  
 ONE STEEL LID  
 ONE DRAIN PLATE

**NOTE:**

1. REFER TO CONTRACT DRAWINGS, SECTION 34 41 13 FOR DETAILED SPECIFICATIONS.
2. BOLT DOWN LID ON BOX BEFORE BACKFILLING, TAMPING & PAVING OPERATIONS.
3. INSTALL TOP OF JUNCTION BOX FLUSH WITH FINISHED GRADE.
4. ALL CONDUITS SHALL DRAIN TO J.B.'S
5. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.

NOVEMBER, 2017



**ROUND PLASTIC JUNCTION BOXES**

DRAWING NUMBER

**CSSD E2.1**

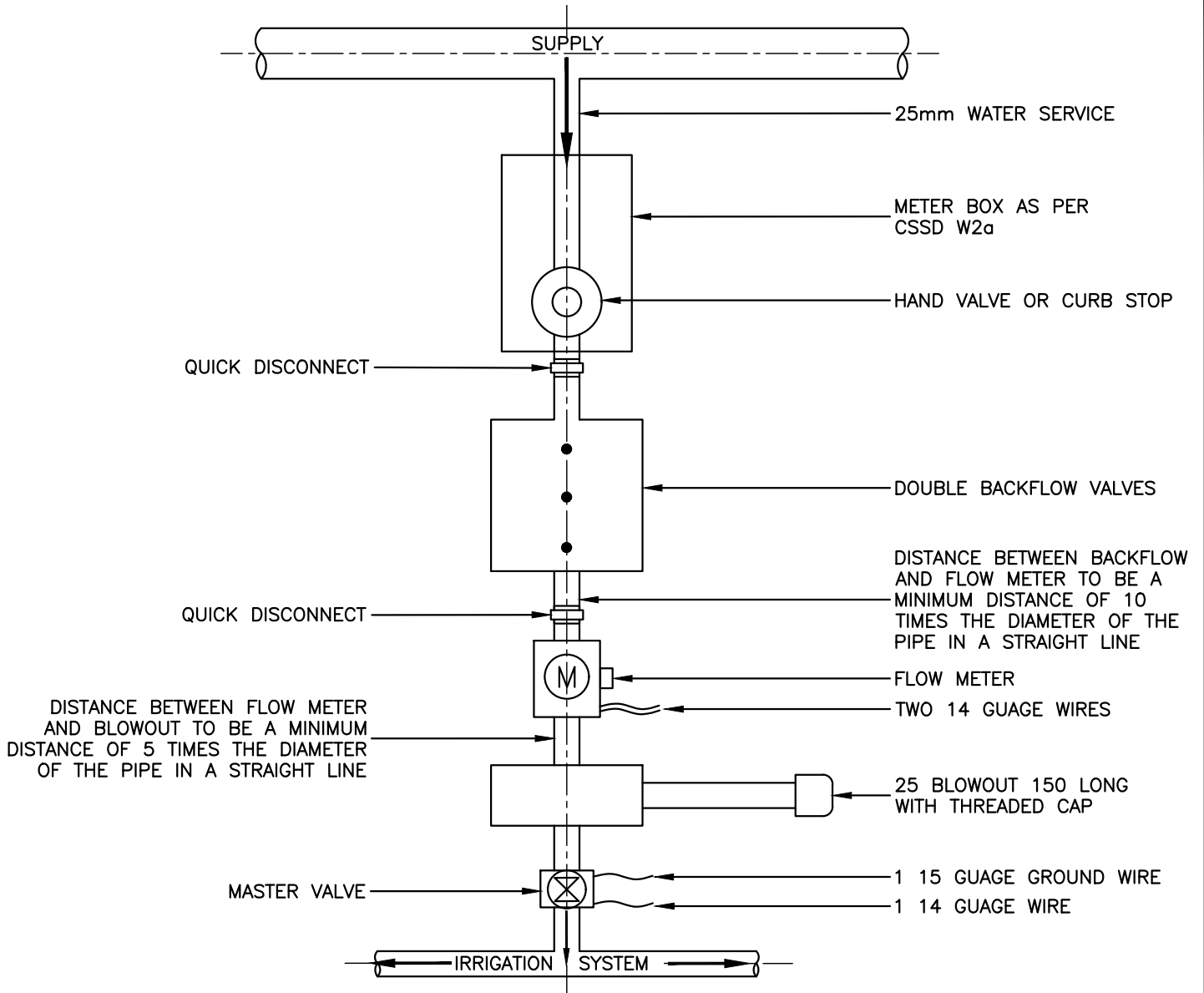
REVISION NUMBER

0

SCALE

**226**

CITY OF COURTENAY  
 SUPPLEMENTARY STANDARD DETAIL DRAWING



NOTE:

1. 25X150 RISER WITH THREADED CAP FOR BLOWOUT.
2. BACKFLOW VALVE DOUBLE CHECK.
3. (760X450X450) RECTANGULAR BOX.
4. TWO QUICK DISCONNECT COUPLERS FOR BACKFLOW REMOVAL.
5. 14 GAUGE T.W.U. WIRE FOR CONNECTION TO CONTROLLER.
6. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED.

NOVEMBER, 2017



IRRIGATION CONNECTION

DRAWING NUMBER

CSSD 11

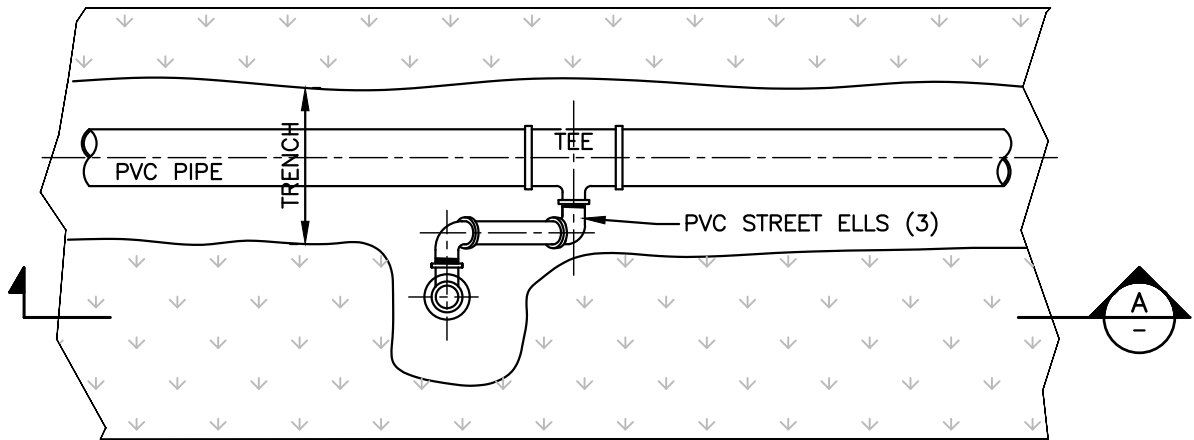
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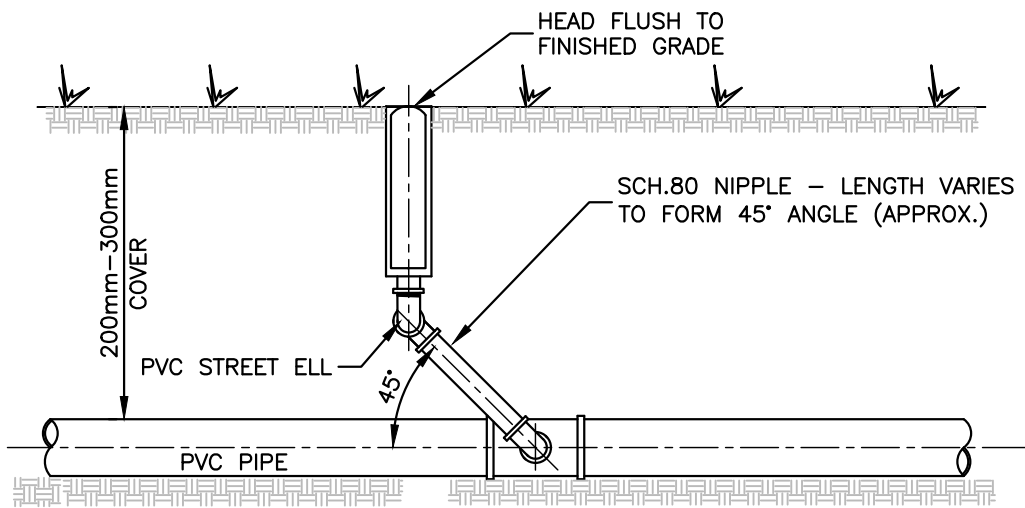
SCALE

2:27

CITY OF COURTENAY  
 SUPPLEMENTARY STANDARD DETAIL DRAWING



PLAN



SECTION A

NOTE:

1. USE TEFLON TAPE ON ALL MALE THREADED ENDS

NOVEMBER, 2017



IRRIGATION SWING JOINT

DRAWING NUMBER

CSSD 12

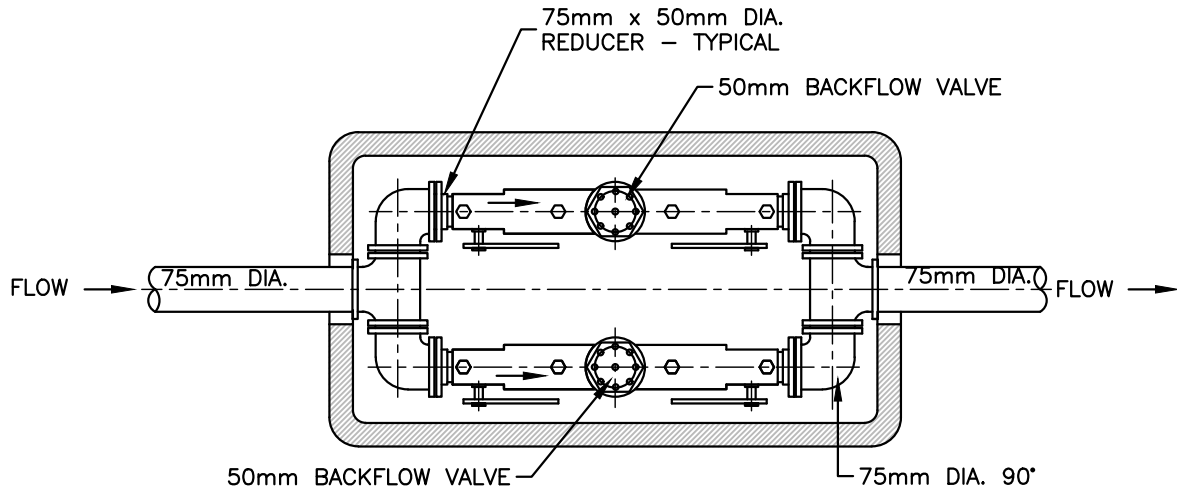
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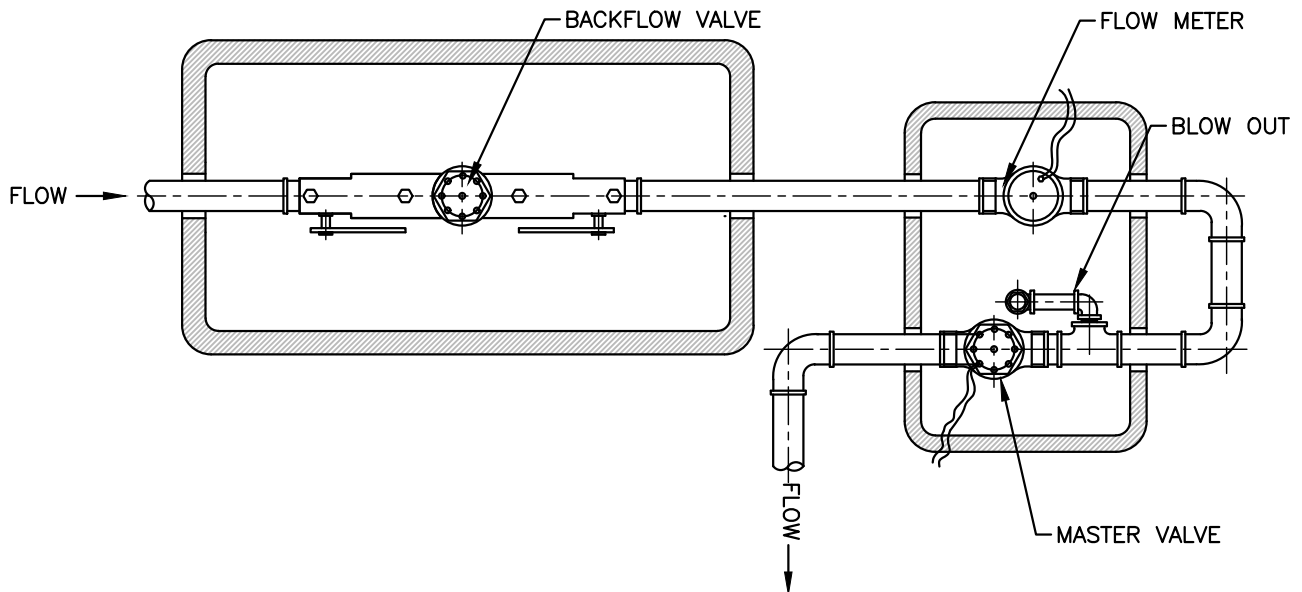
SCALE

**2:28**

CITY OF COURTENAY  
 SUPPLEMENTARY STANDARD DETAIL DRAWING



TYPICAL LARGE LINE/TWIN BACKFLOW VALVES



TYPICAL MASTER VALVE/FLOW METER

NOTE:

1. FLOW METER TO HAVE 10x PIPE DIA. BEFORE AND 5x PIPE DIA. AFTER, OF UNRESTRICTED STRAIGHT PIPE (OF THE SAME DIAMETER, NO FITTINGS) EACH SIDE OF METER.
2. FLOW METER TO BE DISASSEMBLED PRIOR TO GLUING OF PIPE.

NOVEMBER, 2017



TYPICAL INSTALLATIONS  
 LARGE LINE / TWIN BACKFLOW VALVES  
 MASTER VALVE / FLOW METER

DRAWING NUMBER

CSSD 13

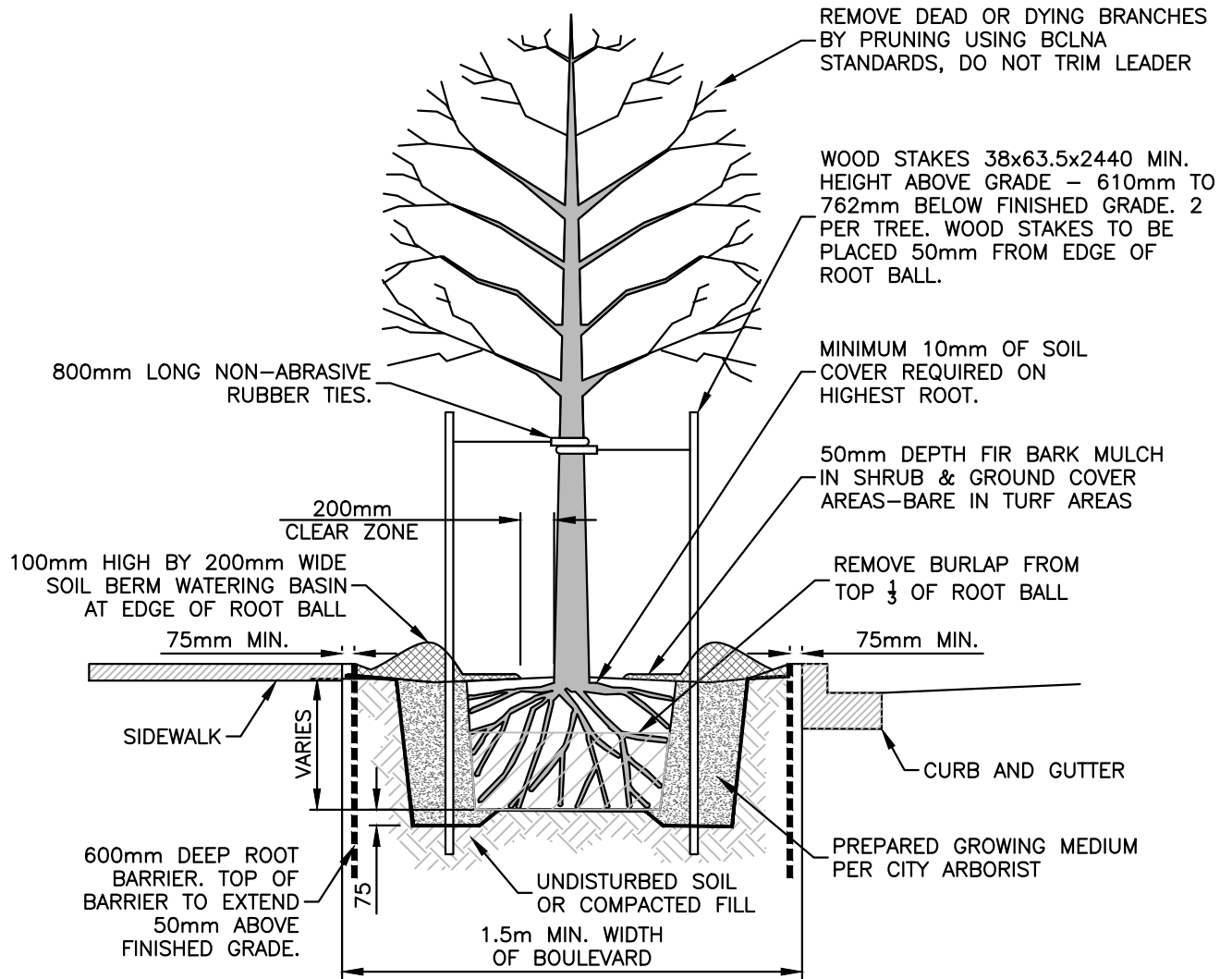
REVISION NUMBER

0

SCALE

229

**CITY OF COURTENAY**  
**SUPPLEMENTARY STANDARD DETAIL DRAWING**



**NOTE:**

1. PLACE TREE & BACKFILL 50mm ABOVE GRADE TO ALLOW FOR SETTLEMENT.
2. ROOT BARRIERS SHALL BE INSTALLED WHEN ROOT BALL IS LOCATED WITHIN 2.44m OF PAVEMENT.
3. ROOT BARRIERS TO EXTEND 2.44m IN BOTH DIRECTIONS FROM TREE CENTRE LINE.
4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED.

NOVEMBER, 2017



**TREE PLANTING  
AND STAKING**

DRAWING NUMBER

**CSSD P1**

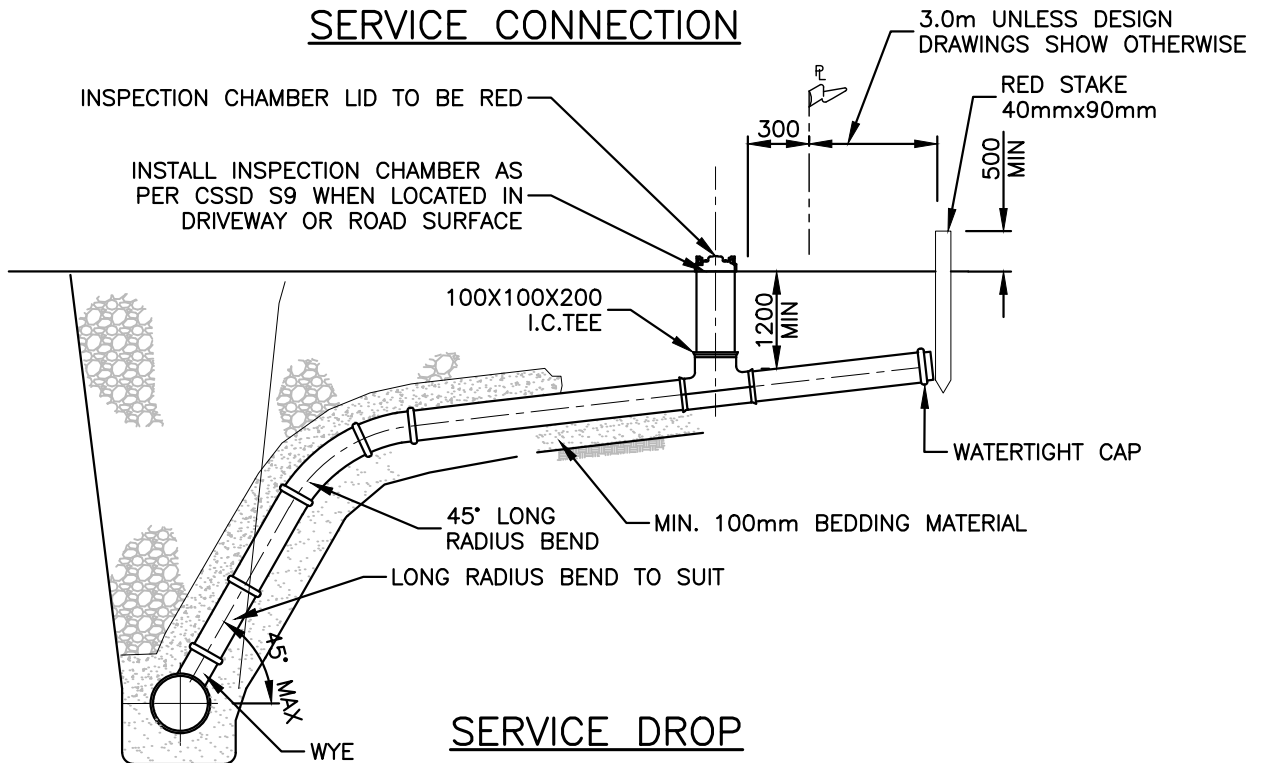
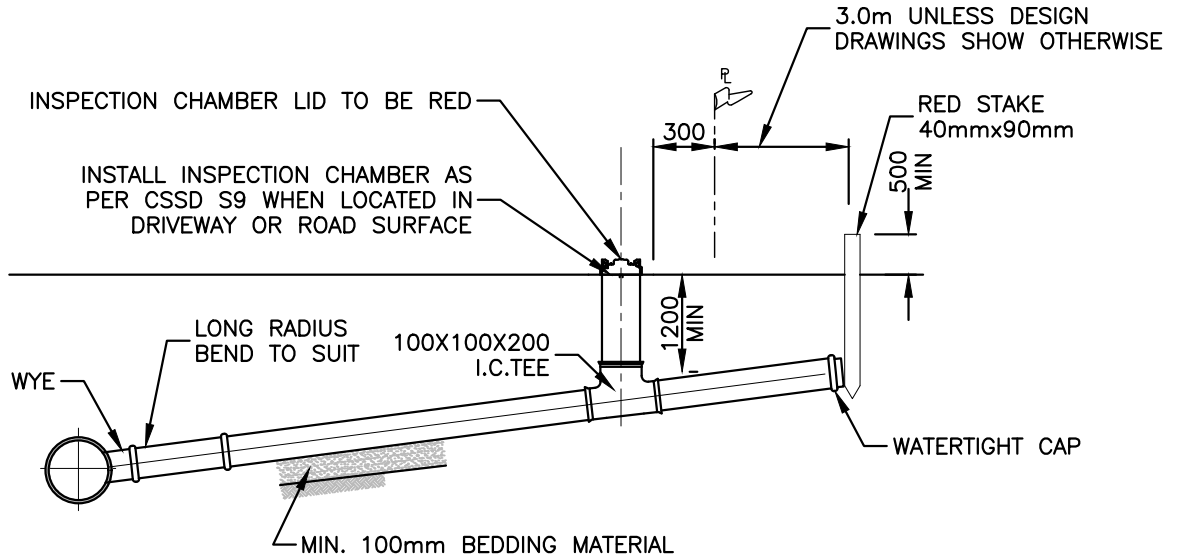
REVISION NUMBER

0

SCALE

**2:30**

**CITY OF COURTENAY**  
**SUPPLEMENTARY STANDARD DETAIL DRAWING**



NOTE:

1. SERVICE CONNECTIONS TO BE LONG LENGTHS OF PVC WITH AS FEW JOINTS AS POSSIBLE.
2. FOR LARGER SERVICE CONNECTIONS, REFER TO CONTRACT DRAWINGS
3. SANITARY SERVICE TO HAVE A MINIMUM GRADE OF 2%.
4. THE CONTRACTOR IS TO VIDEO INSPECT ALL SANITARY SERVICE CONNECTIONS. THE VIDEO MUST BE REVIEWED AND ACCEPTED BY THE ENGINEER OF RECORD PRIOR TO COMMENCEMENT OF ASPHALT PAVING.
5. BEDDING AND BACKFILL AS PER MMCD DRAWING G4.

