

# Marmora and Lake Facilities Review – 2020



Prepared for:  
The Municipality of Marmora and Lake  
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Project: 20-3-2685

July 2020

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INTRODUCTION .....	2
LOCATION.....	3
BUILDING INSPECTIONS AND INVENTORY .....	4
<b>Marmora Fire Hall, 5 Matthew Street, Marmora, Ontario.....</b>	<b>5</b>
<b>Marmora Water Treatment Plant, 22 Water Street, Marmora, Ontario .....</b>	<b>9</b>
<b>Marmora Water Tower Equipment Building, North Hastings Ave, Marmora, Ontario .....</b>	<b>14</b>
<b>Marmora Parks and Recreation Garage, 14 Bursthall Street, Marmora, Ontario .....</b>	<b>16</b>
<b>Marmora Medical Centre, 1 Madoc Street, Marmora, Ontario .....</b>	<b>19</b>
<b>Marmora Waste Water Treatment Plant, Highway 14, Marmora, Ontario.....</b>	<b>22</b>
<b>Marmora Public Works Garage, 70 O’Brien Street, Deloro, Ontario .....</b>	<b>27</b>
<b>Marmora Train Station Building, 51 Cameron Street, Marmora, Ontario .....</b>	<b>32</b>
<b>Marmora and Lake Municipal Offices, 12 Bursthall Street .....</b>	<b>36</b>
<b>Marmora and Lake Library, 37 Forsyth Street .....</b>	<b>40</b>
<b>Tourist Information Centre, 9 Matthew Street.....</b>	<b>45</b>
<b>Marmora &amp; District Community Centre &amp; Curling Club, 28 Victoria Street .....</b>	<b>48</b>
<b>Deloro Community Centre, 20 Deloro Road, Deloro .....</b>	<b>54</b>
OVERALL RECOMMENDATIONS .....	57
FUTURE BUILDING USAGE .....	57
CONCLUSION .....	59

## Introduction

The Greer Galloway Group Inc. was retained by the Municipality of Marmora and Lake to complete an investigation of the existing municipally owned facilities and report on the condition and current use of each facility, as well as make recommendations for future use and feasibility of each facility.

This report is an update of the document completed and submitted to the Municipality in January of 2010. In that report, The Greer Galloway Group identified deficiencies with the building systems and the costs associated with repair or remediation. Additionally, The Greer Galloway Group made five recommendations:

1. Relocate the Manager of Environmental Services to the Water Treatment Plant
2. Move the Fire Department to the Marmora Public Work Garage
3. Move the Public Works Department to the Deloro Public Works Garage
4. Move the Parks and Recreation Department to the existing Marmora Fire Hall
5. Decommission or sell the existing Parks and Recreation Garage

Since the report was issued the Municipality has acted on repair activities and recommendations on the use of facilities.

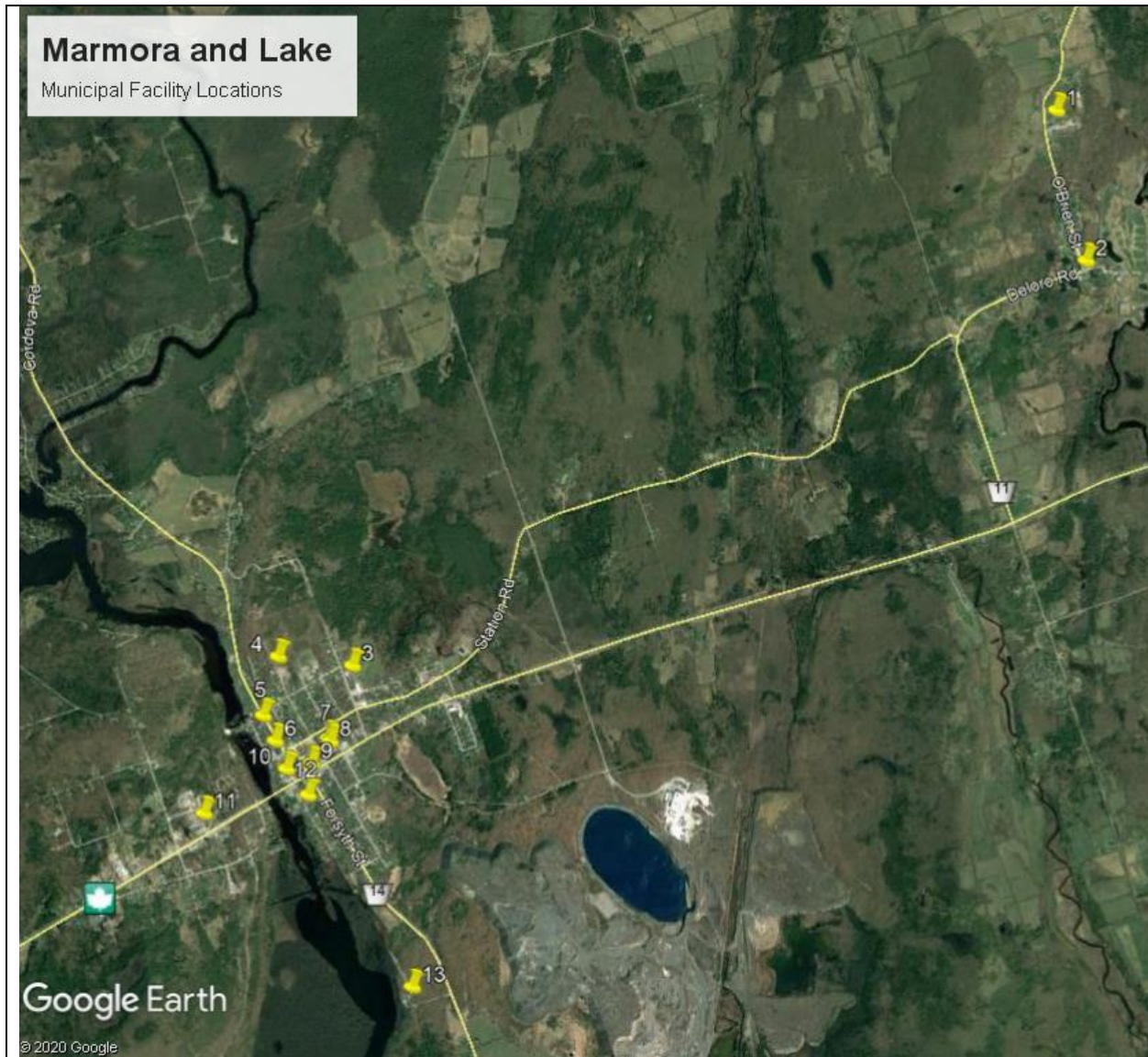
During June and July of 2020, a comprehensive review of the municipal building was conducted. Staff from The Greer Galloway Group inspected 13 facilities to identify opportunities and options for continued use, expansion, improvement, or repair.

This report outlines the findings at each building and assigns costs and priorities to each of the activities. Recommendations for future building use and holistic evaluation of the municipality property

During the months of August and September 2009, an inventory was created of the selected municipal buildings. Building that were not reviewed as part of this report included the Municipal Administration Building, The Marmora and Lake Public Library, The Tourist Information Centre, The Beach House, the Deloro Hall, Booster Park Facilities and the Arena and Community Centre. Based on the information provided to The Greer Galloway Group Inc. from the Municipality, it was determined that these facilities were not likely to be affected by any recommendations for future use.

This report outlines the findings of The Greer Galloway Group Inc. at each building and offers recommendations about the building's future use; and as a whole discusses the possible strategies for addressing the requests, requirements and wishes of the department heads within the municipality based on the buildings reviewed.

## Location



- 1. Marmora Public Works Garage
- 2. Deloro Community Centre
- 3. Community Centre/Curling Club
- 4. Water Tower Building
- 5. Water Treatment Plant
- 6. Medical Centre
- 7. Municipal Office

- 8. Parks and Recreation Garage
- 9. Library
- 10. Tourist Information Centre
- 11. Firehall
- 12. Train Station
- 13. Waste Water Treatment Plant

## Building Inspections and Inventory

The observations in this report are based on information gathered while completing inspections of each facility. The buildings were inspected by Greer Galloway engineers to gather information about their current usage, the condition of the buildings and the feasibility of future use. Questions were posed to municipal staff regarding ongoing issues, systems, maintenance, and repairs.

The following terms have been used throughout this document to record the condition of each of the building elements:

- **Good:** Acceptable in its present condition.
- **Fair:** Acceptable in its present condition, generally speaking; however, portions of this element require some repair or replacement: it is expected that this element will continue to deteriorate in the following few years, to a poor condition.
- **Poor:** The current condition of the specific element reviewed, would not meet the required standard and consequently will require full repair or replacement.

When recommending actions to address observations the following terms are used to assign priorities:

- **High:** Action shall be taken as soon as possible, but not more than 3 years.
- **Medium:** Actions shall be taken in 3 to 7 years.
- **Low:** Items to be addressed within 7 to 10 years or as early as funding can be applied.

The above rating system, and the ratings applied to each building should be observed as the professional opinions of The Greer Galloway Group Inc. based on past experiences with buildings of similar use and construction. Estimates on repair work are equivalent to Class C cost estimates. All municipal purchasing policies shall be followed to act on recommendations from the this report.

This report is concerned with capital expense items identified as having a threshold replacement cost of \$5,000 or greater. The horizon for costs and life expectancy is 15 years. Individual maintenance referenced in this report illustrate conditions at the site and should not be considered in capital expense planning.

## ***Marmora Fire Hall, 5 Matthew Street, Marmora, Ontario***



**Figure 1 - Marmora Fire Hall**

### **Site Information**

The Marmora and Lake Fire Hall is housed in the former public works garage located on Highway 7 at the west side of Marmora. This location currently houses the emergency services equipment. The building comprises a four (4) bay garage with a 2-storey office area on the west end. The lower office area contains two (2) offices and a washroom for each sex. The second storey contains a meeting hall with kitchenette and additional washrooms for each sex. The building site includes a yard for equipment and road works materials, as well as the fueling station. The yard is approximately 100m x 150m. The municipality does not use the yard space and at the time of this report, there is an agreement with Hydro One to allow the storage of vehicles in the yard.

### **Building Construction**

The Garage is constructed using concrete block walls with concrete core slab floors and roof sections in the office portion, as well as Concrete T-Beams in the Garage. The use of T-Beams spanning from front to back of the building makes the building easily expandable into a larger facility by building from the east end. The front façade of the building is finished with a split-faced concrete block, and the area above the garage doors is finished in metal siding. The roof of the structure is a built up flat asphalt roof. The office portion of the building is heated with a boiler system which is supplied through hot water wall mounted baseboard heaters and cooled by window mounted air-conditioners. The garage portion is heated with infrared heaters located between the bays. These heaters are mounted to the ceiling and are fed by the gas service located on the eastern side of the building. There is a Honda generator located in the service room off the garage.

### **Building Condition**

**Mechanical Systems** – The two primary mechanical deficiencies of the firehall are the septic bed and the central cooling.

