

Town of Rhinebeck

Salt Brine Presentation

October, 6th 2020

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Salt Brine Systems

- COSTS RANGE FROM \$55,000 TO \$95,000
- COSTS ASSOCIATED WITH SALT BRINE SYSTEMS INCLUDE: LABOR (BRINE OPERATOR/CLEANOUT COSTS), EQUIPMENT (THE SYSTEM ITSELF & REPAIRS/MAINTENANCE), MATERIALS (SALT/WATER)



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VILLAGE USE

- THE VILLAGE WOULD USE THIS SYSTEM ON 27 MILES OF ROAD, WHICH WOULD EQUATE TO 40 GALLONS PER LANE MILE. THIS WOULD EQUAL 1,080 GALLONS OF BRINE PER TREATMENT.
- TIME NEEDED TO COMPLETE THE 27 MILES OF VILLAGE STREETS WOULD BE ABOUT 2 HOURS WITH THE TREATMENT LASTING UP TO 48 HOURS.
- SALT NEEDED TO MAKE 1080 GALLONS WOULD BE 2,484 LBS OF SALT AT 23.3% BRINE.
- THIS EQUATES TO A SAVING OF 3,116 LBS OF SALT PER TREATMENT.
- LABOR SAVINGS WOULD BE CUT SIGNIFICANTLY AS YOU WOULD ONLY NEED ONE TRUCK TO TREAT ALL 27 MILES OF ROAD.
- SAVINGS IN SALT PER TREATMENT = \$116.23
- SAVINGS IN 350 LBS PER LANE MILE WOULD MEAN A SAVING OF \$239.30 AS WELL AS ANY ADDITIONAL LABOR THAT WOULDVE BEEN INVOLVED AS WELL AS OVERTIME SAVINGS, FUEL AND WEAR AND TEAR ON TRUCKS.
- IN CLOSING YOU COULD TREAT ROADS ON A FRIDAY BEFORE A SMALL SNOW STORM AND NOT HAVE TO WORRY ABOUT IT UNTIL MONDAY.

TOWN USEAGE

- ALL OF THE TOWN ROADS INCLUDING COUNTY ROADS WE ARE CONTRACTED TO PLOW
- BRINE NEEDED WOULD BE 4,800 GALLONS AT 40 GALLONS PER MILE.
- TIME TO TREAT ALL TOWN ROADS WOULD BE APPROXIMATELY 6 HOURS AT 25 MPH.



FACTS ABOUT THE SYSTEM

ON SITE PRODUCTION	ABILITY TO DO EVERYTHING IN HOUSE
LIFE OF THE BRINE MACHINE	APPROXIMATELY 10 YEARS
TANK CAPACITY	5,000 GALLONS
WATER SOURCE	HYDRANT LOCATED ON PROPERTY
ELECTRICITY SOURCE	MAY HAVE TO BE RETRO FITTED
SALT SOURCE	PURCHASED AND DELIVERED TO THE TOWN GARAGE

Summary



We're delivering for our tax payers

Saving money on materials and labor costs.



Less overtime

Being able to pretreat roads saves on hours and hours of overtime



Only one truck necessary

Saving on costs of multiple men going out to treat roads



Possible grant money

Would help save on costs for everyone.



We're getting our work done

More efficiently and effectively.



Maintenance and Repair costs

Would be slashed across the board since we would be saving on wear and tear on the other trucks (tires and possibility for parts to break from excessive plowing).

Conclusion

Thanks to commitment and strong work ethic, we know this would be a great advantage to all departments involved.

We look forward to working together.

