

CITY OF FORT SASKATCHEWAN

Sump Pump Retrofit Program

Purpose:

To provide an update on the status of the Sump Pump Retrofit Program.

Background:

Prior to 2012, the Engineering Standards did not require properties to be connected to the storm sewer system. This did not generally cause issues in Fort Saskatchewan as the City was built on highly sandy soils with a low water table. As development moved east into more clay soils and variable water tables, sump pump discharge became a concern causing damage to properties and to City infrastructure.

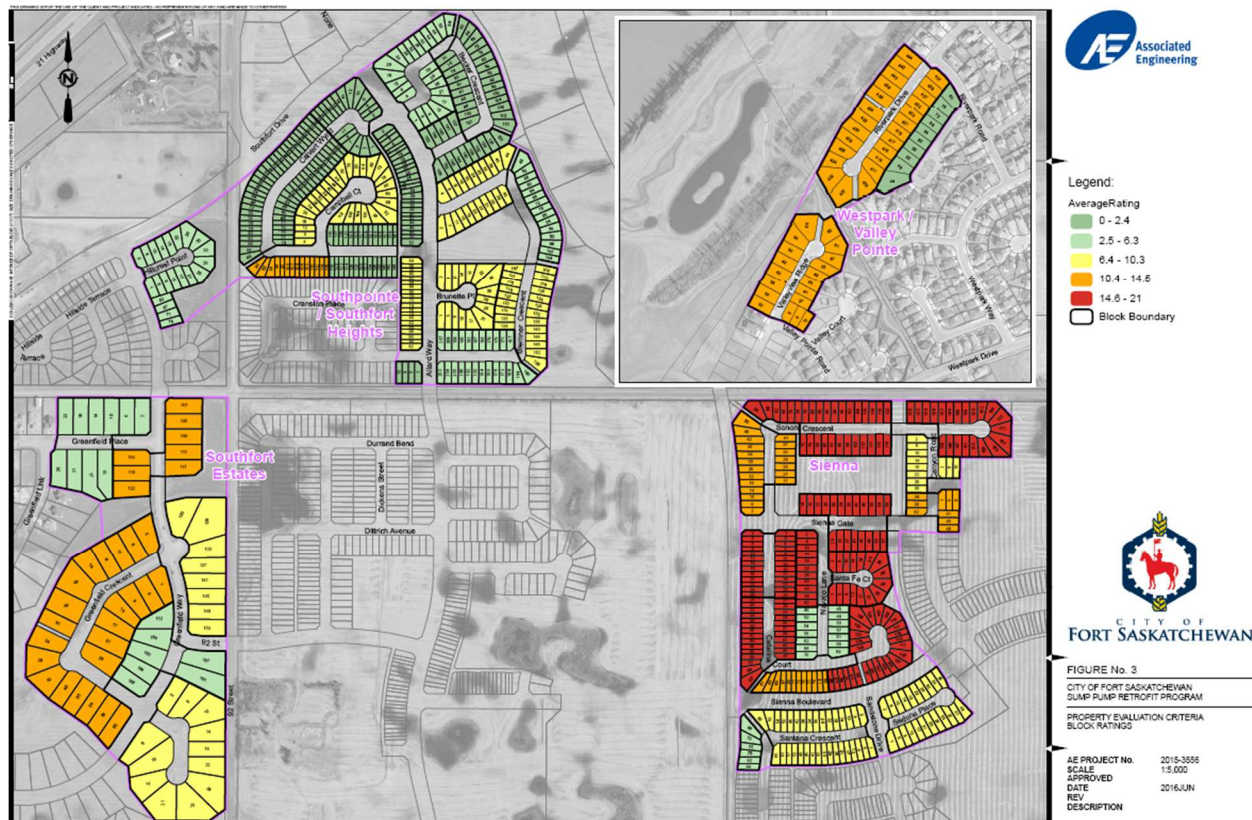
In 2012, the Engineering Standards were changed, requiring a storm sewer connection to every new property. This allows sump pump discharge to be directed into the storm system rather than onto the ground adjacent to the house. All subsequent development stages have been constructed to this standard.

The City is not required to mitigate this problem, however with the number of affected residents and the potential damage to City infrastructure a long-term approach is being developed.

In the 2015 Budget, Council approved \$150,000 to investigate options to deal with sump pump discharge complaints. A consultant was hired to investigate the complaints and determine the best options for addressing the sump pump discharge.

In the summer of 2015 the consultant performed a site investigation cataloging visual evidence of excessive sump pump discharge within neighbourhoods where complaints have been received. In the fall of 2015 a survey was sent to homeowners in the neighbourhoods asking them to identify any concerns that they had with sump pump discharge.

The data from the site investigation and resident surveys was collected and summarized within the consultant's report. A scoring system was developed to rank the different issues identified. This was used to develop a score for each of the properties that responded to the survey and that had issues identified during the site investigation. This information was used to create a block score to prioritize the areas most affected by excessive sump pump discharge.



The Priority 1 areas in red are broken into 8 projects with a total cost of \$1,800,000 in 2016 dollars. At current funding levels this would result in a 15 year program to address the Priority #1 areas.

The Priority 2 areas in orange are comprised of 6 projects in neighbourhoods with curb and gutter. These projects are estimated at about \$1,200,000 in 2016 dollars. There are Priority 2 properties identified in Southfort Estates. With no storm sewer present these areas will require a different approach to move the sump pump discharge to the appropriate ditches with the least impact to their properties. These will have to be dealt with on a case by case basis and costs will vary depending on existing landscaping. The Priority 2 areas would require an additional 12 to 15 years to complete at today's funding levels.

The Priority 3, 4, and 5 areas in yellow and green will be re-evaluated once the Priority 1 and 2 areas are complete. If the decision is made to continue with the program at that time, an additional 20 projects would be added at an estimated cost of \$4,000,000 in 2016 dollars.

Next Steps

The highest ranked Priority 1 project is currently being designed and will be tendered in late summer. Construction of this pilot area is expected in the fall of 2016. In 2017, the first construction project will be evaluated for its effectiveness and process. The lessons learned will be applied to the design of the second ranked Priority 1 area for construction in 2018.

A funding program will be brought forward in the 2018 Budget to accelerate the program.

Plans/Standards/Legislation:

Industry Best Practices

Financial Implications:

In 2015 \$150,000 of on-going money was added to the Utility budget to begin the retrofit program. Of the \$300,000 allocated (2015 and 2016) to the project \$100,000 has been spent on the consultant reports with the remaining \$200,000 being earmarked for construction on the highest ranking area.

Internal Impacts:

This program can be managed within Project Management with support from Utilities.

Attachments:

1. Appendix A - Sump Pump Retrofit Program – Prioritization Criteria
2. Appendix B - Sump Pump Retrofit Program – Catalogue of Affected Homes

File No.:

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Submitted to:	City Council	Date: July 12, 2016