

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

BOARD MEETING

Friday, June 30, 2023

8:00 am

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

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

[Membership and Votes](#)

A G E N D A¹

A. ADOPTION OF THE AGENDA

1. June 30, 2023 Meeting Agenda

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

B. ADOPTION OF THE MINUTES

1. June 2, 2023 Meeting Minutes

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

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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 Change Order to the Contract Resulting from RFP No. 19-007: Northwest Langley Wastewater Treatment Plant - Design and Construction Engineering Services** *pg. 10*
- 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.
- 1.2 Amendment to Central Aggregates Biosolids Management Contract Resulting from SRFEI 21-018** *pg. 13*
- 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.
- 1.3 *Integrated Liquid Waste and Resource Management Plan: Biennial Report for 2021-2022*** *pg. 16*
- 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.

2. ZERO WASTE COMMITTEE REPORTS

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

pg. 20

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.

3. CAUCUS OF COMMITTEE CHAIRS REPORTS

Note: The following item will be considered by the Caucus of Committee Chairs on June 26, 2023. Any resulting changes to recommendations will be presented on table at the Board meeting.

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

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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".

F. ITEMS REMOVED FROM THE CONSENT AGENDA

G. REPORTS NOT INCLUDED IN CONSENT AGENDA

H. MOTIONS FOR WHICH NOTICE HAS BEEN GIVEN

I. OTHER BUSINESS

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

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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 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.

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

M. ADJOURNMENT/CONCLUSION

That the GVS&DD Board adjourn/conclude its meeting of June 30, 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 9:09 am on Friday, June 2, 2023, in the 28th Floor Boardroom, 4515 Central Boulevard, Burnaby, British Columbia.

MEMBERS PRESENT:

Delta, Chair, Director George V. Harvie
 Anmore, Vice Chair, Director John McEwen
 Burnaby, Director Pietro Calendino
 Burnaby, Director Sav Dhaliwal
 Burnaby, Director Mike Hurley
 Coquitlam, Alternate Director Steve Kim for
 Craig Hodge
 Coquitlam, Director Teri Towner
 Delta, Director Dylan Kruger
 Electoral Area A, Director Jen McCutcheon
 Langley City, Director Paul Albrecht
 Langley Township, Director Eric Woodward
 Langley Township, Director Steve Ferguson
 Maple Ridge, Director Dan Ruimy
 New Westminster, Director Patrick Johnstone
 North Vancouver City, Director Linda Buchanan*
 North Vancouver District, Director Lisa Muri
 Pitt Meadows, Director Nicole MacDonald*
 Port Coquitlam, Director Brad West

Port Moody, Director Meghan Lahti
 Richmond, Director Malcolm Brodie
 Richmond, Director Bill McNulty
 Richmond, Director Chak Au
 Surrey, Director Harry Bains
 Surrey, Director Mike Bose
 Surrey, Director Gordon Hepner
 Surrey, Director Pardeep Kooner
 Surrey, Director Brenda Locke*
 Surrey, Director Rob Stutt
 Vancouver, Director Rebecca Bligh
 Vancouver, Director Adriane Carr
 Vancouver, Director Mike Klassen
 Vancouver, Director Ken Sim
 Vancouver, Director Lenny Zhou
 West Vancouver, Director Mark Sager
 White Rock, Director Megan Knight
 Commissioner Jerry W. Dobrovolny
 (Non-voting member)

MEMBERS ABSENT:

Vancouver, Director Lisa Dominato
 Vancouver, Director Sarah Kirby-Yung

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 2, 2023 Meeting Agenda

It was MOVED and SECONDED

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

CARRIED

B. ADOPTION OF THE MINUTES

1. April 28, 2023 Meeting Minutes

It was MOVED and SECONDED

That the GVS&DD Board adopt the minutes for its meeting held April 28, 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 2, 2023 GVS&DD Board Consent Agenda:

- 1.1 Stage Gate 2: Northwest Langley Wastewater Treatment Plant Expansion Project
- 1.2 Annacis Island Wastewater Treatment Plant – Stage 5 Expansion and Outfall Updates
- 1.3 2023 Liquid Waste Capital Projects

CARRIED

The items and recommendations referred to above are as follows:

- 1.1 Stage Gate 2: Northwest Langley Wastewater Treatment Plant Expansion Project**
Report dated May 5, 2023 from Marie-Liesse Marc, Director, Major Projects, Project Delivery, providing the GVS&DD Board an update on progress for the Northwest Langley Wastewater Treatment Plant Expansion Project, and seeking Board approval for the Project to advance to detailed design (Stage Gate 2).

Recommendation:

That the GVS&DD Board approve the Northwest Langley Wastewater Treatment Plant Expansion Project advancing to detailed design (Stage Gate 2), as described in the report dated May 5, 2023, titled, “Stage Gate 2: Northwest Langley Wastewater Treatment Plant Expansion Project”.

Adopted on Consent

1.2 Annacis Island Wastewater Treatment Plant – Stage 5 Expansion and Outfall Updates

Report dated May 5, 2023 from Bob Cheng, Director, Major Projects, Project Delivery, Murray Gant, Director, Major Projects, Project Delivery, providing the GVS&DD Board with a progress update for the Annacis Island Wastewater Treatment Plant – Stage 5 Expansion and Outfall projects.

Recommendation:

That the GVS&DD Board receive for information the report dated May 5, 2023, titled, “Annacis Island Wastewater Treatment Plant – Stage 5 Expansion and Outfall Updates”.

Adopted on Consent

1.3 2023 Liquid Waste Capital Projects

Report dated May 4, 2023 from Colin Meldrum, Director, Engineering, Design & Construction, Liquid Waste Services, informing the GVS&DD Board of the Liquid Waste Capital Projects under its purview for 2023, as approved by the Board on October 28, 2022.

Recommendation:

That the GVS&DD Board receive for information the report dated May 4, 2023 titled “2023 Liquid Waste Capital Projects”.

Adopted on Consent

F. ITEMS REMOVED FROM THE CONSENT AGENDA

No items presented.

G. REPORTS NOT INCLUDED IN CONSENT AGENDA

1.1 Greater Vancouver Sewerage and Drainage District Banking Authority Bylaw No. 363, 2023

Report dated May 8, 2023 from Linda Sabatini, Director, Finance Operations, seeking GVS&DD Board adoption of *Greater Vancouver Sewerage and Drainage District Banking Authority Bylaw No. 363, 2023*.

It was MOVED and SECONDED

That the GVS&DD Board give first, second, and third reading to the *Greater Vancouver Sewerage and Drainage District Banking Authority Bylaw No. 363, 2023*.

CARRIED

It was MOVED and SECONDED

That the GVS&DD Board pass and finally adopt the *Greater Vancouver Sewerage and Drainage District Banking Authority Bylaw No. 363, 2023*.

CARRIED

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 2, 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; and
 - (f) law enforcement, if the council considers that disclosure could reasonably be expected to harm the conduct of an investigation under or enforcement of an enactment.

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 2, 2023.

CARRIED

(Time: 9:11 am)

CERTIFIED CORRECT

Dorothy Shermer, Corporate Officer

George V. Harvie, Chair

60292672 FINAL

To: Liquid Waste Committee

From: Marie-Liesse Marc, Director, Major Projects, Project Delivery
George Kavouras, Director, Procurement and Real Estate Services

Date: June 2, 2023 Meeting Date: June 14, 2023

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

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.

EXECUTIVE SUMMARY

At its June 2, 2023 meeting, the GVS&DD Board approved the Northwest Langley Wastewater Treatment Plant (NLWWTP) Expansion Project advancing to detailed design (Stage Gate 2). The plant's design is being revised to incorporate value engineering opportunities identified in a comprehensive cost and design review and accommodate accelerated population growth in northeast Surrey.

A proposed change order in the amount of up to \$20,655,821 will allow CH2M Hill Canada Ltd. to complete the detailed design work, incorporating the construction cost saving measures and the Stage 1 plant capacity increase from 230,000 to 280,000 service population. This change order will increase the total contract value to \$65,981,187. The requested change order is below the program management consultant's internal estimate for the work and can be accommodated within the current approved budget for the Northwest Langley Wastewater Treatment Plant Program.

