

MANITOBA ) Order No. 61/01  
 )  
THE PUBLIC UTILITIES BOARD ACT ) March 28, 2001

BEFORE: G. D. Forrest, Chairman  
S. Proven, Member

THE RURAL MUNICIPALITY OF MACDONALD  
LOCAL IMPROVEMENT DISTRICT NO. 2 (SANFORD) -  
BY-LAW NO. 29/00  
LOCAL IMPROVEMENT DISTRICT NO. 3 (LA SALLE) -  
BY-LAW NO. 27/00  
LOCAL IMPROVEMENT DISTRICT NO. 5 (OAK BLUFF) -  
BY-LAW NO. 28/00  
SEWER RATES

In three (3) letters each dated November 16, 2000, the Rural Municipality of Macdonald (Macdonald) applied to The Public Utilities Board (the Board) for approval of revised charges for sewer service in the communities of Oak Bluff, Sanford and La Salle, Manitoba (the Applications). The Applications were supported by By-Law Nos. 28/00 for Oak Bluff, 29/00 for Sanford and 27/00 for La Salle, all certified as to having been read the first time on October 24, 2000.

Notice of Public Hearing (Notice) was mailed to customers and posted pursuant to the instructions of the Board. The Notice and affidavits filed by Macdonald confirming the

service and posting of Notice were filed as exhibits to the public hearing held in the office of Macdonald, in Sanford, Manitoba on March 13, 2001 at 7:00 p.m.

For the purpose of this Hearing, the three Applications were dealt with in this single proceeding. However, separate exhibits were filed pertaining to each Application.

The following attendees represented Macdonald:

D. Dobrowolski, Deputy Reeve  
G. Junkin, Councillor  
G. Lavallee, Councillor  
D. Anseeuw, Councillor  
W. T. Raine, CGA, Chief Administrative Officer  
W.H. Brant, P.Eng., Cochrane Engineering Ltd.

The evidence of Macdonald was led by Mr. Raine and supported by Mr. Brant.

The following attendees were ratepayers or representatives of ratepayers:

J.D. Stefaniuk, Counsel, Thompson, Dorfman, Sweatman  
representing 21 concerned ratepayers  
J. Klassen, Ratepayer, Oak Bluff  
B. & J. Rex, Ratepayers, Sanford  
D. Radies, Ratepayer, Oak Bluff

The following information was filed by Macdonald:

1. Since 1977 low pressure sewer systems have been installed in six communities in the Rural Municipality of Macdonald.
2. Following its investigation of sewer system designs Macdonald determined that the installation of low pressure distribution systems (LPS) were the best fit to meet the needs of the municipality. Macdonald noted that LPS have operated quite successfully in Saskatchewan and other jurisdictions. Also, LPS have lower municipal capital costs and allow for easy integration with existing ratepayer septic systems.

In a LPS, household wastewater is collected in a conventional septic tank, from which a small pump conveys the effluent through a small diameter piping system to a sewage lagoon.

3. La Salle - The wastewater collection system on the south side of the La Salle River consists of low pressure sewers and one lift station. On the north side (River Ridge Subdivision), it consists of a network of gravity piping and one lift station. Approximately half of the piping is PVC with the remainder being polyethylene. The main part of the Village is serviced with

low pressure sewer and septic tanks as is the Kingswood Subdivision. The River Ridge Subdivision is serviced with gravity sewers that flow to a lift station for forcemain pumping and consequently do not have septic tanks. The rest of the community does have septic tanks. The Kingswood Subdivision's low pressure sewer flows by the pressure generated by in-house pumps, whereas the main La Salle community low pressure sewer requires a lift station for additional pressure.

The wastewater flows from the Village to a wastewater stabilization pond for treatment. Since most of the pipe network is relatively new and constructed of sound pipe, it is doubtful that there will be a significant amount of sewer repairs in the near future. The lift stations will be the focus of most maintenance expenditures, in terms of pump replacements and other associated items.

Oak Bluff - The wastewater collection system consists of a network of PVC or polyethylene low pressure sewer piping including a new lift station constructed in 2000. The wastewater will flow by pressure generated by in-house pumps from the Village to the lift station and then on to the wastewater stabilization pond for treatment. Since the pipe network is relatively

new and constructed of sound pipe, it is doubtful that there will be a significant amount of sewer repairs in the near future.

