CITY OF NOVI CITY COUNCIL OCTOBER 6, 2025



SUBJECT:

Approve Resolution authorizing the filing of a Petition necessary to Convert Existing County Drain Facility in Novi, now known as the Walled Lake-Novi Water Resource Recovery Facility Sewage Disposal System, into a Chapter 20 Drain to be identified as Walled Lake-Novi Water Resource Recovery Facility Drain.

SUBMITTING DEPARTMENT: Department of Public Works, Engineering Division

KEY HIGHLIGHTS:

- Current arrangement between the City and the County involves a system known as the Walled Lake-Novi Water Resource Recovery Facility Sewage Disposal System owned and operated by the County under Act 342.
- County Water Resource Commissioner (WRC) recently asked the City to approve
 a petition to convert a portion of the existing system (mostly relating to its
 underground facilities to a Chapter 20 system within the City and a Chapter 21
 system for the portions outside the City and City Council approved that petition at
 its August 11, 2025, meeting. The petition is currently going through the process at
 the County level to complete the conversion under the Darain Code.
- This is a related request by WRC to convert the County's water treatment plant, located roughly at West Park Drive and West Road into a Chapter 20 Drain as well.
- WRC believes that the conversion benefits both the City and WRC; City Administration does not object to the conversion.

BACKGROUND INFORMATION:

The Walled Lake–Novi Wastewater Treatment Plant (WWTP) provides essential wastewater treatment services for the City of Walled Lake, the City of Novi, and portions of Commerce Township, which Novi serves under an inter-community agreement.

The plant's infrastructure is aging, including its treatment processes, mechanical equipment, and electrical systems. These conditions present both challenges and

opportunities: while the facility continues to provide reliable service, proactive reinvestment is essential to extend the useful life of the WWTP for the foreseeable future. This petition seeks to establish the appropriate legal and financial structure to address these aging assets and implement the improvements necessary to ensure that the Walled Lake-Novi WWTP remains a dependable, compliant, and sustainable facility for decades to come.

At its August 11, 2025 meeting, the City Councill approved Resolutions to allow the City to file Petitions with WRC to create the "Huron Rouge Sanitary Drain" under Chapter 20 of the Drain Code and the "Rouge Valley Sanitary Intercounty Drain" under Chapter 21 of the Drain Code to convert most of the underground sanitary facilities for which WRC provides service from their current status as Act 342 Drains.

This request by WRC for a Resolution and Petition relate essentially to the "rest" of the WRC facilities in the City, primarily encompassing the wastewater treatment plant (WWTP), which the County has asked to be designated a Chapter 20 drain to be called the "Walled Lake-Novi Water Resource Recovery Facility Drain." Attached are the proposed Resolutions and Petition prepared by WRC to begin the process as occurred with the August agenda item. Also included in the packet are materials explaining the likely improvement to be made to the WWTP in the coming years and an explanation why the Chapter 21 process is being proposed.

City staff are amenable to the conversions proposed by WRC.

RECOMMENDED ACTION: Approve Resolution authorizing the filing of a Petition necessary to Convert Existing County Drain Facility in Novi, now known as the Walled Lake-Novi Water Resource Recovery Facility Sewage Disposal System, into a Chapter 20 Drain to be identified as Walled Lake-Novi Water Resource Recovery Facility Drain.

CITY OF NOVI

COUNTY OF OAKLAND, MICHIGAN

RESOLUTION AUTHORIZING THE FILING OF A PETITION TO LOCATE, ESTABLISH, AND CONSTRUCT A COUNTY DRAIN PURSUANT TO CHAPTER 20 OF PUBLIC ACT 40 OF 1956, AS AMENDED

WALLED LAKE-NOVI WATER RESOURCE RECOVERY FACILITY DRAIN

Minutes of a Meeting of the City Council of the City of Novi, County of Oakland, Michigan, held in the City Hall of said City on October 6, 2025, at 7 o'clock P.M. Prevailing Fastern Time.

| PRESENT: Councilmembers |
|---------------------------------------------------------------------|
| ABSENT: Councilmembers |
| |
| The following preamble and Resolution were offered by Councilmember |
| and supported by Councilmember |

BE IT RESOLVED BY THE CITY OF NOVI, OAKLAND COUNTY, MICHIGAN, as follows:

