



Ladder truck research committee

Goal

- Examine different types of aerial fire trucks and determine the best suited for Mahone Bay.
- Once a type is determined, research all costs involved, training involved and equipment required.
- Intentions are to purchase a pumper aerial fire truck and replace/sell Mahone Bay pumper truck #1 to obtain further capabilities.





Truck type chosen "Bronto"



Used E-One Bronto fire truck chosen

2006 E-One Cyclone II 100FT Bronto Skylift 2000/300 [Q1238}

- Detroit Series 60 Diesel 6 cyl, 515 HP engine
- Allison 4060P Automatic 4 Speed Transmission with Jake brake
- Comes with 6 different length ground ladders
- Waterous S100 2000 GPM single stage mid ship pump
- 300 Gallon Poly tank
- Monitor in Bucket
- 3 discharge ports, 3 pre-connects and 3 intakes
- 2 power rewind electrical cord reels
- An Onan hydraulic generator CMHG 10000 with 750w Quartz scene lights
- Bucket holds 1200 lbs and has a wheel chair gate opening

2006 E-One Bronto presently available

- Cost \$195000 US
- Location New Haven Connecticut USA
- Dimensions
- Mileage 21,984
- Engine Hrs 2,408
- 11'10"H x 8'5" W x 41'6"L
- Wheel Base 233"
- GRV 81,500



Cost to "Get in service"

- Shipping – 20000\$
- Import fees/ Taxes – 45000\$
(town will get back)
- Decals – 5000\$
- Nova Scotia MVI – 500\$



Yearly cost of Ownership

- Ladder Inspection - 3500\$ plus travel cost (shared with Valley Fire Departments)
- Fluid and filter changes – 600\$
- Pump testing – 800\$



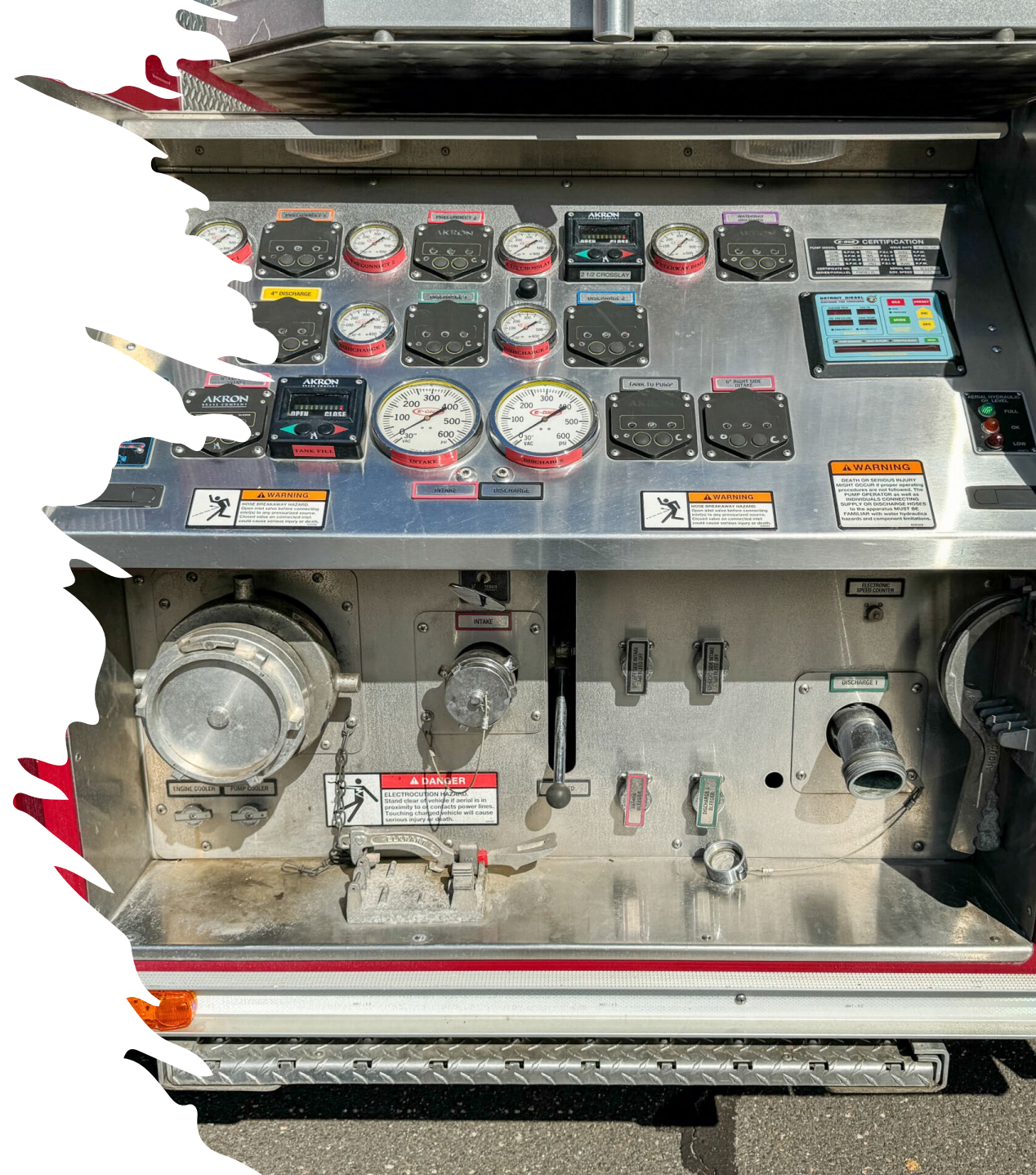
The importance of aerial versatility | Bronto Skylift