Sanford - The wastewater collection system consists of a network of low pressure sewer piping and one lift station. Most of the piping is polyethylene with the remainder being PVC. The wastewater flows by pressure generated by in-house pumps, to a lift station, then from the lift station to a wastewater stabilization pond for treatment. Since most of the pipe network was installed in 1979 and considered to be relatively new and constructed of sound pipe, it is doubtful that there will be a significant amount of sewer repairs in the near future. The lift station will be the focus of most maintenance expenditures, in terms of pump replacements and other associated items.

4. Attached to the Applications, Macdonald filed Sewer Rate studies for each community setting out, amongst other things the following:
  - i) Population and customer growth projections;
  - ii) An assessment of the number of users of the system;
  - iii) Cost and revenue projections; and a

iv) Report on incremental costs of upgrading the LPS system to accommodate weeping tile flow. This report was prepared by Cochrane Engineering Ltd.

5. Population and customer growth projections are as follows:

	Oak Bluff		Sanford		La Salle	
	Population	Customer	Population	Customer	Population	Customer
1976	-	-	347	-	190	-
1999	560	192	591	193	1087	384
2005	577	201	715	237	1386	461

Dashes mean data was unavailable.

6. The capital costs and projected operating costs of the systems are as follows:

	Oak Bluff	Sanford	La Salle
Capital costs	\$519,830	\$459,799	\$417,888
Projected operating costs	\$ 21,724	\$ 25,992	\$ 39,727

7. The last sewer rate study was done in 1999.

8. The commodity rates for the communities were calculated based on 2005 expenditures including administration costs, operating costs, sump pump conversion program costs and small infrastructure repairs. The major reason for the required rate increase is the sump pump

conversion program. To a lesser extent, the increases also can be attributed to the costs of a scheduled septic tank pumpout for each consumer, lab fees for effluent testing prior to discharge, contingency costs and administration costs.

Under the sump pump conversion program Macdonald intends to provide a \$300 contribution per household to offset the costs of installing a sump pit and pump system. The total cost of the program is estimated to be \$29,400 (98 x \$300). Macdonald was proposing in this rate study to recover the conversion program costs over a period of 5 years and have that cost included in the other sewage collection and disposal costs in an annual amount of \$5,880.

9. Since 1977 various communities in the municipality have experienced difficulty pumping out septic tanks into the collection system particularly during periods of heavy rain.

In the design of LPS an assumption is made that weeping tile flows would be no more than the peak domestic wastewater flow. Unfortunately, the experience in the Red River Valley suggests that because heavy clay soils cannot absorb much rainwater or snowmelt, weeping tile flows are running as high as two to three times the rate

of peak domestic wastewater flows. Furthermore, changing weather patterns and more specifically more frequent heavy rainfalls has made matters more difficult.

10. Since 1985, in newer subdivisions, homebuilders have been required to install sump pits and pumps to collect weeping tile water, which is then pumped into yards and dispersed by the land surface drainage system. Macdonald noted that other communities have mandated the disconnection of weeping tile water flows which was proving to be a successful method of addressing the problem. When the by-law was passed in 1985 for new homes, Macdonald grandfathered the continuation of existing weeping tiles connected to the septic systems. Consequently, under wet conditions weeping tile water flows are causing a significant increase in the volume of wastewater pumped from the septic tanks into the LPS system.

11. Macdonald indicated that experience to date shows that the existence of lift stations in a community makes little difference to the operating efficiency of the system pertaining to the current problem. Because of the high risk of increased frequency of heavy rainfalls, Macdonald considered possible options to address

the operational problems which included the following:

- i) Do nothing to address the problem and therefore allow individuals to select a solution of their own and deal with any sewer backup as it occurs;
- ii) Upgrade the existing collection system, the existing lift station and existing lagoon and hope that a significant rainfall event in the future does not exceed the capacity of an expanded system; or
- iii) Attempt to have the source of the additional volume removed from the sewer system.

Macdonald determined Option (i) was not reasonable and would not solve the stress of overloading on the existing system. Option (ii), that proposed a variety of improvements to existing infrastructure, were steps already taken by the municipality within the communities of La Salle and Sanford with no resounding success.