WHEREAS, the City Council has determined that the location, establishment, and construction of the proposed Walled Lake-Novi Water Resource Recovery Facility Drain is necessary for the public health of the City; and

WHEREAS, the conversion of the Walled Lake-Novi Water Resource Recovery Facility Sewage Disposal System to a Chapter 20 drain provides substantial benefit to the City including the following:

- (a) Governance composed of three (3) elected officials from the County Board of Commissioner's Office and the Water Resource Commissioner;
- (b) Improved transparency and communication through regularly scheduled open public meetings, minutes, and approval of invoices and contracts by the Drain Board; and
- (c) The ability to conduct public hearings to solicit comments from the communities and the public for future bond financed projects; and

WHEREAS, the City desires to file a petition with the Oakland County Water Resources Commissioner pursuant to Chapter 20 of Public Act 40 of 1956, as amended ("Drain Code"), for the location, establishment, and construction of the proposed

Walled Lake-Novi Water Resource Recovery Facility Drain, to be located and established in Oakland County, Michigan.

NOW, THEREFORE BE IT RESOLVED by the City Council of the City of Novi, as follows:

- 1. The Mayor and City Clerk are hereby authorized and directed to execute and file the petition substantially in the form attached as **Exhibit A** to this resolution with the Oakland County Water Resources Commissioner by certified mail.
- 2. The Mayor and City Clerk are further hereby authorized and directed to enter into an agreement under the Drain Code related to the project contemplated by the Petition and to file the same with the Oakland County Water Resources Commissioner.
- 3. The City Council hereby consents to the assessment of part of the entire cost of the location, establishment, and construction of the Walled Lake-Novi Water Resource Recovery Facility Drain levied against or assessed to the City.
- 4. The City agrees that it will pay its share of all costs incurred by the Oakland County Water Resources Commissioner or the Drainage District in the event that the Drain is not completed.
- 5. The City acknowledges that the County of Oakland, its Board of Commissioners, and the Oakland County Water Resources Commissioner will not contribute to the cost of the location, establishment, and construction of the Drain or its operation and maintenance except to the extent that Oakland County may be assessed for the cost of the Walled Lake-Novi Water Resource Recovery Facility Drain or may agree to contribute to the cost of the location, establishment, and construction of the Walled Lake-Novi Water Resource Recovery Facility Drain in accordance with the provisions of Chapter 20 of Public Act 40 of 1956, as amended.
- 6. All resolutions and parts of resolutions insofar as they conflict with the provisions of this resolution are hereby rescinded.

| AYES: | | |
|------------------------|---------|----------------------------|
| NAYS: | | |
| RESOLUTION DECLARED AD | OOPTED. | |
| STATE OF MICHIGAN) |)SS | Cortney Hanson, City Clerk |
| COUNTY OF OAKLAND |) | |

I hereby certify that that foregoing is a true and complete copy of a resolution adopted by the City Council of the City of Novi, Oakland County, Michigan, at a regular meeting held on October 6, 2025, the original of which is on file in my office. I certify further that notice of the meeting was given and such meeting was conducted in accordance with the Open Meetings Act.

Cortney Hanson, City Clerk City of Novi

PETITION TO LOCATE, ESTABLISH, AND CONSTRUCT A COUNTY DRAIN PURSUANT TO CHAPTER 20 OF PUBLIC ACT 40 OF 1956, AS AMENDED

WALLED LAKE-NOVI WATER RESOURCE RECOVERY FACILITY DRAIN

TO THE DRAINAGE BOARD FOR THE HEREINAFTER MENTIONED OAKLAND COUNTY, MICHIGAN DRAIN PROJECT

The undersigned public corporation hereby petitions for the location, establishment and construction of an intra-county drain project consisting of the existing Walled Lake-Novi Water Resource Recovery Facility Sewage Disposal System and all improvements needed for the efficient operation of the Walled Lake-Novi Water Resource Recovery Facility Sewage Disposal System through proactively addressing aging infrastructure and equipment, enhance treatment efficiency and performance, enhance biosolids handling, and reduce risk of permit violations. This includes, but is not limited to the following: construction of new effluent structure, new HVAS system, rehabilitation and lining of concrete tanks, renovation and lining of collection systems, a new dewatering process, manlift replacement, installation of new process blowers, and installation of new electrical control centers and panels.

