



## REPORT

Report Date: December 11, 2020  
Contact: Alexander Ralph  
Contact No.: 604 829 2092  
RTS No.: 14052  
VanRIMS No.: 08-2000-20  
Meeting Date: January 20, 2021  
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TO: Standing Committee on City Finance and Services

FROM: General Manager of Engineering Services and Chief Procurement Officer

SUBJECT: Contract Award for PS20200434 – Provision of a Sewage and Rainwater Management Plan (“SRMP”) for Vancouver

### **RECOMMENDATION**

- A. THAT Council authorize City staff to negotiate to the satisfaction of the General Manager of Engineering Services, the Director of Legal Services, and the Chief Procurement Officer a contract with Brown and Caldwell Consultants Canada Ltd., for the Provision of a Sewage and Rainwater Management Plan for Vancouver, for a term of approximately three and half (3.5) years with the option to extend at City’s discretion, for another two (2) years with an estimated contract value of \$2,757,849, plus applicable taxes over the initial term, to be funded through the multiyear approved Capital Budget for the Clean Waters Plan (NEI-00009).
- B. THAT the Director of Legal Services, Chief Procurement Officer and General Manager of the Engineering Services be authorized to execute on behalf of the City the contract contemplated by Recommendation A above.
- C. THAT no legal rights or obligations will be created by Council’s adoption of Recommendations A and B above unless and until such contract is executed by the authorized signatories of the City as set out in these Recommendations.

### **REPORT SUMMARY**

The City issued a Request for Proposal (RFP) PS20200434 for consulting services – “Provision of a Sewage and Rainwater Management Plan for Vancouver on June 23, 2020. The RFP was advertised on the City of Vancouver website and BC Bid and four responses were received. The work was called in accordance with the terms and conditions of the City’s Procurement

Policy ADMIN-008. City staff on the RFP evaluation committee and subsequently, Bid Committee have considered the responses received and on that basis recommend that the City negotiate, and if such negotiations are successful, enter into a contact as described with Brown and Caldwell Consultants Canada Ltd.

### ***COUNCIL AUTHORITY/PREVIOUS DECISIONS***

The City’s Procurement Policy ADMIN-008 requires that contracts with values over \$2 million must be approved by Council following review and recommendations by the Bid Committee. The Bid Committee has considered and recommended Brown and Caldwell Consultants Canada Ltd. as the successful proponent.

In May 26, 2020, Council directed staff to develop a comprehensive SRMP for Vancouver, to address pollution from combined sewer overflows and urban run-off along with risks presented by climate change, aging infrastructure and population growth.

### ***CITY MANAGER'S/GENERAL MANAGER'S COMMENTS***

The Acting City Manager recommends approval of the foregoing, which is a necessary step towards developing the SRMP. In May 2020, Council directed staff to proceed with development of the SRMP to address recent Council and Park Board directions, including accelerated action on combined sewer overflows mitigation, implementation of the Rain City Strategy, and other directions that fundamentally shift the way that water is valued and managed within the city.

Due to the significant costs and complexities associated with sewage and rainwater management, a comprehensive and rigorous planning process is needed to optimize investments, policies, regulations and City advocacy. The plan must also address challenges associated with receiving environment water quality, aging infrastructure, climate change, and population growth. It also needs to include a collaborative approach with key partners, including Metro Vancouver and First Nations, which is essential to achieve inter-jurisdictional alignment and to deliver on equity and Reconciliation objectives. The Sewer and Rainwater Management Plan will be closely coordinated with the development of the Vancouver Plan, which will guide future growth and land use city-wide.

### ***REPORT***

#### ***Background/Context***

In May 2020, Council directed staff to develop a comprehensive long-range citywide SRMP. Key factors driving the need for the SRMP include:

- Combined sewer overflows (commonly referred to as “CSOs”) and polluted urban runoff impact aquatic environments and are one factor limiting public access to waters, including summertime beach closures. Vancouver has a regulatory requirement to eliminate CSOs by 2050, and it is also a Council and Park Board priority to increase public access to water.

- Population growth and land-use decisions being contemplated in adopted community plans face uncertainty when it comes to sewage and drainage system capacity. In addition, a comprehensive integrated planning effort is required to ensure that infrastructure services can sustainably support the growth that will be contemplated in the Vancouver Plan. This requires significant community engagement and technical analysis.
- The impacts of climate change, including the increasing intensity of rainfall events, sea level rise and drought add further strain on sewage and rainwater management services. Billions of dollars will be required between now and 2050 to renew and adapt aging infrastructure, and the SRMP is needed to strategically target investments and policies to mitigate risk and maintain affordability.

