AGENDA

1. ADOPTION OF THE AGENDA
   1.1 June 18, 2020 Regular Meeting Agenda
      That the Water Committee adopt the agenda for its regular meeting scheduled for
      June 18, 2020 as circulated.

2. ADOPTION OF THE MINUTES
   2.1 April 30, 2020 Regular Meeting Minutes
      That the Water Committee adopt the minutes of its regular meeting held
      April 30, 2020 as circulated.

3. DELEGATIONS

4. INVITED PRESENTATIONS

5. REPORTS FROM COMMITTEE OR STAFF

   5.1 2019 GVWD Dam Safety Program Annual Update
      Designated Speaker: Paul Kohl, Director, Operations and Maintenance, Water Services
      That the Water Committee receive for information the report dated May 27, 2020,
      titled “2019 GVWD Dam Safety Program Annual Update”.

   5.2 GVWD Watershed Wildfire Preparedness Update
      Designated Speakers: Kevin Brown, Superintendent, Watershed Protection, Water
      Services, and Mike Mayers, Division Manager, Watershed and Environmental
      Management, Water Services
      That the Water Committee receive for information the report dated May 26, 2020
      titled “GVWD Watershed Wildfire Preparedness Update”.

1 Note: Recommendation is shown under each item, where applicable.
5.3 Award of Contract Resulting from Tender No. 20-021: Construction of Kennedy Newton Main 72nd to 63rd Avenue

Designated Speakers: Roy Moulder, Director, Purchasing and Risk Management, Financial Services, and Goran Oljaca, Director, Engineering and Construction, Water Services

That the GVWD Board:

a) approve the award of a contract in the amount of $18,860,000 (exclusive of taxes) to Pedre Contractors Ltd. resulting from Tender No. 20-021: Construction of Kennedy Newton Main 72nd to 63rd Avenue, 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.

5.4 Manager’s Report

Designated Speaker: Marilyn Towill, General Manager, Water Services

That the Water Committee receive for information the report dated June 4, 2020 titled “Manager’s Report”.

6. INFORMATION ITEMS

6.1 Correspondence dated May 5, 2020 from Minister of Municipal Affairs and Housing, Selina Robinson, to MVRD Chair Sav Dhaliwal regarding a request to amend the Greater Vancouver Water District Act to enable the use of Development Cost Charges (DCCs).

6.2 Correspondence dated December 16, 2019 to Honourable Selina Robinson from Chair Sav Dhaliwal regarding Development Cost Charges in the Greater Vancouver Water District Act.

7. OTHER BUSINESS

8. BUSINESS ARISING FROM DELEGATIONS

9. RESOLUTION TO CLOSE MEETING

10. ADJOURNMENT/CONCLUSION

That the Water Committee adjourn/conclude its regular meeting of June 18, 2020.
Membership:

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<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Location</th>
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<tr>
<td>Brodie, Malcolm</td>
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<td>Elford, Doug</td>
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<td>Belenkie, Neil</td>
<td>- Belcarra</td>
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<td>Bell, Don</td>
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<td>Bligh, Rebecca</td>
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<td>Froese, Jack</td>
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<td>Guichon, Alicia</td>
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<td>Svendsen, Ryan</td>
<td>- Maple Ridge</td>
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Water Committee
Minutes of the Regular Meeting of the Metro Vancouver Regional District (MVRD) Water Committee held at 9:00 a.m. on Thursday, April 30, 2020 in the 28th Floor Boardroom, 4730 Kingsway, Burnaby, British Columbia.

MEMBERS PRESENT:
Chair, Mayor Malcolm Brodie, Richmond
Vice Chair, Councillor Doug Elford, Surrey*
Councillor Brent Asmundson, Coquitlam*
Chief Ken Baird, Tsawwassen*
Mayor Neil Belenkie, Belcarra*
Councillor Don Bell, North Vancouver City*
Councillor Rebecca Bligh, Vancouver*
Mayor Bill Dingwall, Pitt Meadows*
Mayor Jack Froese, Langley Township*
Councillor Alicia Guichon, Delta*
Councillor Joe Keithley, Burnaby
Mayor John McEwen, Anmore*

MEMBERS ABSENT:
Councillor Ryan Svendsen, Maple Ridge

STAFF PRESENT:
Marilyn Towill, General Manager, Water Services
Jerry W. Dobrovolny, Chief Administrative Officer
Janis Knaupp, Legislative Services Coordinator, Board and Information Services

1. ADOPTION OF THE AGENDA

1.1 April 30, 2020 Regular Meeting Agenda

It was MOVED and SECONDED
That the Water Committee adopt the agenda for its regular meeting scheduled for April 30, 2020 as circulated.