Upgrades

- Upgrade to LED emergency lighting – 25000\$
- Upgrade to LED scene lighting – 25000\$
- Upgrade BA seats – 4500\$

Training Requirements

- Ladder ops course can be taken online which talks about truck placement, precautions, uses.
- Pump operates same as any other fire pump.
- Ladder use will require “stick time” to get used to it, no specific course needed.
- Fire Star will put a ladder course for our department.



After action procedure

- If boom exposed to heavy smoke:
- Cleaned with varsol
- Regrease unit
- About 4hrs to complete (designated crew)



Total cost to purchase

- Truck cost 266000\$ Cad
- Upgrades 55000\$ Cad
- Import Fees 45000\$ Cad
- Shipping – 20000\$ Cad

- Total Cost To Purchase – 386000\$
- Minus Sale of Truck 1 Estimated at 200000\$



QUESTIONS???



2006 EONE Bronto Condition Report

Conducted December 20 2023

The Chassis

- Frame is rust free
- Engine is low Km and hours
- Airlines all cold weather lines
- Cab is rust free and in excellent shape inside , seats have no rips or tears
- Tires have plenty life left

The Chassis



The Chassis



The Chassis



The Chassis



The Chassis



The Chassis



The Chassis



The Body

- Body has no major damage
- Minor scratches
- Surface rust around the slam door door handles from dissimilar metal corrosion
- The pump functions as it should and shows no signs of corrosion with a fresh pump test

The Body

Surface corrosion around slam door handle



The Body

Light corrosion around slam door handle



The Body

Surface corrosion around slam door handle.



The Body

Light corrosion around slam door handle.



The Body

Surface corrosion around slam door handle



The Body

Overall condition of body is very good



The Body



The Body



The Boom

- The boom is free of any corrosion and is in very good shape.
- All hydraulic lines and cylinders in good shape with no leaks
- Boom functions as it should with a fresh certification (we have the full report)
- Out riggers are free of corrosion and well greased
- All grease points were well greased

The Boom



The Boom



The Boom



The Boom



The Boom



The Boom



Conclusion

- The truck is overall in excellent condition
- The surface rust can be easily repair by the company doing the Lighting upfit which they said they could do at the same time included in the cost of the upfit we priced.
- We would suggest offering 180 000 USD and see where the come with a counter offer.



Town of Mahone Bay

Staff Report

RE: Capital Investment Plan – Fire Vehicles

January 17, 2024

General Overview:

This staff report is intended to present Council with financial analysis in relation to the proposed purchase of a used aerial truck.

Background:

On September 12, 2023 Council directed staff to work with fire department members to consider the proposal to purchase a ladder truck and to bring forward a recommendation to Council.

Presentations from the Mahone Bay & District Fire Department (MBDFD) Truck Committee are attached as background to the proposed purchase.

Analysis:

The presentations from the MBDFD Truck Committee provide the Fire Department's rationale for adding an aerial truck to the Department's vehicle fleet. In discussing the proposed purchase, the Committee and Town staff developed a proposed plan for replacement of vehicles in future years which would include the continued operation of an aerial truck as a part of the Department's vehicle fleet going forward.

Financial Analysis:

As noted in the presentations by the MBDFD Truck Committee the net cost associated with the proposed aerial truck purchase is approximately \$200,000. This estimate factors in all the costs associated with acquisition and putting into service of the new truck, as well as the likely disposal value of the existing truck to be replaced (based on external valuation).

While \$200,000 is a relatively modest up-front cost to upgrade our "second out" pumper to an aerial truck, and the Committee has provided their rationale for endorsing this investment in the fire service capacity of MBDFD, Council will want to consider how this purchase will impact the longer-term Capital Investment Plan (CIP) for fire vehicles. In this interest I have attached the current CIP as it appeared in the 2023-24 budget as well as a version revised to reflect the continued operation of an aerial truck (both Capital Investment Plans have been extended to 20-years to reflect the – typically 20-25 year – useful life of the vehicles). The revised version also incorporates other changes to the anticipated schedule for replacement of existing vehicles related to the improved capacity provided by the aerial truck, as well as updated costing.

The attached revised Capital Investment Plan demonstrates that aerial truck capacity can be maintained in the long term – beyond the life of the used aerial truck currently proposed for purchase – with relatively minor impact on required levels of investment. It also demonstrates that – with or without the addition of an aerial truck to the MBDFD vehicle fleet – needed capital investment in the coming years will exceed currently available funds.