Sewage and drainage services are jointly provided by the City and Metro Vancouver, with the City providing local infrastructure services and the regional government managing conveyance and treatment systems. The SRMP must optimize investments and outcomes across both systems and inform the update to the Metro Vancouver Liquid Waste Management Plan (“Metro Vancouver LWMP”), which will serve as a regulatory plan for the regional government and its members. A high level of collaboration is required with Metro Vancouver to align with and meet the timeline requirements of the Metro Vancouver LWMP, which must be completed by 2023.

The SRMP will focus on producing a range of deliverables that strategically define future infrastructure investments, inter-jurisdictional advocacy, policy and regulation. Table 1 provides a summary of key questions to be resolved by the plan.

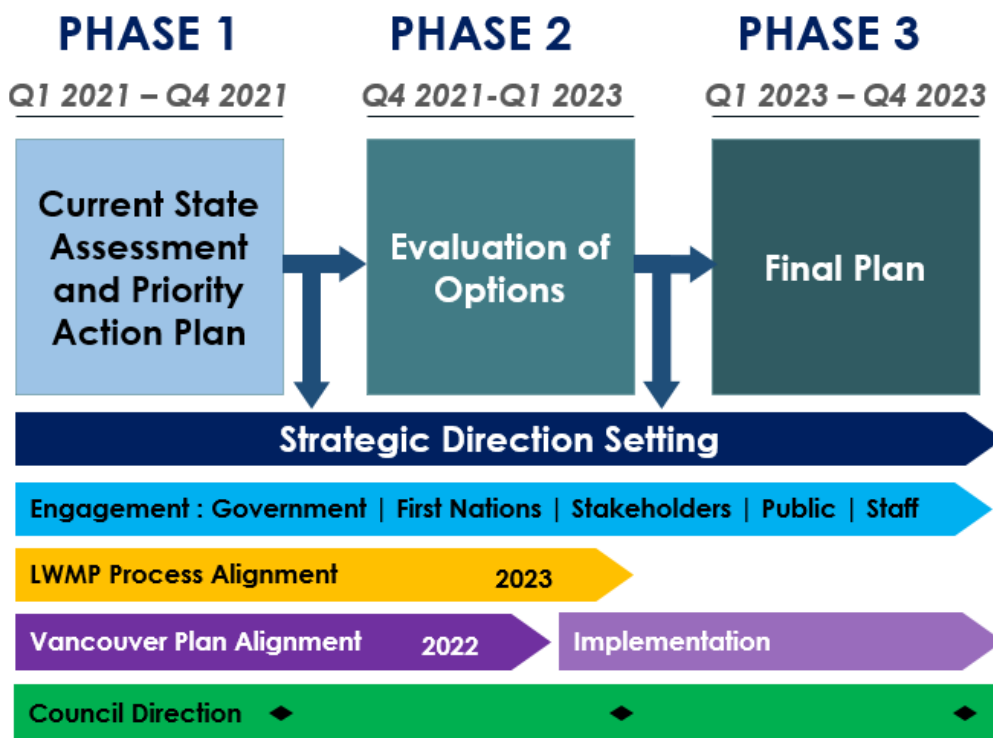
**TABLE 1. KEY QUESTIONS TO BE ADDRESSED BY THE SRMP**

Infrastructure	Inter-jurisdictional Advocacy	Policy and Regulation
<ul style="list-style-type: none"> <li>• How do we <b>optimize the performance</b> of our existing infrastructure?</li> <li>• What are the <b>decision frameworks</b> at the citywide and watershed scale to <b>determine where, when and what investments</b> should be made to the piped network, green rainwater infrastructure, and decentralized water reuse and treatment?</li> <li>• What are the prioritized <b>short and long term capital requirements</b> and strategic investments for the next 30 years?</li> <li>• What measures can be put in place to ensure that the plan is adaptive, incorporating new information and lessons learned?</li> </ul>	<ul style="list-style-type: none"> <li>• What collaboration is required with <b>Metro Vancouver</b> infrastructure and operating practices meet shared objectives?</li> <li>• What commitments are needed in the <b>Metro Vancouver LWMP</b>?</li> <li>• What are our requests of senior levels of government, in coordination with Metro Vancouver, for <b>policy, regulation and funding</b>?</li> </ul>	<ul style="list-style-type: none"> <li>• What <b>performance criteria</b> and <b>service levels</b> do we use to guide water management?</li> <li>• What changes are needed to ensure <b>climate change, risk</b> and <b>ecosystem health</b> are integrated into planning?</li> <li>• What changes are needed to ensure that sewage and rainwater management are considered upfront in land use and community planning?</li> <li>• What <b>level of risk</b> is acceptable? How do we manage risk through capital and operations programs</li> <li>• What <b>by-law</b> amendments and <b>development policies</b> are needed?</li> </ul>

A phased approach will be taken in the development of the SRMP, factoring in planning processes proven in leading jurisdictions. Partner, stakeholder and public engagement will be tailored to each phase of the plan development, with the approach tailored to factor in the COVID-19 pandemic as appropriate. The three phases of the work plan are as follows:

