City of Kingston  
Information Report to Council  
Report Number 20-084

To: Mayor and Members of Council  
From: Peter Huigenbos, Commissioner, Business, Environment & Projects  
Resource Staff: Mark Van Buren, Deputy Commissioner, Major Projects  
Date of Meeting: March 24, 2020  
Subject: Third Crossing – Quarterly Update Q1 2020

Council Strategic Plan Alignment:

Theme: 3. Improve walkability, roads and transportation  
Goal: See above

Executive Summary:

The Major Projects Office continues to provide quarterly reports to update Council on the status of the Third Crossing. This quarterly report covers activities during Q1 of 2020.

This report provides an update to Council on major work activities that have been completed since December 2019, including detailed design activities, the completion of the Parks Canada Detailed Impact Assessment and other government permits and approvals, and on-site construction activities. This information report also provides details regarding ongoing efforts to communicate and engage with the public, near neighbours, Indigenous communities and other stakeholder groups. In addition, the report provides a look ahead to upcoming major activities that the project team will be undertaking.

Recommendation:

This report is for information purposes only.
Authorizing Signatures:

ORIGINAL SIGNED BY COMMISSIONER

Peter Huigenbos, Commissioner,
Business, Environment &
Projects

ORIGINAL SIGNED BY CHIEF
ADMINISTRATIVE OFFICER

Lanie Hurdle, Chief
Administrative Officer

Consultation with the following Members of the Corporate Management Team:

Paige Agnew, Commissioner, Community Services
Not required

Brad Joyce, Acting Commissioner, Corporate Services
Not required

Jim Keech, President & CEO, Utilities Kingston

Desirée Kennedy, Chief Financial Officer & City Treasurer

Sheila Kidd, Commissioner, Transportation & Public Works
Options/Discussion:

A. Detailed Design
The Integrated Project Delivery (IPD) team continues to advance the detailed design work for the Third Crossing project. The overall project has been subdivided into a number of discrete design packages to advance elements of design to support the overall construction schedule. A total of eight (8) design packages have been completed and issued for early work activities that cover utility relocations, rough grading works, permanent noise wall construction, and bridge abutments on both the west and east shores. A total of sixteen (16) main design packages that cover the remaining elements of the project are currently in progress. These main design packages include (i) civil/road design, utilities, electrical and traffic staging for both the west and east shore lands and (ii) substructure and superstructure designs for both the approach spans and main span of the Third Crossing. The majority of these design packages are currently at a 90 percent level of completion with the design packages for substructures for both the approach and main spans completed and currently issued for construction.

The IPD team is also working towards the completion of the project master specifications including development of the construction quality management system that includes all provisions for quality assurance and quality control.

B. Permits and Approvals
Securing the necessary permits and approvals has been a significant component of the overall work for the IPD team through the majority of 2019 and Q1 of 2020. Delays in receiving permits and the conditions imposed by permits can impact project budget and project scheduling. Therefore, the IPD team continues to work closely with regulatory authorities at both the Federal and Provincial levels, including the Cataraqui Region Conservation Authority, to ensure that the necessary permits and approvals are in-place to support construction activities. This work also includes ongoing monitoring efforts to adhere to various permit requirements.

B.1. Parks Canada – Detailed Impact Assessment (DIA)
As reported in the December 2019 information report to Council (Report Number 20-012), the IPD team completed the DIA report that was reviewed by staff from Parks Canada, Environment and Climate Change Canada, Fisheries and Oceans Canada, and Transport Canada and approved for public posting. The DIA report was posted on the City’s website on September 13, 2019 for public to review and comment for 30 days. Following the public review and comment period, the final DIA report, which considered and addressed public comments received, was submitted to Parks Canada and received final approval on December 13, 2019.

Work activities during Q1 of 2020 have focused on completing the associated Environmental Management Plans (EMPs) for review and approval by Parks Canada. The EMPs are detailed work plans that cover appropriate environmental controls for various aspects of the bridge construction.

One of the more significant components of the DIA was the use of a temporary rock causeway and trestle (termed the Causeway-Trestle Solution) as the most viable solution to construct the bridge in consideration of the natural environment, the wildlife that inhabit the area and in
providing the best possibility for eliminating or reducing potentially adverse effects. The EMPs developed for this work have focused on the use of locally sourced quarry rock with limited amounts of fines (i.e. small particle size), installation of turbidity curtains, fish and turtle exclusion measures, and monitoring requirements during the rock causeway construction to ensure turbidity levels remain below acceptable limits.

EMPs have also been developed and finalized to support construction work associated with the installation of the temporary trestle that will span across the navigation channel in the Cataraqui River as well as construction work associated with the permanent bridge abutment to be built on the west shore.

