
TO: GENERAL COMMITTEE

SUBJECT: RESTORATION AND DONATION OF HISTORIC TRAIN - ENGINE 1531

PREPARED BY AND KEY CONTACT: A. DYKE, B.SC. CULTURE OFFICER – DEVELOPMENT, EXT. 4593

SUBMITTED BY: S. SCHLICHTER, DIRECTOR OF ECONOMIC AND CREATIVE DEVELOPMENT

GENERAL MANAGER APPROVAL: A. MILLER, GENERAL MANAGER OF INFRASTRUCTURE AND GROWTH MANAGEMENT

CHIEF ADMINISTRATIVE OFFICER APPROVAL: M. PROWSE, CHIEF ADMINISTRATIVE OFFICER

RECOMMENDED MOTION

1. That subject to the approval of the County of Simcoe, staff in the Economic and Creative Development Department be authorized to negotiate an agreement with the Simcoe County Museum for donation of Engine 1531, its tender box and its caboose (referred to as Engine 1531) that identifies the donation, to be included as part of the Museum's larger exhibit regarding local railway heritage, with an emphasis on City of Barrie and the Allandale Station, subject to terms and conditions to the satisfaction of the Director of Economic and Creative Development and in a form to the satisfaction of the Director of Legal Services.
2. That the City Clerk be authorized to execute the donation agreement subject to the terms of the agreement being to the satisfaction of the Director of Finance/Treasurer and in a form to the satisfaction of the Director of Legal Services.
3. That funding in the amount of \$150,000, \$100,000, and \$64,000 be included in the Capital Budget request for the years 2022-2024 respectively, funded from the Reinvestment Reserve in order to complete the restoration work needed to restore Engine 1531 to a condition suitable for donation.
4. That staff in the Economic and Creative Development and Corporate Facilities Departments incorporate a program to include community displays for recognizing the railway as part of the City's heritage and as part of the City's restoration work at Allandale Station, in consultation with the Allandale Neighbourhood Association and Heritage Barrie and report back to General Committee with options and costs associated with the recognition program.

PURPOSE & BACKGROUND

Purpose

5. The purpose of this Report is to obtain approval to enter into a donation agreement with the Simcoe County Museum to donate Engine 1531, subject to the approval of the County of Simcoe and the association capital budget allocations to complete the restoration works needed to maintain the Engine and prepare it for donation.

Background

6. Motion 17-G-289, approved by City Council on December 4, 2017, directed the following:
 - a) That staff in the Creative Economy and Legal Services Departments be directed to enter exploratory negotiations with the Simcoe County Museum and "The Friends" organization regarding a potential donation of Engine 1531 to the Simcoe County Museum, to be included as part of the Museum's larger exhibit that aims to educate the public about local railway heritage and the role of railways in developing Simcoe County, with an emphasis on City of Barrie and the Allandale Station.
 - b) That should the gifting of the historic Engine be approved, staff in the Creative Economy and Corporate Facilities Departments report back to General Committee regarding options and associated costs for recognition of the significance of railways to the development of the City of Barrie in and around the Allandale Train Station through community displays.
 - c) That staff in the Creative Economy Department report back to General Committee updating the status of negotiations, and any resulting financial implications."
7. Barrie has an extensive and revered railway history. The Canadian National Railway's Allandale Station has been designated as a heritage station because of its historical, architectural and environmental significance.
8. Steam Engine 1531 is part of this history as it was built in Quebec in 1910 by the Montreal Locomotive Works and used by the CN Railway unit in the late 1950's when it was stationed at Allandale. Donated to the City in 1960, the engine was originally placed on display on the lakeshore for the community to enjoy. This was followed in 1995 by CN Railway's donation of the caboos. Although these pieces were never used in Barrie, the Engine, Tender Box and Caboos are representative of railway equipment that was used here.
9. The Engine was exhibited on Barrie's waterfront for many years. At the time of the donation, the CN pensioners group provided the volunteer labour to maintain the equipment. The volunteer base of the CN Pensioners declined over the years as their membership base aged and eventually they were no longer able to assist in the maintenance of the equipment.
10. The original display was open to the public but consequently became a target of vandalism, which resulted in the installation of a chain link fence to provide it some protection from vandalism. However, due to time and weather factors, the equipment experienced significant deterioration.
11. In 2008 construction work began along Lakeshore Drive. To avoid further damage to the Engine the City of Barrie moved the piece from the City's waterfront to the Simcoe County Museum where it is currently stored. The cost to move the engine at that time was \$149,000 including hazardous material abatement, and the additional track required to be laid at the Museum to house the train. Staff were also asked to determine costs for the restoration and preservation of the Engine, and to plan for a future return of the Engine to Allandale station (Motion 15- G-162).
12. The Engine is on loan to the County per an executed Letter of Agreement. Per the Letter of Agreement, the City of Barrie maintains sole ownership of the Engine and is responsible for any costs including insurance, removal of any hazardous materials, transportation to a new location, and/or restoration. The Simcoe County Museum continues to provide preventative care in the absence of the full restoration being completed.