CARRIED

*denotes electronic meeting participation as authorized by Section 3.6.2 of the Procedure Bylaw
2. **ADOPTION OF THE MINUTES**

   2.1 **March 5, 2020 Regular Meeting Minutes**

   **It was MOVED and SECONDED**
   That the Water Committee adopt the minutes of its regular meeting held March 5, 2020 as circulated.

   **CARRIED**

3. **DELEGATIONS**

   No items presented.

4. **INVITED PRESENTATIONS**

   No items presented.

5. **REPORTS FROM COMMITTEE OR STAFF**

   5.1 **GVWD 2019 Water Quality Annual Report**
   Report dated April 6, 2020 from Larry Chow, Program Manager, Quality Control, Water Services, providing a summary of the GVWD 2019 Water Quality Annual Report.

   Members were provided with a presentation on the GVWD 2019 Water Quality Annual Report highlighting source water quality, Seymour Capilano Filtration Plant, Guidelines for Canadian Drinking Water Quality, Coquitlam Water Treatment Plant, distribution system water quality, disinfection by-products and conclusions.

   Presentation material titled “GVWD 2019 Water Quality Annual Report” is retained with the April 30, 2020 agenda.

   **It was MOVED and SECONDED**
   That the Water Committee receive for information the report dated April 6, 2020, titled “GVWD 2019 Water Quality Annual Report”.

   **CARRIED**

   5.2 **Water Supply Forecast and Water Consumption Update for Summer 2020**
   Report dated April 7, 2020 from Paul Kohl, Director, Operations and Maintenance and Lucas Pitts, Acting Director, Policy, Planning and Analysis, Water Services, providing an annual update on the current water supply and consumption situation in advance of the approaching summer peak demand period.

   In response to questions, members were informed about staff efforts to monitor water consumption and water use trends, as well as construction industry trends as they relate to regional capital projects.

   **CARRIED**
Members were informed staff will report back to the Committee with a comparison of water use rates and wholesale water rates for other similar jurisdictions.

**It was MOVED and SECONDED**  
That the Water Committee receive for information the report dated April 7, 2020, titled “Water Supply Forecast and Water Consumption Update for Summer 2020”.  
**CARRIED**

### 5.3 Water Services Capital Program Expenditure Update to December 31, 2019


Members were provided with a presentation on the Water Services Capital Program Expenditures update to December 31, 2019 highlighting Second Narrows Water Supply Tunnel, E2 Shaft Replacement Project (horizontal drains), debris flow mitigation works in Mackay and Grouse Creeks, Whalley Main, Sunnyside Reservoir No. 1 seismic upgrade, and Douglas Road Main No. 2 (Vancouver Heights).

Presentation material titled “Capital Expenditure Summary Project Update” is retained with the April 30, 2020 agenda.

**It was MOVED and SECONDED**  
That the Water Committee receive for information the report dated April 17, 2020, titled “Water Services Capital Program Expenditure Update to December 31, 2019”.  
**CARRIED**

### 5.4 Award of Detailed Design Services, Cape Horn Section Resulting from RFP No. 18-101: Coquitlam Main No. 4 – South and Cape Horn Sections – Detailed Design, Construction and Commissioning Consulting Services

Report dated April 20, 2020 from Roy Moulder, Director, Purchasing and Risk Management, Financial Services, and Goran Oljaca, Director, Engineering and Construction, Water Services, seeking GVWD Board approval to award a contract to CH2M Hill Canada Limited, in an amount up to $5,305,075 (exclusive of taxes), for detailed design of the Cape Horn Section of Coquitlam Main No. 4.

**It was MOVED and SECONDED**  
That the GVWD Board:  
a) approve the award of a contract for an amount of up to $5,305,075 (exclusive of taxes) to CH2M Hill Canada Limited for Detailed Design for Coquitlam Main No. 4 – Cape Horn Section, 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.

CARRIED

5.5 2020 Water Regulations Communications and Regional Water Conservation Campaign
Report dated April 1, 2020 from Larina Lopez, Division Manager Corporate Communications, External Relations, providing an update on regional communications to support the 2020 watering regulations and the regional water conservation campaign.

It was MOVED and SECONDED
That the Water Committee receive for information the report dated April 1, 2020, titled “2020 Watering Regulations Communications and Regional Water Conservation Campaign”.

CARRIED

5.6 Award of Phase C - Construction Engineering Services for the Annacis Water Supply Tunnel
Report dated April 20, 2020 from Roy Moulder, Director, Purchasing and Risk Management, Financial Services, Murray Gant, Division Manager, Major Projects, Water Services, seeking GVWD Board approval to award a contract to the Phase A and B project consultant, Hatch Corporation, in an amount up to $17,881,271 (exclusive of taxes), for the Annacis Water Supply Tunnel.

