

NO: R022

COUNCIL DATE: February 8, 2021

REGULAR COUNCIL

TO: **Mayor & Council**

DATE: **February 1, 2021**

FROM: **General Manager, Engineering**

FILE: **6020-014-11**

SUBJECT: **Award of Contract 6020-014-11
Colebrook Dyke Upgrades (DMAF) – 200 Series**

RECOMMENDATION

The Engineering Department recommends that Council:

1. Award Contract No. 6020-014-11 to Delta Aggregates Ltd. in the amount of \$4,046,373.09 (including GST) for the Colebrook Dyke Upgrades (DMAF) – 200 Series;
2. Set the expenditure authorization limit for Contract No. 6020-014-11 at \$4,452,000.00 (including GST and contingency); and
3. Authorize the General Manager, Engineering to execute Contract No. 6020-014-11.

BACKGROUND

Construction of the Colebrook 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 one 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 Colebrook Dyke is a 7.2 kilometre long dyke located along the north side of the Serpentine River from Mud Bay Park to King George Boulevard. The Colebrook Dyke Upgrades are separated into three distinct segments referred to as ‘Series’ (100 Series, 200 Series, and 300 Series). Each series represents a specific segment along Colebrook Dyke. This Contract consists of upgrades to the Colebrook Dyke 200 Series, which is illustrated on the map attached to this report as Appendix “I”. Construction of Colebrook Dyke Upgrades 300 Series is planned for in the Spring of 2022, and 100 Series is planned for construction in Fall of 2022.

SCOPE OF WORK

This Contract consists of upgrading the Colebrook Dyke 200 Series by raising the dyke to 3.9m elevation to provide uniform flood protection to Provincial standards for a 200-year event. Construction is being delivered over a four-year period due to geotechnical constraints where the weight of the dyke fill must be staged over time to allow controlled subsurface soil consolidation. Given the four-year period required to complete this work, the Contract has been divided into two phases, with the last two years of construction being optional depending on the contractor's performance during the first two years of construction. The project location is listed in the following table, which is also illustrated on the map attached to this report as Appendix "I":

Project Description	Project #	Location
Colebrook Dyke Upgrades (DMAF) – 200 Series	D-15786	Serpentine River: BNSF Railway – Highway 99

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.

The contract work is expected to start in February 2021 and be completed by 2024.

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 January 26, 2021 with the following results:

	Contractor	Tendered Amount (incl. GST)	Corrected Amount (incl. GST)
1.	Delta Aggregates Ltd.	\$4,068,983.24	\$4,046,373.09
2.	Conwest Contracting Limited	\$5,512,500.00	\$5,511,975.00
3.	Bel Contracting, A Division of Belpacific Excavating & Shoring LP	\$5,516,354.00	\$5,518,705.50
4.	Double M Excavating Ltd.	\$5,921,424.06	\$5,921,507.85
5.	Tybo Contracting Ltd.	\$6,172,845.00	\$6,277,845.00

The Engineer's (Stantec Consulting Ltd.) pre-tender estimate was \$6.5 million, including GST.

EVALUATION

The City received six tender submissions, and upon review for accuracy and completeness, one of the tenders was found to be non-compliant. Of the compliant tenders, there were four arithmetic errors that had no bearing on the outcome of the tender process. All submissions included the required 10% bid bond and were signed on the Tender Form.

Based on the tender evaluation price, Delta Aggregates Ltd. provides the best value to the City. Delta Aggregates Ltd. has provided a Consent of Surety for a Performance Bond and a Labour & Materials Bond and agreed to complete the work within the Contract period. Delta Aggregates Ltd.'s has experience with dyke work and have satisfactorily completed dyke work for the City in the past. They have no outstanding legal claims against the City. It is recommended that Delta Aggregates Ltd. be awarded Contract No. 6020-014-11.

SUSTAINABILITY CONSIDERATIONS

Implementation of the DMAF Projects supports 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 Project supports 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.

