

NORTHERN MORAINE WASTEWATER RECLAMATION DISTRICT

113 Timber Trail, Island Lake, Illinois 60042

REGULAR MEETING MINUTES

January 14, 2020

Present: Trustees: Ken Michaels, John Ragland, Timothy Brunn (by telephone), Dena Battaglia, Lydia Ryberg District Manager: Mohammed Haque; District Clerk: Deborah Martin Others: Superintendent: Luke Markko Guest: Eric Rothstein, Galardi Rothstein Group

President Michaels called the meeting to order at 7:32 p.m.

1. CALL TO ORDER:

Roll Call: Timothy Brunn – by phone (in Detroit for work) John Ragland - Present Dena Battaglia - Present Lydia Ryberg – Present Ken Michaels – Present

2. PLEDGE OF ALLEGIANCE:

Those present stood and pledged allegiance to the flag.

President Michaels asked that the order of the agenda be changed slightly to first allow the Board to discuss Agenda Item 9a and then to move to Agenda Item 10D, allowing special guest Eric Rothstein to make his presentation to the Board.

9. OLD BUSINESS

a. <u>Approval of Resolution 20-01, Adopting an Electronic Attendance Policy</u>

President Michaels explained that this resolution would allow for members of the Northern Moraine Wastewater Reclamation District to attend board meetings electronically and be given the right to vote and make motions at board meetings and any committee meetings. There was a brief discussion concerning the language used in the Resolution presented.

Motion by President Michaels to substitute the words "subsidiary public bodies" for "committees" in all instances shown in the presented Resolution 20-01.

2nd by Trustee Ryberg

4 ayes 0 nays 1 abstain - Trustee Brunn MOTION CARRIED

Motion by Mrs. Ryberg to approve Resolution 20-01, with changes as stated in the previous motion, adopting an Electronic Attendance Policy.

2nd by Trustee Battaglia

Roll Call Vote:	Dena	Battaglia - Aye
	Timo	thy Brunn - Aye
	John	Ragland - Aye
	Lydia	a Ryberg – Aye
	Kenl	Michaels - Aye
5 ayes 0 nays	0 abstain	MOTION CARRIED

5 ay ay



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10. NEW BUSINESS

d. <u>User Rate Presentation</u>

The Board listened to a presentation by Eric Rothstein of Galardi Rothstein Group concerning the financial shape of the District and his firm's recommendations concerning future capital needs and any future rate increase increments and frequencies. Of concern were future projects and the maintenance of an aging infrastructure along with the rising costs of chemicals essential to meet the new permitting requirements of the Illinois Environmental Protection Agency. The Board conferred with Mr. Rothstein on some stated financial matters and his firm's suggested percentages of future rate increases. The Board thanked Mr. Rothstein for his time and agreed that his presentation gave them a lot to consider in the very near future.

Mr. Rothstein left and the Board continued with the Agenda as presented.

3. PRESENTATION & APPROVAL OF MINUTES:

a. <u>Regular Meeting, December 11, 2019</u>

Motion by Trustee Ragland to approve the Regular Meeting minutes of December 11, 2019 as presented. 2nd by Mrs. Ryberg 5 ayes 0 nays 0 abstain **MOTION CARRIED**

b. <u>Executive Meeting, December 11, 2019</u>

Motion by Mrs. Battaglia to approve the Executive Meeting minutes of December 11, 2019 as presented. 2nd by Mrs. Ryberg 5 aves 0 navs 0 abstain **MOTION CARRIED**

4. TREASURER'S REPORT:

a. <u>Approval of the Monthly Treasurer's Report/Quarterly Investment Report for month ending</u> <u>November 30, 2019</u>

Mrs. Ryberg presented the Monthly Treasurer's Report for month ending November 30, 2019 for Board approval.

Motion by Mrs. Battaglia to approve the Treasurer's Report for month ending November 30, 2019 as presented. 2nd by Mr. Brunn

5 ayes 0 nays 0 abstain

MOTION CARRIED

5. PUBLIC COMMENTS: none

6. MANAGER'S REPORT:

Superintendent Markko presented his Operations Report and gave more information concerning the North Clarifier and other projects. Mr. Markko reported that heat trace and insulation have been installed on the North and South Digesters, and exterior protections installed to ward off weather related issues. He also informed the Board that Lift Station generator maintenance has been completed and explained what the maintenance entails. He told the Board that although the Treatment Plant's Generator has received the same maintenance treatment, a faulty controller resulted in the need to use a portable generator in late December as a replacement controller was quickly installed. Mr. Markko reported that several improvements have started to the disinfection system area.

District Manager Haque gave the Board a brief summary of his Manager's Report, updating the issues with the North Clarifier. He stated that a great deal of time in December was spent on soliciting proposals for dewatering, dome removal, concrete removal and concrete reinstallation, Mr. Haque informed the Board that the insurance claim had been denied and that he has been discussing the matter with counsel to determine the best course of action. Monitoring wells have been installed and two soil borings were obtained. Televising of the 24" pipe connecting the clarifier and oxidation ditch was not successful, but will be attempted again. Manager Haque informed the Board that the final inspection of Woodmans is still pending, but issues should be worked out soon and the improvements should be accepted shortly. He reminded the Board that the Village of Lakemoor's payment request is a part of this meeting's agenda. Manager Haque updated the Board concerning the progress



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on the sludge bed cover and conveyor. Manager Haque reported that plans for the lift station work in Lakemoor have been finalized and would be shared with Representative Weber. He also told the Board that Senators Wilcox and McConchie showed great concern over the clarifier issues and the insurance company's denial of the District's claim. Manager Haque informed the Board that interviews were taking place for a replacement Operator and Operator in Training. He informed the Board that the floodproofing of the Control Building and generator modifications were nearly completed, and that permanent Hyper Ion storage tanks are being ordered and will be installed by a mechanical contractor. Manager Haque reported that piping painting has been completed on Raw Pump #4. He told the Board that he is waiting for plans from Trotter and Associates on the headworks installation. Manager Haque reminded the Board that District Attorney Vic Filippini is still working on reviewing the District ordinances in order to streamline our 7 main ordinances into 2 or 3 ordinances. He also reported that quotes have been requested for lift station control panel installation.