It was MOVED and SECONDED
That the GVWD Board:

a) approve the award of Phase C, Construction Engineering Services in the amount up to $17,881,271 (exclusive of taxes) to the Phase A and B project consultant, Hatch Corporation, for the Annacis Water Supply Tunnel (Request for Proposal No. 15-127), 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.

CARRIED

5.7 Manager’s Report
Report dated April 17, 2020 from Marilyn Towill, General Manager, Water Services, updating the Water Committee on the Nicomekl Sea Dam, Snowpack Monitoring and Upgrade Project, First Narrows Tunnel Isolation Improvements (North Shaft) project, and the Committee’s 2020 Work Plan.

In response to questions, members were updated on the cancellation of international conferences, and on the condition of infrastructure related to the First Narrows Tunnel isolation improvements project (North Shaft).
It was MOVED and SECONDED
That the Water Committee receive for information the report dated April 17, 2020, titled “Manager’s Report”.

CARRIED

6 INFORMATION ITEMS
No items presented.

7 OTHER BUSINESS
No items presented.

8 BUSINESS ARISING FROM DELEGATIONS
No items presented.

9 RESOLUTION TO CLOSE MEETING

It was MOVED and SECONDED
That the Water Committee close its regular meeting scheduled for April 30, 2020 pursuant to the Community Charter provisions, Section 90 (1) (e) as follows:

“90 (1) A part of the 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 board or committee considers that disclosure could reasonably be expected to harm the interests of the regional district.”

CARRIED

10 ADJOURNMENT/CONCLUSION

It was MOVED and SECONDED
That the Water Committee adjourn its regular meeting of April 30, 2020.

CARRIED
(Time: 9:44 a.m.)

Janis Knaupp, Legislative Services Coordinator

Malcolm Brodie, Chair

Legislative Services Coordinator
To: Water Committee

From: Paul Kohl, Director, Operations and Maintenance, Water Services

Date: May 27, 2020

Subject: 2019 GVWD Dam Safety Program Annual Update

RECOMMENDATION
That the Water Committee receive for information the report dated May 27, 2020, titled “2019 GVWD Dam Safety Program Annual Update”.

EXECUTIVE SUMMARY
GVWD owns and operates five drinking water supply dams that are regulated by the Ministry of Forests, Lands, Natural Resource Operations and Rural Development Dam Safety Branch. The Water Services Dam Safety Program is fully compliant with the requirements outlined in the Provincial Dam Safety Regulation (BC Reg. 40/2016) as required for all dam owners in British Columbia. There were no significant concerns identified from the 2019 routine surveillance, monitoring, or formal dam inspections.

PURPOSE
To provide the Water Committee with an annual update on dam safety activities associated with the Cleveland, Seymour Falls, Palisade, Burwell, and Loch Lomond dams.

BACKGROUND
The Water Services dam safety team monitors and reviews the performance of the five GVWD water supply dams to ensure they remain safe and continue to provide reliable sources of drinking water. A dam surveillance consultant is retained to carry out third party review and reporting on dam monitoring and inspection activities. The dam safety team supports the goals and initiatives of the Board Strategic Plan and Drinking Water Management Plan through contribution to the provision of clean, safe drinking water, and ensuring the long-term financial and functional resilience of the water supply dams.

GVWD WATER SUPPLY DAMS
Cleveland Dam and Seymour Falls Dam
Cleveland Dam (CLD) is a 92 m high concrete gravity dam that impounds Capilano Reservoir, while Seymour Falls Dam (SFD) is a 30 m high composite concrete and earthfill dam that impounds Seymour Reservoir. Both dams include outlets to release water downstream to their respective rivers, as well as water supply intakes to convey water for treatment at the Seymour Capilano Filtration Plant. The reservoir areas upstream of the dams are kept clear of debris with a series of booms, which float on the reservoir surface and prevent the passage of debris towards the dams.
Alpine Lake Dams
The Alpine Lake Dams range in height from 5.8 m to 8.2 m. Palisade and Burwell Dams are rockfill dams with concrete slabs on the upstream faces, while Loch Lomond Dam is a concrete dam. All three alpine lake dams include spillways and outlets that allow for the release of water to their respective downstream reservoirs. Palisade Lake discharges to the Capilano Reservoir, while Burwell and Loch Lomond Lakes discharge to the Seymour Reservoir. The Alpine Lakes are used to augment summertime demand from the two water supply reservoirs.

GVWD DAM SAFETY COMPLIANCE
Cleveland Dam and Seymour Falls Dam fall under the Extreme Consequence classification of the Provincial Dam Safety Regulation, while the three Alpine Lake Dams fall under the Significant Consequence classification. The following work was completed in 2019 to ensure continued compliance with the Dam Safety Regulation:

- Weekly site surveillance, at a minimum, was carried out at CLD and SFD, as required at Extreme Consequence dams.