After significant rainfall events in the past, the municipality installed additional collection lines in the communities of Sanford and La Salle

as a possible solution. That solution was not only costly, but lasted only as long as the next event of heavy rain fall. Once again, the rainfalls of July 2000 overwhelmed the system.

Macdonald determined Option (iii) was the most desirable option that proved to be successful in other communities as well as within the Rural Municipality of Macdonald.

Macdonald did not mandate the disconnection of the existing weeping tiles because of the response it heard at town hall meetings against such a decision. Instead Macdonald developed a program of financial assistance to the ratepayers who voluntarily install a sump pit and pump and of surcharge for those who do nothing. As noted earlier Macdonald was prepared to contribute a maximum of \$300.00 towards the cost of an approved installation of a sump pit upon inspection and completion prior to July 1, 2001. Using the experience in other communities, Macdonald estimated a homeowner's cost of installing a sump pit and pump at \$800 per resident.

12. In developing a surcharge, Macdonald engaged the services of Cochrane Engineering Ltd. to determine the cost of upgrading the sewer systems to handle the higher water flows.

Having established the capital costs, Cochrane was required to make an assumption as to how many residents may not install the sump pit and to set a surcharge that would require only these customers to pay the capital costs. A surcharge of \$200.00 per annum or \$50.00 per resident per quarter was established based on the study. The assumption was the capital cost was similar for all three communities.

It was noted that the surcharge is not unlike other surcharges imposed by some communities on industrial customers for extra strength sewage.

13. Macdonald advised that some ratepayers have installed sump pits and others are waiting the outcome of The Public Utilities Board process.

To date 1 resident in Oak Bluff, 10 residents in Sanford and 8 residents in La Salle have installed sump pits under the conversion program.

The following information was provided by the residents or their representative:

Mr. Rex asked the Board to not approve the Applications of Macdonald for the surcharge. Mr. Rex argued that the surcharge violates the spirit of the decision of Macdonald in 1985 to grandfather the connection of existing

weeping tiles to the sewer system. In his personal situation, his existing sewer pump runs very little even under wetter conditions as he has good drainage around his home. He, therefore, asked Macdonald for an exemption from the surcharge. Macdonald never responded to this request. In opinion of Mr. Rex, Macdonald's assessment of the problem of the excess drainage is inadequate and accordingly, residents with connected weeping tiles are being inappropriately targeted. He estimated that for Sanford the total cost for all the residents to install sump pits would approximate the cost of upgrading the sewer system as determined by Macdonald. Mr. Rex encouraged Macdonald to revisit the issues more thoroughly and to consult the residents of the areas.

Mr. Klassen also questioned whether a full and proper assessment of the source of the problem and possible solutions had been made. He noted that a lift station had recently been installed in Oak Bluff and no opportunity has been given to assess its performance during peak water flows. In his opinion, the problem may be associated with sewer line sizing which can only be resolved by an upgrade. In times of power outages, he felt the existing system would provide more protection to his home in high water flow conditions than a sump pit. The adequacy of the surface land drainage system in existing yards was also a concern.

Mr. Radies also felt that addressing the surface land drainage system had not been fully examined. He noted that at the time of the installation of the sewer system, the

connection of weeping tiles to the sewer system was done with the permission of Macdonald.

Mr. Stefaniuk indicated that his presentation was being made on behalf of 21 objectors residing in Sanford and that there were many others who share his clients' views but have not registered. Mr. Stefaniuk indicated that his clients fully support the views expressed by Mr. Rex. In his clients' view the problem identified by Macdonald was much broader and accordingly, the communities as a whole should be looked at for the solution. It is not just and reasonable to charge a few for what may be deficiencies in design. He felt it was unfortunate that Macdonald did not provide good evidence on what the future requirements of the system might be and how these plans should or could be integrated with any plans to rectify the high water flows. Mr. Stefaniuk suggested that the Board has the expertise to deal with this issue and should exercise its jurisdiction thereby, avoiding a referral to the Court of Queens Bench. Mr. Stefaniuk introduced Mr. Law, one of his clients, who shared with the Board his personal experience with the inadequate land surface drainage system in his area. Mr. Law indicated that his yard does not drain well and yet, like Mr. Rex, his pump is not running excessively due to weeping tile flow. Mr. Law also questioned whether Macdonald had properly assessed the problem associated with high water flows suggesting it would be more prudent to also consider all the changing circumstances in Sanford including the added load placed on the sewer system by the expansion of the school. Mr. Stefaniuk questioned whether Macdonald had adequately

