

July 11, 2019

To: Members
Public Works and Infrastructure Committee

Re: Area 13 Drainage Upgrade Project

RECOMMENDATION

1. That the Executive Director of Citizen Services be delegat4ed authority to initiate the process to engage consulting and professional engineering services for all phases of the Area 13 Drainage Upgrade Project.
2. That the Executive Director of Citizen Services, or his or her delegate be delegated authority to negotiate, award, enter into and amend a contract with the highest ranked proponent from each public procurement process of the Area 13 Drainage Upgrade Project.
3. That City Council authorize the City Clerk to execute the contract with the highest ranked proponent(s) upon review and approval of the City Solicitor.
4. That this report be forwarded to the July 29, 2019 meeting of City Council for approval.

CONCLUSION

The Administration remains committed to developing and implementing drainage improvement solutions and requires the services of a consulting engineering firm to carry out the design and construction of the Area 13 Drainage Upgrade Project. The successful proponent will be appointed to provide engineering services for all phases of this project with an initial upset fee established for design.

This report presents the Administration's plan to implement drainage improvements in Master Plan Drainage Area 13 (Area 13) in an efficient and cost-effective manner. The Administration is planning to issue and award a Request for Proposals (RFP) for engineering services for this project. City Council's authority is required by *The Regina Administration Bylaw No. 2003-69, Schedule D, Section 7* to issue and award the RFP, as the consultant's fees are expected to exceed \$750,000.

BACKGROUND

Area 13 comprises approximately the NorthEast and Coronation Park neighborhoods. From the *Stantec 2013 Pre-design of Master Drainage Plan Area 13 Study*, several areas with higher incidences of flooding were identified. One of these areas is located in the area surrounding Halifax Street and Dover Avenue.

To improve the level of service in the study area, AECOM was commissioned in January 2018 to complete the Design and Construction of Master Drainage Plan Area 13 – St. Anne Park Detention Facility, which was proposed within a 2013 Stantec study.

The original scope of work included confirmation of the proposed St. Anne Park Detention Facility recommended within the pre-design report. The objective was to reduce surface ponding to below 400 millimetres within the original study area surrounding St. Anne Park. AECOM concluded that the development of a detention pond within the St. Anne Park would provide minimal benefit to reducing surface ponding within the study area. However, AECOM confirmed that significant drainage deficiencies exist within the study area, mostly concentrated within the eastern half of Area 13, contributing to elevated flood damage risk. During a major storm event, the stormwater overloads the aging storm and domestic sewer system. This leads to overland flooding and sewer backups, which can flood residential and commercial properties. Due to the drainage issues within the eastern portion of Area 13, it was necessary to expand the scope of work to include an upgrade option with the highest cost/benefit ratio for the area.

DISCUSSION

AECOM determined that the St. Anne Detention Facility would have very minimal impact at reducing the surface ponding within Area 13. As such, the study boundary was expanded to include the catchment area contributing to the Toronto Street Trunk Sewer. This catchment area is generally bound between Broad Street and Winnipeg Street, from 8th Avenue North to the North Storm Channel (approximately 2nd Avenue). Figure 1 below provides an overview of the study boundary area.