The building does not have central cooling. At the time of the site visit, the upstairs hall was served by a single window-mounted commercial 1-ton air conditioner. The air conditioner was located above a desk area. A preliminary order of magnitude calculation indicates the upper hall space would require approximately 4 tons of cooling to provide adequate comfort levels during the cooling season. No cooling

options were visible on the main floor. Approximately 1 ton of additional cooling would be required for the main floor office spaces. The most efficient option to provide cooling is the installation of a multi-split This would install a 5-ton condensing unit at roof or ground level. Cooling heads would be installed in the upstairs hall and the office spaces. The existing heating and ventilation equipment would be unchanged. This item is medium priority.

The septic system has been identified for upgrade. It has been reported that it has required extra pumping and there is evidence of break-through. It is recommended the septic system be excavated and replaced. This item is high priority.

**Electrical Systems** – Building is served by an overhead 120/240V single-phase service from a utility transformer across the street. The main disconnect feeds a splitter which subfeeds 200A panel and 100A panel, both located in the radio room. The main disconnect is of the double-throw style to facilitate manual transfer to generator power. A mobile Honda generator is located in the room adjacent the main disconnect.

Lighting in this building is in good condition. As lighting is replaced it should be switched for LED equivalents.

Emergency lighting is provided by battery packs and is in good condition. Exit signs are in good condition.

Electrical panels are on wall behind an office desk. The desk and desk contents impedes access to the panels. Electrical code requires a 1-meter clear space in front of electrical panels. In addition, the desk clutter provides risk of unintentionally activating breaker handles. It is recommended that this room be re-configured to move the interfering desk. This is deemed to be a high-priority item.

**Structural Elements** – Minor deficiencies observed in the building; otherwise the building is in generally good condition structurally. They include minor cracks in the external Brick Finish and internal Partition walls found. These cracks are mostly non structural. Exposed west wall has some joints exposed due to lost mortar. Some efflorescence is also observed on the west wall.

Overall, building is in good condition. Minor maintenance should be carried out periodically to stop from further damage. Estimated cost of repair is \$6000.00

**Site Elements** – The site is in fair condition. There are opportunities to improve paved surfaces with resurfacing. This is a medium priority item.

The primary item of note is the lack of protection around the natural gas meter and service. The meter is on the northeast side of the building adjacent to the drive path to access the yard space behind the building. Erecting bollards will provide a barrier to disruption of natural gas service owing to collisions. This is a high priority item.

## Deficiencies List

The following list indicates observed deficiencies with regards to the building, as well as anticipated expenses for repairing these deficiencies. Items on this list should be addressed immediately to maintain the life expectancy of the building and its systems.

Deficiency	Estimated Cost
Install multi-split cooling	\$13,000
Protective bollards for natural gas service	\$1,500
Clear space in front of electrical panels	\$0
Replace septic system	\$7,500
Repaving	\$30,000
Minor Crack, Efflorescence, Exposed Brick joints of Mortar	\$6,000

## Photographs

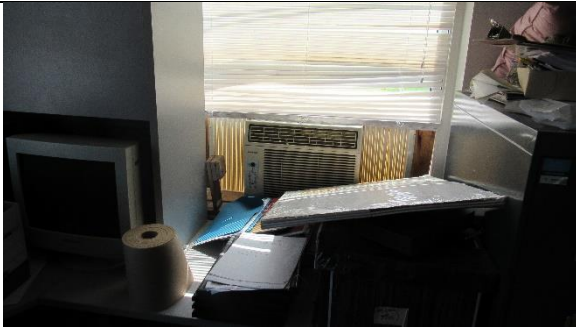


Figure 2 - Window air conditioner



Figure 3 - Unprotected gas service



Figure 4 - Electrical panel obstructions

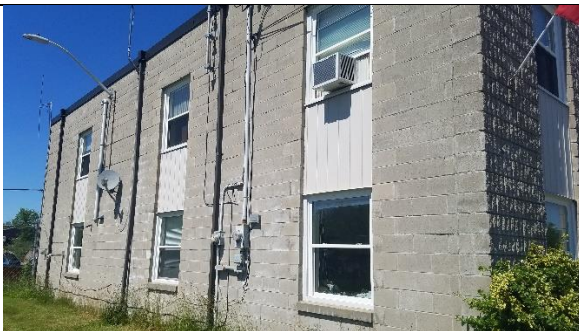


Figure 5 - Efflorescence and raked mortar joints



Figure 6 - Cracks in the joints of brick veneer

## Building Review Summary

Generally the condition of the building is good. With a limited amount of work, this building could be repaired and would be a valuable facility that would continue to serve the municipality for many years to come. With the implementation of a limited number of upgrades to certain aspects of the facility, its utility and comfort can be increased. It is recommended that the deficiencies listed be addressed to extend the life of the building. As portions of the building reach the end of their life cycle or begin to be repaired on a regular or recurring basis, they should be replaced to minimize the cost of upkeep. Keeping the exterior of the building clean and free of vegetation will prevent damage to the building due to the causes mentioned above, but also improve the overall appearance of the building.



## **Financial Forecast Table - Existing Conditions**

Municipality of Marmora and Lake			CASH FLOW															
ADDRESS: 5 Matthew Street, Marmora, Ontario			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
NO. OF BUILDINGS: 1			Anticipated Expenditure	\$ 3,780	\$ 12,978	\$ 1,671	\$ -	\$ 17,030	\$ 8,642	\$ 1,505	\$ -	\$ -	\$ -	\$ 12,418	\$ -	\$ -	\$ 1,850	\$ -
ITEM NO.	BUILDING ELEMENT	OBSERVATION / COMMENT	DESCRIPTION OF FUTURE WORK	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<b>1</b>	<b>MARMORA FIRE HALL</b>																	
1.01	Building Structure	The steel frame and concrete structure of the building are structurally sound and should continue to serve the municipality adequately. Some interior partition walls have minor cracking.	Complete minor repairs to cracking.	\$0	\$0	\$1,671	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.02	Exterior Walls	Cracks observed in external brick finish. West wall has some lost mortar.	Repointing of exterior walls should be completed as soon as possible to prevent further damage to the wall system.	\$0	\$4,867	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.03	Exterior Windows and Doors	Current exterior windows and doors show little to no damage or wear other than natural aging.	Recaulking of windows and doors should be completed on a 5 - 10 year cycle. Replacement of windows should be considered towards end of study horizon.	\$0	\$0	\$0	\$0	\$0	\$3,043	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.04	Overhead Garage Doors	Overhead garage doors and all associated operators and pertinent wiring/auxiliary equipment is in good condition.	Routine maintenance of this equipment should be completed to insure continued good working order.	\$525	\$0	\$0	\$0	\$0	\$609	\$0	\$0	\$0	\$0	\$706	\$0	\$0	\$0	\$0
1.05	Washrooms and Accessories	The washrooms of this facility are serving it well and should require little maintenance to maintain throughout study horizon. The septic system is failing.	Replace septic system	\$0	\$8,111	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.06	Finishes (Paint/ Wall/ Ceiling)	Interior finishes are in fair condition	Re-paint as necessary.	\$0	\$0	\$0	\$0	\$0	\$0	\$1,505	\$0	\$0	\$0	\$0	\$0	\$0	\$1,850	\$0
1.07	Generator	Honda Generator is reported to be in working order.	Maintain generator from operations budget.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.08	Compressor	Compressor was reported to be in good working order.	Maintain copressor through schedule preventive maintenance and operations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.09	Lighting	Lighting is in good condition for age of the building. Lighting is outdated and could be replaced with higher efficiency lighting.	Upgrade lighting to LED at end of life. Maintain and replace as necessary.	\$315	\$0	\$0	\$0	\$0	\$365	\$0	\$0	\$0	\$0	\$423	\$0	\$0	\$0	\$0
1.10	Roofing	Roofing was replaced in late 2009 to address leaking problem over hall area. New flashing was installed at the same time.	Roofing should not require replacement during study horizon. Minor repairs as necessary.	\$0	\$0	\$0	\$0	\$0	\$1,217	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.11	Heating System	Boiler heating system is reported to be in good working order. Upstairs meeting and first floor offices not receiving adequate cooling.	Maintenance of Weil-McLean boiler as required to keep in working condition. Replacement possibly required at midpoint of study horizon. Install new split cooling system for upstairs hall and first floor offices	\$2,940	\$0	\$0	\$0	\$17,030	\$3,408	\$0	\$0	\$0	\$0	\$11,289	\$0	\$0	\$0	\$0
1.12	Site	Site is in fair condition. Paved surfaces are deteriorating. Natural Gas service is exposed and unprotected.	Repave driveway and parking area. Install protective bollards for natural gas service.	\$0	\$1,780	\$0	\$34,421	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL EXPENDITURE: MARMORA FIRE HALL</b>				<b>\$3,780</b>	<b>\$12,978</b>	<b>\$1,671</b>	<b>\$0</b>	<b>\$17,030</b>	<b>\$8,642</b>	<b>\$1,505</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$12,418</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,850</b>	<b>\$0</b>

## ***Marmora Water Treatment Plant, 22 Water Street, Marmora, Ontario***



**Figure 7 - Marmora Water Treatment Plant**

### **Site Information**

The Water Treatment Plant in Marmora is located on Water Street along the Crowe River. The building was upgraded in 2006 to feature a more advanced water treatment system. An extensive addition was constructed to house new equipment. The building was completely upgraded both inside and out as part of the addition. The building contains laboratory facilities, a small office, a washroom and the water treatment system. The building also has a diesel-powered emergency generator for power failure backup. A separate garage building on the site is used for vehicle and equipment storage, and minor repair work.

This evaluation is concerned with the buildings and equipment supporting occupancy and does not include the water treatment process or equipment.

### **Building Construction**

The original building was constructed out of brick with a concrete floor and concrete ceiling slabs. The addition to this building was constructed with poured concrete foundation walls and floors, concrete block walls and an open web steel joist roof structure. The exterior walls of the structure were finished with an Extruded Insulation Finishing System (EIFS) membrane. The roof is a built up flat roof. The building is heated using forced air natural gas heaters. Lighting through the main portion of the facility is high bay light fixtures, while the remainder of the facility is lit by fluorescent light fixtures.

The garage is frame construction over a poured concrete foundation. The exterior cladding is vertical sheet steel with a standing seam metal roof. There is a roll-up door at the front of the building. Heating is by natural gas unit heaters. Lighting is fluorescent fixtures.

### **Building Condition**

**Mechanical Systems** – On the exterior of the main building, there are disconnected downspouts. This will prevent water from being adequately taken away from the foundation and contribute to foundation damage.

On a motorized damper a proper bird and insect screen missing. These items should be repaired as part of normal maintenance.

A brief review of the diesel genset indicated a full dedicated review is a worthwhile exercise. Within the context of this report, a high level review of the diesel tank and generator was completed. The tank has a 1110 L capacity that will power the generator at full load for 24 hours based on fuel consumption numbers from the genset manufacturer. The fuel supply lines are configured to draw from bottom of tank (see Figure 8). Under the current issue of CAS-B139.1.1 in force in Ontario, this is not permitted by Clause 6.2.2; *The fuel lines to and from the engine supply tank to the engine shall enter the engine supply tank through fittings located on the top of the tank.* A full review of the system may identify non-conforming items that can be addressed without a ministry or TSSA order being imposed. This is a high priority item.

