
REPORT TO CORPORATE SERVICES COMMITTEE

MEETING DATE: March 6th, 2024
FROM: Alex Hackenbrook, Public Works Manager
SUBJECT: Equipment Replacement

RECOMMENDATION:

WHEREAS the Council for The Township of Bonfield receives this report and all information contained in it to make an informed decision regarding the replacement of heavy equipment (backhoes) with a new backhoe and excavator within the Public Works Department;
THEREFOR the Public Works Manager recommends to Council the replacement of the current backhoes with a new backhoe and excavator or the replacement of the 2015 Case 580 Super N WT and keep the 2004 Case 580 Super M for future use.

BACKGROUND:

The purpose of this report is to bring forward the past spending incurred by the Township in relation to the Public Works Department's fleet, specifically heavy equipment. Currently the Public Works Department owns and operates two backhoes which are manufactured in 2015 and 2004. The 2004 backhoe currently has 12,609hrs and the 2015 has 8711.8hrs on the body and 1200hrs on the replacement motor installed in 2023. Over the past two years these pieces of equipment have had many repairs resulting in high operating costs.

The 2004 Case 580 Super M in 2022 has required \$9,361.27 and in 2023 required \$5,827.21 worth of repairs. The 2015 Case 580 Super N WT in 2022 required \$43,970.40 and in 2023 required \$36,903.48 worth of repairs. Over a two-year time span the total charges for repair parts, not including labour or staff time allocated to these repairs totalled a sum of \$96,062.36. This large sum of repairs is equivalent to almost half the price of a new backhoe of the same calibre.

Another large cost with these machines is tire replacement. This comes with operating the Township owned landfill site, which requires the use of these pieces of equipment to push the garbage as well as cover and cap the waste pile. In 2023 the Township has spent \$4,969.75 on replacement tires or tubes for both the 2004 and 2015 Case backhoes.

Currently the Township uses the backhoes for not only landfill maintenance but also to load trucks with aggregate/sand, roadside ditching, culvert replacement, pothole repairs and many other tasks throughout the year. Operations that require a high demand of use from the current backhoes consist of ditching and loading trucks with material.

OPTIONS FOR CONSIDERATION:

* All options consist of the Public Works Manager obtaining quotes for current backhoe trade-in/sale value through an assessment conducted by third party entities*

1) Purchase a single new backhoe and keep the 2004 Case 580 Super M. Replacing the newer piece of equipment is justifiable through repair records on the 2015 vs the 2004 as well as the increased downtime for required repairs.

- 2004 Case total repair cost for 2022/2023 - \$15,188.48

- 2015 Case total repair cost for 2022/2023 - \$80,873.88

2) Purchase a new backhoe as well as a new excavator. A excavator would be a highly utilized piece of equipment within Public Works to complete such tasks as ditching, culvert replacements, roadside brushing as well as be used at the landfill without the incurred cost from tire replacements.

As many are aware ditching is a concern throughout the Township and many ditches need to be dug out and/or regraded alongside driveway/road culverts. While using the excavator for ditching, staff can re-set and replace any damaged culverts.

Secondly, the Township currently spends \$20,000 yearly on contracted brushing services. With the rental or purchase of a brusher head attachment for this piece of equipment, this money could be saved yearly and be allocated elsewhere within the budget elsewhere keeping this task in-house for Public Works staff to complete.

Lastly, with the benefit of the excavator having steel tracks, not rubber tires, staff could utilize the blade and bucket on the excavator at the landfill site to not only push and compact the garbage pile but to cap and cover the waste as well. The downfall of this option comes with the high purchasing cost as well as the need for a float trailer to transport this piece of equipment.

3) Keep both the 2004 Case 580 Super M and the 2015 Case Super N WT in the fleet and perform the required repairs for both to keep them operational year-round. Currently the 2004 Case requires a fix to the fuel pump. Due to the age and use of the machine, the fuel pump housing has cracked, and needs replaced. This repair could cost anywhere from \$1200 to \$2700 for parts.

It is suggested that the Public Works Manager reach out to surrounding companies (Case, John Deere, Cat, etc.) to obtain a fair market quote on the trade in of one or both pieces of heavy equipment as well as obtain information regarding the purchase price of new equipment (backhoe, excavator, float trailer). Upon the presentation of quotes to Council regarding trade-in value, Council would then determine the best possible path to peruse with the replacement of the equipment within the Public Works Department.

Respectfully,

Alex Hackenbrook

Public Works Manager

Township of Bonfield

I concur with this report,

Nicky Kunkel

CAO, Clerk Treasurer

Township of Bonfield