



## COUNCIL REPORT

Report Date: September 3, 2024  
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Meeting Date: September 24, 2024  
[Submit comments to Council](#)

TO: Vancouver City Council

FROM: General Manager of Engineering Services

SUBJECT: Infrastructure Access Agreement for District Energy Pipe Network Connection to River District Energy

### Recommendations

- A. THAT Council delegate its authority to the City's General Manager of Engineering Services and Director of Legal Services to negotiate and execute an infrastructure access agreement with the Greater Vancouver Sewerage and Drainage District (GVS&DD) for permission to install and operate district energy piping below certain City of Vancouver streets, on such terms and conditions generally aligned with the Term Sheet in Appendix A and satisfactory to the City's General Manager of Engineering Services and Director Legal Services.
- B. THAT no legal rights or obligation will arise or be created by Council's adoption of Recommendation A unless and until all legal documentation has been executed and delivered by the City and the Greater Vancouver Sewerage and Drainage District (GVS&DD).

### Purpose and Executive Summary

This report seeks Council's approval to negotiate and execute an infrastructure access agreement with the Greater Vancouver Sewerage and Drainage District (GVS&DD) for permission to install and operate district energy piping under certain streets, through which GVS&DD will deliver thermal energy to River District Energy, the energy utility servicing the River District community in the Vancouver. The district energy piping will connect River District Energy to Metro Vancouver's Waste-to-Energy facility located in Burnaby.

Council approval is required for the City to enter into infrastructure access agreements. The terms and conditions outlining the proposed agreement are contained within the Infrastructure Access Agreement Term Sheet in Appendix A to this Report (the "Term Sheet").

## **Council Authority/Previous Decisions**

Section 290 of the *Vancouver Charter* provides that no person shall excavate in or damage a street except under terms and conditions imposed by Council.

Where Council's pre-existing standing authority for the execution of a contract by City staff is not applicable, specific Council authorization is required.

## **City Manager's Comments**

The City Manager concurs with the foregoing recommendations.

## **Context and Background**

The Metro Vancouver Waste-to-Energy Facility is located in Burnaby and has been operating since 1988. Metro Vancouver approved the development of a district energy system, in which steam generated at the facility would, in addition to generating electricity, be used to provide heat to nearby developments.

The River District community is in the southeast corner of Vancouver and borders Burnaby. The River District heating and hot water demand is currently served by a district energy system operated by River District Energy and is operating using temporary natural gas boilers.

In order to use the thermal energy generated by the Waste-to-Energy Facility, the GVS&DD must place district energy piping below streets in Vancouver to connect the facility to the River District Energy network.

Utility companies are permitted to build and operate assets within City streets under the provisions within the Street Utilities By-law No. 10361, or under the terms and conditions established in the City's standard Municipal Access Agreement and approved by Council. The GVS&DD has requested a separate infrastructure access agreement based on the Term Sheet.

## **Discussion**

Metro Vancouver's Waste-to-Energy Facility has operated in Burnaby since 1988 and recovers energy from the combustion of garbage through the hot water and steam that circulates through the Waste-to-Energy Facility. Steam from the facility is used to generate electricity for sale to B.C. Hydro. The facility produces enough electricity to meet the energy needs of approximately 16,000 homes. District energy involves using some of the steam to heat water that is delivered by an underground hot water piping network to nearby developments. The Waste-to-Energy Facility District Energy system provides an opportunity to triple the energy recovery efficiency of the Waste-to-Energy Facility, by providing heat and hot water for up to 50,000 homes and reducing greenhouse gas emissions by up to 70,000 tonnes per year in the region.

The proposed district energy system currently has two phases as illustrated in Appendix B. Phase 1 of the district energy system includes building an energy centre adjacent to the Waste-to-Energy Facility as well as a hot water pipe system from the Waste-to-Energy Facility to the River District Energy system located immediately west of Boundary Road at Marine Way in Vancouver. Phase 2 of the district energy system involves extending the hot water pipe system

from the Phase 1 infrastructure to Metrotown and Edmonds where the City of Burnaby is developing a district energy utility.

The Metro Vancouver Regional District (MVRD) and GVS&DD Boards approved entering into a heat sales agreement with River District Energy in 2021. Phase 1 requires GVS&DD to construct approximately 6 km of pipe from the Waste-to-Energy Facility to the River District including approximately 500 metres of pipe within the City of Vancouver.

To allow GVS&DD infrastructure in City streets, an infrastructure access agreement between the City of Vancouver and GVS&DD is proposed on terms substantially described in the Term Sheet included as Appendix A. Based on the Term Sheet, staff expect that the key aspects of the infrastructure access agreement will include:

- GVS&DD to have the right to install, operate, and maintain a district energy pipe network in city streets for the purposes of providing thermal energy;
- The agreement has no defined expiration date but can be terminated under certain conditions;
- A portion of a GVS&DD collected 3% access fee from all wholesale customers would be distributed to the Vancouver based on percent of pipe network (by length) located within Vancouver;
- Vancouver will receive 5% of any greenhouse gas emission reduction credits which GVS&DD receives through this project, for the energy which flows through the municipality. The 5% allocation of emission reduction credits mirrors the approach taken on Metro Vancouver's sewer heat projects;
- GVS&DD to be subject to municipal bylaws/standards/fees related to use and restoration of city streets;
- GVS&DD to follow standard approval processes for installation and maintenance of infrastructure in city streets;
- The agreement has defined infrastructure relocation cost scenarios; and
- The agreement has insurance and liability provisions.

