

**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT (GVS&DD)
BOARD OF DIRECTORS**

BOARD MEETING

Friday, July 28, 2023

9:00 am

28th Floor Boardroom, 4515 Central Boulevard, Burnaby, British Columbia

Webstream available at <https://www.metrovancouver.org>

[Membership and Votes](#)

REVISED AGENDA¹

A. ADOPTION OF THE AGENDA

1. July 28, 2023 Meeting Agenda

That the GVS&DD Board adopt the agenda for its meeting scheduled for July 28, 2023 as circulated.

B. ADOPTION OF THE MINUTES

1. June 30, 2023 Meeting Minutes

That the GVS&DD Board adopt the minutes for its meeting held June 30, 2023 as circulated.

pg. 5

C. DELEGATIONS

D. INVITED PRESENTATIONS

E. CONSENT AGENDA

Note: Directors may adopt in one motion all recommendations appearing on the Consent Agenda or, prior to the vote, request an item be removed from the Consent Agenda for debate or discussion, voting in opposition to a recommendation, or declaring a conflict of interest with an item.

¹ Note: Recommendation is shown under each item, where applicable. All Directors vote unless otherwise noted.

1. LIQUID WASTE COMMITTEE REPORTS

1.1 Guide to Metro Vancouver Utility Capital Projects for Member Jurisdictions and Impact Mitigation Framework

pg. 11

Note: This report was considered by both Water Committee and Liquid Waste Committee

That the GVS&DD Board receive for information the report dated June 21, 2023 titled "Guide to Metro Vancouver Utility Capital Projects for Member Jurisdictions and Impact Mitigation Framework".

1.2 Phase 2 Design Build Consulting Services for the Lions Gate Secondary Wastewater Treatment Plant – Change Order to AECOM Contract PC14-0408

pg. 50

That GVS&DD Board:

- a) approve Phase 2 Design Consulting Services for the Lions Gate Secondary Wastewater Treatment Plant of AECOM Contract PC-0408 through a change order in the amount of \$113,000,000, for a total contract value of \$153,000,000 (exclusive of taxes), subject to final review by the Commissioner; and
- b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the change order should proceed.

Revised

1.3 Award of RFP No. 23-121 Technical Services for the North Shore Wastewater Treatment Plant Project

pg. 54

That GVS&DD Board:

- a) approve award of RFP No. 23-121 for Technical Services for the North Shore Wastewater Treatment Plant Project, in the amount of \$25,000,000 (exclusive of taxes) to Stantec Consulting Ltd., subject to final review by the Commissioner; and
- b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the award should proceed.

F. ITEMS REMOVED FROM THE CONSENT AGENDA

G. REPORTS NOT INCLUDED IN CONSENT AGENDA

1. LIQUID WASTE COMMITTEE REPORTS

1.1 Greater Vancouver Sewerage and Drainage District Sewer Use Amendment Bylaw No. 366, 2023 pg. 58

That the GVS&DD Board:

- a) give first, second, and third reading to *Greater Vancouver Sewerage and Drainage District Sewer Use Amendment Bylaw No. 366, 2023*; and
- b) pass and finally adopt *Greater Vancouver Sewerage and Drainage District Sewer Use Amendment Bylaw No. 366, 2023*.

1.2 Greater Vancouver Sewerage and Drainage District Hospital Pollution Prevention Amendment Bylaw No. 367, 2023 pg. 69

That the GVS&DD Board:

- a) give first, second, and third reading to *Greater Vancouver Sewerage and Drainage District Hospital Pollution Prevention Amendment Bylaw No. 367, 2023*; and
- b) pass and finally adopt *Greater Vancouver Sewerage and Drainage District Hospital Pollution Prevention Amendment Bylaw No. 367, 2023*.

Added 2. COMMISSIONER REPORTS

2.1 Public Engagement on Development Cost Charges pg. 73

That the GVS&DD/GVWD/MVRD Board direct staff to consult with member jurisdictions, the Urban Development Institute and other parties on proposed updates to Development Cost Charges as recommended in the report dated July 25, 2023 titled "Public Engagement on Development Cost Charges".

H. MOTIONS FOR WHICH NOTICE HAS BEEN GIVEN

I. OTHER BUSINESS

1. GVS&DD Board Committee Information Items and Delegation Summaries

J. BUSINESS ARISING FROM DELEGATIONS

K. RESOLUTION TO CLOSE MEETING

Note: The Board must state by resolution the basis under section 90 of the Community Charter on which the meeting is being closed. If a member wishes to add an item, the basis must be included below.

That the GVSDD Board close its meeting scheduled for July 28, 2023 pursuant to section 226 (1) (a) of the *Local Government Act* and the *Community Charter* provisions as follows:

- 90 (1) A part of a council meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:
- (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;
 - (g) litigation or potential litigation affecting the municipality; and
 - (i) the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose.

L. RISE AND REPORT (Items Released from Closed Meeting)

M. ADJOURNMENT/CONCLUSION

That the GVS&DD Board adjourn/conclude its meeting of July 28, 2023.

**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
BOARD OF DIRECTORS**

Minutes of the Regular Meeting of the Greater Vancouver Sewerage and Drainage District (GVS&DD) Board of Directors held at 8:56 am on Friday, June 30, 2023, in the 28th Floor Boardroom, 4515 Central Boulevard, Burnaby, British Columbia.

MEMBERS PRESENT:

Delta, Chair, Director George V. Harvie	Richmond, Director Malcolm Brodie
Anmore, Vice Chair, Director John McEwen	Richmond, Director Bill McNulty
Burnaby, Director Pietro Calendino	Richmond, Director Chak Au*
Burnaby, Director Sav Dhaliwal	Surrey, Director Harry Bains
Burnaby, Alternate Director Joe Keithley for Mike Hurley	Surrey, Director Mike Bose
Coquitlam, Director Craig Hodge	Surrey, Director Gordon Hepner
Coquitlam, Director Teri Towner	Surrey, Director Pardeep Kooner
Delta, Director Dylan Kruger	Surrey, Director Brenda Locke
Langley City, Director Paul Albrecht	Surrey, Director Rob Stutt
Langley Township, Director Eric Woodward	Vancouver, Director Adriane Carr
Langley Township, Alternate Director Misty vanPopta for Steve Ferguson	Vancouver, Director Lisa Dominato
Maple Ridge, Director Dan Ruimy	Vancouver, Director Sarah Kirby-Yung*
New Westminster, Director Patrick Johnstone	Vancouver, Director Mike Klassen*
North Vancouver City, Director Linda Buchanan	Vancouver, Alternate Director Peter Meiszner for Rebecca Bligh
North Vancouver District, Director Lisa Muri	Vancouver, Director Lenny Zhou*
Pitt Meadows, Alternate Director Tracy Elke for Nicole MacDonald	West Vancouver, Director Mark Sager
Port Coquitlam, Director Brad West	White Rock, Director Megan Knight
Port Moody, Director Meghan Lahti*	Commissioner Jerry W. Dobrovolny (Non-voting member)

MEMBERS ABSENT:

Electoral Area A, Director Jen McCutcheon
Vancouver, Director Ken Sim

STAFF PRESENT:

Dorothy Shermer, Corporate Officer
Rapinder Khaira, Legislative Services Coordinator, Board and Information Services

* denotes electronic meeting participation as authorized by Section 3.6.2 of the *Procedure Bylaw*

A. ADOPTION OF THE AGENDA

1. June 30, 2023 Meeting Agenda

It was MOVED and SECONDED

That the GVS&DD Board adopt the agenda for its meeting scheduled for June 30, 2023 as circulated.

CARRIED

B. ADOPTION OF THE MINUTES

1. June 2, 2023 Meeting Minutes

It was MOVED and SECONDED

That the GVS&DD Board adopt the minutes for its meeting held June 2, 2023 as circulated.

CARRIED

C. DELEGATIONS

No items presented.

D. INVITED PRESENTATIONS

No items presented.

E. CONSENT AGENDA

It was MOVED and SECONDED

That the GVS&DD Board adopt the recommendations presented in the following items as presented in the June 30, 2023 GVS&DD Board Consent Agenda:

- 1.1 Change Order to the Contract Resulting from RFP No. 19-007: Northwest Langley Wastewater Treatment Plant - Design and Construction Engineering Services
- 1.2 Amendment to Central Aggregates Biosolids Management Contract Resulting from SRFEI 21-018
- 1.3 Integrated Liquid Waste and Resource Management Plan: Biennial Report for 2021-2022
- 2.1 Extension of Recycling and Waste Centres Operations and Maintenance Services Contracts
- 3.1 North Shore Wastewater Treatment Plant Program - Program Overview and Background

CARRIED

The items and recommendations referred to above are as follows:

1.1 Change Order to the Contract Resulting from RFP No. 19-007: Northwest Langley Wastewater Treatment Plant - Design and Construction Engineering Services

Report dated June 2, 2023, from Marie-Liesse Mar, Director, Major Projects, Project Delivery and George Kavouras, Director, Procurement and Real Estate Services, seeking GVS&DD Board approval of the change order in the amount of up to \$20,655,821 to CH2M Hill Canada Ltd.

Recommendation:

That the GVS&DD Board:

- a) approve a change order in the amount of up to \$20,655,821 (exclusive of taxes) to CH2M Hill Canada Ltd., subject to final review by the Commissioner; and
- b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the award should proceed.

Adopted on Consent

1.2 Amendment to Central Aggregates Biosolids Management Contract Resulting from SRFEI 21-018

Report dated June 1, 2023, from George Kavouras, Director, Procurement and Real Estate Services and Janelle Hunt, Program Manager, Utility Residuals Management, Liquid Waste Services, seeking GVS&DD Board approval of an amendment to the contract with Lafarge Canada Inc. resulting from Standing Request for Expressions of Interest No. 21-018: Biosolids Management, in the amount of up to \$4,097,000 for biosolids management at the Central Aggregates gravel pit.

Recommendation:

That the GVS&DD Board:

- a) approve an amendment to the contract with Lafarge Canada Inc. resulting from Standing Request for Expressions of Interest No. 21-018: Biosolids Management, in the amount of up to \$4,097,000 (exclusive of taxes) for biosolids management at the Central Aggregates gravel pit, subject to final review by the Commissioner; and
- b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the amendment should proceed.

Adopted on Consent

1.3 Integrated Liquid Waste and Resource Management Plan: Biennial Report for 2021-2022

Report dated Abin Antony, Program Manager, Policy, Planning and Analysis, Liquid Waste Services, seeking GVS&DD Board authorization for staff to forward the Biennial Report to the Ministry of Environment and Climate Change Strategy, and arrange for the Liquid Waste Committee to receive public comments at its scheduled meeting of September 13, 2023.

Recommendation:

That the GVS&DD Board direct staff to:

- a) submit the “Biennial Report: 2021-2022”, attached to the report titled “*Integrated Liquid Waste and Resource Management Plan: Biennial Report for 2021-2022*”, dated June 7, 2023, to the Ministry of Environment and Climate Change Strategy, in accordance with the requirements of the *Integrated Liquid Waste and Resource Management Plan*; and
- b) arrange for the Liquid Waste Committee to receive public comments on the “Biennial Report: 2021-2022”, attached to the report titled “*Integrated Liquid Waste and Resource Management Plan: Biennial Report for 2021-2022*”, dated June 7, 2023, at the September 13, 2023 Liquid Waste Committee meeting.

Adopted on Consent

2.1 Extension of Recycling and Waste Centres Operations and Maintenance Services Contracts

Report dated June 20, 2023, from Paul Henderson, General Manager, Solid Waste Services, seeking GVS&DD Board approval of an amendment in the amount of \$61,481,000 for a two-year extension from January 1, 2024 to December 31, 2025 to the existing Contract 16-071 with Halton Recycling Ltd. for operation and maintenance of the North Shore, North Surrey, and United Boulevard recycling and waste centres, and approval of an amendment in the amount of \$7,553,000 for a two-year extension from January 1, 2024 to December 31, 2025 to the existing Contract 16-114 with GFL Environmental Inc. for operation and maintenance of the Maple Ridge and Langley recycling and waste centres.

Recommendation:

That the GVS&DD Board:

- a) approve an amendment in the amount of \$61,481,000 for a two-year extension from January 1, 2024 to December 31, 2025 to the existing Contract 16-071 with Halton Recycling Ltd. (doing business as Emterra Environmental) for operation and maintenance of the North Shore, North Surrey, and United Boulevard recycling and waste centres;
- b) approve an amendment in the amount of \$7,553,000 for a two-year extension from January 1, 2024 to December 31, 2025 to the existing Contract 16-114 with GFL Environmental Inc. for operation and maintenance of the Maple Ridge and Langley recycling and waste centres; and
- c) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the amendments should proceed.

Adopted on Consent

3.1 North Shore Wastewater Treatment Plant Program - Program Overview and Background

Report dated June 19, 2023, from Chery Nelms, General Manager, Project Delivery, providing the GVS&DD Board with background information on the North Shore Wastewater Treatment Plant Program.

Recommendation:

That the GVS&DD Board receive for information the report dated June 19, 2023, titled "North Shore Wastewater Treatment Plant Program - Program Overview and Background".

Adopted on Consent

F. ITEMS REMOVED FROM THE CONSENT AGENDA

No items presented.

G. REPORTS NOT INCLUDED IN CONSENT AGENDA

No items presented.

H. MOTIONS FOR WHICH NOTICE HAS BEEN GIVEN

No items presented.

I. OTHER BUSINESS

1. GVS&DD Board Committee Information Items and Delegation Summaries

J. BUSINESS ARISING FROM DELEGATIONS

No items presented.

K. RESOLUTION TO CLOSE MEETING

It was MOVED and SECONDED

That the GVS&DD Board close its meeting scheduled for June 30, 2023 pursuant to section 226 (1) (a) of the *Local Government Act* and the *Community Charter* provisions as follows:

- 90 (1) A part of a council meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:
- (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;
 - (g) litigation or potential litigation affecting the municipality;
 - (k) negotiations and related discussions respecting the proposed provision of a municipal service that are at their preliminary stages and that, in the view of the council, could reasonably be expected to harm the interests of the municipality if they were held in public; and
 - (m) a matter that, under another enactment, is such that the public may be excluded from the meeting.

CARRIED

L. RISE AND REPORT (Items Released from Closed Meeting)

No items presented.

M. ADJOURNMENT/CONCLUSION

It was MOVED and SECONDED

That the GVS&DD Board adjourn its meeting of June 30, 2023.

CARRIED

(Time: 8:56 am)

CERTIFIED CORRECT

Dorothy Shermer, Corporate Officer

George V. Harvie, Chair

60825332 FINAL

To: Water Committee and Liquid Waste Committee

From: Jennifer Crosby, Director, Project Management Office, Project Delivery
Nermine Tawfik, Supervisor Community Engagement, External Relations

Date: June 21, 2023 Meeting Date: July 12, 2023
July 19, 2023

Subject: **Guide to Metro Vancouver Utility Capital Projects for Member Jurisdictions and Impact Mitigation Framework**

RECOMMENDATION

That the GVWD and GVS&DD Boards receive for information the report dated June 21, 2023 titled “Guide to Metro Vancouver Utility Capital Projects for Member Jurisdictions and Impact Mitigation Framework”.

EXECUTIVE SUMMARY

Metro Vancouver currently mitigates and compensates member jurisdictions for the impact of projects taking place within their jurisdiction through various means, which are generally negotiated on a case-by-case basis. Mitigation and compensation for member jurisdictions may take the form of changes to a design resulting in higher project costs, addition of community amenities, upgrades to member’s infrastructure, provision of resources to our members to handle increased workload resulting from our projects, as well as payment of fees for various permits, lost revenue, letters of credit, and other charges.

Metro Vancouver staff continue to work with member jurisdictions to review practices with a goal to create a predictable, consistent and equitable approach to mitigating and compensating member jurisdictions for the impacts to their community during construction of region-serving infrastructure. This report provides an update on this work, including publishing the *Guide to Metro Vancouver Utility Capital Projects for Member Jurisdictions*.

PURPOSE

To provide the GVWD and GVS&DD Boards an update on progress with developing an equitable impact mitigation framework for member jurisdictions in which Metro Vancouver is undertaking capital project construction, including publishing the *Guide to Metro Vancouver Utility Capital Projects for Member Jurisdictions* (Attachment 1).

BACKGROUND

Each year, Metro Vancouver delivers projects to ensure that the region has reliable access to clean drinking water, safe wastewater removal and treatment, and waste disposal and recycling. The purpose of delivering these services on behalf of the members is to provide infrastructure at a scale that is more efficient than if each member or participant delivered the services separately. As a result, the services offer efficiencies that benefit all members. Members participate in the core services based on the understanding that not only will the benefits of the service be equitably

shared amongst participants, but the impacts and costs of delivering those services are also equitably shared.

Over the years, members have raised concerns regarding impacts to their communities through noise, dust, and traffic disruption, as well as impacts to their staffing time and resources due to capital project construction. Currently, impacts and corresponding mitigation measures are negotiated on a case-by-case basis with the member jurisdiction within which the construction project is taking place. This has resulted in unequal levels of compensation and mitigation to our members as well as unpredictable material impacts to the scope, schedule, and budget of Metro Vancouver capital projects.