B.2. Other Government Approvals
The IPD team has also received the necessary permits and approvals from other federal government regulatory agencies, including Transport Canada and Fisheries and Oceans Canada. Transport Canada, through the Navigable Protection Program, issued approval under the Canadian Navigable Waters Act on December 5, 2019. The federal department of Fisheries and Ocean Canada issued the Fisheries Act Authorization under the Amended Fisheries Act on December 13, 2019.

The IPD team is currently working towards completion and receipt of permits required from the Ontario Ministry of Environment and Climate Change for Environmental Compliance Approvals for storm water drainage works on both the west and east shores of the Cataraqui River as well as Permit to Take Water approvals for construction dewatering works associated with the bridge foundations.

The IPD team is also working with the Cataraqui Region Conservation Authority to secure all necessary permit approvals for Alterations to Shorelines and Watercourses issued under the Conservation Authority Act. Permits have been completed and received for preliminary works associated with bridge abutment construction on both the west and east shores with permits for the final installation works to be completed shortly.

The project team has also wrapped up discussions and obtained the necessary permit approvals from Fisheries and Oceans Canada, Parks Canada, and the Ontario Ministry of Natural Resources and Forestry in order for the project to continue in-water construction work during the upcoming spring months. Additional environmental protection measures and monitoring requirements will be in place during the period from mid-March to the end of June to protect fish during this spawning period.

C. Construction Activities
Construction activities on the project site have been progressing well with a ramp-up in the amount of construction work as both shoreland and in-water activities are now moving forward. Details of construction work progress are provided below. The IPD team continues to maintain a considerable focus on job site safety. A Life Saving Actions (LSA) program has been developed that provides safety orientation and training for all existing and new employees working on the project. A series of training events have been scheduled on a monthly basis throughout 2020 to cover safety training for construction operations ranging from human-equipment interface to
rigging and lifting to working at height. Representatives from the Ontario Ministry of Labour have also been invited to tour the project site and the IPD team will continue to liaise with emergency service providers with regular construction site updates for emergency preparedness.

C.1. In-Water Construction Works
During the fall of 2019, in-water work activities were focused on the installation of turbidity curtains and wildlife exclusion fencing along the future bridge alignment in the Cataraqui River. These measures were put in place to support construction of the temporary rock causeway and provide protection to the natural aquatic environment within the Cataraqui River.

Construction of the temporary rock causeway began in early January 2020 with approximately 15 percent of the rock causeway currently completed on the west side, and 100 percent of the rock causeway completed on the east side. A total of five (5) separate open water wildlife passage areas along the length of the rock causeway will be constructed to allow movement of aquatic life upstream and downstream of the construction area within the Cataraqui River over the duration of the project. Currently, two (2) of the open water passage areas have been constructed.

Construction of the temporary trestle bridge began in late February 2020. This work includes the construction of 208 metres of mainline trestle over the portion of the Cataraqui River that contains the navigation channel. The trestle will connect to the temporary rock causeways constructed on both the west and east sides and supports construction of the main span of the Third Crossing. The temporary trestle will also include a lift section that will allow for boat passage during the navigation season from May to October.

C.2. Shoreland Construction Works
Construction works continue to progress on both the west and east shores of the project site. Rough grading and utility relocation work involving Hydro One, Kingston Hydro, Bell and Cogeco has now been completed on the west shore along John Counter Boulevard. Installation of the permanent noise fencing has also been completed on the west shore along John Counter Boulevard adjacent to the Riverpark subdivision, and is nearing completion on the east shore adjacent to the Point St. Mark subdivision along Gore Road. These are important milestones for the team as residents on both shores had requested the noise fences to be installed before heavy construction. Rough grading works and rock fill placement has also occurred on the east shore to provide access for in-water construction.

D. Communications and Public Engagement
As part of the Design and Construction Phase, the team has developed a strategic Communications and Engagement plan. This plan will continue to guide communication efforts during the construction phase and ensure opportunities for resident input (where applicable). This plan includes:

Monthly Communication and Engagement Reports
To keep residents informed about project outreach and engagement, a monthly report is posted on the project website. The latest report highlighted communication and engagement from 2019 and includes:
• 35 community and stakeholder meetings with over 700 people throughout 2019;
• Two public open houses on the environmental considerations of the DIA, 120 residents in total attended the open houses;
• 16 different information notifications issued to community organizations on upcoming work;
• 11 targeted emails issued to near-neighbours;
• 16 e-newsletters issued to the more than 970 subscribers informing residents about upcoming work, in-water construction, work hours, Council reports, how to connect with the team, upcoming meetings and other information when necessary;
• 23 media interviews given by the project team to different local and national media outlets with 45 articles reporting on or discussing the project; and
• Over 20,000 visits to the Third Crossing website with the most frequented pages being the home page, project engagement and the construction page.

