A Regular Meeting of the Board of Trustees of the Northeast Ohio Regional Sewer District (NEORSD) was called to order at 12:30 p.m. by Darnell Brown.

I. Roll Call

Present: Darnell Brown
         Ronald Sulik
         Timothy DeGeeter
         Jack Bacci
         Sharon Dumas
         Samuel Alai

Absent: Marjorie Chambers

The Secretary informed the President that a quorum was in attendance.

II. Approval of Minutes

MOTION – Mayor Bacci moved, and Ms. Dumas seconded to approve the Minutes of the May 4, 2023 Board Meeting. Without objection, the motion carried unanimously.

III. Public Session

There were no items.

IV. Chief Executive Officer’s Report

Kyle Dreyfuss-Wells, Chief Executive Officer, advised the Board that NEORSD staff participated in and supported Earth Day events with the Cities of Parma Heights and Hudson, the American Greetings Green Team, the Brecksville-Broadview Heights Elementary Schools, Kent State University, Cleveland State University, Cleveland Metroparks, Lake Metroparks, and the Cleveland Museum of Natural History. Staff discussed NEORSD’s STEM work, sustainability, stormwater management, cost savings programs, and construction programs.

May 15 and 18 are the final public outreach events related to the Doan Brook Restoration near Horseshoe Lake Park Project pre-design process. On May 15, 65 people attended the virtual meeting and watched the hour-long presentation, which is available to view on NEORSD’s website,
NEORSD.org/doanbrook. The May 18 meeting will be held in-person at the Lee Road branch of the Cleveland Heights Public Library. Attendees will have an opportunity to see the latest renderings of what the restoration will look like, talk to the pre-design team, and share their input.

NEORSD was recently named Best Twitter by Government Social Media. Other finalists included the National Genome Research Institute, the National Park Service, Oklahoma Department of Wildlife Conservation, and the Washington State Department of Natural Resources. Ms. Dreyfuss-Wells offered congratulations to the team and added that NEORSD also has a growing presence on Instagram.

On May 18, two projects funded by NEORSD’s Green Infrastructure Grant Program were honored in the Cleveland 2030 District 2022 Green Building Challenge Awards. The Overall Award went to INTRO, a 2021 Green Infrastructure Grant (GIG) recipient of $200,000, an apartment building which uses a green roof, pavers, underground infiltration basin, and tree planters, to achieve 1.9 million gallons of stormwater capture annually. The Water Winner Award went to the Waterloo Arts District for its Green Alley Roof Project, which also received $200,000 in 2021 GIG funding, and has an annual stormwater capture of more than 100,000 gallons. Ms. Dreyfuss-Wells congratulated NEORSD staff that supported these projects as well as the implementors of the projects.

V. Action Items

Authorization to Advertise

Resolution No. 132-23  Authorization to publish notice calling for bids, in accordance with Ohio Revised Code Section 6119.10, for the Southerly Wastewater Treatment Center Paving Services Project with an anticipated expenditure of $190,000.00.

MOTION – Mr. Sulik moved, and Mayor Alai seconded to adopt Resolution No. 132-23. Without objection, the motion carried unanimously.

Authorization to Issue Request for Proposal (RFP)

Resolution No. 133-23  Authorization to issue an RFP, in accordance with Ohio Revised Code Chapter 153, for design and construction administration/resident project representation services for the Abram Creek Smith Road Basin Improvement project.

MOTION – Mayor Bacci moved, and Ms. Dumas seconded to adopt Resolution No. 133-23. Without objection, the motion carried unanimously.
Authorization to Purchase

Resolution No. 134-23  Authorization to purchase software maintenance and support services from sole source vendor OSIsoft, LLC for the District's Process Data Management System application, for the period June 1, 2023 through May 31, 2024, in an amount not-to-exceed $70,785.00.

Resolution No. 135-23  Authorization to purchase software license, maintenance, and support services from sole source vendor Carahsoft Technology Corp. for the District's Boomi cloud software, for the renewal period of July 16, 2023 through July 15, 2024, in an amount not-to-exceed $55,919.40.