- Monthly site surveillance is typically required at Significant Consequence dams, unless otherwise specified in the Operation, Maintenance, and Surveillance (OMS) Manual. The Alpine Lake Dams were inspected routinely by Metro Vancouver staff, as per the OMS Manual, between June and September only, due to their remote locations and winter helicopter access restrictions.

- Semi-annual formal inspections were carried out at CLD and SFD, as required for Extreme Consequence dams. Annual formal inspections were carried out at the Alpine Lake Dams, as required for Significant Consequence dams.

- Annual test operation of mechanical, electrical, and communication components were carried out at all five dams, as required for Extreme and Significant Consequence dams.

- Annual collection, analysis, and interpretation of readings from instrumentation is required for Extreme and Significant Consequence dams. CLD and SFD instrumentation readings were collected at various intervals from daily to annually. The data from instrumentation at the Alpine Lake Dams is reviewed at least annually.

- Annual review of contact information in the Emergency Response Plan (ERP), and if necessary, revision and submission to the Provincial Dam Safety Officer is required for Extreme and Significant Consequence dams. The internal and external contact information for all five dams was reviewed and re-submitted to the Dam Safety Officer in the winter of 2019.

- The OMS Manual and ERP for Extreme Consequence dams should be reviewed every seven years and revised and reported to the Dam Safety Officer, if necessary. The CLD and SFD documents were reviewed in the fall of 2019, and revised and submitted to the Dam Safety Officer.

- The OMS Manual and Ancillary Response Plan (ARP) for Significant Consequence dams should be reviewed every ten years and revised and reported to the Dam Safety Officer, if necessary. The
Alpine Lake Dams documents were last reviewed and reported in July 2016. The next review and submission should occur before July 2026. A review is in progress.

- A formal dam safety review should be carried out, with the report submitted to the Dam Safety Officer, every seven years for Extreme Consequence dams. The last dam safety reviews for CLD and SFD were completed in 2016 and 2014, respectively, and the next reviews will be carried out in 2023 and 2021. No unsafe or unacceptable conditions in relation to the design, construction, or operation were identified for either dam.

- A formal dam safety review is not required for Significant Consequence dams. Regardless, a dam safety review was carried out for the Alpine Lake Dams in 2012, with results indicating the dams are being operated and maintained in a satisfactory manner. Another dam safety review will be carried out following completion of on-going assessments and related follow-up activities.

**ALTERNATIVES**
This is an information report. No alternatives are presented.

**FINANCIAL IMPLICATIONS**
There are no financial implications arising from this report.

**CONCLUSION**
The Water Services Dam Safety Program is compliant with all dam safety regulatory requirements and continues to meet or exceed requirements of the Provincial Dam Safety Regulation. No significant concerns were identified by the Metro Vancouver Dam Safety team or dam surveillance consultant from the 2019 routine surveillance, monitoring, or formal dam inspections.

**Attachment**
Photos of the GVWD Water Supply Dams

38029046
To: Water Committee
From: Kevin Brown, Superintendent, Watershed Protection, Water Services
Mike Mayers, Division Manager, Watershed and Environmental Management, Water Services
Date: May 26, 2020
Meeting Date: June 18, 2020
Subject: GVWD Watershed Wildfire Preparedness Update

RECOMMENDATION
That the Water Committee receive for information the report dated May 26, 2020 titled “GVWD Watershed Wildfire Preparedness Update”.

EXECUTIVE SUMMARY
Metro Vancouver provides clean, safe drinking water to 2.7 million residents. An integral component of this service is management of the forested lands surrounding Capilano, Seymour and Coquitlam Reservoirs. These water supply lands are closed to the public for protection from pollution and fire, and to ensure they are solely used for drinking water supply.

The watersheds have a historically low incidence of fire due in large part to these restrictions. Consequently, the primary cause of fire is from lightning strikes during periods of high fire danger. Most fires are extinguished quickly and without incident due to rapid discovery made possible by real-time lightning detection, staff patrols, local air traffic, and public reports.

The Water Services Protection Program (Protection Program) has staff with expertise in wildfire management, equipment available for strategic deployment, resource sharing agreements, and monitoring stations ready for the 2020 fire season.

PURPOSE
To provide the Water Committee with an annual update on watershed wildfire preparedness in advance of the 2020 fire season.

