## **ENGINEERING DEPARTMENT**



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## **MEMO**

TO: Chairperson Wetzel and Commission Members

FROM: Stacy Winkelman

DATE: September 5, 2023

RE: Public Works Commission Meeting of September 12, 2023

## Agenda Item:

Update, no action required: 2023 Salt Brine Program

## **BACKGROUND:**

The City added liquid salt brine to the winter snow and ice control program in 2021. Brine has primarily been used to pre-treat bridges, hills and intersections prior to a snow event. This improves the City's snow and ice control program 2 ways:

- 1. Light snowfalls melt faster in these areas as traffic drives over it, and
- 2. The brine layer allows snow plows to remove snow and ice from the pavement easier and faster. The brine makes it harder for the snow and ice to bond with the pavement. This reduces the number of times a plow has to go through the same area to remove snow and ice from these streets.

The City plans to grow the brine program incrementally over the next few years, starting with the following purchases in 2023:

- 1. A second storage tank to increase the amount of brine on hand to deal with snow events,
- 2. Equipment to outfit a second truck for pre-treating streets, and
- 3. A pre-wetting system for better salt application on a snow plow/salt truck.

The 2023 budget has funding for a brine-making machine; however staff have evaluated the program needs and would like to use this funding to make the purchases outlined above as the 2023 budget allows. This will allow for an increase in the use of brine in the City this year, with incremental growth and outfitting of additional trucks and tanks in the next few years. The purchase of a brine-making machine is anticipated once we have the distribution system in place and have the need for additional brine to be ready to go during snow events. Staff will be evaluating the use and results of brine throughout the winters, and will be able to modify the planned use and growth of the program accordingly. The goal of bringing brine into the winter snow and ice control program is to provide faster results on the streets and to ultimately reduce the amount of dry salt purchased and used throughout the City.