Memorandum

TO: Jamin Friedl, Finance Director

FROM: Joshua Ripp, Fire Chief

DATE: July 8, 2021

SUBJECT: Ladder 4 Repairs Needed, funding request

Ladder 4 Hydraulic Hose Replacement – I am requesting funding to pay for repairs to the hydraulic system on Stoughton Ladder 4. This cost is estimated to be approximately $50,000. Proposed funding would initially come from proceeds of the sale of our 2004 rescue squad this year, which totaled $71,000. The city's portion is presently $48,300, with the rest paid to the townships ($22,700). Of note, we also had an unanticipated steering gear replacement in June that cost us just over $4k, due to a leak.

Background- The ladder truck is a 2003 Pierce 105 foot tall ladder/bucket truck. The truck is used for both the large aerial device, as well as ground ladders. We utilize it on structure fire calls (2nd truck out, provided trained operators respond). It is scheduled for replacement in 2024 currently. The estimated replacement cost would be 1.5 million dollars in 2024. Assuming a 5% increase per year, that puts my estimate for a similar vehicle at 1.73 million dollars in 2027.

Last year and earlier this year, the truck has received multiple repairs, due to hydraulic fluid dripping from the aerial, onto the windshield. It has been determined that the fluid is seeping through the hydraulic line walls, which means the only fix is replacement of the lines. Further inspection found hoses in other locations of the truck starting to show the same kind of seeping occurring.

I asked for a proposal from Pierce to replace all the hydraulic lines on the truck. We've been chasing problems already, and will continue to chase problems over and over. Replacing the lines requires quite a bit of labor, due to having to reach areas in the truck that are normally covered by panels, etc. If we only replaced what is leaking today, we could end up paying

money next year to get back into those same areas, to replace other lines that would begin leaking later. It seems that the most efficient option is to replace all the hydraulic lines at once, while the truck is apart, and then we minimize the possibility of paying to access those areas multiple times.

Truck replacement plans – You'll see later this year that I'm proposing to move the Ladder 4 replacement to 2027, with a proposed engine replacement moved to 2024. That is assuming this repair takes place in full. The difficult part of estimating equipment life, is that we don't have good access to every part that is buried in the truck. We don't often have the opportunity to see things that are getting ready to go wrong, especially the hydraulic lines. We can only react when we see leaks develop, or see operational issues develop. I'm hoping to minimize things with this proposed repair.

Risks – We do have some risks to be aware of. They have costs associated with them, but I can't quantify it right now, as they would come up as surprise repair. We've planned routine maintenance taking care of things that we can envision/plan for:

Risk 1 – We will find more to repair once the repair shop gets into the vehicle for inspection and hydraulic hose replacement. I can't forecast this. Everything we are doing today tells us the truck is in good shape, but this risk exists, and I'm not able to quantify it. It's entirely possible that I'll need to ask for additional money once an inspection takes place.

Risk 2 – It's entirely possible that we get the truck operational, and something "large" pops up in need of repair. This is why I'm ok with pushing the replacement down the road a few years, but I'm not inclined to go too far, as the age increasing will become an issue.

Final Word – Just to bring it all together, this proposal will bring the Ladder truck to a point where staff will rely on it with their lives, as they use it to perform their jobs. The cost of $50,000 is quite a bit, but we have money from a used truck sale to pay for the majority of it. I'm anticipating asking for a bit more money as we get into the truck, and find things. For that reason I am asking for approval of the following funds to complete this work.

- $48,300 from the 2004 rescue squad sales proceeds
- $11,700 from contingency funds

This results in $60,000 available to complete the work that is known at this point in time. If additional work is required, I will come back before the Finance Committee and Council to request additional funding prior to proceeding.