The forced air furnace is fitted with an oversized particulate filter. This will reduce the efficiency of the furnace. Proper filters should be purchased and installed or, if the filters are no longer available, a modification to the system should be implemented to accommodate a common filter size. This is a medium priority item.

The garage has no exhaust system. It serves multiple purposes, including small repairs and vehicle storage. If it is possible for a vehicle to be stored in the garage with an active engine, a corresponding fan interlocked with a CO<sub>2</sub> sensor should be installed. This is a high priority item.

**Electrical Systems** – Building is served by a 600V three-phase service from a 3 x 75KVA pole mounted transformer array. The utility feeders enter underground. The service entrance is integrated into the MCC. The MCC also integrates the automatic transfer switch (ATS) for the backup generator. The generator is located in the lower level of the plant. The MCC is in good condition.

A separate garage building has a panel sub-fed from the main water treatment plant building.

Lighting in this building is in good condition. It is predominantly fluorescent, with some newer LEDs. As lighting is replaced it should be switched for LED equivalents. The separate garage is lit with 2x4 fluorescent fixtures.

The condition of electrical elements in the floor slab cannot be evaluated without disruption to plant operations and is outside the scope of this investigation. Additional investigation owing to water infiltration in the lower level is recommended.

**Structural Elements** – Cracks in the structural elements including walls, lintels, concrete floor is observed throughout the building. Corroded steel lintel found inside the building. Cracks in the foundation wall observed in ancillary building. Water ingress through the floor cracks and at the base of the walls. Significant water accumulation and flow is present on the lower level. Municipal staff advised the pumps in the sump holes will run continuously in dry weather. Additional sump outlets are provided for a supplemental pump and for high flow volumes. A high priority activity is the diagnosis and correction of water ingress. This will involve test excavations and geotechnical analysis.

The building looks in poor to fair condition.

## Deficiencies List

The following list indicates observed deficiencies with regards to the building, as well as anticipated expenses for repairing these deficiencies. Items on this list should be addressed immediately to maintain the life expectancy of the building and its systems.

Deficiency	Estimated Cost
Repairs to puncture in EIFS on exterior	\$5,250
Emergency Diesel Generator review	\$3,500
Modification to furnace filter	\$500
Garage exhaust system	\$5,000

Crack repairs, Lintel repair	\$9,500
Water Ingress Diagnosis	\$6,000
Slab Electrical Evaluation	\$2,500

### Photographs



**Figure 8 - Oil tank with bottom draw. Water ponding also noted.**



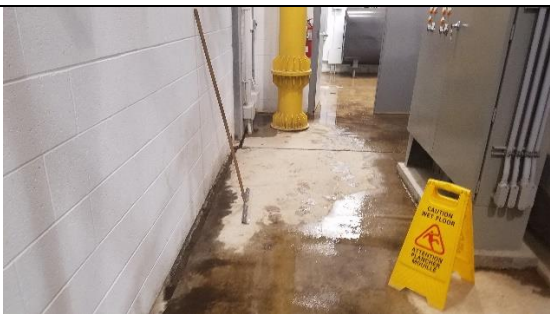
**Figure 9 - Improperly sized furnace filter**



**Figure 10 - Cracked and corroded lintel**



**Figure 11 - Crack in the concrete floor**



**Figure 12 - Poorly drained floor**

## **Building Review Summary**

The overall condition of the facilities is fair to good. Currently these buildings are serving the community well in its present condition. Repairs should be made as required to keep the building in working order and in sound condition. Addressing the deficiencies will extend useful life of structures and equipment.

## **Financial Forecast Table - Existing Conditions**





## ***Marmora Water Tower Equipment Building, North Hastings Ave, Marmora, Ontario***



**Figure 13 - Marmora Water Tower Equipment Building**

### **Site Information**

The water tower building is located at the north end of North Hastings Ave. There is a fenced in enclosure which houses the water tower as well as this building. The building is used to house equipment for the water tower. The property is surrounded by a chain link fence with security wire on the top.

### **Building Construction**

As part of the 2019 replacement of the Marmora Water Tower, the equipment building was completely replaced. The new building is concrete block construction over a pre-cast concrete vault. It is topped with a standing-seam metal roof on wood trusses:

### **Building Condition**

The building is new construction and has no deficiencies.

### **Building Review Summary**

This building is serving the municipality adequately in its current condition. Only routine maintenance items will be required for the timeframe of the study.

**Financial Forecast Table - Existing Conditions**

Municipality of Marmora and Lake			CASH FLOW															
ADDRESS: North Hastings Ave., Marmora, Ontario			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
NO. OF BUILDINGS: 1			Anticipated Expenditure															
			\$ 525	\$ 541	\$ 557	\$ 574	\$ 591	\$ 609	\$ 627	\$ 646	\$ 665	\$ 1,199	\$ 706	\$ 727	\$ 749	\$ 771	\$ 794	
ITEM NO.	BUILDING ELEMENT	OBSERVATION / COMMENT	DESCRIPTION OF FUTURE WORK	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<b>3</b>	<b>MARMORA WATER TOWER BUILDING</b>																	
3.01	Building Structure	Concrete block building to cover pump equipment and house electrical service is in good condition.	Check on a regular basis for damage. Repair as necessary. No allowance has been given for repairs or replacement to building as significant damage is unlikely to occur.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3.02	Exterior Walls	Siding is in good condition.	Clean as required. Repair as necessary throughout study horizon.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$514	\$0	\$0	\$0	\$0	\$0
3.03	Roofing	Standing seam metal roof is in good condition.	Maintain roof as necessary. Replace at end of life cycle.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3.04	Site	Overall site is in good condition.	Maintain building and perimeter through routine grass cutting and maintenance.	\$525	\$541	\$557	\$574	\$591	\$609	\$627	\$646	\$665	\$685	\$706	\$727	\$749	\$771	\$794
<b>TOTAL EXPENDITURE: MARMORA WATER TOWER BUILDING</b>				<b>\$525</b>	<b>\$541</b>	<b>\$557</b>	<b>\$574</b>	<b>\$591</b>	<b>\$609</b>	<b>\$627</b>	<b>\$646</b>	<b>\$665</b>	<b>\$1,199</b>	<b>\$706</b>	<b>\$727</b>	<b>\$749</b>	<b>\$771</b>	<b>\$794</b>

## ***Marmora Parks and Recreation Garage, 14 Bursthall Street, Marmora, Ontario***



**Figure 14 - Marmora Parks and Recreation Garage**

### **Site Information**

This building serves as a storage garage for the Parks and Recreation Department in the Municipality of Marmora and Lake. The building currently consists of 3 garage bays, two of which are accessed by one double overhead door, the other, which was a later addition, is accessed through a single overhead door. At the rear of the facility, there are a meeting area, office, and washrooms.

### **Building Construction**

The building is constructed from concrete split faced block with a wood joist roof structure with a concrete floor slab throughout. The foundation wall along the north and east side of this structure is acting as a retaining wall due to the exterior grade along that side. The grade of the east side is located approximately 4ft. from the flat built up roof level at the rear of the building. The building is heated with a natural gas furnace.

### **Building Condition**

**Mechanical Systems** – The exhaust fans in the washrooms are not functioning. They should be brought back to operation. A proper HRV should be installed to promote air exchanges. A dedicated exhaust fan with CO<sub>2</sub> interlock should be installed.

**Electrical Systems** – Building is served by a 120/240V 200A single-phase overhead service from a pole-mounted utility transformer at the street. A manual generator transfer switch is included in the distribution but it not currently fed by a generator. The 14kW generator currently located at the front of this building feeds the adjacent municipal office building (refer to the municipal office section for further details). A loose generator hookup cable exists for connection to a portable generator if the need arises.

Lighting in this building is provided by 1x4 suspended strips and 2x4 troffers in the grid-ceiling. All are fluorescent and in good condition. As lighting is replaced it should be switched for LED equivalents.

Emergency lighting is provided by battery packs. Some battery packs are not functional. Repairing battery pack units is deemed to be a high priority item.

**Structural Elements** – The building is in fair to poor condition structurally. Roof waterproofing is showing deterioration and requires replacement. The structure is aging and various components show deterioration including cracks in the structural walls. Extensive rehabilitation is required. A detailed assessment including samples of joint material and excavations at foundations will conclude the extent of deterioration.

## Deficiencies List

The following list indicates observed deficiencies with regards to the building, as well as anticipated expenses for repairing these deficiencies. Items on this list should be addressed according to the priorities above to maintain the life expectancy of the building and its systems.

Deficiency	Estimated Cost
Install fencing to top of exterior walls to prevent access to roof	\$5,200
Remove trip hazard to exterior door	\$1,000
Repair/replace emergency light battery packs	\$500
Repair exhaust fans	\$350
Install and integrate HRV	\$1,800
New Waterproofing system	\$18,000
Repair of cracks	\$4,500

If the building is to be decommissioned and replaced the following costs will be incurred:

Task	Estimated Cost
Engineering Study for preparation of plans and specifications	\$5,000
Demolition of building	\$50,000
Site redevelopment	To be determined

## Building Review Summary

This building is serving the municipality as general storage for parks and recreation materials. That department is being amalgamated with the Public Works department and additional storage for equipment, materials, and vehicles is available at the Public Works Garage at Deloro. The building may be vacated shortly.

The building is in poor condition. There are structural deficiencies that require significant remediation to maintain the building in an operational capacity. Further modifications would be required if the occupancy is changed from an office and garage space to an alternative use. The parks and recreation department can not store larger pieces of equipment or vehicles. Space at the public works garage will better suit the needs of the parks and recreation department.

Multiple options are available for the site.

- The building may be rehabilitated for additional office space or for use by the food bank.
- Decommissioning the garage creates an opportunity for additional parking space available for the neighbouring Municipal Office. The costs for demolition and preparation for plans and specifications are included in this report. The construction costs are variable based on the final configuration of the property.

If the space is to be decommissioned and converted to parking, useable building elements (e.g. furnace) would be recovered and stored for other projects.