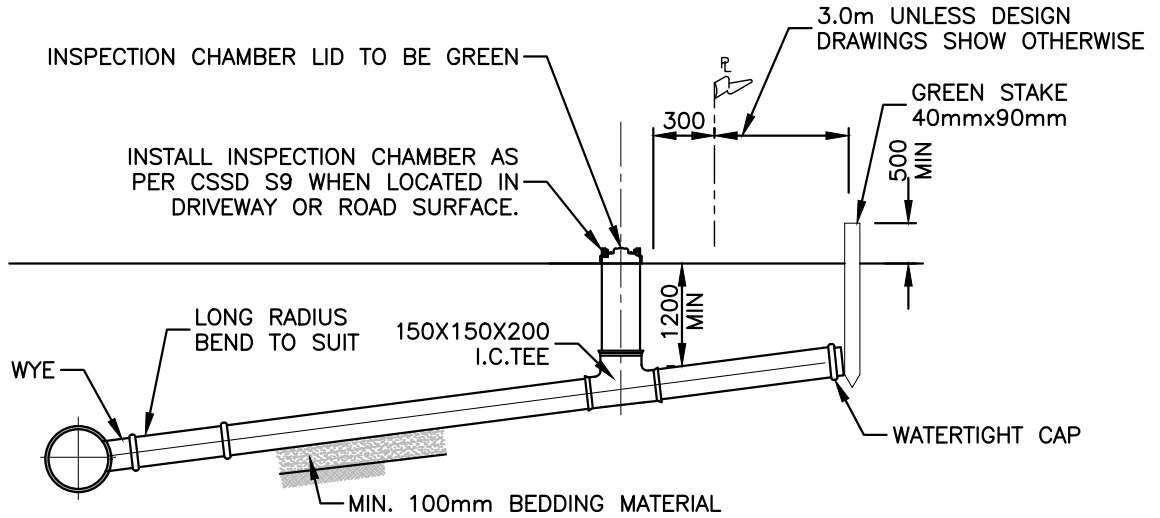
NOVEMBER, 2017



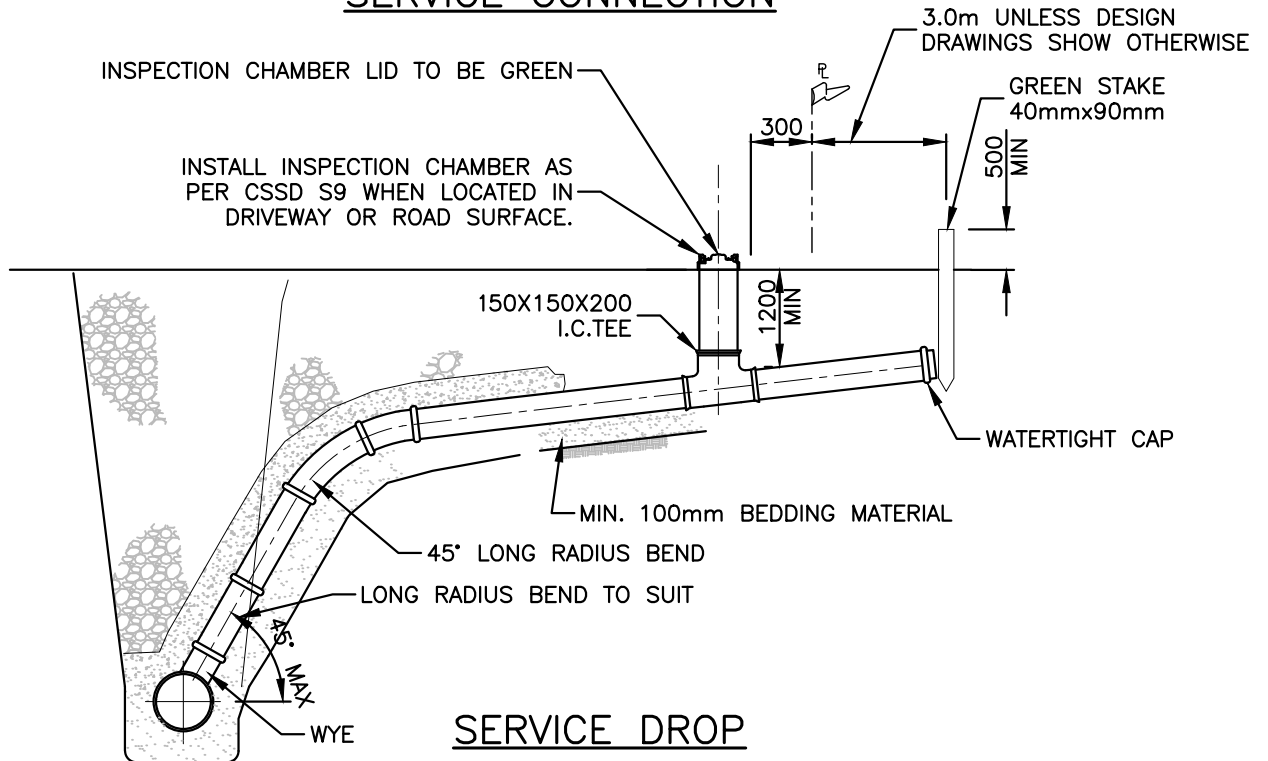
**SANITARY SEWER SERVICE CONNECTION**  
**100mm RESIDENTIAL SANITARY**

DRAWING NUMBER	<b>CSSD S7</b>
REVISION NUMBER	0
SCALE	<b>231</b>

**CITY OF COURTENAY  
SUPPLEMENTARY STANDARD DETAIL DRAWING**



**SERVICE CONNECTION**



**SERVICE DROP**

NOTE:

1. CONCRETE STORM SEWER PIPES TO BE PROVIDED WITH SUPPLIER INSTALLED PVC STUB.
2. SERVICE CONNECTIONS TO BE LONG LENGTHS OF PVC WITH AS FEW JOINTS AS POSSIBLE.
3. STORM SERVICE TO HAVE MINIMUM GRADE OF 2%.
4. MINIMUM SIZE OF SERVICE CONNECTION: 150mm.
5. THE CONTRACTOR IS TO VIDEO INSPECT ALL STORM SERVICE CONNECTIONS. THE VIDEO MUST BE REVIEWED AND ACCEPTED BY THE ENGINEER OF RECORD PRIOR TO COMMENCEMENT OF ASPHALT PAVING.
6. BEDDING AND BACKFILL AS PER MMCD DRAWING G4.

NOVEMBER, 2017



**STORM SEWER SERVICE CONNECTION  
150mm RESIDENTIAL STORM**

DRAWING NUMBER

**CSSD S8**

REVISION NUMBER

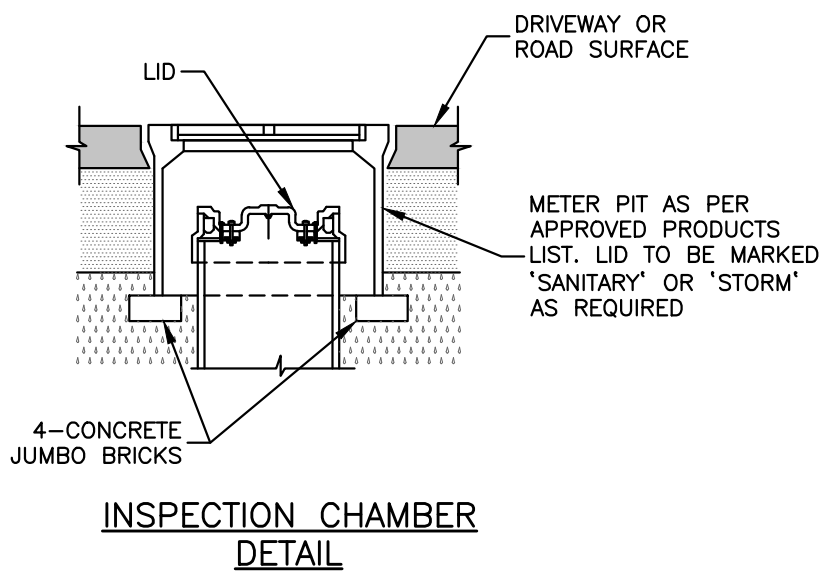
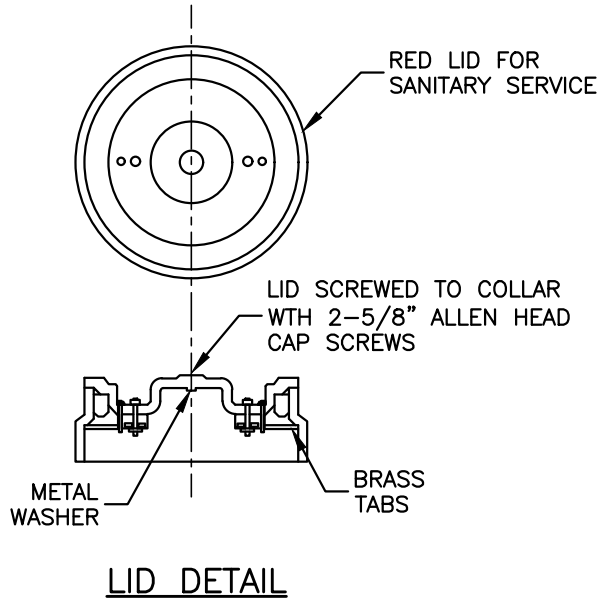
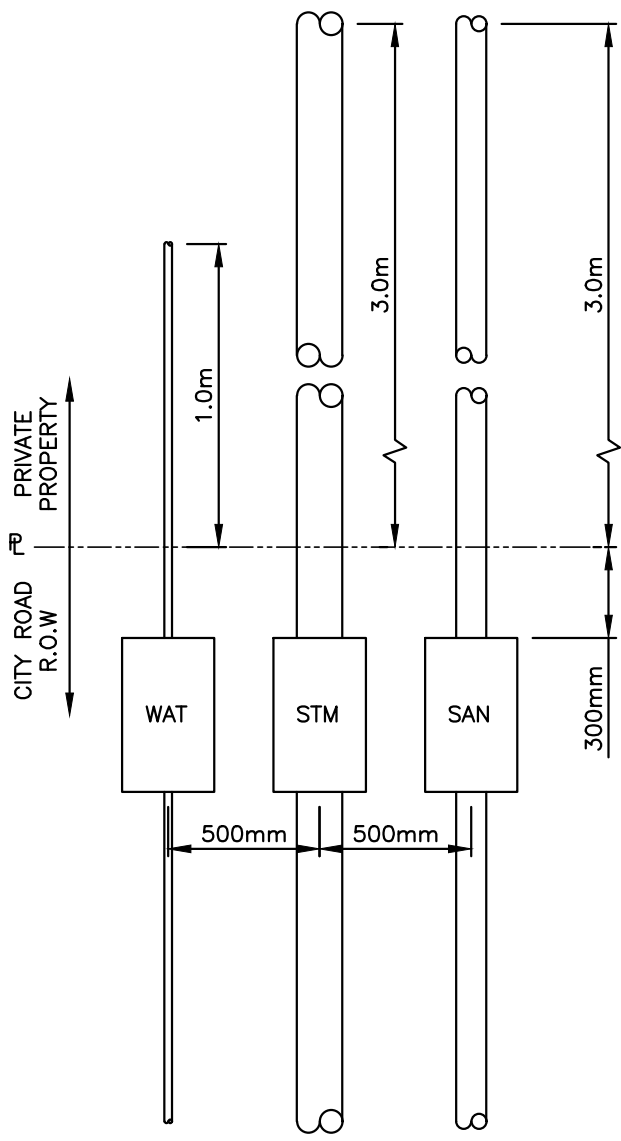
0

SCALE

**232**



**CITY OF COURTENAY**  
**SUPPLEMENTARY STANDARD DETAIL DRAWING**



**NOTE:**

1. REFER TO DRAWING CSSD S7 AND CSSD S8 FOR INSTALLATION REQUIREMENTS.
2. INSPECTION CHAMBER TO BE APPROVED MANUFACTURED FITTING.
3. REFER TO CONTRACT DRAWINGS FOR SITE SPECIFIC DIMENSIONS. REFER TO SECTION 33 30 01 FOR DETAILED SPECIFICATIONS.
4. SANITARY AND STORM SERVICES TO BE EXTENDED 3.0m INTO PROPERTY UNLESS DRAWINGS SHOW OTHERWISE.
5. SERVICES TO BE LOCATED A DISTANCE OF  $\frac{1}{3}$  THE LOT WIDTH FROM THE PROPERTY LINE ON THE OPPOSITE SIDE AS THE DRIVEWAY.

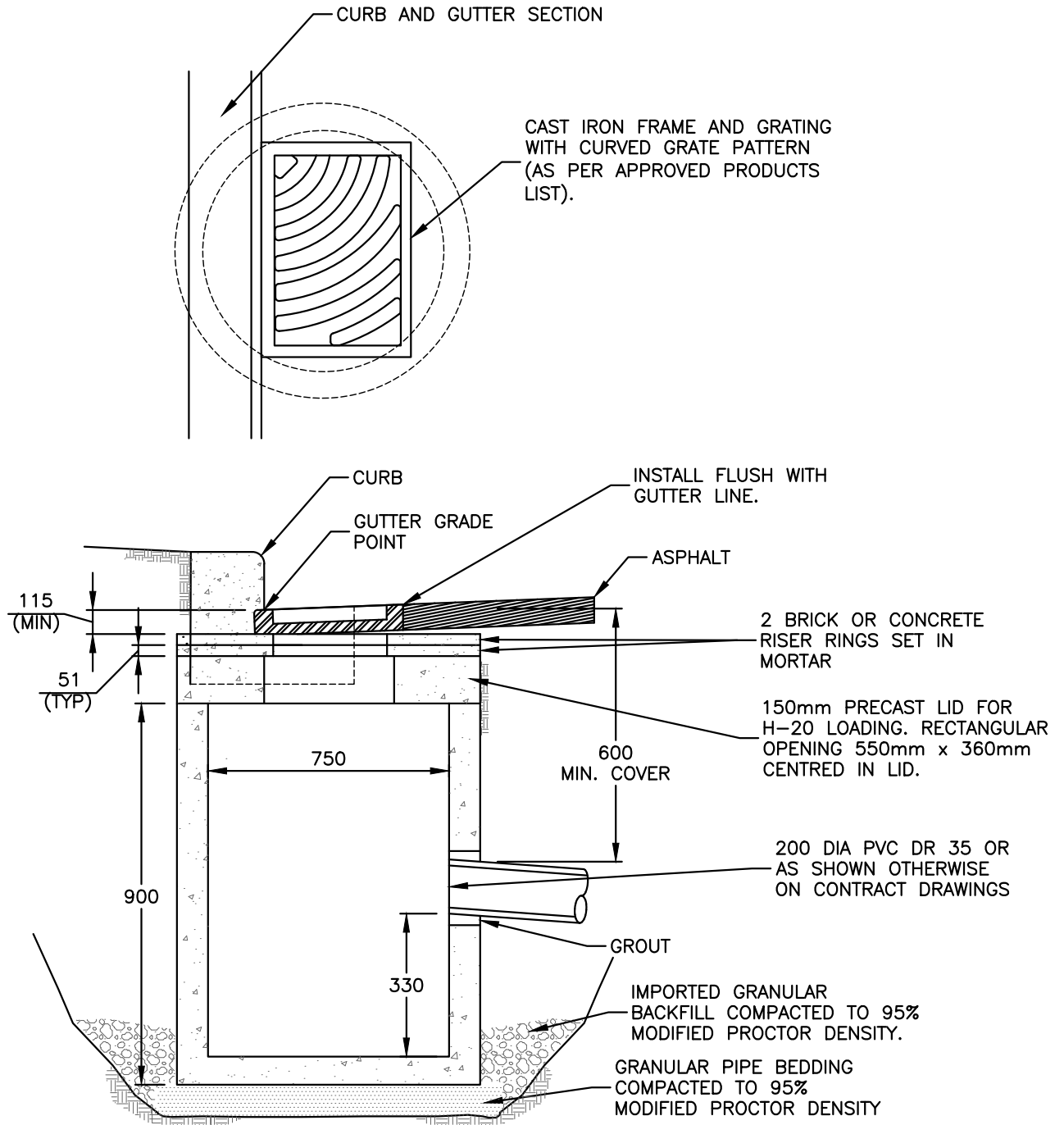
FEBRUARY, 2016



**INSPECTION CHAMBER FOR SANITARY AND STORM  
 SEWER CONNECTIONS**

DRAWING NUMBER	<b>CSSD S9</b>
REVISION NUMBER	0
SCALE	<b>233</b>

CITY OF COURTENAY  
 SUPPLEMENTARY STANDARD DETAIL DRAWING



NOTE:

1. PRECAST UNITS c/w BASE AND H-20 RATING, APPROVED BY CONTRACT ADMINISTRATOR, ARE ACCEPTABLE.
2. REFER TO CONTRACT DRAWINGS, SECTION 33 44 01 FOR DETAILED SPECIFICATIONS.
3. ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SHOWN.

