



NORTHERN MORAIN WASTEWATER RECLAMATION DISTRICT

113 Timber Trail, Island Lake, Illinois 60042

REGULAR MEETING MINUTES

June 9, 2020

Zoom Meeting w/ Video: <https://us02web.zoom.us/j/81461475052>

Zoom Meeting w/ Audio Only: +13126266799,,81461475052#

Present: Trustees: Ken Michaels (by video), John Ragland (by video), Timothy Brunn (by video),
Lydia Ryberg (by video), Dena Battaglia (by video)
District Manager: Mohammed Haque (by video); District Clerk: Deborah Martin (by video)
Others: Superintendent Luke Markko (by video); EIT-Staff Engineer, Joe Lapastora (by video)

President Michaels called the meeting to order at 7:33 p.m.

1. CALL TO ORDER:

Roll Call: Timothy Brunn – Present
John Ragland - Present
Dena Battaglia - Present
Lydia Ryberg – Present
Ken Michaels – Present

2. PLEDGE OF ALLEGIANCE:

Those present pledged allegiance to the flag.

3. PRESENTATION & APPROVAL OF MINUTES:

a. Regular Meeting, May 12, 2020

Motion by Trustee Battaglia to approve the Regular Meeting minutes of May 12, 2020 as presented.

2nd by Trustee Ragland

5 ayes 0 nays 0 absent

MOTION CARRIED

4. TREASURER'S REPORT:

a. Approval of the Monthly Treasurer's Report for month ending April 30, 2020

Trustee Ryberg presented the Monthly Treasurer's Report for month ending April 30, 2020 for Board approval.

Motion by Trustee Brunn to approve the Treasurer's Report for month ending April 30, 2020 as presented.

2nd by Mr. Ragland

5 ayes 0 nays 0 absent

MOTION CARRIED

5. PUBLIC COMMENTS: none

6. MANAGER'S REPORT:

Manager Haque updated the Board on the funding applications that have been submitted through the state's Capital Improvement Fund grants and through IEPA's State Revolving Loan Fund. Manager Haque reported that the office is still closed to the Public due to COVID-19 state guidelines and that half of the staff are working in the office, and half are working remotely. Manager Haque also informed the Board that notices of disconnections were mailed out this month to all communities; he assured the Board that Administrative staff will work with those customers experiencing financial hardships due to COVID-19. Manager Haque also updated the Board that the North Clarifier repairs are progressing, and that Woodman's final improvements have been approved by the District. Mr. Haque stated that McHenry County has reviewed the permit for the



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Sludge Beds Cover project, and that Staff is addressing some of the adjustments needed by the county. He informed the Board that the District will advertise again for a fourth operator soon, and once the office is open to the public, he will advertise again for a part time office clerk. Manager Haque stated that Floodproofing project for the Control Building is nearly complete, and that the SCADA project and automation is progressing as well. Manager Haque reported that the streamlining of our District ordinances will be undertaken soon, and that he is in contact with a potential buyer for a property in Lakemoor that is under review because it may require a conditional use permit, due to the type of business that is proposed for the property. Manager Haque also informed the Board that a new report was included in their monthly packets, outlining permits issued for Darrell Road under the ordinance establishing a special connection fee for Darrell Road developments. He reminded the Board that this includes the new Savannah's of Lakemoor subdivision. He told the Board that the Septage Receiving report is now reporting for Fiscal Year 2020-2021, and that we now receiving double what was received when the project started. Manager Haque reported that there have been no issues shown from a treatment perspective in accepting and treating these septage hauls and that staff will continue to monitor this process.

Superintendent Markko reported to the Board that most of the concrete has been removed from the floor of the North Clarifier and that some lengths of rebar were saved to be reused with the new concrete slab. Mr. Markko told the Board that a new Clarifier mechanism has been ordered from Walker Process Systems that will have stainless steel components for items that will be below the water level in the tanks. He stated that this will significantly reduce rehab costs in the future. Superintendent Markko informed the Board that District staff are working with both TAI and Automation Systems and Design (ASD) to develop a radio/cellular network to transmit data from the lift stations to the treatment plant. Mr. Markko reported that the purchase of another SCADA panel has been put out to bid for the North Clarifier. He also stated that Staff has resumed the collection system sampling in Lakemoor again as the ammonia content has been rising around the Lakemoor Village Hall as previously mentioned in other Board meetings. Superintendent Markko reported that plans are underway to replace aging and failing valves at the Rawson Bridge Rd. Lift Station. The isolation valves and check valves are original equipment dated back to the late 90's. The check valves have begun to leak flow back from the force main into the wet well. Superintendent Markko reported that on the evening of May 28th staff were alerted to water coming out of the ground near the South Shore Lift Station in Island Lake. This was confirmed to be a leak in the force main. District staff worked with Bartnick Construction to perform an emergency repair of the force main, a 6-inch ductile iron pipe that showed a 3-inch wide hole on the bottom of the pipe. A repair clamp was installed to seal the leak. The leak resulted in untreated wastewater flowing overland into a ditch and soaking into the ground, and a report detailing the events was submitted to IEPA per regulation. He commended our operators for their fast response to this issue. Mr. Markko also reported that after some modifications and upgrades, he was excited to see that the belt conveyor and Channel Grinder are back in action. Mr. Markko brought up concerns about the Lily Lake Road Improvement Project. District Manager Haque and Mr. Lapastora reported their own concerns about our three force mains located in this area. The force mains convey all the wastewater from the Village of Lakemoor to the wastewater treatment plant. District assets were neglected on the original engineering plans, but the District was informed multiple times that the engineering firm, HR Green, would re-design portions of the improvements so that the District would not have to move any portion of the Lily Lake forcemain(s). The District's talks with Nunda Township and the project engineers have been frustrating and unproductive. In the last week, the District has been notified that 3 sections of the force main remain problematic. After Board discussion about the issues the District and the Township, and the District and the engineering firm are experiencing, the Board has suggested that the District continue to consult with our District Attorney to get this matter resolved quickly, but to also ensure that the sewer main work is done properly. With schools in session this August, no one wants Lily Lake Road closed, but the Board feels the sewer work must be done correctly and to District specifications. We are in the process of discussing the matter with legal counsel to determine a path forward.