**Financial Forecast Table - Existing Conditions**

Municipality of Marmora and Lake			CASH FLOW															
ADDRESS: 14 Bursthall Street, Marmora, Ontario			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
NO. OF BUILDINGS: 1			Anticipated Expenditure	\$ 315	\$ 24,712	\$ 1,671	\$ 2,065	\$ 6,145	\$ 1,582	\$ -	\$ -	\$ -	\$ -	\$ 423	\$ -	\$ -	\$ -	\$ -
ITEM NO.	BUILDING ELEMENT	OBSERVATION / COMMENT	DESCRIPTION OF FUTURE WORK	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<b>1</b>	<b>MARMORA PARKS AND RECREATION GARAGE</b>																	
1.01	Building Structure	The building structure is in poor condition. Cracks identified in the structure	Repair building structure.	\$0	\$4,867	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.02	Exterior Walls	Exterior walls are generally in fair condition with cracking as above.	Add security fence to the top of wall to prevent access to roof.	\$0	\$0	\$0	\$0	\$6,145	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.03	Exterior Windows and Doors	Main door threshold is a trip hazard in its current configuration.	Repair threshold to remove trip hazard.	\$0	\$0	\$0	\$0	\$0	\$1,217	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.04	Overhead Garage Doors	Overhead doors are in good working order and no problems with their operation was reported.	Garage doors should require minimal repairs over study horizon. Repair as necessary. An allowance has been provided to represent this.	\$315	\$0	\$0	\$0	\$0	\$365	\$0	\$0	\$0	\$0	\$423	\$0	\$0	\$0	\$0
1.05	Washrooms and Accessories	Washrooms and showers are in fair condition. Exhaust fans are out of order.	Replace exhaust fans for proper ventilation.	\$0	\$379	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.06	Finishes (Paint/ Wall/ Ceiling)	Paint is worn and ceilings have signs of leaks in some places.	Re-paint building within next 5 years. Repairs to roofing should address leaks. Replace tiles damaged by leaks. No allowance for maintenance activities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.07	Garage Exhaust	Exhaust fans for garage are not interlocked to CO2 sensors.	Install and connect CO2 interlock for exhaust fans.	\$0	\$0	\$1,671	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.08	Lighting	Lighting is adequate for current requirements and is in good condition.	Battery packs to be replaced on exit lights. Upgrade lighting to LED fixtures at end of life. No allowance provided for maintenance activities.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.09	Roofing	The flat roof was noted to be in poor condition. Roof leaks were noted inside the meeting room and bathrooms. It was noted that these leaks were caused by damage to the flashing which in some locations had failed.	Roof repairs are an immediate requirement to prevent further building deterioration.	\$0	\$19,467	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.10	HVAC System	Furnace has been updated. No dedicated HRV in place.	Install HRV	\$0	\$0	\$0	\$2,065	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL EXPENDITURE: MARMORA PARKS AND RECREATION GARAGE</b>				<b>\$315</b>	<b>\$24,712</b>	<b>\$1,671</b>	<b>\$2,065</b>	<b>\$6,145</b>	<b>\$1,582</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$423</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

## ***Marmora Medical Centre, 1 Madoc Street, Marmora, Ontario***



**Figure 15 - Marmora Medical Centre**

### **Site Information**

This building was constructed around the year 2000 and houses the Marmora Medical Centre, as well as the Central Hastings Family Health Team. The upper floors of the structure contain two (2) 2-Storey apartment units. Currently a portion of the lower floor is unoccupied; most of the building is occupied by different user groups. The lower level also features a walk-out level at the rear towards Water Street.

### **Building Construction**

The building is wood frame construction, with wood siding. The foundations are poured concrete and the floor slab in the lower level is also concrete. The roof structure is wood trusses and the roof is finished with asphalt shingles. Each floor has its own furnace and hot water tank. The building has a mixture of standard residential lighting for the apartments, and fluorescent lighting for the medical areas.

### **Building Condition**

**Mechanical Systems** – The mechanical systems are in fair condition. The domestic hot water heaters are in good condition. Ductless split systems are functioning as expected. Electric forced air furnaces serving the basement and first floor have been replaced with gas-fired units.

Electric forced air furnaces serving the apartment areas have not been replaced owing to the position and venting of exhaust gases. Replacing the electric units with hydronic units is an option to move away from electric heat. The boiler would be located in the basement mechanical room and the circulation piping may follow existing runs to the furnace space. This is a medium priority item.

**Electrical Systems** – Building is served by a 120/208V underground three-phase service from a 3 x 50KVA polemount transformer array. The main disconnect is 600A. A splitter provides separate feeds to a 400A panel for the main building, a 200A panel labelled “dental office”, and feeders to apartment #1 and apartment #2. It should be noted that there was an additional electrical meter adjacent the main electrical distribution, however this appears to be a sub-meter and not a utility meter. There is only one utility service.



The electrical distribution was not traced beyond the main electrical room due to this facility being a medical clinic and the concerns with COVID-19.

Lighting in the areas examined was in good condition.

**Structural Elements** – The structure of the building is in fair to good condition. There is no sign of distress, deflection of any structural members or settlement of the concrete foundation. Some minor cracks in 5 to 6 locations found in external brick finish. The grade between side entrance and front entrance need some attention including possibility of accessible ramp, retaining wall or improved stairs.

### Deficiencies List

The following list indicates observed deficiencies with regards to the building, as well as anticipated expenses for repairing these deficiencies. Items on this list should be addressed immediately to maintain the life expectancy of the building and its systems.

Deficiency	Estimated Cost
Install new hydronic furnaces to apartments	\$12,000
Cracks and Raked mortar to repair for external areas	\$7,000

### Building Review Summary

This building is currently serving the municipality well and should continue to do so for years to come, allowing for continued maintenance and upkeep of the building.

## **Financial Forecast Table - Existing Conditions**



## ***Marmora Waste Water Treatment Plant, Highway 14, Marmora, Ontario***



**Figure 16 - Marmora Waste Water Treatment Plant**

### **Site Information**

This facility is located at the southern end of the municipality off of highway 7 along the Crowe River. This facility was recently upgraded to extend the future usability of the plant. The facility consists of four (4) large tanks, 2 storage tanks, and 2 clarifiers and a large tertiary building as well. In addition to these structures there is a building which consists of a garage bay, offices, laboratory space, and houses the MCC (Motor Control Centre) for the complete system, as well as chemical tanks associated with the waste water treatment procedure.

### **Building Construction**

The main building on this site is constructed of concrete block walls with concrete spandrel panels on the exterior facade. The roof is made of concrete core-slabs and features a built up roofing system. Most of the other facilities on site are associated with the processing of waste water. Generally the construction of these buildings varies. For the purposes of this report, the condition assessment was completed for the main building which housed office space and a usable working environment.

### **Building Condition**

**Mechanical Systems** – The domestic hot water tank in the lower level is showing large areas of corrosion. The nature of the facility provides for a humid environment. The tanks should be replaced and elevated to prevent direct contact with over-floor flows. This is a high priority item.

The damper in the garage area is not functioning. No in-hand control is acknowledged by staff who regularly use the space. Further troubleshooting of the damper is recommended. This is a medium priority item.

There is a heater at the bottom of the stairwell to the lower level of the main building that has become disconnected. This should be restored to proper installation and function. This is a medium priority item.

There are locations on the exterior of the building where ground-level ductwork is damaged. This should be restored as part of regular maintenance to prevent ingress of moisture to building systems.

**Electrical Systems** – Building is served by a 600V three-phase service from a 500KVA pad-mounted transformer adjacent the building. A new MCC has replaced the original MCC and assumed the main electrical distribution responsibilities. The original MCC is still present and serves a handful of loads. The final-filter is housed in a separate building, and sub fed from the main building.

Lighting is generally fluorescent and in good condition. There is one fixture which should be cleaned and repaired due to a lens detaching. This is deemed a low priority item. As lighting is replaced it should be switched for LED equivalents.

Emergency lighting and exit signs are provided by battery packs. Multiple battery packs are not functional and should be repaired or replaced. Repairing battery pack units is deemed to be a high priority item.

**Structural Elements** – The main building consisting office, parking bay looks in fair condition with some maintenance requirements. Spot cracks in walls are found, external concrete panels need to seal the joints especially at corners. Concrete floor and ceiling in the basement show some cracks.

The building with below grade storage facility looks in good condition with some minor cracks in the concrete.

**Site Elements** - Frontside of the building needs regrading around door to divert water away.

### Deficiencies List

The following list indicates observed deficiencies with regards to the building, as well as anticipated expenses for repairing these deficiencies. Items on this list should be addressed immediately to maintain the life expectancy of the building and its systems.

Deficiency	Estimated Cost
Repair/replace emergency light battery packs	\$500
Replacement hot water tank	\$1,000
Restore damaged heating unit	\$750
Repair damaged ductwork	\$500
Repairs caulking joint damage	\$1,500
External conc panel seal, Internal cracks to repair for concrete elements, Regrading etc	\$15,000

## Photographs



Figure 17 - Corrosion of HWT



Figure 18 - Disconnected heater



Figure 19 - Damaged external ducting



Figure 20 - Seal the joint of concrete panel deteriorated (main)



Figure 21 - Concrete cracks in the ceiling (main)

## **Building Review Summary**

The facility is in fair to good condition. With the continued attention to maintenance and repairs, this facility should continue to serve the municipality adequately for the foreseeable future. It is recommended that the repairs to the caulking be completed in the near future to prevent any additional damage to this area.

## **Financial Forecast Table - Existing Conditions**





## ***Marmora Public Works Garage, 70 O'Brien Street, Deloro, Ontario***



**Figure 22 - Marmora Public Works Garage**

### **Site Information**

The Deloro Public Works Garage is located at the north side of Deloro on the east side of O'Brien Street. This facility features six (6) garage bays, a wash bay, office space, and washrooms. There is a mezzanine with a large room and storage area. The site itself contains significant amount of land with a large works yard. There is a large storage shed located at the back of the site next to a large sand/salt dome. The garages are situated to the north and south of the primary access facing inward. Access to the site is to the west. This creates a large area for parking and maneuvering of large vehicles. These buildings are primarily being used as storage for municipal vehicles and equipment.

### **Building Construction**

The exterior structure of the north garage is a steel structure with pre-fabricated column sections with concrete block walls approximately 10ft above grade at the exterior walls. Above the concrete block walls the exterior finish changes to vertical steel siding. The roof is steel beams with metal roofing. The floor finish of the north garage is bare poured concrete. The building is heated with a horizontal discharge oil furnace. The furnace was not on during the time of the visit but was reported by municipal staff to be in working condition. The building has a compressor which appears to be original to the building and was not known to be working or not by municipal staff. The building has fluorescent lighting throughout. There is a washroom with shower on the main floor of the facility.

The south garage is wood frame construction on a poured concrete foundation. The exterior finish is vertical steel siding. The roof is wood truss construction with metal roofing. The floor is unfinished compacted earth.

### **Building Condition**

**Mechanical Systems** – Neither of the garage spaces has a CO<sub>2</sub> interlock to the exhaust fans. Installing a CO<sub>2</sub> interlock is a high priority item.

In the wash bay, there is a significant issue with humidity, especially in the winter. It is recommended to complete a detailed analysis of the installed equipment and the conditions in the wash bay to identify equipment that will continue to perform for extended periods in the extreme wet and cold conditions of the

wash bay. Options may include fiberglass exhaust fans identified for humid and corrosive environments. This is a high priority item.

The hot water tank is encased behind steel sheet of the same type as the walls but is not accessible without removing several screws. The condition of the hot water tank was unknown owing to the inaccessibility of the installation. The pressure wash pump is exposed on a small shelf beside the tank enclosure. The tank and pump should be relocated in the same corner within an accessible enclosure. Commercial enclosures for outdoor tank installations may be installed for less than \$500 and will provide proper resistance to elements and maintenance. This is a high priority item.

Cooling is not installed in the second floor training room of the garage, a 1-ton split system could be easily installed to make that area more comfortable. This is a medium priority item.