In 2018, the Metro Vancouver Board rescinded the existing Capital Projects Policy and recommended that Metro Vancouver staff work with advisory committees to develop a capital projects framework, which would capture the approach and process of how Metro Vancouver utility capital projects are planned, managed, and communicated. Since then, Metro Vancouver has been engaging with member jurisdictions through a Regional Engineers Advisory Committee (REAC) working group consisting of members from the City of Coquitlam, District of North Vancouver, and the cities of Surrey and Vancouver, along with Metro Vancouver staff. The group discussed many important topics and issues and made practical suggestions toward creating more equitable and consistent approaches to improve the processes and communication between our organizations.

The working group came to agreement on a number of improvements and also identified areas where consensus was not possible. Some of the improvement solutions related to stronger coordination and communication have been implemented through a process Metro Vancouver staff just piloted with the City of New Westminster and are now implementing with the City of Burnaby. Recommendations related to improved tendering and procurement are being implemented on current projects. The balance of recommended improvement solutions/ideas (where there was and was not consensus) will be progressed through development of two key deliverables, which are further discussed in the following sections.

Guide to Metro Vancouver Utility Capital Projects for Member Jurisdictions

A guide has been developed to describe the phases of most Metro Vancouver utility capital projects and provides a high-level, consistent, and transparent roadmap that will help member jurisdictions plan their involvement in a Metro Vancouver utility capital project. It identifies the key responsibilities and decision points for both Metro Vancouver and member jurisdiction staff throughout the project lifecycle (from initiation through to close out). The audience for the guide is Metro Vancouver and member jurisdictions staff involved with Metro Vancouver water, liquid waste, and solid waste utility capital projects. The guide describes current practices only, not desired or future state, Metro Vancouver, in collaboration with member jurisdictions, consultants, and contractors is actively and continuously improving these practices and the guide will be updated periodically to reflect changes.

The guide was shared with all REAC members at the Metro Vancouver Conference Day held on May 12, 2023. The document will be available to member jurisdictions staff through the Metro Vancouver website.

Impact Mitigation Framework

In a report to the GVWD and GVS&DD Boards at their October 28, 2022 meeting (Attachment 2), Metro Vancouver staff outlined some of the current issues related to mitigation and compensation practices for Metro Vancouver capital projects construction. Building upon the outcomes from the REAC working group, an impact mitigation framework will be developed to enable predictable, consistent, and equitable approaches to mitigating construction impacts to their communities during construction. This will allow Metro Vancouver to strengthen its relationships with member jurisdictions and the public. The specific objectives for this work include:

- Clarify expectations for how Metro Vancouver and member jurisdictions work together to deliver regional infrastructure
- Standardize the process for assessing and mitigating the impacts of utility capital projects on member jurisdictions
- Reduce risk and uncertainty related to the delivery of Metro Vancouver utility capital projects which in turn reduces impacts on costs and schedules

To support this, Metro Vancouver has outlined a three-part facilitated workshop series with all REAC members starting in 2023 as follows:

Workshop 1 May 12, 2023 - COMPLETE	Workshop 2 Target Q4 2023	Workshop 3 TBD
<p>Purpose: Explore the impacts of Metro Vancouver capital projects construction on member jurisdictions</p>	<p>Purpose: Share Metro Vancouver’s tools and approaches for identifying impacts and improving intergovernmental coordination</p> <p>Build a framework for mitigation practices (guiding principles, impact assessment tool, defining mitigation)</p>	<p>Purpose: Revise and finalize the framework for mitigation practices</p>
<p>Outcome: Establish a shared understanding of the impacts of capital projects construction</p>	<p>Outcome: Identify elements of an equitable framework</p>	<p>Outcome: Framework to be presented to RAAC and Metro Vancouver Boards</p>

The workshop on May 12 was attended by 25 REAC and REAC Subcommittee members representing 17 out of 21 GVWD and GVS&DD members. Following a short contextual presentation, members participated in a facilitated discussion to identify the impacts of Metro Vancouver’s capital project construction, from project initiation through to close-out, and discussed the magnitude and

complexity of these impacts. Participants shared their experiences and the group heard diverse perspectives from each member jurisdiction.

The workshops are intended to be an iterative process to inform the framework development. Metro Vancouver staff will integrate feedback from the workshops and prior discussions from the REAC working group into recommended guiding principles and approaches to different forms of mitigation to develop a predictable, equitable, and consistent regional approach. The proposed framework will go to REAC and Regional Administrators Advisory Committee (RAAC) prior to coming to the Water and Liquid Waste Committees and the GVWD and GVS&DD Boards for review and approval.

ALTERNATIVES

This is an information report. No alternatives are presented

FINANCIAL IMPLICATIONS

The development of standardized, region-wide approaches to mitigation and compensation for projects undertaken in member jurisdictions would help to manage project costs, maintain project schedules, mitigate scope creep and change orders on construction projects, as well as ensure a transparent and equitable approach across all member jurisdictions.

CONCLUSION

Metro Vancouver is committed to the continuous improvement of its processes and coordination with member jurisdictions to deliver regional capital projects efficiently and cost effectively, and to mitigate the impacts of these projects. Development of the *Guide to Metro Vancouver Utility Capital Projects for Member Jurisdictions* is now complete and has been shared with REAC at the Metro Vancouver Conference Day on May 12, 2023 as well as RAAC on June 22, 2023.

The first workshop on May 12, 2023 is one of a three-part workshop series with REAC to engage with members on the development of a framework for mitigation practices for member jurisdictions in which Metro Vancouver is undertaking capital project construction. Planning is underway to prepare for the second workshop, which is targeted to be held in Q4 2023.

Attachments

1. Guide to Metro Vancouver Utility Capital Projects (59308623)
2. Compensation Practices Related to Metro Vancouver's Delivery of Projects, report dated September 28, 2022 (53943312)
3. Guide to Metro Vancouver Utility Capital Projects for Member Jurisdictions and Impact Mitigation Framework - Presentation



Guide to Metro Vancouver Utility Capital Projects for Member Jurisdictions

April 2023

Guide to Metro Vancouver Utility Capital Projects for Member Jurisdictions

April 2023

For more information or to provide feedback please contact Metro Vancouver Information Centre and mention the “Utility Capital Projects Guide”

Phone: 604-432-6200

Email: icentre@metrovancover.org

Metro Vancouver acknowledges that the region’s residents live, work, and learn on the shared territories of many Indigenous peoples, including 10 local First Nations: qíćǎý (Katzie), qʷɑ:ńǎń (Kwantlen), kʷíkʷǎəm (Kwikwetlem), máthxwi (Matsqui), xʷmǎθkʷǎyǎm (Musqueam), qíqéyt (Qayqayt), se’mya’me (Semiahmoo), Sʷxwú7mesh Uxwumixw (Squamish), scǎ́wǎθǎn mǎsteyǎxʷ (Tsawwassen), and sǎ́lílwǎtaʔ (Tsleil-Waututh). Metro Vancouver respects the diverse and distinct histories, languages, and cultures of First Nations, Métis, and Inuit, which collectively enrich our lives and the region.



Table of Contents

Introduction	4
Metro Vancouver Utility Capital Projects	6
Identifying Utility Capital Projects	6
The Lifecycle of a Metro Vancouver Utility Capital Project	8
Metro Vancouver and Member Jurisdiction Roles on Capital Projects	10
Linked Activities by Project Stages	11
Initiation	12
Definition	14
Preliminary Design	16
Detailed Design	18
Construction	20
Close Out	22

Introduction

Metro Vancouver plans and delivers utility capital projects to meet the needs of a growing population, maintain and upgrade aging infrastructure, and increase the region's resilience to the impacts of climate change, seismic events, wildfires, power failures, and natural disasters.

Metro Vancouver is a federation of 21 municipalities, one Electoral Area, and one Treaty First Nation. While each member jurisdiction provides services to its local community, each jurisdiction also works in cooperation with Metro Vancouver to deliver regional utility services and infrastructure. Metro Vancouver operates within a regulatory framework including, but not limited to the Greater Vancouver Sewerage and Drainage District Act (GVS&DD Act), Greater Vancouver Water District Act (GWWD Act) and certain provisions of the Local Government Act and the Community Charter.

Metro Vancouver's Member Jurisdictions

- Village of Anmore
- Village of Belcarra
- Bowen Island Municipality
- City of Burnaby
- City of Coquitlam
- City of Delta
- Electoral Area A
- City of Langley
- Township of Langley
- Village of Lions Bay
- City of Maple Ridge
- City of New Westminster
- City of North Vancouver
- District of North Vancouver
- City of Pitt Meadows
- City of Port Coquitlam
- City of Port Moody
- City of Richmond
- City of Surrey
- Tsawwassen First Nation
- City of Vancouver
- District of West Vancouver
- City of White Rock

Purpose of the Utility Capital Projects Guide

This Utility Capital Projects Guide describes the lifecycle of a Metro Vancouver utility capital project and identifies the key responsibilities for Metro Vancouver and member jurisdiction staff. It provides a high-level, consistent, and transparent roadmap that will help member jurisdictions plan their involvement in a Metro Vancouver utility capital project.

This guide is intended for member jurisdiction staff in all departments involved with Metro Vancouver utility capital projects. It was developed following interviews and working group meetings with Metro Vancouver staff and member jurisdictions.

This guide refers to the Metro Vancouver utility capital projects for water, liquid waste, and solid waste. Metro Vancouver utility capital projects include construction of new infrastructure as well as the expansion or replacement of existing infrastructure. Utility capital projects can be site-specific, such as a wastewater treatment plant, or a linear alignment, such as a drinking water main.

This guide outlines the capital project process that applies to most Metro Vancouver utility capital projects. It describes the phases, stages, and activities most projects have in common and describes current practices only. Metro Vancouver, in collaboration with member jurisdictions, consultants and contractors is actively and continuously improving these practices and this guide will be updated periodically to reflect changes.

Property acquisition is not addressed in this guide.

Metro Vancouver engages with First Nations throughout the lifecycle of its capital projects. This process is not included in this guide.



NEWTON PUMP STATION

By working together, Metro Vancouver and member jurisdictions can continue to build a healthy and resilient region.

At Metro Vancouver we make decisions that impact the 2.8 million residents that live in our region. Metro Vancouver is committed to engaging with member jurisdictions, First Nations, businesses, and the general public on utility capital projects in their communities. Community engagement can take many forms, from online surveys to open houses to working groups. By participating in our engagement opportunities, our partners and the public can help minimize project impacts and develop better projects.

Metro Vancouver Utility Capital Projects

Metro Vancouver provides reliable, clean, safe drinking water to its member jurisdictions through a system of water supply areas, dams, treatment facilities, reservoirs, pump stations, and water mains. Metro Vancouver operates five wastewater treatment plants that process over one billion litres of wastewater every day, and is responsible for waste reduction, recycling planning, and the operation of a series of solid waste facilities to meet the needs of our growing region.

Metro Vancouver utility capital projects are required to maintain the quality and reliability of these systems and continue to protect public health and the environment.

The purpose of delivering these services to member jurisdictions is to provide infrastructure at a scale that is more efficient than if each member or participant delivered the services separately. As a result, the services offer efficiencies that benefit all member jurisdictions.

Consistent with the Metro Vancouver Board Strategic Plan 2019-2022, Metro Vancouver plans and delivers utility capital projects that:

- Meet the current needs of the region and respond to population growth
- Promote a healthy and functioning ecosystem
- Ensure resilience to seismic events, wildfires, power failures, and natural disasters
- Are financially responsible and affordable
- Anticipate and meet regulatory requirements

In all its construction projects, Metro Vancouver works to minimize construction impacts on the community. Before selecting a site or alignment option, Metro Vancouver investigates multiple options and uses comparative analysis of options to evaluate the potential environmental, financial, social, and constructability/technical impacts of each option.

Wherever possible, Metro Vancouver works with member jurisdictions to consider and minimize project impacts. Metro Vancouver staff attend meetings across the region to share information about upcoming utility capital projects with member jurisdiction staff.

Identifying Utility Capital Projects

Utility capital projects are essential to maintain the quality and reliability of the region's drinking water, wastewater, and solid waste management services. Preparing for and responding to population growth, aging infrastructure, seismic events, natural disasters, climate impacts, and changes to regulatory requirements all drive the need to construct, expand, and replace the region's utility infrastructure.

Metro Vancouver works with member jurisdictions to anticipate and plan for these changing conditions. Climate 2050, Metro 2050 (Regional Growth Strategy), the Integrated Liquid Waste and Resource Management Plan, the Drinking Water Management Plan, and the Integrated Solid Waste and Resource Management Plan are among the many plans that reflect and respond to the current and future needs of the region and Metro Vancouver's member jurisdictions and help set the course for a safe and healthy future.

Water Capital Projects

Examples of recent Metro Vancouver water utility capital projects that have helped ensure reliable, safe drinking water:

- Douglas Road Water Main
- Dam Safety Enhancements Programs
- Jericho Reservoir
- Port Mann Water Supply Tunnel



Liquid Waste Capital Projects

Examples of recent Metro Vancouver liquid waste utility capital projects that have helped improve sewer service to residents and businesses in member jurisdictions:

- Iona Biosolids Dewatering Facility
- Sapperton Pump Station Upgrade
- Hastings Cassiar Sewer Upgrade
- Albert Street Trunk Sewer



Solid Waste Capital Projects

Examples of recent Metro Vancouver solid waste utility capital projects that have helped improve solid waste management in member jurisdictions:

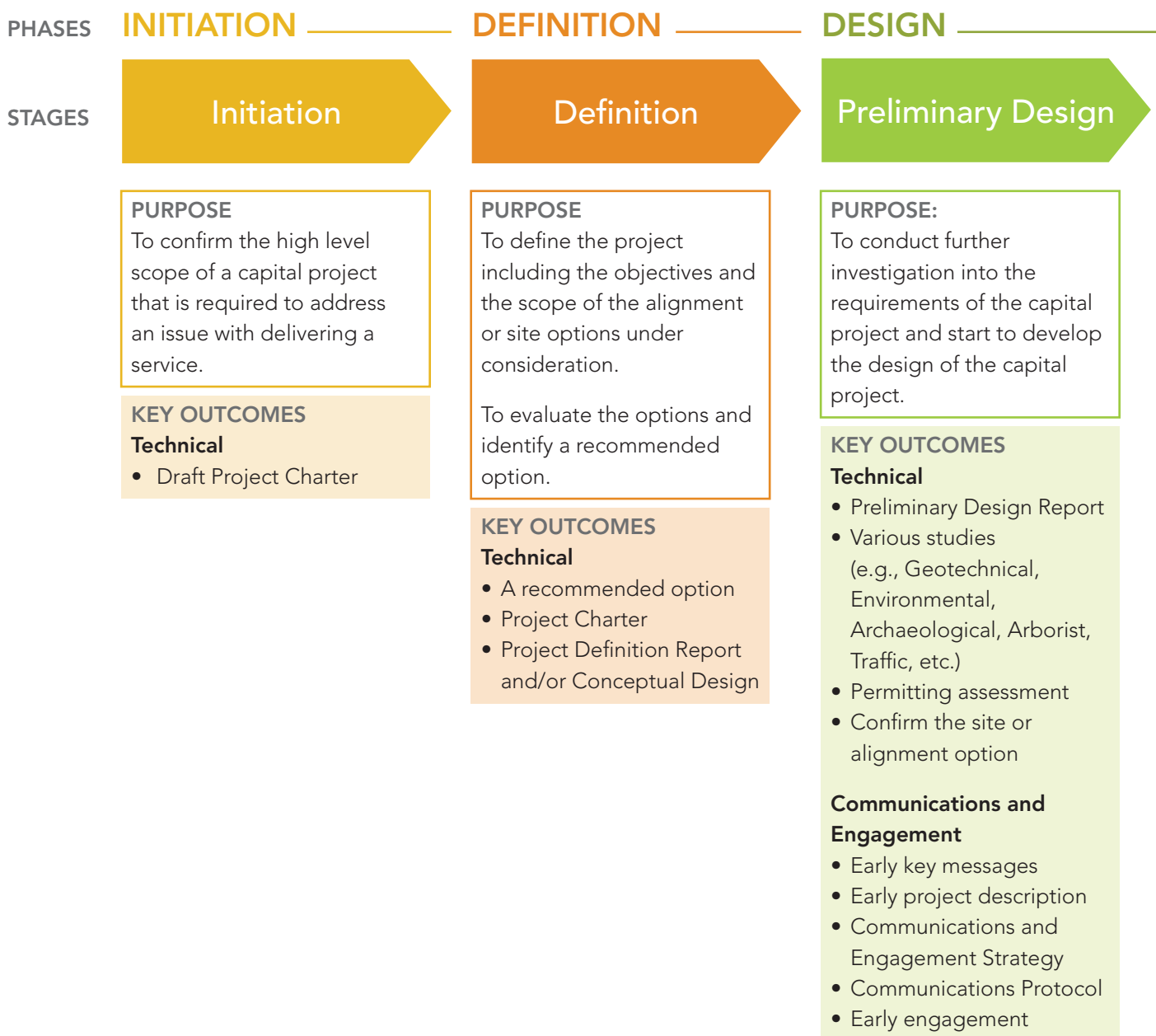
- Central Surrey Recycling and Waste Centre
- United Boulevard Recycling and Waste Centre



The Lifecycle of a Metro Vancouver Utility Capital Project

Metro Vancouver’s utility capital projects follow a consistent six-stage planning and construction process. While large Metro Vancouver projects may take 10 to 15 years to move through the stages, other projects are completed in a much shorter time frame.