7. TRUSTEE REPORTS - none

8. LEGAL BUSINESS - none

10. NEW BUSINESS

a. <u>Approval of Ordinance 20-01, Abating General Obligation Bonds Taxes for 2019</u> Motion by Mrs. Battaglia to adopt Ordinance 20-01, authorizing the County Clerks of Lake and McHenry County to Abate and not spread General Obligation Bond Tax for 2019 in the amount of \$393,818.17. 2nd Mrs. Ryberg

Roll Call Vote:

Dena Battaglia - Aye Timothy Brunn - Aye John Ragland - Aye Lydia Ryberg – Aye Ken Michaels - Aye

5 ayes 0 nays 0 abstain

MOTION CARRIED

b. <u>Approval of Resolution 20-02 for Reimbursement to Village of Lakemoor</u>

President Michaels informed the Board that the District Manager had looked at the figures received from the Village of Lakemoor for their payment request for the sewer infrastructure necessary at the intersection of Routes 120 and 12. He stated that the District did deduct our engineering costs that were not covered by the Village of Lakemoor. It had been determined to pay 90% of the payment request and to hold back 10% until all improvements are completed. Manager Haque explained to the Board that the original amount of the underground contract was \$1 million, but the final costs are near \$2.6 million.

Motion by Mrs. Ryberg to approve a Resolution authorizing the District Manager to remit \$1,094,072.65 (minus 10%), for a total amount of \$1,400,000.00, to date, per the intergovernmental agreement dated June 27, 2017 and approving the payment schedule for future remittances from the Village of Lakemoor.

2nd by Mr. Ragland Roll Call Vote:

Dena Battaglia - Aye Timothy Brunn - Aye John Ragland - Aye Lydia Ryberg – Aye Ken Michaels - Aye

5 ayes 0 nays 0 abstain

MOTION CARRIED



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c. Approval of Resolution 20-02 Authorizing Participation in NIMEC Electric Collaborative

The District has participated in an electrical purchasing collaborative, NIMEC, since 2008 and has benefited with significant cost savings for electric service through this collaborative.

Motion by Mrs. Battaglia to approve a resolution authorizing the District Manager to approve and execute a contract with the lowest cost electricity provider for a period up to 36 months.

2nd by Mrs. Ryberg Roll Ca

la	ll Vote:	Dena Battaglia	- Aye
		Timothy Brun	n - Aye
		John Ragland -	Aye
		Lydia Ryberg -	- Aye
		Ken Michaels -	Aye
s	0 navs	0 abstain	ΜΟΤΙΟ

5 ayes 0 nays – 0 absta N CARRIED

11. MISCELLANEOUS CORRESPONDENCE

a. MCCG Legislative Dinner Meeting: Wednesday, January 22, 2020 at Hickory Hall in Crystal Lake

12. APPROVAL OF BILLS

Motion by Mrs. Ryberg to approve payment of bills on the January 14, 2020 bill list as presented, in the amount of \$136, 112.19.

2nd Mr. Ragland

Roll Call Vote: Dena Battaglia - Aye Timothy Brunn - Ave John Ragland - Aye Lydia Ryberg – Aye Ken Michaels - Aye

5 ayes 0 nays 0 abstain

MOTION CARRIED

13. OTHER BUSINESS - none

ADJOURNMENT

Motion by President Michaels to adjourn at 9:00 p.m. 2nd Mrs. Ryberg 5 ayes 0 nays 0 abstain **MOTION CARRIED**



January 14, 2020 To: NMWRD Board of Trustees From: Mohammed Haque, District Manager Subject: Manager's Report

All update items are in italics.

North Clarifier Issue

A lot of time in December has been spent on this issue. Insurance has denied the claim based on a groundwater exclusion. We have been discussing the matter with counsel to determine the next best course of action. In the meantime, we have installed the monitoring wells and obtained two soil borings and have received proposals for dewatering, dome removal, concrete removal and re-installation. We also tried to have the 24" pipe connecting the clarifier and oxidation ditch televised, but had issues with it. We have been working with McHenry County Department of Health on the dewatering well permits. This has been very cumbersome and difficult. A meeting this morning provided some relief so that we can get started on the dewatering wells (temporary) and will have to circle back if we want to make them permanent after 12 months.

Future steps are as follows:

- Install Dewatering Wells and Pumping Equipment
- Televise the line from Oxidation Ditch to Clarifier for Damage
- Dewater and survey floor of clarifier after dewatering
- Determine extent of repairs needed

Woodmans [Force Main + Gravity Sewer Extension + Lift Station]

We continue to work with Lakemoor to ensure that startup was completed in time of the store opening. The District allowed temporary bypass pumping and operations without the permanent generator to avoid delays and to accommodate the Village's schedule. Since that time, the generator has been installed and tested. District board has approved the project improvements, contingent on punchlist item completion. *The final inspection is still pending as they work out another issue. I expect that after that, we will accept the improvements per past board direction and action. The payment request to the Village of Lakemoor is part of the agenda.*

Sludge Bed Cover and Conveyor

Greenfield Contractors was awarded the bid for the Sludge bed covers. We are currently in the process of submittal review and finalization. Once submittal is approved, we expect that it will be installed in 60-90 days. We have moved the sludge conveyor to directly discharge to the sludge bed to the east of the Dewatering building and are currently setting up the conveyor to dump into the bed. Once the system works and the covers are installed, we expect to order a full stainless conveyor with cleated belts that should function well long-term. *We are getting quotes for concrete blocks that the structure will sit on.*