13. A hazardous material abatement project was completed by Decommissioning Consulting Services (DCS) in July of 2012, to remove all asbestos and lead paint from the Engine. At this time the boiler jacket and the back box was removed, thoroughly cleaned of asbestos, and placed into containers for storage, tagged and mapped for future use. The intent is that these parts, although significantly decayed, would be used as the mold to reproduce the same parts in the future. The City of Barrie covered these expenses at a cost of approximately \$75,000 with remaining restoration and preservation costs outstanding totaling approximately \$240,000.
14. Staff at the Simcoe County Museum worked with the Canadian Conservation Institute and conducted a free workshop in 2012 for conservators and museum technicians. This allowed volunteers the opportunity to participate in a hands-on restoration of industrial objects. Workshop participants cleaned out various portions of the Engine and Tender in preparation for asbestos and lead abatement and painted some surfaces of the Engine. The additional elements of the proposed static restoration and preservation program were not actioned.
15. Since that time the Museum has held the piece on loan, with the outstanding restoration works still required (See photos attached as Appendix "A" to Staff Report ECD004-21).
16. In 2021, Economic and Creative Development staff re-engaged with the Simcoe County Museum to explore the potential of donation per Council motion 17-G-289. Staff at the Simcoe County Museum have indicated that for them to continue to hold the piece in any fashion, the restoration works must be completed in order to support the long-term preservation of the piece. As such, for the Engine to be accepted as a donation into their collection, a budget for restoration must accompany the piece.
17. Further, the Simcoe County Museum have confirmed an interest in the receiving Engine 1531 as a donation to ensure its long-term preservation and to continue to build on its collection focused on County's rich history in transportation, including the role of Allandale Station.
18. In February of 2021, Economic and Creative Development Staff received an updated quote for the restoration and preservation of the Engine, Tender and Caboose from the Simcoe County Museum. This would ensure the longevity of the historic engine and secure its place in the Museum's collection. The quote is estimated at \$319,000, including a \$29,000 contingency. Staff at the Museum have indicated that they can complete the restoration work in phases, over three years to alleviate budgetary pressures associated with the work as shown in the restoration quote, attached as Appendix "B" to Staff Report ECD004-21.
19. After the Engine was installed at the Simcoe County Museum, the Allandale Train Station underwent a renovation and restoration. This project is currently in process, and is at Stage 4 of the archeological investigation of the site. There is no completion date available for the site at this time, per MEMO A19-11.

ANALYSIS

Suitability of Donation to Simcoe County Museum

20. Engine 1531 has been at the Simcoe County Museum since 2010 and other than the asbestos abatement and minor paint work, there has not been any maintenance or restoration work completed on it. The Engine is in poor condition and the longer it remains this way, the greater will be the effort and cost required to restore and preserve it. The Museum makes a commitment to honouring all historical pieces and their heritage and are prepared to take on the additional required work.