PURPOSE

This report is to request authorization by the GVS&DD Board for a change order to the contract resulting from RFP No. 19-007 Northwest Langley Wastewater Treatment Plant – Design and Construction Services awarded to CH2M Hill Canada Ltd. (CH2M Hill) in the amount of up to \$20,655,821 (exclusive of taxes), for services to complete the detailed design and procurement of the Northwest Langley Wastewater Treatment Plant Stage 1 expansion. Construction services are not part of the existing contract and are to be awarded at a later date.

BACKGROUND

Pursuant to the *GVS&DD Officers and Delegation Bylaw 284, 2014* (Bylaw) and the *Procurement and Real Property Contracting Authority Policy* (Policy), procurement contracts which exceed a value of \$5,000,000 require the approval of the GVS&DD Board of Directors.

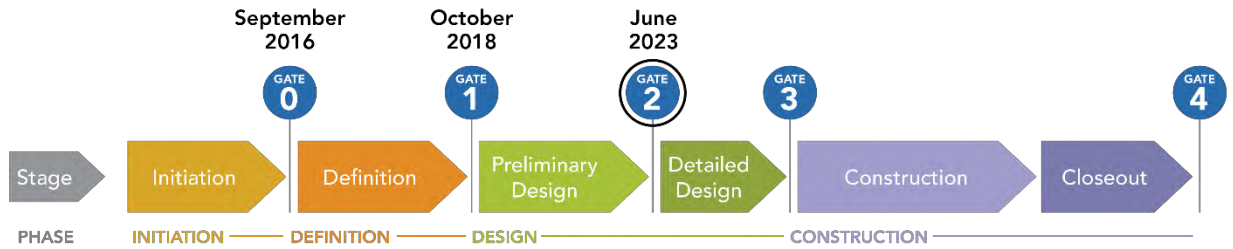


Figure 1: Stage Gate Approval Process

SCOPE CHANGES AND DETAILED DESIGN EXTENSION

At its June 2, 2023 meeting, the GVS&DD Board approved the Northwest Langley Wastewater Treatment Plant Expansion Project (see Reference) advancing to detailed design (Stage Gate 2). A prior value engineering exercise identified significant cost reduction measures to be included in the design, as well as opportunities for a simplified, more modular optimized design to accommodate future expansion and reduced facility footprint (i.e., decreased concrete and site excavation). During that time, it was also determined that population growth in northeast Surrey had accelerated, and that certain areas originally scheduled for connection to the NLWWTP during a second phase of expansion should be included in the current build. This resulted in an increase in the plant’s initial design service population from 230,000 to 280,000 people. The plant is projected to have an ultimate build-out service population of 700,000 people by 2101.

Incorporation of the cost reduction measures, design adjustments, and increased service population requires significant rework of aspects of the plant detailed design, resulting in efforts beyond the scope of the existing contract. Additionally, and with the objective to minimize design rework and proactively manage the quality of output, scope, schedule, and budget, Metro Vancouver requires the implementation of more robust design and project management processes.

CH2M Hill presented a detailed proposal outlining the activities, work plan, resources, level of effort, and fees necessary to reinitiate and complete the Detailed Design and Procurement phases of the NLWWTP Expansion Project. Metro Vancouver and the Project’s Program Management Consultant conducted a detailed evaluation of CH2M Hill’s proposal for completing the detailed design work, including validation of scope, level of effort, and fees. After a series of review and negotiation meetings, staff recommend a change order in the amount of \$20,655,821 to allow detailed design and procurement work to proceed without further delay to project completion.

ALTERNATIVES

- 1) 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.

- 2) That the GVS&DD Board receive for information the report dated June 2, 2023 titled “Change Order to the Contract Resulting from RFP No. 19-007: Northwest Langley Wastewater Treatment Plant - Design and Construction Engineering Services” and direct staff to report back to with options for an alternate course of action.

FINANCIAL IMPLICATIONS

The requested change order is below the program management consultant’s internal estimate for the work and can be accommodated within the current approved budget for the NLWWTP Program.

If the GVS&DD Board approves Alternative 1, the contract with CH2M Hill will be amended by change order in the amount of up to \$20,655,821 (exclusive of taxes), to complete detailed design and procurement of the Stage 1 NLWWTP facilities. The value of this change order will increase the total contract value to \$65,981,187.

CONCLUSION

At its June 2, 2023 meeting, the GVS&DD Board approved the Northwest Langley Wastewater Treatment Plant Expansion Project advancing to detailed design (Stage Gate 2). Incorporation of identified cost reduction measures and an increase in NLWWTP Stage 1 capacity require significant rework of aspects of the plant design. It is recommended that the GVS&DD Board proceed with a change order to CH2M Hill Canada Ltd.’s contract by an amount of up to \$20,655,821 to complete detailed design and procurement of the NLWWTP facilities without further delay to completion of the Project.

Reference

[Stage Gate 2: Northwest Langley Wastewater Treatment Plant Expansion Project](#)

56701798

To: Liquid Waste Committee

From: George Kavouras, Director, Procurement and Real Estate Services
Janelle Hunt, Program Manager, Utility Residuals Management, Liquid Waste Services

Date: June 1, 2023 Meeting Date: June 14, 2023

Subject: **Amendment to Central Aggregates Biosolids Management Contract Resulting from SRFEOI 21-018**

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.
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EXECUTIVE SUMMARY

The *Liquid Waste Management Plan* requires Metro Vancouver to beneficially use biosolids. Metro Vancouver biosolids have been beneficially used by Lafarge Canada Inc. (Lafarge) at their Central Aggregates gravel pit to reclaim exhausted gravel extraction areas for agricultural use. Lafarge submitted a proposal to amend their existing contract under Standing Request for Expressions of Interest (SRFEOI) No. 21-018: Biosolids Management. The amendment would increase the volume of Metro Vancouver biosolids that could be managed on the site by increasing the area to be reclaimed and extending the contract until 2026. Lafarge has demonstrated successful management of biosolids for Metro Vancouver at the site and proposed a reasonable price. It is recommended that the GVS&DD Board authorize the Commissioner and the Corporate Officer to amend the contract with Lafarge in an amount of up to \$4,097,000 (exclusive of taxes).

PURPOSE

The purpose of this report is to recommend that the GVS&DD Board approve the contract amendment with Lafarge Canada Inc. for the beneficial use of biosolids at their Central Aggregates gravel pit in Abbotsford, BC in order to manage additional Iona Island Wastewater Treatment Plant (WWTP) biosolids.

BACKGROUND

Pursuant to the *GVS&DD Officers and Delegation Bylaw No. 284, 2014* (Bylaw) and the *Procurement and Real Property Contracting Authority Policy* (Policy), procurement contracts that exceed a value of \$5 million require the approval of the Board of Directors.

In 2022, Metro Vancouver entered into a 2-year, \$3,300,000 contract under SRFEOI 21-018 with Lafarge to manage Iona Island WWTP land-dried biosolids at their Central Aggregates gravel pit.

This report is being brought forward to the Liquid Waste Committee to consider a recommendation to the GVS&DD Board to amend the existing contract with Lafarge, in the amount of up to \$4,097,000 (exclusive of taxes) for a total contract value of \$7,397,000, in order to manage additional Iona Island WWTP land-dried biosolids at Central Aggregates gravel pit.

DESCRIPTION OF SERVICES

The scope of work includes the management and beneficial use of Class B land-dried biosolids stockpiled at the Iona Island WWTP. The biosolids will be mixed with native soils to create productive soil that will be used to reclaim land disturbed by gravel extraction. The project will beneficially use biosolids from the stockpile at Iona Island WWTP for which there are few beneficial use opportunities as they are low in nutrients. The stockpile biosolids will be used to build a sub-soil, while other soils will be used to cap and re-vegetate the site.

Since 2022, Lafarge has beneficially used 16,000 bulk tonnes of Iona Island WWTP land-dried biosolids to reclaim the Central Aggregates gravel pit. The proposed amendment would increase the volume of biosolids to be managed at the site and extend the length of the contract to 2026. The additional biosolids will allow Lafarge to expand the reclamation area as gravel extraction activities cease.