The table below provides member jurisdictions with a high-level overview of the purpose and key outcomes of each stage of a Metro Vancouver utility capital project. This process will vary depending on the complexity and unique requirements of the capital project.



CONSTRUCTION

Detailed Design

PURPOSE:

To progress the design of the capital project in preparation for construction.

KEY OUTCOMES

Technical

- Final Design Reports (30/60/90%)
- Permit applications
- Various studies (e.g., traffic, noise)
- Tender documents

Communications and Engagement

- Project fact sheet and website
- Notify community/ neighbourhoods
- Seek input through online and in-person engagement events

Construction

PURPOSE

To take the project from tender award through to construction completion.

KEY OUTCOMES

Technical

- Ongoing permit applications (e.g., highway use permit, noise variance)
- Project commissioning and tie-ins

Communications and Engagement

- Construction communications
- Community relations

Close-out

PURPOSE

To hand the project over to Metro Vancouver operations and maintenance.

KEY OUTCOMES

Technical

- Certificate of Completion/ Final Acceptance

Communications and Engagement

- Project completion communications

Metro Vancouver and Member Jurisdiction Roles on Utility Capital Projects

Member jurisdictions play a critical role in the design and delivery of regional utility capital projects. Metro Vancouver works closely with member jurisdictions throughout the lifecycle of Metro Vancouver utility capital projects.

For each utility capital project, Metro Vancouver designates a point-of-contact to liaise with member jurisdictions in the project area. Member jurisdictions should expect to participate in regular meetings, to receive timely updates, to provide input at key stages in the project, and to provide timely review of key project documents and permit applications.

Metro Vancouver staff, including senior management, project staff, capital planning, policy, procurement, real estate, Indigenous relations, and community engagement, will work with member jurisdiction staff as required.

Member jurisdictions should plan to keep their senior leadership team and all relevant departments aware and involved, as required. This includes, but is not limited to, the Chief Administrative Officer, General Manager(s), planning, engineering, transportation, building, public works, parks, and communications and engagement.



Linked Activities by Project Stages

Metro Vancouver and member jurisdiction each have key roles and responsibilities throughout the lifecycle of a Metro Vancouver utility capital project.

This section describes key Metro Vancouver activities that are linked to corresponding activities from the member jurisdiction. Metro Vancouver activities include those carried out by parties contracted to act on Metro Vancouver's behalf.

Initiation

During the Initiation stage of a new utility capital project, Metro Vancouver staff will contact the member jurisdiction to introduce the project, share information, seek initial input, and build an understanding of how to work together to deliver the project.

PURPOSE

To confirm the high level scope of a capital project that is required to address an issue with delivering a service.

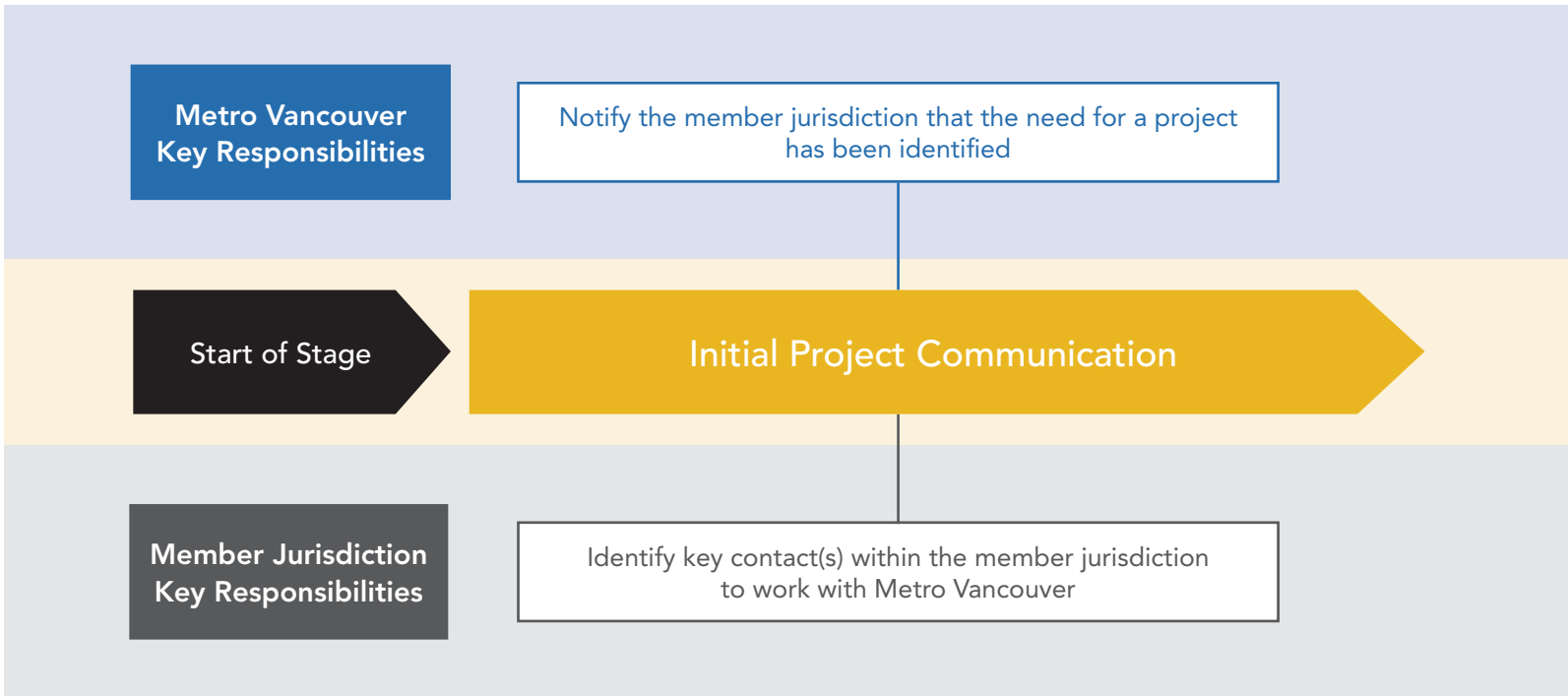
KEY OUTCOMES

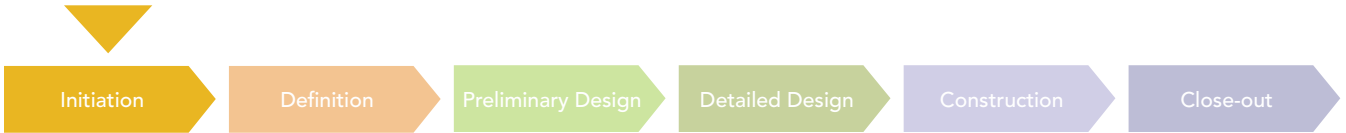
Technical

- Draft Project Charter

Linked Activities by Project Stage

This diagram describes key Metro Vancouver activities that are linked to a corresponding activity from the member jurisdiction. It does not provide a comprehensive list of Metro Vancouver or member jurisdiction activities.





Stage
Completion

Definition

During the Definition stage, Metro Vancouver will define the project including its objectives and the scope of the alignment or site options under consideration. Meetings will be held with member jurisdictions to share information and seek input about the options. During this stage, Metro Vancouver will evaluate the options to select an option based on environmental, financial, social, technical/constructability considerations. At the end of this stage, Metro Vancouver will produce a Project Definition Report and/or Conceptual Design with a recommended site or alignment option.

PURPOSE

To define the project including the objectives and the scope of the alignment or site options under consideration.

To evaluate the options and identify a recommended option.

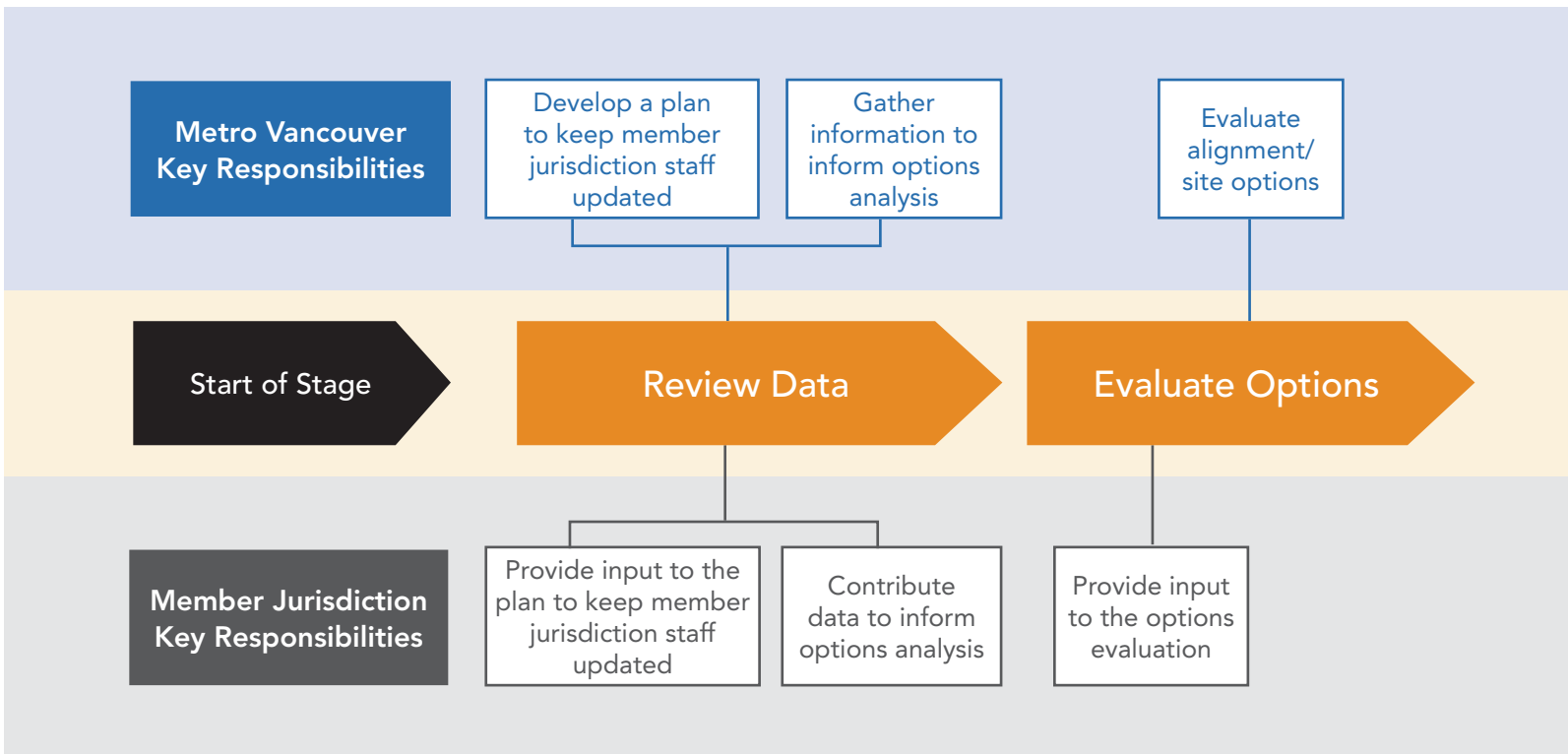
KEY OUTCOMES

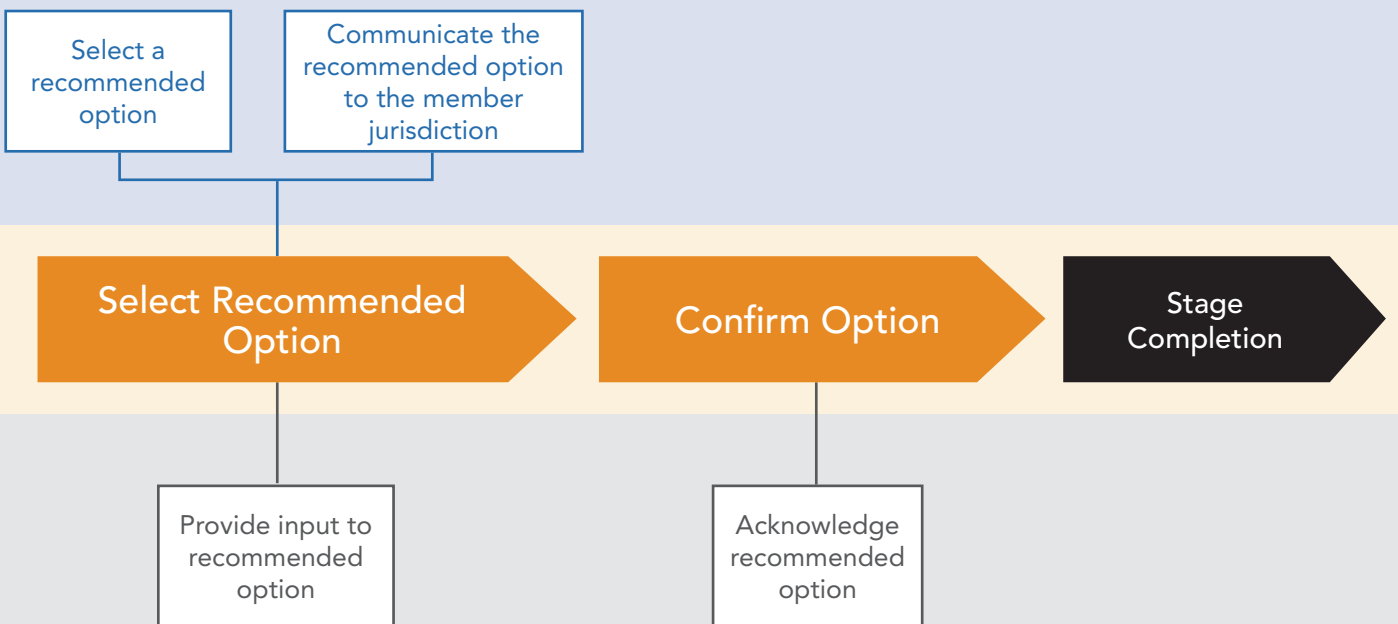
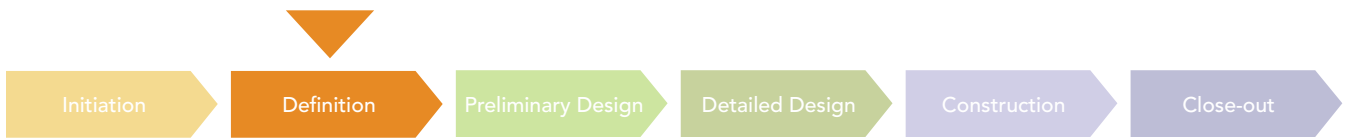
Technical

- A recommended option
- Project Charter
- Project Definition Report and/or Conceptual Design

Linked Activities by Project Stage

This diagram describes key Metro Vancouver activities that are linked to a corresponding activity from the member jurisdiction. It does not provide a comprehensive list of Metro Vancouver or member jurisdiction activities.





Preliminary Design

Now that one option has been selected, Metro Vancouver prepares the preliminary design of the selected site or alignment. Engineering work in this stage includes conducting preliminary properties, traffic, geotechnical, social, archaeological, and environmental investigations, analysing feasibility, and preparing a Permit Summary. The Communications and Engagement Strategy and Communications Protocol are developed, and on some projects, early engagement begins. At the end of this stage, Metro Vancouver will produce a Preliminary Design Report.

PURPOSE:

To conduct further investigation into the requirements of the capital project and start to develop the design of the capital project.

