



Committee of the Whole

Meeting Date: July 19, 2022
Submitted by: Chris Traini, County Engineer
Subject: 5 Year Machinery Replacement Program

BACKGROUND:

Each year staff reviews the equipment replacement schedule and brings forward a proposed Machinery Replacement Program for approval by County Council.

ANALYSIS:

Approval of the Machinery Replacement Program does not commit the County to replace any given piece of equipment in any year. Instead, it is intended to give Council a picture of equipment purchase and replacement needs over a 5-year period. When developing the schedule, staff tried to avoid peaks and valleys in the replacement program while still meeting the equipment needs of the department. Cost estimates are also updated in the plan on an annual basis.

This year's equipment replacement schedule is based on the total 5-year expenditures of \$4,845,000, or an average expenditure of \$969,000 per year. The amount budgeted for equipment replacement is in accordance with sound asset management practices as described below.

A number of changes have been made to the prices and scheduling of equipment replacements. The 2022 5-year Machinery Replacement Program had a projected expenditure of \$4,122,000.⁰⁰ over 5 years. The revised 2023 5-year Machinery Replacement Program has a projected expenditure of \$4,845,000.⁰⁰ over the next 5 years. Any budgeted excess is deposited into reserves in case of an emergency equipment replacement or major unexpected repair.

The vehicle estimate costs in the revised 2023 5-year guide has an approximate increased annual expenditure of \$139,000 over the previous guide, or about a 15% increase. We have experienced not only huge rates of inflation but a limited availability

in stock of vehicles which has greatly increased the purchase price of machinery for the County fleet.

The current practice would be to tender out the vehicles scheduled for replacement in 2023 in the fall of 2022. This has several cost savings advantages as traditionally the County has received very competitive pricing by tendering in the fall. The most important advantage is that the replacement equipment will be ready for the construction and winter maintenance seasons in the following year due to the typically long turnaround time between ordering and the delivery of the equipment.

County staff are reviewing and revising our methods and procedures for the purchase of small trucks in order to better maximize savings to the County as well as keeping a competitive and fair procurement process. Recent years have been challenging due to disruptions in the global marketplace and limited supply of these types of vehicles.

The equipment scheduled for replacement is at a point where any further use would risk the possibility of a major repair and seriously affect any resale value at auction. The additional costs involved with keeping this equipment operational beyond its recommended service life would have an impact on the maintenance budget. The cost of repairs is not the only concern, as the time lost while the machinery is inoperable could be critical during the winter maintenance season or during an emergency.

ALIGNMENT WITH STRATEGIC FOCUS:

This report aligns with the following Strategic Focus, Goals, or Objectives:

Strategic Focus	Goals	Objectives
Connecting Through Infrastructure	Ensure communities are built on a sustainable foundation that is connected and thriving	Commit to a sound asset management strategy to maintain and fund critical infrastructure

RECOMMENDATION:

THAT the 5-year Machinery Replacement Program be approved, and that the equipment scheduled for replacement in 2023 be tendered in the fall of 2022.

FIVE YEAR MACHINERY REPLACEMENT PROGRAM 2023- 2027

EQUIP	ITEM DESCRIPTION	YEAR LAST REPLACED	2023	2024	2025	2026	2027	REMARKS
LOADERS, BACKHOES, MOWERS								
L-1	TRACTOR/LOADER	2015				150,000		
L-2	TRACTOR/LOADER	2014					150,000	
L-3	TRACTOR/LOADER	2012		150,000				
L-4	TRACTOR/LOADER	2015						2028
L-6	3 YD LOADER	2007						ASSES ANNUALLY
L-7	FORKLIFT	2002						ASSESS ANNUALLY
L-8	4 YD LOADER	2014						2028
L-9	4 YD LOADER	2000						ASSESS ANNUALLY
L-10	MINI-EXCAVATOR	2016						2030
L-11	TRACTOR BACKHOE	2018						2030
L-12	EXCAVATOR	2002						ASSESS ANNUALLY
L-13	TRACTOR/LOADER	2003						ASSESS ANNUALLY
L-14	TRACTOR/LOADER	2005						ASSESS ANNUALLY
L-15	TRACTOR/LOADER	2004						ASSESS ANNUALLY
M-1	MULTIDISC MOWER	2017	20,000					
M-2	MULTIDISC MOWER	2017	20,000					
M-3	MULTIDISC MOWER	2017	20,000					
M-4	MULTIDISC MOWER	2017	20,000					