<u>Capital Bill</u>

I have been working with the staff at Representative Weber's office to get them information on the member initiative funding for Lakemoor Lift Station improvements. I continue to work with Mike Tryon to identify other sources of funding for Darrell Road Interceptor. *Plans for the lift station work in Lakemoor have been finalized and will be shared with Representative Tom Weber. I met with Senators Craig Wilcox and Dan McConchie last week and informed them of the issues with the clarifiers. In addition, the District has applied for GATA, which is part of the process to receive member initiative funds, which we are expecting.*

User Rate Study

Now that the picture regarding the capital bill is more certain, the rate study should be completed soon and we will incorporate information from a new capital improvement plan and anticipated construction for Darrell Road and it's related timing. We will also discuss the special connection fee concept that we had previously briefly looked at a few months back. *Eric Rothstein has finalized the rate study with the most recent set of circumstances with the Woodman's payment and Clarifier repair being self-funded. He will present his results at the meeting.*

Personnel

Bryan Gainer is no longer with the District, leading us to be short-staffed in December and having 2 operators split being on call every other week. Interviews are underway for a replacement Operator as well as the Operator-in-Training(part-time) position. Once a fit is found, we expect to hire very quickly to alleviate the situation. We are still weighing what to do with the part-time office clerk position that was previously discussed and put on hold.

Floodproofing of Control Building and Generator Modifications

Since we have had considerable savings on this project, we are replacing the weathered and rusting doors on this building with extruded aluminum doors as well as the entire mansard to have a uniform look to the building. We are also having some landscaping work done around the building and replacing several linear feet of damaged sidewalks and stoops. Some of the concrete work is necessary to allow for the flood barriers to work properly. *The coping is being installed and final touches are being completed. Floodproofing angles and supports have been delivered. Coping and other architectural metals have been received and are currently being installed by District staff. Some metal trim installation work will be contracted out to ensure it is finished soon.*

Phosphorus Removal

Currently on hold due to other work and preparation for the 50th Anniversary, however, we know what we need to do for a long-term arrangement and expect to complete this project by spring. *We have ordered the permanent Hyper Ion storage tanks and will be getting it installed by a mechanical contractor.*



Influent Flowmeter and Raw Pump #4

This is complete and working quite well. I anticipate a big reduction in our energy use is a result of the new pump. The only item remaining is the painting of the new piping. I anticipate that will be completed in the next 2 weeks. *Painter has completed piping painting. Swapping out of Pump #1 due to issues with the existing pump is pending.*

SCADA(Supervisory Control and Data Acquisition) and Telemetry

Fiber optics backbone has been installed and most hardware components have been purchased. *A purchase order has been issued for installation and termination of fiber optics. No update.*

Plant Process Automation - Phase 1

Three control panels have been delivered and are currently awaiting installation in the Control Building, Oxidation Ditch and Chemical Building. *We are waiting on quotes for the installation. We expect to have the panels installed over the winter. No update.*

Headworks / Screening Issues

The influent grinder was installed and continues to work well after it was fixed under warranty. There is a need to change the motor stem height. In addition, some alignment issues will require us to move it slightly in conjunction with the installation of the new replacement screen and conveyor. I am waiting on Trotter & Associates to prepare some drawings for the installation of the new Headworks MS1 bar screen, conveyor, new gates and the repositioning of the grinder. *Change order was approved last month. Once revised submittals are reviewed, the screen will be put into production and scheduled for delivery. Also still waiting on plans from Trotter & Associates.*

Non-Potable Water Improvements

Self-cleaning filter/strainer has been started up and is working quite well. In the process we have discovered that of the three existing NPW pumps, one does not work properly and another is showing extreme age and corrosion. Due to a failure of a second pump, an emergency repair was completed. *A new pump skid has been ordered from MP Pumps and we are waiting for delivery.*

Maintenance Garage

CE Ltd has started the work for stormwater permitting by McHenry County. I am working with ADG Design on the architectural drawings and will submit to the board in late fall. *A revised set of drawings has been received and permits have been applied for the paving work at this time.*

106 E. State, Island Lake (Dentists Office) Expansion

The property owner is in the process of televising the service tie-in. A follow-up will be done with the Village of Island Lake's new building inspector to ensure that we have better coordination going forward. *Work is complete. This item will no longer appear on the DM Report.*



Ordinance Review

Currently the District has Sewer rates, usage, construction details and specifications in seven (7) different documents. There is some duplication (and related confusion) as a result. I am currently working with our attorney Vic Filippini to streamline this into 2-3 ordinances, which is the standard for agencies such as ours. This will make things easier for staff and for the public. *Awaiting receipt of draft from Vic Filippini*.