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Staff Engineer Joe Lapastora gave updates to the Board concerning some of the projects that he has been working on over the past month. He reported that the access road to the lift station at Woodman's in Lakemoor has been paved. Mr. Lapastora told the Board that the District has reached out to Fisher Brothers to order first quality foundation blocks for the sludge drying bed cover foundation and that door hardware was purchased. Mr. Lapastora informed the Board that quotes for asset management software have been obtained, and that the District is close to finalizing its selection. He reported that he and intern Miranda have been working on a detailed Sewer Televising & Cleaning Plan, which will dictate the specifics of which gravity mains are to be televised and cleaned in any given year; that bid package will be available shortly. Mr. Lapastora related that the District continues to aid Fehr-Graham in all their request to produce a meaningful Phosphorus Discharge Optimization Plan and that the District requested a one (1) year extension on the PDOP report on March 26th; the IEPA has confirmed receipt of the request. Mr. Lapastora related that he is back to working more days at the office and that he has taken over the Board Room as the Administrative office practices social distancing. He told the Board that he has been organizing plan sets and plats, and drawings that have been accumulating over the years and hopes to have them digitalized soon. Mr. Lapastora ended his report by encouraging the Board to look over the drone pictures of the progress recorded of the North Clarifier repairs that he provided in their packets.

7. TRUSTEE REPORTS

President Michaels shared with the Board that he received a call from the Village of Island Lake concerned about the number of "red tags" we have asked them to hang on Island Lake properties. This number had jumped to 85, because the District had not sent any out or enforced any water shut off's for March, April and May. Ken informed the Board that he had told the Village that the District would gladly work with any resident experiencing financial hardships, but that the process should move forward. Upon discussion, the Board agreed.

8. LEGAL BUSINESS - none

9. OLD BUSINESS

10. NEW BUSINESS

a. Adoption of Ordinance #20-07, Appropriations Ordinance for Fiscal Year 2020-2021

No action taken this month to allow for a Public Notice to be published in the Northwest Herald concerning a public hearing on the proposed ordinance. Action will be taken at the July regular board meeting.

b. Prevailing Wage Ordinance Requirements

Effective June 1, 2019, Public Act 100-1177 eliminated the state requirement to adopt a prevailing wage ordinance. The District no longer needs to adopt a prevailing wage ordinance each year.

(At this point District Clerk Debi Martin lost electrical power and was not able to hear the votes for 10C. President Michaels documented the roll call votes for Debi Martin.)

c. Adoption of Engineering Services Amendment for Lift Stations 1-7 Upgrades

Motion by Mr. Ragland to adopt a Resolution Authorizing the District Manager to amend the contract with Trotter and Associates for the Design Services for the Lift Station 1-7 Upgrades for an amount not to exceed \$2,170.

2nd Mr. Brunn

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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(District Clerk Debi Martin reconnected to the Zoom meeting.)

d. Adoption of Engineering Services Amendment for Funding Assistance for Grant Applications

Motion by Mr. Brunn to adopt a Resolution Authorizing the District Manager to enter into an amendment to the contract with Trotter and Associates for the Funding Assistance for an amount not to exceed \$10,000.

2nd Mrs. Battaglia

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

11. MISCELLANEOUS CORRESPONDENCE

a. MCCG Membership Meeting: cancelled due to the COVID-19 Pandemic

12. APPROVAL OF BILLS

Motion by Mrs. Ryberg to approve payment of bills on the June 9, 2020 bill list as presented, in the amount of \$134,392.04.

2nd by Mrs. Battaglia

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

13. OTHER BUSINESS - none

ADJOURNMENT

Motion by President Michaels to adjourn at 8:55 p.m.