MOTION – Mayor Alai moved, and Mr. Sulik seconded to adopt Resolution Nos. 134-23 through 13526-23. Without objection, the motion carried unanimously.

Authorization to Enter Into Agreement

Resolution No. 136-23  Authorization to enter into a professional services agreement with ARCADIS U.S., Inc. for task-based Environmental, Health & Safety Consulting Services in an amount not-to-exceed $1,000,000.00.

MOTION – Mr. Sulik moved, and Ms. Dumas seconded to adopt Resolution No. 136-23. Without objection, the motion carried unanimously.

Authorization to Enter Into Contract

Resolution No. 137-23  Authorization to enter into a construction contract with Tucson, Inc. for the Chippewa Creek Flood Reduction Project near Echo Lane in an amount not-to-exceed $8,259,707.00.

MOTION – Mayor Bacci moved, and Mr. Sulik seconded to adopt Resolution No. 137-23. After the following discussion, without objection, the motion carried unanimously.

President Brown requested a brief explanation of the scope of the project associated with Resolution No. 137-23. Frank Greenland, Director of Watershed Programs, provided images of the project area and explained that it is a large, multicomponent stormwater project that will enhance an existing stormwater detention basin, upsize culverted stretches, daylight other areas, and restore portions of Chippewa Creek. NEORSD has partnered with the City of Broadview Heights to incorporate local stormwater improvements into the project.

President Brown noted that it appears that the project will take a couple years to complete and has best practices and stormwater aspects built into it. Mr. Greenland added that the area has flooding,
erosion, and culvert constrictions. The project required several property acquisitions and easements and is ready to begin.

Authorization to Amend Agreement

Resolution No. 138-23  
Authorization to amend Project Agreement No. 19006466 with the City of Hudson for the Owen Brown Street Bridge Project to include the design and construction of a new floodplain relief culvert in lieu of replacing and upsizing the existing Owen Brown Street bridge span, and decreasing the agreement amount by $860,657.92, thereby bringing the total agreement amount not-to-exceed $441,342.08 as reimbursement to the City.

MOTION – Ms. Dumas moved, and Mayor Bacci seconded to adopt Resolution No. 138-23. After the following discussion, without objection, the motion carried unanimously.

President Brown noted that it appears that there will be $800,000 in cost savings by not replacing the bridge as originally planned in this project. Mr. Greenland explained that the City of Hudson identified the alternative. The area was studied under the Cuyahoga River South Master Plan and resulted in a recommendation to replace the Owen Brown Street Bridge and upsize the culvert to achieve a 100-year level of protection.

The City updated and refined the models with NEORSD’s supervision and funding and obtained Ohio EPA 319 grants for stream restoration and floodplain enhancement in the vicinity of the project. The updated modeling suggested that a relief culvert would provide a bypass within the floodplain to still provide a 100-year level of service at a greatly reduced cost.

Property Related Transaction

Resolution No. 139-23  
Authorization to acquire one permanent sewer easement at the property known as PPN 105-03-003, located on East 72nd Street, in the City of Cleveland, owned by The Cleveland Electric Illuminating Company, necessary for the construction and maintenance of the Shoreline Storage Tunnel project with total consideration of $21,450.00.

Resolution No. 140-23  
Authorization to enter into a right of entry agreement for the District-owned property known as PPN 541-16-005, located at 8908 Garfield Blvd., in the City of Garfield Heights, with Kurt Houston doing business as Kurt’s Getaway Bar and Grill, with total consideration of $1.00.
MOTION – Mayor Alai moved, and Mr. Sulik seconded to adopt Resolution Nos. 139-23 through 140-23. Without objection, the motion carried unanimously.

Authorization to Grant Credit

Resolution No. 141-23 Authorizing the District to issue a credit adjustment in the total amount of $453,527.55 against sewer charges on the account ending in 8896 to Strongsville High School at 20025 Lunn Road, Strongsville.

MOTION – Ms. Dumas moved, and Mayor Bacci seconded to adopt Resolution No. 141-23. After the following discussion, without objection, the motion carried unanimously.