NOVEMBER, 2017



TOP INLET CATCH BASIN

DRAWING NUMBER

CSSD S11

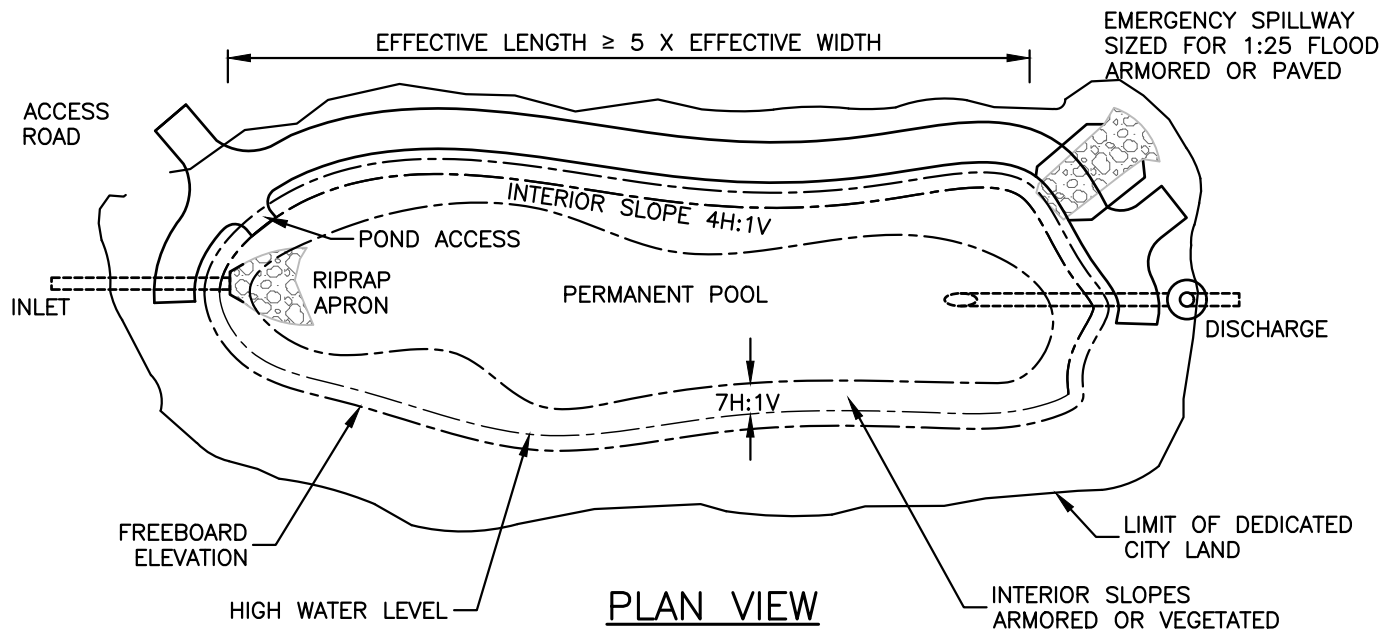
REVISION NUMBER

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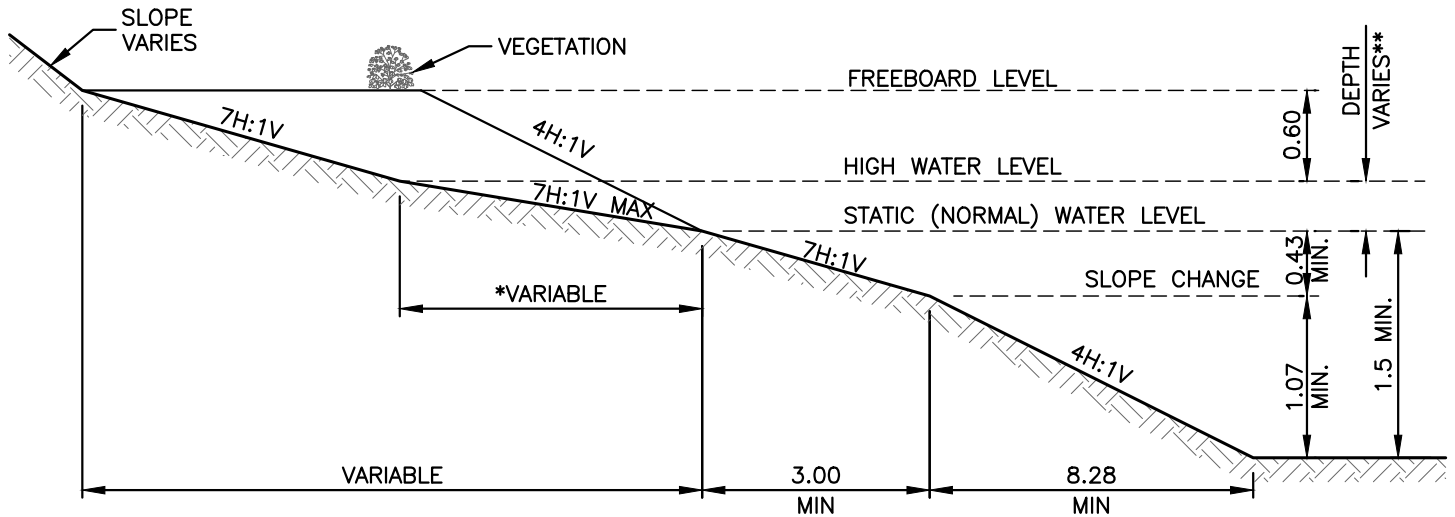
SCALE

234

**CITY OF COURTENAY  
SUPPLEMENTARY STANDARD DETAIL DRAWING**



**PLAN VIEW**



**SECTION VIEW**

NOTE:

1. \*MAXIMUM SIDE SLOPES OF 4:1 (H:V) MAY BE USED PROVIDED ADEQUATE VEGETATION IS USED TO PREVENT ACCESS, OR FOR DRY POND SIDE SLOPES.
2. \*\*MAXIMUM 1.5m FOR  $\leq 10$  YEAR LEVEL AND 3.0m FOR THE 25 YEAR LEVEL.
3. PERMANENT POOL BOTTOM SHALL INCLUDE FULL WIDTH BAFFLES TO DEVELOP SEDIMENTATION BASINS IF APPLICABLE.
4. DEPTHS ABOVE WET POND STATIC (NORMAL) WATER LEVEL SHALL ALSO APPLY TO DRY PONDS.
5. ALL DIMENSIONS ARE IN METRES.

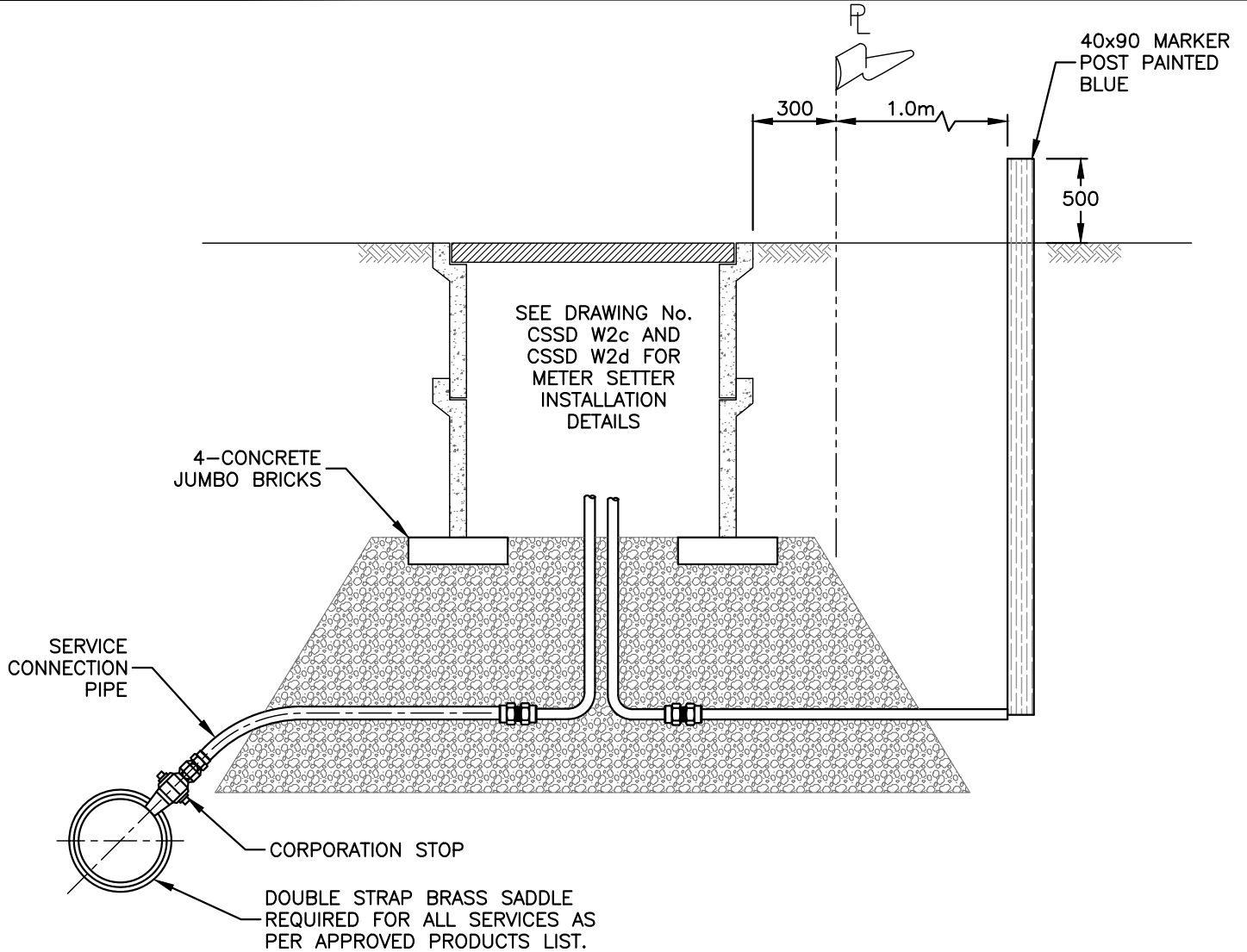
NOVEMBER, 2017



**WET DETENTION POND  
PLAN AND SECTION**

DRAWING NUMBER	CSSD S16
REVISION NUMBER	0
SCALE	<b>235</b>

CITY OF COURTENAY  
 SUPPLEMENTARY STANDARD DETAIL DRAWING



NOTE:

1. THIS DETAIL FOR SERVICES 25 TO 50mm ONLY.
2. PVC SADDLES TO SECTION 33 11 01.
3. INSTALL SERVICE PIPE WITH "GOOSE NECK" IN HORIZONTAL POSITION.
4. REFER TO CONTRACT DRAWINGS, SECTION 33 11 01 FOR DETAILED SPECIFICATIONS.
5. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

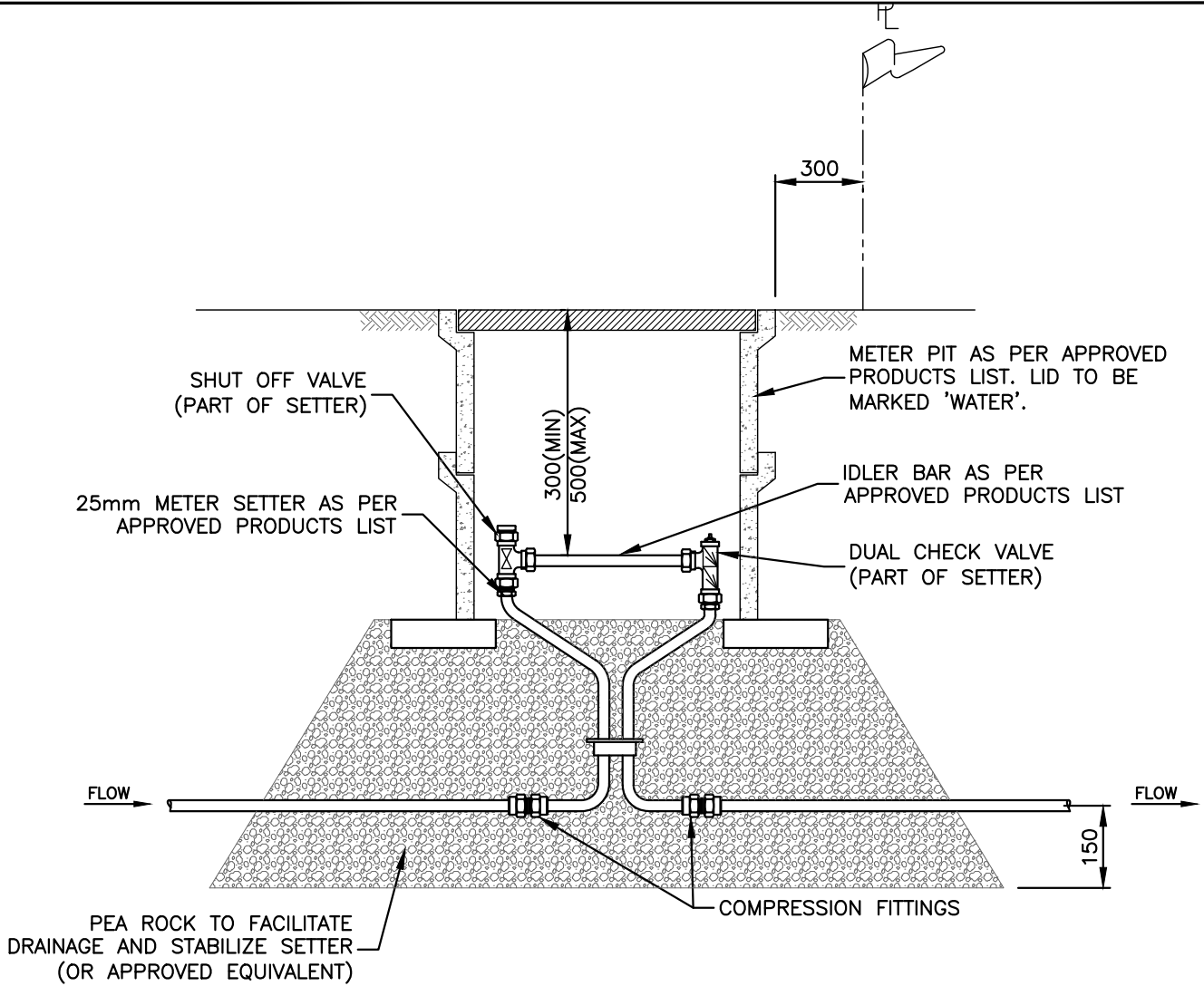
NOVEMBER, 2017



WATER SERVICE CONNECTION  
 SERVICE BOX

DRAWING NUMBER	CSSD W2a
REVISION NUMBER	0
SCALE	<b>236</b>

**CITY OF COURTENAY**  
**SUPPLEMENTARY STANDARD DETAIL DRAWING**



**NOTE:**

1. METER BOX TO BE INSTALLED AS PART OF THE INITIAL SERVICE INSTALLATION.
2. ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SHOWN.
3. REFER TO CONTRACT DRAWINGS, SECTION 33 11 01 FOR DETAILED SPECIFICATIONS.

NOVEMBER, 2017



**WATER METER SETTER INSTALLATION**  
**FOR 25mm SERVICE CONNECTION**

DRAWING NUMBER

**CSSD W2c**

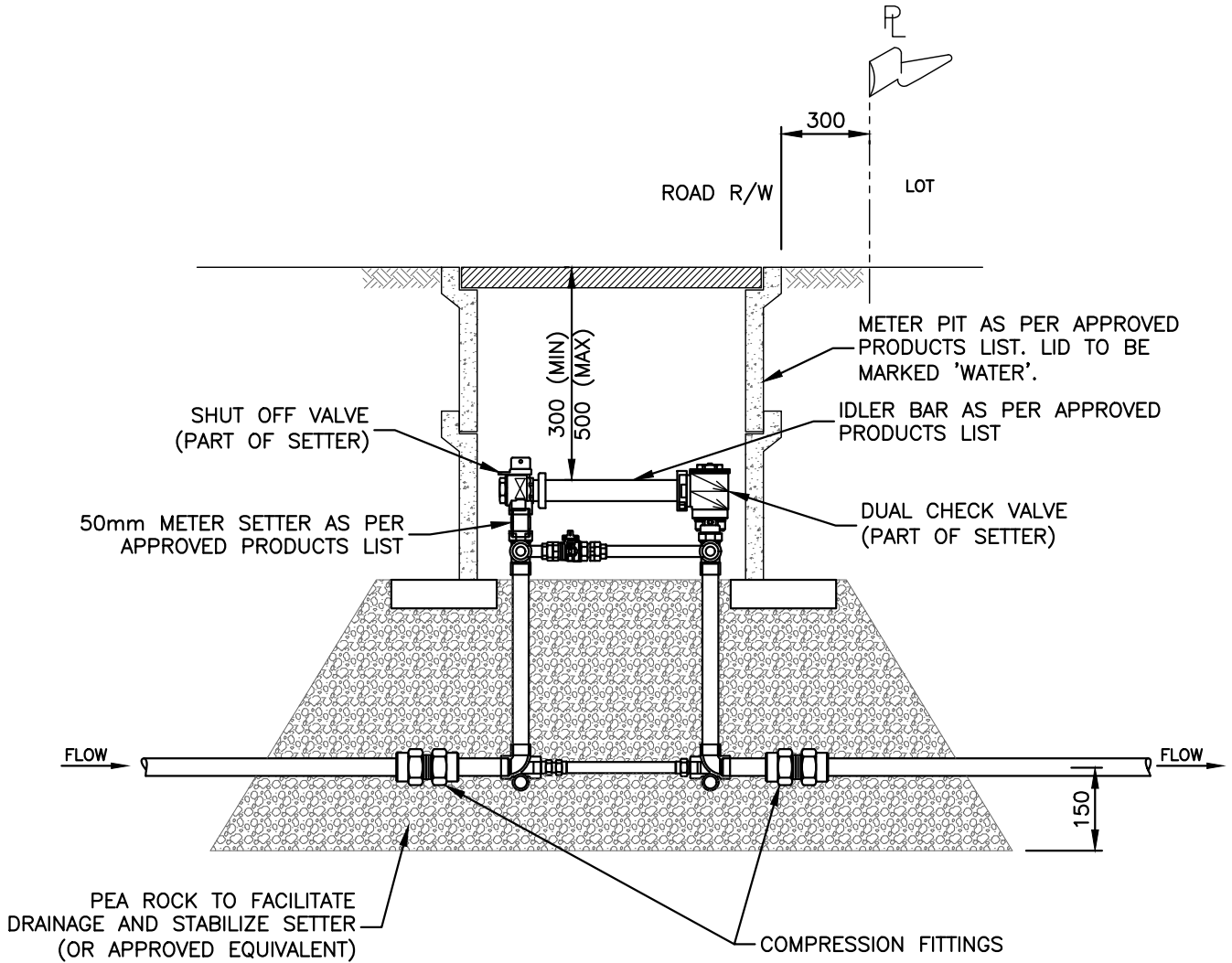
REVISION NUMBER

0

SCALE

**2:37**

CITY OF COURTENAY  
 SUPPLEMENTARY STANDARD DETAIL DRAWING



NOTE:

1. METER BOX TO BE INSTALLED AS PART OF THE INITIAL SERVICE INSTALLATION.
2. ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SHOWN.
3. REFER TO CONTRACT DRAWINGS, SECTION 33 11 01 FOR DETAILED SPECIFICATIONS.

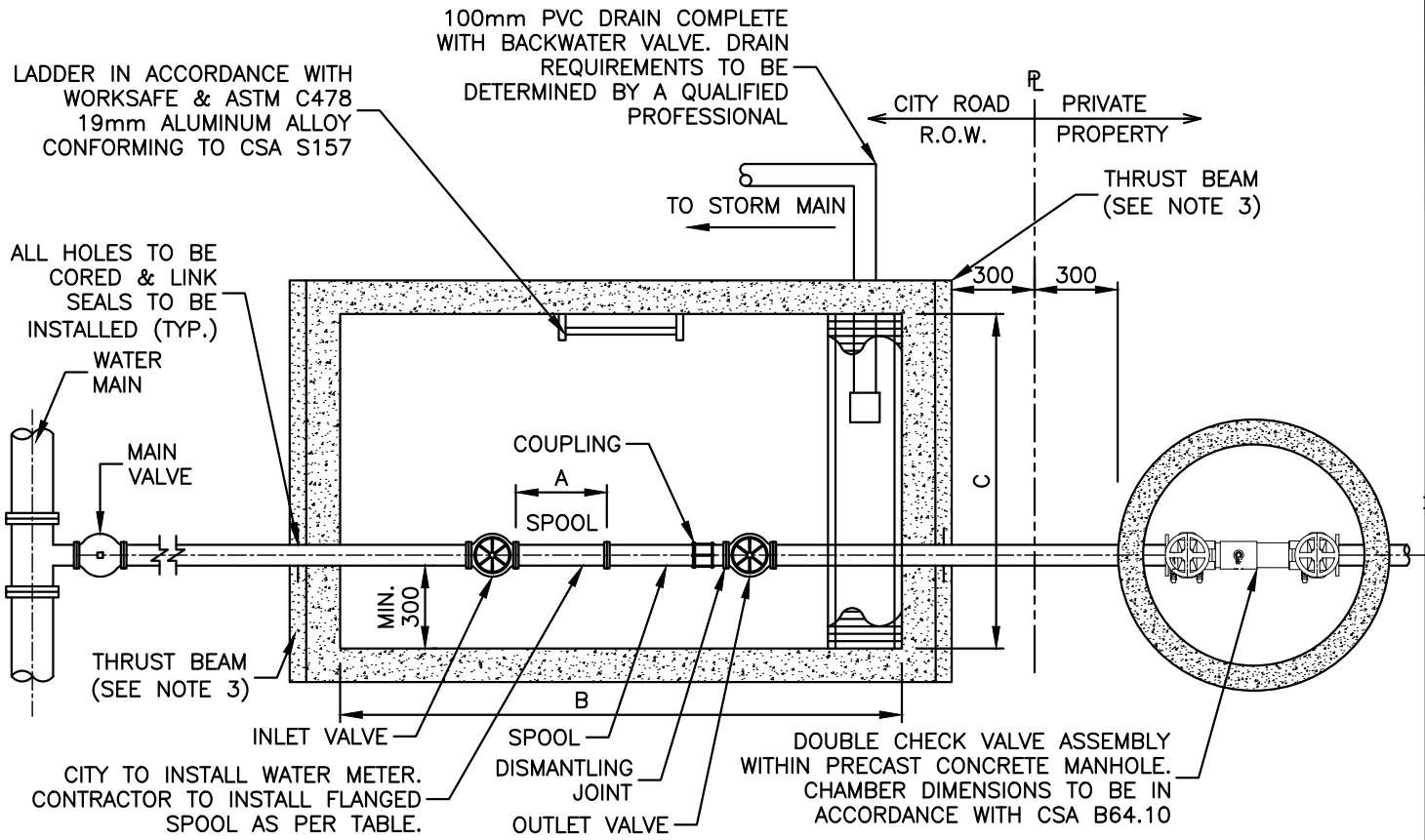
NOVEMBER, 2017



WATER METER SETTER INSTALLATION  
 FOR 50mm SERVICE CONNECTION

DRAWING NUMBER	CSSD W2d
REVISION NUMBER	0
SCALE	238

# CITY OF COURTENAY SUPPLEMENTARY STANDARD DETAIL DRAWING



WATER METER DIMENSIONS SPOOL LENGTH			
METER SIZE	A (mm)	B (mm)	C (mm)
75mm (3")	304.8	2060	1254
100mm (4")	355.6	2060	1254
150mm (6")	457.2	2060	1254
200mm (8")	508.0	TO BE DESIGNED BY A QUALIFIED PROFESSIONAL	
250mm (10")	450.0		

**NOTES:**

1. THIS DRAWING TO BE REVIEWED IN CONJUNCTION WITH THE CITY OF SUPPLEMENTARY DESIGN GUIDELINES AND SUPPLEMENTARY SPECIFICATIONS.
2. HATCH COVER TO BE DUAL DOOR. H20 OCCASIONAL (STATIC LOADING – NOT FOR DYNAMIC TRAFFIC) LOAD RATED LOCKABLE ALUMINUM LID C/W SPRING ASSISTED HATCH AND LOCK OPEN ARMS. HATCHES TO BE TROUGH FRAME WITH DRAIN DIRECTED TO SUMP.
3. PIPE ANCHORING/RETRAIANT TO BE DESIGNED BY APPLICANT'S ENGINEER.
4. ALL DIMENSIONS ARE IN MILLIMETRES.
5. METER CHAMBER FLOOR TO SLOPE TOWARD DRAIN.
6. 2121.5 PRE-CAST CONCRETE VAULT TO BE USED UP TO AND INCLUDING 150mm METER SIZE.