<u>Circle K</u>

Waiting on retained personnel fee. No contact has been made with the District for several months. We have reached out to inspector at Island Lake. *No update.*

Skipper Bud's

Skipper Bud's request to connect to NMWRD did not garner the full support of all five parties. LRSD has requested that the matter be delayed until their dissolution/transfer to Lake County. *No update.*

Lift Station Controls

The Hale control panel has been delivered and because of the 50th Anniversary, we have decided to use it at the Treatment Plant Lift Station. A new one will be ordered for Hale, as well as panels at additional locations in the next few months utilizing contributions from state legislature capital bill funding. Due to ongoing trouble with the Grundfos Remote Management system, we are looking into alternate alarming system for the new conversions. *Work will resume on this now that the Open House is complete. Quotes have been requested for control panel installation.*

January 13th



Northern Moraine WRD 52-6030

52-6030	EOPC	\$ 2,098,130
North Clarifier Rehabilation	Budget	\$ 1,400,000
Expense Summary	Anticipated	\$ 1,319,143
	Savings	\$ 778,988
	Extras	\$ -

HARD COSTS

# Name	Description	EOPC *	Estimated	Pd to Date	Amt Due	Balance
1 SRN Testing	Monitoring Wells	\$0.00	\$11,097.50	\$0.00	\$11,097.50	\$0.00
2 SRN Testing	Soil Boring & Geotechnical	\$20,000.00	\$1,200.00	\$0.00	\$0.00	\$1,200.00
3 Bartnick, Inc.	Excavation	\$26,100.00	\$2,400.00	\$0.00	\$2,400.00	\$0.00
4 TBD	Fill or Flowable Base	\$130,500.00	\$130,500.00	0	\$2,400.00	\$128,100.00
5 Don's Welding	Mechanical	\$0.00	\$515.00	\$515.00	\$0.00	\$0.00
6 Various	Equipment	\$200,000.00	\$200,000.00	\$1,872.86	\$940.56	\$197,186.58
7 See Concrete Price	Demolition - Labor	\$60,000.00	\$0.00	\$0.00	\$0.00	\$0.00
8 See Concrete Price	Demolition - Material Hauling :	\$69,000.00	\$0.00	\$0.00	\$0.00	\$0.00
9 TBD	Remove / Reinstall Cover	\$24,000.00	\$70,000.00	\$0.00	\$0.00	\$70,000.00
10 TBD	Dewatering	\$100,000.00	\$70,000.00	\$0.00	\$0.00	\$70,000.00
11 TBD	Concrete	\$690,000.00	\$450,000.00	\$0.00	\$0.00	\$450,000.00
12 TBD	Piping	\$50,550.00	\$50,550.00	\$0.00	\$0.00	\$50,550.00
13 TBD	Installation - Clarifier Mech.	\$100,000.00	\$100,000.00	\$0.00	\$0.00	\$100,000.00
14 TBD	Electrical	\$35,000.00	\$35,000.00	\$0.00	\$0.00	\$35,000.00
15 Visu-Sewer	Televising	\$3,880.00	\$3,880.00	\$0.00	\$3,880.00	\$0.00
16						\$0.00
17						\$0.00
18						\$0.00
19						\$0.00
20						\$0.00
21						\$0.00
22						\$0.00
25						\$0.00
		\$1,509,030	\$1,125,143	\$2,388	\$20,718	\$1,102,037

SOFT COSTS

# Name	Description	EOPC *	Estimated	Pd to Date	Amt Due	Balance Due
1 TBD	Dumpsters	\$1,000.00	\$0.00	\$0.00	\$0.00	\$0.00
2 TBD	Mobilization/Demobilation	\$10,000.00	\$0.00	\$0.00	\$0.00	\$0.00
3 Trotter and Associates	Supervision & Surveying	\$52,000.00	\$20,000.00	\$434.62	\$0.00	\$19,565.38
4 Trotter and Associates	Record Drawing	\$10,000.00	\$10,000.00	\$0.00	\$0.00	\$10,000.00
5 N/A	Bonds & Insurance		\$0.00	\$0.00	\$0.00	\$0.00
6 N/A	Overhead & Profit	\$151,000.00	\$0.00	\$0.00	\$0.00	\$0.00
7 TBD	Contingency @ 20%	\$349,100.00	\$100,000.00	\$0.00	\$0.00	\$100,000.00
8 Trotter and Associates	Engineering - Civil	\$0.00	\$40,000.00	\$13,406.50	\$0.00	\$26,593.50
9 Weston Solutions, Inc	Engineering - Hydrogeological	\$0.00	\$24,000.00	\$2,806.31	\$0.00	\$21,193.69
TOTAL SOFT COSTS		\$589,100	\$194,000	\$16,647	\$0	\$177,353
GRAND TOTAL		\$2,098,130	\$1,319,143	\$19,035	\$20,718	\$1,279,389

* EOPC (Engineers Opinion of Probable Cost)

Northern Moraine WRD - Septage Receiving Tracking

Month	Loads	Gallons	Revenue	YTD
May-19	9	21000	\$1,260.00	\$1,260.00
Jun-19	10	22000	\$1,320.00	\$2,580.00
Jul-19	5	11850	\$711.00	\$3,291.00
Aug-19	9	22250	\$1,335.00	\$4,626.00
Sep-19	5	12950	\$777.00	\$5,403.00
Oct-19	16	38400	\$2,304.00	\$7,707.00
Nov-19	14	40100	\$2,550.00	\$10,257.00
Dec-19	10	29450	\$1,795.20	\$12,052.20
Jan-20				
Feb-20				
Mar-20				
Apr-20				
May-20				