KEY OUTCOMES

Technical

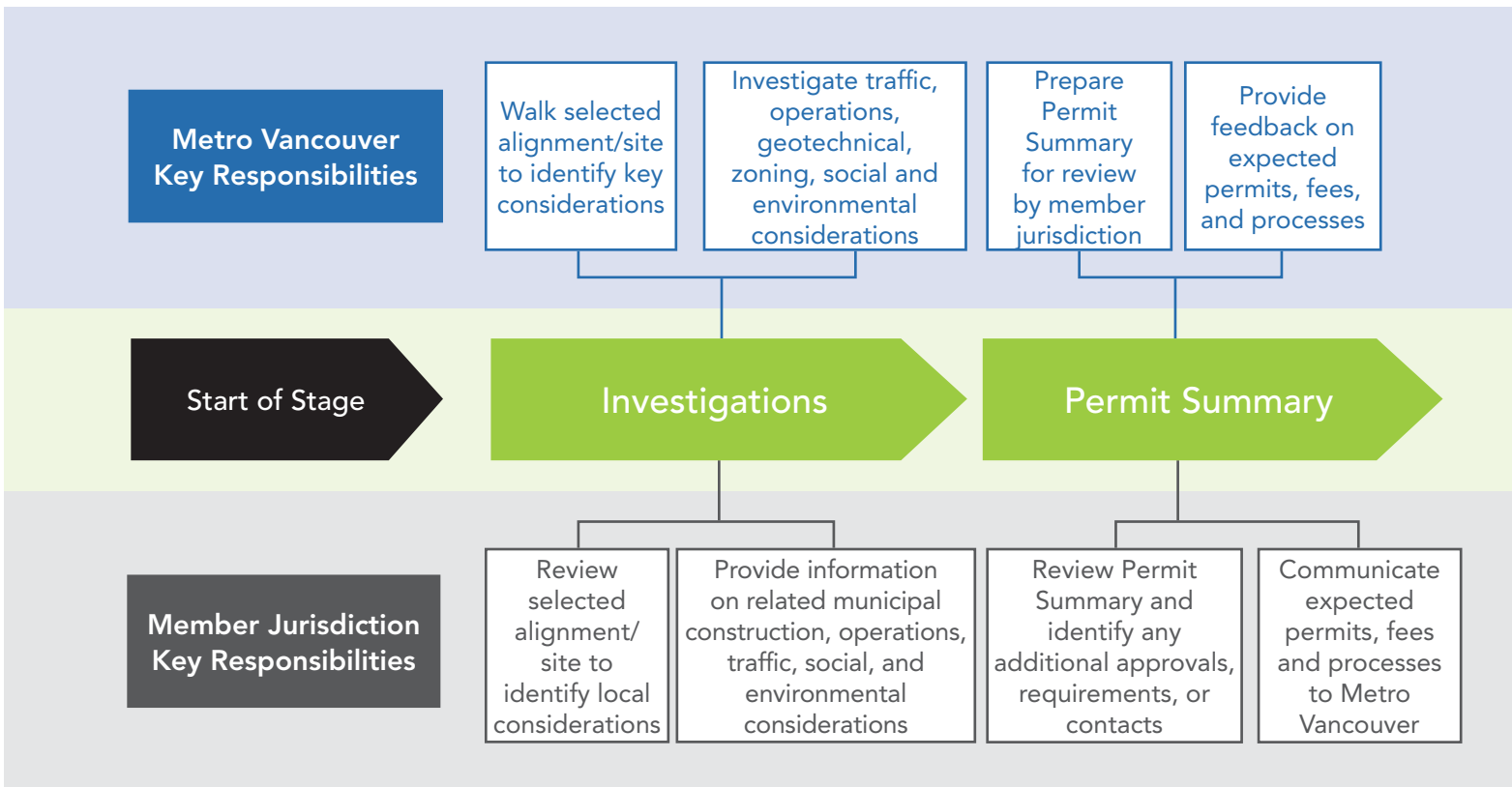
- Preliminary Design Report
- Various studies (e.g., Geotechnical, Environmental, Archaeological, Arborist, Traffic, etc.)
- Permitting assessment and Permit Summary

Communications and Engagement

- Early key messages
- Early project description
- Communications and Engagement Strategy
- Communications Protocol
- Early engagement

Linked Activities by Project Stage

This diagram describes key Metro Vancouver activities that are linked to a corresponding activity from the member jurisdiction. It does not provide a comprehensive list of Metro Vancouver or member jurisdiction activities.





Communicate information from preliminary design such as alignment/site details for member jurisdiction confirmation

Draft the Communications and Engagement Strategy by project stage

Develop Communications Protocol to outline how Metro Vancouver and the member jurisdiction will share, be involved with, and/or execute public information initiatives related to the project

Preliminary Design Report

Communications and Engagement Strategy

Communications Protocol

Stage Completion

Review information and provide input

Review and provide input to the Communications and Engagement Strategy

Contribute to the Communications Protocol

Detailed Design

During Detailed Design, Metro Vancouver prepares the detailed design of the selected site or alignment. Detailed Design Reports are typically produced when the design work is 30%, 60%, and 90% complete. At this stage, traffic management plans are developed, construction impacts are further assessed and mitigation strategies are developed, permits are approved, and the construction tender documents are prepared and issued. The posting of the tender documents signals the end of the Detailed Design stage.

Public communication about the project begins during this stage, with the implementation of the Communications and Engagement Strategy.

PURPOSE:

To progress the design of the capital project in preparation for construction.

KEY OUTCOMES

Technical

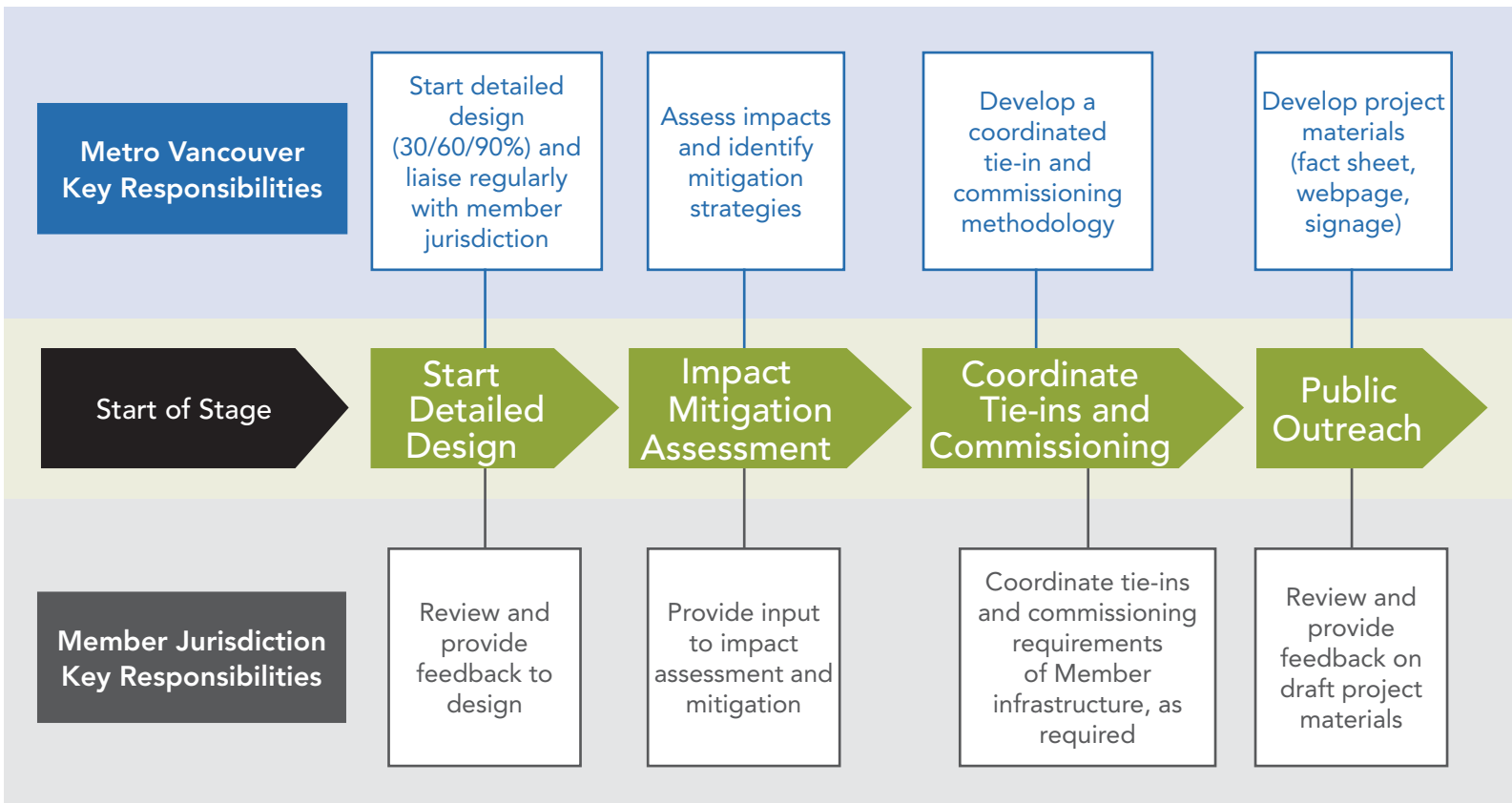
- Final Design Reports (30/60/90%)
- Permit applications
- Various studies (e.g., traffic, noise)
- Tender documents

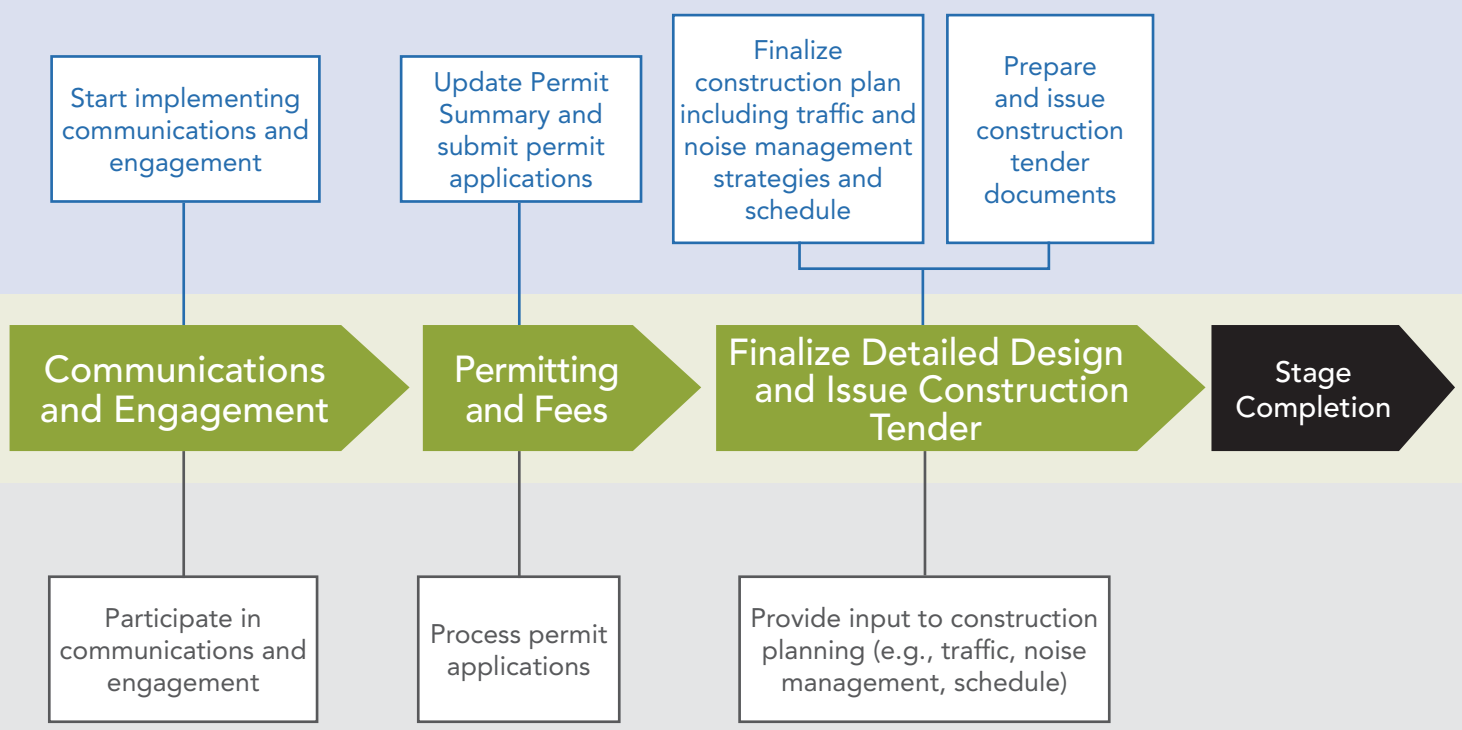
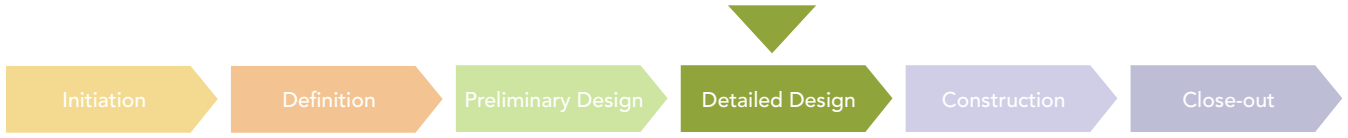
Communications and Engagement

- Project fact sheet and website
- Notify community/neighbourhoods
- Seek input through online and in-person engagement events

Linked Activities by Project Stage

This diagram describes key Metro Vancouver activities that are linked to a corresponding activity from the member jurisdiction. It does not provide a comprehensive list of Metro Vancouver or member jurisdiction activities.





Construction

During Construction, Metro Vancouver will take the construction project from tender award through to the completion of construction. This involves managing and administering the construction contract including monitoring progress, problem solving and sharing information with the member jurisdictions involved with the project. Throughout this stage, Communications and Engagement continues to implement the Communications and Engagement Strategy and is actively communicating construction activities to the public and key stakeholders through newsletters, project updates, notices and meetings as required. This stage ends with project commissioning and tie-ins.

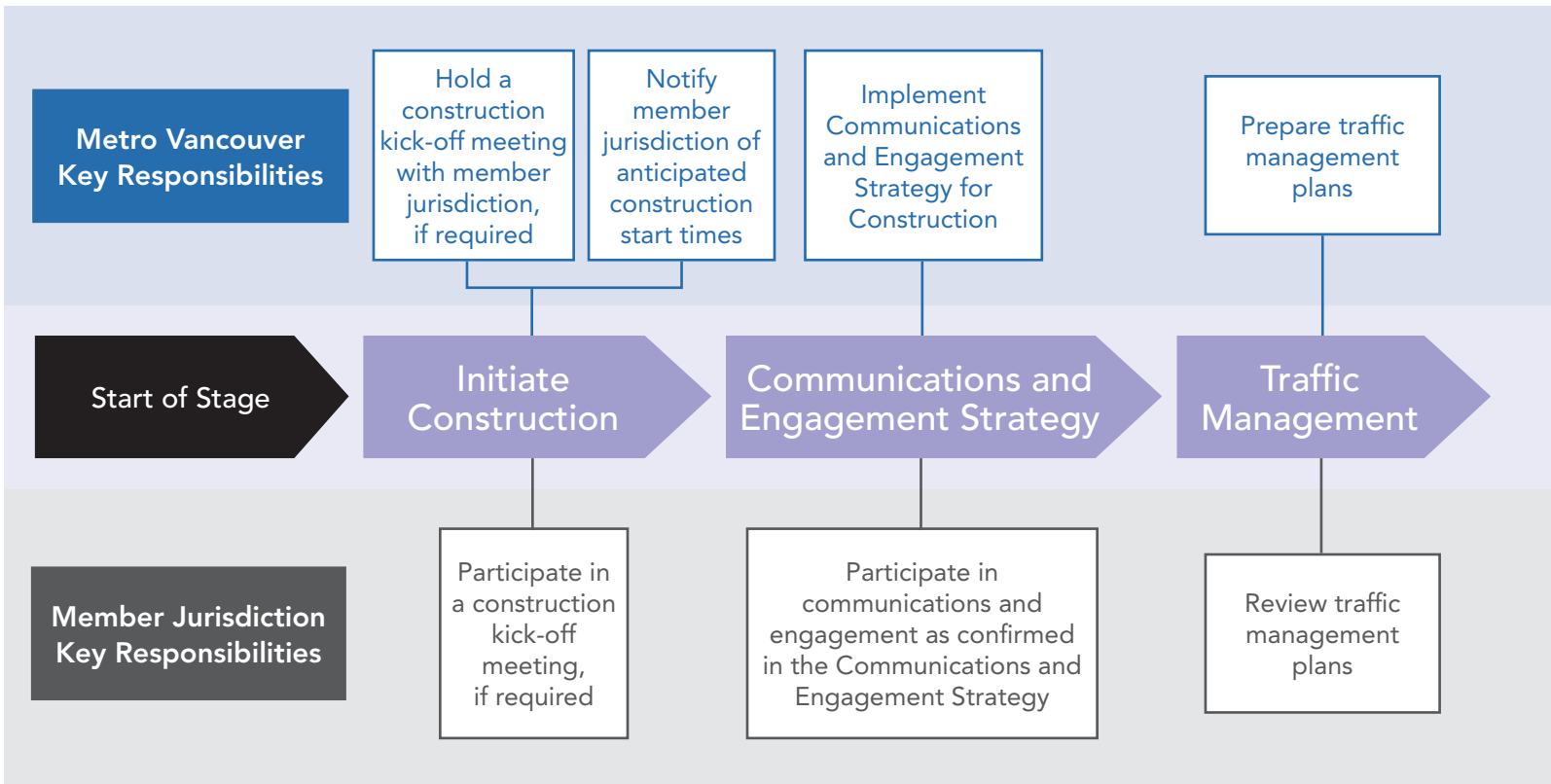
PURPOSE
To take the project from tender award through to construction completion.