NOVEMBER, 2017



## DOMESTIC WATER METER INSTALLATION FOR GREATER THAN 50mm SERVICE

DRAWING NUMBER

**CSSD W2e**

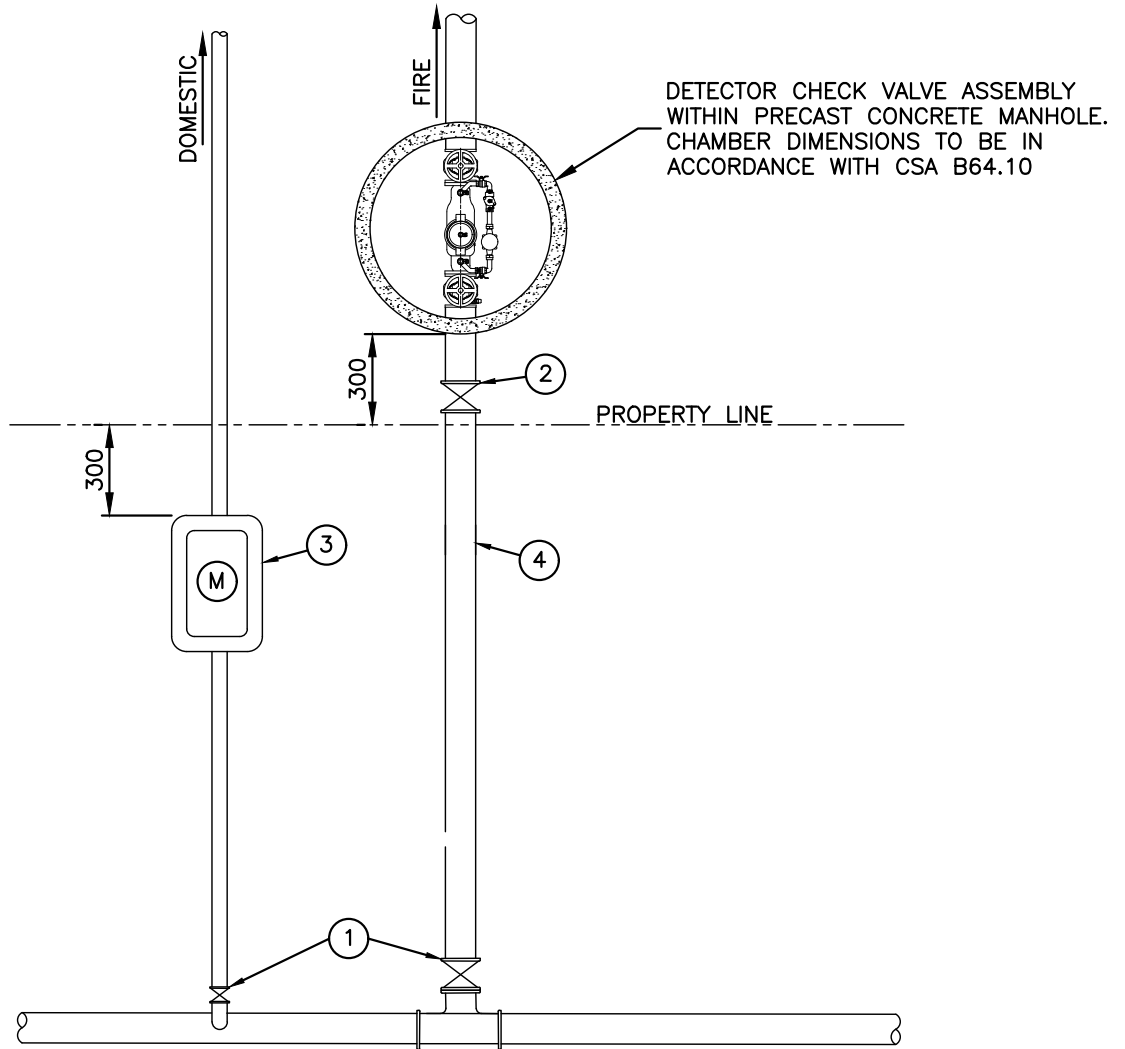
REVISION NUMBER

0

SCALE

**239**

**CITY OF COURTENAY**  
**SUPPLEMENTARY STANDARD DETAIL DRAWING**



NO	NAME
1	CORPORATION STOP, 25 $\phi$ -50 $\phi$ GATE VALVE, OVER 50 $\phi$
2	CURB STOP, 25 $\phi$ -50 $\phi$ (IN METER BOX) GATE VALVE, OVER 50 $\phi$
3	DOMESTIC SERVICE, 25 $\phi$ -50 $\phi$ FOR MORE DETAIL SEE DRAWINGS - CSSD W2a - CSSD W2c - CSSD W2d SERVICES GREATER THAN 50 $\phi$ FOR MORE DETAIL SEE DRAWING - CSSD W2e
4	FIRE LINE SERVICE (SIZE VARIES)

**NOTE:**

1. ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SHOWN
2. REFER TO CONTRACT DRAWINGS AND SECTION 33 11 01 FOR DETAILED SPECIFICATIONS.
3. INSTALL THRUST BLOCKING AS REQUIRED.
4. SEPARATE DOMESTIC AND FIRE CONNECTION MAY BE PERMITTED IF APPROVED BY THE CITY.

NOVEMBER, 2017



FIRE / DOMESTIC WATER  
 SERVICE PIPING LAYOUT

DRAWING NUMBER

**CSSD W2f**

REVISION NUMBER

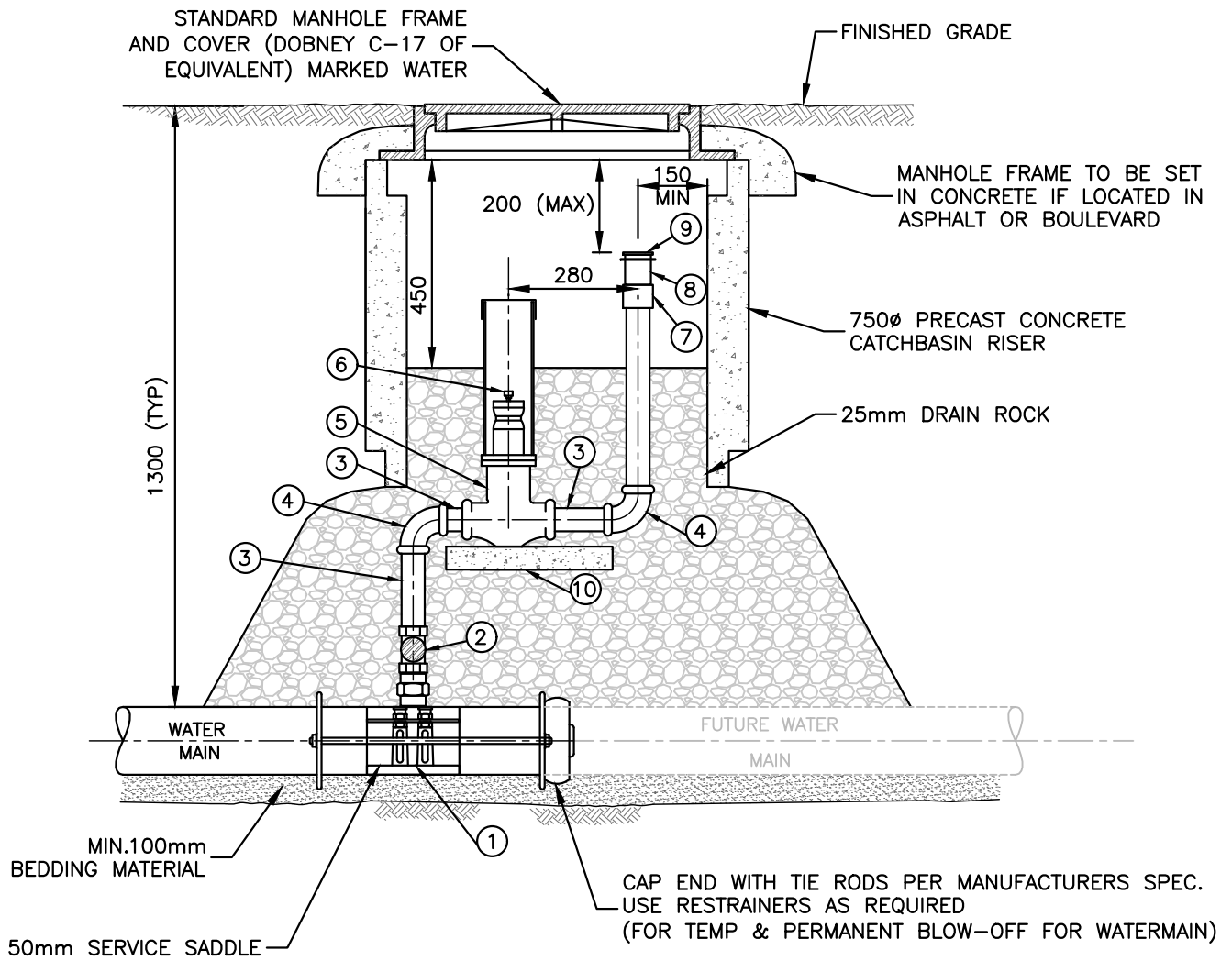
0

SCALE

**2:40**



# CITY OF COURTENAY SUPPLEMENTARY STANDARD DETAIL DRAWING



MATERIALS LIST	
ITEM	DESCRIPTION
1	50mm SERVICE SADDLE TAPPED AT PIPE CROWN
2	50mm GATE VALVE
3	50mm SS SPOOL PIECE
4	50mm SS 90° BEND

5	50mm CURB STOP WITH DRAIN
6	50mm SQUARE NUT
7	65mmx50mm BUSHING
8	65mmx65mm ADAPTOR
9	65mm QUICK CONNECT BRASS CAP
10	450x450x50 PRECAST CONCRETE PAD

**NOTE:**

- FOR INSTALLATIONS SHOWN ON CONTRACT DRAWINGS WHERE WATER TABLE (AT SEASONAL HIGH) IS ABOVE BASE OF DRAIN ROCK, REMOVE 4mm DRAIN HOLE AND AND SUBSTITUTE GRANULAR PIPE BEDDING FOR DRAIN ROCK. (COMPACT PIPE BEDDING TO 95% MODIFIED PROCTOR DENSITY).
- REFER TO MMCD DRAWING W1 FOR THRUST BLOCK DETAILS.
- REFER TO CONTRACT DRAWINGS, SECTION 33 11 01 FOR DETAILED SPECIFICATIONS.

NOVEMBER, 2017



## TEMPORARY AND PERMANENT BLOW-OFF FOR WATERMAIN

DRAWING NUMBER

**CSSD W8**

REVISION NUMBER

0

SCALE

**24:1**

**SCHEDULE 4**  
**STANDARDS FOR SANITARY LIFT STATIONS**



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## INTRODUCTION

The use of sanitary lift stations is generally discouraged and the City must approve any proposal for a lift station prior to submission of any engineered drawings for a lift station. Lift stations are considered a "special case" and are to be designed by a qualified professional. The following will form the general design requirements for duplex lift stations categorized as small to mid-sized lift stations. For stations larger than 50 l/s, or that require more than two pumps, authorization must be obtained from the City on a case by case basis, and the following standards may not fully apply.

Unless documentation provided by the City of Courtenay along with a specific request for tender or request for proposal states specifically that a provision set forth has been waived, all provisions are to be satisfied.

The requirements set forth in these standards are minimum requirements that shall be applied universally by all parties performing services for and/or providing equipment to the City of Courtenay. This includes, but is not limited to, all component parts that may form part of package systems.

This document is part of a series of standards and as such should not be viewed in isolation of all other City of Courtenay associated standards which may modify and/or clarify the requirements set forth within this document.

The City of Courtenay may, on a case-by-case basis, and at the City's sole discretion, approve deviations from these standards.

## INTENT OF THE STANDARDS

The Design Criteria are intended to provide direction to the Applicant and their Engineer on the elements required to be considered in the design of sanitary lift stations. It is intended to be used in conjunction with the MMCD Design Guideline Manual and the City of Courtenay Subdivision and Development Servicing Bylaw Schedule 1.

The Supplementary Specifications are intended to provide direction to the Applicant and their Engineer on the specifications that must be incorporated into building servicing contracts for the installation of new sanitary lift stations. The Supplementary Specifications are to be used in conjunction with the City of Courtenay Subdivision and Development Services Bylaw Schedule 2 and Schedule 3 and the Master Municipal Construction Document (MMCD).



## SANITARY LIFT STATION DESIGN CRITERIA

### 1.0 GENERAL SPECIFICATIONS

#### 1.1 Pumps

- (a) All sanitary lift stations shall be designed with a minimum of two pumps, each capable of handling the Peak Wet Weather Flows independent of the other. The pump that is furthest away from the inlet shall be supplied with a 4901 flush valve.
- (b) Each pump must be:
- capable of passing solids up to 75 mm in size;
  - equipped with hour meters;
  - easily removed for maintenance;
  - constructed to operate on a voltage based on HP rating as shown on the table below:

Pump Size	Approved Voltages
Less than 5HP	Single phase 240V / Three phase 208V
5HP – 10HP	Three phase 208V / Three phase 600V
Larger than 10 HP	Three phase 600V

- (c) Motor cables, power cables, etc. shall be continuous from the lift station to the kiosk. Cables are not to be spliced. Only one power cable is allowed in one conduit.

#### 1.2 Kiosk

All auxiliary equipment and control panels shall be mounted in a secure lockable kiosk adjacent to the station. The kiosk shall be located not less than 1.2 metres and not more than 3 metres from the station lid, with the controls section of the kiosk facing the wet well and facing north (where practical to do so.). The kiosk shall be founded on a concrete foundation, and should be made from powder coated aluminum, with a standard green finish. All kiosks shall be supplied with a rubber gasket between the aluminum kiosk and the concrete to prevent water leakage into the kiosk.

The electrical Kiosk shall be CSA Type 3R rated and fabricated from marine grade aluminum in accordance with the following Ministry of Transportation and Infrastructure Kiosk Specifications:

- General Material Requirements: 402.3.1
- Connecting Hardware 402.3.2
- Fabrication Mechanical Requirements, General Requirements 402.4.1
- Welding 402.4.2
- Door Gaskets 402.4.4
- Kiosk Environmental Requirements, General 402.4.8.1
- Kiosk Fan and Heater Thermostat 402.4.8.5
- Kiosk Finish 402.6
- Electrical Kiosk shall be powder coated "Fence Post Green".



- Plan Pouch 402.9

The kiosk shall be fabricated with sufficient bracing to form a structure capable of withstanding transportation, wind, snow and ice loading. The kiosk manufacturer is responsible for obtaining structural and seismic certification from a professional engineer registered with Engineers and Geoscientists BC. Structural certification shall include recommendations for fastening methods.

The kiosk shall contain separate compartments for:

- pump control;
- service entrance and distribution; and
- fan and duct section, complete with isolated cable junction chamber vented to the atmosphere.

The kiosk shall be designed to contain:

- all control and telemetry equipment within the pump control compartment;
- an electrical service entrance that is complete with required appurtenances and components shall be arranged in a manner acceptable to B.C. Hydro;
- all power distribution equipment in the service entrance and distribution section, with exception to a 120/240 or 120/208V electrical panel which shall be mounted within the pump control compartment;
- an extra 120 volt receptacle within the pump control and service entrance/distribution sections;
- an automatic transfer switch in the service entrance and distribution section;
- a manual transfer switch in the service entrance and distribution section;
- a receptacle for mobile backup generator on the exterior of the kiosk;
- intrusion and fault alarm keypad and panel, keypad to be accessible, with equipment mounted within the pump control compartment;
- exterior lighting mounted to an overhead pole capable of illuminating the area around the tank lid to WorksafeBC required standards;
- a heater within each of the pump control and service entrance/distribution sections; and
- a digital clock.

The fan and duct section shall be isolated from the pump control and service entrance/distribution sections by means of a continuous weld.

### 1.3 Piping/Valve Chamber

All piping within the wet well shall be stainless steel or approved equivalent, and all stations shall feature an external separate valve chamber for valves and flow measurement equipment. The valve chamber can be either fiberglass or pre-cast concrete with suitable lockable lids with lift assist mechanisms as required.

Each pump discharge shall have a ball check valve or lever type swing check valve.



Each pump discharge shall have a plug valve installed downstream of the check valves.

Drain to be provided at floor elevation and floor to be sloped to convey inflow of water or sewage toward drain inlet. The drain shall include a backwater valve and p-trap to prevent sewage and gas from entering the piping/valve chamber.

#### 1.4 Ventilation

Ventilation at each station is to be by forced air using a fixed speed fan that runs continuously. The minimum ventilation rate is to be 12 air changes per hour or higher if required for safety considerations. The fan shall be located in the kiosk and be sealed to the inlet blower line. The blower shall indicate failure on the control panel.

Each station shall have a minimum of one vent stack, and shall have odour control installed. As a minimum, the vent stack shall be equipped with an activated carbon filter capable of conveying the required air flow rate without excessive pressure loss: Calgon SweetVent or equal.

#### 1.5 Lift Station Tank

The lift station tank to be of fiberglass construction.

Wet wells shall be designed with the following features:

- Include a benched bottom to direct all solids into the pump suction;
- Include surface access with a lockable, waterproof fiberglass or aluminum cover. Access hatches must include hydraulic assist and safe hatch;
- Provide access that is 200 mm to 500 mm above the finished grade to prevent vehicles from riding overtop of the structure;
- Contain aluminum (or fiberglass) ladder mounted so it does not interfere with the removal and installation of the pumps, etc. The ladder shall be designed to extend and lock least 1.0 metre above the tank access. Ladders mounts to be structurally sufficient to prevent puncturing of the tank wall, where mechanical fasteners are to be used, the wall shall be reinforced to provide sufficient capacity for the type and size of fastener. Integrated fiberglass ladders shall be fixed mounted to the fiberglass wall with appropriate reinforcing of the fiberglass as specified by the manufacturer;
- Contain a platform above the high water level float to permit wet well access wherever the total depth from ground level to wet well floor exceeds 2.4 metres;
- Include 1 base and davit complete with hand operated winch capable of lifting the pumps clear of the lift station (as per the City's Approved Products List);
- Include 1 base and davit for confined space entry. (as per the City's Approved Products List);
- Contain explosion proof lighting capable of illuminating the interior of the tank.

#### 1.6 Equipment

All equipment must be CSA Approved and Work Safe BC compliant.



## 1.7 Emergency Backup Generator

All sewage lift stations shall be equipped with an emergency backup generator unless otherwise approved by the City. The generator transfer switch shall be of the automatic type. The generator shall be diesel fueled unless otherwise approved by the City. Diesel fuel tanks shall be base tanks integrated into generator unit by OEM, shall include double wall containment, and shall be sized to run the generator for at least 24 hrs continuously at 100% load. The concrete base to install the generator shall be provided with a spill containment structure to capture any spillage. The generator shall have a 1.2m clearance all around, and it shall be provided with a noise control package. Noise Control Package Specification for Generator shall be residential rated. Sound attenuation includes enclosure and exhaust muffler package. Sound attenuation system performance shall result in measured sound levels not to exceed 65 dB @ 10.7 metres. Design Engineer shall perform a load analysis with the sequence of motor starting in order to know the motor starting loads and the motor running loads. Such electric load calculations must be done in kVA units to account additional loads due to low power factor. The generator shall have a motor starting kVA capacity to limit the voltage dip to no more than 15% for any motor starting conditions. Such generator load analysis must be included in the engineering report. The generator manufacturer must be pre-approved by the City prior to design of the backup system.

The generator shall also come equipped with a permanently-mounted resistive load bank, with a full load that equals +/- 80% of the generator unit's full load capacity. The load bank shall also include the following specifications:

- Duty Cycle: Rated for continuous operation.
- Load Steps: 5, 10, 10, 25, 50, 100 KW
- Cooling System: integral with generator cooling system
- Sound dampening: integral with generator muffling system
- Operator Controls: Control Panel housed in a NEMA-type wall mount enclosure including:
  - Main Power ON/OFF Switch, Power ON Indicator, and Master Load ON/OFF Switch.
  - Load selection shall be provided by individual industrial lever-type toggle switches for on/off application of resistive load segments, one provided for each load step.
  - Auto Load Dump Circuit: A remote load dump circuit is provided as part of the load bank control circuit.
- Provisions shall be provided to trip the load bank off-line from a normally closed set of auxiliary contacts from an automatic transfer switch or other device. In the event of a utility failure, all load is removed.

**Automatic Load Controller:** Automatic Load step controller that maintains a minimum load on the generator set. The controller shall monitor the connected downstream loads and will automatically add or subtract load steps in response to overall load changes as to maintain a minimum load level on the generator set.





### 1.8 Warranty

All lift station components shall be warranted in accordance with the manufacturer’s warranty, and such warranty shall be explicitly stated in a warranty statement (section) provided with the Operations and Maintenance Manuals submitted upon acceptance of the Lift Station by the City.

### 1.9 Water Connection

A 50 mm water service connection for cleaning purposes must be provided at the site. The service must include a dry standpipe and appropriate cross-connection control devices located in an above ground heated lockable cabinet. The connection shall also include an on/off ball valve and a 38mm quick connect cam-lock fitting. Cross-connection control devices must be designed to be compliant with CSA standard B64.10-11 (Selection and Installation of Backflow Preventers/Maintenance and Field Testing of Backflow Preventers). RP backflow device shall be located in an above ground kiosk.

### 1.10 Site Fencing

1.8m black epoxy coated perimeter fencing is to be provided.

## 2.0 LIFT STATION ELECTRICAL DESIGN STANDARDS

### 2.1 Standard Lift Station Electrical Specification

All lift stations shall include at a minimum the following features and capabilities:

Manual pump controls	It shall be possible to set each pump into manual (Hand) mode. When in the manual mode the control of the pump shall be independent of (and unaffected by) the actions (or absence) of the controller or fail-safe pump control relays.
Motor type and starting	All pumps 10hp or larger require soft starting devices or are to be speed controlled via Variable Frequency Drives.
Controller	The station controller shall conform to the City of Courtenay Approved Products List.
Float Switches	Each station shall be supplied with a high level and low level float switch. These shall be either an ITT Flygt float level tree type (mercury) or an acceptable alternative as Approved by the City and CSA certified. Guides must be used for all float levels. The low level float is to be set at a level just above the pump intake. The high level float is to be set at a level no higher than the obvert of the lowest inlet pipe.