Metro Vancouver must remove the Iona Island WWTP land-dried stockpile prior to ground improvements for the Iona Island WWTP Projects. The Central Aggregates gravel pit represents a proven biosolids beneficial use project with an experienced contractor, capable of responsibly managing the land-dried biosolids. The amendment amount of \$4,097,000 is based on biosolids quantities and site applications specified in Lafarge's amendment letter, and subsequent negotiations. The rate per tonne is comparable to the cost of other Metro Vancouver biosolids beneficial use projects and is significantly less than the cost to dispose of biosolids in a landfill, which is not a beneficial use.

The cost of hauling biosolids to the site is not included in the award. Hauling services are provided under an existing contract awarded to Arrow Transportation Systems Inc. through competition No. RFP 19-112: Utility Residuals Management Hauling Services.

ALTERNATIVES

1. 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.

2. That the GVS&DD Board receive for information the report dated June 1, 2023, titled "Amendment to Central Aggregates Biosolids Management Contract Resulting from SRFEOI 21-018," and direct staff to report back to the GVS&DD Board with options for an alternate course of action.

FINANCIAL IMPLICATIONS

If the Board approves Alternative 1, a contract amendment will be awarded to Lafarge in the amount of up to \$4,097,000 (exclusive of taxes). This amount is within the Liquid Waste Services' budget allocated for this work.

Under Alternative 2, staff will need to seek other options for the management of Iona Island WWTP land-dried biosolids. Limited opportunities are available for beneficial use of land-dried biosolids and they must be removed prior to Iona Island WWTP Projects construction work. If an alternative beneficial use option cannot be secured, biosolids will need to be disposed in a landfill, resulting in additional costs of up to \$2,239,000 over the course of this contract.

CONCLUSION

Lafarge Canada Inc. has proposed to amend their contract under SRFEI No. 21-018 for Biosolids Management at their Central Aggregates gravel pit. The proposed amendment would increase the volume of biosolids beneficially used to reclaim land at the Central Aggregates gravel pit and extend the contract until 2026. It is recommended that the GVS&DD Board authorize the Commissioner and the Corporate Officer to amend the contract with Lafarge Canada Inc. in an amount of up to \$4,097,000 (exclusive of taxes).

59151549

To: Liquid Waste Committee

From: Abin Antony, Program Manager, Policy, Planning & Analysis, Liquid Waste Services

Date: June 7, 2023 Meeting Date: June 14, 2023

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

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.
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EXECUTIVE SUMMARY

In accordance with the 2011 *Integrated Liquid Waste and Resource Management Plan* (ILWRMP), Metro Vancouver must submit a biennial report by July 1, 2023 to the Ministry of Environment and Climate Change Strategy (MoECCS) outlining progress by Metro Vancouver and its member jurisdictions in implementing ILWRMP actions through 2021 and 2022. GVS&DD Board approval is requested to submit the attached biennial report by the required deadlines to the MoECCS, followed by an opportunity to receive comments on the report. The biennial report outlines significant progress in regional liquid waste management over the preceding two years along with continuing challenges, especially during wet weather.

Review and update of the ILWRMP is currently underway, and approval of a more streamlined and targeted progress reporting approach will be requested for the next plan. The next plan will be modernized, with more impactful actions that better serve regional needs.

PURPOSE

To request that the GVS&DD Board authorize staff to forward the attached biennial report to the MoECCS, and arrange for the Liquid Waste Committee to receive public comments at its scheduled meeting of September 13, 2023.

BACKGROUND

The 2011 *Integrated Liquid Waste and Resource Management Plan* outlines requirements for biennial reporting, summarizing progress by Metro Vancouver and its member jurisdictions in implementing ILWRMP actions completed over the preceding two calendar years. Under the process specified in the ILWRMP, this biennial reporting must be submitted to the MoECCS by

July 1st every second calendar year, followed by an opportunity for the Liquid Waste Committee to receive input and comments on the report. The last biennial report was approved by the GVS&DD Board on June 25, 2021.

BIENNIAL REPORT: 2021-2022

The attached biennial report has been prepared in a similar format as previous years, structured into two volumes addressing progress by Metro Vancouver and its member jurisdictions, with key highlights including:

- Substantial investments being made in upgrading treatment facilities throughout the region
- Progress in completing Integrated Stormwater Management Plans (ISMPs) around the region
- Progress in separating combined sewers in many key areas, including nearly complete sewer separation in Burnaby in the Willingdon and Westridge catchment areas.

However, Metro Vancouver and its member jurisdictions continue to have challenges including: (1) managing large inflows during wet weather; (2) inconsistent regional progress in implementing ISMP actions leading to confirmed improvement in environmental health; (3) inconsistent progress towards the combined sewer overflow elimination target dates as specified in the ILWRMP.

REVIEW AND UPDATE OF THE *INTEGRATED LIQUID WASTE AND RESOURCE MANAGEMENT PLAN*

Metro Vancouver is developing the next *Liquid Waste Management Plan* and is currently consolidating feedback received through a range of engagement processes including three technical workshops, one-on-one meetings with local First Nations, and various public outreach efforts. An overarching vision of “Healthy Waters. For All. Forever.” has been adopted that reflects a plan focussed on inter-generational actions that enhance the health of regional water bodies - for all peoples and for all forms of life. Key areas of change for the plan include wet weather management, combined sewer overflow elimination, and source control, wastewater treatment and resource recovery.

The current biennial reporting process is an arduous process that takes significant resourcing by Metro Vancouver and its member jurisdictions to compile, in many cases reporting on progress for actions that may no longer be meaningful. Provincial approval of a more streamlined and targeted progress reporting process will be requested for the next plan, with a focus on developing key performance indicators that transparently track progress.

Some key areas of focused improvement noted for the next plan include:

- Integration of Indigenous priorities
- Strengthening climate resilience
- Enabling multi-jurisdictional collaboration for improved quality of local waters
- Accelerated action on wet weather sewage overflows
- Increased accountability for improved stormwater management.

Some actions, such as wet weather pricing that incentivizes action to address high levels of inflow and infiltration that cause wet weather sewage overflows, are already being implemented. Other actions are being developed and will be presented in a draft plan for Board approval in 2024.

ALTERNATIVES

1. 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.
2. That the GVS&DD Board receive for information the report dated June 7, 2023 titled “*Integrated Liquid Waste and Resource Management Plan: Biennial Report for 2021-2022*” and provide alternate direction to staff.

Alternative 1 is recommended. Alternative 2 will not result in submission of the biennial report to MoECCS by July 1, 2023 as required by regulation.

FINANCIAL IMPLICATIONS

This is a request to meet a regulatory requirement to submit a biennial report and arrange to receive comment by required timelines, and there are no financial implications.

CONCLUSION

Although Metro Vancouver is currently completing the review and update of the ILWRMP, there is still a requirement to submit a biennial report (Attachments 1 and 2) to MoECCS by July 1, 2023 that outlines progress by Metro Vancouver and its member jurisdictions in implementing the actions identified in the 2011 ILWRMP. Subject to GVS&DD Board approval, the report will be submitted to MoECCS by the required deadline and, as per the process identified in the ILWRMP, an opportunity for the Liquid Waste Committee to receive public comments on the biennial report will follow.

While the biennial report does indicate progress by Metro Vancouver and its members through 2021 and 2022, there are a number of challenges for regional liquid waste services. The next plan will incorporate a range of actions to better meet these challenges including reducing the potential for wet weather sewer overflows, ensuring continued progress on combined sewer overflow elimination, along with improved source control, wastewater treatment and resource recovery initiatives. A transparent, more streamlined and targeted progress reporting process focusing on key performance metrics will be requested to the MoECCS for the next plan.

Attachments

1. “Biennial Report: 2021-2022”, Volume 1: Metro Vancouver Report (60160742)
2. “Biennial Report: 2021-2022”, Volume 2: Municipal Reports (60160332)

Attachments to 5.4: Biennial Report – *Integrated Liquid Waste and Resource Management Plan*

1. “Biennial Report: 2021-2022”, Volume 1: Metro Vancouver Report
[DOWNLOAD REPORT](#)
2. “Biennial Report: 2021-2022”, Volume 2: Municipal Reports
[DOWNLOAD REPORT](#)

To: GVS&DD Board of Directors

From: Paul Henderson, General Manager, Solid Waste Services

Date: June 20, 2023 Meeting Date: June 30, 2023

Subject: **Extension of Recycling and Waste Centres Operations and Maintenance Services Contracts**

ZERO WASTE COMMITTEE 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.