Said drain project is necessary for the public health, and will serve property located entirely within the limits of the City of Novi; City of Walled Lake; and Charter Township of Commerce (collectively, the "Communities"). The Walled Lake-Novi Water Resource Recovery Facility Drain Drainage District will collect, transport, and handle sanitary wastewater originating in the County of Oakland only. The area to be served is depicted in the attached **Exhibit A** hereto. The route and course of the Walled Lake-Novi Water Resource Recovery Facility Drain Drainage District is depicted in the attached **Exhibit B** hereto.

This petition is filed pursuant to the provisions of Chapter 20 of Act No. 40 of the Public Acts of Michigan of 1956, as amended.

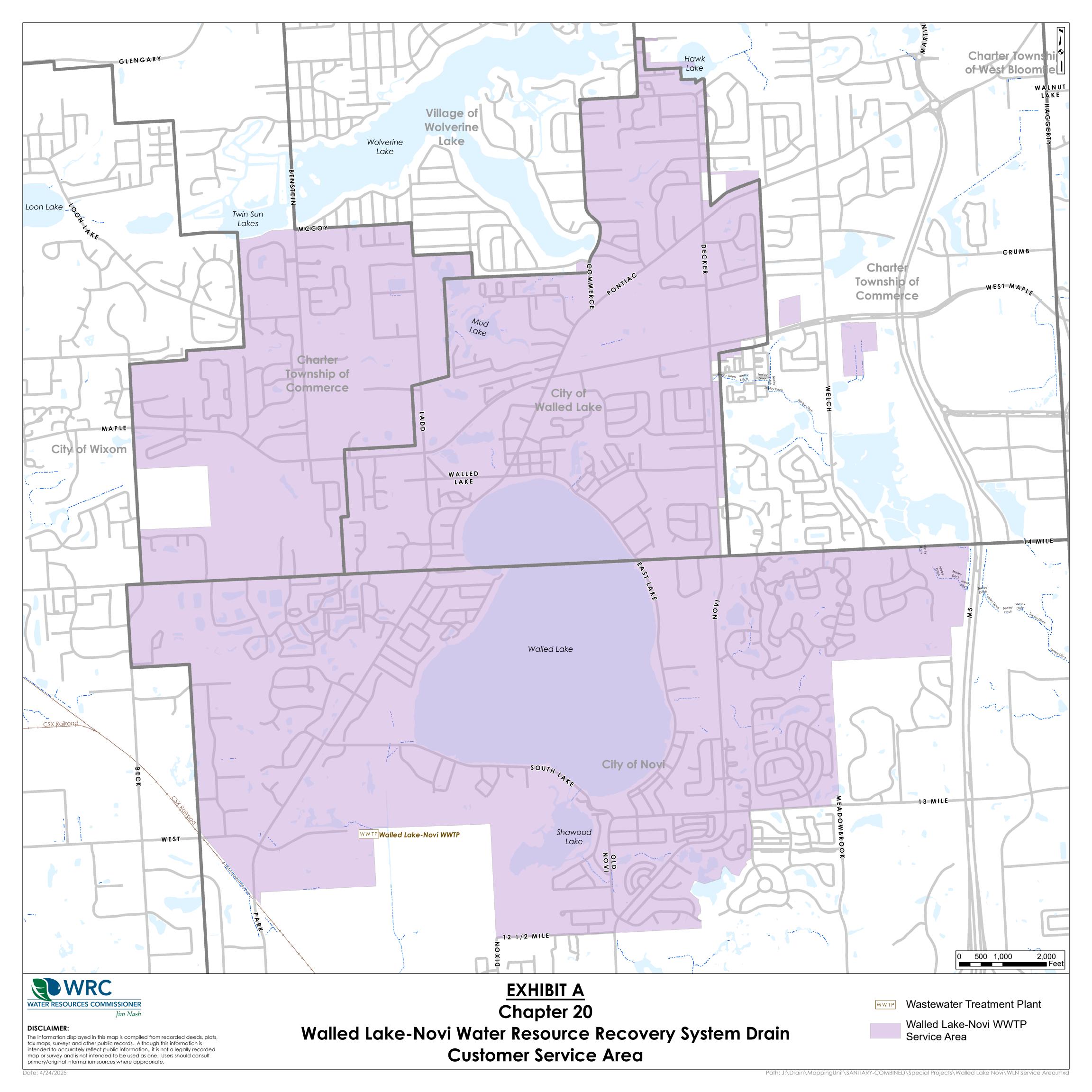
It is understood and agreed that the entire cost of the drain project, including litigation costs and the amount of any judgment, arbitration award or settlement to the extent such costs are payable by the Walled Lake-Novi Water Resource Recovery Facility Drain Drainage District, is to be assessed against all public corporations that benefit from the drain project and contribute to the conditions that make the drain project necessary, including this petitioner.