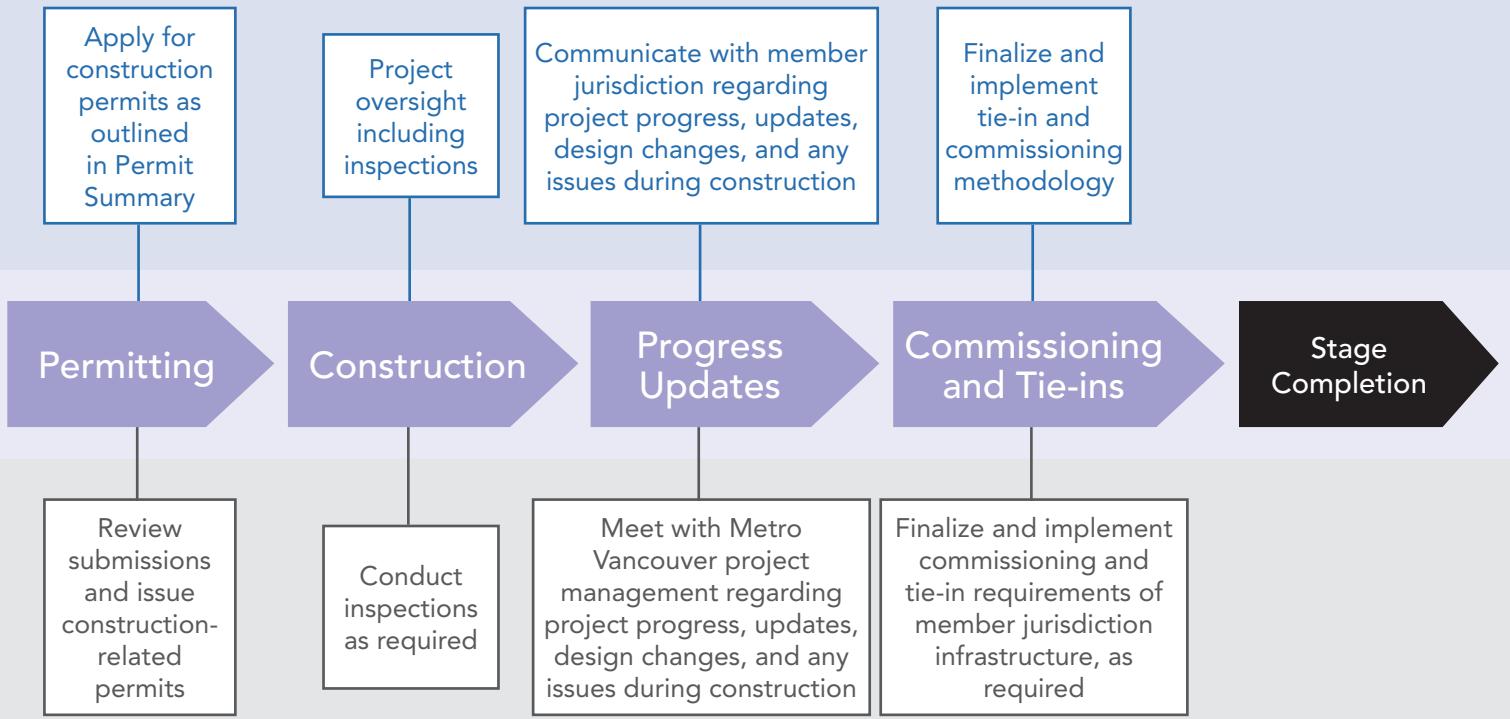
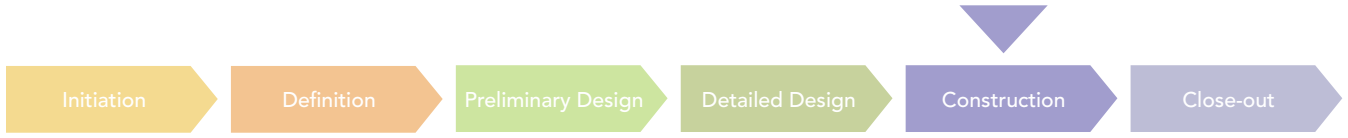
KEY OUTCOMES

<p>Technical</p> <ul style="list-style-type: none"> • Ongoing permit applications (e.g., highway use permit, noise variance) • Project commissioning and tie-ins 	<p>Communications and Engagement</p> <ul style="list-style-type: none"> • Construction communications • Community relations
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Linked Activities by Project Stage

This diagram describes key Metro Vancouver activities that are linked to a corresponding activity from the member jurisdiction. It does not provide a comprehensive list of Metro Vancouver or member jurisdiction activities.





Close out

Close out marks the last stage of a Metro Vancouver utility capital project. During the close out stage, the project is handed over from the Metro Vancouver capital project team to Metro Vancouver operations and maintenance staff.

PURPOSE

To hand the project over to Metro Vancouver operations and maintenance.

KEY OUTCOMES

Technical

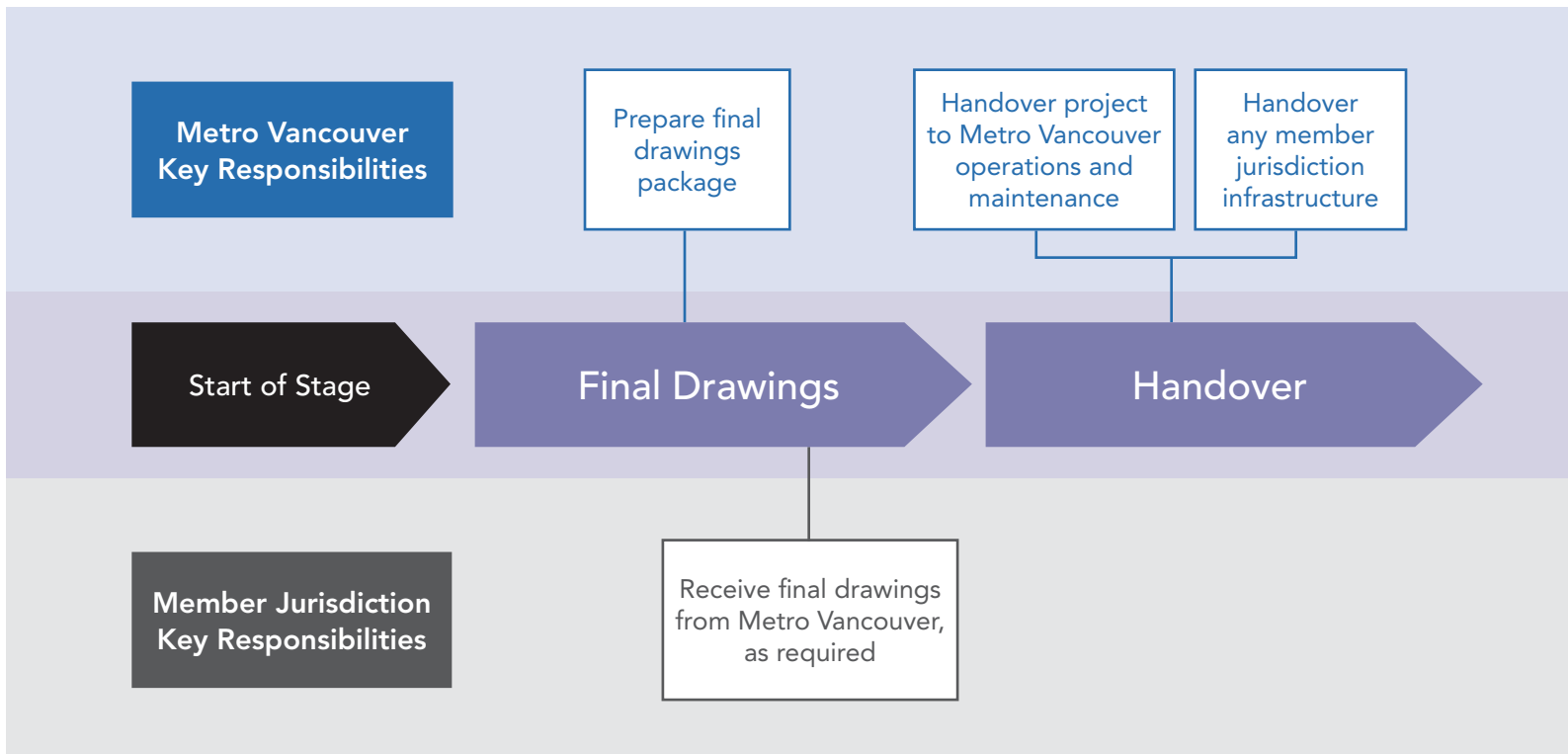
- Certificate of Completion/Final Acceptance

Communications and Engagement

- Project completion communications

Linked Activities by Project Stage

This diagram describes key Metro Vancouver activities that are linked to a corresponding activity from the member jurisdiction. It does not provide a comprehensive list of Metro Vancouver or member jurisdiction activities.



Initiation

Definition

Preliminary Design

Detailed Design

Construction

Close-out



Stage
Completion



To: Liquid Waste Committee and Water Committee

From: Cheryl Nelms, General Manager, Project Delivery

Date: September 28, 2022 Meeting Dates: October 5, 2022
October 6, 2022

Subject: **Compensation Practices Related to Metro Vancouver's Delivery of Projects**

RECOMMENDATION

That the GVS&DD and GVWD Boards receive for information the report dated September 28, 2022, titled "Compensation Practices Related to Metro Vancouver's Delivery of Projects".

EXECUTIVE SUMMARY

Metro Vancouver currently mitigates and compensates member jurisdictions for the impact of projects taking place within their jurisdiction through various means, which are generally negotiated on an ad-hoc basis. Mitigation and compensation for member jurisdictions may take the form of changes to a design resulting in higher project costs, addition of community amenities, upgrades to member's infrastructure, provision of resources to our members to handle increased workload resulting from our projects, as well as payment of fees for various permits, lost revenue, letters of credit, and other charges.

Metro Vancouver is currently reviewing practices underway with a goal to create a predictable, consistent and equitable approach to mitigating and compensating member jurisdictions for the impacts to their community during construction of region-serving infrastructure. Staff intend to bring back future reports that will recommend guiding principles and approaches to different forms of compensation.

PURPOSE

To provide the GVS&DD and GVWD Boards an overview of current practices used by Metro Vancouver when delivering projects, to either mitigate or compensate for the impacts to communities during construction.

BACKGROUND

Each year, Metro Vancouver delivers projects to ensure that the region has reliable access to clean drinking water, safe wastewater removal and treatment, and waste disposal and recycling. Additionally, Metro Vancouver develops regional parks for use by the public and builds housing to support low-income residents. The purpose of delivering these services on behalf of the members is to provide infrastructure at a scale that is more efficient than if each member or participant delivered the services separately. As a result, the services offer efficiencies that benefit all members. Members participate in the core services based on the understanding that not only will the benefits of the service be equitably shared amongst participants, but the impacts and costs of delivering those services are also equitably shared.

Construction, particularly the linear construction that is required to build or replace large regional water and sewer mains, has impact to communities through noise, dust, and traffic disruption.

Currently Metro Vancouver addresses impacts on a case-by-case basis. Addressing the impacts may be through mitigation and/or compensation, and are identified in collaboration with member jurisdictions within which the construction project is taking place.

Forms of mitigation can include changes to construction methodology. For example, choosing to do a tunneling method rather than open cut to reduce local community impacts, can significantly increase the cost of a project. Forms of compensation may include adding amenities (washrooms, trails), compensating for lost revenue or paying fees that Metro Vancouver may or may not be legally obligated to pay.

In 2018, the Board rescinded the existing Capital Projects Policy and recommended that Metro Vancouver staff work with staff advisory committees to develop a capital projects framework, which would capture the approach and process of how Metro Vancouver projects are planned, managed, constructed, and communicated. Since then, Metro Vancouver has been engaging with member jurisdictions through a Regional Engineers Advisory Committee (REAC) working group. In conversations with the working group, members have expressed interest in working collaboratively to reduce impacts of Metro Vancouver projects on the community, reduce impacts of Metro Vancouver projects on staff capacity, and address the impact of hosting Metro Vancouver facilities in their community. Various recommendations have been made by the group, and Metro Vancouver is now beginning a review of mitigation and compensation practices, as well as what types of costs should be considered compensation.

Metro Vancouver's intent is to develop predictable, consistent, and equitable approaches to mitigating construction impacts and compensating member jurisdictions for the impacts to their community during construction. This will allow Metro Vancouver to strengthen our relationships with member jurisdictions and the public. Specific objectives for this work include:

- Creating a more equitable and transparent project delivery process across all member jurisdictions
- Reducing project delivery timelines and costs
- Reducing overall impact on the region's ratepayers
- Addressing how members' permit processes and fees are applied to capital projects

The review will also take into consideration whether Metro Vancouver should or should not be participating in existing municipal payment frameworks used for developers.

AREAS OF MITIGATION AND COMPENSATION UNDER REVIEW

Statutory Rights of Way

Currently, statutory rights of way (SRW) are negotiated on a case-by-case basis with member jurisdictions and others when projects are underway. Increasingly, Metro Vancouver is being asked to pay current market value for land that has either been previously purchased in the public interest

or is an existing municipal asset. A full policy proposal will be brought forward to the Metro Vancouver Board in 2023 for consideration.

Community Amenities

Currently, Metro Vancouver works collaboratively with member jurisdictions to provide amenities in tandem with construction on a case-by-case basis. Examples include things such as water features, staircases, multi-use or bike paths, parking stalls, washrooms, park upgrades, public plazas, public art, and interpretive elements. These contributions can vary in cost and percentage of the project budget. Currently, there is no standard or limit set, and the extent of the provision is balanced with other project impacts as well as priorities in a local community.

Other Fees

Other types of fees that Metro Vancouver either pays or has been asked to pay in the course of delivering infrastructure include; Development Cost Charges (DCCs), Community Amenity Charges (CACs), payment in lieu of taxes, and permit fees (e.g. building permits, development permits, highway use permits, etc.).

The REAC working group has been discussing the appropriateness of these types of payments by Metro Vancouver to member jurisdictions. This feedback, along with Metro Vancouver's evaluation will inform the development of a guide that will reference considerations when levying fees on Metro Vancouver projects to help assess whether fees are applicable.

Compensation for Lost Revenue, Restoration of Damage, and Other

Metro Vancouver currently compensates members for any damage caused and restoration of disturbed areas and specific to temporary work areas, lost revenues (such as from parking lots), and additional items as may be negotiated between Metro Vancouver and its members.

Other Forms of Mitigation

Metro Vancouver also works closely with communities to design and deliver projects with low impact. On occasion, this mitigation can increase costs of a project by a significant amount. One example is Metro Vancouver agreeing to tunnel mains to reduce impacts on the community and traffic, which can increase project costs. These mitigation efforts will also be taken into consideration as how it adds into the overall mitigation and compensation costs that Metro Vancouver pays to deliver projects.

ADDITIONAL TOOLS UNDER DEVELOPMENT

Capital Projects Impact Assessment Tool

Metro Vancouver is evaluating the creation of an impact assessment tool that would allow the organization to evaluate more consistently and systematically the impacts of Metro Vancouver construction projects on the local communities and identify potential mitigation and/or compensation measures.

Capital Projects Guide

A Capital Projects Guide is under development with input from the REAC working group. The purpose of a Capital Projects Guide is to capture the approach and process of how Metro Vancouver projects are planned, managed, constructed, and communicated. This will help promote a transparent and consistent process that ensures all members and partners know what to expect. The guide will:

- Set expectations and improve communication between Metro Vancouver and its members.
- Document how Metro Vancouver plans and delivers its capital projects and the milestones for member input/participation.
- Facilitate a consistent and transparent process for the delivery and communication of capital projects within host member jurisdictions.

In addition to this forward looking work, Metro Vancouver staff continue to work with member jurisdictions to set up regular coordination meetings to talk about upcoming work, protocols, and collectively mitigate impacts of how Metro Vancouver projects intersect with work being delivered by that member jurisdiction.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

The development of standardized, region-wide approaches to mitigation and compensation for projects undertaken in member jurisdictions would help to manage project costs, maintain project schedules, mitigate scope creep and change orders on construction projects, as well as ensure a transparent and equitable approach across all member jurisdictions.

CONCLUSION

Each year, Metro Vancouver delivers projects to ensure that the region has access to clean drinking water, safe wastewater removal and treatment, and waste disposal and recycling. Additionally, Metro Vancouver develops regional parks for use by the public and builds housing to support low-income residents. The purpose of delivering these services on behalf of the members is to provide infrastructure at a scale that is more efficient than if each member or participant delivered the services separately. As a result, the services offer efficiencies that benefit all members. Members participate in the core services based on the understanding that not only will the benefits of the service be equitably shared amongst participants, but the impacts and costs of delivering those services are also equitably shared.

Currently Metro Vancouver addresses project impacts on a case-by-case basis. The development of standardized, region-wide approaches to mitigation and compensation for projects happening in any member jurisdiction would help to manage project costs and schedule, and mitigate scope creep on design, or changes resulting in construction claims once construction has begun, as well as ensure a transparent and equitable approach across all member jurisdictions.

Staff will return to the Board with additional reports containing recommendations on guiding principles and approaches to different forms of compensation.

ATTACHMENT 3



Port Mann Water Supply Tunnel Shaft

Guide to MV Utility Capital Projects and Impact Mitigation Framework

Jennifer Crosby

Director, Project Management Office, Project Delivery

Nermine Tawfik

Supervisor, External Relations

Liquid Waste Committee Meeting – July 19, 2023
60658786

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AGENDA

- Objective
- Introduce the *Guide to Metro Vancouver Utility Capital Projects for Member Jurisdictions*
- MV Conference Day - Impact Mitigation Framework Workshop

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2

OBJECTIVE

Why are we here?

- Current mitigation and compensation practices vary widely across the region
- The goal is to create a predictable, consistent, and equitable approach to mitigating and compensating member jurisdictions



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REAC WORKING GROUP

Goal: Discuss and recommend guidelines to promote consistency in how Metro Vancouver projects are processed within member jurisdictions.

