



Committee of the Whole

January 11, 2022

Staff Report: #FIR-2022-01

REPORT BY: Gene Richardson, Fire Chief/CEMC
REPORT SUBJECT: Fire Station 5 in White Lake - Closure
DEPARTMENT: Fire

RECOMMENDATION(S):

***“THAT,** staff are directed to bring forth a by-law to formally close Fire Station 5 in White Lake in accordance with the Master Fire Plan;*

***AND THAT,** staff are directed to provide notice to the public for a period of 30 days stating the intention to pass a by-law formally closing Fire Station 5 in White Lake;*

***AND FURTHER THAT,** the notice refers the public to the Master Fire Plan and report number FIR-2022-01 for the pertinent details supporting the decision.”*

1. BACKGROUND

In Aug 2019 the Lanark Highland township awarded Emergency Management Training Inc (EMT) the contract to complete a Fire Master Plan (FMP). On Aug 25th, 2020, upon completion of the FMP, Council had passed by-law 2020-1637, being a by-law to Adopt a FMP for the Township of Lanark Highlands and included the Fire Chief’s Recommendations outlined in Appendix “B” of his report.

The FMP included options for Council’s consideration which was considered under Section 9.1.2 of the FMP. The consultants provided 3 options for consideration;

Option 1 – 5 Station Model

The first option would be to continue the status quo, operating from the existing 5 stations. The benefit of this model is that it minimizes community concerns about fire station coverage, although there may be an inflated sense of fire protection within the Station 5 coverage area.

Challenges to this option include:

- Most expensive option, having to maintain 5 buildings, the associated apparatus and equipment.*
- Significant building repairs/maintenance or replacement is required for each of the stations.*
- Requires ensuring a minimum complement of firefighters (15) at each station to be recognized by FUS as having an operational fire station. EMT recommends 19.*

- *The inability to maintain adequate firefighters at Station 5, and therefore, the inability to ensure a reliable response from this station.*
- *Station 5 appears to struggle with adequate training to ensure firefighter competency, creating a potential safety liability.*
- *Need to add 25 additional firefighters across the department*
- *Need two new Pumper/Tankers for stations 4 and 5 in 2020*

OPTION 2 - 4 Station Model

Option 2 would be to continue the status quo with the existing stations at their present locations, while amalgamating the White Lake Station with the Tatlock Station. This would result in the closure of the White Lake Station as a fire station.

The current White Lake Station is struggling to maintain an adequate number of firefighters and an adequate training program, both of which create a liability in safety. The community may feel that they are receiving a level of fire protection that is not actually there due to the lack of firefighter response capabilities.

Selecting this option combines the staffing from both stations at the Tatlock Station, which in turn has the benefit of more in-depth training programs. There will also be cost savings resulting from the cease in operation of the White Lake Station by eliminating the building maintenance/energy costs, as well as the vehicle maintenance costs by reducing the fleet.

Currently, Lanark Highlands has an automatic aid agreement with the McNabb Braeside Fire Department for fire protection in the White Lake area, which would continue to provide response.

An alternative is to establish a medical first response team in White Lake that could respond to medical calls, without the same level of staffing, training, or equipment being maintained in the community. While this would still close the fire station, it would address the medical emergencies that occur in the community.

The following map highlights the 14-minute response areas for stations 1 through 4, which remain at their present location. Firefighters from Station 5 – White Lake would be relocated to Station 4 – Tatlock bringing the station up to the 19 firefighters per station EMT is recommending.

With this option it is recommended the fire department add 6 additional firefighters across the department with a cost of approximately \$24,000 in equipment and \$54,000 in training costs, along with an 8% increase in annual salary costs.

OPTION 3 – 3 Station Model – (figure references not included: See FMP)

This option would be to build 3 new stations, replacing Stations 1, 2, and 3. It would require the closure and amalgamation of the firefighters of stations 2, 4 & 5, relocating a new Station 2 at a new location on Highway 511 in the area of the French Line.

The condition of stations 1 and 3 are such they should be replaced with new facilities. This should take place within the short to long-term of 1 to 10 years. Rebuilding these stations is estimated to cost between \$1 and \$1.5 million per station, with the headquarters being \$1.5-2.5 million. The priority should be to replace Station 3 first so all the trucks may be kept in one station.

Amalgamating the crews from Stations 2, 4 and 5 in a new station on Highway 511 by the French Line will maintain response coverage as outlined on the map in FIGURE 14 below. The Township will be saving funds by reducing the number of stations, thus eliminating operating costs and making more apparatus available for redeployment. In addition, the existing properties for stations 4 and 5 have the potential to be deemed surplus and be liquidated with revenue put towards offsetting the costs of the new stations.

Combining the firefighters from the three stations into one increases the response reliability as well as creating synergies in training modalities.

Currently, Lanark Highlands has an automatic aid agreement with the McNabb Braeside Fire Department for fire protection in the White Lake area. It is suggested the Township enter into an automatic aid agreement with the Mississippi Mills Fire Department to provide fire protection coverage along the northeastern corner and eastern boundary of the Township (note the area around the red circle in the upper right corner of FIGURE 17).

It is also suggested that Lanark Highlands enter into an automatic aid agreement with North Frontenac Fire Department for fire protection in the north western section of the Township (note the area indicated by the red circle on the left side of FIGURE 17).

The construction of a new station and the closure of the other 3 could occur over a mid-term of 4 to 6 years. It would be recommended that station 5 and 4 be amalgamated in the short term while the construction of the new station takes place.