Entering into an infrastructure access agreement for the installation of district energy piping under city streets will allow the Metro Vancouver Waste-to-Energy Facility District Energy system to connect to the River District community. The supply of River District Energy with thermal energy produced from energy recovery at the Waste-to-Energy Facility will reduce greenhouse gas emissions in the region, which is consistent with the objectives of Vancouver's Climate Emergency Action Plan and Metro Vancouver's Climate 2050 plan.

### **Financial Implications**

As part of the operating model by GVS&DD, a portion of overall revenues collected by wholesale customers would be distributed to municipalities for access to city street. A portion of a 3% access fee would be distributed to the City of Vancouver based on the percent of the overall pipe network (by length) that is located within Vancouver. Approximately 90% of the Phase 1 pipe network will be within Burnaby and 10% within Vancouver, and as such Vancouver would receive approximately 0.3% of overall revenues. This equates to approximately \$5,000 of revenue per year and will change over time as the overall district energy system grows and expands.

## **Legal Implications**

This report grants City staff with authority to negotiate and execute an infrastructure access agreement with GVS&DD on terms and conditions consistent with the Term Sheet, which are described above and in Appendix A.

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**APPENDIX A**  
**Infrastructure Access Agreement Term Sheet**

The Greater Vancouver Sewerage and Drainage District (“GVS&DD”) and the City of Vancouver (“Vancouver”) intend to execute a detailed Infrastructure Agreement (the “Agreement”) outlining the conditions for GVS&DD’s use of certain Vancouver streets for district energy piping as part of GVS&DD’s Waste-to-Energy District Energy project. GVS&DD and Vancouver have drafted this non-binding term sheet to state some of the details that GVS&DD and Vancouver expect to include in the Agreement. This term sheet will not legally bind GVS&DD and Vancouver.

July 10, 2024

<b>Issue</b>	<b>Description</b>
<b>Applicable Area</b>	<ul style="list-style-type: none"> <li>• GVS&amp;DD’s right to install, operate, and maintain district energy pipe network identified for a limited sub-set of Vancouver streets for the purposes of providing thermal energy to River District Energy (RDE)</li> </ul>
<b>Term</b>	<ul style="list-style-type: none"> <li>• Agreement has no defined expiration date but can be terminated under certain conditions</li> </ul>
<b>Termination Provisions</b>	<ul style="list-style-type: none"> <li>• Vancouver can terminate if GVS&amp;DD is in default (e.g. for damaging Vancouver infrastructure and failing to repair). Default provision includes a cure period.</li> <li>• GVS&amp;DD can terminate if it has abandoned or removed its facilities or transferred facilities to Vancouver.</li> </ul>
<b>Approvals for Work</b>	<ul style="list-style-type: none"> <li>• GVS&amp;DD must apply to Vancouver for approvals for any work that require street use. Applications will include plans and specifications of works and other info as appropriate. Vancouver to make efforts to approve or deny (with explanation) within 30 days</li> <li>• Vancouver can only deny under limited conditions defined in the agreement between the parties.</li> <li>• GVS&amp;DD must pay any permit or fee costs defined in Vancouver bylaws applicable to all users of streets for similar purposes</li> </ul>

	<ul style="list-style-type: none"> <li>GVS&amp;DD may complete work to alleviate emergencies. GVS&amp;DD will make best efforts to notify Vancouver before it commences emergency work.</li> </ul>
<b>Restoration</b>	<ul style="list-style-type: none"> <li>Streets must be restored to the standards defined in applicable City of Vancouver Bylaws and Design and Construction Standards</li> </ul>
<b>Relocation Costs</b>	<ul style="list-style-type: none"> <li>GVS&amp;DD to pay 100% of costs of relocation of Vancouver infrastructure caused by Metro Vancouver works</li> <li>Vancouver to pay 100% of costs of relocation of GVS&amp;DD infrastructure caused by Vancouver works.</li> <li>GVS&amp;DD to enter into agreements with third parties for any necessary relocation costs for any third party infrastructure caused by GVS&amp;DD works.</li> </ul>
<b>Access Fee</b>	<ul style="list-style-type: none"> <li>GVS&amp;DD to collect 3% municipal access fee from all wholesale customers of GVS&amp;DD district energy system</li> <li>3% access fee to be distributed to municipalities based on % of pipe network (by length) located within each municipality. E.g. if Vancouver hosts 10% of GVS&amp;DD pipe network, Vancouver receives 10% of access fees.</li> <li>Any additional access fees applicable solely to GVS&amp;DD's district energy system enacted by Vancouver will be set off against the portion of the 3% fee described above, and GVS&amp;DD will not have to pay amounts in excess of the 3% fee</li> </ul>
<b>Environmental Attributes</b>	<ul style="list-style-type: none"> <li>In addition to the access fee, Vancouver to receive 5% of any greenhouse gas emission reduction credits (as calculated in accordance with the BC Carbon Neutral Local Government Framework) that GVS&amp;DD receives for energy from this project flowing through Vancouver.</li> </ul>
<b>Insurance</b>	<ul style="list-style-type: none"> <li>GVS&amp;DD's contractors must retain insurance which names GVS&amp;DD and Vancouver as additional insureds</li> </ul>

<b>Liability</b>	<ul style="list-style-type: none"><li>• Vancouver and GVS&amp;DD to agree on appropriate liability provisions for the installation of GVS&amp;DD infrastructure in Vancouver streets.</li><li>• Vancouver makes no reps or warranties as to condition of roads, and GVS&amp;DD uses on an 'as-is' basis</li></ul>
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## APPENDIX B Waste-To-Energy Facility District Energy Map