	Date	Company Name	Gallons	Cost/Gal	Revenue	Time	Туре
	5/1/2019	Comm. Sewer & Septic	1500	\$0.06	\$90.00	11:15AM	Septic/Multiflo
	5/3/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	10:00AM	Septic/Multiflo
	5/6/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	9:15AM	Septic/Holding Tank
~	5/9/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	12:35PM	Septic
May	5/10/2019	Comm. Sewer & Septic	1500	\$0.06	\$90.00	9:35AM	Septic/Lift Station
	5/10/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	3:10PM	Septic/Jet-Rodding
	5/22/2019 5/24/2019	Comm. Sewer & Septic	3000 3000	\$0.06 \$0.06	\$180.00 \$180.00	9:40AM 11:15AM	Septic
	5/30/2019	Comm. Sewer & Septic Comm. Sewer & Septic	2000	\$0.06	\$120.00	10:00AM	Holding Tank Septic
	6/3/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	9:45AM	Septic/Jet-Rodding
	6/5/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	9:20AM	Septic
	6/5/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	11:15AM	Septic
	6/10/2019	Comm. Sewer & Septic	1500	\$0.06	\$90.00	9:55AM	Septic
June	6/12/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	8:15AM	Septic
P	6/14/2019	Comm. Sewer & Septic	2500	\$0.06	\$150.00	7:55AM	Septic/Jet-Rodding/Aeration Tank
	6/17/2019	Comm. Sewer & Septic	1000	\$0.06	\$60.00	1:40PM	Septic
	6/24/2019	Comm. Sewer & Septic	2750	\$0.06	\$165.00	10:55AM	
	6/25/2019 6/27/2019	Comm. Sewer & Septic Comm. Sewer & Septic	1000 2250	\$0.06 \$0.06	\$60.00 \$135.00	-	
	7/8/2019	Comm. Sewer & Septic	2850	\$0.06	\$171.00	-	-
	7/9/2019	Comm. Sewer & Septic	2250	\$0.06	\$135.00		
λInΓ	7/11/2019	Comm. Sewer & Septic	1200	\$0.06	\$72.00	-	-
	7/17/2019	Comm. Sewer & Septic	2550	\$0.06	\$153.00	-	-
	7/18/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	=	-
	8/12/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	-	Septic
	8/14/2019	Comm. Sewer & Septic	3500	\$0.06	\$210.00	10:05AM	Septic
	8/14/2019	Comm. Sewer & Septic	2100	\$0.06	\$126.00	2:05PM	Septic
ust	8/16/2019	Comm. Sewer & Septic	2750	\$0.06	\$165.00	1:00PM	Septic
August	8/19/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	9:40AM	Septic
	8/21/2019 8/23/2019	Comm. Sewer & Septic Comm. Sewer & Septic	3000 2000	\$0.06 \$0.06	\$180.00 \$120.00	2:10PM	Septic Septic
	8/23/2019	Comm. Sewer & Septic	1950	\$0.06	\$120.00	8:30AM	Septic
	8/29/2019	Comm. Sewer & Septic	1950	\$0.06	\$117.00	8:10AM	Septic
	9/3/2019	Comm. Sewer & Septic	2200	\$0.06	\$132.00	10:00AM	Septic
per	9/4/2019	Comm. Sewer & Septic	3500	\$0.06	\$210.00	2:45PM	Septic
September	9/5/2019	Comm. Sewer & Septic	1500	\$0.06	\$90.00	11:05AM	Septic
Sep	9/6/2019	Comm. Sewer & Septic	2500	\$0.06	\$150.00	1:55PM	Septic
	9/22/2019	Comm. Sewer & Septic	3250	\$0.06	\$195.00	9:00AM	Septic
	10/7/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	10:05AM	Septic
	10/7/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	2:55PM	Septic
	10/9/2019 10/11/2019	Comm. Sewer & Septic Comm. Sewer & Septic	3100 3100	\$0.06 \$0.06	\$186.00 \$186.00	2:45PM 2:30PM	Septic Septic
	10/17/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	9:05AM	Septic
<u>.</u>	10/17/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	3:10PM	Septic
October	10/25/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	2:00PM	Septic
õ	10/25/2019	Weidner' Septic Service	3100	\$0.06	\$186.00	4:30PM	Septic
	10/28/2019	Weidner' Septic Service	3500	\$0.06	\$210.00	AM	Septic
	10/29/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	1:35PM	Septic
	10/29/2019	Weidner' Septic Service	3300	\$0.06	\$198.00	9:30AM	Septic
	10/31/2019	Weidner' Septic Service	3400 2900	\$0.06	\$204.00	9:45AM	Septic
	10/31/2019 11/6/2019	Weidner' Septic Service Weidner' Septic Service	2900	\$0.06 Flat Rate	\$174.00 \$183.60	12:05PM 12:45PM	Septic Septic
	11/6/2019	Weidner' Septic Service	3000	Flat Rate	\$183.60	9:10AM	Septic
	11/7/2019	Comm. Sewer & Septic	3000	Flat Rate	\$173.40	12:20PM	Septic
	11/7/2019	Weidner' Septic Service	2500	Flat Rate	\$183.60	2:25PM	Septic
	11/8/2019	Weidner' Septic Service	3200	Flat Rate	\$183.60	-	Septic
er	11/8/2019	Weidner' Septic Service	3000	Flat Rate	\$183.60	12:50PM	Septic
lovembe	11/15/2019	Weidner' Septic Service	2500	Flat Rate	\$183.60	9:00AM	Septic
Nove	11/19/2019	Comm. Sewer & Septic	3000	Flat Rate	\$173.40	11:40AM	Septic
2	11/21/2019 11/22/2019	Weidner' Septic Service Weidner' Septic Service	2500 3000	Flat Rate	\$183.60	3:05PM	Septic
	11/22/2019	Weidner' Septic Service Weidner' Septic Service	2750	Flat Rate Flat Rate	\$183.60 \$183.60	12:05PM 1:25PM	Septic Septic
	11/22/2019	Weidner' Septic Service	2800	Flat Rate	\$183.60	10:00AM	Septic
	11/25/2019	Weidner' Septic Service	3000	Flat Rate	\$183.60	2:05PM	Septic
	11/27/2019	Weidner' Septic Service	3000	Flat Rate	\$183.60	11:15AM	Septic
	12/2/2019	Comm. Sewer & Septic	2500	Flat Rate	\$173.40	12:40PM	Septic
	12/3/2019	Weidner' Septic Service	3300	Flat Rate	\$183.60	3:10PM	Septic
	12/5/2019	Weidner' Septic Service	2750	Flat Rate	\$183.60	9:00AM	Septic
0e r	12/12/2019	Comm. Sewer & Septic	3550	Flat Rate	\$173.40	9:15AM	Septic
December	12/12/2019	Comm. Sewer & Septic	2600	Flat Rate	\$173.40	1:45PM	Septic
Dec	12/13/2019	Weidner' Septic Service	3200	Flat Rate	\$183.60	1:10PM	Septic
	12/13/2019 12/17/2019	Weidner' Septic Service Weidner' Septic Service	3200 2250	Flat Rate Flat Rate	\$183.60 \$183.60	1:25PM 10:30AM	Septic Septic
	12/18/2019	Comm. Sewer & Septic	2700	Flat Rate	\$173.40	12:15PM	Septic
	12/18/2019	Weidner' Septic Service	3400	Flat Rate	\$183.60	1:45PM	Septic
-							677 C