The fire department would have an adequate complement with the three stations to allocate 19 firefighters per station, eliminating the need to equip and train additional firefighters. FIGURE 15 illustrates 14-minute response zones of the existing stations 1 and 3 locations, and the proposed new location for Fire Station 2.

SUMMARY OF OPTIONS:

EMT provided a summary of the options provided as follows;

Council, with the assistance of the Fire Chief, should review the data regarding the number of firefighters per station, the number of fire calls the station responds to, training related statistics, firefighters' availability, chute and response times, overall coverage adjustments, and automatic aid agreements. Travel times and distances should be taken into consideration, added to that the costs of operating stations that are not very active, plus the cost of apparatus and equipment purchases.

It is EMT's opinion that the best option for the Township of Lanark Highlands to pursue is that of Option 3. This will mean the closure of stations 2, 4 and 5 at their current locations and the building of a new station in the area of Highway 511 and French Line. This process would be started with the integration of White Lake Station into the Tatlock Station in the short term, while plans are being developed for the new station.

The Township currently does not have adequate numbers of firefighters in either the Tatlock or White Lake stations. The average turn-out time for apparatus to begin responding from either station to a call is close to fourteen minutes. There have been incidents where it has been over thirty minutes in both stations for the first truck to respond. There is no guarantee that there are an adequate number of responders from these stations to properly, effectively, or safely put in place an aggressive attack on a structure fire due to the lack of staffing on scene.

The Township will save funds on all three stations regarding operating and maintenance costs, renovations, and equipment purchases as few apparatus and ancillary equipment will be required. A new fire station will be more cost effective to operate due to energy efficient features to the structure and new up-to-date amenities and health and safety measures such as an exhaust extraction system and a bunker gear storage room. The combination of firefighters into one central station will ensure an adequate firefighting complement.

Presently, if a structure fire were to occur in the White Lake or Tatlock areas, with the low number of firefighters available, it may be some time before other responders will know if any firefighters are responding from the stations. This may put the lives of citizens at risk which in turn may place the Township at risk for the lack of fire response.

In 2019 the Tatlock Station responded to 15 fire calls and the White Lake Station responded to 2 fire calls. With so few calls, it is difficult for those firefighters to maintain their skill sets to competently and safely perform their duties as required. On average, the number of firefighters attending training sessions at the White Lake Station is between 0 and 2. Proper effective training cannot occur with so few in attendance and exposes the Township to liability issues under the OH&S Act.

Due to the many unknown variables regarding adequate responding firefighters, remote area residents will be better protected by the Township entering into automatic aid agreements with the surrounding fire departments who do have adequate staffing, equipment, and are capable of performing an aggressive fire attack upon arrival.

While EMT understands the concerns area residents will have with the closures of the stations, they should understand that they are, for the most part, ineffective fire stations with too few firefighters for enough response coverage. They will be better served by through a larger station in Middleville combined with automatic aid from neighboring fire departments, ensuring more reliable service and potentially faster response times.

Relevant to the consideration of the options provided by EMT is that Council has contracted Mississippi Mills to provide fire and medical tiered response to the White Lake Area as recommended in Option 3.

2. DISCUSSION

Staff and Council understand and appreciate the public's passion for their fire halls and what they mean. These recommendations and processes are not taken lightly. Since the start of the MFP process, the following timeline and details are provided as a review of how this report and process has been carried out;

Date	Communication/Notes	Comments
July 7, 2019		Request for Proposal for Master Fire Plan Posted on Biddingo
August 2, 2019		From July 30 th , Rumors circulated that Station 5 would be closing. Signed petition received from Ward 2 residents. CAO and Fire Chief put forth plans to meet at White Lake to discuss rumors.
August 13, 2019	Township Council	RFP awarded to Emergency Management Training Inc. (EMT)
August 29, 2019		CAO and Fire Chief attended a meeting at the WLCC to discuss the concerns. Stated all options for each hall were on the table. Closure, expansion, replacement etc. Stated to the residents that Council wanted the Consultant's independent recommendation. Staff were going to support the process, but ensure the expert's recommendations were not influenced by staff. Staff would provide their own recommendations or agree/disagree with the consultant.

September 6, 2019		<p>CAO and Fire Chief met with EMT to discuss MFP process</p> <p>Over the course of 3 months (Sept 6 – Dec 31) hundreds of documents were sent to EMT pertaining to operation statistics</p>
September 26, 2019	<p>Township of Lanark Highlands Facebook Page</p> <p>Township Website</p>	<p>Input requested with regards to the draft Master Fire Plan</p> <p>A survey was available on both the website and facebook page</p> <p>Paper copies made available thanks to Lanark Era</p>
October 10, 2019	Advertised in Metroland Media (Perth Courier, EMC, Carleton Place, Almonte, Arnprior)	Notice of the Master Fire Plan Review and Process
October 15, 2019	Advertised in the Lanark Era	Notice of the Master Fire Plan Review and Process
October 17, 2019	Advertised in Metroland Media (Perth Courier, EMC, Carleton Place, Almonte, Arnprior)	Notice of the Master Fire Plan Review and Process
October 22, 2019	Advertised in the Lanark Era	Notice of the Master Fire Plan
October 23, 2019	Council	Provided with a Questionnaire on what their thoughts were with regards to the Fire Department
October 25, 2019	EMT	EMT met with the Deputy Fire Chief, Met with the Firefighters at Station 5
October 26, 2019	EMT	EMT met with any available Firefighters from Stations 1-4
November 14, 2019	White Lake Property Owners Association Facebook Page	Notice about the deadline for the survey
November 15, 2019	Township Website and Facebook	Survey closed