At its June 15, 2023 meeting, the Zero Waste Committee considered the attached report titled “Extension of Recycling and Waste Centres Operations and Maintenance Services Contracts”, dated June 8, 2023.

The Committee endorsed the recommendations presented in the report, as shown above, and directed staff to provide additional information to the Board, regarding the proposed one-time price adjustments, referenced on page 2 of the report under *Proposed Contract Extensions*.

RECYCLING AND WASTE CENTRE CONTRACT EXTENSIONS

Emterra Environmental Contract Extension

The following table provides a breakdown of the proposed one-time 7.4% price adjustments in addition to price index adjustments, for the contract with Emterra Environmental for operation and maintenance of North Shore, North Surrey, and United Boulevard recycling and waste centres:

Item	Proposed Price Adjustment as a Percent of Total Contract Value
Increased Hauling Costs	4.2%
Additional Staffing at United Boulevard	2.0%
Wage Adjustment	0.7%
Increased Maintenance Costs	0.5%
Total	7.4%

Increased Hauling Costs

Hauling of garbage from the recycling and waste centres operated by Emterra is through third-party sub-contractors. Emterra requested quotes for hauling for the contract extension period from multiple contractors. Emterra received two quotes for hauling with the lowest quote resulting in an overall price increase of 4.2%.

Additional Staffing at United Boulevard

The United Boulevard Recycling and Waste Centre opened in March 2022. Compared to the previous Coquitlam Recycling and Waste Centre, the United Boulevard Recycling and Waste Centre is significantly larger, provides more services and has seen significantly more use for certain recyclable materials. For instance, the facility has seen a 40% increase in yard trimmings drop-off compared to the previous facility. To ensure excellent customer service and safe facility operations, additional staffing is proposed for United Boulevard Recycling and Waste Centre, resulting in a 2% increase in cost.

Wage Adjustment

Consistent with requirements at Central Surrey Recycling and Waste Centre, a one-time increase in wages is proposed to provide living wages for the lowest paid staff at recycling and waste centres. This, combined with a wage adjustment for equipment operators, results in a 0.7% increase in costs.

Increased Maintenance Costs

A 0.5% adjustment to the contract price is proposed to account for increased costs by sub-contracted third-party vendors that complete preventative maintenance to various heating, cooling, ventilation, plumbing and electrical equipment at the three recycling and waste centres.

GFL Environmental Contract Extension

The report also recommends a 4.1% one-time increase in the contract price for GFL Environmental for the operation and maintenance of the Langley and Maple Ridge recycling and waste centres. These facilities receive recyclables and garbage from hand-unloaded vehicles and as such the quantities of recyclables and garbage processed at these facilities are much smaller than the amounts processed at the North Shore, United Boulevard and North Surrey recycling and waste centres. For the GFL Environmental contract, wage adjustments are the primary driver of the proposed one-time cost increase.

This matter is now before the Board for its consideration.

Attachment

“Extension of Recycling and Waste Centres Operations and Maintenance Services Contracts”, dated June 8, 2023.

60659165

To: Zero Waste Committee

From: George Kavouras, Director, Procurement
Paul Henderson, General Manager, Solid Waste Services

Date: June 8, 2023 Meeting Date: June 15, 2023

Subject: **Extension of Recycling and Waste Centres Operations and Maintenance Services Contracts**

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.
-

EXECUTIVE SUMMARY

Operation and maintenance contracts for five of Metro Vancouver's recycling and waste centres expire on December 31, 2023. The contracts allow for extension for up to two additional years. Staff recommend that the Board approve amendments to Contract 16-071 with Halton Recycling Ltd. doing business as Emterra Environmental for operation and maintenance of North Shore, North Surrey, and United Boulevard recycling and waste centres in the amount of \$61,481,000 (exclusive of taxes) and Contract 16-114 with GFL Environmental Inc. for operation and maintenance of Langley and Maple Ridge recycling and waste centres in the amount of \$7,553,000 (exclusive of taxes) to extend the two contracts until December 31, 2025. Contract extensions provide good value in the near-term, and allow for procurement processes for new long-term contracts that will be effective in 2026. During the extension period Metro Vancouver will work with Emterra Environmental and GFL Environmental to test low carbon/zero emission transport trucks and onsite mobile equipment.

Recycling and waste centre operating and maintenance costs are funded from tipping fees paid by all regional solid waste system users. The cost of the contract extensions can be accommodated within the tipping fee projections included in the 2023-2027 five-year financial plan endorsed by the Board in October 2022.

PURPOSE

The purpose of this report is to recommend that the GVS&DD Board (the Board) approve two-year extensions to agreements with Halton Recycling Ltd. doing business as Emterra Environmental and GFL Environmental Inc. for operation and maintenance of the North Shore, North Surrey, United Boulevard, Maple Ridge, and Langley recycling and waste centres.

Pursuant to the *GVS&DD Officers and Delegation Bylaw No. 284, 2014* and the *Procurement and Real Property Contracting Authority Policy*, procurement contracts that exceed a value of \$5 million require the approval of the Board.

BACKGROUND

Following a competitive procurement process in 2016 the Board approved contracts as follows:

- Contract 16-071 with Emterra Environmental for operation and maintenance of the North Shore, North Surrey, and Coquitlam recycling and waste centres; and
- Contract 16-114 with SSG Holdings (subsequently acquired by GFL Environmental) for operation of Maple Ridge and Langley recycling and waste centres.

These contracts expire on December 31, 2023, but allow for an extension of up to two additional years.

RECYCLING AND WASTE CENTRE OPERATION AND MAINTENANCE SERVICES CONTRACTS**Original Contract Details**

The contract with Emterra Environmental for the operation and maintenance of the North Shore, North Surrey, and Coquitlam recycling and waste centres, had an original contract value of \$115,608,000 (exclusive of taxes). The Board subsequently approved amending the contract to include operation and maintenance of the United Boulevard Recycling and Waste Centre that replaced the Coquitlam Recycling and Waste Centre in 2022. The contract with GFL Environmental for the operation and maintenance of Langley and Maple Ridge recycling and waste centres had an original contract value of \$17,677,000 (exclusive of taxes). Each contract includes escalation provisions tied to price indexes.

Proposed Contract Extensions

Emterra Environmental submitted a proposal to extend Contract 16-071 for operation and maintenance of the North Shore, North Surrey, and United Boulevard recycling and waste centres by two years. The Emterra Environmental proposal includes a one-time price adjustment of approximately 7.4%, in addition to contract specified increases tied to price indexes. The increase is largely due to increased costs for garbage transportation subcontractors: subcontractors integral to the operation of the recycling and waste centres.

GFL Environmental also submitted a proposal to extend Contract 16-114 for operation and maintenance of the Maple Ridge and Langley recycling and waste centres by two years. The GFL Environmental proposal includes a one-time price adjustment of approximately 4.1%, in addition to contract specified increases tied to price indexes. The GFL Environmental contract increase is less than the Emterra Environmental increase as the proportion of garbage transportation costs for the

GFL Environmental contract is less than the Emterra Environmental contract. Maple Ridge and Langley recycling and waste centres receive only hand-unloaded small loads; as such, the quantities of garbage requiring transportation are proportionally less than for the larger facilities operated by Emterra Environmental.

Extending the current contracts provides good value in the near term, and allows for procurement processes that will be initiated in 2024 for new long-term contracts for the operation and maintenance of the recycling and waste centres. The process is expected to be designed to continue to have at least two contractors operating recycling and waste centres on Metro Vancouver's behalf. This approach increases the robustness of the recycling and waste centre network and helps to maximize competition in delivering these services.

Testing of Low Carbon/Zero Emission Transport Trucks and Mobile Equipment

Emissions associated with transporting waste within the region and to remote disposal sites, and from onsite mobile equipment, represent a significant portion of Metro Vancouver's corporate carbon emissions. Extending the Emterra Environmental and GFL Environmental contracts will allow for the testing of low carbon/zero emission trucks and onsite equipment. Heavy duty electric trucks are just coming onto the market and two additional years to test these vehicles along with on-site mobile electric equipment will allow low carbon/zero emission trucking/equipment requirements to be integrated into the next procurement process.

ALTERNATIVES

1. 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.
2. That the GVS&DD Board not approve amendments to Contract 16-071 and Contract 16-114 to extend the contract terms by two years and direct staff to report back to the GVS&DD Board with alternate options.