NMWRD Sewer Connection Permit Tracking FY 2019-20



Amount Paid
\$-
\$ 7,674.00
\$ 7,674.00
\$ 100.00
\$ 7,674.00
\$-
\$ 11,757.67
\$ 32,565.00
\$ 7,674.00
\$ 7,674.00
\$-
\$-
\$ 7,674.00
-
\$ 100.00
\$ 100.00

2019 Total: \$ 90,666.67



NMWRD December 2019 Operations Report

As of January 9th, 2020 Prepared by: Luke Markko, Superintendent

North Secondary Clarifier

Four monitoring wells were installed at the end of December so that groundwater levels in the vicinity of the North Clarifier can be monitored and logged. These wells go down approximately 35 feet. Boring samples were taken to analyze the strata and consistency of the soil. Presently District staff are taking a daily measurement with a water level indicator and maintaining a running record of the water levels. Future automation of this logging is planned with either level loggers or level transducers. This will provide a more real-time reading.



Monitoring well installation and boring collection.



Staff Engineer Joe Lapastora measuring groundwater.

Exploratory excavations were made to inspect the pressure relief valves and the surrounding bedding on the outside of the tank walls. Stand-pipes were installed inside the excavations prior to them being backfilled to allow for a moderate amount of dewatering until the full scale dewatering wells are installed.



Digging down to inspect the pressure relief valves.



Stand-pipes installed after excavations.

There were plans to televise the feed line that carries water from the Oxidation Ditch to the North Clarifier, however the contractor experienced equipment difficulties and was unable to do so. This work is being reevaluated and rescheduled.



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• We are close to arranging a contract to have the dewatering wells installed. By the time this report goes out, a contract may very well have been awarded. As the name implies, these wells will allow for pumps to be installed at the bottom that will pump the groundwater out. This will all be to bring the groundwater level below the bottom of the clarifier. Once the groundwater can consistently be controlled, further inspection and repairs can move forward.

Sludge Conveyance – The experimental belt conveyor was picked up after being retrofitted with an electric motor to driver. There was initial success in using it to convey the dewatered sludge from the existing conveyor arrangement. However, on one occasion while it was in use the belt became stuck, and the drive pulley melted the belt. We are currently awaiting a new belt to install and resume utilizing the conveyor. The initial success indicates that we are on the right path towards an economical method of conveying the sludge over a considerable distance. To put it into perspective, the existing shaftless screw conveyors have been quoted to us at around \$2,000.00 per linear foot. Belt conveyors like the one currently under trial run for around \$500.00 per linear foot. We are excited to continue pursuing this option.



Early success with experimental belt conveyor.

Waste Activated Sludge Pipe Insulation - Last month preparations were underway to have the waste activated sludge lines that feed the North and South Digesters retrofitted with heat trace cable and insulated. The heat trace and insulation have been installed, and exterior protections have been installed to ward off the elements.



Preexisting insulation and heat trace.



New heat trace and insulating wrap.

113 Timber Trail, PO Box 240, Island Lake, IL 60042



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Control Building Floodproofing – The stainless-steel mounting plates for the control building stoplogs have arrived. These will provide a smooth surface for the stoplog gaskets to press against, thus providing a tight seal against any floodwater seepage. Plans are to install wall anchors for mounting the plates in the event they are needed. Under normal circumstances something like a mounting bracket for a hanging basket can be installed to create a better aesthetic.



Metal mounting and sealing plates.



Fiberglass flood stoplog.

Lift Station Generator Maintenance - There are a number of District lift stations that are equipped with standby generators to provide backup power in the event of a power outage. These generators are serviced annually by a contracted service. All with the exception of a few of the lift station standby generators have had fluid checks and changes along with load bank testing performed on them for the 2019 year. Fluid checks and changes are similar to those that would be conducted on a vehicle engine. The load bank test is where the generator is placed under an artificial electrical load where it is pushed to the point of providing the maximum power output it is capable of. This testing does two things for us. It ensures that the generator can indeed supply the necessary power that it is required to do so, and it causes to the engine to run hotter than it normally does when supplying emergency power or when exercised on a weekly basis. The engine running hotter helps remove carbon build-up from incomplete combustion and acts as a cleansing operation.







Treatment Plant Generator Maintenance - Like the lift stations, the treatment plant has a backup generator to keep the plant running during power losses. Maintenance was performed on this generator as well, however a faulty controller on December 26th resulted in the need to mobilize a portable generator until the controller was replaced. Fortunately, a replacement controller was made available and the faulty one was quickly replaced under warranty.



Portable backup generator being set up.

Disinfection System Improvements – As noted in previous months, improvements have been underway with the disinfection system. The disinfection chemicals are very corrosive, and have taken their toll on the equipment housed in the same room. There are several items being removed and replaced. Leaky piping, corroded electrical conduits and outlets, along with an electric heater. Several improvements are underway as well. Spill containment sealing and reconfiguration, chemical feed pump valving and mounting, along with fill and vent piping for the chemical storage tanks.