2nd Mrs. Ryberg

5 ayes 0 nays 0 abstain

MOTION CARRIED



June 9, 2020

To: NMWRD Board of Trustees

From: Mohammed Haque, District Manager

Subject: Manager's Report

All update items are in italics.

2020 Project Funding / Grants

The District has been working with TAI to prepare the project funding applications and related documents. The Darrell Road sewer application with Illinois DCEO is being done in conjunction with the Village of Lakemoor, since sanitary districts are not allowed to apply in the first round (this is something that we are also working on). The District issued a letter of support for the Village's application. *The District has made application for Darrell Road – Phase 1 for a DCEO Fast Track grant application. In addition, we are working on the application for the \$200,000 grant that we hope to receive for the Electrical project at the Control Building. In addition, the State Revolving Loan Fund priority listing has been released and the District has four future projects on it. The current SRF priority listing indicates that there will be principal forgiveness up to \$5 million per agency in future SRF loans. We hope to maximize our portion of this.*

COVID-19 Adjustments

Staff have made numerous adjustments to accommodate social distancing and the stay-at-home order as well as the potential presence of COVID-19 in wastewater. *We are starting to plan for a re-start of the office. Initially we have allowed two people to be in the office at the same time and split shifts with the goal of being fully integrated once we enter Phase 4 of the Illinois guidance. We will continue to keep the lobby closed until Phase 4 and may re-open the drive-through in the next 2 weeks. So far, we have not had anyone request an in-person meeting, although it has been offered.*

Lily Lake Road Improvements – Nunda Township

On February 14th, Mike Lesperance with Nunda Township told us about the Lily Lake Road project to shave down some dangerous hills on the road. On February 18 we met at their engineer's office – HR Green and I informed them of our two force mains that come down Lily Lake Road and told them about the incident where the 12" force main was damaged during the roundabout project. *We are coordinating work with the contractor, Curran. We are also working on getting the air relief valves replaced on the force mains. In the last week, we have been notified that 3 sections of the force main remain problematic. We are in the process of discussing the matter with legal counsel to determine a path forward.*

Wegner Road Stormwater Improvements – Nunda Township

J Condon and Associates are designing a storm sewer for Nunda Township on Wegner Road, east of Lily Lake Road. This area also has both of our Lakemoor force mains as well as a gravity line. We have sent them plans for the sewers so that they can incorporate them in their designs. *We are waiting for the engineering plans for review.*



North Clarifier Issue

The District has moved forward on issuing a purchase order for the clarifier mechanism as well as dome removal and replacement and clarifier mechanism removal and installation. The work on the clarifier should work out well with our plant paving project, so we plan on doing some sight grading in the near future to prep for both projects. *Shop drawings have been approved for Walker Process clarifier mechanism and production has started. Removal of the dome and the demolition of the exiting clarifier mechanism has been completed. District staff is planning on re-coating the dome internally. We have issued purchase orders and started work on the concrete demolition and restoration. Work is progressing nicely and we anticipate we will be pouring the new slab in the next 3-4 weeks.*

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

District board has approved the project improvements, contingent on punchlist item completion. *The final inspection was completed and passed. We are working on the final letter that approves all improvements and points out the balance of items remaining to be completed per our agreement.*

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. Greenfield is working with McHenry County for the permits and comments were received from the County in the last week. The comments require some additional site plan work that we are having Caldwell Engineering complete for us. We are also finalizing quotes for a greenhouse to cover the area between the existing dewatering building and the new cover.*

User Rate Study

Eric Rothstein has provided his final report and the review is pending.

Personnel

We are holding off on PT Office Clerk (over 200 applied) because the office is closed. *We continue with our search for a new operator. We are also currently exploring the hiring of a summer intern.*

Floodproofing of Control Building and Generator Modifications

Floodproofing angles and supports have been delivered. Coping and other architectural metals have been received and are currently being installed by District staff. District staff are finalizing the door orders. *Some items are pending and final as-builts will be completed by TAI.*



SCADA(Supervisory Control and Data Acquisition) and Telemetry

Fiber optics backbone has been installed and most hardware components have been purchased. *Part of the fiber optics is currently being installed. In addition, we are working with ASD to get the SCADA completed in the near future. Software has been ordered for a centralized maintenance management system called Cartegraph that will interact with the new SCADA and the District's GIS system.*

Plant Process Automation – Phase 1

Three control panels have been installed and are awaiting their fiber network installation. *We are currently working on developing a list of instrumentation we will need. The human-machine-interface (HMI) software has been purchased from Trihedral/VTScada and ASD is working on starting to program it. Quotes are being received for a new control panel to update the RAS station at the Clarifiers. This is being done in conjunction with the Clarifier repair.*

Headworks / Screening Issues

Change order approved to convert to MS2 bar screen and waiting final engineering drawings by TAI.