FINANCIAL IMPLICATIONS

If the Board approves Alternative 1, amending Contract 16-071 with Emterra Environmental for operation and maintenance of the North Shore, North Surrey, and United Boulevard recycling and waste centres and Contract 16-114 with GFL Environmental for operation and maintenance of the Maple Ridge and Langley recycling and waste centres, the contract terms will be extended by two years, until December 31, 2025.

The estimated value of the two-year extension for Contract 16-071 with Emterra Environmental is \$61,481,000 and the estimated value for the two-year extension for Contract 16-114 with GFL Environmental is \$7,553,000. The estimated contract extension values are based on existing contractual rates, estimated waste tonnages, estimated annual inflation adjustments, and one-time contract price increases.

Recycling and waste centre operating and maintenance costs are funded from tipping fees paid by all regional solid waste system users. The cost of the contract extensions can be accommodated within the tipping fee projections included in the 2023-2027 five-year financial plan endorsed by the Board in October 2022.

CONCLUSION

Operation and maintenance services contracts for five of Metro Vancouver's recycling and waste centres expire on December 31, 2023. Proposals from the two current contractors were received to extend the contracts by two years. Staff recommend that the Board approve and authorize the Commissioner and the Corporate Officer to execute amendments to Contract 16-071 with Emterra Environmental in the amount of \$61,481,000 (exclusive of taxes) and Contract 16-114 with GFL Environmental in the amount of \$7,553,000 (exclusive of taxes) to extend the two contracts until December 31, 2025.

58075238

To: Caucus of Committee Chairs

From: Cheryl Nelms, General Manager, Project Delivery

Date: June 19, 2023 Meeting Date: June 26, 2023

Subject: **North Shore Wastewater Treatment Plant Program - Program Overview and Background**

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”.

EXECUTIVE SUMMARY

As a response to Board member requests, staff have been providing standing committees with background information on the North Shore Wastewater Treatment Plant Program including the Liquid Waste and Finance Committees. This report provides the same information to the Caucus of Committee Chairs, with the intent of forwarding the information to the GVS&DD Board.

PURPOSE

To provide the Caucus of Committee Chairs and GVS&DD Board with background information on the North Shore Wastewater Treatment Plant Program.

BACKGROUND

At a recent Board meeting, members requested that staff provide background information on the North Shore Wastewater Treatment Plant project in advance of next stage gate decision making. This report provides that information.

CONTEXT

Cheryl Nelms will be providing a verbal update to the Caucus of Committee Chairs on the North Shore Wastewater Treatment Plant Program – Program Overview and Background at the June 26, 2023 meeting. The presentation slide deck for this update is attached.

ALTERNATIVES

This is an information report; no alternatives are provided.

FINANCIAL IMPLICATIONS

There are no financial implications to this report.

CONCLUSION

At a recent Board meeting, members requested that staff provide background information on the North Shore Wastewater Treatment Plant project in advance of the next stage gate decision. This report provides that information.

Attachment

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

60707156



Architectural Rendering of NSWWTP

North Shore Wastewater Treatment Plant Program

PROGRAM OVERVIEW AND BACKGROUND

Cheryl Nelms, P.Eng., Ph.D.

General Manager, Project Delivery

Caucus of Committee Chairs – June 26, 2023
60716526

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metrovancouver

AGENDA

- Program Overview
- Project History & Background
- Termination & Transition
- Activities Since Transition
- Next Steps



Program Overview

NSWWTP Site, Apr 2023



WHY ARE WE BUILDING THE NORTH SHORE WASTEWATER TREATMENT PLANT?

- Regulatory requirement to upgrade to secondary treatment
- Return Lions Gate WWTP lands to Squamish Nation

NSWWTP Architectural Rendering

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REGULATORY REQUIREMENT

Upgrade to Secondary

- Federal Wastewater Systems Effluent Regulation (2012) required upgrade to secondary by end of 2020
- Requirement of 2011 Liquid Waste Management Plan, approved by provincial Minister of Environment



Lions Gate WWTP and Lions Gate Bridge, 2013

NORTH SHORE WASTEWATER TREATMENT PLANT PROGRAM



WHY THIS LOCATION WAS SELECTED

Site Location



NSW WTP Site aerial, April 2023

NSW WTP Site aerial, April 2023

CONVEYANCE PROJECT – NOW COMPLETE

Includes Pump Station and 3km of Conveyance Pipes



Completed on time, on budget

First Narrows Pump Station, 2022

Project | 2023 Municipal & Civil Infrastructure | 2023 Winner

 2023 Award of Merit

First Narrows Pump Station Design-Build

WSP Canada



AWARDS OF EXCELLENCE

General Contractors – \$20 Million to \$50 Million

Kenaidan Contracting Ltd.

North Shore Wastewater Treatment Plant Conveyance Project

TREATMENT PLANT



DESIGN POPULATION

2014 Project Definition Report

- On track to meet design population targets
- Design population of ~250,000 people, to 2050
- Expandable in the future

Design team monitoring growth projections and flows/loads

TERTIARY TREATMENT

- Added in 2019
- Improves effluent quality
- Protects the Salish Sea
- Future-proofs the plant
- Ensures regulatory requirements are met



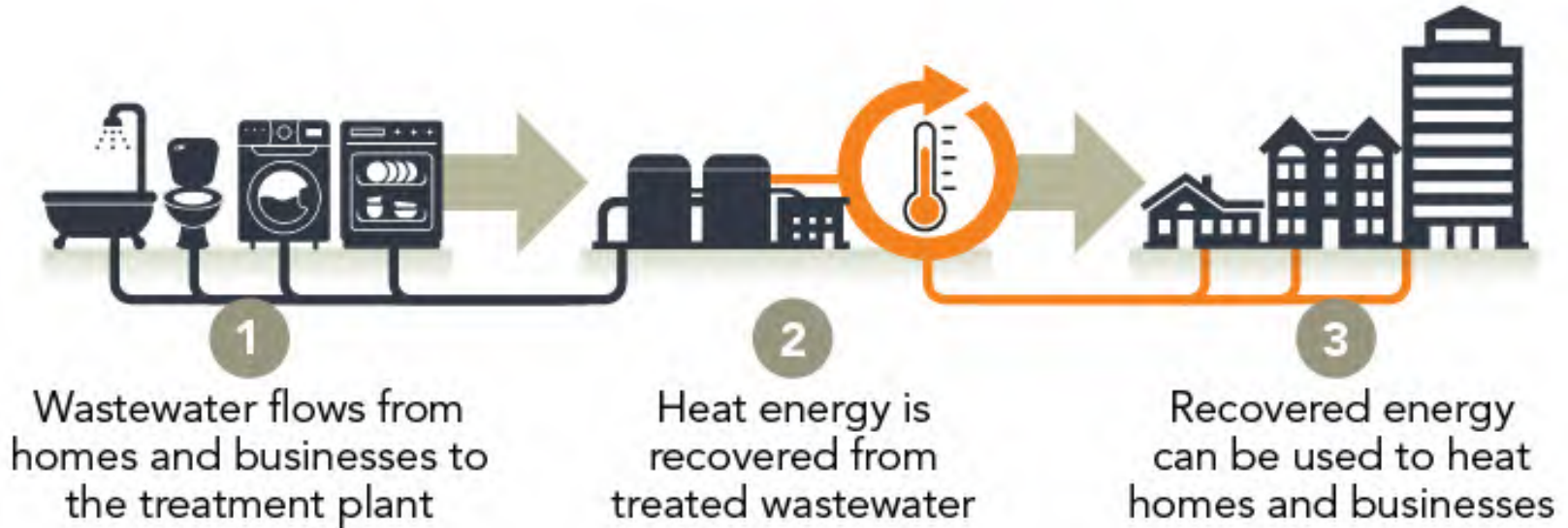
Coho Salmon Fry



Orca

DISTRICT ENERGY SYSTEM

Will provide 5,700 tonnes GHG reduction credits to Metro Vancouver



CLIMATE ACTION, RESILIENCE, AND ENVIRONMENTAL PROTECTION FEATURES

- Leadership in Energy and Environmental Design (LEED) Gold
- ENVISION Gold certification
- Reclaimed water
- Meet seismic standards
- Biogas cogeneration used to produce heat and power for plant