21. The display of Engine 1531 at the Simcoe County Museum is a good fit with the Museum's theme of Barrie and Simcoe County in the early 20th century, covering the period of late 1800's to early 1900's. Additional displays reflecting that period in Barrie's history include the Barrie Street Exhibit, The Barrie Bell automobile and a 1905 replica of the Allandale Railway station. Engine 1531 fits into the holistic experience of the transportation theme offered by the Simcoe County Museum. More than 8,000 students visit their site annually for educational purposes.
22. The City of Barrie has a long association with the Simcoe County Museum, beginning in 1928 when the original museum was in Barrie. It is estimated that 60% of the 35,000-45,000 annual visitors to the Simcoe County Museum are residents of Barrie. Over the years, the City of Barrie has contributed to the Museum, including \$324,000 in 2008 towards a capital expansion campaign for the facility.
23. Given the direct linkages between the Engine with the existing historic exhibits at the Simcoe County Museum, and the extensive community partnerships in place with the Museum, it is a natural home for the Engine, Tender and Caboose. Over the long-term, the Engine can continue to be shared with the community from the Simcoe County Museum and their ability to maintain it, offer security and provide educational experiences to honour the history of rail to the City and County.
24. Research with Museum staff, through the Barrie Public Library and with heritage associations will form the foundation for a future recognition program at Allandale Station upon the conclusion of the archeological site works. Through the City's website and digital campaigns, the development of online communications to provide recognition for Engine 1531 and the significance of railways to the development of the City of Barrie until the possible installation of public displays at Allandale Station can be completed.
25. Economic and Creative Development staff will consult with Facilities, Planning and the Heritage Barrie committee, in addition to the Museum and Allandale Historic Association to assess potential program elements including signage content and placement and report back to General Committee with alternatives and costing once the Allandale Station project is in a position to proceed
26. Should Barrie City Council choose to support direction to donate Engine 1531, the Simcoe County Museum will need to seek acceptance from Simcoe County Council to receive the donation. Should County Council choose to receive the donation, Economic and Creative Development staff would proceed to work Legal Services, Finance Department and the Simcoe County Museum on a donation agreement and associated financial contribution schedule pending capital budget approval.
27. The donation agreement would include key terms that would transfer ownership rights and all costs and responsibilities associated with maintenance, insurance, preservation and future repair to the Simcoe County Museum as the recipient of the donation.

Tourism Product Development Potential

28. Barrie's Tourism Master Plan has just been completed, and although Engine 1531 is not identified in the Plan, the restoration and interpretation work to bring the Engine to Allandale Station Park could serve as tourism product development and become an ancillary draw to Barrie. Although Engine 1531 was not built in Barrie, it was stationed at Allandale during some of its years of operation.

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29. Kingston's historic Engine 1095 sits at the site of their Tourism offices and is currently listed as the #11 thing to do in Kingston on Trip Advisor. It was built in Kingston by the Canadian Locomotive Company Ltd. before travelling across Canada and represents Kingston's position in Canada's industrial age.
 30. Based on Council direction to pursue donation, the current status of the Allandale Station site, fiscal costs to move, maintain and preserve the engine, and the ability to add a fulsome educational experience at the Museum, staff have pursued the recommendation to donate Engine 1531 and have it remain at the Simcoe County Museum.
 31. The potential to leverage as a tourism product development may still exist with option through the opportunity to create a regional tourism experience that encompasses programming and interpretive signage at Allandale Station that connects to the County Museum.
 32. Should Simcoe County Council opt not to accept the donation of Engine 1531, Barrie City Council could pursue the option of restoring the engine and moving it to Allandale Station upon site completion.

Restoration and Preservation:

33. As part of the restoration and preservation quote provided by the Simcoe County Museum (outlined in Appendix 'B' to this report), they also identified the ongoing estimated costs of maintaining and future preservation of Engine 1531. Specifically, beyond the estimated \$314,000 in restoration costs, the following costs have been identified:

Interpretive signage, exhibit material.....\$15,000(one-time)

Projected future cost of annual maintenance for engine and caboose (materials).....\$2,500/year

Projected future cost of annual maintenance for engine and caboose (labour).....\$2,000/year

Potential protective enclosure (One-time – to be assessed).....\$100,000

Further, an additional \$20,000 would be required every ten years to support the repainting of the engine and caboose.
34. By donating the Engine to the Simcoe County Museum all ongoing maintenance and insurance costs would become the responsibility of the County.
35. The Simcoe County Museum has a robust volunteer group who play a critical role in maintenance and restoration. As such annual maintenance costs provided incorporate elements of in-kind support for ongoing labour costs incurred by the Museum.
36. Beyond maintenance, any contemplation to move Engine 1531 from the Simcoe County Museum would incur movement costs (which in 2008, were \$89,000), in addition to the preparation of a site to support and display the Engine. To consider the return to Allandale Station, costing associated with soil assessments, concrete slab, engineering, track installation, protection of the site, etc. would need to be assessed and budgeted for.