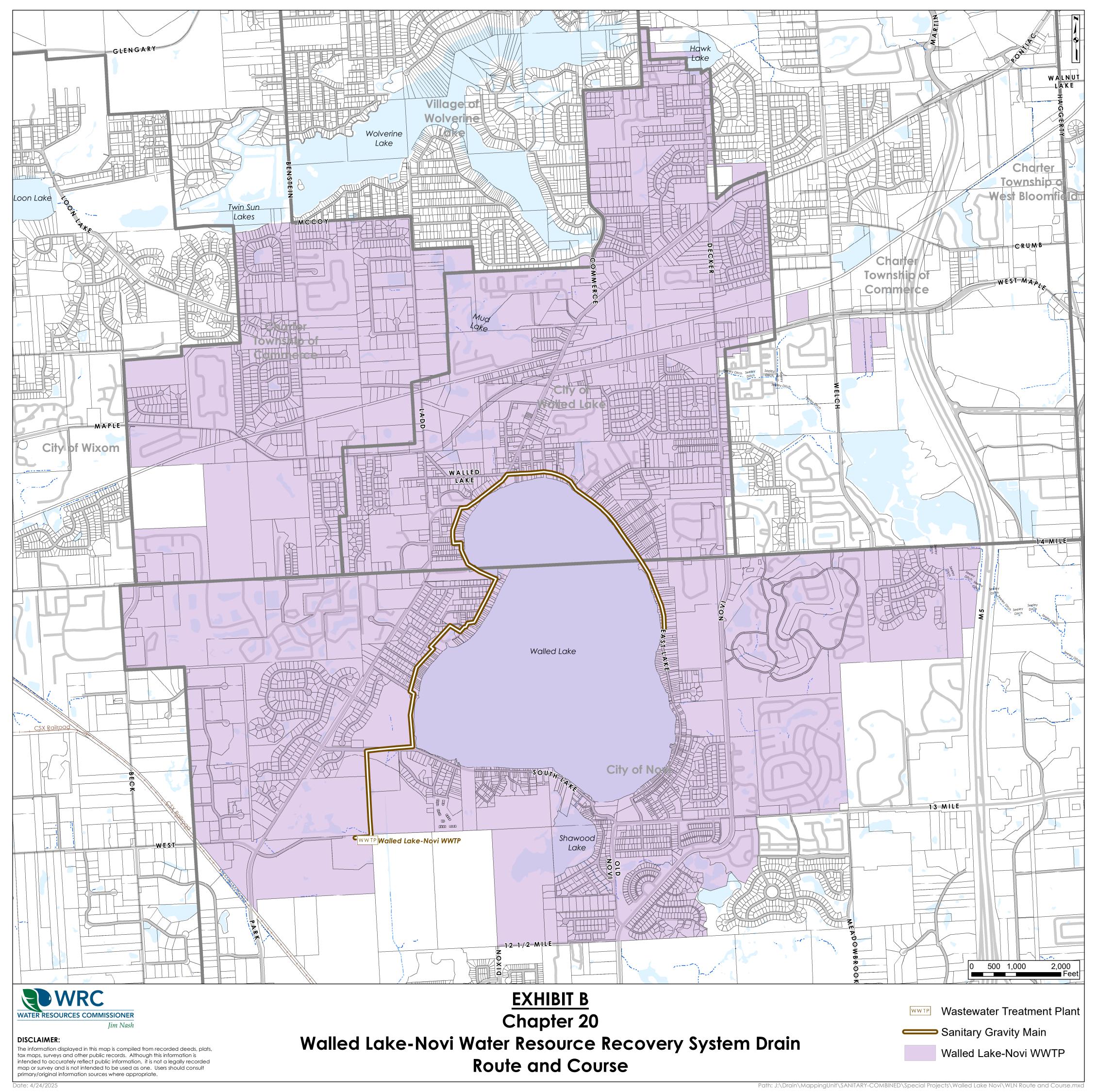
A certified copy of the resolution of the governing body of the City of Novi authorizing execution of this petition is attached hereto.