NSWWTP Architectural Rendering
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COMMUNITY INTEGRATION & AMENITIES



NSWWTP Architectural Rendering

NSWWTP Site aerial, April 2023

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INNOVATIVE USE OF SPACE



NSWWTP Architectural Rendering

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SQUAMISH NATION



Skwxwú7mesh Úxwumixw
Squamish Nation
Xwemelch'stn
Capilano Reserve

NSWWTP Site, May 2023

Conveyance pipe alignment, Oct 2022

INITIATIVES AT LIONS GATE WWTP

- Still operational
- Working with regulators
- Reduce influent loading
- Improve quality of effluent discharged to Burrard Inlet
- Operating strategy changes
- Treatment technology improvements
- Public education initiatives

metrovancover

Get just
as clean
with less



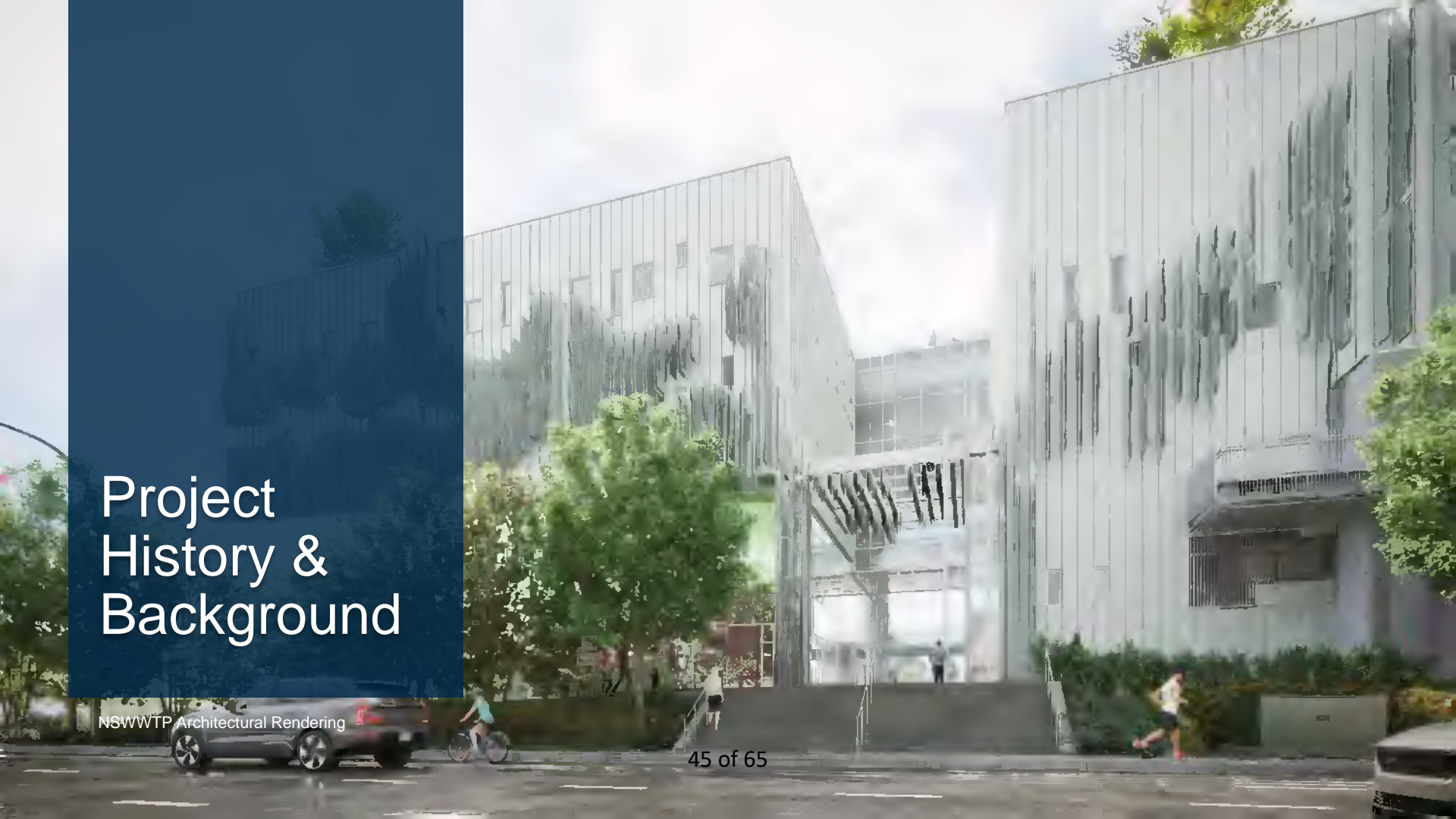
Managing Soaps and Detergents Campaign, 2022



LGWTP Aerial, 2017

Project History & Background

NSWWTP Architectural Rendering



PROJECT TIMELINE

**2012 to
2014**

Indicative
Design &
Project
Definition
completed



**2017 to
2018**

\$405 M in
funding
received

Award to
Acciona

WWTP
construction
starts

Ground
improvements

**2019 to
2020**

Stop work
order

Acciona
contractual
issues

Tertiary
treatment
added

COVID-19

2021

Updated cost
\$1.058 B &
schedule (end
of 2023)

Acciona layoffs

MV loses
confidence in
Acciona

Termination
notice issued

2022

Acciona
terminated

PCL becomes
Construction
Manager

AECOM
becomes
Designer

Early works
begin

2023

Project
execution
Planning

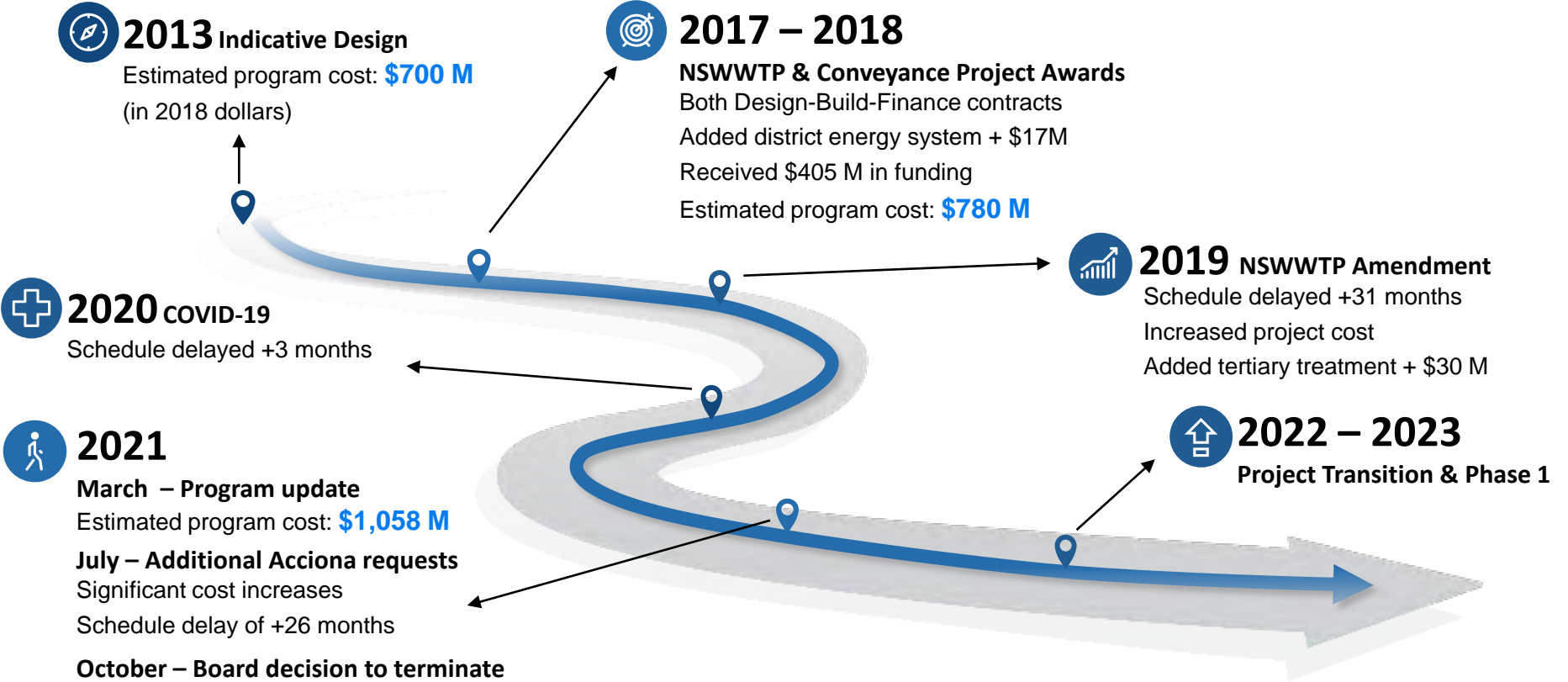
Early works
continue

Addressing
design &
construction
deficiencies

*Community Engagement
(Planning)*

Community Engagement (Design & Construction) - Ongoing

PROGRAM COSTS





Termination & Transition

Power Distribution & Disinfection Buildings, Apr 2023

REASONS FOR ACCIONA TERMINATION

June to September 2021

June 2021

- Already 2.5 years behind schedule with increased cost
- Acciona informed GVS&DD it would take 2+ more years to complete
- Asked for a further budget increase (almost double the original contract price)