January 3, 2020		CAO and Fire Chief receive draft Master Fire Plan
February 4, 2020		Community Risk Assessment Received as draft
February 6, 2020		Final draft received
February 11, 2020	<p>MFP Brought before Council, initially a 30 day review period but that was extended to April 7, 2020.</p> <p>Ultimately, due to Covid, the MFP was in the public for 6 months (Aug. 25) before a by-law was passed.</p>	<p>Resolution 2020-029 “THAT, the Township of Lanark Highlands accept the Master Fire Plan as presented in draft. AND THAT, the Master Fire Plan be posted for 30 days for public review and comment period. AND THAT, staff are to bring forward recommendations regarding the plan at the Council meeting of April 7th, 2020</p>
February 12, 2020	Township Website	<p>1284 hits/views Copy of the Draft Master Fire Plan for review with 30 day review period</p>
February 26, 2020	Township Website	<p>Draft Master Fire Plan revised</p> <p>229 hits/views</p>
February 28, 2020	CTV News Ottawa Facebook Page	News story regarding the potential closing of Station 5
July 17, 2020	Township of Lanark Highlands Facebook Page	<p>“On August 11th, 2020 Lanark Highlands Council will be discussing the most up to date Draft Joint Recreation Master Plan, and the Draft Fire Master Plan. The plans have been updated based on community feedback received during the consultation period.”</p> <p>Links to documents on website</p>

August 11, 2020		<p>Staff recommendation to adopt the Master Fire Plan along with changes outlined in Chief's report – Schedule "B".</p> <p>Staff are directed to bring the bylaw forward to Council on Aug 25, 2020.</p>
August 25, 2020		By-Law Passed.

Staff are recommending an additional notice period with the public to ensure there is an opportunity to specifically comment on this direction. Staff also realize that in adopting the FMP, it is only a "plan" and plans can change. Members of Council at any time could receive information or feedback from their constituents that may bring about reason to change their minds on any topic. Therefore, staff are recommending a final public notice period of 30 days to communicate the intent to formally close Station 5.

Call History

As part of the review and consideration of this report, the Chief conducted a review of call volumes at station 5. The call summary is attached as Schedule "A" to this report and highlight the calls from 2017 to 2021 for Station 5.

Note that the call history breaks down to;

- There were 34 calls over this period, which averages out to 6.8 calls per year.
- Of the 34 calls over this period, 16 calls required the Township's Fire Department as a result of a fire or primary response. To be clear, these calls would generally be a fire department first response matter including fires, downed power lines, outdoor burning etc.
 - o Of the aforementioned 16 calls, 10 calls required action by the Fire Department and 6 calls required no action. No action could mean burning complaints where a fire was permitted etc.
- Of the 34 calls over this period the remaining 18 calls were not a direct responsibility for the Township of Lanark Highlands. These calls were tiered response calls for first aid. These calls are the responsibility of Lanark County and the Ambulance Service. The Township is only called upon if the Paramedics deem it necessary under certain circumstances.
 - o Of these 18 calls,
 - 4 were "no action required". First aid was declined upon arrival etc.
 - 5 were vehicle collisions – Police and Ambulance
 - 9 were medical calls where first aid action was required; cuts, fractures, fainting, chest pains, oxygen, VSA – Ambulance

For context, all stations within the Township received a total of 521 calls between 2017 and October of 2021. White Lake calls account for 6.52% of the total call volume. Staff feel that this is a vital statistic when looking at the financial impact of purchasing front line fire

apparatus and other equipment. Further, it was this extremely low call volume that made the agreement with Mississippi Mills practicable for Lanark Highlands and Mississippi Mills.

Attendance

Staff reviewed the attendance for various calls and training in 2021. The data shows that Station 5 members attended the following calls;

21-92-05 Sep 13 21 21:18:32 Medical Aid Not Required-- 4 personnel attended
21-84-05 Aug 25 21 14:29:00 Medical Aid not required—3 personnel attended
21-82-05 Aug 7 21 15:25:58 Water Rescue-- 6 personnel attended
21-79-05 Jul 18 21 23:31:58 Medical Aid Not Required-- 3 personnel attended
21-77-05 Jul 7 21 07:45:44 Chest pains or suspected heart attack— 1 personnel attended
21-76-05 Jul 4 21 17:30:22 Human - Perceived Emergency— 1 Personnel attended
21-73-05 Jun 17 21 15:30:32 Vehicle Collision-- 2 Personnel attended
21-62-05 May 3 21 14:50:49 Accident or illness related— 0 personnel attended
21-51-05 Apr 11 21 12:42:12 Assisting other FD -3 personnel attended
21-46-05 Apr 8 21 16:29:38 Chest pains or suspected heart attack-- 1Personnel attended
21-30-05 Mar 7 21 17:03:32 Vehicle Collision— 4 personnel attended
21-20-05 Jan 6 21 13:44:09 Vehicle Collision— 2 Personnel attended

Staff reviewed the previous 5 years of call attendance, and the statistics show that in the previous 5 years Station 5 has had limited response to calls and appears to be a small group of dedicated firefighters responding to most of them. In order to resolve this issue through the MFP, the consultants recommended to form an agreement with Mississippi Mills to supplement the Township's forces. Actual attendance statistics are included below;

