

NO: R107

COUNCIL DATE: May 30, 2022

**REGULAR COUNCIL**

TO: **Mayor & Council** DATE: **May 24, 2022**  
 FROM: **General Manager, Engineering** FILE: **6020-012/11**  
 SUBJECT: **Award of Contract No. 6020-012-11 Colebrook Dyke 100 Series and Lower Serpentine Dyke Upgrades (DMAF)**

**RECOMMENDATION**

The Engineering Department recommends that Council:

1. Award Contract No. 6020-012-11 to Tybo Contracting Ltd. in the amount of \$4,215,015.00 (including GST) for the Colebrook Dyke 100 Series and Lower Serpentine Dyke Upgrades (DMAF);
2. Set the expenditure authorization limit for Contract No. 6020-012-11 at \$4,640,000.00 (including GST and contingency); and
3. Authorize the General Manager, Engineering to execute Contract No. 6020-012-11.

**BACKGROUND**

Construction of the Colebrook Dyke (100 Series) and Lower Serpentine Dyke upgrades is included as part of the Surrey Disaster Mitigation and Adaptation Fund (“DMAF”) program involving the implementation of a comprehensive flood protection strategy that will seek to reduce Surrey’s vulnerability to coastal flooding and sea level rise. This contract represents a multi-phased program for the completion of two of the 13 projects identified under the DMAF program, with all projects being completed by 2028 in order to remain eligible for the Federal government contribution grant.

The DMAF dyking improvement projects are broken down into the following distinct segments:

<b>Name</b>	<b>Location</b>
Colebrook Sea Dyke	Mud Bay Sea
Colebrook Dyke 100 Series	Mud Bay Park
Colebrook Dyke 200 Series	Serpentine River: BNSF Railway to Hwy 99
Colebrook Dyke 300 Series	Serpentine River: Hwy 99 to King George Blvd.
Lower Serpentine River Dyke	Serpentine River: King George Boulevard to 152 Street

Construction of the Colebrook Dyke Upgrades 200 Series is currently under construction and will be completed by 2024. Construction of the Colebrook Dyke 100 Series (Phase 2) and the Colebrook Sea Dyke Upgrade is planned for in the Spring of 2023.

**SCOPE OF WORK**

This contract consists of upgrades to sections of the Colebrook Dyke 100 Series and segments of the Lower Serpentine Dyke Upgrades by raising the dykes to provide uniform flood protection to Provincial standards for a 200-year event. The dyke upgrade locations are illustrated on the map attached to this report as Appendix “I”.

The project location is listed in the following table, which is also illustrated on the map attached to this report as Appendix “I”:

<b>Map Reference Number</b>	<b>Project #</b>	<b>Project Description</b>	<b>Location</b>
1	D-18317	Colebrook Dyke Upgrades- 650m of dyke upgrade to elevation 4.0m (56,000 cubic metres of dyke fill placement)	Mud Bay Park
2	D-11722	Lower Serpentine River Dyke Upgrades- 1,450m of dyke upgrades to elevation 2.75m (5,600 cubic metres of dyke fill placement)	Serpentine River: King George Boulevard to 152 Street

The contract permits construction from 7:00 a.m. to 10:00 p.m., Monday through Friday, in compliance with the *Surrey Noise Control Bylaw, 1982, No. 7044*. The contract does not include an option for contractors to work 24-hours a day, seven days a week due to safety concerns with the placement of dyke fill at night and the adjacency to the Serpentine River. Access to Mud Bay Park will remain open to the public during construction of the Colebrook Dyke Upgrades.

The contract work is expected to start in June 2022 and be completed by October 2022.

**TENDER RESULTS**

Tender invitations were limited to contractors who were pre-qualified under the City’s 2021 to 2024 pre-qualification process for Tier 1-Dyking work. Tenders for the subject contract were opened on May 19, 2022, with the following results:

<b>Contractor</b>	<b>Tendered Amount with GST</b>	<b>Corrected Amount</b>
1. Tybo Contracting Ltd.	\$4,215,015.00	No Change
2. Delta Aggregates Ltd.	\$5,556,988.46	No Change
3. Bel Contracting, A Division of Belpacific Excavation & Shoring LP	\$6,293,512.72	No Change

The Engineer’s (Parsons Inc. and Urban Systems Ltd.) pre-tender estimate was \$3.5 million, including GST.

## EVALUATION

The submissions were reviewed for accuracy and completeness. No errors were found. All submissions included the required 10% bid bond, and were signed on the Tender Form.

The low bidder, Tybo Contracting Ltd, has provided a Consent of Surety for a Performance Bond and a Labour & Materials Bond, and agreed to complete the work within 80 working days, as stipulated in the contract. Tybo Contracting Ltd.'s past performance on similar work has been satisfactory. They have no outstanding legal claims against the City. While Tybo Contracting Ltd.'s tender was above the Engineer's pre-tender estimate, the pricing is reflective of the current market conditions and still provides the best value to the City. It is recommended that Tybo Contracting Ltd. be awarded Contract No. 6020-012-11.

## SUSTAINABILITY CONSIDERATIONS

Implementation of the DMAF Projects support the objectives of the City's Sustainability Charter 2.0. In particular, the DMAF works relate to the Sustainability Charter themes of Infrastructure, Built Environment and Neighbourhoods, Ecosystems, and Public Safety. Specifically, the DMAF Projects support the following Desired Outcomes ("DOs"):

- Energy and Climate DO6: The City anticipates changing weather patterns and sea level rise as a result of climate change, and implements appropriate infrastructure, land use planning and emergency response solutions that will be resilient over the long term;
- Neighbourhoods and Urban Design DO9: All aspects of planning, design and construction include climate change impacts, greenhouse gas mitigation, adaptation and resiliency strategies;
- Green Infrastructure DO12: Surrey protects ecosystem services and manages natural assets in order to create resiliency to adapt and thrive in a changing climate; and
- Emergency Preparedness and Prevention DO8: The community's critical infrastructure and systems are designed to withstand climate change impacts and natural events and disasters, and include emergency response and reconstruction plans.