Lots of room for improvement here.





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Painting – Last spring and summer there were a couple of projects that required new pipe to be installed. A new raw pump and influent flowmeter in the Control Building, along with a sludge pump in the Dewatering Building. Painting services have been contracted to ensure that all of the new piping is protected against corrosion.



Shortly after new pump and meter were installed.



New Sludge Pump prior to install last summer.



As pumps & pipe are replaced there will be additional painting.



A fresh coat of paint.





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NMWRD Engineering Report

Date: January 10th, 2020 Prepared by: Joe Lapastora, Staff Engineer

Woodman's Lift Station and Sanitary Sewer Additions:

[Project Update] – Mainline construction and testing was completed in July while the remaining items associated with the lift station were completed in late August. Since August, there have been various areas of concern that the District requested be addressed before we assume responsibility of the lift station. Mary Schorr informed the District on December 2nd that Grundfos reps were on site to address a few issues related to the pumps in the Woodman's Lift Station. After some investigation, Grundfos discovered damage on the connector for Pump 2 as well as cable damage for Pump 1. An additional problem was encountered in late December as one of the pumps continued to trip when starting the pump in hand. A Grundfos rep was out on-site on Tuesday January 7th and both pumps are now in working order. The District should see an invite for an inspection in mid-January. The District is doing its due diligence to ensure that the lift station and all associated components are in working condition before acceptance. Note that the access road to the lift station has not been paved but aggregate has been laid to allow for winter access.

Right turn lane at the intersection of Route 176 and Roberts:

[*Project Update*] – This project is nearing completion as the road has officially been paved. I expect that the project will not be completed until after the winter as electrical work still needs to be wrapped up.

NMWRD Plant Projects:

[Project Update] – Plant project updates include; control building coping is installed, sludge conveyor has been reconfigured so that the sludge is now leaving the dewatering building towards the permanent resting place in the Southwest drying bed, two (2) actuator were installed on the Oxidation Ditch and RAS station, prep work on the Southwestern most drying beds has been completed while some block foundation blocks have been positioned for the sludge drying bed cover, and various painting projects have been completed. The endwall design for the Greenfield sludge drying bed cover has been sent to Craig White with Greenfield. Additionally, the District was informed that Fisher Bros has no remaining stock of the foundation blocks so I reached out to Ranger Ready Mix and we should see a quote come our way soon. There were several other plant projects, both new and continued projects, during the month of December including; installation of four (4) monitoring wells and soil boring logs were recorded, floodproofing metal hardware was delivered, and digester WAS pipes were insulated.









NMWRD SCADA & Telemetry:

[*Project Update*] – Completed aspects of the SCADA & Telemetry project include; underground conduit with tracer wire installed at the plant, most of the hardware has been ordered for SCADA system (recommended by ASD), one (1) actuator installed on a RAS line, one (1) actuator installed on the Oxidation Ditch, fiber cable ordered, and new concrete pads poured. Allan-ICS was awarded the bid regarding the SCADA Control Panels. The three (3) panels include; Control Building C.P., Oxidation Ditch C.P. and Chemical Building C.P. and all were delivered by October. The District issued a P.O. to Imperial CCTV to pull and terminate fiber and although we expected that work to be performed in December, we are now pushing the work back until we get the control panels placed and power brought to them. We expect to have the panels installed by mid-January so that Imperial can begin their work.

Septage Receiving:

[Project Update] – The District has been exploring the option of septage receiving at the treatment plant and intends to move forward with a permanent septage receiving station. Preliminary designs have been examined and District staff are close to finalizing plans. A new manhole was placed near the Southeast corner of the drying beds in anticipation for septage receiving. The new manhole is now connected to the headworks wet well but is currently not in use. In preparation for the next phase of septage receiving, the District is searching for revised quotes for new gate hardware that will allow haulers to enter only if they receive a District issued RFID card that will both track proximity of haulers entering the treatment plant and allows for complete control on who does and does not have access to the plant. This program will provide the District with another revenue stream with a short-term payback period.

Deer Grove Sanitary Sewer Extension:

[*Project Update*] – The District has officially entered the maintenance period of the project for the next three (3) years.

Savannah's of Lakemoor Residential Subdivision:

[*Project Update*] – The District has officially entered the maintenance period of the project for the next three (3) years.



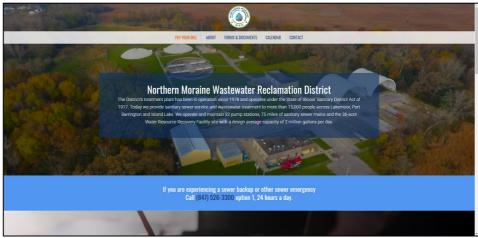






In addition to the work relating to these projects, the following engineering related work is also being performed;

- We officially launched our new NMWRD website on Tuesday, January 7th. We are still working through a few edits and District staff members will go through training on Monday, January 13th so that we will be able to make all website edits in-house moving forward.



Screenshot from the new NMWRD website.

On December 17th, Nelson Insulation was on-site to install new insulation around two (2) exposed pipes that have previously been an area of concern when it comes to freezing. These are waste activated sludge pipes that feed the digesters above ground level. Before each pipe was insulated and wrapped with an aluminum jacket, self-regulating heat trace was added to the pipes. The District is happy with both the looks and durability of the covers.



Digester WAS pipe covers.