| | CITY OF NOVI By: | |
|-------------------------------|------------------|------------|
| | , | Mayor |
| | By: | |
| 4897-8097-3150 v5 [12840-469] | , | City Clerk |

Benefits for the City of Conversion from Act 342 System to a Chapter 20 / Chapter 21 Drain

- Chapter 20 and 21 of the Michigan Drain Code both allow for governance by a "Drainage Board" comprised of elected officials rather than by a county designee as provided in Act 342.
- A Drain Code system provides for improved transparency and communication of business and financials through regularly scheduled open public meetings, formal minutes, and formal approval by the Drainage Board of invoices and contracts.
- The Drain Code allows for public participation through public hearing to solicit comments from community leaders and from the public for all future projects.
- A Chapter 20/21 Drain would eliminate the need for the City to seek full faith and credit resolutions from City Council for financing a project.
- Act 342 requires negotiated agreements for the acquisition, construction or financing of facilities. The Drain Code does not require such contracts.
- Under Act 342, communities can collect funds through rates, charges, or assessments. Under the Drain Code, the funds may be collected by levying of a special assessment, fee, charge, or may be funded directly from the general fund.
- Act 342 requires a notice of intent to enter a contract to acquire facilities, construct facilities, or finance projects and a referendum period of 45 days must be satisfied. Act 342 then allows electors to petition for a referendum (which may stop or at least delay a project). With a Chapter 20/21 project, there is no referendum period, and the process for acquiring, constructing, and financing is much easier.
- The Drain Code provides enforcement remedies vis a vis interaction with railroads and other public utility companies to ensure uninterrupted service.
- A Drain Code system insulates the City from EGLE enforcement actions because a Drainage District is a separate legal entity that is responsible for the system and, therefore, the City would not be subject to or responsible for any regulatory enforcement actions.
- The Drain Code provides greater enforcement remedies for obstructions of the system, including the recovery of any and all costs associated with removal of an obstruction.
- In Act 342, the maintenance and operation of the system is at the sole discretion of the County Agency. Under Chapter 20 and 21, the oversight belongs to the Drainage Board.









Introduction

The Walled Lake Arm and Walled Lake-Novi WWTP were originally constructed in 1966 with the original intention of being a temporary facility.

Overtime, it has become realized to be more permanent with many upgrades over the years.

However, these upgrades were not to sustain the existing infrastructure that was originally built.



Background Plant Overview

Capacity

- Design 3.5 MGD
- Peak 7.0 MGD

Treatment

- Solids and Fecal Coliform
- Phosphorus
- Ammonia-Nitrogen
- Nutrient Recovery and Reuse

8 Employees

- 2 Chemists
- 4 Operators
- 2 Supervisors



Background Flow Data Summary

| | RY 2024 | | |
|-------------|----------------------------|-----------------------------|--|
| Community | Average Flow Rate (cfs) | 3-yr Average Percentages | |
| Novi | 2.38 | 68.1% | |
| Walled Lake | 1.12 | 31.9% | |
| Total | 3.5 | 100.0% | |



Background Facility Timeline

- 1970: Raw Sewage Pump Station (RSPS Building), EQ Tank, Clarifiers and Sludge drying beds
- 1986: Tertiary Filters, Clarifier Upgrade
- 1990: Admin Building, Aerated Clarifiers
- 1993: Sludge Storage Tanks Addition
- 2000: Sludge Storage Tanks
- 2003: UV Disinfection System
- 2014: Retention Basin

Current Trends in Wastewater

Inflow and Infiltration (I&I)

Managing I&I water entering the sanitary system is a priority to sustain reasonable treatment costs, prevent overflows, and extend plant capacity without new construction.