Working Group participants:

- Four municipalities - Coquitlam, District of North Vancouver, Surrey, and Vancouver
- Metro Vancouver - Water Services, Liquid Waste Services, Project Delivery, External Relations

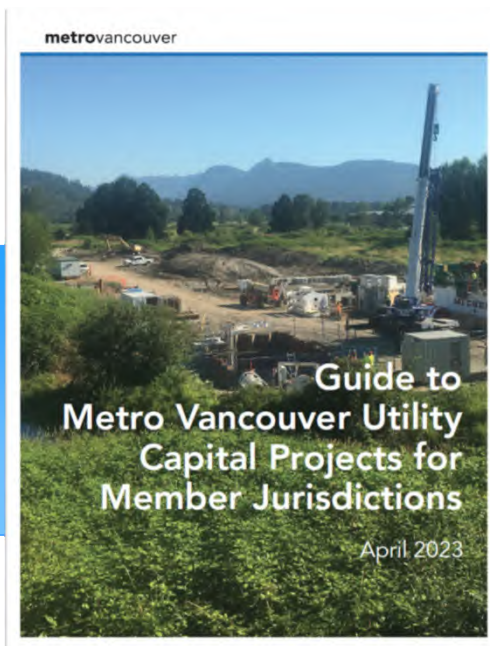
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4

REAC WORKING GROUP

Idea	Status
Utility Capital Projects Guide	Drafted
Improved coordination and communication process with members	Started with New Westminster and Burnaby
Project tendering and procurement improvements	Being implemented
Impact Mitigation Framework	In development

Introducing the Capital Projects Guide



SCOPE OF THE CAPITAL PROJECTS GUIDE

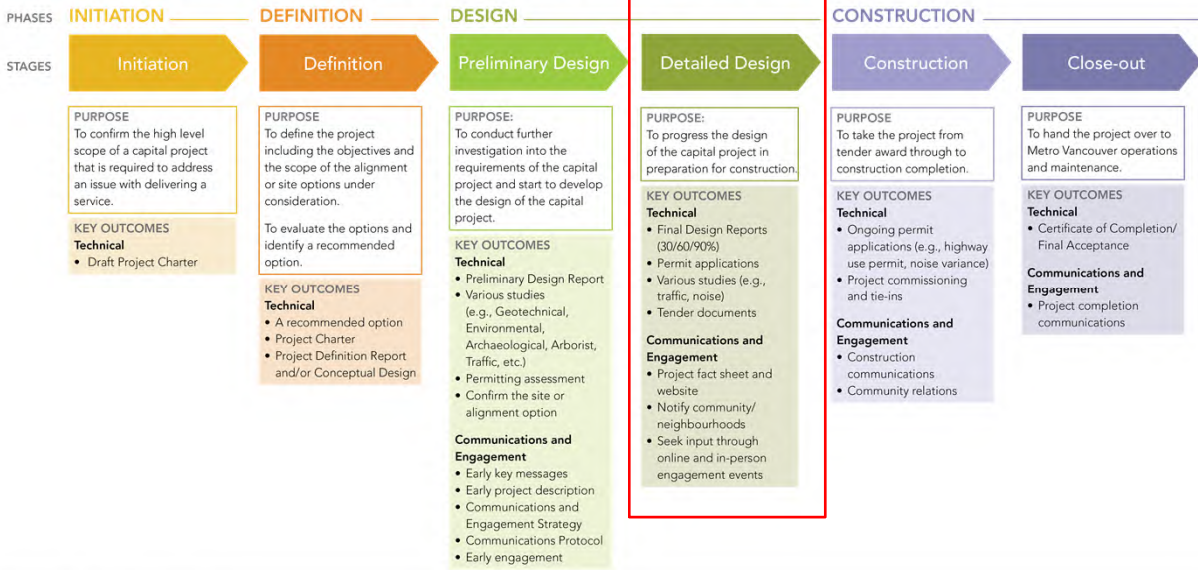
- The guide presents the capital project process that applies to **most** projects
- Describes the phases and stages that most projects have in common, **not** exceptions
- Describes **current practices only**, not desired or future state.
- Refers to utility capital projects for water, liquid waste, and solid waste

PURPOSE OF THE GUIDE

- Describes the **lifecycle** of a Metro Vancouver utility capital project
- Identifies the **key responsibilities** for Metro Vancouver and member jurisdiction staff
- Provides a **high-level, consistent, and transparent roadmap** that will help member jurisdictions plan their involvement in a Metro Vancouver utility capital project

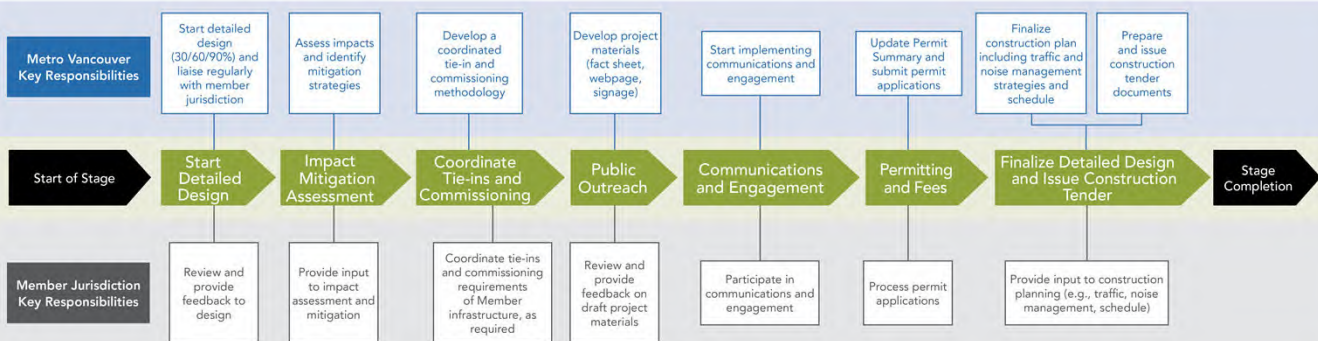
EXCERPT FROM GUIDE

PURPOSE AND KEY OUTCOMES BY PROJECT LIFECYCLE STAGE



RESPONSIBILITIES BY PROJECT STAGE

DETAILED DESIGN STAGE EXAMPLE



Excerpt from *Guide to Metro Vancouver Utility Capital Projects for Member Jurisdictions*



DEVELOP IMPACT MITIGATION FRAMEWORK

- Clarify expectations for how Metro Vancouver and member jurisdictions work together to deliver regional infrastructure
- Standardize the process for assessing and mitigating the impacts of utility capital projects on member jurisdictions
- Reduce risk and uncertainty related to the delivery of Metro Vancouver utility capital projects which in turn reduces impacts on costs and schedules

MV CONFERENCE DAY WORKSHOP

REAC WORKSHOP SERIES TO DEVELOP IMPACT MITIGATION FRAMEWORK

Workshop 1- Held on May 12 	Workshop 2 – Target Q4 2023	Workshop 3 - TBD
<p>Purpose: Explore the impacts of MV capital projects on member jurisdictions</p>	<p>Purpose: Share tools and approaches for identifying impacts and improving intergovernmental coordination</p> <p>Build a framework for mitigation practices (guiding principles, impact assessment tool, defining mitigation)</p>	<p>Purpose: Revise and finalize the framework for mitigation practices</p>
<p>Outcome: Establish a shared understanding of the impacts of capital projects</p>	<p>Outcome: Identify elements of an equitable framework</p>	<p>Outcome: Framework for mitigation practices to be presented to RAAC, and Metro Vancouver Boards</p>

14



Lulu Island Wastewater Treatment Plant

Thank you

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14

To: Liquid Waste Committee

From: Cheryl Nelms, General Manager, Project Delivery
Nick Kassam, General Manager, Procurement & Real Estate Services
Dean Rear, CFO & General Manager, Financial Services

Date: July 11, 2023 Meeting Date: July 19, 2023

Subject: **Phase 2 Design Build Consulting Services for the Lions Gate Secondary Wastewater Treatment Plant - Change Order to AECOM Contract PC14-0408**

RECOMMENDATION

That GVS&DD Board:

- a) approve Phase 2 Design Consulting Services for the Lions Gate Secondary Wastewater Treatment Plant of AECOM Contract PC-0408 through a change order in the amount of \$113,000,000, for a total contract value of \$153,000,000 (exclusive of taxes), subject to final review by the Commissioner; and
 - b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the change order should proceed.
-

EXECUTIVE SUMMARY

This report is recommending that GVS&DD proceed with a change order to the AECOM contract to complete Phase 2 work as the Engineer of Record for the North Shore Wastewater Treatment Plant project (formerly known as the Lions Gate Secondary Wastewater Treatment Plant). As a result of extensive deficiencies in the prior contractor's design and construction works, Phase 2 will require extensive effort for AECOM.

Phase 2 activities for AECOM include completion of the detailed design, provision of support to GVS&DD for the procurement of owner-supplied equipment, providing design and comprehensive construction support over an extended construction duration, leading the wastewater commissioning process, condensing the design duration and implementing design optimization opportunities for the project.

On March 25, 2022, due to their extensive involvement in the project as the Owner's Engineer from initiation of the project, AECOM was authorized by the GVS&DD Board to proceed as Engineer of Record with Phase 1 work. At that time, contract approval for Phase 2 work was anticipated to be required at a later date.

PURPOSE

Pursuant to the *GVS&DD Officers and Delegation Bylaw No. 284, 2014 (Bylaw)* and *Board Policy No. FN-006*, procurement contracts which exceed a value of \$5 million require the approval of the Board of Directors.

BACKGROUND

Prior to termination, Acciona Wastewater Solutions LP (Project Co.) was responsible for the design, construction, commissioning, and process performance for the plant. AECOM was the owner's engineer, reviewing all design submissions by Project Co on behalf of Metro Vancouver. AECOM was successful proponent of public competition RFP No. 14-205 - Design Build Consulting Services for the Lions Gate Secondary Wastewater Treatment Plant. This project has since been renamed the North Shore Wastewater Treatment Plant Project.

Following termination of the Project Agreement with Project Co., Metro Vancouver wanted to expedite the delivery of the project while retaining the ability for competitive pricing of construction for the final delivery of the project. To do this, Metro Vancouver adjusted the project delivery model to retain a general contractor and a design consultant separately. AECOM was uniquely positioned to assume the role of design consultant for the completion of the design of the project given their participation in the project from initiation, which included the development of the indicative design and technical specifications through to fulfilling their current role as owner's engineer.

Metro Vancouver opted to deliver the remainder of the project in two phases:

- Phase 1: design delivery includes design due diligence review and advancement, while construction delivery includes pre-construction services and early works; within Phase 1, the design consultant (AECOM) and the construction manager (PCL) have been working collaboratively with Metro Vancouver to advance the design and to develop a detailed execution plan, schedule, and cost estimate to complete the project.
- Phase 2: design delivery includes design completion, provision of support to GVS&DD for the procurement of owner-supplied equipment, and comprehensive construction field services; construction delivery includes main construction and early commissioning.

The GVS&DD Board authorized a contract amendment to AECOM of \$15,000,000 to proceed with Phase 1 as the design consultant at the March 25, 2022 Board meeting, with focus on a due diligence review of the Project Co. design and support to PCL for development of a cost and schedule to complete the Project. Based on the understanding of the project and its expected level of completion, AECOM's estimated value for both phases at that time was \$60,000,000.

At the time of the termination of Project Co., it was anticipated by staff, based on Project Co.'s submittals, that the design effort was likely less than the approximately 80% complete Project Co. had reported. AECOM's investigations and comprehensive design reviews during Phase 1 found that the overall level of completeness reported by Project Co. was significantly misrepresented and that there were a greater number of non-compliances with the Project Agreement than previously documented. Extensive constructability reviews between AECOM, PCL, and Metro Vancouver have been required because design was not as advanced as reported by Project Co. As a result, AECOM's efforts in Phase 1 were significantly greater than initially anticipated.

In addition to the design deficiencies identified by AECOM, PCL and Metro Vancouver, there have also been deficiencies identified in the concrete placed by Project Co., and in some cases, more extensive concrete deficiencies than originally anticipated. This has resulted in significant design support effort and field reviews by AECOM during Phase 1. Due to the increased level of effort required, a change order of \$25,000,000 to AECOM's contract was authorized by the GVS&DD Board at the January 27, 2023 meeting to complete Phase 1 work.

PHASE 2 PROPOSAL

AECOM has provided a proposal in the amount of \$113,000,000 to support and complete design in Phase 2, for a total contract value of \$153,000,000.

AECOM's Phase 2 services includes design completion, procurement support, field reviews, enhanced construction field services, and commissioning. Due to the increased level of effort and significant deficiencies discovered in Phase 1, the fees reflect the increased efforts required for both cost and schedule development. In addition, fees reflect the increased efforts to complete the following:

- The addition of enhanced field support services to monitor construction activities and provide project management support to Metro Vancouver. This is above and beyond the field reviews required for the Engineer of Record.
- Due to the significant deficiencies in both design and construction, the schedule has been extended, requiring AECOM to adjust their level of effort during construction for field services to match the overall anticipated construction schedule.
- Because the design was not complete at termination of the Project Agreement with Project Co., and due to the significant design deficiencies to be overcome, AECOM has created an accelerated design schedule that optimizes Issued for Construction drawings that align with the construction critical path. This accelerated design schedule has resulted in additional design effort not anticipated at termination.
- Project Co. had a number of equipment and materials contracts that were in various stages of finalization at the time of termination. Metro Vancouver and AECOM have been working together to understand the stipulations of the current contracts and are working to transfer the contracts from Project Co. to Metro Vancouver. AECOM is integral in the process, providing technical and procurement support. This process has been ongoing since termination and is anticipated to continue for several months through the design phase.
- Implementation of ongoing value engineering opportunities and design optimizations.

The project team reviewed the AECOM rates against other Metro Vancouver engineering assignments and found them to be comparable. A member of the NSWWTP Expert Advisory Panel and retired executive of a global engineering wastewater design firm reviewed and agreed with the team's recommendation to proceed with the amendment. Based on this review, as well as the size,

scale and inherent complexities of the project, the total design consulting services fee of \$153,000,000 is representative of what we would expect to obtain from a competitive process.

ALTERNATIVES

- 1) That the GVS&DD Board:
 - a) approve Phase 2 Design Consulting Services for the Lions Gate Secondary Wastewater Treatment Plant of AECOM Contract PC-0408 through a change order in the amount of \$113,000,000, for a total contract value of \$153,000,000 (exclusive of taxes), subject to final review by the Commissioner; and
 - b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the change order should proceed.
- 2) That the GVS&DD Board receive for information the report dated July 11, 2023, titled, “Phase 2 Design Build Consulting Services for the Lions Gate Secondary Wastewater Treatment Plant - Change Order to AECOM Contract PC14-0408” and direct staff to report back with options for an alternate course of action.

FINANCIAL IMPLICATIONS

The current approved budget for the North Shore Wastewater Treatment Plant Program is \$1.058B. At this time, the approved project budget can accommodate the requested change order to the AECOM contract and the cash flows for the project will be comparable to that currently projected in the Financial Plan. However, staff are working to adjust the financial forecast in advance of the October Board Budget adoption.

If the GVS&DD Board approves Alternative 1, the contract with AECOM will be amended by Change Order in the amount of up to \$113,000,000 (exclusive of taxes) to provide the Phase 2 design delivery.

CONCLUSION

It is recommended that the GVS&DD Board approve Phase 2 Design-Build Consulting Services for the Lions Gate Secondary Wastewater Treatment Plant of AECOM Contract PC-0408 through a change order in the amount of \$113,000,000, for a total contract value of \$153,000,000 (exclusive of taxes).

To: GVS&DD Board of Directors

From: Liquid Waste Committee

Date: July 19, 2023 Meeting Date: July 28, 2023

Subject: Award of RFP No. 23-121 Technical Services for the North Shore Wastewater Treatment Plant Project

LIQUID WASTE COMMITTEE RECOMMENDATION

That GVS&DD Board:

- a) approve award of RFP No. 23-121 for Technical Services for the North Shore Wastewater Treatment Plant Project, in the amount of \$25,000,000 (exclusive of taxes) to Stantec Consulting Ltd., subject to final review by the Commissioner; and
 - b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the award should proceed.
-

At its July 19, 2023 meeting, the Liquid Waste Committee considered the attached report titled “Award of RFP No. 23-121 Technical Services for the North Shore Wastewater Treatment Plant Project”, dated July 11, 2023. Members were informed of an administrative error on page 3 of the report, in the *Financial Implications* section, removing the wording of “change order to the AECOM contract”, replacing it with the wording of “award of the contract to Stantec”.

The second sentence of the *Financial Implications* section now reads:

“At this time, the approved project budget can accommodate the requested award of the contract to Stantec and the cash flows for the project will be comparable to that currently projected in the Financial Plan.”

Staff have corrected the report, as attached. This matter is now before the Board for its consideration.

Attachment

“Award of RFP No. 23-121 Technical Services for the North Shore Wastewater Treatment Plant Project”, dated July 11, 2023.

61271257

To: Liquid Waste Committee

From: Cheryl Nelms, General Manager, Project Delivery
Nick Kassam, General Manager, Procurement & Real Estate Services
Dean Rear, CFO and General Manager, Financial Services

Date: July 11, 2023 Meeting Date: July 19, 2023

Subject: **Award of RFP No. 23-121 Technical Services for the North Shore Wastewater Treatment Plant Project**

RECOMMENDATION

That the GVS&DD Board:

- a) approve award of RFP No. 23-121 for Technical Services for the North Shore Wastewater Treatment Plant Project, in the amount of \$25,000,000 (exclusive of taxes) to Stantec Consulting Ltd., subject to final review by the Commissioner; and
 - b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the award should proceed.
-

EXECUTIVE SUMMARY

Stantec Consulting Ltd. ranked highest overall, provided the lowest cost, had the highest technical score and demonstrated best value overall for Metro Vancouver.