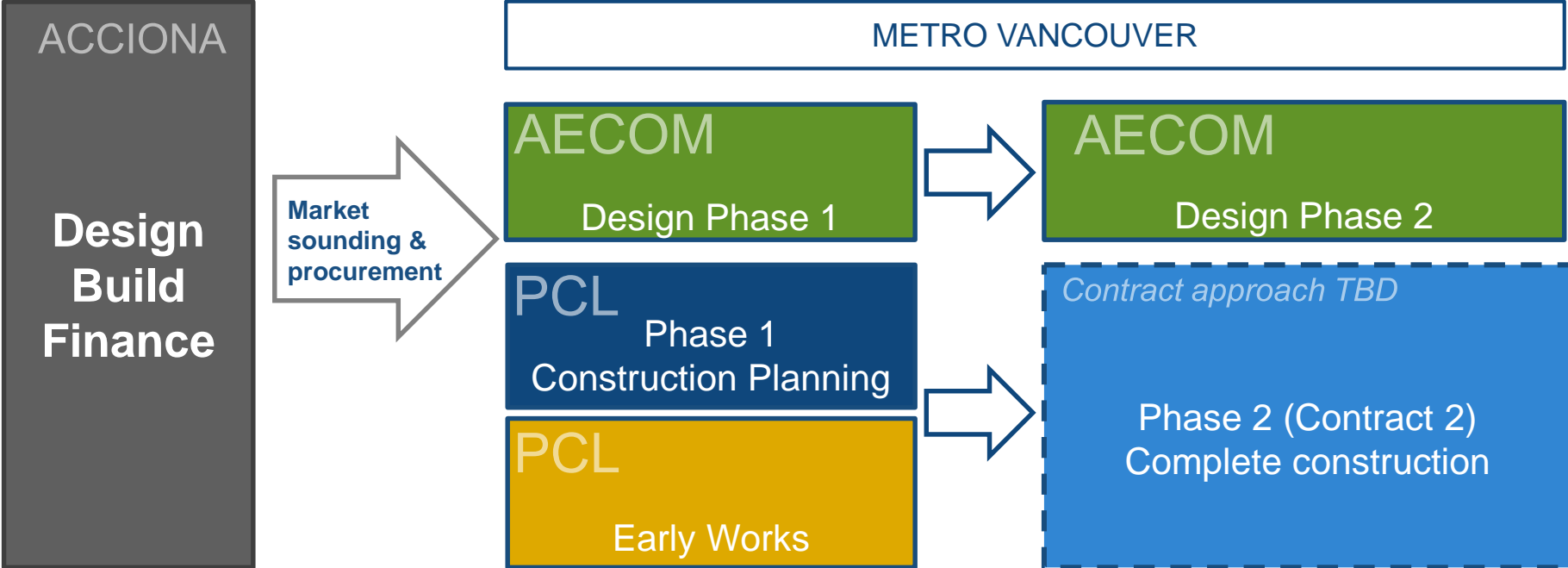
September 2021

- Without warning, Acciona laid off majority of staff working on the project

Acciona underperformed and consistently failed to meet its contractual obligations, causing Metro Vancouver to lose confidence in Acciona's ability to deliver the project.

PROJECT DELIVERY MODEL

Transition from Termination



OVERSIGHT & GOVERNANCE

- Metro Vancouver staff oversight, monitoring the quality of deliverables, ensuring quality management systems are in place and adhered to
- Expert Advisory Panel
- Project controls
 - Requirements included in contract language
- Integrated project team
- Standard process for early identification and addressing of concerns
- Monthly progress reports from AECOM and PCL
- Monthly project administration meetings
- Metro Vancouver review reports, invoices, staff hours & positions, etc

EXPERT ADVISORY PANEL

Purpose

To provide an objective third-party lens on proposed recommendations

Members

- **Frank Margitan** – Retired GM, Kiewit
- **John Herbert** – Retired Senior VP, Jacobs
- **Greg Lewis** – Retired Partner, Norton Rose Fulbright LLP
- **Jane Bird** – Director, Canada Infrastructure Bank; Senior Business Advisor, Bennett Jones LLP
- **Don Fairbairn** – President, DCF Consulting
- **Dana Hayden** – Chair, Infrastructure BC

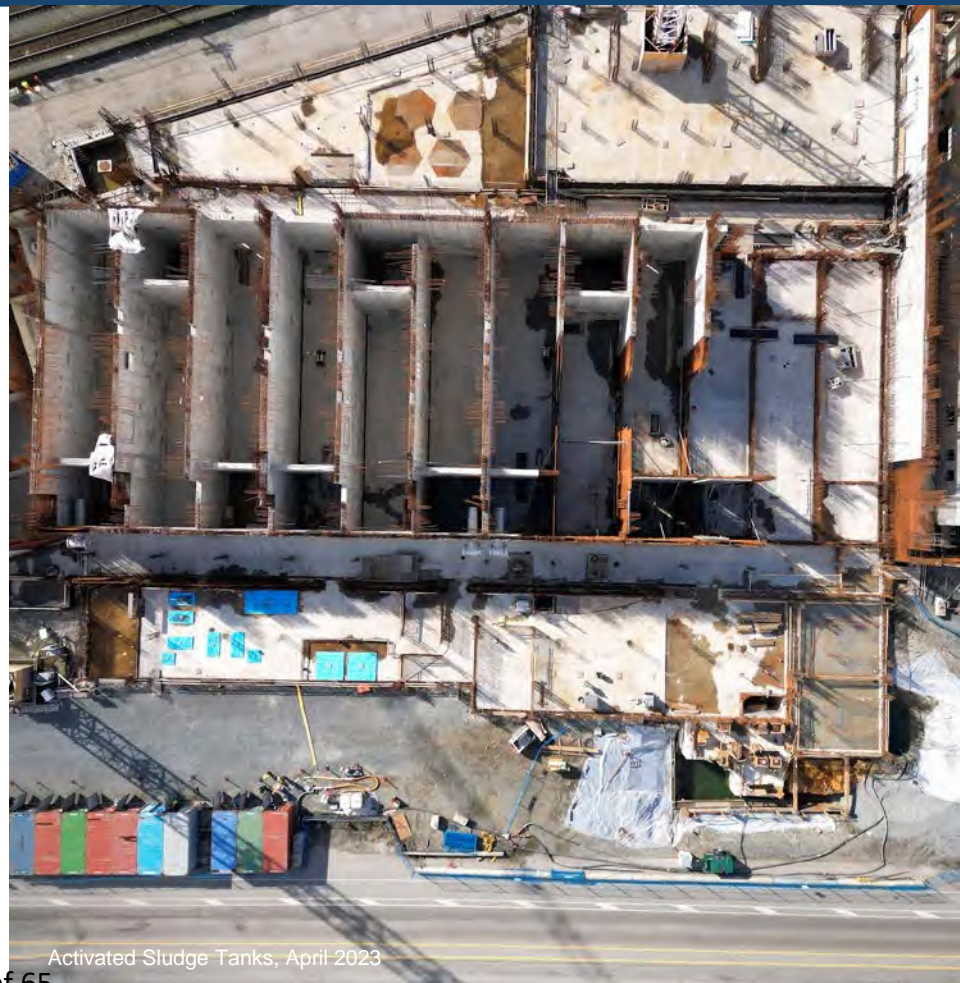
Activities Since Transition

NSWWTP Architectural Rendering



ACTIVITIES SINCE TRANSITION

- Due diligence review of existing design & construction
- Developing project execution plan, cost estimate, and schedule
- Correction of design deficiencies and non-compliances
- Advancing detailed design
- Early Works construction (including ongoing concrete deficiencies repairs)