Ms. Dumas noted that this is a significant credit and requested a brief summary. Ken Duplay, Chief Financial Officer, explained that there was an underground leak in the school’s water line that has been repaired. City of Cleveland, Division of Water issued a partial credit of approximately $123,000, and Resolution No. 141-23 is for the excess sewer usage because the leak was underground and undetected.

VI. Information Items

Devona Marshall, Director of Engineering and Construction, provided the monthly update on the Capital Improvement Program (CIP) for April 2023, beginning with cashflow. The planned total CIP cashflow for 2023 is $192 million, with seven projects making up 73% of that total at $140.8 million. Ms. Marshall provided a table demonstrating the planned and actuals for those seven projects through April 2023, and explained that NEORSD is below its Key Performance Indicator (KPI) of 85% of planned for the Shoreline Storage Tunnel (SST), Pearl/Jennings Road Storage Tank and Pump Station project, and the Westerly Tunnel Dewatering Pump Station Project.

Planned spending through April for the SST was $24 million, and the actual is $11.6 million. The primary reason for the difference in planned versus actual is the slow start to the mining operation. Mining start-up was estimated to take 5 weeks and it took 11 weeks. Full-scale mining for the project began March 23, and increased spending is expected.

The planned spending for the Pearl/Jennings Storage Tank and Pump Station Project was $5.5 million and the actual was $3.6 million, because after speaking with local business owners, NEORSD requested that construction be delayed avoiding road closures that would make the businesses difficult to access during the snowy season. The delayed work is scheduled to commence next week.

Spending for the Westerly Tunnel Dewatering Pump Station project was planned to be $3.5 million, and the actual was $1.85 million, due to supply chain delays, specifically for the new transformer
which was scheduled to be supplied by Cleveland Public Power in January. The transformer has passed inspection and is to be shipped this week.

Ms. Marshall moved her presentation on to KPIs and advised that the Southerly FST-7 through 11 Launder Support Concrete Repair Project did not meet the KPI as it relates to the engineer's estimate, as the average of the three lowest bids did not come within 10% of the engineer's estimate. The engineer's estimate was $750,000 and the contract was awarded to the lowest bidder at $450,000. The contract was awarded at 65 days of planned, missing the KPI of 60 days of planned.

Ms. Marshall invited Rick Vincent, Manager of Collections Design, to provide an update regarding the Brookside Culvert Repair project.

Mr. Vincent provided photographs of the project area and explained that the failing Brookside Culvert is under repair. It is a corrugated metal pipe that is 9 feet tall by 23 feet wide and runs through approximately 100 residential backyards. NEORSD performed an emergency repair on a section of the culvert in 2019.

Mr. Vincent reminded the Board that the contract for the project was awarded to the second lowest bidder, because the lowest bidder did not have the necessary qualifications for installing shotcrete. Shotcrete was chosen as the permanent lining to structurally support the culvert because it has the lowest impact to residents nearby, as it is the most flexible method, the lowest cost option, and it meets the hydraulic requirements. Additionally, there is not much equipment required for the installation of shotcrete, meaning that when there is wet weather and CSO and stormwater need to flow through the culvert, it is not difficult to remove the equipment to not impede the flow.

Mr. Vincent explained that the shotcrete process requires an experienced nozzleman to shoot the concrete, which is the same concrete that is used in poured applications, being shot from a hose at 60 to 80 miles per hour, until the rebar is encapsulated and bonded with the concrete. This is difficult work, as the shotcrete needs to be applied at a 90-degree angle and the hose is very heavy.

Mr. Vincent provided additional photographs and explained that there is much work to be done prior to the installation of the shotcrete, including the removal of the rubber lining on the culvert in some areas using a heavy-duty power washer. They also need to remove dirt and plant roots and patch holes. Then they add access points; install rebar, all with flow moving through the culvert.

The nozzlemen are required to pass a qualification test, wherein they have to build an arch approximate to the culvert shape, shoot into test boxes along the arch, and test the shotcrete they shot to show it meets requirements prior to allowing the nozzlemen to work on the project.