Consideration will need to be given by Council, in the 2024-25 budget process and beyond, to increasing fire rates in line with capital investment requirements. The 2023-24 budget established rates of \$0.209/\$100 of assessment within the Town's boundaries and \$0.11/\$100 of assessment in the outside areas served; the \$0.099 differential represents the costs of hydrant services in town. The attached revised Capital Investment Plan document calculates that an increase to both Town and outside area rates of as much as \$0.0496/\$100 may be required to fund capital replacement in the Department's vehicle fleet in the coming years, depending on other factors including fundraising / external funding, and growth in assessment. Current fire service rates in Lunenburg County range from \$0.07/\$100 to \$0.20/\$100.

Cash flow should also be considered for the proposed purchase of the used aerial truck. As a non-budgeted expense coming late in the 2023-24 fiscal year, the Town may not have sufficient cash on hand for the purchase, which is time-sensitive based on the availability of the used aerial truck. The 2023-24 budget projected a fire reserve balance of \$185,666 at March 31, 2024; this excludes unaudited year-end surpluses in 2021-22 and 2022-23, estimated at \$173,518 in the 2023-24 budget. With the estimated net cost of \$200,000 reflecting the disposal of existing truck to be replaced, which is not likely to take place in the 2023-24 fiscal year, the cash flow requirement in 2023-24 could be as much as \$425,000. As this exceeds the projected balance of the fire equipment reserve an interfund loan – from one of the Town's other reserves – would likely be required.

Climate Analysis:

Not applicable.

Strategic Plan:

2.3 Governance to Meet Expectations of our Growing Community

- Align staff capacity, capital, and operating plans with strategic plan.

Recommendation:

It is recommended,

THAT Council approve the allocation of \$425,000 for the purchase an aerial truck for the Mahone Bay & District Fire Department; and,

Direct staff to proceed with the proposed aerial truck purchase; and,

Approve the transfer of funds as needed to cover the purchase of the aerial truck from another reserve* to the Fire Equipment Reserve, to be paid back from the Fire Equipment Reserve when a sufficient balance is reached.

*to be specified.

Attached for Council Review:

- MBDFD Truck Committee – Initial Presentation
- MBDFD Truck Committee – Inspection Report
- CIP / Revised CIP Spreadsheet

Respectfully Submitted,



Dylan Heide, Town of Mahone Bay CAO

Current 20-year Capital Investment Plan for MBDFD Vehicles											
	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34
2001 Freightliner Pumper*	\$400,000	\$800,000									
2005 International 4400 Tanker											\$1,000,000
2008 Rosenbauer Spartan Pumper							\$400,000	\$800,000			
2009 Spartan Rescue											
	\$4,400,000	Over 20 Years \$220,000 Annually (financing costs excluded)									

Revised 20-year Capital Investment Plan for MBDFD Vehicles											
	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34
New Spartan Pumper (2023)*	\$450,000	\$900,000									
Proposed Aerial Truck (2006)	\$200,000										
New Pumper/Tanker (2028)						\$800,000					
New Aerial Truck (2031)								\$550,000	\$1,100,000		
New Heavy Rescue (2034)											
	\$5,000,000	Over 20 Years \$250,000 Annually (financing costs excluded)									

*First Out Pumper

For less than \$30,000 annually* the dept. can add an aerial truck to its fleet going forward:
 1 Pumper, 1 Pumper/Tanker, 1 Aerial Truck, 1 Heavy Rescue

*also reflects updated cost estimates for replacement of other vehicles from prior CIP

2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43
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\$1,000,000

2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43
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\$1,000,000

Additional Rev. Req'd: \$185,000 (\$250,000 less \$65,000 current annual reserve contribution)

In Town Rates

					<u>Increase</u>
RESIDENTIAL	\$ 161,199,100	0.209	336,906.12	79,966.28	\$ 0.04961
RESOURCE	\$ 1,686,500	0.209	3,524.79	836.62	\$ 0.04961
COMMERCIAL	\$ 21,532,900	0.209	45,003.76	10,681.86	\$ 0.04961
LONG TERM CARE FACILITY - Residential	\$ 16,162,200	0.209	33,779.00	8,017.61	\$ 0.04961
LONG TERM CARE FACILITY - Commercial	\$ 368,400	0.209	769.96	182.75	\$ 0.04961
	<u>\$ 200,949,100</u>		<u>419,983.62</u>	<u>99,685.12</u>	

Outside Rates

					<u>Increase</u>
Clearland	\$ 30,665,700.00	0.11	33,732.27	15,212.38	\$ 0.04961
Oakland	\$ 73,643,300.00	0.11	81,007.63	36,532.34	\$ 0.04961
Mader's Cove	\$ 67,672,000.00	0.11	74,439.20	33,570.15	\$ 0.04961
	<u>\$ 372,930,100.00</u>		<u>189,179.10</u>	<u>85,314.88</u>	

\$185,000