handled the lot fees collected from lot owners in the new developments and whether such fees were adequate to resolve the incremental costs of upgrading the system. His clients feel that they have paid their fair share of the costs of the system and should not be asked to pay again through surcharge fees.

Mr. Paul Yarish forwarded an e-mail to the Board on March 20, 2001. Mr. Yarish held views similar to the other residents. This letter was forwarded to Macdonald on March 27, 2001.

#### **Board Finding**

The question for the Board is with circumstances having overtaken the original design of the LPS including the appropriateness of the use of LPS for conditions in Manitoba particularly in light of the change in weather patterns, and two is the remedy offered by Macdonald a stop gap measure or a permanent solution to the overloading problem.

The Board accepts that the diversion of weeping tile water away from the sewer system will alleviate in part, the pressure of overloading which is the experience in other communities. However, the Board is not convinced that the evidence provided by Macdonald provides a high level of certainty that the problem will be fully addressed.

The Board believes that in principle, the diversion of storm water away from the sewer system is sound engineering

practice which works well, for example, in new developments when there is a full opportunity to address the adequacy of the land surface drainage system. In the older parts of communities where the land drainage system may not be adequate to take away the additional water from the weeping tile it is significantly more challenging to make that argument.

While the Board is satisfied that Macdonald did reasonably explore the options available, the Board is persuaded by the comments of the residents of the communities who suggested more analysis should be conducted by Macdonald to ensure that all aspects of the problem are examined fully including any future need for expansion and to ensure that the most desirable option is justified based on a sound engineering assessment. The engineering assessment should examine the costs and benefits of the Macdonald proposal together with the costs and benefits of a system upgrade to address the immediate problem at hand and the further growth in the communities in the short and long term. In the meantime, Macdonald may wish to consider educating its residents about the desirability of maintaining good land drainage away from buildings which may assist in alleviating excess water flows in the weeping tiles. This coupled with improved land drainage opportunities may offer further remedies to the ground water problems.

Accordingly, the Board will defer the approval of the surcharge at this time and require Macdonald to conduct further analysis and provide an updated report to the Board.

However, the Board will approve the rates proposed by Macdonald for all communities including the financial assistance provision which the Board noted, is the principle reason for the need for increased rates.

**IT IS THEREFORE ORDERED THAT:**

1. Schedules "A" to By-law Nos. 27/00, 28/00, 29/00 of the Rural Municipality of Macdonald BE AND THE SAME IS HEREBY APPROVED subject to the deletion of the Storm Water Surcharge clause in each By-law, all as reflected in the attached Schedules A, B, and C.
2. The fees payable upon this Order will be forwarded by the Board under separate cover.

THE PUBLIC UTILITIES BOARD

"G. D. FORREST"

Chairman

"G. O. BARRON"

Secretary

Certified a true copy of  
Order No. 61/01 issued by  
The Public Utilities Board

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Secretary

SCHEDULE "A"  
TO BOARD ORDER NO. 61/01  
THE RURAL MUNICIPALITY OF MACDONALD  
LOCAL IMPROVEMENT DISTRICT NO. 3 (LA SALLE)  
SEWER RATES  
BY-LAW NO. 27/00

1. Quarterly Rates for Sewer Service

CUSTOMER	UNITS	SEWER COMMODITY CHARGE	SERVICE CHARGE	QUARTERLY BILL
Single Family Dwelling Equivalent	1	\$ 22.20	\$2.30	\$ 24.50
MHRC (6 - 1 bdr units)	3	66.60	2.30	68.90
La Salle Curling/Hall	3	66.60	2.30	68.90
La Salle General Store (Peppy's - 34 restaurant seats, 18 lounge seats)	3	66.60	2.30	68.90
La Salle Service Centre (3 Wash Racks)	6	133.20	2.30	135.50
La Salle River Inn (4 rooms, 40 restaurant seats, 80 beverage room seats)	9	199.80	2.30	202.10
Kingswood Golf Course & Clubhouse (300 banquet room seats 113 sports bar seats)	9	199.80	2.30	202.10
Seine River S.D. #14 (Elementary - 11 classrooms, 9 showers)	14	310.80	2.30	313.10