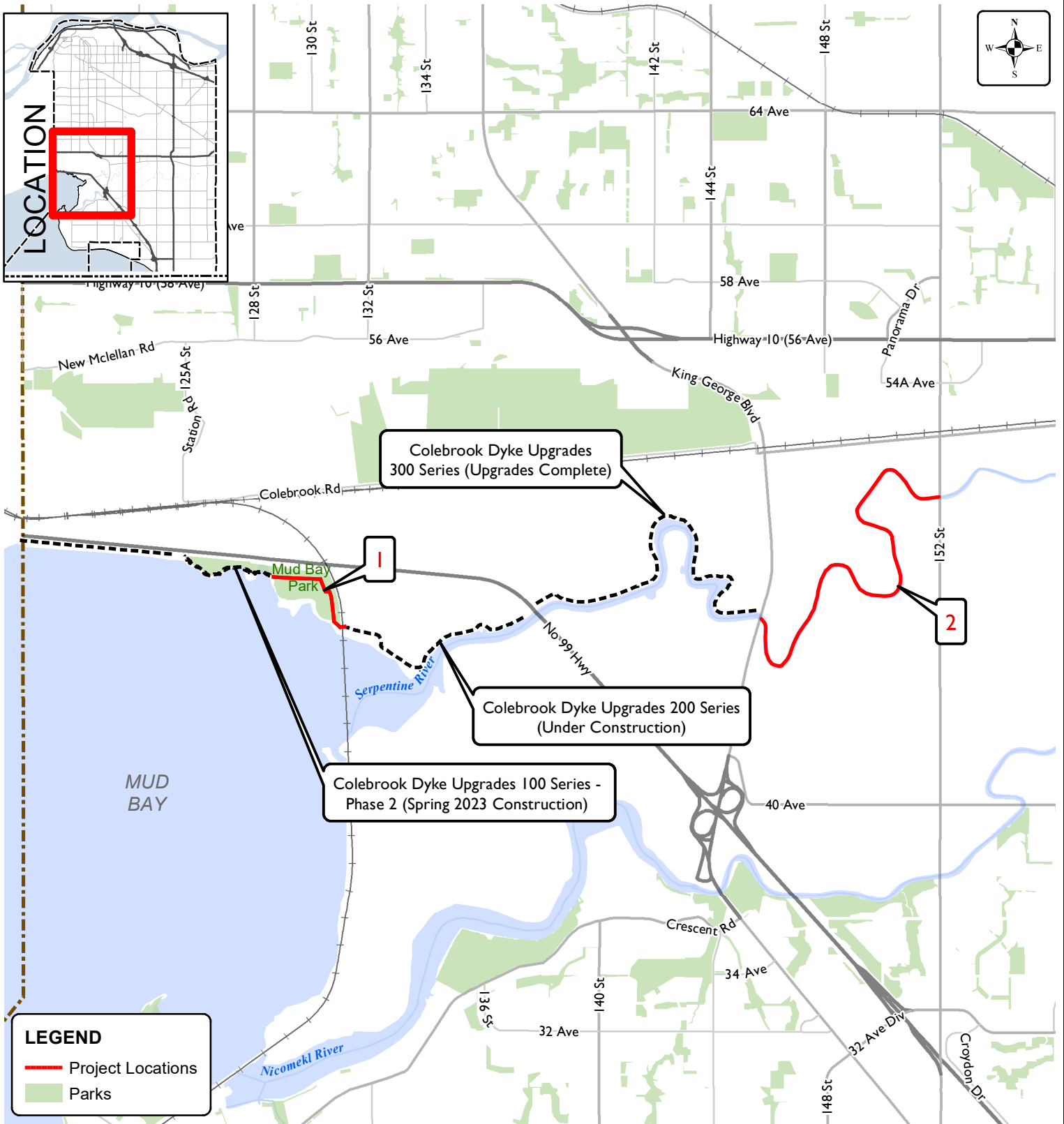
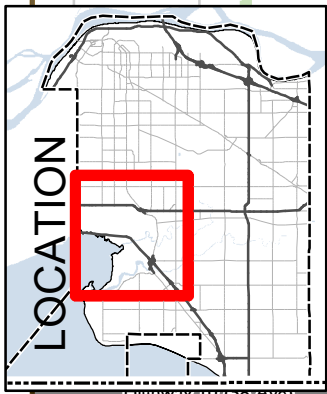
## FUNDING

Funding for this contract is available in the approved 2022 Utilities Budget. 40% of the project costs are available to be contributed under the Federal government contribution grant through the DMAF program and the remaining 60% of the funding has been contributed by the Provincial Government Transfer Shared Cost Arrangement for the Colebrook Dyke.

Scott Neuman, P. Eng.  
General Manager, Engineering

VJ/THS/jhs

Appendix "I": Map of Locations – Contract No. 6020-012-11



**LEGEND**

- Project Locations
- Parks

Produced by GIS Section: 20-May-2022, P205934

Scale: 1:37,500 0 350 M



**Contract No. 6020-012-11**  
**Colebrook Dyke (100 Series) and**  
**Lower Serpentine Dyke Upgrades**

**ENGINEERING**  
**DEPARTMENT**

The data provided is compiled from various sources and IS NOT warranted as to its accuracy or sufficiency by the City of Surrey. This information is provided for information and convenience purposes only. Lot sizes, Legal descriptions and encumbrances must be confirmed at the Land Title Office.