Number	Date	Alarm Time	Response Type Description	Station 5 Attendance	Attendance by Others	Total	Personnel at Scene
21-92-05	2021-09-13	21:18:32	Medical Aid Not Required on Arrival	3	1	4	4
21-84-05	2021-08-25	14:29:00	Medical Aid Not Required on Arrival	2	1	3	3
21-82-05	2021-08-07	15:25:58	Water Rescue	3	3	6	6
21-79-05	2021-07-18	23:31:58	Medical Aid Not Required on Arrival	3		3	3
21-77-05	2021-07-07	7:45:44	Chest pains or suspected heart attack	2	1	3	1
21-76-05	2021-07-04	17:30:22	Human - Perceived Emergency	1		1	1
21-73-05	2021-06-17	15:30:32	Vehicle Collision	2		2	2
21-62-05	2021-05-03	14:50:49	Accident or illness related - cuts, fractures, person fainted, etc.		2	2	0
21-51-05-MM	2021-04-11	12:42:12	Assisting Other FD: Mutual Aid	3* Mutual Aid		0	3
21-46-05	2021-04-08	16:29:38	Chest pains or suspected heart attack	1		1	1
21-30-05	2021-03-07	17:03:32	Vehicle Collision	3	1	4	4
21-20-05	2021-01-06	13:44:09	Vehicle Collision	2		2	2
21-03-05	2020-11-05	19:59:33	Oxygen administered	3	1	4	4
20-91-05	2020-07-11	9:54:14	NO LOSS OUTDOOR fire (see exclusions)	3	2	5	5
20-85-05	2020-06-29	0:49:00	Alcohol or drug related	2		2	2
20-01-05	2019-11-01	6:45:51	NO LOSS OUTDOOR fire (see exclusions)	2		2	2
18-83-05	2018-09-06	11:09:11	Vital signs absent, DOA	2	2	4	2
18-80-05	2018-08-16	13:25:32	Incident not found	1		1	1
18-77-05	2018-08-03	17:18:23	Accident or illness related - cuts, fractures, person fainted, etc.	3		3	3
18-76-05	2018-08-02	8:04:40	Incident not found	4	1	5	5
18-47-05	2018-05-06	19:29:54	NO LOSS OUTDOOR fire (see exclusions)	5	16	21	13
18-45-05	2018-05-06	12:49:21	Open air burning/unauthorized controlled burning (no uncontrolled fire)	5		5	1
18-111-05	2018-12-18	23:14:08	Medical/resuscitator call no action required	2	4	6	6
18-103-05	2018-11-14	11:44:16	NO LOSS OUTDOOR fire (see exclusions)	1	2	3	3
17-98-05	2017-11-17	19:15:48	Vehicle Collision	3	9	12	12
17-96-05	2017-11-03	17:56:35	Power Lines Down, Arcing	3		3	3
17-78-05	2017-08-24	20:36:06	Authorized controlled burning - complaint	2		2	2
17-75-05	2017-08-22	9:27:58	Authorized controlled burning - complaint	4		4	4
17-70-05	2017-07-25	10:21:02	Vital signs absent, DOA	3		3	3
17-68-05	2017-07-22	20:46:15	Other Medical/Resuscitator Call	2	5	7	1
17-67-05	2017-07-22	17:19:11	Assistance to Other Agencies (exc 921 and 922)	1		1	7
17-49-05	2017-05-19	19:56:33	Power Lines Down, Arcing	5		5	5
17-48-05	2017-05-18	20:12:05	Power Lines Down, Arcing	4		4	4
17-14-05	2017-02-03	13:36:23	Vehicle Collision	3	4	7	7

Considering the above statistics, it confirms the FMP's findings that there are not enough firefighters in Station 5 to support the needs of the community, even with the limited number of calls. There have been no persons come forward to submit a formal application to become a member of the fire service despite the attention this issue was getting.

The FMP also brought about concerns with respect to attendance at training;

TABLE 6: Attendance at Training Sessions

Station	Average Number of Firefighters at Training Sessions	Number of Firefighters Assigned to that Station
Station 1 – Lanark Village	8 to 10	16
Station 2 - Middleville	10 to 12	17
Station 3 – McDonald Corners	12 to 14	18
Station 4 - Tatlock	8 to 10	13
Station 5 – White Lake	0 to 2	8

The above table references 8 firefighters assigned to station 5, but currently there are 4 firefighters assigned to the station and one acting Station Captain from Tatlock Station 4. Of the 4 firefighters, one lives in Florida approximately half of the year and the other lives south

of Ottawa as their primary residence. This effectively leaves 2 resident firefighters available and one acting Station Captain from another area.

To monitor the attendance, staff reviewed the prevailing statistics relevant for consideration of the FMP findings. Below is a summary of the attendance from November 2020 to October 2021;

Lanark Highlands Firefighter Attendance Station 5								
Nov 2020 to Oct 2021								
Date	Activity / Training	Activity Hours	Training Hours	Attendance (FF #)				
				506	519	401	516	504
07-Dec-20	A	1.75		2	1.75	1.75		
01-Feb-21	A	1.5		1.5	1.5	1.5		
01-Mar-21	A	2			2	2		
24-Mar-21	A	2		2		2		
25-May-21	A	1.5					1.5	
07-Jun-21	A	1.75		1.75	1.75	1.75	1	
05-Jul-21	A	1			1			
09-Aug-21	A	1.58		1.58	1.58	1.58	1.58	1.58
28-Aug-21	A	2			2		2	2
30-Aug-21	A	7					7	
13-Sep-21	A	1.75		1.75	1.75	1.75		
04-Oct-21	A	1.25		1.25	1.25	1.25		
08-Mar-21	T		2	2	2	2	2	
15-Mar-21	T		2.25	2.25	2.25	2.25		
05-Apr-21	T		2	2	2	2		
03-May-21	T		1.5		1.5	1.5	1.5	
14-Jun-21	T		2	2	2	2		
21-Jun-21	T		2	2	2	2		
16-Aug-21	T		2.75	2.75	2.75	2.75		
23-Aug-21	T		2		2	2	2	
18-Oct-21	T		1.5		1.5	1.5	1.5	
Total		25.08	18	24.83	32.58	31.58	20.08	3.58
Total % Hours Attended				58%	76%	73%	47%	8%
Total Attendance (21 events)				13	18	17	9	2
Total % Activities and Training Attended				62%	86%	81%	43%	10%