- Phase 1 – Strategy, Current State Assessment, and Priority Action Plan:** Initial work will focus on fully defining the overarching strategic framework and then on developing the current state understanding, baseline projection and priority actions for analysis in Phase 2. Findings and recommendations will be framed against global and local leading practices. This phase will also identify short-term “no regrets” actions to take while planning to achieve accelerated water quality outcomes.
- Phase 2 – Evaluation of Options:** This phase of work will focus on completing a staged and comprehensive analysis of a range of different infrastructure and policy solutions at different scales, utilizing the strategic framework of decision criteria developed in Phase 1. A key deliverable of this phase will be the identification of preferred pathways for detailed business analysis and plan development to take place in Phase 3.

FIGURE 1. A PHASED APPROACH TO PLAN DEVELOPMENT



- Phase 3 – Final Plan Development:** The optimal pathway will be further refined to guide City investments into the future. This includes detailed business case analysis, financing strategies and a long-term roadmap for infrastructure investments, operational improvements, policy and regulation and frameworks to support watershed planning and the prioritization of work.

## **Strategic Analysis**

Following direction from Council to proceed with the SRMP, the City released an RFP to identify a consulting team to support all phases of work. Development of this RFP incorporated input from various Engineering workgroups, Financial Services, Business Planning and Project Support, Planning, Urban Design and Sustainability, Environmental Services, Legal Services and staff from Metro Vancouver. Key qualifications for the consultancy include:

- An adequate depth of experience on projects similar to the SRMP, including internationally recognized leading examples as well as a strong local track record; and
- A diverse skillset, including strategic planning, wastewater and stormwater engineering and planning utilizing green and grey infrastructure solutions, community and First Nations engagement, community planning, financial analysis, adaptive planning and structured decision making.

The Request for Proposal (RFP PS20200434) was advertised on the City of Vancouver website and BC Bid and email notices were sent to twenty-six (26) potential proponents on June 23, 2020 in accordance with the terms and conditions of the City Policies. Four responses were received:

- Associated Engineering (BC) Ltd.;
- Black & Veatch Canada Company;
- Brown and Caldwell Consultants Canada Ltd.; and
- GHD Limited.

The responses were reviewed by an evaluation team comprised of representatives from various Engineering work groups including Clean Water Planning, Development Water Resources Management, Integrated Sewer and Drainage Planning Branch, Sewers and Drainage Design and Green Infrastructure Implementation, under the stewardship of Supply Chain Management. To ascertain if the responses offered good overall value to the City, both quantitative and qualitative factors were evaluated.

The evaluation process was conducted in two stages:

- i. Regular review of submitted proposals; and
- ii. Interviews with three (3) shortlisted proponents.

The first stage of the evaluation consisted of a review of the technical requirements, which included understanding of project requirements, company profile and experience, key personnel and experience, work plan and methodology, allocation of resources, project timeline, innovation and value add, sustainability and the associated price.

For the interview stage, the City requested a short presentation and a set of clarification questions were sent to the three short-listed proponents for written response and for discussion.

Based on the overall evaluation, the team concluded that the proposal submitted by Brown and Caldwell best met the City’s requirements. Brown and Caldwell’s proposal and follow-up responses to the questions demonstrated the strongest understanding of the requirements of the project, and offered credible solutions to address a range of planning challenges and

uncertainty. The team also demonstrated a strong understanding of local technical, financial stakeholder and regulatory risks.

Brown and Caldwell is an internationally recognized leading water sector consulting firm that has demonstrated success in other west coast wet weather cities, including San Francisco, Seattle and Portland – jurisdictions that had a similar degree of technical and stakeholder complexity to Vancouver. They have assembled a well-rounded, experienced and cohesive project team grounded in both local knowledge and international experience.

### ***Financial***

Financial Planning & Analysis (FP&A) has reviewed the cost of the services and concurs that funding for Part I is currently available from the Approved Multiyear Project Budget for the Clean Waters Plan capital project (NEI-00009), and that scope for the subsequent Part II will be executed subject to approved funding and direction from staff upon satisfactory completion of Part I.

### ***Environmental***

This project will also advance a number of long term sustainability goals for the City particularly related to healthy ecosystems, climate adaptation and biodiversity.

### ***Legal***

The City’s Procurement Policy requires that all contracts that have been awarded by Bid Committee and Council will be signed by the Director of Legal Services.

### ***CONCLUSION***

In summary, City staff recommends that the City of Vancouver negotiate and enter into a three and a half (3.5) year contract, with an estimated value of \$2,757,849, with the option to extend the contract, at the City’s discretion, for a two (2) year period for a total term of five and half (5.5) years, with Brown and Caldwell Consultants Canada Ltd.

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