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. *All components have been received, but we are waiting on some electrical design drawings from TAI before we can have the work completed.*

Maintenance Garage

I am working with ADG Design on the architectural drawings and will submit to the board in the future. Permits from McHenry County Stormwater have been received for the paving work related to the maintenance garage and plant. *Revisions to the architectural drawings were sent back to the ADG Design and we are waiting for the next iteration of drawings.*

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. *Since Vic Filippini is not providing the revisions, I will start to do this work.*

Circle K

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, although I was told that there may be some activity pending on this project.*



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. *Plans are nearly complete and ready to bid once the funding source is confirmed.*

520 Wegner Road

We are working with Lakemoor and the new owner of this property for a new auto-mechanic shop at this location. The property will require future water meter based billing.

NMWRD Sewer Connection Permit Tracking
 FY 2020-21



Permit Date	Address	City	Subdivision/ Business	Re-Connect, Repair, Demo or New Connection	Permit Owner	Permit No.	Connection/ Inspection Fee	Darrell Road Special Connection Fee
5/12/2020	32049 Savannah Drive	IL	Savannahs	New Connection	William Ryan Homes	5646	\$ 7,674.00	\$ 3,248.00

	Standard Connections	Darrell Road Connections
FY 2020 - 2021 Total:	\$ 7,674.00	\$ 3,248.00
Approved Budget FY 2020 - 2021	\$ 108,536.00	\$ 25,984.00
Approved +/- vs. Current YTD	\$ (100,862.00)	\$ (22,736.00)

Northern Moraine WRD - Septage Receiving Tracking FY 2020-21



Month	Loads	Gallons	Revenue FY20-21	Revenue FY19-20	YTD FY20-21
May-20	19	53200	\$3,396.60	\$1,260.00	\$3,396.60
Jun-20					
Jul-20					
Aug-20					
Sep-20					
Oct-20					
Nov-20					
Dec-20					
Jan-21					
Feb-21					
Mar-21					
Apr-21					

	Date	Company Name	Gallons	Cost/Gal	Revenue	Time	Type
May	5/1/2020	Comm. Sewer & Septic	2750	Flat Rate	\$173.40	10:35AM	Septic
	5/4/2020	Weidners	3100	Flat Rate	\$183.60	10:30AM	Septic
	5/5/2020	Comm. Sewer & Septic	2750	Flat Rate	\$173.40	1:45PM	Septic
	5/6/2020	Comm. Sewer & Septic	1500	Flat Rate	\$173.40	10:05AM	Septic
	5/6/2020	Weidners	3000	Flat Rate	\$183.60	2:45PM	Septic
	5/7/2020	Weidners	3100	Flat Rate	\$183.60	11:45AM	Septic
	5/7/2020	Weidners	3500	Flat Rate	\$183.60	2:50PM	Septic
	5/12/2020	Comm. Sewer & Septic	2500	Flat Rate	\$173.40	10:10AM	Septic
	5/12/2020	Weidners	3400	Flat Rate	\$183.60	3:25PM	Septic
	5/14/2020	Comm. Sewer & Septic	3200	Flat Rate	\$173.40	10:30AM	Septic
	5/14/2020	Weidners	3200	Flat Rate	\$183.60	3:00PM	Septic
	5/15/2020	Weidners	3000	Flat Rate	\$183.60	10:00AM	Septic
	5/19/2020	Comm. Sewer & Septic	2000	Flat Rate	\$173.40	3:40PM	Septic
	5/20/2020	Comm. Sewer & Septic	2000	Flat Rate	\$173.40	10:30AM	Septic
	5/20/2020	Weidners	3500	Flat Rate	\$183.60	11:45AM	Septic
	5/20/2020	Weidners	3600	Flat Rate	\$183.60	3:00PM	Septic
	5/21/2020	Comm. Sewer & Septic	2000	Flat Rate	\$173.40	11:10AM	Septic
5/21/2020	Weidners	3100	Flat Rate	\$183.60	2:55PM	Septic	
5/28/2020	Comm. Sewer & Septic	2000	Flat Rate	\$173.40	11:30AM	Septic	



NORTHERN MORAIN W R D

NMWRD May 2020 Operations Report

As of June 5th, 2020

Prepared by: Luke Markko, Superintendent

COVID-19 Response

There has been some modest scaling back of several of the precautionary measures District staff have been taking in response to the phased approach the state of Illinois is using to reopen and after the CDC offered some guidance on COVID-19 in untreated wastewater.

- **Work Shifts** – Operations staff work shifts remain unchanged as the current phase of the State’s reopening plan still recommends the staggering of shifts. We look forward to bringing everyone back together under normal operating hours.
- **PPE** – We have scaled back some of the PPE requirements we were employing. We have reduced the need for Operations staff to use N95 to only when they are working under conditions when they can be splashed/sprayed with untreated wastewater. We are allowing staff to remove conventional face masks when outdoors and when in some of the large buildings such as the Dewatering Building. Conventional face mask use is still required whenever social distancing cannot be maintained or when completing tasks outside of the treatment plant.
- **COVID-19 RNA Wastewater Testing Program** – The District has recently joined a group of 400 wastewater treatment plants across the nation to test for the ribonucleic acid (RNA) of the virus causing COVID-19 in their influent waste streams. This will provide indication of the virus’ spread on a community scale. The first sample set was collected and shipped out on May 6th. BIOBOT has experienced some setback and the test results have been delayed. They hope to have data for participants soon.