Third Crossing Website
The project website (https://thirdcrossing.cityofkingston.ca) continues to be a key conduit for the team to provide up-to-date information about construction activity, opportunities for engagement, photos and videos of the work happening on either shore.

Third Crossing E-Newsletter
The Third Crossing e-newsletter provides information on project-related activities to the community. Currently, 977 residents have signed up for the e-newsletter.

Third Crossing Email Address
A dedicated email address (thirdcrossing@cityofkingston.ca) provides a direct link for residents to get in touch with the team. With a goal of replying within 48 hours, the project team has seen a trend of residents using the email address to connect with the team.

Community Meetings and Events
The team continues to meet with the community through one-on-one, near neighbour meetings and key stakeholder meetings, and by giving presentations as requested. The team will also make an effort in the spring and summer to attend some key community events to provide the latest information on what’s happening with the project.

Videos
Videos play an important role in telling the story of the bridge. The team will be focus on producing and releasing videos highlighting the progress of the construction, environmental aspects and key milestones.

The project team is committed to ongoing communication with residents throughout the remaining phases of the project and ensuring that concerns and questions are addressed as quickly as possible. For more detailed information on our communication and engagement efforts, visit the project site at https://thirdcrossing.cityofkingston.ca.
In the spring, the project team will be re-engageing with residents in the Pittsburgh District around considerations of Point St. Mark Drive traffic flow. The west end entrance of Gore Road at Point St. Mark Drive was closed for vehicle traffic beginning in the summer of 2019 and will remain closed for the duration of construction. The Transportation & Public Works Group has conducted traffic counts at this location and additional data on traffic flow can be gathered as needed. In the spring, the Third Crossing project team and the Transportation & Public Works Group will host an information session with residents to provide an update on the Highway 15 corridor, the roadwork that is being completed as part of the Third Crossing project, and on the temporary or permanent closure of the west end entrance of Point St. Mark Drive.

Indigenous Consultation
The project team values the relationship with Indigenous communities and has been discussing the Third Crossing project through the Duty to Consult and Accommodate with Indigenous Nations since 2009. For the DIA, City staff consulted with a number of Indigenous Nations via email, mail outs, face-to-face meetings, participation in archaeology field studies and telephone conversations. The Mohawk Nation Council of Chiefs has been a key consultation partner on the Third Crossing Project, providing rich input especially during the Environmental Assessment and through the DIA process. Additionally, meetings with Alderville First Nation and the Huron-Wendat of Wendaki have been undertaken for over a decade, including community representation during field studies. These same communities also continue discussions held with other departments of the City on cultural connects between our respective communities.

Staff also values consultation with the local urban Indigenous community. The team will continue to foster this relationship moving forward into the next phases of the project.

E. Project Upcoming Activities
The project team will be continuing work on a number of concurrent activities going forward. Ongoing efforts will be focused on completing all remaining permitting requirements and final design packages during Q2 of 2020. Continued progress will be made with both shoreland and in-water construction work, and ongoing communication and public engagement.

In-water construction activity will continue to be focused on the installation of the temporary rock causeway, wildlife passages and the temporary trestle bridge. This work is expected to take approximately 7 months to complete and will necessitate work occurring Monday through Saturday with working hours from 7am to 10pm daily. The project team will continue to work with near neighbouring residents on both the west and east shores to provide information regarding the planned work hours as this phase of the construction work progresses. As a reminder, a night time construction noise impact assessment was undertaken to determine potential impacts to adjacent residential areas with the results indicating noise levels within acceptable levels as per provincial guidelines. The project team will be adopting the noise mitigation measures that were identified in the report including white noise back-up alarms on dozers and triaxle trucks, strict compliance for dump trucks to avoid slamming tailgates, setup of stationary noise sources such as generators as far as possible from adjacent residential areas, installation of noise monitoring equipment, and contact information for the construction site supervisor for complaint handling and resolution.
Construction work will also be occurring on both the west and east bridge abutments with substructure work focused on construction of the pile foundations followed by abutment footings. Superstructure work will then occur to construct the abutment walls with this work scheduled to be completed within the next 5 months. It is also anticipated that construction of the first in-water piers will commence later in Q2. Additional details of this work operation will be provided as part of the next quarterly information report to Council.

Shoreland construction work will be focused on the east shore of the Cataraqui River. Excavation and preparation of the storm water pond on the east shore north of the future road alignment will occur with an anticipated construction duration of approximately 4 months.