To support Metro Vancouver's due diligence and oversight of the work to complete the North Shore Wastewater Treatment Plant Project, the GVS&DD issued RFP No. 23-121 on April 14, 2023 to secure an Owner's Engineer. RFP No. 23-121 was advertised publicly and the procurement was executed in accordance with the terms and condition of Metro Vancouver's Procurement Policy. The RFP No. 23-121 evaluation team have considered the proposals received, and on that basis recommend that the GVS&DD Board award the RFP No. 23-121 to Stantec Consulting Ltd.

Following termination of the contract with Acciona Wastewater Solutions LP (Project Co.) to design, construct, and commission the plant, a new delivery model was created. Metro Vancouver amended the contract of the previous owner's engineer, AECOM, to allow them to become the engineer of record. It is recommended that Stantec Consulting Ltd. be the new Owner's Engineer, providing advice and representing Metro Vancouver's interests on the project.

PURPOSE

Pursuant to the GVS&DD Officers and Delegation *Bylaw No. 284, 2014* (Bylaw) and the *Board Policy No. FN-006*, procurement contracts which exceed a value of \$5 million require the approval of the GVS&DD Board.

BACKGROUND

In January 2022, Metro Vancouver terminated its contract with Acciona Wastewater Solutions LP (Project Co.) to design, construct, and commission the North Shore Wastewater Treatment Plant.

Following the termination of the Project Agreement with Project Co., Metro Vancouver wanted to expedite the delivery of the project while retaining the ability for competitive pricing of construction for the final delivery of the project. To do this, Metro Vancouver adjusted the project delivery model to retain a general contractor and a design consultant separately. Under the new delivery model, Metro Vancouver amended the contract of the previous owner’s engineer to allow them to become the Engineer of Record, creating the need to retain a new owner’s engineer who will represent Metro Vancouver’s interests on the project. To support this requirement and with design development and early works construction underway, Metro Vancouver proposes to award a contract for an owner’s engineer to provide design compliance reviews and project management support to Metro Vancouver throughout the remainder of Phase 1 work and during the design, construction, and commissioning of the project in Phase 2. Having this resource available will provide support in the oversight of both design and construction during a complex and challenging phase in the project, as well as provide expertise to the project team and Metro Vancouver, as and when required.

PROCUREMENT SUMMARY

The evaluation of proposals was conducted in two stages. Stage 1 contemplated technical requirements, weighted at 70% of total score (i.e. proponent qualifications, proposed methodology and work plan). Stage 2 contemplated financial requirements (fees), weighted at 30% of total score. The RFP stipulated that proposals receiving a score of less than 40% out of the 70% possible for technical requirements may be eliminated from further consideration. Metro Vancouver received five proposals. Following Stage 1 evaluation two of the five proposals were eliminated from further consideration due to not meeting minimum technical requirements. Technical requirements were evaluated by the Project Delivery Department and financial requirements were evaluated by the Procurement Department. The following three proposals were fully reviewed.

Proponent	Price (excluding taxes)
Stantec Consulting Ltd.	\$21,113,404
CDM Smith Canada ULC	\$23,014,224
WSP Canada Inc.	\$25,660,426

After a comprehensive and detailed evaluation of the proposals, the evaluation team concluded that the proposal submitted by Stantec Consulting Ltd. ranked highest overall, provided the lowest cost, had the highest technical score, and demonstrated best value overall for Metro Vancouver for the following reasons:

1. Proponent Qualifications: Stantec demonstrated a very good understanding of RFP 23-121 requirements, the projects referenced in their proposal are similar in scope, size and complexity as the NSWWTP and Stantec proposed a strong and experienced team.
2. Proposed Methodology and Work Plan: the project methodology, work plan and tasks put forward by Stantec Consulting Ltd. demonstrate a good understanding of the project and details were provided that demonstrate that the submission aligns with the scope of work set out in RFP 23-121.

3. Financial Requirements: The fee submission put forward by Stantec Consulting Ltd. was the lowest cost and Stantec did not take any exceptions to Metro Vancouver's consulting contract terms and conditions.

A negotiation meeting with Stantec Consulting was held on June 19, 2023 and the terms of the contract were agreed to and finalized, subject to receiving approval from the GVS&DD Board. The contract value agreed to is \$25,000,000 (exclusive of taxes), which includes an additional \$3,886,596 over the original proposal price resulting from an agreed increase in the hours for project management support and technical reviews and a contingency as a management reserve.

ALTERNATIVES

- 1) That the GVS&DD Board:
 - a) approve award of RFP No. 23-121 for Technical Services for the North Shore Wastewater Treatment Plant Project, in the amount of \$25,000,000 (exclusive of taxes) to Stantec Consulting Ltd., subject to final review by the Commissioner; and
 - b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the award should proceed.
- 2) That the GVS&DD Board receive for information the report dated July 11, 2023, titled "Award of RFP No. 23-121 Technical Services for the North Shore Wastewater Treatment Plant Project" and direct staff to report back with options for an alternate course of action.

FINANCIAL IMPLICATIONS

The current approved budget for the North Shore Wastewater Treatment Plant Program is \$1.058B. At this time, the approved project budget can accommodate the requested award of the contract to Stantec and the cash flows for the project will be comparable to that currently projected in the Financial Plan. However, staff are working to adjust the financial forecast in advance of the October Board Budget adoption.

CONCLUSION

It is recommended that GVS&DD Board authorize the Commissioner and the Corporate Officer to approve the award of RFP No. 23-121 for Technical Services for the North Shore Wastewater Treatment Plant Project, in the amount of \$25,000,000 (exclusive of taxes) to Stantec Consulting Ltd.

60335963

To: Liquid Waste Committee

From: Dana Zheng, Program Manager, Policy, Planning Analysis, Liquid Waste Services

Date: July 11, 2023 Meeting Date: July 19, 2023

Subject: **Greater Vancouver Sewerage and Drainage District Sewer Use Amendment Bylaw No. 366, 2023**

RECOMMENDATION

That the GVS&DD Board:

- a) give first, second, and third reading to *Greater Vancouver Sewerage and Drainage District Sewer Use Amendment Bylaw No. 366, 2023*; and
 - b) pass and finally adopt *Greater Vancouver Sewerage and Drainage District Sewer Use Amendment Bylaw No. 366, 2023*.
-

EXECUTIVE SUMMARY

The Greater Vancouver Sewerage and Drainage District Sewer Use Amendment Bylaw No. 366, 2023 (SUB Amendment Bylaw) is presented for GVS&DD Board adoption. There are 24 proposed amendments, with multiple instances of the same changes in different sections of the bylaw. Changes include terminology and consistency improvements to address operational and enforceability issues, improve administration, and improve accuracy and clarity of the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw No. 299, 2007*. No policy or material revisions were made, and thus no engagement with stakeholders is required.

PURPOSE

To seek GVS&DD Board adoption of the SUB Amendment Bylaw.

BACKGROUND

The *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw No. 299, 2007* (SUB) (Reference 1) and associated sector-specific bylaws regulate the discharge of waste into sewers and drains connected to a sewage facility operated by the GVS&DD. The *Greater Vancouver Sewerage and Drainage District Hospital Pollution Prevention Bylaw No. 319, 2018* (Hospital P2 Bylaw) (Reference 2) was adopted in 2018 and requires hospitals to develop pollution prevention plans to reduce the discharge of pollutants into the wastewater system.

Metro Vancouver routinely reviews and updates bylaws to ensure accuracy, clarity and enforceability of the policy. It was determined that bylaw amendments are required to improve accuracy, clarity and enforceability of both the SUB and the Hospital P2 Bylaw. These proposed revisions resolve straightforward operational and enforceability issues that are aligned with current enforcement practices and the original intent of the bylaws. The scope of the revisions do not constitute policy or material changes and thus do not require engagement with stakeholders. This report and the report titled, "Greater Vancouver Sewerage and Drainage District Hospital Pollution

Prevention Amendment Bylaw No. 367, 2023” dated July 11, 2023, are complementary and are intended to be adopted together.

PROPOSED SUB AMENDMENTS

There are 24 amendments proposed, with multiple instances of the same changes in different sections of the bylaw. The types of proposed changes to the SUB are:

- Terminology improvements to ensure alignment with industry standards and improve consistency. Revisions to definitions and terminology improve accuracy, reduce ambiguity and resolve interpretation and enforceability issues.
- Updates to references that are redundant and outdated. Revisions reduce duplication and improve clarity and enforceability.
- Operational and enforceability improvements to add clarity to the responsibility and authority granted to the Sewage Control Manager and revise clauses to ensure current operational and enforcement practices are substantiated.
- Administrative improvements to improve financial administration of the bylaw, including substantiating and clarifying current operational practices, synchronizing payment schedules, and charging interest on overdue payments for administration fees to ensure that interest charges are consistently applied for all fees within the SUB. These revisions improve clarity and administration of the Sewer Use Bylaw regulatory program.

ALTERNATIVES

1. That the GVS&DD Board:
 - a) give first, second, and third reading to *Greater Vancouver Sewerage and Drainage District Sewer Use Amendment Bylaw No. 366, 2023*; and
 - b) pass and finally adopt *Greater Vancouver Sewerage and Drainage District Sewer Use Amendment Bylaw No. 366, 2023*.
2. That the GVS&DD Board receive for information the report dated July 11, 2023, titled “Greater Vancouver Sewerage and Drainage District Sewer Use Amendment Bylaw No. 366, 2023” and provide alternate direction to staff.

FINANCIAL IMPLICATIONS

The proposed amendments include the addition of interest charges on overdue payments for administration fees to ensure that interest charges are consistently applied for all fees within the SUB. The additional revenue is expected to be minimal.

CONCLUSION

Metro Vancouver routinely reviews and updates bylaws to ensure accuracy, clarity and enforceability. The proposed amendments to the SUB address: a) terminology improvements; b) updates to redundant and outdated references; c) operational and enforceability improvements; and d) administrative improvements. Revisions include changes to definitions, wording and terminology improvements to existing clauses and new provisions that improve interpretation, enforceability and administration of the SUB. The scope of the revisions do not constitute policy or material changes and thus do not require engagement with stakeholders.

This report and the report dated July 11, 2023, titled “Greater Vancouver Sewerage and Drainage District Hospital Pollution Prevention Amendment Bylaw 367, 2023” are complementary and are intended to be adopted together.

Attachment

Greater Vancouver Sewerage and Drainage District Sewer Use Amendment Bylaw No. 366, 2023
(59780180)

References

1. [GVS&DD Sewer Use Bylaw No. 299, 2007](#)
2. [GVS&DD Hospital Pollution Prevention Bylaw No. 319, 2018](#)

57995793

**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
BYLAW NO. 366, 2023
A bylaw to amend “Greater Vancouver Sewerage and Drainage District
Sewer Use Bylaw No. 299, 2007”**

WHEREAS:

- A. The Greater Vancouver Sewerage and Drainage District Board (the “Board”) adopted the Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw No. 299, 2007 on May 25, 2007; and
- B. The Board wishes to amend Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw No. 299, 2007.

NOW THEREFORE the Board of the Greater Vancouver Sewerage and Drainage District enacts as follows:

Citation

- 1. The official citation of this bylaw is “Greater Vancouver Sewerage and Drainage District Sewer Use Amendment Bylaw No. 366, 2023”.

Amendment of Bylaw

- 2. “Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw No. 299, 2007”, as amended, is amended as follows:
 - a. In Section 2.1, in the definition “Combined Sewer”, the word “Storm Water” is deleted and replaced with the word “Stormwater”;
 - b. In Section 2.1, in the definition “Ground Water”, the word “Ground Water” is deleted and replaced with the word “Groundwater”;
 - c. In Section 2.1, the definition “Hospital” is added as follows:

“Hospital” means a hospital as defined in the *Hospital Pollution Prevention Bylaw No. 319, 2018*, as amended;
 - d. In Section 2.1, in the definition “Industrial Treatment Fee”, the word “groundwater” is deleted and replaced with the word “Groundwater”;
 - e. In Section 2.1, in the definition “Non-Domestic Waste”, the word “Storm Water” is deleted and replaced with the word “Stormwater”;
 - f. In Section 2.1, in the definition “Sanitary Sewer”, the word “Storm Water” is deleted and replaced with the word “Stormwater”;
 - g. In Section 2.1, the definition “Sewer”, is deleted and replaced with the following:

“Sewer” means all pipes, conduits, drains, and other equipment and facilities, owned or otherwise under the control or jurisdiction of the District, for collecting, pumping, and transporting Wastewater to a Sewage Facility and includes but is not limited to all such pipes, conduits, drains and other equipment and facilities which connect with those of the District;

- h. In Section 2.1, in the definition “Storm Sewer”, the word “Storm Water” is deleted and replaced with the word “Stormwater”;
- i. In Section 2.1, in the definition “Storm Water”, the word “Storm Water” is deleted and replaced with the word “Stormwater”;
- j. In Section 3.3 the word “Storm Water” is deleted and replaced with the word “Stormwater”;
- k. In Section 3.4 the word “forthwith” is deleted and replaced with the word “immediately”;
- l. In Section 5 the word “BYLAWS,” is added after the word “ORDERS,”;
- m. In Section 5.1(c) the word “Storm Water” is deleted and replaced with the word “Stormwater”;
- n. In Section 5.6 the word “shall” is deleted and replaced with the word “must”;
- o. In Section 5.7 the word “revoke” is deleted and replaced with the word “cancel”;
- p. In Section 5 the following sections are added:
 - 5.7.1 The Sewage Control Manager, in addition to their powers under section 5.7, may:
 - a) upon request from the holder of a Waste Discharge Permit, suspend a Waste Discharge Permit for up to but not longer than the length of time requested; and
 - b) cancel a Waste Discharge Permit if the holder of the Waste Discharge Permit:
 - i) is a corporation that is liquidated, dissolved or otherwise wound up or is an extra provincial company within the meaning of the *Business Corporations Act* SBC 2002, c. 57, that has had its registration cancelled under Part 11 or 12 of that Act;
 - ii) is a partnership that is dissolved; or
 - iii) requests that the Waste Discharge Permit be cancelled;
 - c) reinstate a Waste Discharge Permit that has been suspended, but not cancelled, provided that the holder of a Waste Discharge Permit submits

an application for reinstatement accompanied by payment of all fees owing at the time that the Waste Discharge Permit was suspended.

5.7.2 For greater certainty, a Waste Discharge Permit that is suspended or cancelled is not a valid and subsisting permit.

- q. In Section 5.8 the word “shall” is deleted and replaced with the word “must”;
- r. In Section 5.8 the word “forthwith” is deleted and replaced with the word “immediately”;
- s. In Section 5.9 the word “shall” is deleted and replaced with the word “must”;
- t. In Section 5.10 the word “consent” is deleted and replaced it with the word “approval”;
- u. Section 6.1 is deleted and replaced with the following:

6.1 Whether or not a person holds and is in compliance with this Bylaw, the Grease Interceptor Bylaw, the Fermentation Operations Bylaw, the Hospital Pollution Prevention Bylaw, the Trucked Liquid Waste Bylaw, a Waste Discharge Permit, Order, or Code of Practice, a Sewage Control Manager may, for any of the purposes set out in section 1, issue a Discharge Abatement Order in accordance with section 6.2.

- v. Section 6.2 is deleted and replaced with the following:

6.2 A Discharge Abatement Order may:

- a) require a person to alter the quantity, composition, duration and timing of the discharge or cease discharge of Non-Domestic Waste or Non-Domestic Trucked Liquid Waste to a Sewer or Sewage Facility; and
- b) include any terms or conditions that could be included in a Waste Discharge Permit.

- w. Section 7 is deleted in its entirety;
- x. In Section 8.1 the phrase “sample and analyze the discharge” is deleted and replaced with the phrase “measure, sample, and analyze the discharge”;
- y. In Section 8.2 the word “sampling” is deleted and replaced with the phrase “measuring and sampling”;
- z. In Section 9.1 the word “may” is deleted and replaced with the word “must”;
- aa. Section 10.2 is deleted and replaced with the following:

10.2 Any person who contravenes any provision of this Bylaw, the Grease Interceptor Bylaw, the Fermentation Operations Bylaw, the Sani-dump Bylaw, the Trucked Liquid Waste Bylaw, the Hospital Pollution Prevention Bylaw, a Waste Discharge Permit, Trucked Liquid Waste Authorization, Order, or Code of Practice shall be liable to the District for and shall indemnify the District from all costs, expenses, damages and injuries resulting from the contravention. This section does not limit any other remedies or actions the District may have under this Bylaw or otherwise at law.

bb. Section 13.1 is deleted and replaced with the following:

13.1 Any person who contravenes this Bylaw, a Waste Discharge Permit, Order, or a Code of Practice commits an offence and is liable to a fine not exceeding \$10,000.

cc. In Schedule "A", Section 6 is deleted and replaced with the following:

6. BIOMEDICAL WASTE

Any Waste that, at the point of discharge into a Sewer or Sewage Facility, contains Biomedical Waste as defined in the Hazardous Waste Regulation as amended from time to time pursuant to the *Environmental Management Act* with the exception of Biomedical Waste from a Hospital in accordance with an approved Hospital Pollution Prevention Plan.

dd. In Schedule "A", Section 8 is deleted and replaced with the following:

8. HAZARDOUS WASTE

Any waste defined as Hazardous Waste in the *Environmental Management Act* with the following exceptions:

- a) Hazardous Waste in compliance with the effluent standards contained in Schedule 1.2, Column 3 of the Hazardous Waste Regulation; and
- b) Biomedical Waste from a Hospital in accordance with an approved Hospital Pollution Prevention Plan.

ee. In Schedule "B", in Section 3, the word "Sewerage Facility" is deleted and replaced with the word "Sewage Facility":

ff. In Schedule "C", Section 2.13 is deleted and replaced with the following:

2.1.3 The Permit Application Fee must be paid at the time the application for a Waste Discharge Permit is submitted, or within 30 days of an invoice being issued if an invoice is issued. The Waste Discharge Permit application will not

be processed before the Permit Application Fee is paid in full, and if an invoice is issued, may be considered withdrawn if the Permit Application Fee is not paid within 30 days of the invoice being issued.