Activities					
Total Activity Hours Attended	11.83	14.58	13.58	13.08	3.58
% Activity Hours Attended	47%	58%	54%	52%	14%
Total Attendance (12 events)	7	9	8	5	2
% Activities Attended	58%	75%	67%	42%	17%

Training					
Total Training Hours Attended	13	18	18	7	0
% Training Hours Attended	72%	100%	100%	39%	0%
Total Attendance (9 events)	6	9	9	4	0
% Training Attended	67%	100%	100%	44%	0%

Insurance

There have been questions about insurance rates increasing in the area should the White Lake Station be closed. There is some misunderstanding about the affect on insurance rates for residents in White Lake.

The National Fire Protection Association (NFPA) sets out the Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments. Chapter 4 outlines the Organization, Operation, and Deployment of resources as follows;

Demand Zone ^a	Demographics	Minimum Staff to Respond ^b	Response Time (minutes) ^c	Meets Objective (%)
Urban area	>1000 people/mi ²	15	9	90
Suburban area	500–1000 people/mi ²	10	10	80
Rural area	<500 people/mi ²	6	14	80
Remote area	Travel distance ≥ 8 mi	4	Directly dependent on travel distance	90
Special risks	Determined by AHJ	Determined by AHJ based on risk	Determined by AHJ	90

^a A jurisdiction can have more than one demand zone.

^b Minimum staffing includes members responding from the AHJs department and automatic aid

^c Response time begins upon completion of the dispatch notification and ends at the time interval shown in the table.

The table above references a Demand Zone - “Rural Area” upon which White Lake falls under due to the demographics. The MFP referenced under Section 5.1.1 states;

The National Fire Protection Association’s 1720 Standard for volunteer fire department response times is provided below. Based on the population density of approximately 5.09 residents per square kilometre, the Township’s response criteria fall under the rural category, with a response of 6 firefighters on scene within 14 minutes, 80 percent of the time. Within communities like Lanark Village, however, the population densities may be greater than 5.09 residents per square kilometer. Therefore, there are pockets of Lanark Highlands that may fall into the suburban category, thus requiring a response of 10 firefighters on scene within 10 minutes, 80 percent of the time. This response time is also known as “Travel Time”.

Further below on page 79, the consultants state;

Not having enough firefighters at an emergency scene can create an unsafe situation for the firefighters or, in a worst-case scenario, it can cause a delay in conducting fire suppression, lifesaving and/or rescue operations. The NFPA 1710, Standard on Firefighting notes that for a standard two-storey single-family dwelling (without a basement), the required response of 12 firefighters on scene is necessary to effectively battle the fire. Lanark Highlands is unable to meet this staffing requirements on a consistent basis.

This is part of the rationale for engaging Mississippi Mills to provide supplemental fire services to the Township. The result has been improved services to the White Lake Area and adequate response personnel and equipment.

The above table and narrative does not speak to insurance rates. However, the Fire Underwriters Survey (FUS) provides a “Dwelling Protection Grade” (DPG) to determine the protection level for an area of a municipality, upon which insurance companies can rely on to determine a homeowner’s insurance rates. The following chart demonstrates the DPG for various levels of service;

Dwelling Protection Grade Summary of Basic Requirements per Fire Station ¹				
DWELLING PROTECTION GRADE	WATER WORKS SYSTEM	FIRE DEPARTMENT		CORRELATION WITH PFPC ² Public Fire Protection Classification
		EQUIPMENT	FIREFIGHTERS	
1	Water supply system designed in accordance with Fire Underwriters Survey standard “Water Supply for Public Fire Protection” with a relative classification of 5 or better	Response from within 8 km by road of a triple combination pumper	Minimum Response: - On-duty: 3 career fire fighters, plus - Off-duty: fire chief or other officer	Water Supply and Fire Department must grade PFPC Relative Class 5 or better
2	Water supply system designed in accordance with Fire Underwriters Survey standard “Water Supply for Public Fire Protection” with a relative classification of 6 or better	Response from within 8 km by road of a triple combination pumper	Minimum Response: - On-duty: 1 career fire fighters, plus - On-call: 15 auxiliary fire fighters	Water Supply and Fire Department must grade PFPC Relative Class 6 or better
3A	Water supply system designed in accordance with, and meeting the minimum requirements of, Fire Underwriters Survey standard “Water Supply for Public Fire Protection”	Response from within 8 km by road of a triple combination pumper	15 auxiliary fire fighters	No Public Fire Protection Classification required
3B	Not required – however fire department must have adequate equipment, training and access to approved water supplies to deliver standard shuttle service in accordance with NFPA 1142, Standard on Water Supplies for Suburban and Rural Fire Fighting	2 units required. Triple combination pumper <u>plus</u> a mobile water supply with a combined water carrying capacity of not less than 6820 L (1500 IG)	15 auxiliary fire fighters	No Public Fire Protection Classification required
4 ³	Not required – however fire department must have adequate equipment, training and access to approved water supplies to deliver shuttle service in accordance with NFPA 1142, Standard on Water Supplies for Suburban and Rural Fire Fighting	2 units required. Triple combination pumper <u>plus</u> a mobile water supply with a combined water carrying capacity of not less than 6820 L (1500 IG)	15 auxiliary fire fighters	No Public Fire Protection Classification required
5	Unprotected communities or communities not qualifying for Grades 1, 2, 3A, 3B, or 4 above	Unprotected communities or communities not qualifying for Grades 1, 2, 3A, 3B, or 4 above	Unprotected communities or communities not qualifying for Grades 1, 2, 3A, 3B, or 4 above	No Public Fire Protection Classification required