Fail Safe Operation	The high level float shall trigger operation of pumps, the operation of which shall be independent of the main station controller. The pump operation shall be wired to cease on either activation of the low level float or time-out of a timer relay. During normal operation the high level float will not be activated.
Level monitoring	Wet well levels shall be monitored using an ultrasonic sensor or pressure transducer connected as an analog input to the control unit. This level is to be used for pump control and shall be reported to the central monitoring station.
Programmable operation	Pump start and stop levels are to be programmable and set through the local pump controller HMI and via SCADA.
Pump supervision	Pumps shall be monitored, as a minimum, for stator over temperature faults, seal leakage and over current condition.
Flow rate	Flow rate data is to be reported by flow monitoring device.
Intrusion alarm for kiosk or building	Access to the electrical controls is to be monitored by a contact switch, and an alarm condition shall be generated when the contact is broken.
Receptacle for plug in of standby generator	Each station, including those which include local generator, shall be equipped with a receptacle for plug-in of City standby generator, mounted on the exterior of the building or kiosk within a lockable NEMA-4X enclosure (padlock provided by the City).
Alarms	The following alarms shall be generated and reported by the alarm system by way of a dedicated telephone connection. The alarms shall also be connected to the lift station controller to allow for annunciation through the City's SCADA system <ul style="list-style-type: none"> <li>• Intrusion Alarm</li> <li>• Loss of Power</li> <li>• High level alarm</li> <li>• Low level alarm</li> <li>• Pump monitoring alarms (leakage, high temperature)</li> <li>• Generator Faults (if generator installed)</li> <li>• Breaker tripped</li> <li>• Float switch failure</li> </ul>
UPS backup for controller and communications system	A UPS standby power system is required. The UPS must provide power to the controller for at least one hour in the event of a power outage.

## 2.2 User Interface

The user interface in a typical lift system consists of manual controls for emergency and maintenance purposes, and an electronic interface directly to the controller.



Manual Controls

The operator interface at this level shall be kept to a minimum. Auto/Off/Manual selectors for each pump are to be provided. These controls shall function independently of the controller. When in placed in manual mode the appropriate pump shall start. When placed in the Off condition the pump shall not start regardless of input from the controller. In Auto mode the pump is controlled by the controller. Pump run time meters shall be installed for each pump.

Status lamps are required as follows:

- One lamp indicating kiosk power
- One status lamp for each pump indicating pump run condition
- One status lamp for each pump indicating a failure condition

Controller Interface

Each station shall also include a station control Human-Machine-Interface (HMI), mounted in the door of the control cabinet. This control keypad is used to view and reset alarm status, and to configure the operation of the station. The HMI shall conform to the City of Courtenay Approved Products List, and shall integrate directly with the station controller.

2.3 VFD Station Supplementary Specification

All lift stations involving VFDs shall include the features and capabilities outlined above plus the following features and capabilities:

VFD	A solid state variable frequency drive, sized for the motors associated with the project, with inline load filters. Xylem ACS550 or similar.
VFD Manual Mode	The VFD shall be programmed to run the pump at an appropriate default speed in manual mode (when started).
VFD controller connection	Connection to the VFD is by analog output from the controller.
VFD output monitoring	The controller shall monitor and make use of the speed output, and current outputs of each VFD. These shall be made available to the monitoring system.

2.4 Entry and Alarm Test Mode

Each pumping station panel will have a key lock access to the control cabinet. A momentary spring-to-centre rotary selector switch shall be provided to switch to select between Test & Normal mode of operation. In Test mode the system shall behave as follows:

When momentarily switched to the "Test" position all normal alarms from the station will be acknowledged and disabled for 30 minutes, and a local "Test Mode" pilot light will illuminate.



In addition, a test alarm shall be triggered which will be treated as a low priority alarm at the SCADA system.

The station controller begins a phased monitoring of the situation, as described in the following table.

Phase	Description	
1	The input is activated by the test mode selector switch. Result: Work time begins (25 minutes).	
2	The input has been activated longer than the Work time. Result: Common alarm outputs are activated. Warning time begins. (5 minutes)	
3	Personnel acknowledge their presence within the Warning time. Result: Work time is restarted. Common alarm outputs are set to passive.	No acknowledge is received within the Warning time. Result: Personnel alarm is generated.
4	The selector switch is momentarily placed in the "Normal" position, or the kiosk/station door is closed. Result: "Test Mode" pilot light extinguishes and station alarming returns to normal.	

### 3.0 CITY SCADA SYSTEM

City of Courtenay sewage pumping stations are to be compatible with a central monitoring system, planned for some future date. This section is provided to explain the requirements on all new lift stations in order to ensure compatibility with the planned SCADA system.

Key features of the planned SCADA system are planned to include:

- real time information regarding the status of stations throughout the municipality in order to efficiently respond to faults and other issues as they arise;
- limited remote control capability of the stations, which in certain cases may avoid the need for a site visit;
- historical information and other data that will assist with proactive maintenance activities; and
- historical information and other data that can be used to make informed decisions guiding future infrastructure development.



#### 4.0 COMMUNICATIONS BETWEEN SCADA AND LIFT STATION

Stations constructed pre SCADA system shall support the future installation of communications equipment. Sufficient space is to be provided in the kiosk for a lockable louvred/ventilated box that will contain transmitter/receiver and networking equipment. In addition, a 100mm underground communications conduit shall be stubbed out from the kiosk/building foundation to allow for a future installation of antenna.



CONSTRUCTION SUPPLEMENTARY SPECIFICATIONS

- 1.0 GENERAL .1 This section refers to those portions of the Work that are unique to the supply and installation of prefabricated submersible sewage lift stations. This section must be referenced to and interpreted simultaneously with all other sections pertinent to the works described herein.
- 1.1 Related Work .1 Electrical Division 26  
.2 Concrete Reinforcement Section 03 20 01  
.3 Cast-in-Place Concrete Section 03 30 53  
.4 Aggregates and Granular Materials Section 31 05 17  
.5 Excavating, Trenching, and Backfilling Section 31 23 01  
.6 Sanitary Sewers Section 33 30 01  
.7 Sewage Force mains Section 33 34 01
- 1.2 Shop Drawing and Data Sheets .1 Before fabrication, the supplier shall submit shop drawings to the City for review. The submission shall include data sheets for all equipment to be ordered, along with a full drawing package for the electrical kiosk (external kiosk, internal layouts, wiring and controls diagrams)  
.2 Lift station structural drawings, stamped by a Professional Engineer registered in British Columbia, shall be provided for the fibreglass wet well, the reinforced concrete base, the electrical kiosk enclosure and the anchoring systems for the generator, electrical kiosk and wet well.
- 1.3 Requests for Approved Equals .1 Any requests for approved equal shall contain sufficient documentation regarding the service organization which is available to back up the tendered pumping units. In particular, the service organization shall:
  - have been in existence a sufficient length of time to have established a reputation which can be backed up with references;
  - have a number of qualified employees whose major commitment is to carry out service calls; and
  - have a well-equipped local maintenance shop.  
.2 The Contractor shall also be prepared to demonstrate the availability of commonly required spare parts. If these are not kept in stock locally, the anticipated delivery period must be clearly indicated in the Form of Tender.



- 1.4 Commissioning Plan .1 A commissioning plan should be provided to the City for review 2 weeks in advance of the scheduled commissioning.
- 2.0 PRODUCTS
- 2.1 Structure .1 Chamber:
- .1 The main chamber shall contain the pumps and associated equipment and shall be a vertical cylinder.
  - .2 The shell shall be constructed of Fibreglass Reinforced Plastic (FRP) and shall provide sufficient rigidity to resist deflection during installation and to resist pump loads and vibrations.
  - .3 The main chamber shall be reinforced with external reinforcing rings.
  - .4 Four (4) lifting "eyes" adequate for the entire weight of the completed station, including all installed equipment, shall be provided.
  - .5 Where inflow, discharge and ventilation lines, pass through the tank wall, the wall shall be reinforced.
  - .6 The connecting flanges shall be ANSI B-16.1, Class 125, unless shown otherwise on drawings.
  - .7 Color of the fibreglass interior shall be sanitary white. The exterior shall be dark green.
  - .8 Hold down lugs, complete with hold down bolts, shall be provided with sufficient strength to anchor the lift station to the reinforced concrete base, preventing flotation.
  - .9 The wet well shall be smooth and free of projections and pockets which could impede flow and collect sediment.
  - .10 An aluminum access ladder shall be provided as per Work Safe BC requirements. After installation of the complete lift station, all equipment shall be capable of servicing from the upper chamber.
  - .11 Electrical connection points shall be provided for the pump motors, light, and float conduits.



.2 Physical Properties of FRP Fabrication:

.1 The material of all tanks shipped shall meet the following minimum requirements:

<u>Property at 73° F.</u>	<u>ASTM Test</u>	<u>Value</u>
Tensile Strength	D638	8,000 - 16,000 psi
Compressive Strength	D695	14,000 - 27,000 psi
Flexural Strength	D790	16,000 - 30,000 psi
Flexural Modulus	D790	1.0 x 10 <sup>6</sup> psi
Hardness (average)	D790	Barcol 40

.2 Fiberglass tank to be helically filament wound utilizing chemically inert ISO resins. The laminate shall contain at least 60% and not over 70% glass by weight. All FRP work shall meet or exceed the following standards:

C.G.S.B.	41-GP-22
A.S.T.M.	3299 and 2563-2.4
A.S.T.M.	D883-69

.3 The maximum load rating permitted on the top of the tank must be posted on a plaque on the inside of the lid. The plaque must clearly visible when the lid is open.

.3 Construction

.1 Laminates shall be dense, without voids, dry spots, foreign inclusions, air bubbles, pinholes, or delamination and shall not be cracked or crazed. Such deficiencies shall be removed by grinding and replaced with hand laid matt and roving exceeding the amount removed. The fabricated unit shall have a smooth white inner surface and shall have a dimensional tolerance of plus or minus 6mm from design dimensions.

.2 Bonded joints shall be made by wrapping with strips of fibreglass mat soaked in resin. The wrap material shall be at least as thick as the heaviest plastic section joined, and it shall extend to either side of the joint a sufficient distance to make the joint at least as strong as the pieces joined. Interior joints shall be coloured white to match the interior surfaces; exterior joints shall be of the same colour as the exterior surface.





- .3 The inside surfaces of bonded joints shall be sealed with one layer of mat and then coated with resin to a minimum of 2.5mm thick.
- .4 All exposed interior and exterior surfaces shall have sufficient resin coating 0.51mm minimum thickness, to avoid exposure of glass fibres.
- .5 To prevent "flowing" of the final resin coat, it shall be bonded by using "Veil" glass fibre.
- .6 All cut edges and drilled holes shall be coated with resin so that no glass fibres are exposed and voids filled.
- .7 Structural elements having edges exposed shall be reinforced with chopped strand glass mat.
- .8 The minimum tank wall thickness shall be 16mm and shall be externally reinforced to resist soil, bearing, hydraulic, and handling loads, both internal and external. Wall thickness to be increased as required to resist loading.
- .9 The resin used shall be a commercial grade and shall be evaluated by test of previous service to be acceptable for use in domestic sewage applications and suitable for installation underground throughout Canada.
- .10 Ultraviolet light inhibitors to be used on all external surface in accordance with resin manufacturer's instructions.

2.2 Submersible Sewage Pumps .1

Pumps to be equipped with ANSI discharge flange. Pumps shall be a centrifugal, submersible, non-clog, bottom suction, capable of passing a 76mm solid. Pumps and motors shall incorporate the following:

Impeller: Cast iron.

Volute/Motor Frame: Cast iron, close coupled to seal chamber. Volute to be equipped with quick discharge nozzle to provide an automatic rapid and leakproof gravity lock type connection or disconnection from the fixed elbow. Sliding guide brackets to slide along guide rails.

Shaft: Stainless Steel.

Seals: Double mechanical seals (tungsten carbide to carbide upper and tungsten carbide to tungsten carbide lower).



Bearings: Anti-friction suitable for a minimum bearing life of 50,000 hours B10 life under operating conditions.

Fluid Operating Temp.: 0°C to 20°C.

Fluid Specific Gravity: 1.0

Fluid Type: Domestic Sewage

Fasteners: Stainless Steel (ASTM TYPE 316).

- .2 Motors shall be CSA approved submersible squirrel cage induction type with Class F insulation and non-hydroscopic windings. Service factor shall be 1.0. Use EEMAC Design B. If higher starting torque is required for the equipment loading, use EEMAC Design C.

Pump motors shall come equipped with means of communicating seal leaks and over-temperature conditions.

- .3 Power cables shall be factory-sealed into the motors and flush valve. They shall be of a type of construction acceptable to the electrical inspector. Cables shall be of sufficient length to reach the Control Kiosk without splices.

Power cables shall be equipped with a disconnect switch located inside the wet well, complete with lockout. Disconnect switches to be Meltric Decontactors or approved equal.

- .4 The pump motor nameplates shall be mounted in the Kiosk or Panel.

- .5 Pumps shall be painted with epoxy and equipped with sacrificial zinc anodes to provide corrosion protection.

- .6 Pump P2 to be equipped with Flygt Model 4901 Mix Flush Valve or approved equal.

- .7 Contractor shall supply the following spare equipment:

- one (1) impeller
- one (1) spare pump

2.3 Fixed Discharge Connection

- .1 Fixed discharge elbow, quick disconnect type, with steel soleplate, lower guide rail holder and drilled for anchor bolts.



2.4	Lifting Chains	.1	Lifting chains to be Grade 80 Accoloy A8 material, rated with a working load of 1900 kg and shall be NAR approved for overhead lifting, finish to be galvanized. Chain length to be sufficient to connect between pump and chain hoist.
2.5	Guide Rail Assembly	.1	Schedule 40 galvanized steel pipe c/w upper guide bar holder.
		.2	All fittings and connectors to be galvanized.
2.6	Ventilation Duct Work & Fan	.1	Inlet duct shall be provided for air blown into the lift station and a vent shall release exhaust air.
2.7	Lighting Fixture	.1	The wet well light shall be an explosion-proof, wall-mounted, LED fixture suitable for Class 1 locations, complete with globe and guard, RAB Type EB 123 or equal. Switch by General Contractor.
2.8	External Piping	.1	As per the Contract Drawings.
2.9	Internal Piping	.1	Sewage piping shall be stainless steel.
2.10	Plug Valves	.1	Plug Valve, c/w lever. Flanges to ANSI B-16.1, Class 125.
2.11	Check Valves	.1	Ball check valve. Flanges to ANSI B-16.1, Class 125.
2.12	Level Regulators	.1	Provide five ENM-10 Flygt level regulators to stop both pumps, start lead pump, start standby pump, high level alarm, low level alarm for 24 volt operation, each with sufficient cable suitable for the installation.
		.2	Provide one aluminum liquid level hanger, with wall bracket mount and flat switch conductor hooks for excess cable. Hanger shall also provide threaded strain-relief squeeze connectors for each level regulator.
2.13	Bolts	.1	All bolts, including those for the check valve and plug valve, shall be ASTM Type 316 Stainless Steel.
2.14	Access Covers	.1	Access covers shall be designed to allow removal of the pumps from the stations without removing or damaging other equipment.
		.2	Each cover shall be hinged and include hydraulic assist for easy opening with less than 225 N lifting force and shall be provided with a padlock hasp with a box enclosure to prevent vandalizing of the lock.



- .3 A brass padlock shall will be installed by the City at the developer's cost.
- .4 Each cover shall be provided with a positive means of locking open.
- .5 Safe-Hatch (or approved equal) shall be included to provide fall through protection.
- 2.15 Air Release Valve .1 Air release valve to be 50mm diameter NPT inlet, cast iron body, bronze mechanism and seat, stainless steel lever pins and float, designed for sewage, rated at 1MPa. Provide shut-off valve and back flushing facilities including blow-off valves and 3 metre long back flush hose. Equip valve and hose with quick disconnect couplings.
- 2.16 Floor Gratings .1 Fibreglass or Borden Type B aluminium Size No. 6 suitable for a bearing load of 5 kN/m<sup>2</sup>, or 200 kg plus dead weight of one pump whichever is greater.
- 2.17 Miscellaneous Metals .1 Aluminium: to ASTM 655.  
.2 conforming to CSA G40.2-M1977; Type W with yield strength of 300 MPa, shop primed.  
.3 stainless steel ASTM Type A316 Stainless Steel unless otherwise noted.  
.4 Miscellaneous metalwork, including brackets, nuts and bolts, cables, turnbuckles, and eye bolts shall be stainless steel or aluminium. Sharp edges and weld splatter shall be removed prior to installation.
- 2.18 Pressure Gauge .1 GIC #6211, liquid 100 mm diameter pressure gauge c/w snubber and isolating valve.
- 2.19 Hydrostatic Tests .1 Pressure piping within the FRP wet well and valve chamber shall be hydrostatically tested to a pressure no less than 1.5 x the shut off pressure of the lift station pumps. The test pressure shall be held for a period of not less than two (2) hours, with no leakage permitted.

Sewage forcemains external to the lift station shall be tested in accordance with Section 33 34 01 – Sewage Forcemains.

Should any test disclose leakage greater than that specified above, the Supplier shall locate and repair the defect and retest



			the section to ensure that the leakage is within the allowable limits.
2.20	Concrete Base and Anchoring System	.1	The reinforced concrete wet well base and anchoring system shall be designed to prevent uplift of the fibreglass lift station assuming that the surrounding soil is flooded to finished ground elevation and that the station is empty. A minimum safety factor of 1.5 against uplift shall be used in the design of the base and anchoring system.
2.21	Power Supply and Controls	.1	As per Division 26.
3.0	EXECUTION		
3.1	Excavation and Backfilling	.1	To requirements of Section 31 23 01 Excavation, Trenching and Backfilling.
		.2	Start backfilling only after the concrete has acquired a suitable degree of strength and only after obtaining written permission from the Contract Administrator. No backfilling of walls shall take place before the slabs have been cast and have reached a minimum of 75% design strength.
		.3	Use only the approved portion of the excavated material and other approved imported granular fill.
		.4	Deposit backfill in layers not exceeding 150mm thickness, and compact to obtain 95% of Standard Proctor Density or otherwise indicated on the Contract Documents.
		.5	Keep heavy compacting equipment away from structure by at least 1.5 metres. This portion shall be compacted using hand operated tampers.
		.6	Make all fills and embankments to elevations, contours, and slopes shown on the drawings.
		.7	Grade top layer carefully to smooth regular surface, with a minimum thickness of 100mm of topsoil, when indicated on the drawings.
		.8	Allow for any settlement which may occur in order that the finished fills or embankments will be to the final grades as shown on the drawings.



- .9 Excavate and remove all materials whatever their nature and condition to depths and dimensions necessary for the construction of the structure and piping to the limits shown on the drawings.
  - .10 Furnish all equipment for construction, temporary supports including shoring, bracing, cribs, coffer dams, etc. and for de-watering.
  - .11 Install and operate an adequate de-watering system for construction of the structures in the dry.
  - .12 All equipment used for de-watering and excavation shall be of a suitable and rugged type to assure continuous operation.
  - .13 Make special provisions to relieve the water pressure and prevent flotation or damage to parts of the works in case of accidental stoppage of de-watering equipment.
  - .14 Where over excavation is required, fill with specified sub-base or lean concrete unless otherwise indicated in the Contract Documents.
  - .15 Stockpile excavated granular material meeting backfill specification designated by the Contract Administrator. Save for re-use.
  - .16 Notify the Contract Administrator for inspection and approval after the excavation is completed.
  - .17 Do not place any concrete until the Contract Administrator has approved the depth of excavation and the character of the foundation material.
- 3.2 External Piping .1 To requirements of Sections 31 23 01 - Excavating, Trenching and Backfilling, Section 33 30 01 - Sanitary Sewers, and Section 33 34 01 - Sewage Forcemains.
- 3.3 Concrete Work .1 To Section 03 30 53 - Cast-in-Place Concrete and Section 03 20 01 - Concrete Reinforcement.
- 3.4 Electrical .1 To Division 26.
- 3.5 Piping Installation .1 Pipe shall be adequately supported on adjustable pipe saddle supports or from pie hangers or brackets during construction and completion to prevent abnormal stresses being imposed on items of equipment such as pump flanges.



- .2 Valves shall be installed in accordance with the manufacturer's recommendations.
  - .3 Before installing bolted connections, pipe ends, and gaskets shall be absolutely clean. Gaskets shall be lubricated with soapy water and bolts with thread lubricant. Bolts shall be tightened progressively by the crossover method and not in rotation around the joint. Bolts shall be torqued to the manufacturer's requirements. Wrenches used for tightening bolts shall be in good condition and properly sized to prevent rounding of nuts and bolt heads.
  - .4 During all stages of construction, piping shall be protected from damage from any cause. Openings in the piping system shall be securely covered, capped, or plugged to prevent collection of dirt, debris, or other extraneous matter during the entire construction.
  - .5 Damaged work shall be removed and replaced with new material to the satisfaction of the City.
- 3.6 Pumps and Accessories
- .1 Locate discharge elbows on the sump floor at exact locations required so that guide rails which connect from them to the access frame will be in perfect alignment.
  - .2 Firmly anchor discharge elbows to the floor at their proper location.
  - .3 Install guide rails.
  - .4 Lower pumps on guide rail system until contact is made with discharge elbows. Ensure that system functions to give leaktight connection.
- 3.7 Start-Up
- .1 Lift station shall be completed, including work of other sections, before start-up.
  - .2 Start-up of equipment to take place in the presence of a trained representative of the Equipment Supplier and City. Copies of final operating and maintenance manuals shall be provided to the City at least two (2) weeks in advance of start-up.
  - .3 Set level and align all equipment to the complete satisfaction of the City.
  - .4 Carefully check the operation and controls of the equipment.