North Secondary Clarifier

- **New Mechanism** – A new clarifier mechanism has been ordered from Walker Process Systems. The new mechanism will have stainless steel components for items that will be below the water level in the tanks. This will significantly reduce rehab costs in the future.
- **Concrete Rehab** – Concrete rehab has commenced. After the dome and mechanical removal, contractors made a circular cut/score 5 ft. in from the wall inside the entire diameter of the clarifier and began chipping out the grout layer on the clarifier floor. Once the grout had been removed breaking of the concrete slab began. As the concrete was broken up, sections of rebar were cut to facilitate the removal of both. Note that the contractors witnessed that some of the stone bedding was found between the bottom of the concrete slab and the top of the center pier. This could be a result of the stone being forced into the void that was created when the floor lifted. The stone bedding was partially removed to allow access to the large concrete center pier in the center of the clarifier and the ductile iron pipe that feed into and out of it. At this time, a portion of both the center pier and the ductile iron pipe have been removed.



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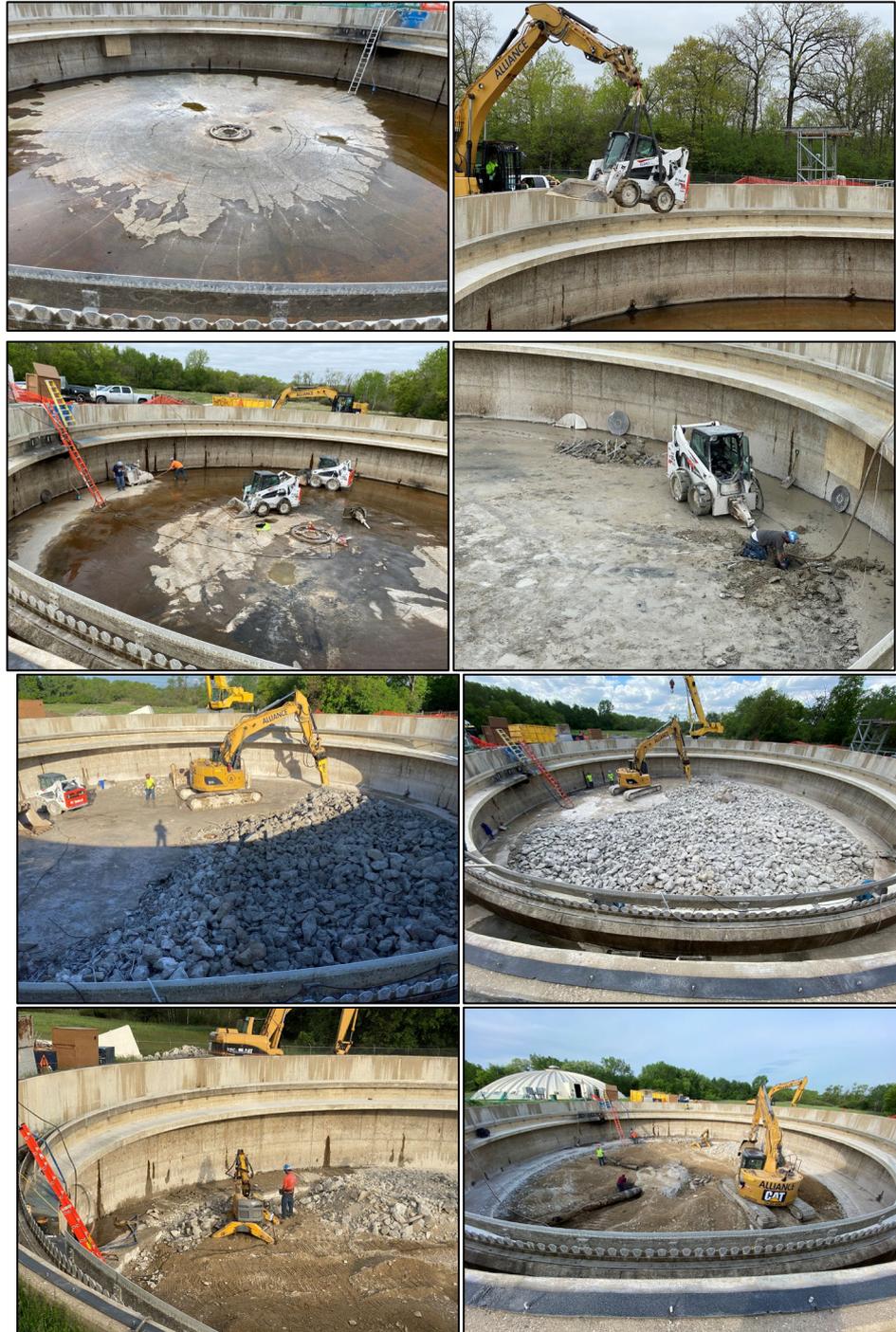
Phone: 847-526-3300
Fax: 847-526-3349



Email: info@nmwr.org
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NORTHERN MORAIN W R D



A progression of the work being completed to rehab the North Clarifier floor.