Given the staffing levels at Station 5 currently and historically, Station 5 or White Lake has been classified as a DPG of 5 due to the lack of 15 auxiliary firefighters. Therefore, if insurance companies were providing rates under a “protected” DPG for Station 5, it has not traditionally been supported by the compliment of 15 firefighters required.

The Fire Underwriters’ Survey from the Township’s 2020 Grade Letter states;

Fire Underwriters Survey also assigns a second grade for fire protection. The second grading system, entitled Dwelling Protection Grade (DPG), assesses the protection available for small buildings, such as single-family dwellings, and is used by Personal Lines² insurers. The DPG is a numerical grading system scaled from 1 to 5. Class 1 is the highest grading possible, Class 5 indicates little or no fire protection is present; Class 5 also represents fire protection beyond 8 km by road travel distance of a responding fire station. This grading reflects the ability of a community to handle fires in small buildings such as single family dwellings and semi-detached dwellings.

The Grade Letter provides mapping indicating that White Lake is not unique in being considered “unprotected”. Much of the Township is identified in this same category for insurance purposes. This is evidenced in Schedule “B” to this report.

3. FINANCIAL IMPLICATIONS

Council ultimately opted with the 3 Station Model outlined in the Master Fire Plan. Staff continue to support moving towards a 3 station model from an operational and financial perspective.

3.1.

Under the 5 Station Model, the standards would require additional equipment, replacing front line pumpers and other units in 2021/2022 as follows;

2021

Replace Unit 424: \$450,000
 Replace Unit 425: \$450,000
 Total \$900,000

2022

Replace Unit 482: \$150,000
 Replace Unit 434: \$350,000
 Add Unit 455: \$300,000
 Total \$800,000

The total immediate equipment cost to the Township if Station 5 does not close is \$1,700,000. Council will need to approve these purchases for 2022 should it be determined that Station 5 is to remain open.

However, in anticipating the closure of Station 5 the Fire Department can relocate various equipment to avoid the immediate \$1.7M expense. The Mississippi Mills contract for fire service will offset the requirement for these purchases.

3.2.

Under the 5 Station Model, Station 5 also needs approximately \$750,000 in upgrades to correspond with the upgrades also required at Tatlock as they are the same building.

As a result of the information available at the time, Watsons and Associates presented a Station Model Option Comparison which outlined that a 3 Station Model uninflated would cost at a net present value over 20 years of \$16,335,382. A 5 Station Model uninflated would cost a net present value over 20 years of \$21,637,811. This equates to a difference of \$5,302,429 or an additional \$265,121 per year.

In consideration of a call volume of 34 calls from 2017 to 2021 equating to an average call volume of 6.8 calls per year, staff agree that the consultant's recommendation to close station 5 is operationally and financially responsible.

Item	OPTION 1 - 5 STATION OPERATION (UNINFLATED)	OPTION 2 - 4 STATION OPERATION (UNINFLATED)	OPTION 3 - 3 STATION OPERATION (UNINFLATED)
20-Year Capital Forecast	15,471,700	12,920,200	10,959,200
Average Annual 20-Year Capital Forecast	773,585	646,010	547,960
2010-2019 Average Annual Capital Budget	178,500	178,500	160,980
20-Year Capital Forecast - Debt Principal	11,901,700	9,350,200	7,739,600
Average Annual 20-Year Net Operating Forecast	729,792	631,523	588,977
Average Annual 20-Year Debt Costs	598,541	491,813	403,995
Total Average Annual 20-Year Net Operating Costs	1,328,334	1,123,337	992,972
2020 Net Operating Expenditures	534,144	534,144	534,144
Net Present Value (4% Discount Rate)-inflated\$	21,637,811	18,379,670	16,335,382

4. **OPTIONS CONSIDERED**

4.1.

Recommended:

- Council posts notice of intention to pass a by-law for the closure of Station 5 for a period of 30 days.
- Staff shall include the financial implications and call volumes as the rationale for closure, along with other pertinent details.
- Staff shall amend the E&R By-Law to reflect this change and other pertinent changes as a result of the MFP.

The benefit of this option is that the service levels to the White Lake Area has increased by the supplemental service from Mississippi Mills. Further, the Township has an ongoing agreement with the Township of McNab Braeside to further supplement fire services as required.

Additional benefits in consideration of the municipality as a whole is an immediate cost avoidance of \$1.7M and an additional \$5.3M over the next 20 years.

Fire Halls are proving to be costly to operate and maintain. Many municipalities across the province are closing fire halls for economic reasons. The Township has an opportunity to address economic issues and provide a better level of service with our municipal partners.

4.2

Not Recommended:

- Station 5 remains open in a 5 Station Model.

