

STAFF REPORT

DATE:4/18/2023

TO: City Manager

FROM: Marty McGee

RE: Sewer truck proposal



BACKGROUND:

Public Works needs to replace our current sewer jetter. The current trailer mounted jetter was purchased new in 2005, for the sum of \$45,000. The jetter has been repaired several times in past years, the last time it was in for repair we were informed the water pump could no longer be rebuilt. The estimate to completely rebuild our current is \$25,000. Due to the repairs needed and the age of our current trailer jetter as well as its small capacity, Public Works has started to research truck mounted jetter and vac combos to determine what would be the best option for our current system as well as accommodate future growth. If our current jetter goes down again, the city will have no ability to clean sewers or respond to emergency backups, which would require the city to outsource this work to prevent citizens from having sewage back up into their homes. Plumbing Solutions charges \$490.00 for each call out. The city averages 3 to 4 emergency call outs per year. We also clean an average of 25,000 linear feet of sewer mains each year in 2022, we had 21,140 linear feet cleaned by UMC at a cost of \$50,313.20.

DISCUSSION:

As our city continues to grow the demand for sewer cleaning becomes higher each year. We would request Council approve the purchase of a truck jetter that meets or exceeds the below specifications in order to keep up with current and future demands. The total cost being requested to spend is no more than \$280,000.00 versus the cost of a new truck of identical specifications which would exceed \$500,000. This vac truck will allow the city to save costs on quarterly lift station cleaning as well. All five lift stations are cleaned three times a year at a cost of \$8,498.00 for each cleaning, which total \$25,494.00 a year. The vac truck is a safer and more efficient version of our current machine. A vac truck is highly versatile in its uses, examples of what the vac truck can be used for are listed below.

Vac Truck Capabilities:

- Able to clean a sewer line with various types of nozzles for general maintenance of the sewer line or to remove a blockage of roots and other debris.
- Able to clean or unplug a storm sewer drain.
- Remove debris from a manhole after cleaning without the need for a confined space permit.
- Clean storm water catch basins.
- Remove standing water in a roadway.
- Clean sewer lift stations or wet wells with high pressure water and have the capabilities to vac out any debris found (Grease, Gravel, Sand etc.) without having a confined space permit.
- Hydro-Excavation allows us to locate utilities safely while preventing damage.
- Offers the ability to hydro-excavate water main breaks before a locator shows up. Locates can take up to an hour to show up, this saves the city precious time to react which also saves money in water and labor.
- Helps keep water levels down during a water line repair.
- Vac out water meter boxes for meter maintenance.
- Clean out water valve shut offs to assist in exercising and maintaining water main valves in case of an emergency.
- Pot holing to install a new sign or replace an existing one without making a big mess.
- Power wash and removal of graffiti.
- Power wash playground equipment to help keep clean and sanitize.
- Helps with replacement of fire hydrants.
- Clean off sewer pumps before maintenance is performed to keep employees safe.

A representative from Key Equipment came out and evaluated our current sewer cleaner. Due to its age and condition, they offered us \$20,000 as trade-in allowance toward the purchase of a sewer vac truck.

FINANCIAL CONSIDERATIONS: The 2023 budget includes \$280,000 for this truck purchase.

POLICY DECISION: Staff is adhering to the purchasing policy in gathering a minimum of three bids. Due to the specialty of such a vehicle, there are limited manufactures and suppliers available in our region. We have reached out to three such suppliers with the specifications we are looking for.

Suppliers

- Key Equipment – Wichita, KS (Local maintenance)
- Elliot Equipment Company – Grandview, MO
- RED Equipment LLC – Kansas City, MO (48-hour maintenance response)

RECOMENDATION: As used vehicles of this type are in high demand; staff recommends the City Council authorizes Public Works to purchase a reasonably used vehicle with the listed specifications for a price not to exceed \$280,000 so that when a properly outfitted vehicle becomes available it can be acquired before it is purchased by another interested party.

FINANCIAL CONSIDERATIONS:

Funding for the sewer truck is available in the Equipment Reserve Fund. This Equipment Reserve Fund is used to plan and purchase large equipment. The Equipment Reserve Fund is supported by transfers from our General, Water, and Sewer Funds.

The Sewer Main Cleaning Truck was originally planned for purchase in 2021 but staff noticed one of our dump trucks was failing at a more rapid pace. The 2021 money planned for a new Sewer Main Cleaning Truck was used to purchase a new dump truck. Fund balance and accounting is as follows:

FY23 Equipment Replacement Reserve Fund (Non-Budgeted)

Fund Balance - starting	274,720		
Budgeted FY23 Transfer from General Fund	100,000		
Budgeted FY23 Transfer from Water Fund	150,000		
Budgeted FY23 Transfer from Sewer Fund	150,000		
Total Funds Available	624,720		
Ford F-150 Crew Cab (P&Z)	44,865	Bid Approved	< waiting on delivery
Replacement Watchguard Server (PD)	14,307	Bid Approved	< waiting on delivery
Sewer Main Cleaning Truck (PW)	280,000		< scheduled for replacement
FY2022 Police Vehicle Purchase (PD)	55,000		< scheduled for replacement
FY2023 Police Vehicle Purchase (PD)	55,000		< scheduled for replacement
Exmark Mower (PW)	20,000		< scheduled for replacement
F-350 Truck (PW)	50,000		< scheduled for replacement
Admin Vehicle Purchase (ADMIN)	45,000		< scheduled for replacement
Utility Task Vehicle (REC)	20,000		< scheduled for replacement
Estimated Expenditures	584,172		
Estimated Fund Balance - ending	90,548		

Vac and Jetter Truck Specifications

Debris Body

- 15-Yard capacity
- 60" dump height
- Hydraulic dump hoist
- Fully opening flat rear door with hydraulic locks and hydraulic door
- Debris body flush out system.
- 6" curbside decant system
- Splash shield
- Pump off ports

Vacuum System

- PD Blower with 16" of vacuum
- Front control blower start/stop.
- Debris body vacuum relief system, located in inlet of vacuum system.
- Debris inlet deflector plate in debris body
- Dual stainless-steel float ball shut-off.
- Centrifugal separator rear mounted
- Stainless steel micro-strainer

Boom

- 10' telescopic boom assembly with 180-degree rotation
- Joystick control

Water System

- Single piston water pump rated at 80 GPM @ 2500 PSI
- Accumulator system
- 3" Y-Strainer at water pump with 3" drain valve
- Rodder pump drain valves.

Hose Reel

- 800' capacity tele-rotating hose reel
- 500' x 1" sewer hose
- Pinch roller
- Auto-level wind

Chassis

- Freightliner tandem axle chassis or similar tandem axle chassis (Class B CDL required to operate)
- Diesel engine
- 66,000 GVWR (Required for debris body size and carry capacity)
- Automatic transmission

Additional Specifications

- Hydro excavation functionality
- High pressure hose reel
- 4000 PSI pressure gun
- 3000 PSI washdown gun
- Hydro excavation nozzle
- Cold Weather recirculation
- Backup cameras mounted to debris body door.
- LCD color monitor in cab for backup camera
- LED Split arrow traffic controller
- Amber safety light package
- LED work lights on boom