ENVIRONMENTAL AND CLIMATE CHANGE IMPACT MATTERS

37. There are no environmental and/or climate change impact matters related to the recommendation.

ALTERNATIVES

38. There are two alternatives available for consideration by General Committee.

Alternative #1

General Committee could choose to offer the Engine as a donation with no cash contribution for restoration.

This is not recommended as staff at the Museum have indicated they would recommend to County Council to not accept the Engine as their budget cannot support the cost of the much-needed restoration.

Alternative #2

General Committee could choose to request an extension of the loan for a period of time and support funding the allocation of restoration works while Allandale Station site works are completed.

This alternative is not recommended as the Engine has been on site at the Museum for eleven years, and is a component of their transportation history programming, is safe on their secure site, can be best enjoyed by school groups and other visitors through their interpretive educational programs. Further, there are no timelines in place for completion of the Allandale Station site, and the Engine is in need of restoration and ongoing maintenance in order to be best appreciated by residents and visitors.

FINANCIAL

39. The quote for restoration costs was \$319,000. The schedule of work has been phased over a three-year period with costs estimated at Year 1 at \$150,000, Year 2 of \$100,000 and \$65,000 in Year 3.
40. Should Council approve the recommended motion, funding and the associated sources would be included in the City's Capital Budget for years 2022 through 2024. Due to the impact of Covid-19 and existing commitments on the Municipal Accommodation Tax (MAT) Reserve. It would be recommended funding for such works be from the Reinvestment Reserve.
41. The Simcoe County Museum identified a few variables in their quotation that could reduce the capital contribution of the City. Specifically, through the 'Friends of the Simcoe County Museum', any funds raised directly in support of the Engine's restoration would be applied to reduce the City's capital contribution in addition to any cost savings achieved through the delivery of the restoration program.
42. Should the donation be received by the Simcoe County Museum, no further fiscal contributions would be required from the City as the Museum would take on all future maintenance and preservation works.
43. Program development related to recognizing the City's rail heritage as part of the Allandale Station Project would be contemplated upon the Project proceeding and budgetary considerations would be presented to General Committee at that time for signage/displays, etc.

LINKAGE TO 2018-2022 COUNCIL STRATEGIC PLAN

44. The recommendation(s) included in this Staff Report support the following goals identified in the 2018 - 2022 Strategic Plan:
- Growing Economy – support tourism industry growth
 - Offering Innovative, Citizen-Driven Services – inspire community participation
45. Historic Engine 1531 is a valuable asset for tourism to Simcoe County, and its connection to Barrie's railway history provides a variety of tourism and educational opportunities for both the City and the Simcoe County Museum. The donation of the engine to the Museum will allow for both parties to complete necessary work to properly preserve the artifacts and their history in the region.

Appendix "A"

Photos of Engine 1531 at Simcoe County Museum



Appendix “B” - Current Restoration Quote from Simcoe County Museum



1110 Highway 26, Midhurst, Ontario L9X 1N6
 Tel: 705-726-9300 | Toll Free: 866-893-9300

Restoration Costs & Timeline for Cosmetic Restoration of Engine 1531 & Tender (2021)

Executive Summary

In 2008, the City of Barrie and County of Simcoe entered into an agreement to relocate Engine 1531 and caboose to Simcoe County Museum. As part of the agreement, the pieces were to undergo a cosmetic restoration, with City of Barrie providing funding and Simcoe County Museum staff and volunteers completing the work. The pieces were placed on display as a loan.

In 2008, a new track was constructed at the Museum, and the Engine and Caboose were brought from Barrie to the Museum. In 2010, a hazardous materials abatement project was completed. The total cost already spent for the track, relocation to museum and abatement project was \$149,000.