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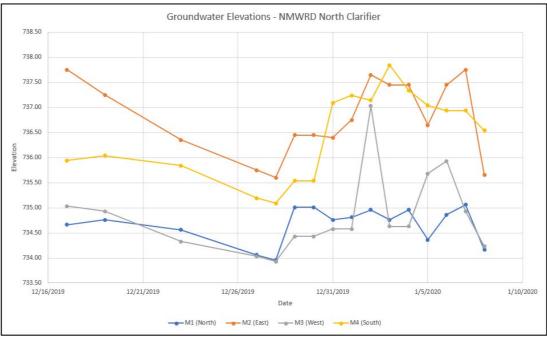
SRN Testing arrived on-site on December 12th to begin drilling four (4) monitoring wells. The SRN team ended up taking three (3) full workdays to drill the bore holes and enter the casings. Since the SRN encountered a "blowout" while drilling the first bore hole, Scott Nelson of SRN informed District Staff Engineer, Joe Lapastora that their team would need the full 3 days to complete their work. Joe ensured that there would be no additional mobilization fees and SRN wrapped up the remaining wells on December 13th and December 16th. The SRN team returned on December 17th to install the well permanent well casings and also provide an initial groundwater level reading at each of the four (4) locations.



SRN Testing team setting up drill rig.



Drilling of Monitoring Well M4 (South).



Monitoring well groundwater levels.





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Bartnick Construction mobilized on December 20th to perform a pressure relief valve (PRV) investigation relating to the North Clarifier. Bartnick was able to find the two (2) PRVs that the District was hoping to uncover. Bartnick also installed 12" standpipes for dual use as monitoring water levels and to be used for dewatering.



Picture of one of the 12" standpipes.



Excavation performed by Bartnick.

 Don's Welding was on-site on January 3rd to cut through the feedline that runs from the Oxidation Ditch to the North Secondary Clarifier. This work was performed to prepare for the televising of the 24"DIP feedline later this week.



Feedpipe "cover" after cut was made.



Picture looking down into 24" DIP feedline.



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- District Operator, Tim Hendrickson and District Engineering Intern, Miranda Durbin were instrumental in helping obtain surveying data relating to the North Clarifier during the month of December. On various occasions, District Staff Engineer, Joe Lapastora would need help to use the surveying equipment to gather data such as; Clarifier elevation data, groundwater level data and more and I am happy to see that we have employees who not only stepped up to help out, but also showed genuine interest in learning another skill.
- The District is finalizing a clothing order for all employees through Full Source Clothing as we transition from the old logo to the new one.









DELINQUENT ACCOUNTS RECAP FOR December 2019 Revised: 1/08/20 by Debi Martin, District Clerk

\$200-\$300	66 Active Accounts Island Lake – 37 customers 33 Water Shut Off Notices, 1 Sewer Disconnection Notice, 3 Final Notices of Delinquency Lakemoor – 24 customers 10 Water Shut Off Notices, 13 Final Notices of Delinquency, 1 Sewer Disconnection Notice Port Barrington – 5 customers 3 Final Notices of Delinquency, 2 Sewer Disconnection Notices
\$301-500	7 Active Accounts Lakemoor – 4 customers 2 Sewer Disconnection Notices, 2 making payments Port Barrington – 3 customers 1 Sewer Disconnection Notice, 2 making payments
\$501-\$1000	13 Active Accounts Island Lake – 5 customers 5 liens – 4 with water off, 1 to be disconnected from sewer Lakemoor – 5 customers 5 liens – 5 to be disconnected Port Barrington – 3 customers 3 liens – 2 to be disconnected, with 1 now bank owned
\$1001 and up	10 Active Accounts Island Lake – 4 customers 4 liens – 3 with water off, 1 to be disconnected from sewer Lakemoor – 6 customers 6 liens – 3 sold for delinquent taxes; with 1 to be demolished, 3 to be disconnected

Delinquent Accounts total (active and inactive customers): <u>\$51,972.36</u> (\$9,701.89 inactive accts) December 2018's report: \$48,549.68 December 2017's report: \$53,735.27

MONTHLY ACTIVITY:

- **4828** Monthly Bills mailed on 1/01/20 (for December service)
- 360 Bills not mailed customers prepaid on their accounts
- 43 Water Shut Off Notices mailed on 1/02/20
- 19 Final Notices of Delinquency mailed on 1/02/20
- 7 Sewer Disconnection Notices mailed on 1/02/20
- 94 Notices of Delinquency mailed on 1/02/20
- 21 Real Estate closings for December 2019
- 1 Lien filed in December
- 2 Liens released in December



"We found the accounting error. Somebody printed all the zeroes upside down."



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AGENDA REGULAR MEETING

7:30 P.M. - January 14, 2020

1. CALL TO ORDER & ROLL CALL

2. PLEDGE OF ALLEGIANCE

3. PRESENTATION & APPROVAL OF MINUTES

- a. Regular Meeting Minutes December 10, 2019
- b. Executive Meeting Minutes December 10, 2019

4. TREASURER'S REPORT

a. Quarterly Investment Report

5. PUBLIC COMMENTS

6. MANAGER'S REPORT

- a. Operations Report
- b. Engineering Report
- c. Delinquent Accounts Report

7. TRUSTEE REPORTS

8. LEGAL BUSINESS

9. OLD BUSINESS

a. Approve Resolution 20-01 to Adopt Electronic Attendance Policy

10. NEW BUSINESS

- a. Approve Ordinance 20-01 to Abate GO Bond Taxes for 2019
- b. Approve Reimbursement to Village of Lakemoor for the Woodman's Sewer
- c. Approve Resolution 20-02 Authorizing Participation in the NIMEC Electric Collaborative
- d. User Rate Study Presentation

11. MISCELLANEOUS CORRESPONDENCE

a. MCCG Legislative Dinner – Wednesday, January 22, 2020 – Hickory Hall, Crystal Lake, Illinois

12. APPROVAL OF BILLS

13. OTHER BUSINESS

a. Executive Session – Personnel; Litigation, if needed

Posted to <u>www.nmwrd.org</u> - January 10, 2020