Mr. Vincent provided video of the shotcrete installation being performed in the culvert demonstrating the difficulty of the work being performed, and the amount of noise and other
factors associated with shooting and finishing the concrete. Once completed, the culvert repairs are expected to last for 75 to 100 years.

President Brown asked what the structures visible inside the culvert are. Mr. Greenland explained that there was a dividing wall to attempt to prevent cross contamination and direct some of the flows into the sanitary sewer, however, it is no longer functional.

President Brown asked whether the reduction of diameter in the culvert due to the installation of rebar and shotcrete reduces capacity. Mr. Vincent explained that despite losing diameter, the smoother finish compared to the corrugated pipe reduces friction and improves hydraulic capacity.

The project is scheduled to be completed in October.

Ms. Dreyfuss-Wells invited Robin Halperin, Manager of Environmental, Health, and Safety, to provide information regarding the field of emerging contaminants as it relates to Perfluorooalkyl and Polyfluoroalkyl Substances (PFAS), and the potential ramifications of PFAS for NEORSD for years to come.

Ms. Halperin began her presentation by explaining that PFAS is used in multiple applications from stain guarding in carpeting, to food packaging and personal care items, to non-stick pans. There are more than 5,000 variations of such chemicals which are known as PFOA, PFOS, Gen X, and many others. They are all synthetic compounds that have a very strong chlorine-fluorine bond which gives them the ability to resist heat, water, and oil. They also have a long chemical chain, which makes them harder to destroy.

Teflon was the original PFAS compound which was accidentally discovered in the 1930s and was used in the Manhattan Project in the development of the atomic bomb, before the Teflon pan became the first real industrial use of PFAS compounds. Another primary use of PFAS compounds is AFFF foam, a fire suppression foam required to be used on all military bases and airports since the 1960s. There was some voluntary phaseout of some PFAS chemicals in the 2000s, however, they were traded for very similar compounds.

Because the compounds do not break down easily and they are used so widely, it is assumed that PFAS is widespread in the environment and some sites such as PFAS manufacturing sites, landfills, airports, and various industry will have a higher concentration due to extended periods of use or exposure.

Because it is an emerging contaminant, there is much that is unknown about PFAS. A primary focus is working to understand human health risks from exposure to these chemicals. The science and regulatory communities are just beginning to study and understand what levels of PFAS are safe and what the potential health effects are. Early studies have shown that PFAS can cause certain forms of cancer, reproductive issues, and endocrine disruption. Another concern is the lack of
ability to accurately test and analyze all 5,000 PFAS compounds in the minute quantities necessary, as low as parts per quadrillion in one study.

There is currently a focus on the 40 primary PFAS compounds to be able to sample and analyze them in air, water, wastewater, and biosolids. Additionally, there is focus on how to destroy or remove PFAS from the environment, particularly in drinking water, contaminated soil, biosolids and effluent.

Wastewater treatment plants are not a source of PFAS but by nature of the business, it is likely that there are PFAS compounds coming into WWTPs. The Water Research Foundation (WRF) is currently studying 38 WWTPs around the country to determine how much and what kinds of PFAS are in influent, effluent and biosolids. The report is due later this year. WRF has a related ongoing study to determine whether sewage sludge incinerators used at some WWTPs are effective at destroying PFAS.

In 2021, U.S. EPA released its strategic short-term plan, which is focused on research, restricting, remediation of sites with known high concentrations.

There are currently no regulations to govern PFAS, however, there is much activity federally and nationwide to address the concerns. Drinking water is a primary concern and earlier this year, U.S. EPA proposed maximum contaminant levels for some PFAS compounds, though they have not yet gone into effect. There is a push at the federal level to designate PFAS compounds as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act, which would allow for direct funding to remediate PFAS. This designation could have unintended negative consequences for WWTPs. As a passive recipient of PFAS, NEORSD and other water organizations are working with the National Association of Clean Water Agencies to advocate for an exemption for WWTPs.