This would result in an immediate need to spend \$1.7M and spend an additional \$5.3M over the next 20 years.

4.3

Not Recommended:

- Do Nothing

This option would effectively result in the adoption of the 5 Station Model.

5. **STRATEGIC PRIORITIES**

N/A

6. **RELEVANT LEGISLATION AND POLICIES**

6.1. Master Fire Plan – Section 9.1.2.4

7. **OTHERS CONSULTED**

- Ryan Morton, CAO

8. ATTACHMENTS

8.1. Schedule "A" – Call Summary 2017-2021 Station 5

8.2. Schedule "B" – Dwelling Protection Grade Lanark Highlands

Prepared By: *Gene Richardson, Fire Chief/CEMC*

Reviewed By: *Choose an item.*

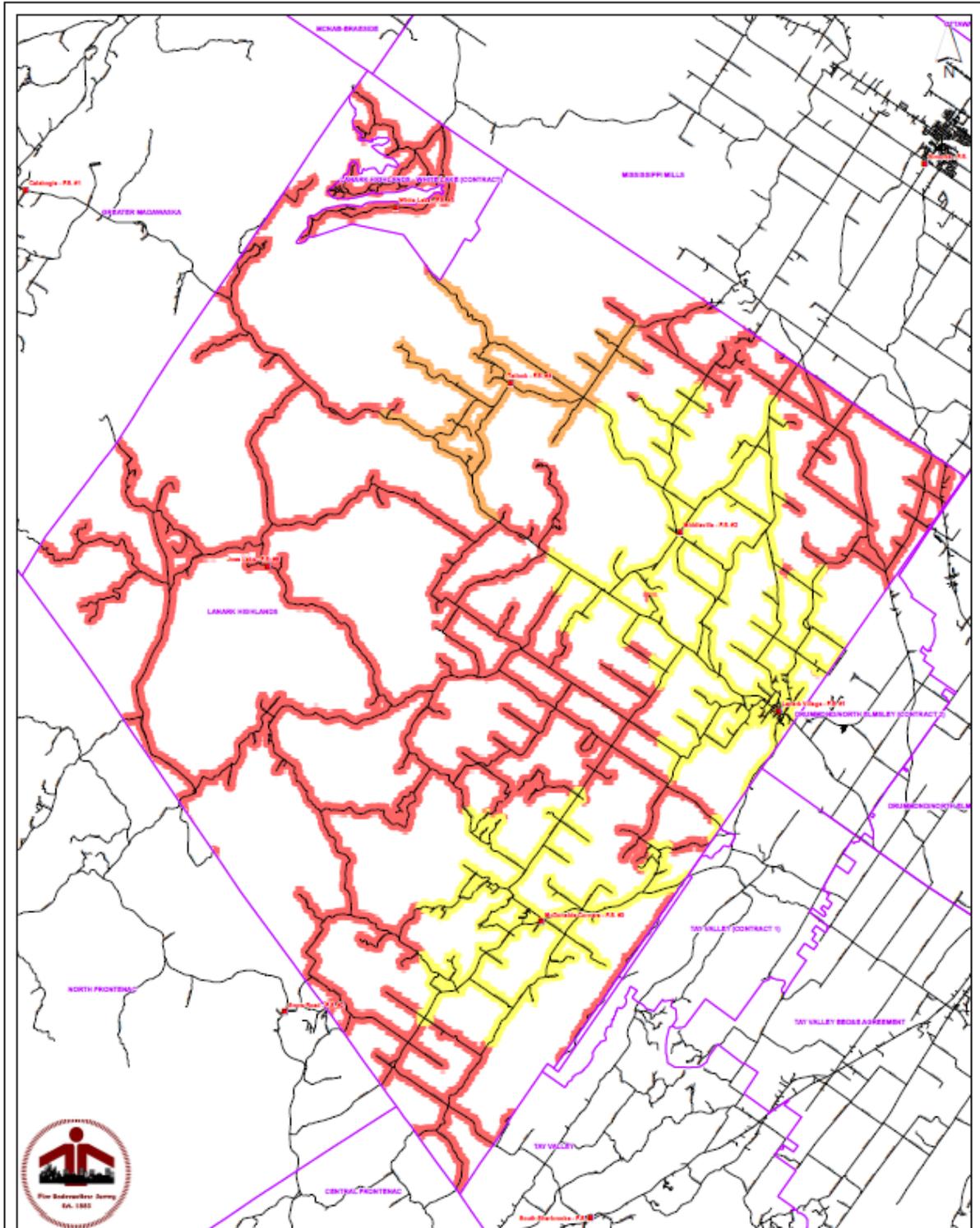
Approved By: *Ryan C. Morton, CAO/Deputy-Clerk*