2. Billings and Penalties

Accounts shall be billed quarterly, and shall be due and payable 30 days after date of billing. A penalty of 10% of the amount of the bill shall be added if not paid by the due date. (Note: due date may be set as Council sees fit to do.)

3. Disconnection

Service may be disconnected and discontinued immediately and without further notice in the event of non-payment of the account within 30 days after due date.

4. Outstanding Bills

Pursuant to Section 252 (2) of the Municipal Act, "A charge referred to in Clause (1)(a) may be collected by the municipality in the same manner as a tax may be collected or enforced under this act".

SCHEDULE "B"  
TO BOARD ORDER NO. 61/01  
THE RURAL MUNICIPALITY OF MACDONALD  
LOCAL IMPROVEMENT DISTRICT NO. 5 (OAK BLUFF)  
SEWER RATES  
BY-LAW NO. 28/00

1. Quarterly Rates for Sewer Service

CUSTOMER	UNITS	SEWER COMMODITY CHARGE	SERVICE CHARGE	QUARTERLY BILL
Single Family Dwelling Equivalent	1	\$ 28.80	\$2.30	\$ 31.10
Oak Bluff Hall	2	57.60	2.30	59.90
Oak Bluff Arena	2	57.60	2.30	59.90
Dan Murray Chev Olds (1 wash rack)	2	57.60	2.30	59.90
Enns Brothers (2 wash racks)	4	115.20	2.30	117.50
Humpty's Restaurant (104 Restaurant Seats)	6	172.80	2.30	175.10
Morris Macdonald SD #19 (Elementary - 10 classrooms, 2 portables, 5 showers)	13	374.40	2.30	376.70

2. Billings and Penalties

Accounts shall be billed quarterly, and shall be due and payable 30 days after date of billing. A penalty of 10% of the amount of the bill shall be added if not paid by the due date. (Note: due date may be set as Council sees fit to do.)

3. Disconnection

Service may be disconnected and discontinued immediately and without further notice in the event of non-payment of the account within 30 days after due date.

4. Outstanding Bills

Pursuant to Section 252 (2) of the Municipal Act, "A charge referred to in Clause (1)(a) may be collected by the municipality in the same manner as a tax may be collected or enforced under this act".

SCHEDULE "C"  
TO BOARD ORDER NO. 61/01  
THE RURAL MUNICIPALITY OF MACDONALD  
LOCAL IMPROVEMENT DISTRICT NO. 2 (SANFORD)  
SEWER RATES  
BY-LAW NO. 29/00

1. Quarterly Rates for Sewer Service

CUSTOMER	UNITS	SEWER COMMODITY CHARGE	SERVICE CHARGE	QUARTERLY BILL
Single Family Dwelling Equivalent	1	\$ 26.85	\$2.30	\$ 29.15
Sanford Arena	2	53.70	2.30	56.00
Mandan Manor (8 - 2 bdr units - 3 - 1 bdr units)	10	268.50	2.30	270.80
Morris Macdonald S.D. #19 (11 Classrooms, 5 Portables)	14	375.90	2.30	378.20
Morris Macdonald S.D. #19 (21 Classrooms, 12 showers, 2 Multipurpose)	34	912.90	2.30	915.20

2. Billings and Penalties

Accounts shall be billed quarterly, and shall be due and payable 30 days after date of billing. A penalty of 10% of the amount of the bill shall be added if not paid by the due date. (Note: due date may be set as Council sees fit to do.)

3. Disconnection

Service may be disconnected and discontinued immediately and without further notice in the event of non-payment of the account within 30 days after due date.

4. Outstanding Bills

Pursuant to Section 252 (2) of the Municipal Act, "A charge referred to in Clause (1)(a) may be collected by the municipality in the same manner as a tax may be collected or enforced under this Act".