Since 2010, Engine 1531 and caboose have been displayed in an incomplete state on the museum grounds and have been exposed to the elements. While some preventive care has been ongoing to these pieces, the delay in the completion of the cosmetic restoration has been detrimental and needs to be completed in order to preserve the integrity and life of both engine and caboose.

The information provided in this document outlines the estimated costs and recommended timelines for the completion of the restoration work. Budget figures are estimates based on similar recent locomotive restorations in Ontario, most notably Engine 6167 in Guelph. Total costs may vary depending on a number of factors, including current material prices, funds raised by the community to support this project, as well as the level of in-kind contributions secured.

The following table provides an overview of the remaining steps required to complete the restoration process.

Action	Associated Cost	Year	Timeline
Metal repair – Cab, Tender Body	\$40,000	Year 1	Spring/Summer 2022
Prepare for painting, complete preventive measures relating to mechanical systems.	\$5,000	Year 1	Spring/Summer 2022
Rentals/consumables – fencing, scaffold, equipment, specialty tools, storage container, etc.	\$25,000	Year 1	Ongoing
Arrange for contractor to complete media blasting, priming/painting	\$60,000	Year 1	Summer/Fall 2022
Caboose- floor replacement	\$20,000	Year 1	Fall/2022
Fabrication and installation of new boiler jacket, painting.	\$75,000	Year 2	Assess, Research, Layout, Quotes Winter 2022/23 Install

			Spring/Summer 2023
Repair/paint/reinstall boiler fittings, piping, walkways, appurtenances	\$10,000	Year 2	Research/Repairs Ongoing Reinstallation 2023/24
Caboose – glazing, roof maintenance	\$15,000	Year 2	Fall 2023
Electrical	\$10,000	Year 3	2024
Windows/Glazing	\$5,000	Year 3	Summer Fall 2024
Detailing: Heralds, Number plates, etc	\$10,000	Year 3	Summer/Fall 2024
Caboose – painting	\$15,000	Year 3	Completion Fall 2024
Contingency (10% of total project)	\$29,000	As required	
TOTAL RESTORATION COST	\$319,000		

Cost Breakdown:

Expense	City of Barrie	Museum
COMPLETED		
Expenditures to relocate to museum, install track bed, complete abatement	\$149,000	
In-Kind to Date (Museum)		\$13,750
REQUIRED TO COMPLETE RESTORATION		
Projected Cost of Restoration (outstanding) 2022	\$150,000	
2023	\$100,000	
2024	\$40,000	
Contingency	\$29,000	
Interpretive Signage, exhibit material		\$15,000
ONGOING FUTURE COSTS		
Projected future cost of annual maintenance for engine and caboose- materials		\$2,500/YEAR
Projected future cost of annual maintenance for engine and caboose- labour		\$2,000/YEAR
Potential protective enclosure- further analysis required to determine feasibility of an enclosure for these artifacts.		\$100,000

Project Timeline

Estimated time of completion is 4 years. The beginning and final stages of restoration are heavily reliant on the availability of volunteer labour, the level of support having a significant impact on project duration. The middle stages of restoration are primarily completed by contractors and require the greatest financial inputs. Volunteer support is critical throughout the project, and to assist with ongoing annual maintenance following completion of restoration.

Annual Preventive Maintenance

Annual preventive maintenance is a necessary follow-up to restoration in order that this investment be protected and maximized for years to come. Most of the preventive maintenance costs incurred will be for staff and/or volunteer time to implement and execute a program involving Integrated Pest Management (IPM), cleaning, polishing, lubricating, and touch-up painting. Annual maintenance hours are estimated at 60-80 hours. An allowance of \$20,000 should be made for repainting the locomotive and tender at 10 year intervals (\$2000.00 per annum). Beyond these costs, financial outputs are expected to be minimal barring unexpected damage related to vandalism or extreme weather incidents.

Task	Time	Costs
Annual Maintenance (Locomotive/Tender)	60-80 hrs (\$25/hr)	\$1500-2000 (labour in-kind)
Repainting (Locomotive/Tender)	Approx every 10 years	\$20,000 (\$2,000/annum)
Annual Maintenance (Caboose)	20 hrs (\$25/hr)	\$500 (labour in-kind)
Repainting (Caboose)	Approx every 10 years	\$10,000 (\$1,000/annum)