BACKGROUND
A watershed is a geographic term to describe a water collection and drainage area from mountain top to convergence with another larger body of water. The Capilano, Seymour and Coquitlam watersheds collect and drain water from mountain ridgetops to Burrard Inlet and the Fraser River respectively. The GVWD water supply areas encompass the mid and upper portions of the Capilano, Seymour, and Coquitlam watersheds and include approximately 60,000 ha of forested lands. Access into these lands is protected and limited through the Watershed Access Policy. The principle of protecting the watersheds by restricting access is a fundamental component of the multiple barrier approach to drinking water quality protection.
The requirements for fire protection on GVWD’s watershed lands dates back to the 1927 and 1942 provincial crown land leases. These 999-year leases require Metro Vancouver to protect the lands from wildfire and retain qualified and trained staff for this purpose.

Historically, in the 1920s and 1930s, the watersheds, particularly Seymour and Capilano, experienced large scale, human caused fires due to industrial activities. As the GVWD policy enforcing restricted access came into effect, the primary cause of wildfires shifted to lightning strikes. The Protection Program responded by implementing a system that decreased response times and increased effectiveness in fighting these types of fires. The current Protection Program, based on an Initial Attack (IA) model, utilizes three-person IA fire crews, in conjunction with helicopters, for rapid deployment of resources to fire sites. In addition, Metro Vancouver maintains a resource sharing agreement with the BC Wildfire Service that ensures seamless communications with the Province and allows for additional resource requests should they be needed.

In addition to providing wildfire response within the three water supply areas and the Lower Seymour Conservation Reserve (LSCR), the GVWD Protection Program is also the primary wildfire response for Electoral Area A, and assists the Greater Vancouver Regional District Parks system as required.

WATERSHED WILDFIRE PREPAREDNESS

Preparedness
The Protection Program currently has two dedicated three-person IA fire crews and approximately 40 additional Watershed and Environmental Management (WEM) staff trained to a basic fire response level. Drills of varying complexity are conducted throughout the season to maintain proficiency in fire response skill sets and to ensure equipment readiness.

Equipment
For mobile deployment, the Protection Program maintains one dedicated IA truck that is supported by two 4-wheel drive water tankers. These vehicles are staged in North Vancouver and Coquitlam as the fire danger increases within the watershed lands.

The majority of wildfire response equipment (pumps, hoses, hand tools) is stored at the Bone Creek Operations Centre in the LSCR, with strategic cache locations in each watershed.

Lightning strike fires often occur in steep terrain inaccessible by vehicle. Helipads, strategically located throughout the water supply lands, are maintained to support the initial air attack of emerging wildfire in these situations. An annual helicopter use contract for fire response and other operations is managed by Water Services. This contract ensures necessary helicopter resources are available throughout the busy fire season.

Resource Sharing Agreement
Metro Vancouver maintains an agreement with the BC Wildfire Service (BCWS) in which fire-fighting resources are shared between both parties. This agreement is the basis for a strong and positive relationship which is of great benefit to both groups when assistance is required. Metro Vancouver crews routinely backfill BCWS resource shortfalls throughout the Coastal Fire Centre and, as required, BCWS crews can be stationed at the Bone Creek Operations Centre to provide additional support to
GVWD response efforts. This arrangement has been in place since 1997 and has been effective for regional response to fire situations.

Interagency Preparedness
Staff work with various municipal partners, including the North Shore Interface Wildfire Working Group, Coquitlam Fire & Rescue, and the Metro Vancouver Wildfire Conditions Task Group, to ensure preparedness and coordinated response across the region. Groups meet throughout the fire season to discuss communications, planning, specific critical issues, drills, and equipment availability.

A recent initiative between District of North Vancouver Fire & Rescue Services and Metro Vancouver focused on cross training opportunities, situational awareness, and sharing equipment; resulting in strengthened wildfire preparedness for both the watershed lands and local forested public areas.

Monitoring
Water Services staff carry out extensive fire weather monitoring and publish a weekly Fire Weather Report. This report utilizes data from eight weather stations located throughout the water supply lands and the Metro Vancouver region. Municipal fire chiefs, regional/municipal parks staff, and the emergency planning community rely on this information to determine the fire danger rating for their jurisdictions and the appropriate public activity restrictions.

Staff continue to investigate and monitor the current state of forest health within the watersheds and to track changes over time associated with climate change. Working with neighbouring watershed managers in the Pacific Northwest, a shared goal is to better understand wildfire and water quality implications from changing forest health trends.

Interface Areas and Fuels Management
Forest fuel management along the residential interface areas of the Capilano Watershed (British Properties) have been completed and are now in a maintenance phase. Interface fuel management for Seymour and Coquitlam falls to other jurisdictions. Other interface areas, including around Water Treatment facilities, are inspected on an annual basis and maintenance treatments (pruning, brushing, etc.) are used as required.

ALTERNATIVES
This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS
There are no financial implications.