Ohio does not have any pending regulations regarding PFAS, however, through the Drinking Water Action Plan, all drinking water in Ohio was tested for PFAS a couple of years ago and no major contamination was identified. It is likely that NPDES permit monitoring requirements will soon include PFAS monitoring for the 40 PFAS compounds that are close to having accurate testing methods.

Ms. Halperin explained that because this is an emerging contaminant, as NEORSD has done with other emerging contaminants such as mercury and personal care products in years past, it will take a proactive approach to addressing these issues. NEORSD’s roadmap for its efforts to remain proactive on this front is to plan, prevent, protect, and educate, by: better understanding potential treatment methods to remediate PFAS; potentially utilizing Infrastructure Investment and Jobs Act (IIJA) emerging contaminant funding to perform its own PFAS treatment feasibility studies; attempting to prevent PFAS from entering the WWTPs (NEORSD is currently unaware of industrial customers utilizing PFAS compounds); protecting NEORSD from enforcement, regulation, or
possible litigation as NEORSD did not utilize or profit from PFAS compounds; and to educate the
general public, local media, and industries of the potential effects of PFAS.

NEORSD has assembled an internal team to the implementation of its PFAS roadmap under the
direction of Ms. Dreyfuss-Wells; Eric Luckage, Chief Legal Officer; Frank Foley, Director of
Operation and Maintenance; and Mr. Greenland. There are smaller working groups dedicated to
identifying specific strategies to implement each of the areas of the roadmap.

President Brown noted that this could be an expensive endeavor and added that, presumably, any
water that comes into NEORSD’s process would have gone through the treatment process to
remove PFAS, and stormwater will be returned to source water. If the potable water is being
treated for PFAS as part of the process, there is likely not much more for NEORSD to do to return
it to an improved state. Mr. Greenland added that this is the dilemma, identifying how to treat
wastewater for these compounds. There is a belief that incineration will breakdown the
compounds, but the details remain unknown until information from the incineration study
becomes available.

President Brown added that because NEORSD is not creating or utilizing such compounds, it should
not have to bear the cost of remediating it. Mr. Greenland explained that this may be a source
control initiative. For example, Michigan has implemented steps in their pretreatment program to
reduce source through product substitution and elimination of use. How this will impact NEORSD
remains to be seen. Ms. Halperin added that it may be much like mercury inasmuch as NEORSD
has implemented source control, but a domestic load of mercury remains outside of its control.

President Brown reiterated that although NEORSD does not generate PFAS contamination, it will
impact it, nonetheless. If there is a mandate that NEORSD is required to mitigate PFAS
contamination before the water is reintroduced to the source stream, there should be federal
funding to support the processes. NEORSD still has a number of years to deal with its long-term
control program. Adding another heavily regulated and perhaps expensive requirement program
may negatively impact NEORSD’s responsibilities to its ratepayers, as well as the ability to appeal
to the reasonableness of the requirements. Ms. Dreyfuss-Wells agreed and added that NACWA
has been working on this issue and recently agreed to form a subcommittee specifically focusing
on PFAS. This may be similar to mercury wherein producers are required to pay. The emerging
contaminants funding IIJA is $5 million, and NEORSD is applying for two potential grants under the
program.

VII. Open Session

There were no items.
VIII. Public Session (any subject matter)

There were no items.

IX. Executive Session

Mayor Bacci, pursuant to Ohio Revised Code Section 121.22 (G)(3), moved, and Mr. Sulik seconded, to enter an executive session to consult with the District’s legal counsel concerning disputes involving the District that are subject to or are pending and imminent court action. By roll call vote, the Board voted unanimously to enter into executive session at 1:28 p.m.

The Board returned to open session at 2:49 p.m.

X. Approval of Items from Executive Session

There were no items.

XI. Adjournment

MOTION – President Brown stated business having been concluded, he would entertain a motion to adjourn. Mayor Bacci moved, and Ms. Dumas seconded the motion to adjourn at 2:50 p.m. Without objection, the motion carried unanimously.

Timothy J. DeGeeter, Secretary
Board of Trustees
Northeast Ohio Regional Sewer District

Darnell Brown, President
Board of Trustees
Northeast Ohio Regional Sewer District