Schedule "A"
Call Summary 2017-2021
Station 5

Number	Date	Alarm Time	Response Type Description	Address	Personnel at Scene	Staff Hours
21-92-05	2021-09-13	21:18:32	Medical Aid Not Required on Arrival	1669 Peneshula Road, WHITE LAKE	4	4:18
21-84-05	2021-08-25	14:29:00	Medical Aid Not Required on Arrival	410 Peneshula Road,	3	1:12
21-82-05	2021-08-07	15:25:58	Water Rescue	100 Cedar Cove Road, Lanark Highlands	6	13:15
21-79-05	2021-07-18	23:31:58	Medical Aid Not Required on Arrival	348 Lakeshore Road,	3	3:18
21-77-05	2021-07-07	7:45:44	Chest pains or suspected heart attack	630 Peters Point Road,	1	1:19
21-76-05	2021-07-04	17:30:22	Human - Perceived Emergency	100 Cedar Cove Road, Lanark Highlands	1	0:02
21-73-05	2021-06-17	15:30:32	Vehicle Collision	850 Snye Road, Lanark Highlands	2	1:28
21-62-05	2021-05-03	14:50:49	Accident or illness related - cuts, fractures, person fainted, etc.	478 Snye Road, WHITE LAKE	0	0:00
21-51-05-MM	2021-04-11	12:42:12	Assisting Other FD: Mutual Aid	1391 Bellamy Road, MISSISSIPPI MILLS	3	2:54
21-46-05	2021-04-08	16:29:38	Chest pains or suspected heart attack	1669 Peneshula Road, WHITE LAKE	1	0:47
21-30-05	2021-03-07	17:03:32	Vehicle Collision	Windy Point Road & Windy Point Side Road, WHITE LAKE	4	5:08
21-20-05	2021-01-06	13:44:09	Vehicle Collision	1094 Snye Road,	2	1:56
21-03-05	2020-11-05	19:59:33	Oxygen administered	1128 Snye Road, WHITE LAKE	4	4:00
20-91-05	2020-07-11	9:54:14	NO LOSS OUTDOOR fire (see exclusions)	294 Calling Loon Drive, WHITE LAKE	5	12:10
20-85-05	2020-06-29	0:49:00	Alcohol or drug related	184 Lacourse Lane, White Lake ON	2	3:52
20-01-05	2019-11-01	6:45:51	NO LOSS OUTDOOR fire (see exclusions)	335 Pickerel Bay Road, WHITE LAKE	2	2:00
18-83-05	2018-09-06	11:09:11	Vital signs absent, DOA	101 Mcallister Road,	2	2:21
18-80-05	2018-08-16	13:25:32	Incident not found	306 Birch Island,	1	1:00
18-77-05	2018-08-03	17:18:23	Accident or illness related - cuts, fractures, person fainted, etc.	100 Cedar Cove Road, WHITE LAKE	3	5:06
18-76-05	2018-08-02	8:04:40	Incident not found	Proximity of 300 Calling Loon Drive	5	17:09
18-47-05	2018-05-06	19:29:54	NO LOSS OUTDOOR fire (see exclusions)	proximity of 1069 Snye Road	13	43:08
18-45-05	2018-05-06	12:49:21	Open air burning/unauthorized controlled burning (no uncontrolled fire)	579 Peneshula Road,	1	1:00
18-111-05	2018-12-18	23:14:08	Medical/resuscitator call no action required	1669 Peneshula Road, WHITE LAKE	6	7:00
18-103-05	2018-11-14	11:44:16	NO LOSS OUTDOOR fire (see exclusions)	140 Mcallister Road,	3	3:45
17-98-05	2017-11-17	19:15:48	Vehicle Collision	vicinity of 699 California Road bounded by Loney Lake and Darling Road	12	25:21
17-96-05	2017-11-03	17:56:35	Power Lines Down, Arcing	Syne Road & Love's Gate	3	7:12
17-78-05	2017-08-24	20:36:06	Authorized controlled burning - complaint	boat launch located at 579 Peneshula Road	2	1:08
17-75-05	2017-08-22	9:27:58	Authorized controlled burning - complaint	234 Maclachlan Lane, LOWNEY LAKE	4	18:16
17-70-05	2017-07-25	10:21:02	Vital signs absent, DOA	456 Lakeshore Road, WHITE LAKE	3	4:21
17-68-05	2017-07-22	20:46:15	Other Medical/Resuscitator Call	100 Cedar Cove Road, WHITE LAKE	1	0:25
17-67-05	2017-07-22	17:19:11	Assistance to Other Agencies (exc 921 and 922)	shoreline in proximity to 148 Lakeshore Road	7	9:47
17-49-05	2017-05-19	19:56:33	Power Lines Down, Arcing	471 Peneshula Road,	5	6:40
17-48-05	2017-05-18	20:12:05	Power Lines Down, Arcing	414 Lakeshore Road,	4	15:12
17-14-05	2017-02-03	13:36:23	Vehicle Collision	1461 Snye Road (bounded by Love's Gate and Lakeshore Road)	7	34:00

Schedule "B"

Dwelling Protection Grade – Lanark Highlands



<p>Lanark Highlands, ON</p> <p>Scale = 1:25,000</p>		<p>Personal Lines Insurance - Dwelling Protection Grade</p>		<p>Date Drawn: 2020-09-10</p>	
<p>Legend</p> <ul style="list-style-type: none"> Fire Map Fire Fire Protection Boundary 1 1 (Private Hydrant Protected) 2 2 (Private Hydrant Protected) 3A 3A (Private Hydrant Protected) 3B 3B (Private Hydrant Protected) 4 5 6 		<p>These maps and figures are not intended to illustrate the exact response distance or fire insurance grade coverage areas but can be used to aid in determining the fire insurance grade that should be applied to the property in question. Fire Underwriters Survey does not warrant or make any representations with respect to the quality, completeness, currency or accuracy of anything contained in this map, the fitness of this map for any purpose or results obtained using information contained in this map and is not responsible for any action taken in reliance on information contained in this map. In all cases, field data should be used to confirm the date and accuracy of these maps; if differences are noted please contact Fire Underwriters Survey at 1-800-665-6661.</p>		<p>Drawn By: CY</p> <p><input type="checkbox"/> Preliminary <input checked="" type="checkbox"/> Final</p> <p>Type: Personal</p>	