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NORTHERN MORAINÉ W R D

Lakemoor Lift Station Capital Bill Improvements – An initial plan set was provided by Trotter and Associates Inc. (TAI) for the planned improvements to the Lakemoor lift stations that will be funded by the Capital Bill. District staff have been in touch with TAI and revisions are being made to the initial plan-set at the District’s direction. District staff are working with both TAI and Automation Systems and Design (ASD) to develop a radio/cellular network to transmit data from the lift stations to the treatment plant.

Supervisory Control And Data Acquisition (SCADA) – Fiber optic cable has been successfully run in a loop around the wastewater treatment plant. There are several termination points where the cable will need to be cut and fitted with connectors to link it up with our SCADA panels and server. Additionally ethernet cable will be installed to link up several facility systems as well as the lift station located at the treatment plant. A new server rack has been purchased to better house and protect critical IT equipment at the treatment plant.

Collection System Sampling – There have been intermittent periods when laboratory analysis on Mondays indicates that there are higher levels of ammonia entering and leaving the treatment plant on Sundays. This has recently resumed, and over the past several weeks, staff have been systematically sampling at various points in the collection system to determine where it is coming from. We began by sampling at key lift stations that would indicate what region of the system it could be originating from. Those results indicated that the systems feeding into Lift Station #7 in Lakemoor were resulting in ammonia readings as high as 39 mg/L at that lift station. To put that into context, the average ammonia levels entering the treatment plant for January 2020 were 16 mg/L. So, this indicates a significant source of ammonia. Ever since the “Shelter in Place” directive went out, we have not had enough flow to collect samples at the manholes that have recently been targeted for sampling.

Rawson Bridge Rd. Lift Station – Plans are underway to replace aging and failing valves at the Rawson Bridge Rd. Lift Station. The isolation valves and check valves are original equipment dated back to the late 90’s. The check valves have begun to leak flow back from the force main into the wet well. This reduces the station’s efficiencies resulting in reduced hydraulic capacity and increased energy consumption. New valves have been ordered, and a PO has been issued to Dahme Mechanical to perform the replacement of the valves with District staff supporting the project with use of the Vactor. Additionally, new base elbows have been purchased to replace the existing elbows. This is the point where the pump connects to the force main.





NORTHERN MORAINE W R D

Lily Lake Rd. Improvements – District staff have met with and continue to stay in contact with the contractors involved with the Lily Lake Rd. improvements to safeguard three of the District's force mains. The force mains originating at Lift Station #'s 1&7 along with the Stone Dr. Lift Station, convey all of the wastewater from the Village of Lakemoor to the wastewater treatment plant. Recently three locations of conflict with the new proposed roadway and District force mains have been brought to our attention. This is disappointing because the District had assurances from the engineer on the project that they would be able to come up with a solution that would not interfere with NMWRD infrastructure.



Two areas of conflict with the proposed relocated Lily Lake Rd.

- **Air Relief Valve** – An air relief valve (ARV) broke away from the 12" PVC force main running along Lily Lake Rd. This force main serves Lift Station 7 and is one of two force mains running along Lily Lake Rd. District Staff were made aware of this condition by the contractor performing road work in this area. District staff were able to temporarily stop the leak until Dahme Mechanical could arrive with a stainless-steel pipe and valve to provide a solution that would allow for future improvements. District staff became aware of the poor condition of the ARVs when they began locating District infrastructure along Lily Lake Rd. Staff have made plans to replace all the ARV's on this force main with an ARV comprised of a polymer body and stainless-steel components to ensure longevity.



Existing ARV tipped over due to corrosion of piping.

New style ARV comprised of polymer & SS.





NORTHERN MORAIN W R D

South Shore Lift Station Force Main Break – On the evening of May 28th staff were alerted to water coming out of the ground near the South Shore Lift Station in Island Lake. This was confirmed to be a leak in the force main. District staff worked with Bartnick Construction to perform an emergency repair of the force main, a 6 inch ductile iron pipe. Upon excavation a hole approximately 3 inches in diameter was discovered on the bottom of the pipe. A repair clamp was installed to seal the leak. The District's Operations staff responded to this emergency well, and saw the problem mitigated promptly. The leak resulted in untreated wastewater flowing overland into a ditch and soaking into the ground. This is classified as a Sanitary Sewer Overflow by IEPA. A report detailing the events was submitted to IEPA per regulation.



Leak surfacing above buried force main.



Repair clamp being installed.

Belt Conveyor- After some modifications, the belt conveyor is back in action. Custom drive pulleys were fabricated and installed at either end. The ribbed design allows for dried sludge to escape rather than build up and cause the pulley to slip on the belt, a problem we were experiencing a few months ago.



Ribbed pulleys to prevent slipping.