**Existing Policy/By-Law:**

None

**Notice Provisions:**

None

**Accessibility Considerations:**

The design for the Third Crossing bridge and associated road works includes the provision of accessible sidewalks/pathway, street benches, para-ramps, pedestrian countdown devices and audible pedestrian traffic devices in conformance with the requirements of the provincial Accessibility for Ontarians with Disabilities Act (AODA). The Municipal Accessibility Advisory Committee (MAAC) has appointed two project representatives for the Third Crossing and the project team has offered presentations and touch points with MAAC upon request. Members of the IPD team are scheduled to provide an update report to MAAC at the meeting scheduled in May 2020.

**Financial Considerations:**

Table 1 provides a financial status update of the Third Crossing capital project as at February 29, 2020. The report reflects the approved budget of $180 million together with total project to date actual expenditure information. The table provides a breakdown of budget and actuals to date, percentage complete and resulting variances as at the end of February 29, 2020. The quarterly performance reporting is a similar measure of reporting that the City has taken with other large capital infrastructure projects. With respect to the overall results, the table summarizes actuals and budget by phases and major work activities to date.

The financial information provided in this report is derived from the financial accounting records of the Corporation as at February 29, 2020. Expenditures (actuals and budget) are tracked using the City of Kingston’s corporate financial management system - Microsoft Dynamics. The project team also has access to advanced technology project management software systems and tools as utilized by the contractor, which provides more detailed tracking and cost analysis functions.
In order to ensure that spending remains within approved budget parameters, staff regularly monitor and review budget variance information through internal cost monitoring and use of cost tracking tools. This allows for variances to be reviewed on a timely and frequent basis in order to apply any necessary corrective actions.

As of February 29, 2020, total project costs are as outlined in Table 1 below. Overall, the Third Crossing capital project is 17.2% spent as of February 29, 2020. Actuals to date are $30.9 million as compared to the approved budget of $180 million. Expenditures are tracking as expected based on the timing of receipt of permits and additional environmental mitigating measures. Staff continue to monitor the budget closely as permits and approvals are received to ensure that changes to various construction schedules do not have significant budgetary impacts.

### Table 1: Third Crossing Works in Process – February 29, 2020

<table>
<thead>
<tr>
<th>Financial Performance</th>
<th>Actuals to Date ($)</th>
<th>Approved Budget ($)</th>
<th>Variance ($)</th>
<th>% Spent</th>
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<tbody>
<tr>
<td><strong>Expenditures:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Validation phase fees</td>
<td>$4,190,313</td>
<td>$4,172,160</td>
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<tr>
<td>Design engineering fees</td>
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<td>Planning &amp; Project management</td>
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<tr>
<td>Construction costs</td>
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</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td>$30,947,248</td>
<td>$180,000,000</td>
<td>$149,052,752</td>
<td>17.2%</td>
</tr>
</tbody>
</table>

**Note:** Validation phase fees include pre-design work, pre-planning, project management and early work activities. Validation phase fees are final. No further expenditures to be incurred.

**Note:** Design engineering costs to date include design efforts for utility relocations, rough grading works, permanent noise wall construction, bridge abutments on west and east shores, civil/road design, utilities, electrical and traffic staging for west and east shore lands, and substructure/superstructure designs for approach spans and main span.

**Note:** Planning & project management costs to date include salaries allocated to capital, communication costs, consulting/owner advisor fees and planning/preparation fees.

**Note:** Construction costs to date include site preparation work, tree clearing, grubbing, grading, removal & demolition costs, mobilization costs, utility relocation work, survey & inspection work, installation of turbidity curtains and permanent noise fencing, fish and turtle exclusion measures, and in-water work including temporary rock causeway construction.
As the project progresses and moves further into the construction phase, internal project monitoring will expand to include additional detail and expenditure categories, previous year and previous quarter result comparators, as well as key performance indicators such as hours of local workforce used and total dollar value of locally procured material and sub-contracts.

Since receiving the final approval of the federal regulatory permit, the DIA, Third Crossing project staff have been working on submitting claims to both levels of government for payments against project costs incurred to date. Initial grant claims have been processed and the City has started to receive payments from both the Federal and Provincial governments. The capital project funding for the bridge is based on an equal contribution from the federal, provincial and municipal governments. The Government of Canada, the Province of Ontario and the City of Kingston are each contributing $60 million. Semi-annual reports are submitted to both the Federal and Provincial governments, as per the reporting obligations specified in the grant funding agreements.

Contacts:

Mark Van Buren, Deputy Commissioner, Major Projects 613-546-4291 extension 3218

Other City of Kingston Staff Consulted:

Dan Franco, Projects Engineer, Major Projects Office
Scarlet Eyles, Manager of Financial Planning, Financial Services
Nicole MacKinnon, Financial Analyst, Financial Services
Marie Bartlett, Communications Officer, Communications & Customer Experience
Holly Wilson, Manager of Intergovernmental Relations, Office of the Mayor

Exhibits Attached:

None