CONCLUSION
Although the extent, duration, and intensity of the 2020 fire season is unknown, the Protection Program is well positioned to effectively react to wildfires within the water supply lands and the region. Strong relationships built over many years with the BC Wildfire Service, local fire departments, and other emergency services ensures a rapid and well-coordinated response should additional resources be required to respond to a large scale wildfire.
Attachments
1. Preparedness, Planning, and Equipment Photos
2. Deployment Photos

37261229
**Image 1:** Preparedness exercise

**Image 2:** Initial Attack response truck at Bone Creek Operations Centre
Image 1: Metro Vancouver crews working on behalf of the BCWS near Harrison Lake

Image 2: North Shore Interagency Wildfire “Dry Lightning” Exercise 2019
To: Water Committee

From: Roy Moulder, Director, Purchasing and Risk Management, Financial Services
       Goran Oljaca, Director, Engineering and Construction, Water Services

Date: June 9, 2020

Subject: Award of Contract Resulting from Tender No. 20-021: Construction of Kennedy Newton Main 72nd to 63rd Avenue

RECOMMENDATION
That the GVWD Board:
   a) approve the award of a contract in the amount of $18,860,000 (exclusive of taxes) to Pedre Contractors Ltd. resulting from Tender No. 20-021: Construction of Kennedy Newton Main 72nd to 63rd Avenue, 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
The Kennedy Newton Main project is a growth project in Metro Vancouver’s Capital Long Range Plan and is being constructed in three phases. The 72nd to 63rd Avenue section is the second phase of the project and consists of approximately 2.7 km of 1,800 mm (72-inch) diameter welded steel water main. Tender No. 20-021 was issued to six (6) prequalified bidders and closed on May 29, 2020. The bid from Pedre Contractors Ltd. was reviewed for completeness by staff from the Purchasing and Risk Management Division, and is identified as the lowest compliant bid. It is recommended to award Tender No. 20-021 to Pedre Contractors Ltd. in the amount of $18,860,000 (exclusive of taxes).

PURPOSE
This report is to advise the GVWD Board of the results of Tender No. 20-021: Construction of Kennedy Newton Main 72nd to 63rd Avenue and to recommend award of the contract in the amount of $18,860,000 (exclusive of taxes) to Pedre Contractors Ltd. to enable this phase of the Kennedy Newton Main project to proceed to completion.

BACKGROUND
Pursuant to the GVWD Officers and Delegation Bylaw No. 247, 2014 (Bylaw) and the Procurement and Real Property Contracting Authority Policy (Policy), procurement contracts which exceed a value of $5 million require the approval of the GVWD Board of Directors.

This report is being brought forward to the Water Committee to consider a recommendation to the GVWD Board to award a contract for the construction of Section 2 of the Kennedy Newton Main 72nd to 63rd Avenue.
PROJECT DESCRIPTION
The Kennedy Newton Main project comprises the twinning of the existing water main between the Kennedy Reservoir and the Newton Reservoir in the City of Surrey to meet long-term growth and improve the reliability of supply. As shown in the attachment to this report, the 72nd to 63rd Avenue section is one of three project phases and consists of approximately 2.7 km of 1,800 mm (72-inch) diameter welded steel water main.

As a result of the Request for Qualifications (RFQ) No. 19-372, six (6) experienced contractors were shortlisted and invited to respond to Tender No. 20-021. The Tender closed on May 29, 2020 and all six (6) compliant bids were received.

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<td>JJM Construction Ltd.</td>
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<td>Matcon Civil Constructors Inc.</td>
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<td>Clearway Construction Inc.</td>
<td>$23,641,036.50</td>
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<tr>
<td>Sandpiper Contracting LLP</td>
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The bid from Pedre Contractors Ltd. was reviewed for completeness by staff from the Purchasing and Risk Management Division, and is identified as the lowest compliant bid.

ALTERNATIVES
1. That the GVWD Board:
   a) approve the award of a contract in the amount of $18,860,000 (exclusive of taxes) to Pedre Contractors Ltd. resulting from Tender No. 20-021: Construction of Kennedy Newton Main 72nd to 63rd Avenue, 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 GVWD Board terminate Tender No. 20-021: Construction of Kennedy Newton Main 72nd to 63rd Avenue and direct staff to report back to the GVWD Board with options for an alternate course of action.

FINANCIAL IMPLICATIONS
If the GVWD Board approves Alternative 1, a contract will be awarded to Pedre Contractors Ltd. in the amount of $18,860,000 (exclusive of taxes) to complete the project work. This amount is within the budget allocated for this project. The tender submitted by Pedre Contractors Ltd. is the lowest compliant bid.