Per/Poly-fluoroalkyl Substances (PFAS) PFAS consists of human-made chemicals used in products like nonstick cookware, shoes, and firefighting foams. It is known as a "forever chemical" because it does not easily break down.

Class B Biosolids Demand

Many facilities are upgrading to Class A biosolids production, which is a higher quality product, reducing demand for Class B along side fear associated with PFAS in biosolids.

Aging Infrastructure

Much of the nation's wastewater infrastructure is well beyond its lifespan. Reinvestment in pipes, tanks, electrical, and treatment processes is critical for compliance, reliability, and safety.

Public Engagement and Transparency

Sanitary systems are no longer "out of sight – out of mind". Communicating the value of water, treatment, and sustainability efforts is vital.

Access, Plan, Collaborate



Assess Site and Determine Future Need



Engage Municipal Partners



Reliable Water Recovery



Assessing Past Projects

1986: Tertiary Filters, Clarifier Upgrade 1990:
Admin
Building,
Aerated
Clarifiers

1993: Sludge Storage Tanks Addition

Sludge Storage Tanks

Bec

We have updated ancillary equipment to treatment since 2014.

Major rehabilitation to ensure sustainable treatment has yet to be performed.

2014: Retention Retention

Maintenance Assessment





Unplanned EventsOlder systems will have unforeseen issues occur



Concrete Repairs

Minor concrete repairs around the facility for tanks, process rooms and buildings



Aging Piping
Piping was installed between
1970-1990, aging past useful life



Minor Facility Improvements
This includes gutters, roofs,
exterior masonry repairs, etc.

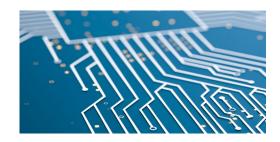


Pump and Valve Replacements

Many pumps around the facility
are over 20 years old



Diffuser Replacement
Diffusers are over 20 years old
and supply biological treatment
through oxygen delivery



Calibrations and Evaluations
Ancillary equipment, buildings,
and electrical require evaluations
and calibrations



Samplers, Meters, and Hoists
Samplers, Meters and Hoists from
the 1990s and 2000s require
repair or replacement



Maintenance Assessment

Diffuser Replacement
SCADA Upgrade – Security and Treatment Issue
Retaining Wall Replacement
Tertiary Filters Media Replacement





Major Improvements Assessment





Biosolids Storage
Tanks updated in 1993
Time lapse of 32 years



Biosolids Dewatering Equipment
Dewatering Drum installed in 1970
Time lapse of 55 years



Process Blowers
Blowers updated in 1990s
Time lapse of 35 years



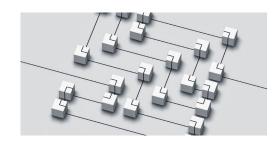
Walled Lake Arm Collection
Installed in 1966, last inspected in 2016
Time lapse for repair 59 years



Effluent Structure
Structure installed in 1970
Time lapse of 55 years



Administration Building HVAC
HVAC installed in 1990
Time lapse of 35 years with minor upgrades to keep functional



Electrical Panels and MCC-1 MCC-1 and PP installed in 1970 Time lapse of 55 years



Pump Station Elevator (Manlift)

Manlift installed in 1970

Time lapse of 55 years





| Project Description | Estimated Implementation Year(s) | Net Useful Life/ Extended Life | Estimated Cost |
|------------------------------------------------------|----------------------------------------|-----------------------------------|----------------|
| New Dewatering System | 2026 - 2027 | 20 years | \$600,000 |
| Concrete Tanks Restoration | 2026 - 2029 | 50 years | \$895,000 |
| Process Blowers Replacement | 2026 - 2029 | 20 years | \$585,000 |
| Collection System and Manhole Restoration and Lining | 2026 - 2029 | 40 years | \$1,400,000 |
| Electrical Control Center Replacement | 2027-2029 | 30 years | \$1,550,000 |
| Effluent Structure Replacement | 2028 - 2029 | 40 years | \$150,000 |
| Administration HVAC Replacement | 2029 | 15 years | \$200,000 |
| Replacement of Manlift | 2030 | 40 years | \$620,000 |

Total Estimated Cost: \$6,000,000