Conveyor back in action.





NORTHERN MORAIN W R D

NMWRD Engineering Report

Date: June 5th, 2020

Prepared by: Joe Lapastora, E.I.T. – Staff Engineer

Woodman's Lift Station and Sanitary Sewer Additions:

[Project Update] – The District performed its final inspection for the Woodman's Lift Station on February 11th and approved the inspection after all concerns were addressed. The binder course and surface course have been completed along the entire stretch of Ring Road (this is the road that the District Lift Station is located on). The District intends to issue a conditional approval and acceptance letter to the Village of Lakemoor in June.



Figure 1. Woodman's Lift Station base course.



Figure 2. Woodman's Lift Station surface course.

Lily Lake Road Safety Improvements:

[Project Update] – The District discovered that major road work was schedule to be performed along a stretch of Lily Lake Road (project extent is from Stone Drive to Wegner Road) as early as mid-February. Prior to May, the District had been in consistent contact with Nunda, HR Green and Lakemoor to resolve issues of an engineered design for safety and roadway improvement along Lily Lake Road. Since NMWRD assets were neglected on the original engineering plans, the District was informed multiple times that HR Green would re-design portions of the improvements so that the District would not have to move any portion of the Lily Lake forcemain(s). District Staff Engineer, Luke Markko, met with Ben Hartman, Ryan Fontana and Todd Destree of HR Green on June 3rd and further discussion and coordination will be required to address the current situation. A meeting between all parties involved will likely occur in early June.





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NMWRD Plant Projects:

[Project Update] – Plant project updates for the month of May are outlined in the following section. The District has asked Caldwell Engineering to work on the site plan for the sludge drying bed cover after the project stalled for the month of May. The District has reached out to Fisher Bros to order first quality foundation blocks from Fisher Bros for the sludge drying bed cover foundation but production had not yet started as of mid May. Door hardware purchasing was finalized early this week and the District will be coordinating delivery of hardware directly to Cross Aluminum for production. For a detailed update on work relating to the North Secondary Clarifier, see the Operations Report.

Asset Management Software Considerations:

The District moved forward with obtaining quotes for asset management software during the month of May. District staff members have done their due diligence and sat the a few virtual demos during the last week of May. As of June 5th, the District is close to finalizing its selection as we wait for the final quotes to come in. Note that all softwares being considered were recommended by other Illinois wastewater treatment facilities.

Sewer Televising & Cleaning Plan:

Last month, NMWRD unveiled its newly developed CMOM plan which includes a sanitary sewer cleaning and televising schedule, which repeats every five (5) years. A detailed Sewer Televising & Cleaning Plan is currently being developed which will dictate the specifics of which gravity mains are to be televised and cleaned in any given year and will accompany the District's bid package.

Phosphorous Discharge Optimization Plan:

The District entered into an agreement with Fehr-Graham in early April to produce a quality Phosphorous Discharge Optimization Plan which is required per NMWRD's NPDES permit. An introductory call was held with District Management and a shared Dropbox has been created to share all applicable data with the engineering consultant. The District received a draft version of the report on June 4th noting that some sections required more information to be submitted to Fehr-Graham in order to complete. The District will continue to aid Fehr-Graham in all their request to produce a meaningful PDOP. Note that the District requested a one (1) year extension on the PDOP report on March 26th and the IEPA has confirmed receipt of the request.



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Engineering Adjustments in light of COVID19:

In response to the State of Illinois entering Phase 3 of the Restore Illinois plan, administrative staff members have begun transitioning back to a semi-routine office schedule. Management has continued to maintain staggered in-office shifts but allowing Engineering to return to an office setting a few days a week has certainly sped up production. All engineering related work continues to progress with no setbacks.

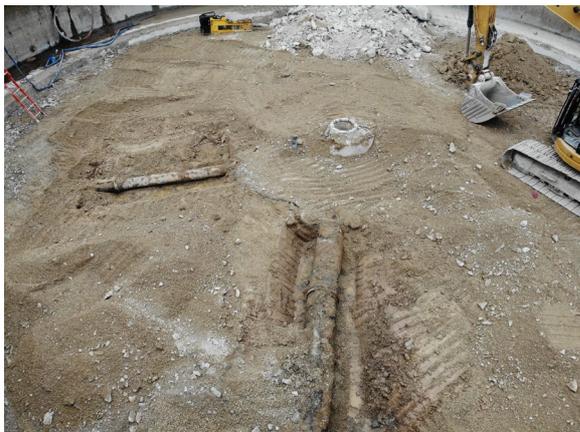
In addition to the work relating to these projects, the following engineering related work is also being performed;

