



Agenda Item Executive Summary

Title: Water Main Replacement Plan and Water Rate Study

Presenter: Brian Keys, Director of Water & Electric

Agenda Date: 09/06/2016

Consent: YES NO

<input type="checkbox"/>	Ordinance
<input type="checkbox"/>	Resolution
<input type="checkbox"/>	Bid Authorization/Award
<input checked="" type="checkbox"/>	Policy Direction
<input type="checkbox"/>	Informational Only

Item History:

The Village's water distribution system is comprised of approximately 72 miles of water main with the majority of the system having been installed in the early 1900's. Given the age of the water distribution system, a long term, comprehensive plan for the asset's replacement and a funding strategy is necessary to ensure the long term viability of the water utility. In December 2015, the Village Council approved Resolution R-43-2015, approving an agreement with Burns & McDonnell Engineering Company for professional services. The project scope included development of a prioritization plan for the replacement of the water infrastructure, determining the appropriate rate of replacement of the existing water infrastructure, and performing a rate study of the Village's water system.

Executive Summary:

Burns & McDonnell has prepared a preliminary report entitled; "Water Main Replacement Plan and Water Rate Study" (attached), which summarizes the preliminary recommendations. During the September 6, 2016 Regular Council meeting, staff is seeking feedback and policy direction from the Village Council regarding the Water Main Replacement and financial plan. Thereafter, a full report including recommendations on cost of service and rate design will be provided to the Council with an accompanying presentation. The second presentation and full report is tentatively scheduled for the October 4, 2016 Regular Council meeting.

Recommendation:

Provide policy direction regarding the Water Main Replacement Plan and financial planning scenarios

Attachments:

- Agenda Report dated August 29, 2016
- Burns & McDonnell preliminary report entitled; "Water Main Replacement and Water Rate Study"

AGENDA REPORT

SUBJECT: Water Main Replacement Plan and Water Rate Study

PREPARED BY: Brian Keys, Director Water & Electric

REF: December 1, 2015 Council Meeting, pp. 111-233

DATE: August 29, 2016

Background:

The Village's water distribution system is comprised of approximately 72 miles of water main with the majority of the system having been installed in the early 1900's. Given the age of the water distribution system, a long term, comprehensive plan for the asset's replacement and a funding strategy is necessary to ensure the long term viability of the water utility. In December 2015, the Village Council approved Resolution R-43-2015, approving an agreement with Burns & McDonnell Engineering Company for professional services. The project scope included development of a prioritization plan for the replacement of the water infrastructure, determining the appropriate rate of replacement of the existing water infrastructure, and performing a rate study of the Village's water system.

The Consultant team is using a four step approach to achieve these goals.

- Step 1: Water Main Replacement Plan
- Step 2: Financial Planning
- Step 3: Cost of Service
- Step 4: Rate Design

Steps 1 & 2 of the project plan are completed. Burns & McDonnell has prepared a preliminary report entitled; "*Water Main Replacement Plan and Water Rate Study*" (attached), which summarizes the preliminary recommendations. During the September 6, 2016 Regular Council meeting, staff is seeking feedback and policy direction from the Village Council regarding the Water Main Replacement and financial plan. Thereafter, a full report including recommendations on cost of service and rate design will be provided to the Council with an accompanying presentation. The second presentation and full report is tentatively scheduled for the October 4, 2016 Regular Council meeting.

Preliminary Report Recommendations:

In the preliminary report, Burns & McDonnell has developed a prioritized listing of water main sections that should be replaced. The prioritized list is based on their evaluation of Village data using parameters such as: number of main breaks, time period in which main breaks occurred, break type, water main age, water main material and capacity. A replacement plan database has been developed so staff can manage and update

information on an annual basis. The proposed replacement cycle for water mains has been developed upon a 100-year cycle.

Critical Decision #1: Is the proposed cycle for water main replacement acceptable?

The Consultant evaluated several financial planning scenarios appropriate for the operating and capital needs of the Water Fund. Since the targeted replacement cycle of water mains directly impacts the financial planning analysis, the Plan was developed with input from Village staff. The proposed plan recommends phasing in replacement and funding beginning in 2017 through 2025, when a fully implemented targeted replacement program is envisioned.

To complete the targeted replacement program by 2025, three scenarios are presented for the Council's consideration. The Consultant and staff recommend Scenario #1 which incorporates consistent revenue increases over time, a loan from the general fund repaid with interest, and capping the water utility's payment in lieu of taxes to maximize funds for capital investment. Under each of the scenarios, existing water rates and annual revenues do not meet the projected need of capital investment over the next 10 years.

Critical Decision #2: What is the preferred financial planning scenario?

The Consultant and staff require direction from the Council before finalizing the cost of service study and rate design report. The cost of service analysis is tied to the selected financial plan; therefore, the values in the cost of service tables will change depending on the scenario selected. Subsequent recommendations for proposed rates and structures would include projected revenue scenario increases.

Representatives from Burns & McDonnell will be at the September 6th Regular Council meeting to present an overview of the work completed to date. Following the presentation, Village staff and the Consultant will address questions regarding the work completed to date and the next steps.

Recommendation:

Provide policy direction regarding the Water Main Replacement Plan and financial planning scenarios