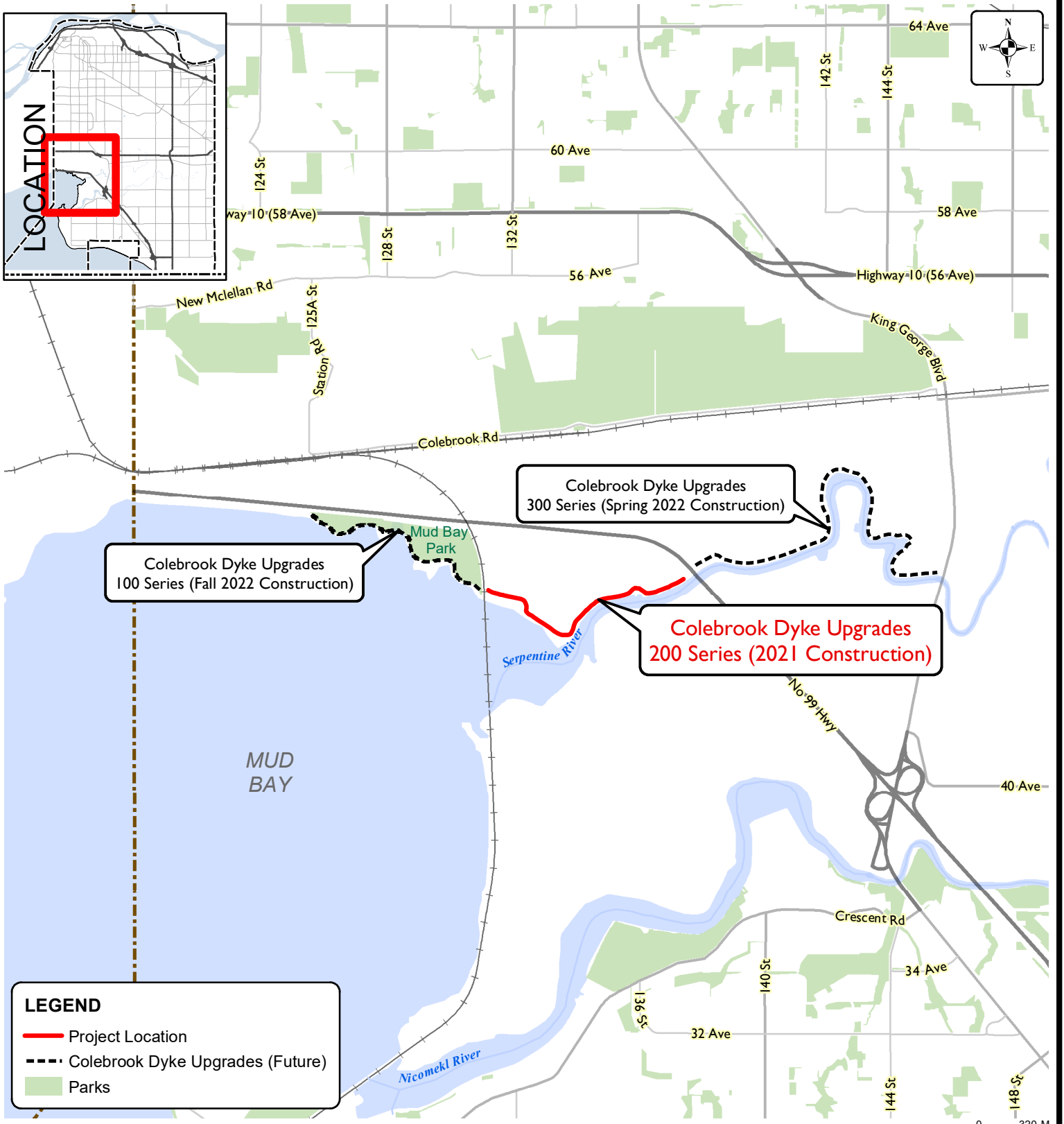
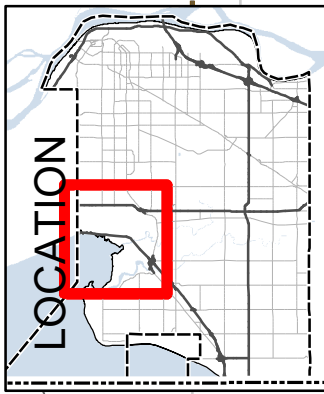
FUNDING

Funding for 2021 project expenditures is available in the approved 2021 Drainage Utility budget. Funding for project expenditures in subsequent periods have been allocated in the approved 5-year Financial Plan. 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

JC/VJ/THS/cc

Appendix "I" – Map of Locations – Contract No. 6020-014-11



Produced by GIS Section: 02-Feb-2021, P205934

Scale: 1:34,000 0 320 M



CONTRACT No. 6020-014-11 Colebrook Dyke Upgrades - 200 Series

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.