The GVWD Board has the choice not to proceed with Alternative 1, but staff will need further direction in relation to the project. Alternative 2 will result in a delay to the project schedule and may impact water supply to member jurisdictions south of the Fraser River.
CONCLUSION

Tender No. 20-021 was issued for the Construction of Kennedy Newton Main 72nd to 63rd Avenue and Pedre Contractors Ltd. was identified as offering the lowest compliant bid. Based on the evaluation of the tenders, it is recommended that the Board authorize the Commissioner and the Corporate Officer to award and execute the contract to Pedre Contractors Ltd. in the amount of $18,860,000 (exclusive of taxes).

Attachment

Greater Vancouver Water District – Kennedy Newton Main – 72 Avenue to 63 Avenue
RECOMMENDATION
That the Water Committee receive for information the report dated June 4, 2020 titled “Manager’s Report”.

1. Metro Vancouver’s Permit to Operate a Water Supply System

The GVWD recently received the attached amended *Permit to Operate a Water Supply System*, dated November 26, 2019, signed by the Vancouver and Fraser Health Authorities. As the planning and design of the Coquitlam 2nd Intake Project progresses, it was prudent to request a clarification to the conditions of the GVWD Permit, specific to the requirements for the current filtered and unfiltered treatment plant processes at the Seymour Capilano Filtration Plant and Coquitlam Water Treatment Plant, respectively.

The amended Permit clarifies conformance requirements under the federal *Guidelines for Canadian Drinking Water Quality* and provincial *BC Drinking Water Treatment Objectives for Surface Water*. The Permit to Operate emphasizes objectives for disinfection of microbial organisms as well as turbidity levels in the source water supply. Turbidity is a concern at higher concentrations, as it has the potential to interfere with disinfection processes. The integrated amendments to the operating permit will not require any operational changes to the water supply system.

2. Metro Vancouver Water Wagon – 2020 Summer Season

As part of its annual public engagement and education program, Metro Vancouver provides two Water Wagons and an associated outreach team for events hosted by members of the Greater Vancouver Water District (GVWD) and other public events throughout late spring and summer. However, the COVID-19 pandemic has resulted in numerous event cancellations throughout the 2020 season. There are also concerns around ensuring the safety of communal water sources such as the Water Wagon, as well as public perception and willingness to use shared drinking fountains and dispensers. Recruitment and training of outreach staff is also challenging without the certainty of an event schedule. The Water Wagon program is therefore unable to function as a public outreach tool at this time, and the program has been suspended for the remainder of the season. In the absence of the Water Wagon program as a public outreach tool, other opportunities will be pursued to promote Metro Vancouver water initiatives, including increased promotion of the regional watering regulations and conservation. The situation will be monitored and an assessment will be made in Spring 2021 about the feasibility of deploying the Water Wagon in 2021.
3. First Nations Engagement at Metro Vancouver during COVID-19

Metro Vancouver engages with First Nations in accordance with its corporate policy based on provincial advice. Metro Vancouver also utilizes the Province’s First Nations Consultative Areas Data Base and Remote Access to Archaeological Data as part of its analysis. Part of the engagement process includes sending correspondence to First Nations about a project or initiative and seeking input, either verbally or in writing. Engagement may also consist of meetings, presentations and workshops. Results of the engagement are then summarized by Metro Vancouver in First Nation Engagement Summary Reports which are sent to the various Ministries or provincial agencies issuing Crown permits, allowing the project to proceed.

While Metro Vancouver continues to engage with First Nations in order to move forward with its projects during COVID-19, the corporation is doing so by adhering to the Provincial Health Officer’s directives and Ministry of Indigenous Relations and Reconciliation’s guidelines, as well as by being respectful of the wishes of the individual local First Nations which have come forward with their own notifications of office and road closures, alternative meeting and engagement opportunities, and specific arrangements for archaeological activities.

4. Second Narrows Water Supply Tunnel Update

The Second Narrows Water Supply Tunnel, which is currently under construction, reached a key milestone in late April, with the lowering of the tunnel boring machine (TBM) to the bottom of the north shaft in our Beach Yard in the District of North Vancouver. Over the past few weeks, the contractor, Traylor Aecon, has continued to assemble the TBM and ancillary equipment, for its scheduled launch in mid to late June. The TBM is 6.5 m in diameter and once fully assembled with all of its trailing gear, will be 135 m long. It is anticipated that the TBM will complete its 1100 m drive and intersect the south shaft in Second Narrows Park in the City of Burnaby, in early 2021. The video that you will be seeing documents the lowering of the TBM cutter head.