- .5 Notify the City when the operation and controls of the equipment are satisfactory.
- .6 Provide the necessary facilities for the City to check the operation of the equipment.
- .7 The Contractor shall make provisions for adequate supply of water to the wet well and forcemain for testing purposes. Testing will include checking performance of all pumps, floats, and controls. At minimum the following tests will be conducted.
  - .1 Pump Condition - i.e. pump body, impeller running free, quick disconnect connection, cable connections, gaskets and oil level.
  - .2 Wet Well Condition - i.e. pump sliding free on guide rails, pump cable with sufficient slack, floats suitably positioned and will not snarl, no cable splices or junction box in the wet well, well clean.
  - .3 Control Panel Condition - i.e. components including motor overloads correctly rated for the pumps. Record over-load settings on schematic, date and sign.
  - .4 Start-Up Operation - i.e. supply voltage suitable, pump rotation correct, operation of pumps - by float switches - HOA selectors - lead pump selector - overloads isolate associated control, alarm float.
  - .5 Pump Load Checks - ie. load current on all phases for single and parallel pump operation, supply voltage under load. Confirm pumping rate and operating head.
  - .6 Alarm panel test to confirm all zones are correctly configured and operational.
- .8 Liaise with the Contract Administrator to ensure that the Design Engineer, the City, the Contractor, and the Equipment Supplier are present for the start-up and testing program.
- .9 The City will not take over operation and maintenance of any equipment until the work of all related sections has been completed in the area in which the equipment is located and all equipment has operated in its intended manner to the satisfaction of the City.





- .10 Cost of any temporary power costs for the start-up procedure shall be the responsibility of the Contractor.
- 3.8 Protection
  - .1 Protect the work and material of all other sections from damage and make good all damage thus caused, to the satisfaction of the City.
  - .2 Be responsible for work and equipment until finally inspected, tested, and accepted, protect work against theft, injury, or damage, and carefully store material and equipment received on site which are not immediately installed. Close open ends of work with temporary covers and plugs during construction to prevent entry of obstructing materials.
- 3.9 Cleaning
  - .1 Any dirt rubbish, or grease on walls, floors, or fixtures for which the Contractor is responsible must be removed and the premises left in first class condition in every respect.
  - .2 De-water station wet well and remove all dirt and grit from bottom of station.
- 3.10 Maintenance Manuals
  - .1 Supply three copies of hard backed bound manuals with all the information required for maintenance, operation, parts catalogue and lubrication.

The following information shall be included in the manual:

- .1 Table of contents.
- .2 As constructed shop drawings.
- .3 Equipment, layout drawings.
- .4 Electrical, control, and alarm wiring diagrams.
- .5 Normal and emergency operating instructions for all equipment.
- .6 Maintenance instructions for all equipment.
- .7 Safe work procedure for confined space entry into the wet well and valve chamber (to be prepared by a Qualified Professional).
- .8 Equipment data sheets.
- .9 Certified head/capacity curves for pumps.
- .10 Equipment part lists.
- .2 Each section shall be separated from the preceding section with a plasticized divider with a tab denoting contents of the section.
- .3 Review all of these instructions with the City representatives before the commencement of the maintenance period.



General catalogues will not be accepted and bulletins must deal specifically with the equipment provided.

**REFERENCE DOCUMENT 1**  
**WORKS AND SERVICES AGREEMENT**



TERMS OF INSTRUMENT - PART 2  
COVENANT

(Section 219 *Land Title Act*)

Agreement Number:

File Number:

**THIS AGREEMENT** is dated \_\_\_\_\_, \_\_\_\_\_ and is between

**THE CORPORATION OF THE CITY OF COURTENAY**

830 Cliffe Avenue  
Courtenay, BC V9N 2J7

(the "City")

OF THE FIRST PART

AND

***[name of Developer]***

(the "Developer")

OF THE SECOND PART

---

**WHEREAS**

- A. The Developer is the registered owner in fee simple of the lands in the City of Courtenay legally described in Item 2 of Part 1 of the *Land Title Act* Form C to which this Agreement is attached and which forms part of this Agreement (the "Land");
- B. The Developer has agreed to construct and provide certain works and services as required by the City's Subdivision and Development Servicing Bylaw No. XXXX, 2017, as amended, in accordance with the drawings, standards and specifications attached to this Agreement and in accordance with the applicable policies of the City;
- C. The Developer has applied for the approval of a subdivision or building permit in respect of the Land prior to the construction and installation of the required works and services and has agreed to enter into this Agreement with the City pursuant to Section 509(2) of the *Local Government Act*;



- D. The Developer has agreed to grant and transfer to the City all its right, title and interest in and to the works and services required to be constructed and installed, and the City has agreed to accept such transfer of the works and services on the terms of this Agreement; and
- E. The Developer has agreed to provide *security for completion* of the works and services.

**NOW THEREFORE** in consideration of payment of \$2.00 by the City to the Developer and other good and valuable consideration, the receipt of which is acknowledged by the Developer, the Developer covenants and agrees with the City in accordance with Section 219 of the *Land Title Act* as follows:

## DEFINITIONS

1. In this Agreement:

**“Accepted Drawings”** means the specifications, design drawings and other plans for the Works as referred to in Schedule “A” of this Agreement that are sealed by the Qualified Professional, and accepted in writing by the Development Engineer.

**“Bylaw”** means the City’s Subdivision and Development Servicing Bylaw No. XXXX, 2017, as amended or replaced from time to time.

**“Certificate of Construction Completion”** means written certification by the Development Engineer that the Works have been tested and are complete except for minor deficiencies specified in the certification, such that the Works are usable for their intended purpose, as determined by the Development Engineer acting reasonably.

**“Certificate of Acceptance”** means written certification by the Development Engineer under Section 5 of this Agreement that the Warranty Period in respect of the Works has been satisfactorily completed and ownership of the Works can be transferred to the City.

**“Complete” or Completion”** with respect to the Works means completion to the satisfaction of the Development Engineer evidenced by the Certificate of Construction Completion.

**“Construction Costs”** means the construction costs of Works and Services as estimated by the Qualified Professional and accepted by the Development Engineer.

**“Developer”** means the owner of land, or appointed agent for the owner, in respect of which a subdivision application or building permit application has been made.

**“Development Engineer”** means the person designated to that position by the City of Courtenay, or a designate.

**“Warranty Period”** means the period which expires on the later of one year after the date of issuance of the Certificate of Construction Completion and a later date established under section 5(c) of this Agreement



“**Qualified Professional**” means a Professional Engineer who is registered or licensed to practice in British Columbia under the *Engineers and Geoscientists Act*, who is responsible for the design, construction, supervision and certification of all Works on behalf of the Developer.

“**Security**” means cash or a clean, unconditional, irrevocable and automatically renewing letter of credit drawn on a chartered bank or credit union having a branch in the City at which demand may be made on the letter of credit.

“**Works**” means the works and services to be provided, performed and constructed by the Developer as required by the bylaws of the City or as otherwise required under statutory authority; without limitation, the Works include all the design and construction work described in Schedule “A” hereto, utilities and connections to be constructed on and off the Land, landscaping, environmental protection measures, provision of plans and registration of Land Title Office documents and plans.

## DEVELOPER’S COVENANTS

2. The *Developer* covenants and agrees with the City:
  - a) that the Land shall not be used except in accordance with this Agreement; and
  - b) that until such time as all the terms and conditions contained in sections 3, 4 and 8 are complied with, the Land and any buildings or structures erected or placed on or to be erected or placed on the Land shall not be used or occupied.
  
3. The *Developer* covenants and agrees:
  - a) not to commence the construction or installation of the *Works* without first receiving authorization to commence construction in writing from the *Development Engineer*;
  - b) to construct, install and *complete* the *Works* in accordance with the *Accepted Drawings*, with this Agreement and all applicable enactments;
  - c) to obtain the prior written consent of the *Development Engineer* for any changes to the *Accepted Drawings*;
  - d) to comply with any changes to the *Accepted Drawings* required by the *Development Engineer* as may be necessary to satisfy the *Development Engineer* that the *Works* function and operate in a manner satisfactory to the *Development Engineer*;
  - e) to comply with all statutes, laws, regulations and orders of any authority having jurisdiction and without limiting the generality of the foregoing all bylaws of the City; and
  - f) not to deposit or permit the deposit of any material or debris upon any highway or lands of the City, and if any material or debris is left upon a highways or land of the City during or after the construction of the *Works*, the City may remove the material or debris at the expense of the *Developer*.



4. Upon *completion* of the *Works*, the *Developer* covenants and agrees:
  - a) to assign to the City all of its right, title and interest in and to the *Works* not located on the Land unless in a City statutory right-of-way over the Land, free and clear of all encumbrances;
  - b) to grant or cause to be granted to the City in registerable form all statutory rights-of-way reasonably required by the *Development Engineer* for the operation, maintenance, repair and replacement of the *Works* located on the Land, on the City's standard terms; and
  - c) to deliver to the City all final inspection and testing records and as-constructed drawings of the *Works* which drawings shall be prepared by a professional engineer in accordance with the *Bylaw* and good engineering practice and be in a form satisfactory to the *Development Engineer* before issuance of the *Certificate of Acceptance*.
  
5. The *Developer* covenants and agrees :
  - a) to repair any deficiencies in design, materials or workmanship in the *Works* that may arise during the *Warranty Period*, including without limitation any deficiency of which the *Development Engineer* gives the *Developer* notice in writing;
  - b) that if the *Works* are in any way defective or do not operate in a satisfactory manner, the *Developer* shall, at the expense of the *Developer*, modify and reconstruct the *Works* immediately so that the *Works* are fully operative and function in accordance with the *Bylaw* standards, provided that any modification has been approved in writing by the *Development Engineer*;
  - c) that the *Development Engineer* may upon written notice to the *Developer*, given before the issuance of the *Certificate of Construction Completion*, increase the *Warranty Period* to a period the *Development Engineer* considers reasonable, in consideration of the period of time that is required to repair any deficiency in the *Works* of which the *Developer* has been given notice, but in any event not to exceed three years;
  - d) that if the *Developer* fails to remedy any defect or deficiency in the *Works* or pay for any damage resulting from the installation of the *Works*, the City may deduct from the *Security* the cost of repairing the *Works*, remedying any defect or deficiency or paying for any damage, and Section 10 of this Agreement shall apply.
  
6. The *Developer* authorizes the City, its agents and contractors to enter upon the Land at any time as may be necessary or convenient for the carrying out of this Agreement, including without limitation for the purpose of inspecting, repairing or undertaking the *Works*.

#### THE CITY'S COVENANTS

7. The City covenants and agrees that:



- a) it will permit the *Developer* to perform the *Works* on the terms and conditions contained in this Agreement and to occupy and use municipal highways and lands of the City as necessary for the construction of the *Works* as defined on the *Accepted Drawings*;
- b) it will issue a *Certificate of Construction Completion* signed by the *Development Engineer* upon the *Developer* satisfactorily completing the *Works*;
- c) during the *Warranty Period*, the City will operate and maintain those parts of the *Works* which are within a highway, municipal easement or municipal statutory right of way in the same manner and to the same standard as equivalent *works* are operated and maintained elsewhere in the City. Any costs attributable to any deficiency or defect in the *Works* or failure of the *Works* to operate normally shall be the responsibility of the *Developer*; and
- d) it will issue a *Certificate of Acceptance* signed by the *Development Engineer* upon the *Developer* satisfactorily completing the repair or correction of any defect or deficiency in the *Works* during the *Warranty Period* and performing all other requirements of this Agreement, i, and providing all final inspection records, testing records and as-constructed drawings.

#### TIME FOR COMPLETION OF WORKS

8. The *Developer* will *complete* the construction and installation of the *Works* to the satisfaction of the *Development Engineer* and obtain a *Certificate of Construction Completion* by **[insert date]**.

#### SECURITY

9. As a guarantee for the *Developer's* performance of all of its covenants and agreements contained in this Agreement, the *Developer* has deposited *Security*, in accordance with the *Bylaw*, in the sum of \$**[amount]** (the "Deposit"), which is equal to 125% of the estimated Construction Cost of the required *Works*, as certified by the *Qualified Professional*.
10. If the *Developer* does not *complete* the *Works* as required by Sections 3 and 8 of this Agreement, the City may, without notice to the *Developer*, *complete* the *Works* at the cost of the *Developer* and for that purpose the City may draw down upon the *Security* and hold or use the full amount of the *Security*. The City may undertake the *Works* either by itself or by contractors employed by it. The City shall be under no obligation to *complete* the *Works* and may undertake the *Works* in whole or in part, in the City's discretion as to extent and timing of *completion*.
11. If there are insufficient monies included in the *Security* to *complete* the *Works* in accordance with the *Accepted Drawings*, the *Developer* shall pay to the City the amount of the insufficiency immediately upon receipt of the City's invoice for that amount, whether or not the City has then completed the balance of the *Works*.
12. If:





- a) The *Developer* completes the *Works* as required by Section 3 and section 8 of this Agreement, and the *Certificate of Construction Completion* is issued by the City; or
- b) The City completes the *Works* in accordance with Section 10 of this Agreement at a cost which is less than the amount of the *Security*,

then the amount of the *Security* may be reduced by the *Development Engineer* to the sum of 5% of the *Security*, or \$1,000.00, whichever is greater, which amount shall be held by the City throughout the *Warranty Period* as *security* for the requirements in section 5.

13. The City shall return any unused part of the *Security* to the *Developer* without interest, not less than 60 days after issuance of the *Certificate of Acceptance*. Any return of *security* shall be made to the *Developer*, despite any change in ownership of the Land.
14. The *Development Engineer* may, not more than once in any three-month period, approve the *Developer's* request for a partial reduction in the amount of the *Security* as the construction of the *Works* proceeds, on the basis of a certification by the *Developer's Qualified Professional* that the portion of the *Works* to which the reduction relates has been completed to the standard specified in the *Bylaw* and in accordance with the *Accepted Drawings*, but not so as to reduce the amount of the *Security* below the amount mentioned in section 12. The *Development Engineer* may not approve a reduction under this section in relation to any portion of the *Works* in respect of which the *Development Engineer* has advised the *Developer* of a deficiency that has not been satisfactorily repaired.
15. If the City undertakes all or part of the *Works*, the cost of completing the *Works* which is payable by the *Developer* includes the City's actual cost of the construction and installation of them, together with engineering, supervision, legal, survey, contract administration, tendering, other professional services, interest and all other costs reasonably required for *completion* of the *Works*.

#### STANDARD OF THE WORKS

16. The *Developer* will construct and install or secure the *Works* to the standard required in the Engineering Divisions Design Standards and Specifications contained in the *Bylaw* and to the satisfaction of the *Development Engineer*.

#### DEVELOPER'S QUALIFIED PROFESSIONALS

17. The *Developer* represents and warrants that the *Works* have been, or will be, designed by a *Qualified Professional*.
18. The *Developer* acknowledges that the City has relied on cost estimates prepared by one or more *Qualified Professionals* in establishing the amount of the *Security* and that the *Developer* has so advised the *Qualified Professionals* prior to submission of those estimates to the City by the *Developer*.
19. At all times during the construction and provision of the *Works*, the *Developer* shall retain one or more *Qualified Professionals* to oversee the *completion* of the *Works*.



20. Any explanations, orders, instructions, directions and requests given by the City to the *Qualified Professional* shall be deemed to have been given to the *Developer*.
21. Upon *completion* of the *Works* and prior to issuance of the *Certificate of Construction Completion*, the *Developer's Qualified Professional* shall certify in writing that the *Works* have been constructed in accordance with the *Accepted Drawings*.

#### INDEMNIFICATION AND INSURANCE

22. The *Developer* shall indemnify and save harmless the City, its officers, employees, Council members, contractors and agents:
  - a) against all expenses and costs incurred as a result of bodily injury, death, property loss, property damage or other loss arising from the construction or provision of the *Works*;
  - b) against all expenses and costs which may be incurred by reason of liens, non-payment for labour or materials, Workers' Compensation assessments, employment insurance, federal or provincial tax, or union dues check off in respect of the construction or provision of the *Works*; and
  - c) from any claims, actions or proceedings relating to the construction, provision, maintenance or repair of the *Works* by the *Developer*, including defects in the *Works* and non-repair of the *Works*.

This indemnity shall survive any conclusion or other termination of this Agreement, in relation to any matter arising prior to expiry of the *Warranty Period*.

23. The *Developer* shall take out and maintain at all times from commencement of construction and installation of the *Works* until the *Development Engineer* issues a *Certificate of Acceptance*:
  - a) comprehensive general liability insurance against claims for bodily injury (including death) and property damage or loss arising from its carrying out the construction and installation of the *Works* (including failure to properly carry out or negligence in carrying out the *Works*), in an amount of not less than \$5,000,000.00 combined single limit per claim and with a per claim deductible of not more than \$5,000.00; and
  - b) builder's risk insurance, insuring the *Works* against loss or damage to the full replacement cost of the *Works*, and if the City elects to *complete* the *Works* as provided in this Agreement, the *Developer* is conclusively considered to have assigned the benefit of that insurance, and all proceeds of it, to the City.

The *Developer* must provide the *Development Engineer* with proof in writing of insurance before commencing the *Works* and again before the issuance of any *Certificate of Construction Completion*. All policies of insurance must name the City as an additional insured and contain a provision requiring the insurer to give the City 30 days' prior written notice before any alteration or cancellation of the policy is effective.



## MISCELLANEOUS

24. Nothing in this Agreement shall exempt the *Developer* of the Lands from the ordinary jurisdiction of the council of the City, its *bylaws* and regulations, and without limitation the construction of the *Works* shall not confer directly or indirectly any exemption or right of set-off from development cost charges, connection fees, application fees, user fees or other fee charge, except as statutorily required.
25. Where the singular or masculine is used in this Agreement it will be construed as the plural or feminine or neuter, as the case may be, and vice versa where the context or the parties so require.
26. This Agreement will be binding upon and will enure to the benefit of the parties, their successors and assigns.
27. The headings in this Agreement are for convenience of reference only and do not define or limit the scope or intent of this Agreement.
28. The Schedules to this Agreement form part of this Agreement.
29. The *Developer* acknowledges and agrees that the *Developer* relies exclusively on its own expertise, the *Developer's Qualified Professionals* and contractors and that the City does not, by its approvals, inspections or acceptance of the *Works*, warrant or represent that the *Works* are in compliance with any enactment or warrant the quality, fitness for purpose, adequacy or safety of the *Works*.
30. The *Developer* acknowledges that the City has made no representations, covenants, warranties, guarantees, promises or agreement with the *Developer* with regard to the subject matter of this Agreement, other than those in this Agreement.
31. The *Developer's* obligations and rights under this Agreement shall not be assigned without the written consent of the City, such consent not to be unreasonably withheld.
32. Every obligation and covenant of the *Developer* in this Agreement constitutes both a contractual obligation and a covenant granted under s.219 of the *Land Title Act* in respect of the Land and this Agreement burdens the Land and runs with it and binds the successors in title to the Land. This Agreement burdens and charges all of the Land and any parcel into which the Land is subdivided by any means and any parcel into which the Land is consolidated (including by removal of interior parcel boundaries) and shall be extended, at the *Developer's* cost, to burden and charge any land consolidated with the Land.
33. The *Developer* will, at the *Developer's* expense, do or cause to be done all acts reasonably necessary to register this Agreement against title to the Land with priority over all financial charges, liens and encumbrances registered or pending registration at the time of application for registration of this agreement against the title to the Land.



34. An alleged waiver of any breach of this Agreement is effective only if it is an express waiver in writing of the breach in respect of which the waiver is asserted. A waiver of a breach of this Agreement does not operate as a waiver of any other breach of this Agreement.
35. If any part of this Agreement is held to be invalid, illegal or unenforceable by a court having the jurisdiction to do so, that part is to be considered to have been severed from the rest of this Agreement and the rest of this Agreement remains in force unaffected by that holding or by the severance of that part.
36. This Agreement binds the parties to it and their respective successors, heirs, executors and administrators.
37. The parties hereto shall execute and do all such further deeds, acts, things and assurances that may be reasonably required to carry out the intent of this Agreement.
38. Time is of the essence of this Agreement.
39. Any notice to be given pursuant to this agreement must be in writing and delivered personally or sent by registered mail. The addresses of the parties for the purpose of notice are the addresses on the first page of this agreement and in the case of any subsequent *Developer*, the address will be the address shown on the title to the Land in the Land Title Office. If notice is delivered personally, it may be left at the relevant address in the same manner as ordinary mail is left by Canada Post and is to be deemed given when delivered. If notice is sent by mail, it will be considered given 5 days after mailing. In the case of any strike or other event causing disruption of ordinary Canada Post operations, a party giving notice for the purposes of this agreement must do so by delivery as provided in this section. A party may change its address for the purposes of this section by giving notice in accordance with this section.
40. By executing and delivering this Agreement each of the parties intends to create both a contract and a deed executed and delivered under seal.



**IN WITNESS WHEREOF** the parties hereto have executed this Agreement as of the day and year first above written.

SIGNED by an authorized )  
signatory of: )  
"The Developer" )

in the presence of )

\_\_\_\_\_) )  
Witness: )

\_\_\_\_\_) )  
Name of Developer

SIGNED by the authorized )  
signatories of **THE** )  
**CORPORATION OF THE CITY** )  
**OF COURTENAY** )

\_\_\_\_\_) )  
Name )  
Mayor

\_\_\_\_\_) )  
Name )  
Director of Legislative Services



## Schedule "A" – Description of Required Works



## Schedule "B" – Calculation of Security

**REFERENCE DOCUMENT 2**  
**APPROVED PRODUCTS LIST**





**APPROVED PRODUCTS LIST**

This Reference Document lists materials and products that are either approved, restricted, or not allowed, for Works and Services performed within the City of Courtenay.

If a material or product is not listed in relation to an MMCD or a Supplementary Specification, any product meeting the requirements of such specification shall be accepted.

Where brand names are specified for a product, any proposal for an alternate product requires the approval of the Director of Engineering.