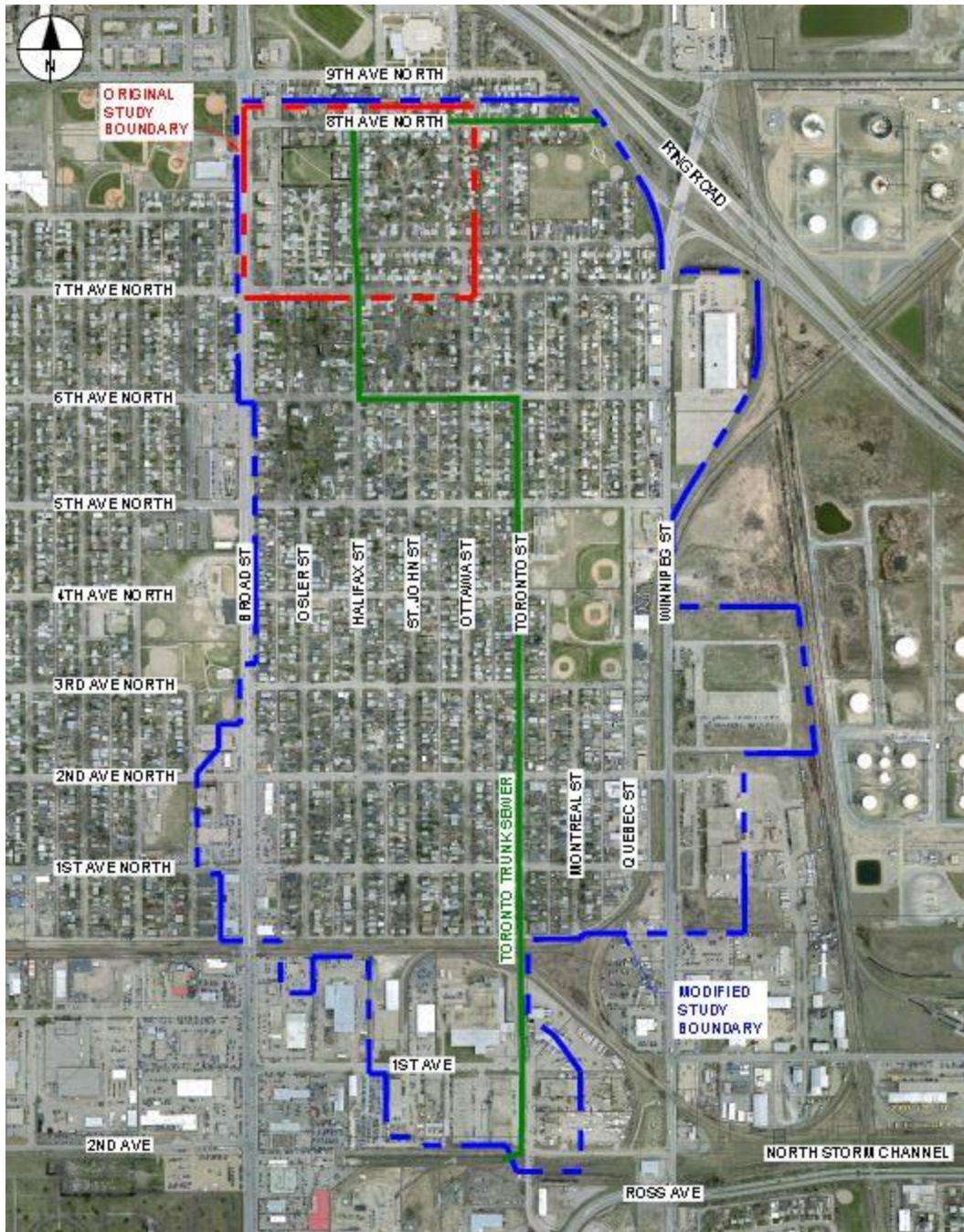


Figure 1: Study Boundary Area

AECOM developed and investigated three alternative stormwater upgrades. The existing collection system was analyzed using a detailed model and evaluation criteria. The evaluation criteria prioritizes reducing flooding locations for critical infrastructure (i.e. hospital, police station or fire hall) and residential properties. The criteria also incorporates flooding reductions on non-residential properties and major roadways.

The effectiveness of each upgrade option was evaluated in terms of its ability to lower the overall score within each of the key areas identified within the catchment. Costs for each relief option

were developed, while the benefits of each were quantified in terms of a reduction in overall score and reduction in flooded structures post upgrade. A benefit-cost ratio was then calculated based on these totals and expressed on a points reduction/\$Million basis. The ratio was intended to provide an indication of the relative benefit of each relief upgrade in relation to the costs of implementation. Higher benefit-cost ratios suggest greater returns (i.e. more value for the investment made).

The Administration remains committed to developing and implementing drainage improvement solutions and requires the services of a consulting engineering firm to carry out the design and construction of the Area 13 Drainage Upgrade Project. The successful proponent will be appointed to provide engineering services for all phases of this project with an initial upset fee established for design. The commission of subsequent phases of work is dependent on satisfactory performance of the previous phase of work and funding approval. If the appointment is terminated, another public procurement process will be initiated to seek a consulting engineering firm to complete the project.

The Administration requests City Council's approval to delegate authority to the Executive Director of Citizen Services to initiate the process to engage consulting and professional engineering services for the Area 13 Drainage Upgrade project. The Administration also requests City Council's approval to delegate authority to the Executive Director of Citizen Services to negotiate, award and enter into a contract with the highest ranked proponent from each public procurement process.

The engineering service fees for this commission are expected to exceed \$750,000; therefore, City Council's approval is required to engage consulting and professional engineering services for this project as required by *The Regina Administration Bylaw No. 2003-69, Schedule D, Section 7*.

RECOMMENDATION IMPLICATIONS

Financial Implications

Funding in the amount of \$5,000,000 was approved for the drainage improvements in Area 13 – St. Anne Detention Facility and Area 13 – Avonhurst in the 2018 and 2019 Utility Capital Budgets respectively. Funding for future phases of this project, as identified through this commission, will be requested through future budget submissions and are anticipated in the long-term Utility Model.

Environmental Implications

Completion of this project will mitigate flood risks within Area 13. Mitigating flood risks will reduce the amount of stormwater runoff entering the sanitary system and help reduce the frequency and intensity of future wastewater bypasses and sewer backups. This will have a positive effect on the environment and downstream users.

Policy and/or Strategic Implications

This project is consistent with the *Design Regina: The Official Community Plan (OCP)*, as it will support Section D4-Infrastructure Goal 4 Section 6.11 “Support runoff infiltration and retention by: continuing to reduce the incidence of water runoff being directed to the sanitary system”. Additionally, improvements to our financial viability will be made through collaboration with the underground infrastructure and the road program, and will ultimately reduce cost from a whole life cycle perspective.

Other Implications

None with respect to this report.

Accessibility Implications

None with respect to this report.

COMMUNICATIONS

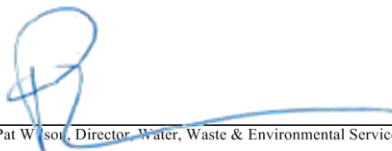
Internal and external stakeholders directly affected by the project will be consulted throughout the process, including the Water Security Agency. A communication plan will be developed to communicate the design and construction activities.

DELEGATED AUTHORITY

The recommendations contained in this report require City Council approval.

Respectfully submitted,

Respectfully submitted,



Pat Wilson, Director, Water, Waste & Environmental Services

7/2/2019



Kim Onrao, Executive Director, Citizen Services

7/3/2019