5. Water Committee Work Plan

Attachments
1. Permit to Operate a Water Supply System
2. Water Committee 2020 Work Plan
ATTACHMENT 1

HEALTH PROTECTION

PERMIT TO OPERATE

A Water Supply System

Purveyor: Greater Vancouver Water District
Facility Name: Greater Vancouver Water District

Conditions of Permit:
1. Maintain treatment systems in place that achieve the following in accordance with the Guidelines for Canadian Drinking Water Quality:
   a. At least 4-log (99.99%) reduction &/or inactivation of Viruses;
   b. At least 3-log (99.9%) reduction &/or inactivation of Giardia cysts;
   c. At least 3-log (99.9%) reduction &/or inactivation of Cryptosporidium oocysts;
   d. Turbidity levels of treated water from the Seymour Capilano Filtration Plant meet the following: Individual filter turbidity levels <0.3 NTU in at least 95% of measurements per month, never to exceed 1.0 NTU as stated in the GCDWO;
   e. Turbidity levels of treated water from the Coquitlam Water Treatment Plant to conform to the BC Drinking Water Treatment Objectives for Surface water on the basis of exclusion of filtration
2. Monitoring and reporting of water quality will be conducted as per the most recent Water Quality & Reporting Plan for the Metro Vancouver and member Municipalities.
3. Continued verification of the performance of source water treatment plants for Seymour Capilano Filtration Plant and for Coquitlam Treatment Plant

Dr. Patricia Daly
Chief Medical Health Officer
Vancouver Coastal Health Authority

Dr. Martin Lavoie
Chief Medical Health Officer
Fraser Health Authority

Effective Date
November 26, 2019

This permit must be displayed in a conspicuous place and is not transferable
# Water Committee 2020 Work Plan

## Priorities

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<td>Water Use-by-Sector Report</td>
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<tr>
<td>Annual Energy Management Program Update</td>
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<td>First Nation Engagement Updates (Q2)</td>
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<td>Seymour Salmonid Society 2019 Annual Report</td>
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<td>Lawn Water Regulations Communication &amp; Regional Water Conservation Campaign</td>
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<td>Reservoir Limnology Program Report</td>
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<td>Watershed Fisheries Initiatives Annual Update</td>
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May 5, 2020

Ref: 251380

Sav Dhaliwal, Chair
Metro Vancouver
4730 Kingsway
Burnaby BC V5H 0C6

Dear Chair Dhaliwal:

Thank you for your letter requesting an amendment to the Greater Vancouver Water District Act to enable the use of Development Cost Charges (DCCs). I apologize for the delay in responding.

I appreciate your recognition of our current legislative agenda. This is an important issue, and I understand that the provision of DCCs is an important financial tool you wish to utilize for several large future drinking water capital projects. I also understand that Metro Vancouver staff have been in contact with Ministry of Municipal Affairs and Housing staff on this request and can assure you that ministry staff will work with your staff through the legislative amendment process, which involves comprehensive analysis and stakeholder engagement. Much of this work can begin with Metro Vancouver taking a lead on engagement which must include consultations with the development community while ministry staff begin the internal legislative review and analysis.

There is still much work to be completed before I can commit to taking a legislative amendment such as this forward for consideration. However, I am confident that our respective staff teams can work together toward a positive outcome. I encourage your staff to continue to engage with Brian Bedford, Acting Executive Director, Local Government Infrastructure and Finance, on this initiative.

Thank you again for writing.

Sincerely,

Selina Robinson
Minister

pc: Jerry Dobrovolny, Commissioner and Chief Administrative Officer, Metro Vancouver
    Dean Rear, Chief Financial Officer and General Manager, Financial Services, Metro Vancouver
    Brian Bedford, Acting Executive Director, Local Government Infrastructure and Finance
DEC 16 2019

The Honourable Selina Robinson
Minister of Municipal Affairs and Housing
Ministry of Municipal Affairs and Housing
PO Box 9056 Stn Prov Govt
Victoria, BC  V8W 9E2

Dear Minister Robinson:

Re: Development Cost Charges in the Greater Vancouver Water District Act

As set out in the 2019 – 2022 Board Strategic Plan, the Metro Vancouver Board respectfully requests that the Greater Vancouver Water District Act be amended to include the ability to impose development cost charges. This would bring the Greater Vancouver Water District Act into alignment with the Greater Vancouver Sewerage and Drainage District Act as well as the Local Government Act, compelling regional growth to pay for the infrastructure necessary to continue to provide water services to an increasing Metro Vancouver population.

We understand that there are many competing priorities for the legislative agenda, but we ask that this be added to the work plan at the earliest opportunity.

Yours sincerely,

Sav Dhaliwal
Chair, Metro Vancouver Board

SD/OR

CC: Liam Edwards, Executive Director, Local Government Infrastructure and Finance
    Jerry W. Dobrovolny, Commissioner/Chief Administrative Officer, Metro Vancouver
    Dean Rear, Chief Financial Officer/General Manager, Financial Services, Metro Vancouver

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