**Electrical Systems** – The transportation truck bay is served by a 120/240V 400A single-phase service from a pole-mounted transformer at the road. The main disconnect feeds double-throw style switch to facilitate connection to a temporary generator. This service is split to feed a 200A panel in the transportation truck bay and a 200A panel in the transportation dept office and truck bay. The transportation dept office and truck bay is a separate building, and is fed with an underground feeder from the transportation truck bay. The 200A panel in the transportation dept office and truck bay is in fair condition. It shows signs of corrosion and there are no free breaker slots. Consideration should be given to replacing this panel and providing extra circuits to enable expansion. This is considered a medium priority item.

The transportation dept office and truck bay further subfeds overhead circuits to salt shed and sand dome. The wiring at the salt shed and sand dome has degraded and should be replaced. This is deemed to be a high-priority item due to potential loss of lighting in this otherwise dark area.

The lighting in the transportation truck bay pre-dates LED but is in good condition. The lighting in the transportation dept office and truck bay, is Fluorescent and in good condition. As lighting is replaced it should be switched for LED equivalents. The lighting at the salt shed and sand dome is in poor condition and should be replaced with LED equivalents. This is deemed to be a high-priority item due to potential loss of lighting in this otherwise dark area.

Emergency lighting and exit signs are provided by battery pack units. At least one battery pack and one exit sign in the transportation dept office and truck bay was non-functional and should be repaired. Repairing battery pack units is deemed to be a high priority item.

#### **Structural Elements –**

- a. Transportation dept with office: The building comprises three sections built at different times.
  1. Storage Shed: Consisting wood framed mono pitched roof. The water leakage observed at the interaction of roof and vertical cladding of adjacent building. Sealing the gap is recommended. Wood framed construction showed no tie down connection at beam column interaction. Being an open shed, it is prone to wind forces, so providing connectors is recommended.
  2. Transportation Bay: Minor cracks in the foundation wall around corners found. Cracks in the block wall in the garage area.
  3. Office Building: No structural issues/deficiencies observed.
- b. Transport dept with washing bay: Dual pitch roof consisting wood framed wall and wooden trusses.
  1. Minor cracks in the foundation wall in one location. Roof water downspout needs to install/extend in a way to divert water away from building.
- c. Sand and Salt dome: Roof shingles looks in bad condition and need change. Periodic structural inspection is recommended.
- d. South garage. The garage on the south side of the entrance is frame and foundation with an unfinished floor. As storage for heavy equipment with hydraulic components, there is a higher than average chance for grease and oil to be present on the floor. The provides a route for refined

petroleum products to enter the ground. It is recommended a finished floor with appropriate oil and grit interceptors be installed in the south garage. This is a medium to low priority item.

**Site Elements** – Around the buildings, downspout extensions are disconnected. This does not move water away from building foundations and may lead to premature decay of the elements. It is recommended that extensions be installed at minimum distances as required in local building code. This is a medium priority maintenance item.

### Deficiencies List

The following list indicates observed deficiencies with regards to the building, as well as anticipated expenses for repairing these deficiencies. Items on this list should be addressed immediately to maintain the life expectancy of the building and its systems.

Deficiency	Estimated Cost
Second floor AC split	\$2,000
Panel replacement	\$3,500
Salt shed and sand dome circuits and lighting	\$1,000
Replacement enclosure for wash bay pump and tank	\$1,000
Redesign of exhaust system for wash bay	\$5,000
CO <sub>2</sub> interlock systems	\$3,000
Repair of structural deficiencies as noted above	\$6000
Design and install finished floor to south garage	\$120,000

## Photographs

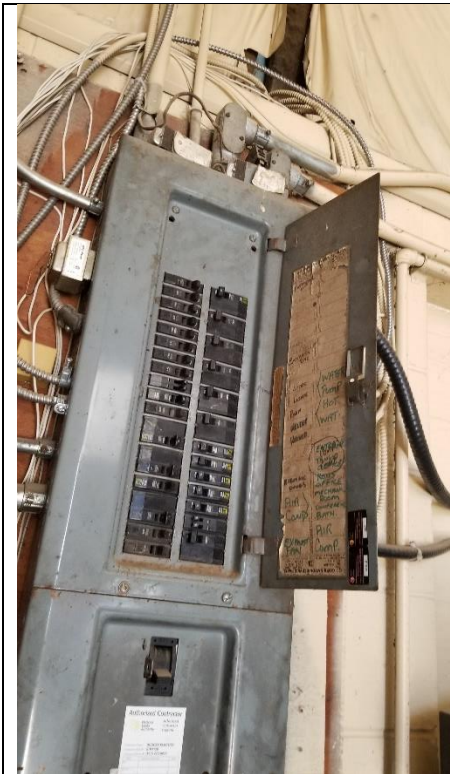


Figure 23 - Electrical panel for replacement



Figure 24 - Concealed HWT in wash bay

## Building Review Summary

The buildings are in fair to good condition. The site is effectively used for the breadth of services. With continued maintenance and few minor repairs the garages will continue to serve as valuable facilities to the municipality for a considerable amount of time.

Space is available at the site for construction of additional garage space to accommodate the consolidation of the Parks and Recreation department with the Public Works and relocation of equipment and goods from the Parks and Recreation garage as described above.

**Financial Forecast Table - Existing Conditions**



## ***Marmora Train Station Building, 51 Cameron Street, Marmora, Ontario***



**Figure 25 - Marmora Train Station**

### **Site Information**

This building was originally located on Station Road on the way to Deloro. The building was moved to its current location approximately 25 years ago. This was the third time the station had been relocated. The structure is the original train station for Marmora and has a plaque located on it stating this. The building is now situated on Cameron Street and is situated near the base ball diamond at the corner of Cameron Street and Highway 7. The rear portion of the building is used for storage for the baseball club. That portion of the building also has the washrooms and electrical service room. The front portion was last used several summers ago for a summer camp. Summer camp equipment and some historical artifacts are still stored in the front portion of the building. Other than the equipment storage, the building is not occupied. The Chief Building Inspector completed a separate assessment of the building that identified an extensive list of items that would be required to bring the facility to current standards for seasonal occupancy.

### **Building Construction**

The station is currently sitting on a more modern concrete block foundation and has a newer deck attached to it. The building construction is wood frame with wooden roof trusses. The roof is sheathed with cedar shakes. There is no heating system inside the building. There are two washrooms spaces in the rear portion of the building but they are not in use. Hydro service to the building serves lights and outlets.

### **Building Condition**

**Mechanical Systems** – The mechanical systems are in poor condition. They would require complete replacement if the building is to be put in service.

**Electrical Systems** – Building is served by a 120/240V single-phase underground service from a pole-mounted transformer at the street. The panel is in fair condition, but replacement should be considered due to age.

Lighting is in fair condition. It is recommended that it be replaced with LED equivalents.



**Structural Elements** – Building is not suitable to use for any intended occupancy in its current condition. Detailed structural investigation, design and construction is required to make it suitable to occupy.

The building was observed to be leaning towards front. Also, the building is not properly secured against and/or ground. In this condition, we recommend investigating and beef up before it become hazardous to surrounding occupant, even if it is not going to be occupied.

**Site Elements** – The site is maintained as part of the baseball diamond and park grounds. This on-going maintenance will ensure continued access to the site. No provision is made for site enhancements.

## Deficiencies List

The following list indicates observed deficiencies with regards to the building, as well as anticipated expenses for repairing these deficiencies. Items on this list should be addressed immediately to maintain the life expectancy of the building and its systems.

Deficiency	Estimated Cost
Repairs to foundation	\$3,675
Repairs to exterior walls	\$1,575
New doors and Windows	\$10,500
Painting of Structure	\$2,625
New Roofing	\$7,875

## Building Review Summary

The building is in poor condition and is not serving the municipality in a significant capacity. The recommendations listed above will maintain the building from further deterioration.

The structure is recognized for its status in the history of Marmora and Lake but is not included in the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries database. As an unrecognized building, its modifications and updates are not governed under the Ontario Heritage Act.

The municipality will need to decide if the building is to be maintained as a heritage structure or if it is better used as a seasonal occupancy. To bring the building to the standard where it could serve again as a seasonal structure with barrier free access, the remediation would be extensive.

In addition to the items identified above the following items have been discussed with the Chief Building Officer:

- Exterior access: Demolish existing deck. Replace deck with structure level to interior elevations. All deck construction to follow current Ontario Building Code requirements for structure and guards. Include a new ramp to the deck for barrier free access.
- Exterior envelope: Remove the chimney and patch with appropriate materials. Install new windows with appropriate shutters. Repaint exterior. Install a new security system. Enlarge main door to 38" with appropriate aluminum-frame, double-pane door.
- Interior finishes: Remove interior wall finished and reconstruct with R14 insulation, new plywood, and drywall. Interior trims to be restored. Interior door to be replaced with re-framed 48" door. Patch floors with appropriate materials. Refinish flooring. Repaint.
- Washrooms: Remove all fixtures and finished. Replace flooring with moisture resistant material. Replace all plumbing with access for seasonal draining operations. Install new barrier-free washroom fixtures including sink, toilet, grab bars, mirror, and door openers. Install new fan fixtures for proper ventilation. Install baseboard heaters for shoulder season heating.

If the building is to be retained and designated as a historic structure, a review by a certified heritage professional would be required to identify the elements that would need to be preserved in addition to

correcting existing deficiencies. This list may differ from the elements required to use the building as a seasonal occupancy.

The final option is to have the property identified as surplus and offered for sale to individuals or groups in a position to remove the building for alternative purposes.

## **Financial Forecast Table - Existing Conditions**

Municipality of Marmora and Lake			CASH FLOW															
ADDRESS: 51 Cameron Street Street, Marmora, Ontario			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
NO. OF BUILDING: 1			Anticipated Expenditure	\$ -	\$ 12,491	\$ 16,375	\$ -	\$ -	\$ -	\$ -	\$ 1,017	\$ -	\$ -	\$ -	\$ -	\$ 1,179	\$ -	\$ -
ITEM NO.	BUILDING ELEMENT	OBSERVATION / COMMENT	DESCRIPTION OF FUTURE WORK	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
1	<b>MARMORA TRAIN STATION BUILDING</b>																	
1.01	Building Structure	Building structure is in poor condition. There is a pronounced lean to the structure and not properly secured against the ground.	Foundation repairs and shoring required	\$0	\$3,975	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.02	Exterior Walls	Generally, the exterior wood board and batten siding is in fair condition. There are several areas where rot is noted.	Cleaning of exterior siding and repair of minor rotted areas. Continued maintenance of siding to maintain appearance.	\$0	\$0	\$1,754	\$0	\$0	\$0	\$0	\$1,017	\$0	\$0	\$0	\$0	\$1,179	\$0	\$0
1.03	Exterior Windows and Doors	Windows and doors are in poor condition.	Replace windows and doors with appropriate fixtures.	\$0	\$0	\$11,696	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.04	Finishes (Paint/ Wall/ Ceiling)	Paint is in poor condition.	Repaint building within next 2 years. Touch up periodically throughout life cycle.	\$0	\$0	\$2,924	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.05	Roofing	The roof on this building has reached the end of its life cycle. It is in need of repairs. Minor damage noted to Soffit.	Replacement of existing shingles and further examination of sheathing should be completed to confirm stability of roof system. Perform repairs to soffit as necessary.	\$0	\$8,517	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.06	Washrooms	The washrooms are in poor condition.	Replacement of all fixtures and piping.	\$0	\$2,433	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$0	\$0
<b>TOTAL EXPENDITURE: MARMORA TRAIN STATION BUILDING</b>				<b>\$0</b>	<b>\$12,491</b>	<b>\$16,375</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,017</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,179</b>	<b>\$0</b>	<b>\$0</b>

## ***Marmora and Lake Municipal Offices, 12 Bursthall Street***



**Figure 26 - Marmora and Lake Municipal Offices**

### **Site Information**

The municipal office building was constructed in 1913/14 with space for municipal governance and events. It has undergone renovations and modernizations over the years as required by changing activities. The upper level serves primarily as council chambers while the lower floor is the offices for municipal staff.