MMCD Section	Section Description	Product	Manufacturer	Approved Model	Restrictions/Additional Specifications
<b>03 40 01</b>	<b>Precast Concrete</b>				
		Concrete Fence for Arterial Roads	<ul style="list-style-type: none"> <li>American Technocrete</li> <li>Approved equal</li> </ul>	<ul style="list-style-type: none"> <li>Woodcrete Wall, Buffer Color</li> </ul>	<ul style="list-style-type: none"> <li>Posts at 1.5m c/c</li> </ul>
		Concrete Fence for Wet Detention Pond	<ul style="list-style-type: none"> <li>American Technocrete</li> <li>Approved equal</li> </ul>	<ul style="list-style-type: none"> <li>Woodcrete Rail, Buffer Colour</li> </ul>	<ul style="list-style-type: none"> <li>Post at 2.44 c/c &amp; 2 Rail Fence</li> </ul>
		Concrete MSE Retaining Wall	<ul style="list-style-type: none"> <li>Langley Precast</li> <li>Ocean Precast</li> </ul>		
<b>26 56 01</b>	<b>Roadway Lighting</b>				
	<i>Products</i>	LED Luminaires	<ul style="list-style-type: none"> <li>Philips</li> </ul>	<ul style="list-style-type: none"> <li>Roadfocus</li> </ul>	3000 K, RFS, RFM and RFL Series, as applicable
<b>31 11 45</b>	<b>Shrub and Tree Preservation</b>				
		Snow Fence	<ul style="list-style-type: none"> <li>Dupont</li> </ul>	<ul style="list-style-type: none"> <li>L-70</li> </ul>	
<b>32 92 19</b>	<b>Hydraulic Seeding</b>				
	<i>Fertilizer</i>		<ul style="list-style-type: none"> <li>Direct Solutions</li> </ul>	<ul style="list-style-type: none"> <li>20-2-16</li> </ul>	
<b>32 93 01</b>	<b>Planting of Trees, Shrubs and Ground-covers</b>				
		Tree Guy Anchors	<ul style="list-style-type: none"> <li>Tree Guy Systems</li> </ul>	<ul style="list-style-type: none"> <li>Arrow Anchor</li> </ul>	
		Tree Trunk Protection	<ul style="list-style-type: none"> <li>Deep Roots Products</li> </ul>	<ul style="list-style-type: none"> <li>Arborgard</li> </ul>	
		Tree Ties	<ul style="list-style-type: none"> <li>Deep Roots Products</li> </ul>	<ul style="list-style-type: none"> <li>Arbor Tie</li> </ul>	
	<i>Misc. Products</i>	Root Barrier	<ul style="list-style-type: none"> <li>deeproot</li> </ul>	<ul style="list-style-type: none"> <li>UB 18-2</li> </ul>	
		Adhesive	<ul style="list-style-type: none"> <li>OSI Sealants</li> </ul>	<ul style="list-style-type: none"> <li>PL 200</li> </ul>	
		Drain Mat	<ul style="list-style-type: none"> <li>Nilex Geotextile</li> </ul>	<ul style="list-style-type: none"> <li>Nudrain WD/15</li> </ul>	
		Filter Fabric	<ul style="list-style-type: none"> <li>Nilex Geotextile</li> </ul>	<ul style="list-style-type: none"> <li>Nilex 4545</li> </ul>	



MMCD Section	Section Description	Product	Manufacturer	Approved Model	Restrictions/Additional Specifications
<b>32 94 015</b>	<b>Irrigation System</b>				
	<b>Backflow Prevention Device</b>		<ul style="list-style-type: none"> <li>Watts</li> </ul>	<ul style="list-style-type: none"> <li>Model 007-QT</li> </ul>	
	<b>Electronic Control Valves</b>		<ul style="list-style-type: none"> <li>Rain Bird</li> </ul>	<ul style="list-style-type: none"> <li>EFB CP Series Brass</li> <li>300 BPES Series Brass</li> </ul>	<ul style="list-style-type: none"> <li>&lt; 75mm</li> <li>≥ 75mm</li> </ul>
	<b>Master Valve</b>		<ul style="list-style-type: none"> <li>Rain Bird</li> </ul>	<ul style="list-style-type: none"> <li>EFB CP Series Brass</li> <li>300 BPES Series Brass</li> </ul>	<ul style="list-style-type: none"> <li>&lt; 75mm</li> <li>≥ 75mm</li> </ul>
	<b>Pressure Regulating Modules</b>		<ul style="list-style-type: none"> <li>Toro</li> <li>Rain Bird</li> </ul>	<ul style="list-style-type: none"> <li>EZR-100</li> <li>PRS-Dial</li> </ul>	
	<b>Automatic Controllers</b>		<ul style="list-style-type: none"> <li>Toro</li> </ul>	<ul style="list-style-type: none"> <li>Sentinel Satellite Controller</li> </ul>	
	<b>Control Wire</b>	Wire	<ul style="list-style-type: none"> <li>Paige Wire</li> </ul>	<ul style="list-style-type: none"> <li>P7079D</li> </ul>	<p>Common Wire to be min. 14-gauge</p> <p>Master Valve Wire to be min. 14-gauge</p>
		Flow / pulse transmitter wiring	<ul style="list-style-type: none"> <li>Belden</li> </ul>	<ul style="list-style-type: none"> <li>PE39</li> </ul>	<p>8mm Aluminum Polyester Shield</p> <p>Black HDPE Jacket</p>
		Wire splice	<ul style="list-style-type: none"> <li>3M</li> </ul>	<ul style="list-style-type: none"> <li>DBY connector</li> </ul>	
	<b>Sprinkler Heads</b>		<ul style="list-style-type: none"> <li>Toro</li> <li>Rain Bird</li> <li>Hunter</li> </ul>		<p>Additions to existing irrigation systems to be same product</p>
<b>33 11 01</b>	<b>Waterworks</b>				
	<b>Water Main Ductile Iron</b>	<ul style="list-style-type: none"> <li>Ductile Iron</li> </ul>	<ul style="list-style-type: none"> <li>McWane Group</li> <li>US Pipe</li> </ul>		<p>CL 50 for all mains less than 400mm dia. and Pressure Class 350 for all mains larger than 400mm dia.</p>
	<b>Water Main PVC</b>	<ul style="list-style-type: none"> <li>PVC</li> <li>PVCO</li> </ul>	<ul style="list-style-type: none"> <li>Ipex</li> <li>Royal Pipe Systems</li> </ul>	<ul style="list-style-type: none"> <li>Blue Brute</li> <li>Seal</li> <li>Bionax</li> </ul>	<p>PVC pipe to AWWA C900 / C 905/ C 909 – 100 mm to 300 mm diameter</p> <p>DR18 Minimum. Compliance with MMCD updated Section 33 11 01 2.2.2.2 for thickened bell and spigot pipe</p> <p>All PVC / PVCO water mains shall be pigmented blue.</p> <p>Nitro gasket shall be used when hydro carbon is encountered in surrounding soil.</p>



MMCD Section	Section Description	Product	Manufacturer	Approved Model	Restrictions/Additional Specifications
					Bionax to be accepted for use in seismic condition
	<b>Water Main HDPE</b>	<ul style="list-style-type: none"> <li>• HDPE</li> </ul>	<ul style="list-style-type: none"> <li>• KWH Pipe</li> <li>• Isco Pipe</li> <li>• Polytubes</li> </ul>	<ul style="list-style-type: none"> <li>• Sclairpipe</li> <li>• WL Plastics</li> </ul>	AWWA C 153 AWWA C110
	<b>Water Main Fitting Ductile Iron</b>	<ul style="list-style-type: none"> <li>• Ductile Iron</li> </ul>	<ul style="list-style-type: none"> <li>• Terminal City Iron Works</li> <li>• Sigma</li> </ul>		
	<b>PVC Injection Molded Fittings</b>	<ul style="list-style-type: none"> <li>• PVC</li> <li>• PVCO</li> </ul>	<ul style="list-style-type: none"> <li>• IPEX</li> <li>• Royal</li> </ul>		
	<b>PVC Fabricated Fittings</b>	<ul style="list-style-type: none"> <li>• PVC</li> <li>• PVCO</li> </ul>	<ul style="list-style-type: none"> <li>• IPEX</li> <li>• Pro-line</li> <li>• Galaxy Plastics</li> </ul>		
	<b>Nuts and Bolts</b>	Stainless Steel ASTM A194 type 304			
	<b>Tie Rod</b>	Zinc or Cadmium Plated ASTM A354 Grade BC Steel	<ul style="list-style-type: none"> <li>• Cor-ten Steel</li> </ul>		
	<b>Couplings and Flange Coupling Adapters</b>	Plain End Coupler	<ul style="list-style-type: none"> <li>• Robar</li> <li>• Smith-Blair</li> <li>• Romac</li> <li>• Mueller</li> <li>• Ford</li> </ul>	<ul style="list-style-type: none"> <li>• Robar 1408</li> <li>• Smith-Blair441</li> <li>• Romac 501</li> <li>• Mueller MRC</li> <li>• Ford FC1</li> </ul>	
		Flanged Adapter	<ul style="list-style-type: none"> <li>• Robar</li> <li>• Smith-Blair</li> <li>• Romac</li> <li>• Mueller</li> <li>• EBAA</li> <li>• Clow</li> </ul>	<ul style="list-style-type: none"> <li>• Robar 7404/6</li> <li>• Smith-Blair912</li> <li>• Romac</li> <li>• Mueller</li> <li>• EBAA Iron 1000</li> <li>• Clow Series 40, DI</li> <li>• Clow Series 90, PVC</li> </ul>	
		Restrained Flange Adaptors	<ul style="list-style-type: none"> <li>• Romac</li> <li>• Uniflange</li> <li>• EBAA</li> </ul>	<ul style="list-style-type: none"> <li>• Romac RFCA</li> <li>• Uniflange RFAP</li> <li>• EBAA 2100</li> </ul>	
		Repair Clamps	<ul style="list-style-type: none"> <li>• Canpac</li> <li>• Mueller</li> <li>• Robar</li> <li>• Clow</li> <li>• Romac</li> </ul>	<ul style="list-style-type: none"> <li>• Canpac CR-2</li> <li>• Mueller 520</li> <li>• Robar 400 and 1500</li> <li>• Clow 100, 200, 300</li> <li>• Romac SS2</li> </ul>	Repair clamps shall be stainless steel
	<b>Joint Restraint Ductile Iron Mains</b>		<ul style="list-style-type: none"> <li>• UniFlange Series 1400</li> <li>• EBAA Iron</li> <li>• Clow</li> </ul>	<ul style="list-style-type: none"> <li>• UniFlange Series 1400</li> <li>• EBAA Iron Megalug1700</li> <li>• Clow Tufgrip TDG</li> </ul>	All joint restraints shall have a pressure rating equal or greater than the mainline pipe.



MMCD Section	Section Description	Product	Manufacturer	Approved Model	Restrictions/Additional Specifications
	<b>Joint Restraint PVC / PVCO Mains</b>		<ul style="list-style-type: none"> <li>UniFlange</li> <li>EBAA Iron</li> <li>Romac</li> </ul>	<ul style="list-style-type: none"> <li>UniFlange Series 1300</li> <li>EBAA Iron MJ Series 1500</li> <li>EBAA Iron 1900</li> <li>Romac Alpha</li> </ul>	No wedge action type for PVC or PVCO pipes. Restraint systems for PVC or PVCO pipe shall be approved by the pipe manufacturer to not reduce the pipe recommended working pressure.
	<b>Restrained Joint Pipe Systems (PVC)</b>		<ul style="list-style-type: none"> <li>Ipex</li> <li>Royal</li> </ul>	<ul style="list-style-type: none"> <li>Ipex Terra Brute</li> <li>Royal Cobra Lock</li> </ul>	
	<b>Restrained Joint Pipe Systems (DI)</b>		<ul style="list-style-type: none"> <li>US Pipe</li> <li>McWane</li> </ul>	<ul style="list-style-type: none"> <li>Field-Lok Gasket</li> <li>SureStop Gasket</li> </ul>	
	<b>Valves and Valve Boxes</b>	75 mm – 300 mm Resilient-seated	<ul style="list-style-type: none"> <li>Mueller</li> <li>Clow Canada</li> <li>AVK</li> <li>Dobney</li> <li>Terminal City</li> </ul>	<ul style="list-style-type: none"> <li>Mueller A2362</li> <li>Clow 6100</li> <li>AVK</li> </ul>	All valves shall have epoxy coated ductile iron body with Stainless Steel Bolts
	<b>Blowoff Valve</b>	50mm Resilient Seat Gate Valve	<ul style="list-style-type: none"> <li>AVK</li> <li>Mueller</li> <li>Clow</li> </ul>	<ul style="list-style-type: none"> <li>AVK</li> <li>Mueller A2360</li> <li>Clow F6103</li> </ul>	
	<b>Air Valve</b>		<ul style="list-style-type: none"> <li>Apco</li> <li>Val-Matic</li> <li>Crispin</li> </ul>	<ul style="list-style-type: none"> <li>APCO 143C</li> <li>Val-Matic 201C</li> <li>Crispin UL</li> </ul>	Internally Coated
	<b>Water Valve Box</b>		<ul style="list-style-type: none"> <li>Terminal City</li> <li>Dobney</li> <li>Sigma</li> </ul>		Square type Cover shall be marked with "Water".
	<b>Curb Stop Box</b>		<ul style="list-style-type: none"> <li>Dobney</li> <li>Trojan</li> <li>Mueller</li> </ul>		Square type Cover shall be marked with "Water".
	<b>Joint Protection</b>	Petrolatum Tape & Mastic	<ul style="list-style-type: none"> <li>Petrowrap</li> <li>Trenton Tec Tape</li> <li>Denso</li> </ul>		AWWA C209 AWWA C214 AWWA C217-90
	<b>Water Service Connection</b>	Type K Copper – 19mm to 75mm			ASTM B88M
		Polyethylene	<ul style="list-style-type: none"> <li>Rehau</li> </ul>	<ul style="list-style-type: none"> <li>Rehau Municipex (PexA)</li> </ul>	With 10 Gauge Tracer Wire (AWG)
	<b>Saddles for Ductile Iron Mains</b>		<ul style="list-style-type: none"> <li>Robar</li> <li>Canpac</li> <li>Mueller</li> <li>Romac</li> </ul>	<ul style="list-style-type: none"> <li>Robar 2406/8</li> <li>Canpac 313</li> <li>Mueller DR2A</li> <li>Romac 202BS</li> </ul>	
	<b>Saddles for PVC / PVCO Main</b>		<ul style="list-style-type: none"> <li>Canpac</li> <li>Robar</li> <li>Cambridge Brass</li> </ul>	<ul style="list-style-type: none"> <li>Series 81Z</li> </ul>	Saddles required for service installation on all PVC / PVCO mains - Bronze body with stainless steel straps



MMCD Section	Section Description	Product	Manufacturer	Approved Model	Restrictions/Additional Specifications
	<b>Tapping Sleeve for PVC</b>		<ul style="list-style-type: none"> <li>Ford Meter Box</li> <li>JCM</li> <li>Romac</li> </ul>	<ul style="list-style-type: none"> <li>Ford FS313</li> <li>JCM 422 Series</li> <li>SST Series</li> </ul>	
	<b>Abandon Service Sleeve</b>		<ul style="list-style-type: none"> <li>Robar</li> </ul>	<ul style="list-style-type: none"> <li>6636AS</li> </ul>	NC T 304 SS Const
	<b>Hydrant</b>		<ul style="list-style-type: none"> <li>Terminal City</li> <li>Mueller Co.</li>   <li>AVK</li> </ul>	<ul style="list-style-type: none"> <li>C71P – H105</li> <li>Modern Centurion (A-442)</li> <li>2780</li> </ul>	Must have 100mm Storz fitting on pumper port Paint colours shall be as follows: <ul style="list-style-type: none"> <li>Red body</li> <li>White top</li> <li>2 white side ports</li> <li>black Storz</li> </ul>
	<b>Corporation Stop</b>	Full Port Ball Valve	<ul style="list-style-type: none"> <li>Cambridge</li> <li>Ford</li> <li>Mueller</li> <li>Al-MacDonald</li> </ul>	<ul style="list-style-type: none"> <li>Cambridge 301</li> <li>Ford FB600</li> <li>Mueller B25008</li> <li>Al-MacDonald 4700</li> </ul>	Shall be full-port ball valve to 50 mm only. Use mainline gate valve for sizes >50 mm
	<b>Curb Stop</b>	Full Port Ball Valve	<ul style="list-style-type: none"> <li>Cambridge</li> <li>Ford</li> <li>Mueller</li> <li>Al-MacDonald</li> </ul>	<ul style="list-style-type: none"> <li>Cambridge 202</li> <li>Ford B44-343G</li> <li>Mueller B25209</li> <li>Al-MacDonald 6100</li> </ul>	Shall be full-port ball valve to 50 mm with 90° turn stop. Use mainline gate valve for larger sizes > 50mm
	<b>Meter Setters</b>		<ul style="list-style-type: none"> <li>Cambridge Brass</li> </ul>	<ul style="list-style-type: none"> <li>1" 6031 Series</li> <li>1 ½" – 2" 6020 series</li> </ul>	
	<b>Idler Bar</b>		<ul style="list-style-type: none"> <li>Cambridge Brass</li> </ul>	<ul style="list-style-type: none"> <li>450 Plastic (25mm Service Connection)</li> <li>450NL Copper (50mm Service Connection)</li> </ul>	
	<b>Meter Pits</b>		<ul style="list-style-type: none"> <li>Langley Concrete</li> <li>AE Concrete</li> <li>Armtec</li> </ul>	<ul style="list-style-type: none"> <li>Type#66 with cast iron Lid for 25mm</li> <li>5686 with steel lid for 50mm</li> </ul>	Full Circumferential models only.
	<b>Meter Chambers</b>		<ul style="list-style-type: none"> <li>Armtec</li> </ul>	<ul style="list-style-type: none"> <li>2121.5</li> </ul>	With Aluminum spring assisted double lids.
	<b>Casing Spacers</b>	As shown on contract drawings	<ul style="list-style-type: none"> <li>Uniflange</li> <li>Calpico</li> <li>APS</li> </ul>	<ul style="list-style-type: none"> <li>Uniflange</li> <li>Calpico</li> <li>APS Casing Spacers</li> </ul>	Shall be fabricated cast iron or high density polyethylene insulating spacers designed to center main in the carrier pipe
	<b>Pressure Reducing Valve Stations (PRV)</b>	<ul style="list-style-type: none"> <li>PRV Valve</li> <li>Limit Switch Indicator</li> <li>Valve Position Indicator</li> </ul>	<ul style="list-style-type: none"> <li>Singer</li> <li>Singer</li>   <li>Singer</li> </ul>	<ul style="list-style-type: none"> <li>Singer 106-PR</li> <li>Singer X129</li>   <li>Singer X156</li> </ul>	Epoxy coated



MMCD Section	Section Description	Product	Manufacturer	Approved Model	Restrictions/Additional Specifications
		<ul style="list-style-type: none"> <li>• Strainer</li> <li>• Domestic flow indicator</li> <li>• Pressure Transducer</li> <li>• PLC</li> <li>• HMI</li> <li>• Router</li> </ul>	<ul style="list-style-type: none"> <li>• Singer</li> <li>• Singer</li> <li>• Emerson-Rosemount</li> <li>• Scadapack</li> <li>• Maple Systems, or equivalent</li> <li>• SonicWall</li> </ul>	<ul style="list-style-type: none"> <li>• J1521M Arion Strainer</li> <li>• SPI-MV Flow Meter</li> <li>• 2088</li> <li>• Scadapack 334</li> </ul>	
<b>33 30 01 Sanitary Sewers</b>					
	<b>Concrete</b>				Not permitted
	<b>PVC Pipe, Mainline Smooth Profile</b>	PVC SDR35	<ul style="list-style-type: none"> <li>• IPEX</li> <li>• Royal</li> <li>• Diamond</li> <li>• JM Eagle</li> <li>• Northern Pipe Products</li> </ul>	<ul style="list-style-type: none"> <li>• IPEX Ring-Tite</li> <li>• Royal Seal</li> <li>• Diamon Sani-21</li> </ul>	Sizes > than 750 mm to be approved by the City
	<b>Sanitary Service Connection</b>	PVC SDR35 Min 100mm diameter	<ul style="list-style-type: none"> <li>• IPEX</li> <li>• Royal</li> <li>• Diamond</li> <li>• JM Eagle</li> <li>• Northern Pipe Products</li> </ul>	<ul style="list-style-type: none"> <li>• IPEX Ring-Tite</li> <li>• Royal Seal</li> <li>• Diamon Sani-21</li> </ul>	New PVC main: use manufactured wyes. Existing mains: use manufactured wyes, strap saddles or insertable tees.
	<b>Inspection Chamber</b>	Inspection Chamber	<ul style="list-style-type: none"> <li>• Le-Ron Plastics Inc.</li> <li>• Pro-line</li> <li>• Galaxy Plastics</li> </ul>		
		Inspection Chamber Back-flow check valve	<ul style="list-style-type: none"> <li>• Le-Ron Plastics Inc.</li> <li>• Pro-line</li> <li>• Galaxy Plastics</li> </ul>		
	<b>Service Connection Boxes</b>		<ul style="list-style-type: none"> <li>• Brooks</li> </ul>	<ul style="list-style-type: none"> <li>• Series 37</li> </ul>	Full Circumferential models only.
	<b>Repair Couplers</b>		<ul style="list-style-type: none"> <li>• Rollee, Fernco, Shear Band</li> </ul>	<ul style="list-style-type: none"> <li>• Rollee, Fernco, Shear Band</li> </ul>	Couplers shall have appropriate adaptor gaskets to suit OD of pipe material being coupled
<b>33 34 01 Sewage Forcemains</b>					
	<b>Pipes, Joints and Fittings</b>	Fused PVC	<ul style="list-style-type: none"> <li>• Ipex</li> <li>• Royal</li> </ul>		
		HDPE with fusion welded joints	<ul style="list-style-type: none"> <li>• Sclairpipe</li> <li>• Drisco Pipe</li> <li>• ISCO Pipe</li> </ul>	<ul style="list-style-type: none"> <li>• Sclairpipe</li> <li>• DriscoPlex</li> <li>• WL Plastics</li> </ul>	AWWA C906
	<b>Valves</b>	Air Valves	<ul style="list-style-type: none"> <li>• ARI</li> </ul>		
	<b>Valve Chamber</b>		<ul style="list-style-type: none"> <li>• Dobney</li> </ul>	Dobney C20	
<b>33 40 01 Storm Sewers</b>					