Activated Sludge Tanks, April 2023

CONCRETE DEFICIENCIES



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CONCRETE DEFICIENCIES



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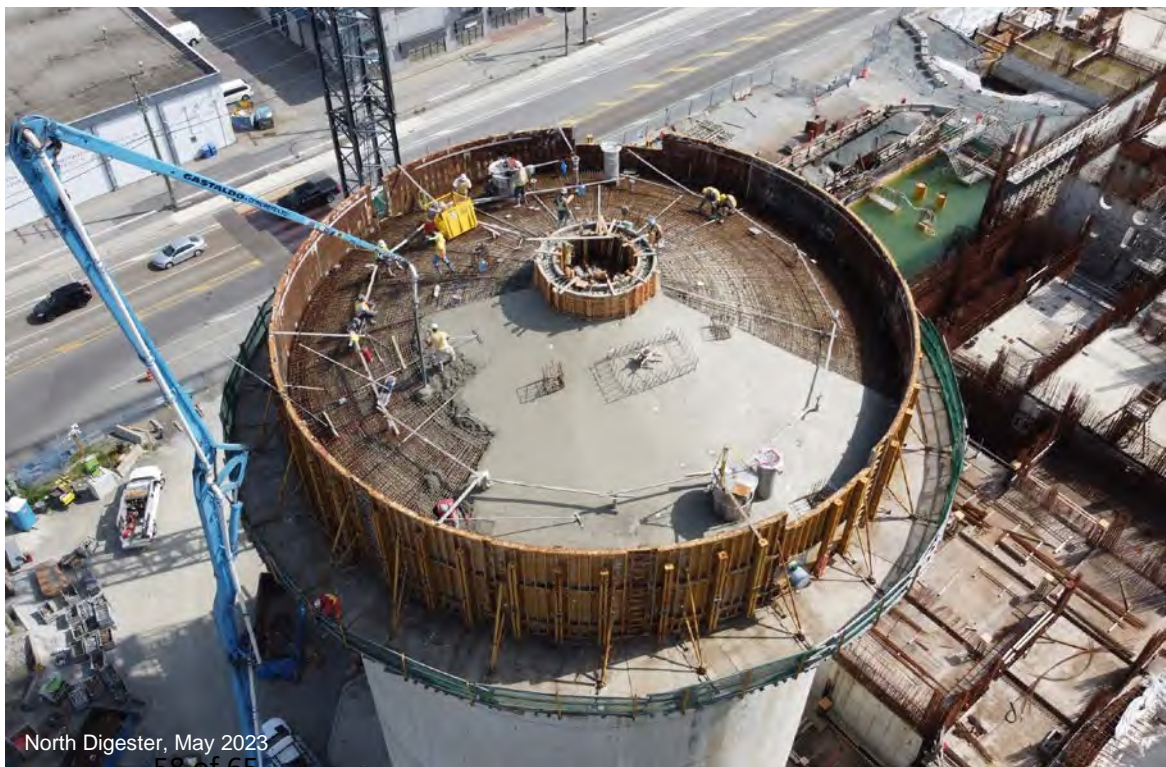
CONCRETE DEFICIENCIES



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CONSTRUCTION PROGRESS NOW UNDERWAY

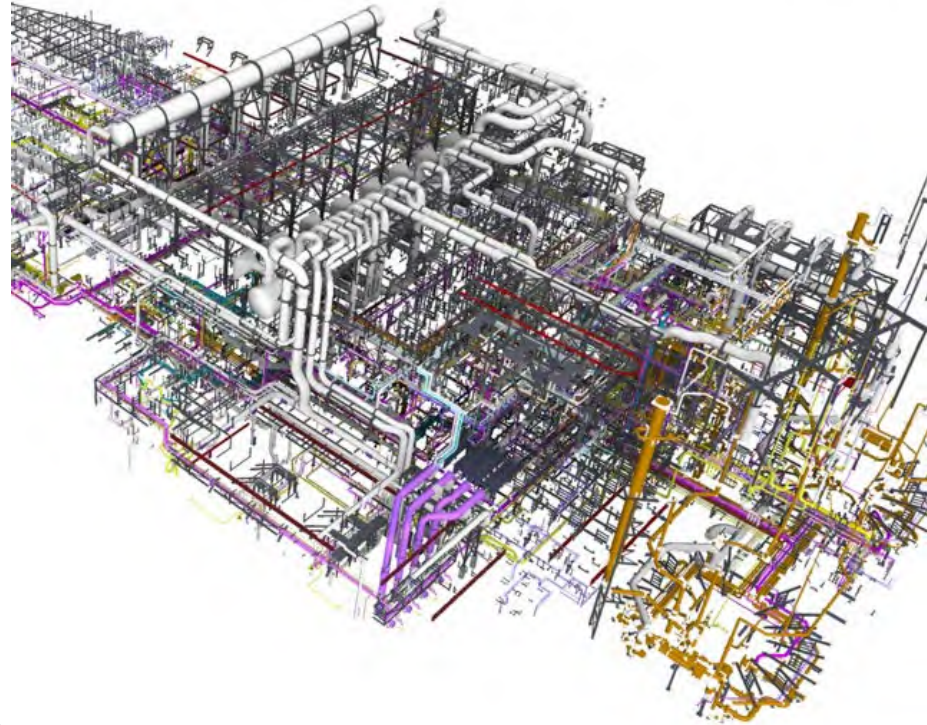
Early Works - Concrete



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DESIGN DEFICIENCIES

- Now that we have complete oversight, we have full access to identify and repair the deficiencies
- ~1,200 conflicts identified in the model
- Model had to be recreated
- Design communicated as 80% complete prior to termination



CURRENT STATUS: DESIGN PROGRESS

NORTH VANCOUVER



-  90% design complete (4 of 14)
-  90% design in progress



North Shore Wastewater Treatment Plant Project

April 2023

About the Project

Metro Vancouver is building the North Shore Wastewater Treatment Plant to replace the current Lions Gate Wastewater Treatment Plant. This new treatment facility is being built to serve 250,000 residents and businesses on the North Shore and will provide tertiary treatment to better protect the environment. The project is located on West 1st Street, between Philip and Pemberton Avenues, in the District of North Vancouver (see map below for location).

[Visit the project webpage to learn more](#)



Senior Municipal Finance Staff Site Tour, Nov 2022

ENGAGEMENT & COMMUNICATIONS

- Member jurisdictions
- Squamish Nation
- BC Hydro, Fortis
- Business and industry neighbours
- Community and public
- Construction impact mitigation

An aerial photograph of an industrial site, likely a water treatment plant, situated along a large body of water. The site is filled with various structures, including large cylindrical tanks, rectangular buildings, and extensive parking lots. In the background, a city skyline is visible across the water. A semi-transparent blue vertical bar is overlaid on the left side of the image, containing the text 'Next Steps'.

Next Steps

NSWWTP Site Aerial

NEXT STEPS

June

- Site Tours
- Liquid Waste Committee, Finance Committee, Caucus of Committee Chairs
- GVS&DD Board

July

- Updates
 - Liquid Waste Committee & Finance Committee
 - Caucus of Committee Chairs
 - GVS&DD Board



NSWWTP Architectural Rendering

Discussion

COMMITTEE INFORMATION ITEMS AND DELEGATION SUMMARIES

Greater Vancouver Sewerage and Drainage District
Board Meeting Date – Friday, June 30, 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 – June 15, 2023*Delegations:*

No delegations presented

Information Items:

- 5.2 Illegal Dumping Update and Gypsum Management in Metro Vancouver
- 5.3 Waste-to-Energy Facility 2022 Financial Update
- 5.4 2023 Regional Clothing Waste Reduction Campaign Results

60421335