### **Building Construction**

The building construction is wood framing and limestone walls. The roof is tiled. The main floor office space was significantly renovated in 2017/18 to improve occupant comfort and accessibility.

### **Building Condition**

**Mechanical Systems** – The office and council spaces were renovated in 2017/2018 including upgrades to the HVAC systems. Initial installation of the council chamber heating and cooling was subsequently modified to improve air flow and function. These systems are in good condition.

In the main office, there is no dedicated exhaust fan to the kitchenette. This is a recommended maintenance item of medium priority.

The server space adjacent to the kitchenette does not have any dedicated HVAC. This is not causing issues with the equipment and IT services are continuing to monitor the temperature within the space. Future implementation of HVAC equipment may be required if the IT equipment is changed out or if the temperature monitoring indicates a deficiency. This is a low priority item.

**Electrical Systems** – Building is served by a 120/240V 200A single-phase overhead service from a pole-mounted utility transformer at the street. This building is partially backed-up from the 14kW generator located in front of the adjacent Parks and Recreation Garage. An automatic transfer switch (ATS) provides switching between the utility and generator feeds, however the ATS does not have control wiring extending to the generator. Thus, the generator must be manually started before backup power is provided to this building. It is suggested that the required control wiring be installed to provide automatic backup. This is

deemed a low priority item. The lower office area was completely renovated in 2018, including the electrical wiring.

Lighting is in good condition. As lighting is replaced it should be switched for LED equivalents. This is particularly true in the large open-office area which is served by suspended fixtures. Given the effort to reach these high fixtures, LED should be implemented to reduce the maintenance costs. It has been observed that light bulbs in the upper area in the back of the building burn out with an unusually high frequency. It is suggested that the wiring of these circuits be checked for abnormal conditions. This is deemed a medium priority item. Lighting in the lower renovated area is new LED pot-light style, and in good condition.

Emergency lighting and exit signs are provided by battery packs.

An accessible-washroom was installed during the 2018 renovation and has a functional accessible-washroom alerting system.

**Structural Elements** – Side entrance near mech room has ponding issue and floor is damaged. Bricks are deteriorating and coming off the chimney above the roof line; repointing required. Emergency exit stair in the rear is not up to standard; the stringers shall be connected to the concrete pad. Limited visibility of the roof structure; wood members show sign of split; water leakage observed in some location can deteriorate wood structure faster; to be watched. External brick finish shows some minor cracks.

### Deficiencies List

Deficiency	Estimated Cost
Repairs to structural deficiencies listed	\$35,000
Connect ATS to generator	\$1,500
Investigate lighting circuit	\$500
Chimney repairs	\$20,000

## Photographs



Figure 27 - Side entrance



Figure 28 - Rear Entrance



Figure 29 - Sign of Water ingress in the ceiling  
and indication of split in the aging structure

## Building Review Summary

The building is overall in fair to good condition. It has deficiencies expected with a century-old structure that has been renovated. Continued maintenance will ensure continued use and occupancy. The municipal offices will continue to serve the community for the foreseeable future.

## **Financial Forecast Table - Existing Conditions**



Municipality of Marmora and Lake			CASH FLOW															
ADDRESS: 12 Bursthall Street, Marmora, Ontario			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
NO. OF BUILDINGS: 1			Anticipated Expenditure	\$ -	\$ 43,260	\$ -	\$ -	\$ 23,636	\$ -	\$ 6,269	\$ 1,937	\$ -	\$ -	\$ -	\$ 7,267	\$ -	\$ -	\$ -
ITEM NO.	BUILDING ELEMENT	OBSERVATION / COMMENT	DESCRIPTION OF FUTURE WORK	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<b>1</b>	<b>MARMORA AND LAKE MUNICIPAL OFFICE</b>																	
1.01	Building Structure	Chimney structure is showing deterioration above the roof line.	Repair and repoint as required.	\$0	\$21,630	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.02	Exterior Walls	External brick finish is showing evidence of cracking.	Repair and repoint as required.	\$0	\$0	\$0	\$0	\$23,636	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.03	Exterior Access	Exterior windows and doors are in fair condition. Ponding at side entrance reported. Emergency exit stair improperly connected.	Correct ponding and draingage. Connect exit stair stringer to concrete pad.	\$0	\$16,223	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.04	Lighting	Lighting was noted to be in good condition. Change out lights for LED fixtures at end of life.	No expense anticipated for this item, maintain as part of regular maintenance. Review circuit with high burn-out rate.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.05	Washrooms and Accessories	Washroom is reported to be in good working condition.	No expense anticipated for this item, maintain as part of regular maintenance.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.06	Finishes (Paint/ Wall/ Ceiling)	Office and council spaces recently upgraded. Finishes in good condition.	No expense anticipated for this item, maintain as part of regular maintenance.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.07	Generator	Generator located at 14 Bursthall St. appears in good condition. Generator is currently configured for manual start.	Recommend connecting ATS to generator	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,937	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.08	Roofing	Wood members supporting roof showing signs of splits and water leakage.	Monitor roof condition.	\$0	\$5,408	\$0	\$0	\$0	\$0	\$6,269	\$0	\$0	\$0	\$0	\$7,267	\$0	\$0	\$0
1.09	Heating System	Office and council heating upgraded in 2017/2018 with subsequent modifications. Systems are in good condition.	No expense anticipated for this item, maintain as part of regular maintenance.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL EXPENDITURE: MARMORA AND LAKE MUNICIPAL OFFICE</b>				<b>\$0</b>	<b>\$43,260</b>	<b>\$0</b>	<b>\$0</b>	<b>\$23,636</b>	<b>\$0</b>	<b>\$6,269</b>	<b>\$1,937</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$7,267</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

## ***Marmora and Lake Library, 37 Forsyth Street***



**Figure 30 - Marmora and Lake Library**

### **Site Information**

The Library building is home to four distinct operating groups. The Library is the primary occupant of the main floor and much of the basement. Also in the basement are the facilities for the Helping Hands Food bank. The upper floor is divided into space for the Marmora and Lake Historical Foundation, who display a small collection of artifacts from the area's history, and space for the Community Hub, a space available for rent to community or commercial groups for meetings, seminars, or office space.

### **Building Construction**

The original building was constructed in 1928 and is wood frame construction on a stone foundation. The exterior is clad with brick. The roof is a built-up flat system. Additional expansion to the structure was completed in the early 1990s to provide barrier free access. The expansion is on a block foundation and is constructed to match the existing building.

### **Building Condition**

**Mechanical Systems** – The heating systems serving the spaces are a pair of forced air furnaces located in the basement space. One furnace was replaced in 2019 and the other in 2020. These units are fitted with cooling coils served by exterior condensing units. They are in fair to good condition.

The Shannon room is a multi-purpose space with a kitchenette space. The space does not have a hood installed above the range. A range hood exhausting to the exterior should be installed. The range is used infrequently so this is a medium priority item.

Split AC systems are serving the Shannon Room, the Community Hub and the Marmora Historical Foundation spaces. These systems are all linked to a single thermostat control that forces all systems to be active simultaneously. This leads to increased costs when systems are active without occupancy. The systems should be decoupled to increase efficiency. This is a low-priority item.

The Community Hub has a small kitchen space with range. The range in the community hub space should have a range hood installed and vented to outside. This is a medium priority item.

**Electrical Systems** – Building is served by a 120/240V 200A single-phase underground service from a pole-mounted utility transformer at the street. This service is split into four separate utility meters on the exterior of the building. These four meters serve the library, rear-library, and two upper floor areas (a

museum area and another-area). The main disconnects for all four service meters are grouped together in the basement, providing feeds to each respective panel. One of the upper-area panels consists of an old fused-type panel. It is advised that this panel be replaced with a breaker-type equivalent. This is deemed a medium-priority item. Some wiring is original and quite old. It is recommended that it be replaced. The distribution wiring in the ceiling near the two basement panels is disorganized and unsecured. As wiring is replaced, efforts should be made to tidy this wiring. This wiring refurbishment is deemed a medium-priority item. This building contains a lift. The disconnect for this lift is in good condition. The basement has a room which is occasionally used as a daycare. As wiring is replaced, consideration should be given to replacing the receptacles in the daycare room with tamper-proof styles.

Lighting in the library consists of track, chandelier, and suspended fixtures, in good condition. As lighting is replaced it should be switched for LED equivalents. The furnace room lacks a light. A light should be installed. This is deemed a high priority item for safety reasons.

Emergency lighting and exit signs are provided by battery packs.

The library has a security camera system, with the camera feeds monitored at the administration desk.

The washroom has a power door operator which is functional.

**Structural Elements** – Main entrance steps and ramp need repair for cracks, corrosion on the railing; roof leakage need to be checked; water leakage in the basement to watch; ice fall from roof on the ramp could become hazardous for user; wood frame of the window in basement shows sign of rotting

**Site Elements** – The Helping Hands Food Bank is located in part the basement space which is only accessible by stairs. This important service for vulnerable community members may explore options to increase accessibility or relocate as circumstances permit. This is a medium priority activity.

## Deficiencies List

Deficiency	Estimated Cost
Decouple split systems	\$500
Install Shannon Room kitchen exhaust	\$500
Replace old wiring	\$5,000
Install light in furnace room	\$350
Install kitchen exhaust in Community Hub	\$500
Repairs to structural deficiencies listed	\$35,000

## Photographs



Figure 31 - Fuse panel for replacement



Figure 32 - Outdated wiring



Figure 33 - Main entrance



Figure 34 - Unused fixtures to be removed



**Figure 35 - Sign of water ingress in basement**

### **Building Review Summary**

The building is in fair to good condition. The renovations and additions have increased the functionality of the space. There are deficiencies to be addressed for continued operations and safety. Continued investment in repairs and maintenance will ensure the facility will continue to provide service through the study horizon.