MMCD Section	Section Description	Product	Manufacturer	Approved Model	Restrictions/Additional Specifications
	<b>Concrete Pipe</b>	Non-reinforced Concrete C14-3 Reinforced Concrete C76-III, IV, and V	<ul style="list-style-type: none"> <li>Langley Concrete and Tiles</li> <li>Ocean Pipe</li> </ul>		PPP or Q-Cast Certified
	<b>PVC Pipe, Mainline Smooth Wall</b>	PVC SDR35	<ul style="list-style-type: none"> <li>IPEX</li> <li>Royal</li> <li>Diamond</li> <li>JM Eagle</li> <li>Northern Pipe</li> </ul>	<ul style="list-style-type: none"> <li>IPEX Ring-Tite</li> <li>Royal Seal</li> <li>Diamond Sani-21</li> </ul>	Sizes > than 750 mm to be approved by the City Engineer
	<b>PVC Pipe, Mainline Profile</b>		<ul style="list-style-type: none"> <li>Ipex</li> <li>Royal</li> </ul>	<ul style="list-style-type: none"> <li>Ipex UltraRib</li> <li>Royal Korflo</li> </ul>	Concentric ribbed pipe only is permitted to 900 mm, No spiral ribbed pipe will be allowed.
	<b>HDPE Pipe, Mainline Open Profile</b>		<ul style="list-style-type: none"> <li>Armtec</li> <li>ADS</li> </ul>	<ul style="list-style-type: none"> <li>Armtec Boss 2000</li> <li>ADS N-12</li> </ul>	
	<b>Service Connection</b>	PVC SDR28 Min 150mm diameter	<ul style="list-style-type: none"> <li>IPEX</li> <li>Royal</li> <li>Diamond</li> <li>JM Eagle</li> <li>Northern Pipe</li> </ul>	<ul style="list-style-type: none"> <li>IPEX Ring-Tite</li> <li>Royal Seal</li> <li>Diamond Sani-21</li> </ul>	New PVC main: use manufactured wyes. New HDPE mains: Use injection molded PVC manufactured wyes New concrete main: use PVC stub with bell, pre-cemented with epoxy resin. Existing PVC and HDPE mains: use manufactured wyes, strap saddles or insertable tees. Existing concrete main: use cored tee
	<b>Inspection Chamber</b>	Inspection Chamber	<ul style="list-style-type: none"> <li>Le-Ron Plastics Inc.</li> <li>Pro-line</li> <li>Galaxy Plastics</li> </ul>		
	<b>Service Connection Boxes</b>		<ul style="list-style-type: none"> <li>Brooks</li> </ul>	<ul style="list-style-type: none"> <li>Series 37</li> </ul>	Full Circumferential models only.
<b>33 42 13</b>	<b>Pipe Culverts</b>				
	<b>End Walls</b>	Concrete	<ul style="list-style-type: none"> <li>Langley Concrete and Tiles</li> <li>Ocean Pipe</li> </ul>		Q-Cast Certified PPP Certified
		Fiberglass Composite	<ul style="list-style-type: none"> <li>CIF Composites</li> </ul>	<ul style="list-style-type: none"> <li>Ecolite</li> </ul>	
		Mechanically Stabilized Earth (MSE)	<ul style="list-style-type: none"> <li>Flex MSE</li> </ul>	<ul style="list-style-type: none"> <li>Flex MSE</li> </ul>	
<b>33 44 01</b>	<b>Manholes and Catchbasins</b>				
	<b>Manhole Frame and Cover</b>	Cast Iron	<ul style="list-style-type: none"> <li>Dobney</li> <li>Westview Sales Ltd.</li> </ul>	<ul style="list-style-type: none"> <li>Dobney</li> <li>Westview Sales Ltd.</li> </ul>	Sanitary Sewer manhole lids shall be marked "SANITARY SEWER"



MMCD Section	Section Description	Product	Manufacturer	Approved Model	Restrictions/Additional Specifications
					Storm Sewer manhole lids shall be marked "STORM SEWER"
	<b>Catch Basin and Other Castings</b>	CB Frame	<ul style="list-style-type: none"> <li>Dobney</li> <li>Westview Sales Ltd.</li> </ul>	<ul style="list-style-type: none"> <li>B50</li> </ul>	
		CB Grate	<ul style="list-style-type: none"> <li>Dobney</li> <li>Westview Sales Ltd.</li> </ul>	<ul style="list-style-type: none"> <li>B50</li> </ul>	
		Lawn Basin Grate (1050mm Barrel)	<ul style="list-style-type: none"> <li>Dobney</li> <li>Westview Sales Ltd.</li> </ul>		
	<b>Hydro-dynamic grit Separator</b>		<ul style="list-style-type: none"> <li>Langley Concrete and Tiles</li> <li>Contech</li> </ul>	<ul style="list-style-type: none"> <li>Stormceptor</li> <li>Vorsentry</li> <li>CDS</li> </ul>	
<b>33 49 23</b>	<b>Storm Drainage Water Retention Systems</b>				
	<b>Polypropylene Arched Chamber</b>		<ul style="list-style-type: none"> <li>ADS</li> </ul>	<ul style="list-style-type: none"> <li>Stormtech</li> </ul>	
	<b>Polyethylene Arched Chamber</b>		<ul style="list-style-type: none"> <li>Contech</li> </ul>	<ul style="list-style-type: none"> <li>Chambremaxx</li> </ul>	
			<ul style="list-style-type: none"> <li>Brentwood Industries</li> </ul>	<ul style="list-style-type: none"> <li>Stormtank</li> </ul>	
<b>34 41 13</b>	<b>Traffic Signals</b>				
		Siren Activated Emergency Pre-emption	<ul style="list-style-type: none"> <li>Traffic Systems LLC</li> </ul>	<ul style="list-style-type: none"> <li>Sonem 2000</li> </ul>	
		Audible Signals	<ul style="list-style-type: none"> <li>Polara Enterprises</li> </ul>	<ul style="list-style-type: none"> <li>Navigator APS</li> </ul>	
		LED Luminaires	<ul style="list-style-type: none"> <li>Philips</li> </ul>	<ul style="list-style-type: none"> <li>Roadfocus</li> </ul>	3000 K, RFS, RFM and RFL Series, as applicable
		Traffic Controllers	<ul style="list-style-type: none"> <li>Econolite</li> </ul>	<ul style="list-style-type: none"> <li>Cobalt</li> </ul>	
	<b>Sanitary Lift Station Components</b>				
	Standards for Sanitary Lift Stations	Submersible Pumps	<ul style="list-style-type: none"> <li>Flygt</li> </ul>		Non-Clogging
		Flush Valve	<ul style="list-style-type: none"> <li>Flygt</li> </ul>	Model 4901	Or Approved Equal
		Wet Well	<ul style="list-style-type: none"> <li>Xylem</li> </ul>		Engineered & Prefabricated
		Portable Lifting Davit	<ul style="list-style-type: none"> <li>DBI SALA</li> </ul>	<ul style="list-style-type: none"> <li>8510311 w/ Davit Arm</li> <li>8517412 including tie off 8516691</li> </ul>	
		HMI	<ul style="list-style-type: none"> <li>To be confirmed by the City</li> </ul>		
		Controller	<ul style="list-style-type: none"> <li>Xylem</li> </ul>	MultiSmart	





MMCD Section	Section Description	Product	Manufacturer	Approved Model	Restrictions/Additional Specifications
		SCADA	<ul style="list-style-type: none"><li>Flygt / Allied Control Systems</li></ul>		Must be compatible with City Scada system
		Float Switches	<ul style="list-style-type: none"><li>Xylem</li></ul>	tree type (mercury)	Or Approved Equal (must be CSA certified)



**THE CORPORATION OF THE CITY OF COURTENAY**  
**HARMSTON AVENUE ROAD CLOSURE BYLAW NO. 2920, 2018**

WHEREAS, pursuant to Section 40 of the *Community Charter*, Council may, by bylaw, close a portion of a highway to traffic and remove the dedication of the highway, if prior to adopting the bylaw, Council publishes notices of its intention in a newspaper and provides an opportunity for persons who consider they are affected by the bylaw to make representations to Council;

AND WHEREAS the Council of the City of Courtenay deems it expedient to close to traffic and remove the dedication of highway of that portion of highway comprising of .103 hectares in size legally described as Part of Section 61, Comox District dedicated as road at the Victoria Land Title Office by Plan 472-B, outlined in bold black on the draft Reference Plan prepared by J. Hansen, BCLS 815 on the 17<sup>th</sup> day of July, 2017 a reduced copy of which is attached hereto as Schedule “A”;

AND WHEREAS notices of Council’s intention to close this portion of highway to traffic, to remove its dedication as highway, and to dispose of it were published in a newspaper and posted in the public notice posting place, and Council has provided an opportunity for persons who consider they are affected by the closure and disposition to make representations to Council;

AND WHEREAS the Council does not consider that the closure of that portion of highway will affect the transmission or distribution facilities or works of utility operators;

NOW THEREFORE the Council of the City of Courtenay in open meeting assembled, enacts as follows:

1. That portion of highway comprising of .103 hectares in size legally described as Part of Section 61, Comox District dedicated as road at the Victoria Land Title Office by Plan 472-B, outlined in bold black on the draft Reference Plan prepared by J. Hansen, BCLS 815 on the 17<sup>th</sup> day of July, 2017 a reduced copy of which is attached hereto as Schedule “A” (the Closed Road), is closed to all types of traffic, and its dedication as highway is removed.
2. On deposit of the reference plan attached hereto as Schedule “A” and all other documentation for the closure of the Closed Road in the Victoria Land Title Office, the Closed Road is closed to traffic, it shall cease to be public highway, and its dedication as highway is cancelled.
3. The Mayor and Corporate Officer are hereby authorized to execute and deliver such transfers, deeds of land, plans and other documentation as may be necessary for the purposes aforesaid.
4. This Bylaw may be cited as “**Harmston Avenue Road Closure Bylaw No. 2920, 2018**”.

Read a first time this 16<sup>th</sup> day of April, 2018

Read a second time this 16<sup>th</sup> day of April, 2018

Read a third time this this 16<sup>th</sup> day of April, 2018

Published in two editions of the Comox Valley Record on the 24<sup>th</sup> day of April, 2018 and on the 1<sup>st</sup> day of May, 2018

Finally passed and adopted this      day of                      , 2018

\_\_\_\_\_  
Mayor

\_\_\_\_\_  
Corporate Officer

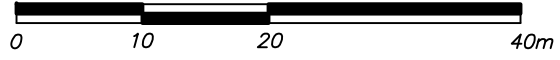
**PROPOSED ROAD CLOSURE OF PART OF SECTION 61,  
COMOX DISTRICT, SHOWN DEDICATED AS ROAD ON  
PLAN 472-B**

Schedule A to Bylaw No. 2920, 2018

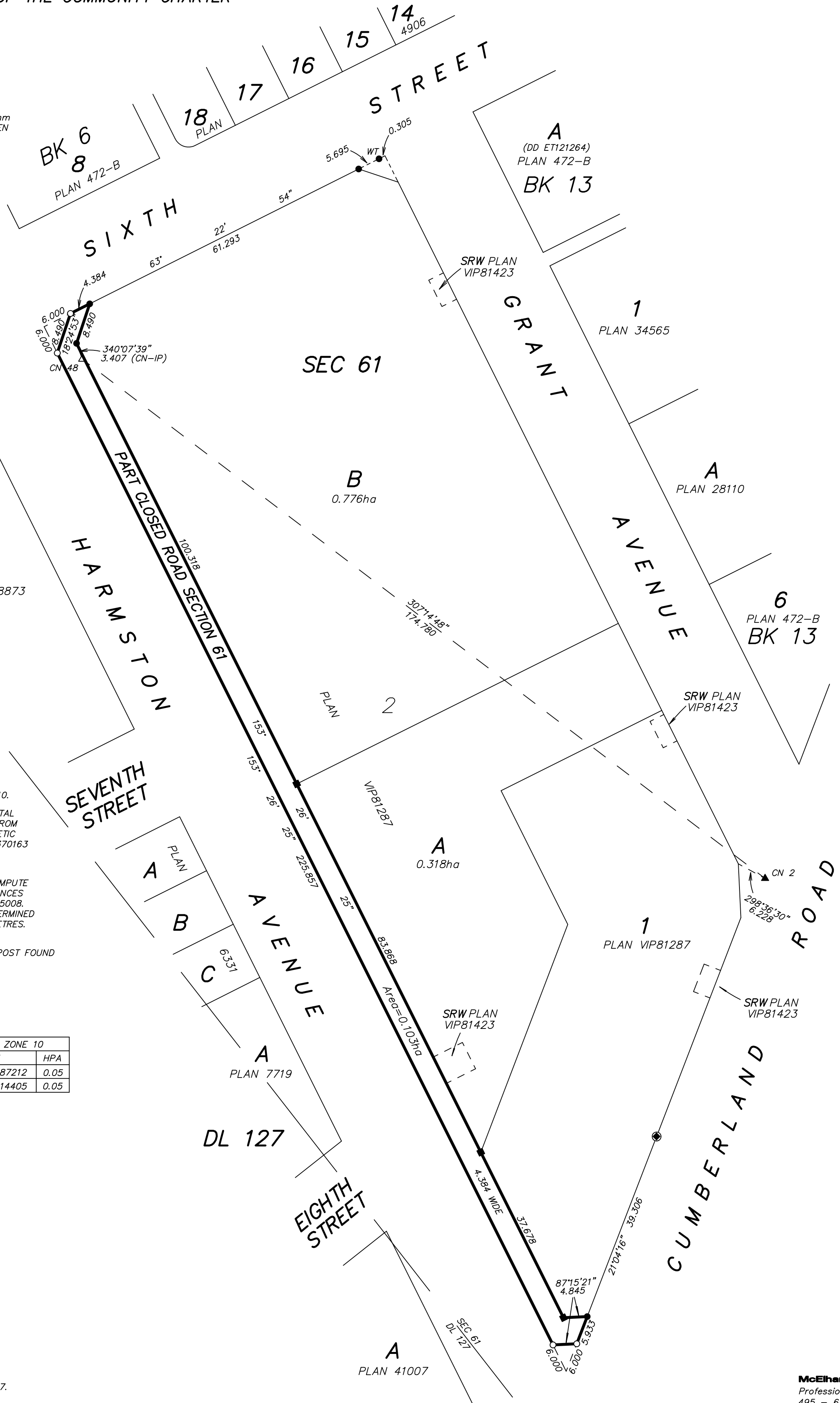
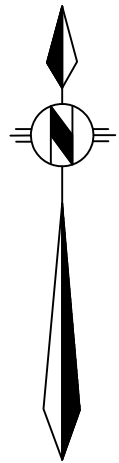
PURSUANT TO SECTION 120 OF THE LAND TITLE ACT  
PURSUANT TO SECTION 40 OF THE COMMUNITY CHARTER  
BCGS 92F 065

SCALE: 1:600

ALL DISTANCES ARE IN METRES.



THE INTENDED PLOT SIZE OF THIS PLAN IS 560mm  
IN HEIGHT BY 432mm IN WIDTH ( C SIZE ) WHEN  
PLOTTED AT A SCALE OF 1 : 600



**LEGEND**

GRID BEARINGS ARE DERIVED FROM DIFFERENTIAL  
CARRIER PHASE GNSS OBSERVATIONS AND ARE  
REFERRED TO THE CENTRAL MERIDIAN OF ZONE 10.

THE UTM COORDINATES AND ESTIMATED HORIZONTAL  
POSITIONAL ACCURACY ACHIEVED ARE DERIVED FROM  
DUAL FREQUENCY GNSS BASELINE TIES TO GEODETIC  
CONTROL MARKERS 496919 ( 90H6255 ) AND 370163  
( 90H6253 ).

THIS PLAN SHOWS HORIZONTAL GROUND-LEVEL  
DISTANCES UNLESS OTHERWISE SPECIFIED. TO COMPUTE  
GRID DISTANCES, MULTIPLY GROUND-LEVEL DISTANCES  
BY THE AVERAGE COMBINED FACTOR OF 0.999855008.  
THE AVERAGE COMBINED FACTOR HAS BEEN DETERMINED  
BASED ON AN ELLIPSOIDAL ELEVATION OF 6.7 METRES.

- - DENOTES STANDARD IRON POST FOUND
- ⊙ - DENOTES NON STANDARD ROUND IRON POST FOUND
- - DENOTES LEAD PLUG FOUND
- ▲ - DENOTES TRAVERSE HUB FOUND
- - DENOTES LEAD PLUG SET
- - DENOTES STANDARD IRON POST SET
- △ - DENOTES TRAVERSE HUB SET
- CN - DENOTES CONCRETE NAIL

NAD83 ( CSRS ) 3.0.0.BC.1.NVI, UTM ZONE 10				
TH	NORTHING	EASTING	CSF	HPA
CN 2	5505801.31	355684.44	0.99985487212	0.05
CN 48	5505907.08	355545.33	0.99985514405	0.05

JULY 27, 2017

THIS PLAN LIES WITHIN THE JURISDICTION OF  
THE APPROVING OFFICER FOR THE CITY  
OF COURTENAY

THE FIELD SURVEY REPRESENTED BY THIS PLAN  
WAS COMPLETED ON THE XTH DAY OF XXX, 2017.  
MICHAEL J. HANSEN, BCLS 815

THIS PLAN LIES WITHIN THE COMOX VALLEY  
REGIONAL DISTRICT AND THE CITY OF  
COURTENAY

**McElhaney Associates**  
Professional Land Surveyors  
495 - 6th Street  
Courtenay, B.C. V9N 6V4  
Tel. 338-5495  
File 05620 RD CLS draft



**THE CORPORATION OF THE CITY OF COURTENAY**

**BYLAW NO. 2925**

**A bylaw to impose rates on all  
taxable lands and improvements**

Whereas pursuant to the provisions of the *Community Charter* the Council must each year, by bylaw, impose property value taxes on all land and improvements according to the assessed value thereof, by establishing rates for:

- a. the municipal revenue proposed to be raised for the year from property value taxes, as provided in the financial plan, and
- b. the amounts to be collected for the year by means of rates established by the municipality to meet its taxing obligations in relation to another local government or other public body;

Therefore, the Council of the Corporation of the City of Courtenay in open meeting assembled, enacts as follows:

1. This bylaw may be cited for all purposes as **“Tax Rates Bylaw No. 2925, 2018”**.
2. The following rates are hereby imposed and levied for the year 2018:
  - (a) For all lawful general purposes of the municipality, on the assessed value of land and improvements taxable for general municipal purposes, rates appearing in column “A” of the schedule attached hereto and forming a part of this bylaw hereof;
  - (b) For debt purposes, on the assessed value of land and improvements taxable for general municipal purposes, rates appearing in column “B” of the schedule attached hereto and forming a part of this bylaw hereof;
  - (c) For purposes of the Vancouver Island Regional Library on the assessed value of land and improvements taxable for general municipal purposes, rates appearing in column “C” of the schedule attached hereto and forming a part of this bylaw hereof;
  - (d) For purposes of the Comox Valley Regional District on the assessed value of land and improvements taxable for general municipal purposes, rates appearing in column “D” of the schedule attached hereto and forming a part of this bylaw hereof;
  - (e) For purposes of the Comox Valley Regional District on the assessed value of land and improvements taxable for general hospital purposes, rates appearing in Column “E” of the schedule attached hereto and forming a part of this bylaw hereof;

- (f) For purposes of the Comox-Strathcona Regional Hospital District on the assessed value of land and improvements taxable for hospital purposes, rates appearing in column “F” of the schedule attached hereto and forming a part of this bylaw hereof;
  - (g) For purposes of the Municipal Finance Authority on the assessed value of land and improvements for general municipal purposes, rates appearing in column “G” of the schedule attached hereto and forming a part of this bylaw hereof.
  - (h) For purposes of the B.C. Assessment Authority on the assessed value of land and improvements for general municipal purposes, rates appearing in column “H” of the schedule attached hereto and forming a part of this bylaw hereof.
  - (i) For purposes of the Downtown Courtenay Business Improvement Area on the assessed value of land and improvements for general municipal purposes, rates appearing in column “I” of the schedule attached hereto and forming a part of this bylaw hereof.
3. As soon as is practicable after the 2<sup>nd</sup> day of July, 2018, there shall be added to the unpaid taxes of the current year, in respect of each parcel of land and its improvements on the property tax roll, ten percent of the amount unpaid as of the 2<sup>nd</sup> day of July, 2018; and the said unpaid taxes together with the amount added as aforesaid, shall be deemed to be taxes of the current year due on such land and improvements.

Read a first time this    day of April, 2018

Read a second time this    day of April, 2018

Read a third time this    day of April, 2018

Finally passed and adopted this    day of May, 2018

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Mayor

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Director of Legislative Services



**BYLAW NO. 2925, 2018**

**SCHEDULE**

Tax Rates (dollars of tax per \$1000 taxable value)

Property Class	<u>A</u> General Municipal	<u>B</u> Debt	<u>C</u> Library	<u>D</u> Regional District (rates applied to general assessment)	<u>E</u> Regional District (rates applied to hospital assessment)	<u>F</u> Regional Hospital District	<u>G</u> Municipal Finance Authority	<u>H</u> B.C Assessment Authority	<u>I</u> Downtown Courtenay Business Improvement Area
1. Residential	3.2205	0.2084	0.1914	0.4372	0.3953	0.6670	0.0002	0.0403	0.0000
2. Utilities	22.5432	1.4588	1.3399	3.0603	1.3834	2.3344	0.0007	0.5037	0.0000
3. Supportive Housing	3.2205	0.2084	0.1914	0.4372	0.3953	0.6670	0.0002	0.0000	0.0000
4. Major Industry	12.5598	0.8128	0.7465	1.7050	1.3439	2.2677	0.0007	0.5037	0.0000
5. Light Industry	12.5598	0.8128	0.7465	1.7050	1.3439	2.2677	0.0007	0.1241	1.1201
6. Business / Other	9.7897	0.6335	0.5819	1.3290	0.9684	1.6341	0.0005	0.1241	1.1201
8. Recreation / Non-Profit	3.2205	0.2084	0.1914	0.4372	0.3953	0.6670	0.0002	0.0403	0.0000
9. Farm	3.2205	0.2084	0.1914	0.4372	0.3953	0.6670	0.0002	0.0403	0.0000