FIVE YEAR MACHINERY REPLACEMENT PROGRAM 2023- 2027

EQUIP	ITEM DESCRIPTION	YEAR LAST REPLACED	2023	2024	2025	2026	2027	REMARKS
TRUCKS								
T-1	86,000 LB TRIAXLE COMBINATION BODY	2016				400,000		
T-2	82,000 LB TRIAXLE COMBINATION BODY	2010						SPARE CYCLE THROUGH
T-3	3/4 TON PICK-UP	2019	65,000					
T-4	68,000 LB TANDEM COMBINATION BODY	2013		355,000				
T-5	68,000 LB TANDEM COMBINATION BODY	2019						2029
T-6	86,000 LB TRIAXLE COMBINATION BODY	2016					400,000	
T-7	86,000 LB TRIAXLE COMBINATION BODY	2017					400,000	
T-8	86,000 LB TRIAXLE COMBINATION BODY	2017						2028
T-9	86,000 LB TRIAXLE COMBINATION BODY	2021						2032
T-11	82,000 LB TRIAXLE COMBINATION BODY	2012						2022
T-12	82,000 LB TRIAXLE COMBINATION BODY	2008						SPARE CYCLE THROUGH
T-13	68,000 LB TANDEM COMBINATION BODY	2014		355,000				
T-14	86,000 LB TRIAXLE COMBINATION BODY	2021						2031
T-15	½ TON WINDOW VAN	2014			50,000			2028
T-16	68,000 LB TANDEM COMBINATION BODY	2015				355,000		
T-17	68,000 LB TANDEM COMBINATION BODY	2013	355,000					
T-18	82,000 LB TRIAXLE COMBINATION BODY	2021						2032
T-19	82,000 LB TRIAXLE COMBINATION BODY	2008						SPARE CYCLE THROUGH
T-20	3/4 TON PICK-UP	2020	65,000			65,000		
T-21	3/4 TON CREW CAB PICKUP	2021						2028
T-22	3/4 TON CREW CAB PICK-UP	2021						2028

FIVE YEAR MACHINERY REPLACEMENT PROGRAM 2023- 2027

EQUIP	ITEM DESCRIPTION	YEAR LAST REPLACED	2023	2024	2025	2026	2027	REMARKS
COMBINATION BODY								
T-25	68,000 LB TANDEM COMBINATION BODY	2015			355,000			
T-26	68,000 LB TANDEM COMBINATION BODY	2010						SPARE CYCLE THROUGH
T-27	3/4 TON CREW CAB PICKUP	2014						2022
T-28	3/4 TON CREW CAB PICKUP	2014						2022
T-29	82,000 LB TRIAXLE COMBINATION BODY	2007						SPARE CYCLE THROUGH
T-30	68,000 LB TANDEM COMBINATION BODY	2010						SPARE CYCLE THROUGH
T-31	½ TON PICK-UP	2022						2028
T-32	½ TON PICK-UP	2022						2028
T-33	¾ TON PICK-UP	2020	60,000					
T-34	½ TON PICK-UP	2019		55,000				
T-35	PICKUP	2012						SPARE CYCLE THROUGH
T-36	82,000 LB TRIAXLE COMBINATION BODY	2010						SPARE CYCLE THROUGH
T-37	68,000 LB TANDEM COMBINATION BODY	2011	355,000					
T-38	½ TON PICKUP	2019		55,000				
T-39	68,000 LB TANDEM COMBINATION BODY	2011						2022
T-41	½ TON PICKUP	2017						SPARE CYCLE THROUGH
T-42	¾ TON PICKUP	2012						SPARE CYCLE THROUGH
T-43	¾ TON PICKUP	2016						SPARE CYCLE THROUGH
T-44	¾ TON PICKUP	2014						SPARE CYCLE THROUGH
T-45	¾ TON PICKUP	2018						SPARE CYCLE THROUGH
T-46	¾ TON PICKUP	2016						SPARE CYCLE THROUGH
T-47	½ Ton Pickup	2015						SPARE CYCLE THROUGH
T-50	¾ TON PICKUP	2015						SPARE CYCLE THROUGH
T-53	½ TON PICKUP	2014						SPARE CYCLE THROUGH
T-58	82,000 LB TRIAXLE COMBINATION BODY	2007						SPARE CYCLE THROUGH
T-62	½ TON PICKUP	2017						SPARE CYCLE THROUGH
T-63	½ TON PICKUP	2015						SPARE CYCLE THROUGH

FIVE YEAR MACHINERY REPLACEMENT PROGRAM 2023- 2027

EQUIP	ITEM DESCRIPTION	YEAR LAST REPLACED	2023	2024	2025	2026	2027	REMARKS
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GRADERS AND ATTACHMENTS								
G-1	GRADER 730A	2005						2028
G-2	GRADER 940A	2009						2029
G-3	GRADER 740 A	1993						ASSESS ANNUALLY
MISCELLANEOUS EQUIPMENT								
T-40	HIGHWAY MARKER	2006			570,000			
	51 TON RGN TRAILER	2021						2031
	WALING DUMP PUP TRAILER	1998						PURCHASED IN 2003
	RAVEN DUMP PUP TRAILER	1977						PURCHASED IN 2005
	GRAVEL STACKER 80 FOOT	2018						2029
	SHOULDERING MACHINE	2008						2028
	3,000 GALLON TANK AND PUMP (SLIDE IN UNIT)	2004						SPARE CYCLE THROUGH
	3,000 GALLON TANK AND PUMP (SLIDE IN UNIT)	2008						
	185 CFM AIR COMPRESSOR	1997						
	185 CFM AIR COMPRESSOR	2014						
	TAR KETTLE	2003						
	CANADA BACKHOE TRAILER	2012						
T-23	FLOAT TRUCK	2004						SPARE CYCLE THROUGH
T-60	VACUUM TRUCK	2019						2031
T-10	UTILITY TRUCK	2019						2029
C-1	ACURA RDX	2019						ASSESS ANNUALLY
TOTALS			980,000	970,000	975,000	970,000	950,000	