- Coinciding with Phase 3 of the Restore Illinois plan, additional businesses were allowed to open. Obenauf Auctions had previously been closed to the public, but the District was able to post their most recently Board approved auction to the Obenauf Auction site in late May. The auction is set to close on June 10th and the District will ensure that we follow safe social-distancing practices upon releasing items to the winning bidders.
- A small perk of getting back into the office was that I had an opportunity to dig through hundreds of plan sets that have been crowding the administrative building and they are now organized and categorized for a simplified locating process. The District will now be moving forward with digitizing historical plan sets, plats, as-builts, etc. so that District employees have access to a digital repository on our server moving forward.
- The District spent the month of May researching CMMS / Asset Management Softwares that will work in conjunction with the District's new SCADA system. The new software will replace two (2) existing softwares, Upkeep and ICOM, as the District continues to improve efficiencies in our day-to-day operations. District Superintendent, Luke Markko, and Staff Engineer, Joe Lapastora sat through a few demos last week and a formal selection will be made in early June was all revised quotes have been received and reviewed.
- Similarly, the District spent some time in May researching Billing Portal Softwares that would allow for more than just payments (e.g. billing, balance, historical charges, etc.). The District is still in the research phase and we are looking to see more quotes come in during June.
- Coinciding with the partial demolition phase of the North Secondary Clarifier, the District entered into an agreement with TSC, a material testing company that will perform all concrete and earthwork testing. All testing details, along with general day-to-day updates relating to the North Clarifier repair, are being maintained in a District Observation Report.





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Drone Photos of North Clarifier



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



Phone: 847-526-3300
Fax: 847-526-3349



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Web: www.nmwrd.org



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DELINQUENT ACCOUNTS RECAP FOR May 2020

Revised: 6/04/20 by Debi Martin, District Clerk

\$200-\$300

248 Active Accounts

Island Lake – 153 customers
73 Water Shut Off Notices, 76 Notices of Delinquency, 4 Final Water Shut Off Notices
Lakemoor – 72 customers
18 Water Shut Off Notices, 41 Notices of Delinquency, 11 Final Notices of Delinquency,
2 Final Water Shut Off Notices
Port Barrington – 23 customers
13 Notices of Delinquency, 10 Sewer Disconnection Notices

\$301-500

29 Active Accounts

Island Lake – 15 customers
11 Final Water Shut off Notices, 3 Water Shut Off Notices, 1 Sewer Disconnection Notice
Lakemoor – 8 customers
1 Lien-1 with water off (VACANT), 4 Sewer Disconnection Notices, 3 Water Shut Off Notices,
Port Barrington – 6 customers
2 Final Notices of Delinquency, 4 Sewer Disconnection Notices

\$501-\$1000

11 Active Accounts

Island Lake – 4 customers
4 liens – 2 with water turned back on (COVID-19), 2 with water shut off
Lakemoor – 4 customers
4 liens – 4 to be disconnected
Port Barrington – 3 customers
3 liens – 2 to be disconnected, 1 in foreclosure

\$1001 and up

11 Active Accounts

Island Lake – 5 customers
4 liens – 4 with water off (VACANT), 1 to be disconnected from sewer
Lakemoor – 6 customers
6 liens – 3 sold for delinquent taxes; with 1 to be demolished, 6 to be disconnected

Delinquent Accounts total (active and inactive customers): **\$74,112.47**** (\$9,701.89 inactive accts)

May 2019's report: **\$54,736.22**

May 2018's report: **\$47,667.20**

MONTHLY ACTIVITY:

4800	Monthly Bills mailed 6/01/20 (for May service)	130	Notices of Delinquency mailed 6/08/20
391	Bills <u>not</u> mailed – customers prepaid on their accounts	18	Real Estate closings for May 2020
97	Water Shut Off Notices mailed on 6/08/20	17	Final Water Shut off Notices mailed 6/08/20
13	Final Notices of Delinquency mailed on 6/08/20	2	Liens released in May
19	Sewer Disconnection Notices mailed on 6/08/20		

**** Please note that this month's total is high since the District did not send out any delinquency notices in April & May.**



"We had a catch-22, but we 86'd it and now we're looking at a surplus of 64!"



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AGENDA
REGULAR MEETING
7:30 P.M. – June 9, 2020

Zoom Meeting w/ Video: <https://us02web.zoom.us/j/81461475052>
Zoom Meeting w/ Audio Only: +13126266799,,81461475052#

- 1. CALL TO ORDER & ROLL CALL**
- 2. PLEDGE OF ALLEGIANCE**
- 3. PRESENTATION & APPROVAL OF MINUTES**
 - a. Regular Meeting Minutes – May 12, 2020
- 4. TREASURER'S 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**
- 10. NEW BUSINESS**
 - a. Adoption of Ordinance # 20-07, FY 2020-21 Appropriations Ordinance
 - b. Prevailing Wage Rate Ordinance Requirements
 - c. Adoption of Engineering Services Amendment for Lift Station 1-7 Upgrades
 - d. Adoption of Engineering Services Amendment for Funding Assistance
- 11. MISCELLANEOUS CORRESPONDENCE**
 - a. MCGG Membership Meeting – Cancelled due to Pandemic
- 12. APPROVAL OF BILLS**
- 13. OTHER BUSINESS**
 - a. Executive Session – Litigation, if needed

Posted to www.nmwrld.org - June 5, 2020



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