- gg. In Schedule “C”, Section 2.3.2 is deleted;
- hh. In Schedule “C”, in Section 2.3.3, the phrase “Effective January 1, 2011, the Permit Administration Fee” is deleted and replaced with the phrase “The Permit Administration Fee”;

- ii. In Schedule “C”, Section 2.3.5 is deleted and replaced with the following:

2.3.5 Until December 31, 2023, the Permit Administration Fee is payable on the issuance of a Waste Discharge Permit and by each anniversary thereafter. The Permit Administration Fee may be prorated for billing periods of less than one year.

After January 1, 2024, each Waste Discharge Permit holder must pay to the District the Permit Administration Fee on the issuance of a Waste Discharge Permit and annually by June 30 thereafter. The Permit Administration Fee may be prorated for billing periods of less than one year.

- jj. In Schedule “C”, in Section 2.3.6, the word “without effect” is deleted and replaced with the word “suspended”;

- kk. In Schedule “C”, Section 2.3.7 is deleted and replaced with the following:

2.3.7 Permit Administration Fees not paid by the due date will be subject to a monthly interest charge of 1.25% per month (15% per annum).

- ll. In Schedule “C”, Sections 2.3.8 and 2.3.9 are deleted;

- mm. In Schedule “C”, in Section 2.4, the word “Periods” is deleted and replaced with the word “Terms”;

- nn. In Schedule “C”, Section 2.4.1 and Table D, are deleted and replaced with the following:

2.4.1 Where a Waste Discharge Permit is issued for a term of less than 365 days, the Permit Administration Fee (at the rate applicable on the date the Permit Administration Fee is payable) will be reduced in accordance with Table D:

Table D – Permit Administration Fee reduction for Waste Discharge Permits with terms of less than 365 days

Waste Discharge Permit Term	Permit Administration Fee Reduction
-----------------------------	-------------------------------------

Less than 7 days	90%
7 days - 30 days	80%
31 days - 90 days	60%
91 days - 180 days	40%
181 days - 270 days	20%
271 days - 365 days	No reduction

oo. In Schedule “C”, the following section is added:

2.5.2 If a Waste Discharge Permit is cancelled at the request of the holder of the permit, the District will prorate the Permit Administration Fee and refund the amount of any overpayment. Refunds for less than \$100 will not be issued.

pp. In Schedule “E”, Section 4.1 is deleted and replaced with the following:

4.1 All Dental Operations that discharge Wastewater containing Dental Amalgam to Sewer must install a Certified Amalgam Separator according to manufacturer’s or supplier’s instructions and specifications. No Dental Operation shall discharge Non-Domestic Waste containing Dental Amalgam to Sewer unless the Non-Domestic Waste has been treated using the Certified Amalgam Separator prior to discharge to Sewer.

qq. In Schedule “E”, in Section 4.3, the word “shall” is deleted and replaced with the word “must”;

rr. In Schedule “E”, in Section 4.4, the word “shall” is deleted and replaced with the word “must”;

ss. In Schedule “E”, in Section 4.5, the word “shall” is deleted and replaced with the word “must”;

tt. In Schedule “E”, in Section 5.1, the word “shall” is deleted and replaced with the word “must”;

uu. In Schedule “E”, in Section 5.2, the word “shall” is deleted and replaced with the word “must”;

vv. In Schedule “F”, in Section 2.3 the phrase “non-domestic wastewater” is deleted and replaced with the phrase “Non-Domestic Waste”;

ww. In Schedule “F”, in Section 2.4, the phrase “non-domestic wastewater” is deleted and replaced with the phrase “Non-Domestic Waste”;

xx. In Schedule “F”, in Section 2.5, the phrase “non-domestic wastewater” is deleted and replaced with the phrase “Non-Domestic Waste”;

yy. In Schedule “F”, Section 2.6 is deleted and replaced with the following:

2.6 If the holder of a Waste Discharge Permit fails to keep records and provide information required to be submitted by a Waste Discharge Permit to calculate the usage charge, then the Sewage Control Manager may, in their discretion, prescribe the volumes of Non-Domestic Waste, BOD, and TSS concentrations to calculate the total usage charge.

zz. In Schedule “F”, the following section is added:

2.11. If the holder of a Waste Discharge Permit fails to keep records and provide information required to be submitted by a Waste Discharge Permit to calculate the capacity charge, then the Sewage Control Manager may, in their discretion, prescribe the volumes of Non-Domestic Waste, BOD, and TSS concentrations to calculate the total capacity charge.

aaa. In Schedule “F”, Sections 3 and 3.1 are deleted;

bbb. In Schedule “G”, in Section 4.1, the phrase “On the date of adoption of this Code of Practice, the owner” is deleted and replaced with the phrase “The owner”;

ccc. In Schedule “G”, in Section 6.5, the phrase “shall forthwith” is deleted and replaced with the phrase “must immediately”;

ddd. In Schedule “H”, in Section 4.1, the phrase “On or before January 1, 2009, an operator” is deleted and replaced with the phrase “An operator”;

eee. In Schedule “H”, in Section 4.7 the word “shall” is deleted and replaced with the word “must”;

fff. In Schedule “H”, in Section 5.1, the word “shall” is deleted and replaced with the word “must”;

ggg. In Schedule “H”, in Section 5.2 the word “shall” is deleted and replaced it the word “must”;

hhh. In Schedule “H”, in Section 5.4, the phrase “shall forthwith” is deleted and replaced with the phrase “must immediately”.

Read a first, second and third time this _____ day of _____, _____.

Passed and finally adopted this _____ day of _____, _____.

George V. Harvie, Chair

Dorothy Shermer, Corporate Officer

To: Liquid Waste Committee

From: Dana Zheng, Program Manager, Policy, Planning and Analysis, Liquid Waste Services

Date: July 11, 2023 Meeting Date: July 19, 2023

Subject: **Greater Vancouver Sewerage and Drainage District Hospital Pollution Prevention Amendment Bylaw No. 367, 2023**

RECOMMENDATION

That the GVS&DD Board:

- a) give first, second, and third reading to *Greater Vancouver Sewerage and Drainage District Hospital Pollution Prevention Amendment Bylaw No. 367, 2023*; and
 - b) pass and finally adopt *Greater Vancouver Sewerage and Drainage District Hospital Pollution Prevention Amendment Bylaw No. 367, 2023*.
-

EXECUTIVE SUMMARY

The *Greater Vancouver Sewerage and Drainage District Hospital Pollution Prevention Amendment Bylaw No. 367, 2023* (Hospital P2 Amendment Bylaw) is presented for Board adoption. There are five proposed amendments, with multiple instances of the same changes in different sections of the bylaw. Changes include terminology and consistency improvements to address operational and enforceability issues, and improve accuracy and clarity of the *Greater Vancouver Sewerage and Drainage District Hospital Pollution Prevention Bylaw No. 319, 2018*. No policy or material revisions were made, and thus no engagement with stakeholders is required.

PURPOSE

To seek GVS&DD Board adoption of the Hospital P2 Amendment Bylaw.

BACKGROUND

The *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw No. 299, 2007* (SUB) (Reference 1) and associated sector-specific bylaws regulate the discharge of waste into sewers and drains connected to a sewage facility operated by the GVS&DD. The *Greater Vancouver Sewerage and Drainage District Hospital Pollution Prevention Bylaw No. 319, 2018* (Hospital P2 Bylaw) (Reference 2) was adopted in 2018 and requires hospitals to develop pollution prevention plans to reduce the discharge of pollutants into the wastewater system.

Metro Vancouver routinely reviews and updates bylaws to ensure accuracy, clarity and enforceability of the policy. It was determined that bylaw amendments are required to improve accuracy, clarity and enforceability of both the SUB and the Hospital P2 bylaw. These proposed revisions resolve straightforward operational and enforceability issues that are aligned with current enforcement practices and the original intent of the bylaws. The scope of the revisions do not constitute policy or material changes and thus do not require engagement with stakeholders. This report and the report titled, "Greater Vancouver Sewerage and Drainage District Sewer Use

Amendment Bylaw No. 366, 2023” dated July 11, 2023, are complementary and are intended to be adopted together.

PROPOSED HOSPITAL P2 BYLAW AMENDMENTS

There are five amendments proposed, with multiple instances of the same changes in different sections of the bylaw. The types of proposed changes to the Hospital P2 Bylaw are:

- Terminology improvements and reference updates to improve consistency. Revisions improve accuracy, reduce ambiguity and resolve interpretation and enforceability issues.
- Updates to references that are redundant and outdated. Revisions reduce duplication and improve clarity and enforceability.
- Operational and enforceability improvements add clarity to the responsibility and authority granted to the Sewage Control Manager and revise clauses to ensure current operational and enforcement practices are substantiated.

ALTERNATIVES

1. That the GVS&DD Board:
 - a) give first, second, and third reading to *Greater Vancouver Sewerage and Drainage District Hospital Pollution Prevention Amendment Bylaw No. 367, 2023*; and
 - b) pass and finally adopt *Greater Vancouver Sewerage and Drainage District Hospital Pollution Prevention Amendment Bylaw No. 367, 2023*.
2. That the GVS&DD Board receive for information the report dated July 11, 2023 titled “Greater Vancouver Sewerage and Drainage District Hospital Pollution Prevention Amendment Bylaw No. 367, 2023” and provide alternate direction to staff.

FINANCIAL IMPLICATIONS

There are no financial implications associated with this report.

CONCLUSION

Metro Vancouver routinely reviews and updates bylaws to ensure accuracy, clarity and enforceability. The proposed amendments to the Hospital P2 Bylaw address: a) terminology improvements; b) updates to redundant and outdated references; and c) operational and enforceability improvements. The scope of the revisions do not constitute policy or material changes and thus do not require engagement with stakeholders.

This report and the report dated July 11, 2023, titled, “Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw Amendment Bylaw 366, 2023” are complementary and are intended to be adopted together.

Attachment

Greater Vancouver Sewerage and Drainage District Hospital Pollution Prevention Amendment Bylaw No. 367, 2023 (59776540)

References

1. [GVS&DD Sewer Use Bylaw No. 299, 2007](#)
2. [GVS&DD Hospital Pollution Prevention Bylaw No. 319, 2018](#)

**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
BYLAW NO. 367, 2023
A bylaw to amend “Hospital Pollution Prevention Bylaw No. 319, 2018”**

WHEREAS:

- A. The Greater Vancouver Sewerage and Drainage District Board (the “Board”) adopted the Hospital Pollution Prevention Bylaw No. 319, 2018 on October 26, 2018.
- B. The Board wishes to amend Hospital Pollution Prevention Bylaw No. 319, 2018.

NOW THEREFORE the Board of the Greater Vancouver Sewerage and Drainage District enacts as follows:

Citation

- 1. The official citation of this bylaw is “Greater Vancouver Sewerage and Drainage District Hospital Pollution Prevention Amendment Bylaw No. 367, 2023”.

Amendment of Bylaw

- 2. “Hospital Pollution Prevention Bylaw No. 319, 2018”, is amended as follows:
 - a. Section 6(a) is deleted and replaced with the following:
 - (a) *biomedical waste*, unless such discharge is from a *hospital* in accordance with a *hospital pollution prevention plan* approved by the *Sewage Control Manager*;
 - b. Section 6(b) is deleted and replaced with the following:
 - (b) *hazardous waste*, unless such discharge is from a *hospital* in accordance with a *hospital pollution prevention plan* approved by the *Sewage Control Manager*; and
 - c. In Section 7(d) the word “*storm water*” is deleted and replaced with the word “*stormwater*”;
 - d. In Section 7(f) the word “*ground water*” is deleted and replaced with the word “*groundwater*”;
 - e. Section 8 is deleted and replaced with the following:
 - 8. Every *hospital* must submit a *hospital pollution prevention plan* to the *Sewage Control Manager* by the date specified by the *Sewage Control Manager*, and every five years thereafter. The *hospital pollution prevention plan* must be in such form, and must include such information, drawings, and specifications as set out in section 12, and as a *Sewage Control Manager* may prescribe from time to time.

f. Section 11 is deleted and replaced with the following:

11. Every *hospital* must submit a report to the *Sewage Control Manager* detailing the actions taken in the previous year to complete the *pollution prevention measures* specified in the *hospital's* approved *hospital pollution prevention plan*.

g. In Section 23(b) the phrase "*Greater Vancouver Sewerage and Drainage District Food Sector Grease Interceptor Bylaw No. 268, 2012*" is deleted and replaced with the phrase "*Grease Interceptor Bylaw*".

Read a first, second and third time this _____ day of _____, _____.

Passed and finally adopted this _____ day of _____, _____.

George V. Harvie, Chair

Dorothy Shermer, Corporate Officer

To: GVS&DD, GVWD and MVRD Boards

From: Jerry W. Dobrowolny, Commissioner/Chief Administrative Officer

Date: July 25, 2023 Meeting Date: July 28, 2023

Subject: **Public Engagement on Development Cost Charges**

RECOMMENDATION

That the GVS&DD/GVWD/MVRD Board direct staff to consult with member jurisdictions, the Urban Development Institute and other parties on proposed updates to Development Cost Charges as recommended in the report dated July 25, 2023 titled “Public Engagement on Development Cost Charges”.

EXECUTIVE SUMMARY

Per Board Policy No. GV-018 – Public Engagement, the Board of Directors is responsible for authorizing engagement processes. This report seeks authorization from each of the GVS&DD, GVWD and MVRD Boards for undertaking a consultation process in September with member jurisdictions, the Urban Development Institute (UDI) and other parties on proposed updates to Development Cost Charges imposed by each of GVS&DD, GVWD and MVRD respectively. The input received through this process will inform the budget process in October 2023.

PURPOSE

To seek authorization from each of the GVS&DD, GVWD and MVRD Boards for undertaking a consultation process in September with member jurisdictions, the Urban Development Institute and other parties on proposed updates to Development Cost Charges.

BACKGROUND

Per Board Policy No. GV-018 – Public Engagement, the Board of Directors is responsible for authorizing engagement processes. As changes to Development Cost Charges have the potential to impact the public and stakeholders, a public consultation process is recommended to ensure that each of the GVS&DD, GVWD and MVRD Boards’ decisions are informed by public input. To meet budget cycle deadlines, staff recommend undertaking a consultation process in September with member jurisdictions and the UDI.

PUBLIC ENGAGEMENT PROCESS

Metro Vancouver staff will adhere to the *Public Engagement Guide* and seek input on the following topics from member jurisdictions and the Urban Development Institute:

- Updating Liquid Waste Development Cost Charge Rates
- Updating Water Development Cost Charge Rates
- Creation of a Parks Development Cost Charge

The results of this engagement process will be presented to the Board for its consideration as part of the Five-Year Financial Plan budget deliberations to be held in October.

ALTERNATIVES

1. That the GVS&DD/GVWD/MVRD Board direct staff to consult with member jurisdictions, the Urban Development Institute and other parties on proposed updates to Development Cost Charges as recommended in the report dated July 25, 2023 titled “Public Engagement on Development Cost Charges”.
2. That the GVS&DD/GVWD/MVRD Board receive for information the report dated July 25, 2023 titled “Public Engagement on Development Cost Charges”.

FINANCIAL IMPLICATIONS

The costs of undertaking a consultation process with member jurisdictions and the UDI on proposed updates to Development Cost Charges can be accommodated within regular operating budgets. No budgetary impact is expected.

CONCLUSION

Authorization from each of the GVS&DD, GVWD and MVRD Boards is requested per Board Policy No. GV-018 for undertaking a consultation process in September with member jurisdictions and the Urban Development Institute on proposed updates to Development Cost Charges. The input received through this process will inform the budget process in October 2023. Alternative 1 is recommended.

COMMITTEE INFORMATION ITEMS AND DELEGATION SUMMARIES

Greater Vancouver Sewerage and Drainage District
Board Meeting Date – Friday, July 28, 2023

This information item, listing recent information received by committee, is provided for the GVS&DD Board's information. Please access a complete PDF package [here](#).

Zero Waste Committee – July 13, 2023*Delegations:*

- 3.1 Lori Bryant, Waste Management Association of BC (WMABC)
Subject: Smart Waste Program
No Executive Summary provided

Information Items:

- 5.1 Draft Solid Waste Services 2024 – 2028 Capital Plan
- 5.2 Solid Waste Services Capital Program Expenditure Update as of April 30, 2023
- 5.3 Solid Waste Management Plan: Vision and Guiding Principles Engagement Initial Feedback
- 5.4 Draft Tipping Fee Bylaw Updates
- 5.5 Smart Waste Program
- 5.6 2022 Disposal Ban Program Update

Liquid Waste Committee – July 19, 2023*Delegations:*

No delegations presented

Information Items:

- 5.1 Draft Liquid Waste 2024 – 2028 Capital Plan
- 5.2 Liquid Waste Services Capital Program Expenditure Update as at April 30, 2023

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