**Financial Forecast Table - Existing Conditions**

Municipality of Marmora and Lake			CASH FLOW															
ADDRESS: 37 Forsyth Street, Marmora, Ontario			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
NO. OF BUILDINGS: 1			Anticipated Expenditure	\$ -	\$ 43,801	\$ -	\$ 1,147	\$ 591	\$ -	\$ 627	\$ -	\$ -	\$ -	\$ -	\$ 727	\$ -	\$ -	\$ -
ITEM NO.	BUILDING ELEMENT	OBSERVATION / COMMENT	DESCRIPTION OF FUTURE WORK	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<b>1</b>	<b>MARMORA AND LAKE PUBLIC LIBRARY</b>																	
1.01	Building Structure	Structure was noted to be in fair condition. Water leakage noted in basement	Investigate source of water leakage and repair	\$0	\$10,815	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.02	Exterior Walls	Exterior walls noted in fair condition	No expense anticipated for this item, maintain as part of regular maintenance.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.03	Exterior Windows and Doors	Main entrance steps and ramp need crack repair. Corrosion on the railings. Wood-frame window in the basement is rotting	Repair steps and ramp. Replace wood-frame window.	\$0	\$16,223	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.04	Electrical	Lighting was noted to be in good condition. A fixture is missing from the furnace room. Some wiring is noted to be original and old.	Replace original wiring. Install a fixture in the furnace room. Replace lights with LED at end of life.	\$0	\$5,408	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.05	Washrooms and Accessories	Washroom is reported to be in good working condition. Kitchen spaces in the Shannon Room and the Community Hub lack kitchen exhaust.	Install kitchen exhaust for Shannon Room and Community Hub. This is a maintenance item	\$0	\$0	\$0	\$1,147	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.06	Finishes (Paint/ Wall/ Ceiling)	No significant signs of damage on interior finishes.	No expense anticipated for this item, maintain as part of regular maintenance.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.07	Generator			\$0	\$541	\$0	\$0	\$0	\$0	\$627	\$0	\$0	\$0	\$0	\$727	\$0	\$0	\$0
1.08	Roofing	Roof leakage noted.	Investigate and repair	\$0	\$10,815	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.09	Heating System	The furnaces have been recently replaced. Split systems providing cooling to select areas are interlocked.	Interlocked split systems to be de-coupled. This is a medium priority maintenance item.	\$0	\$0	\$0	\$0	\$591	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL EXPENDITURE: MARMORA AND LAKE PUBLIC LIBRARY</b>				<b>\$0</b>	<b>\$43,801</b>	<b>\$0</b>	<b>\$1,147</b>	<b>\$591</b>	<b>\$0</b>	<b>\$627</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$727</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

## ***Tourist Information Centre, 9 Matthew Street***



**Figure 36 - Tourist Information Centre**

### **Site Information**

The Marmora and Lake tourist information centre is co-located with a Service Ontario office. There are exhibits regarding the history of Marmora and Lake as well as brochures outlining activities and sites in the area. Service Ontario is a tenant to Marmora and Lake.

### **Building Construction**

The building was constructed as a Lion's Club project. It is wood frame on a poured concrete pad. There are heating coils and electrical runs embedded in the pad. The exterior is vinyl siding. The roof is standing metal seam and was replaced less than 5 years ago.

### **Building Condition**

**Mechanical Systems** – The building is heated with in-slab radiant water circulation. This system is in good condition. Cooling is provided by a 3-ton split system. Ceiling fans provide mixing. There are no reported comfort issues.

There are accessible washrooms with properly functioning fixtures. Only maintenance is anticipated throughout the study timeline.

**Electrical Systems** – Building is served by a 120/240V 200A single-phase underground service. The utility transformer is pole-mounted on the other side of the street. A crossing pole on the tourist center side dips the service underground. The building contains a 200A panel. One of the breaker slots in this panel is missing a cover. The hole should be covered for safety reasons. There is a floor-receptacle at the main desk which appears to be non-functional. This should be confirmed and the circuit made safe (if it is not already). The breaker slot covering and floor receptacle check are deemed a high priority item for safety reasons.



Suspended lighting is used in the main tourist area and is in good condition. As lighting is replaced it should be switched for LED equivalents.

Emergency lighting is provided by a battery pack unit, however this unit does not appear to be functional. This battery packs serves the whole building.

There is a security camera system used at this site. One camera monitors in the building interior. Another 6-8 cameras monitor the exterior.

A power door operator is present on the main entrance and is functional.

There are two accessible washrooms, each with a functioning accessible-washroom alerting system.

**Structural Elements** – The building is in good condition and no notable deficiencies observed at this time.

**Site Elements** – The condensing unit is located in the garden. Proper management of the vegetation will prevent interference with the fan units.

### Deficiencies List

Deficiency	Estimated Cost
Cover opening in breaker panel and make floor receptacle safe	\$500

### Building Review Summary

The building is in good condition. Regular maintenance and addressing deficiencies will ensure the continued use of the building for several years.

**Financial Forecast Table - Existing Conditions**



## ***Marmora & District Community Centre & Curling Club, 28 Victoria Street***



**Figure 37 - Marmora & District Community Centre**

### **Site Information**

The primary role of the community centre for much of the year is the local rink surface. The arena has facilities to support the arena including viewing areas, concession services, and meeting and change rooms. At other times of the year, when the ice surface is removed, the arena serves for trade shows, conferences and seminars while the upper hall will serve for wedding receptions, birthday parties, and club meetings. Both the community centre and the curling club support the annual agricultural fair.

### **Building Construction**

The building has evolved since the construction of the first arena in the 1950s. The new dressing rooms and community hall date from 1975. The arena and ice surface was rebuilt in 1990/91 to comply with all applicable standards of construction. The arena is steel frame clad in metal over a block foundation.

The community hall and dressing rooms are concrete block construction on a poured concrete slab. They are faced with brick and steel siding.

The Curling club is constructed of block walls on a block foundation.

Both buildings have standing seam metal roofs.

### **Building Condition**

#### **Mechanical Systems – Community Centre**

The rink is served by R407 dehumidifiers. They are operating normally and should continue to serve with regular maintenance.

The change rooms at the rear of the building are in poor condition. The hot water tank serving the showers is in poor condition and is recommended for replacement. This is a high priority item.

The changerooms are served by an exhaust system that exhausts into an attic space above the change rooms with no exterior venting. This does not provide adequate ventilation and will contribute to moisture decay of the structure. The ventilation systems for the rear changerooms should be redesigned for proper air movement. This is a high priority item.

The changerooms, upper community hall, and lobby area are served by Lennox air handling units from 2017. These new units are in good condition and should require only scheduled maintenance for the extent of the study timeline.

The water service to the main portion of the building is in fair condition and should require only regular maintenance for the study period.

#### Curling Club

Curling club is undergoing a full renovation in the lower level. The condition of those system is good and will require only maintenance for the study period.

The kitchen and meeting space on the first floor is in fair condition. There are outstanding maintenance items including disturbed covers on baseboard heaters and regular cleanliness of the range hood.

The hydronic system serving the rink is in fair condition. The infiltration of water from the roof will shorten the life of elements if the leaks travel over to the fan units. The condition of hydronic units should be monitored closely until the room issues are resolved. This is a high priority item.

**Electrical Systems** – These buildings are described separately for clarity:

#### Community Centre

Building is served by a 600V overhead three-phase service from a 3 x 100KVA polemount transformer array. It should be noted that there is a solar-photovoltaic generation installation at this facility with rooftop solar panels, but that this generating system is not part of the building assessment. The distribution equipment supporting the generation system is housed on the ground outside the building. The main distribution consists of what appears to be a 400A main switchboard. The labelling is faded to the point where the amperage cannot be clearly viewed. The switchboard feeds a 100A 347V lighting panel, the refrigeration equipment, and several stepdown transformers distributed around the building. The transformers are located in the Zamboni bay, above the timekeeper box, and in the electrical room off the main lobby. The stepdown transformers feed several 120/208V panels are distributed around the facility. The 120/208V panel in the main office is missing cover plates for breakers even-numbered slots #12 through #20 and odd-slot #19. This gap presents a safety issue since the internal live parts of the panel are easily accessible and thus the gap should be covered. The mop-sink in the janitor's room has a receptacle mounted nearby. Electrical code specifies that this receptacle must be a GFI-model due to its proximity to the sink. Both the panel slot covering and GFI are deemed high-priority items.

The rink lights are LED-style and installed approximately 3 years ago. They are in good condition. The spectator stands, hallways, main lobby, and dressing rooms are predominantly lit by 1x4 fluorescent lights. The upstairs function room and kitchen are lit by 2x4 troffer style fluorescent lights. All fluorescent lights are in good condition. As lighting is replaced it should be switched for LED equivalents.

Dressing rooms are heated with electric baseboard heaters. Corrosion is evident on several of these heaters. Replacement of these is deem a medium priority item.

Emergency lighting is provided by battery packs. Some battery packs were observed to be damaged. Repairing battery pack units is deemed to be a high priority item. Exit signs are present and functional.

An accessible washroom is located off the lobby. It has a function power door operator but no accessible-washroom call system.

The building is served by a fire-alarm system and not sprinklered.

#### Curling Club

Building is served by a 120/208V underground three-phase service from a polemount transformer array. The main disconnect is 400A and feeds a 400A splitter to distribute power around the facility. Panels are located in a small storage room off the function room and in the refrigeration equipment room. The storage room containing the panel has shelving opposite the panel that has reduced clearance to about half of a meter. Electrical safety code specifies that there must be 1 metre of clearance in front of panels. Resolution of this item is deemed a high priority item. A 30KVA step-up transformer is provided to create 600V for the

refrigeration equipment. There are receptacles above sinks in the function room area. Electrical code specifies that these receptacles must be GFI-models. Replacement of this receptacle is deemed a high priority item.

Rink lighting is provided by new LED lights and are in good condition. The main function room is served by 1x4 fluorescent light which are in good condition. As function room lighting is replaced it should be switched for LED equivalents.

Emergency lighting and exit signs are provided by battery packs.

**Structural Elements –**

Arena Building: Sign of deterioration of the coating on the structural steel members; limited to visual inspection

Curling Club: The roof is experiencing significant water leakage. Multiple ad hoc conveyance methods are in place to collect and direct the water away from the play surface. External Block wall shows some deterioration including cracks, joints raked, and weathered block wall and concrete pedestals at the ground level; Limited to visual inspection

**Deficiencies List**

Community Centre - Deficiency	Estimated Cost
GFI receptacle for mop sink	\$500
Cover open panel slots	\$350
Replace baseboard heaters	\$3,500
Repair/replace battery pack emergency lights	\$500
Replace hot water tank	\$500
Reconfigure changeroom ventilation	\$10,000

Curling Club - Deficiency	Estimated Cost
Provide space in front of breaker panels	\$0
Install GFI receptacles in sink area	\$500
Leakage of water	\$25,000
Annual Hydronic Inspection	\$800
Repair cracks in the concrete, repair spall (Medium)	\$20,000

## Photographs



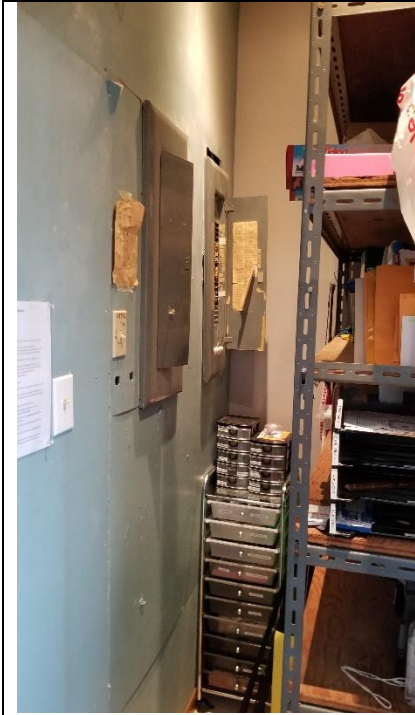
**Figure 38 - Concrete elements deteriorated**



**Figure 39 - Open electrical panel slots**



**Figure 40 - Corroded baseboard heater**



**Figure 41 - Blocked electrical panel access**

### **Building Review Summary**

Community Centre – Overall the community centre is in fair to good condition. There are deficiencies to be addressed immediately including ventilation, hot water, and structural deterioration. Many other items are maintenance issues that will form part of on-going operations. By addressing the deficiencies and continuing maintenance, the community centre will continue to serve the municipality for the extent of the study horizon.

Curling Club – Overall the curling club is in poor to fair condition. The new construction in the lower floor will improve conditions in the club. The primary deficiency with the roofing system is a significant concern and may begin to impact other systems if not resolved. Other maintenance issues can be addressed to improve functionality and comfort. The curling club will continue to serve the community for the extent of the study period if the remediation actions are completed.



## **Financial Forecast Table - Existing Conditions**



## ***Deloro Community Centre, 20 Deloro Road, Deloro***



### **Site Information**

This is an underused community hall in Deloro. It houses a community space, kitchen, smaller community space and the controls and monitoring for the community septic bed located on a separate property behind the building. The Deloro cenotaph is also located on the property. The building has been underused for the past few years. A branch of the Marmora Library was located in the lower portion of the building but has been amalgamated with the main branch.

### **Building Construction**

The building is a concrete block foundation with wood frame walls and trusses. The exterior siding is vinyl and the roof is standing seam metal roofing.

### **Building Condition**

**Mechanical Systems** – The building has all municipal services; water, electric, gas, and sewer. HVAC for the main floor is a central forced air system. There are supplemental electric baseboard heaters in occupied basement spaces. Separate washroom exhausts are not present. The forced air furnace is recently upgraded however there was a condensate leak on the day of the visit. This is a maintenance repair. The external condenser is from 1999.

The DHW tank is located on the concrete floor adjacent to the furnace. Excess moisture in the area around the furnace and water heater will make the heater susceptible to corrosion. The controls for the Deloro septic bed are located in the same utility space as the furnace and hot water tank. If the building is rendered surplus and sold, the controls would need to be relocated to a dedicated structure. A pre-cast concrete shed would provide appropriate service.

The mechanical systems are in fair to good condition.

**Electrical Systems** – Building is served by an underground 120/240V single-phase service from a utility at the street. The main disconnect is a 200A fused-switch. A 200A breaker panel distributes power to the building.

Fluorescent 1x4 lights are used throughout the building and are in good condition. As lighting is replaced it should be switched for LED equivalents.

Emergency lighting is provided by battery packs. Some exit signs are not lit and should be repaired.

The front entrance has a power door operator which is functional.

It should be noted that a waste-water treatment facility is situated behind this building. The controls for this facility are powered by underground electrical feeds from this building. If this building were to be sold, the waste-water facility would need a new means to obtain power and controls. This could take the form of a small dedicated shed.

**Structural Elements** – Emergency door east face of building need proper ramp and block wall; Rear exit door need the concrete floor replaced; Wood retaining wall on west side of building need to be redone; External face of the block wall has cracks in several locations including around window should be repaired; Repair cracks in the internal face of the wall in random locations; cracks need to be repaired in the lintel of the rear exit door; Front ramp and railing need to check for AODA compliance

### Deficiencies List

Deficiency	Estimated Cost
Cost of structural Repairs	\$45,000
Pre-cast Concrete Controls Shed	\$15,000
Relocation of Septic controls	\$10,000

### Photographs



Figure 42 - Emergency exit of east face



Figure 43 - Rear exit door

### Building Review Summary

The building is in fair condition overall. There are elements that are in need of updating to maintain continued occupancy and function. However, the building is too far from the primary services of Marmora and Lake to be appropriate for community purposes. It is recommended the building be decommissioned and declared surplus and the controls for the Deloro septic be relocated to a pre-cast control shed on the property of the septic bed.

## **Financial Forecast Table - Existing Conditions**

Municipality of Marmora and Lake			CASH FLOW															
ADDRESS: 20 Deloro Road, Deloro, ON			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
NO. OF BUILDINGS: 1			Anticipated Expenditure	\$ -	\$ 35,149	\$ 13,924	\$ -	\$ -	\$ -	\$ 627	\$ -	\$ -	\$ -	\$ -	\$ 2,180	\$ -	\$ -	\$ -
ITEM NO.	BUILDING ELEMENT	OBSERVATION / COMMENT	DESCRIPTION OF FUTURE WORK	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<b>1</b>	<b>Deloro Community Centre</b>																	
1.01	Building Structure	Wood retaining wall to be repaired	Replace retaining wall	\$0	\$10,815	\$0	\$0	\$0	\$0	\$627	\$0	\$0	\$0	\$0	\$727	\$0	\$0	\$0
1.02	Exterior Walls	Exterior vinyl siding in good condition. External block wall has cracks.	Repair block walls	\$0	\$10,815	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,453	\$0	\$0	\$0
1.03	Exterior Windows and Doors	Exit ramps and landings to be repaired. Rear exit lintel deteriorating. East exit door requires ramp and block wall. Front ramp and railing requiring review	Replace ramps and landings. Repair around lintel. Complete AODA and OBC review of front ramp and railing.	\$0	\$13,519	\$13,924	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.04	Lighting	Lighting in good condition	Switch lighting for LED equivalents at end of life.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.05	Washrooms and Accessories	Washroom is reported to be in good working condition. Hot water tank in good condition but susceptible to corrosion	No expense anticipated for this item, maintain as part of regular maintenance.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.06	Finishes (Paint/ Wall/ Ceiling)	Interior finish cracking	No expense anticipated for this item, maintain as part of regular maintenance.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.07	Emergency Lighting	Some emergency lights not lit	No expense anticipated for this item, maintain as part of regular maintenance.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.08	Roofing	No evidence of leaks, no issues were reported.	No expense anticipated for this item, maintain as part of regular maintenance.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.09	Heating System	Fan forced air heaters are in good working condition.	No expense anticipated for this item, maintain as part of regular maintenance.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL EXPENDITURE: DELORO COMMUNITY CENTRE</b>				<b>\$0</b>	<b>\$35,149</b>	<b>\$13,924</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$627</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,180</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

## Overall Recommendations

The Greer Galloway Group Inc. feels that most buildings within the current municipal inventory are serving the municipality well. It is recommended that the deficiencies listed with each building summary be completed to bring the buildings up to good working order.

A common deficiency across several buildings was non-functional emergency lighting and/or exit signs. Regular maintenance of these building should include regular check of this equipment and repair/replacement of defective units. This may be linked with the existing program to upgrade lighting systems to LED fixtures as electrical personnel will already be on the premises.

Another common deficiency was a prevalence of disconnected downspouts and rain leaders. This will allow water to settle closer to the foundation, promote water ingress, and accelerate deterioration of the foundation structures. If there is a common cause for these elements being disconnected (e.g. property maintenance lawn mower interference) a program to retrofit the rain leaders with an easily adjusted alternative.

## Future Building Usage

For the second part of this report, The Greer Galloway Group Inc. was asked to examine how the municipality could best use their existing building assets to maximize the life span of their buildings without the requirement for adding any new facilities. Based on the inspections completed, and through discussions with municipal employees, The Greer Galloway Group Inc. has developed the following recommendations that would extend the serviceability and lifespan of current municipal buildings for the next twenty years.

### Expand the Public Works Garage to house Parks and Recreation Vehicles

The site of the Public Works Garage in Deloro allows for expansion of the south garage to house additional vehicles and storage. A garage of similar size and construction would more than compensate for the space currently available to the Parks and Recreation Department at the current facility on Bursthall Street. The public works yard would also allow for storage of outdoor equipment in a secure location.

### Rehabilitate or decommission the Parks and Recreation Garage

The existing Parks and Recreation Garage on Bursthall street is in poor condition as noted earlier in the report. The two options available to the municipality are to rehabilitate or decommission the structure. Rehabilitation would give the municipality a viable facility in the heart of the community either as additional municipal operations space or as a community access location.

Decommissioning the structure and repurposing the property is an alternative that may resolve secondary issues in the municipality. Current parking for persons attending the municipal offices either as staff or visitors is limited to street parking or the elevated rear lot. An additional parking area directly adjacent to the municipal offices will ease parking limitations such as slope and availability associated with the existing spaces.

### Rehabilitate or sell the Deloro Community Centre

The Deloro Community Centre is in fair condition and could be rehabilitated for multiple uses such as commercial use, meetings, or event space. However, it is located at a distance from the municipal centre that makes regular use less attractive to potential tenants. The costs of rehabilitation to maintain existing function are in excess of \$45,000. Any upgrades to service would increase that amount. The payback period would need to be examined by the municipality to determine viability of this option.

The alternative is to declare the facility surplus and offer it for sale. Other properties in the municipality have been listed at \$150,000 and up. Severing the property into access for the Deloro septic system and property with the community centre would allow the centre to be sold at a profit to cover the costs of relocating the septic controls to a new dedicated shed.

## **Rehabilitate, sell, or decommission the Marmora Train Station**

The Marmora Train Station is in poor condition and must be addressed. Although over a century old, it is not a recognized heritage structure and therefore the options for future use are not restricted. To rehabilitate the structure to serve as a three-season washroom and concession will require significant expense. The list of remedial work is detailed above.

The structure may also be sold on condition of removal from the site. Persons interested would be made aware of the contents of this report which would inform their plans. Heritage groups may express interest in order to preserve the history. Local entrepreneurs could make it the centerpiece of new development either renovated as office space or a small gift-shop. This option has the potential to provide an income to the municipality with minimum expenses associated with disconnecting services.

Decommissioning and demolition of the structure will remove any potential hazards owing to the degraded condition of the structure. There are limited support services to be disconnected. The demolition costs would be approximately \$40,000.




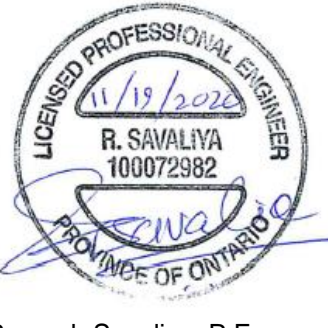

## Conclusion

This municipality has many suitable facilities that will be able to serve the community for a considerable amount of time. This report has explored opportunities for upgrades and capital projects and it is the opinion of The Greer Galloway Group Inc. that if these recommendations are followed, the municipality will be able to operate the facilities efficiently and effectively for the foreseeable future.

The Greer Galloway Group Inc. would like to thank the Municipality of Marmora and Lake for allowing us the opportunity to provide this report.

Respectfully submitted

**The Greer Galloway Group**  
**Consulting Engineers**

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