



CITY COUNCIL AGENDA

CITY OF NOVI
Regular City Council Meeting

March 24, 2025 | 7:00 PM

Council Chambers | Novi Civic Center | 45175 Ten Mile Road
(248) 347-0460

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL – Mayor Fischer, Mayor Pro Tem Casey, Council Members Gurumurthy, Heintz, Smith, Staudt, Thomas

APPROVAL OF AGENDA

PUBLIC HEARINGS

- [1.](#) Proposed vacation of a portion of Gen Mar Drive

PRESENTATIONS

REPORTS

1. Manager/Staff
2. Attorney

AUDIENCE COMMENT – In order to hear all citizen comments at a reasonable hour, the City Council requests that speakers respect the three-minute time limit. This is not a question-answer session. However, it is an opportunity to voice your thoughts with City Council. Speakers wishing to display visual materials through the City's audiovisual system must provide the materials to the City Clerk's Office no later than 12:00 P.M. the day of the meeting. The materials cannot be changed before the meeting.

CONSENT AGENDA REMOVALS AND APPROVALS – All items listed under Consent Agenda are considered routine by the City Council and will be enacted by one motion. There will be no separate discussion of these items unless a Council Member so requests, in which event the item will be removed from the Consent Agenda and considered at the end of the normal Agenda.

MATTERS FOR COUNCIL ACTION

- [1.](#) Consideration of approval of a contract to CSM Mechanical, LLC., for an emergency repair of the Drakes Bay Sanitary Lift Station in the amount of \$161,967.
- [2.](#) Consideration to approve a Resolution to vacate a portion of Gen Mar Drive north of Ten Mile Road and west of Novi Road, and consideration to approve the Act 51 Resolution to decertify/vacate a portion of Gen Mar Drive, removing 0.292 miles of roadway from the City's public street system.

CONSENT AGENDA REMOVALS FOR COUNCIL ACTION – Consent Agenda items which have been removed for discussion and/or action.

AUDIENCE COMMENT – In order to hear all citizen comments at a reasonable hour, the City Council requests that speakers respect the three-minute time limit. This is not a question-answer session. However, it is an opportunity to voice your thoughts with City Council. Speakers wishing to display visual materials through the City's audiovisual system must provide the materials to the City Clerk's Office no later than 12:00 P.M. the day of the meeting. The materials cannot be changed before the meeting.

COMMITTEE REPORTS

1. Environmental Sustainability Committee - Councilmember Smith
2. Consultant Review Committee - Councilmember Staudt

MAYOR AND COUNCIL ISSUES

COMMUNICATIONS

CONSENT AGENDA – Background information for Consent Agenda items is available for review at the City Clerk's Office.

- A. Approve Minutes of:
 - March 3, 2025 - Special Meeting
 - March 10, 2025 - Regular Meeting
- B. Approval of request for Pyrotechnics Display Permit by Brightmoor Christian Church to be operated by James Herr, from April 7, 2025 to April 13, 2025
- C. Adoption of a Resolution requesting the Michigan Department of Transportation (MDOT) include the existing bridge on Ashbury Drive over the Middle Branch of the Rouge River in the State Local Bridge Program List for Replacement. If MDOT selects the bridge, the City of Novi will accept 100% of the design engineering costs and 5% of the total construction cost.
- D. Approval to purchase ASHRAE Level II energy audits through Information & Energy Services, Inc. in the amount of \$28,917, and amend the budget.
- E. Approval of claims and warrants – Warrant 1176

ADJOURNMENT

SCHEDULED MEETINGS – All Regular Council meetings are held in the Council Chambers unless otherwise noted. For a complete listing of scheduled meetings, please visit the Event Calendar at cityofnovi.org.

NOTICE: *People with disabilities needing accommodations for effective participation in this meeting should contact the City Clerk (248) 347-0456 at least two working days in advance of the meeting. An attempt will be made to make reasonable accommodations.*

CITY OF NOVI NOTICE OF PUBLIC HEARING PROPOSED VACATION OF A PORTION OF GEN MAR DRIVE NORTH OF TEN MILE ROAD AND WEST OF NOVI ROAD.

NOTICE IS HEREBY GIVEN that the City of Novi Council will hold a public hearing on Monday, March 24, 2025, at 7:00 p.m., or as soon thereafter as the same may be reached, on the proposed vacating of a portion of Gen-Mar Drive, located north of Ten Mile Road and west of Novi Road.

NOTICE IS FURTHER GIVEN that this hearing will be held in the Council Chambers of the Novi Civic Center, 45175 W. Ten Mile Road, Novi, Michigan. All interested persons will be heard at this Hearing.



Questions regarding this matter may be directed to the City Clerk: 248-347-0456.

CORTNEY HANSON
CITY CLERK

PUBLISH: 3/13/2025

LV-41348693



CITY OF NOVI CITY COUNCIL
MARCH 24, 2025

SUBJECT: Consideration of approval of a contract to CSM Mechanical, LLC., for an emergency repair of the Drakes Bay Sanitary Lift Station in the amount of \$161,967.50.

SUBMITTING DEPARTMENT: Department of Public Works, Engineering Division

KEY HIGHLIGHTS:

- A vehicle jumped the curb and struck the station, severely damaging most of the operating components on February 16.
- Issued CSM Mechanical a PO in the amount of \$9,706.00 to construct a temporary control panel to more safely operate the station.
- 12-to-16-week lead-time on permanent station controls.
- Clerk's Office is working with the insurance companies to get these costs reimbursed.

	FY 2024/25
EXPENDITURE REQUIRED	\$ 161,967.50
BUDGET	
Water & Sewer Fund 592-536.00-976.241	\$ 171,674.00
APPROPRIATION REQUIRED	\$ 0
FUND BALANCE IMPACT	\$ 0
The inspection and coordination of the station will be handled internally by City DPW-Water & Sewer staff.	

BACKGROUND INFORMATION:

At 2:00 am on Sunday, February 16, Novi Police and DPW-Water & Sewer personnel received notification that the Drakes Bay Sanitary Lift Station had been struck by a vehicle, yielding severe damage to the station and a loss of power. Immediately following, DPW-Water & Sewer staff re-energized the station with generators and

assembled some makeshift float controls and alarms to keep the station up and running.

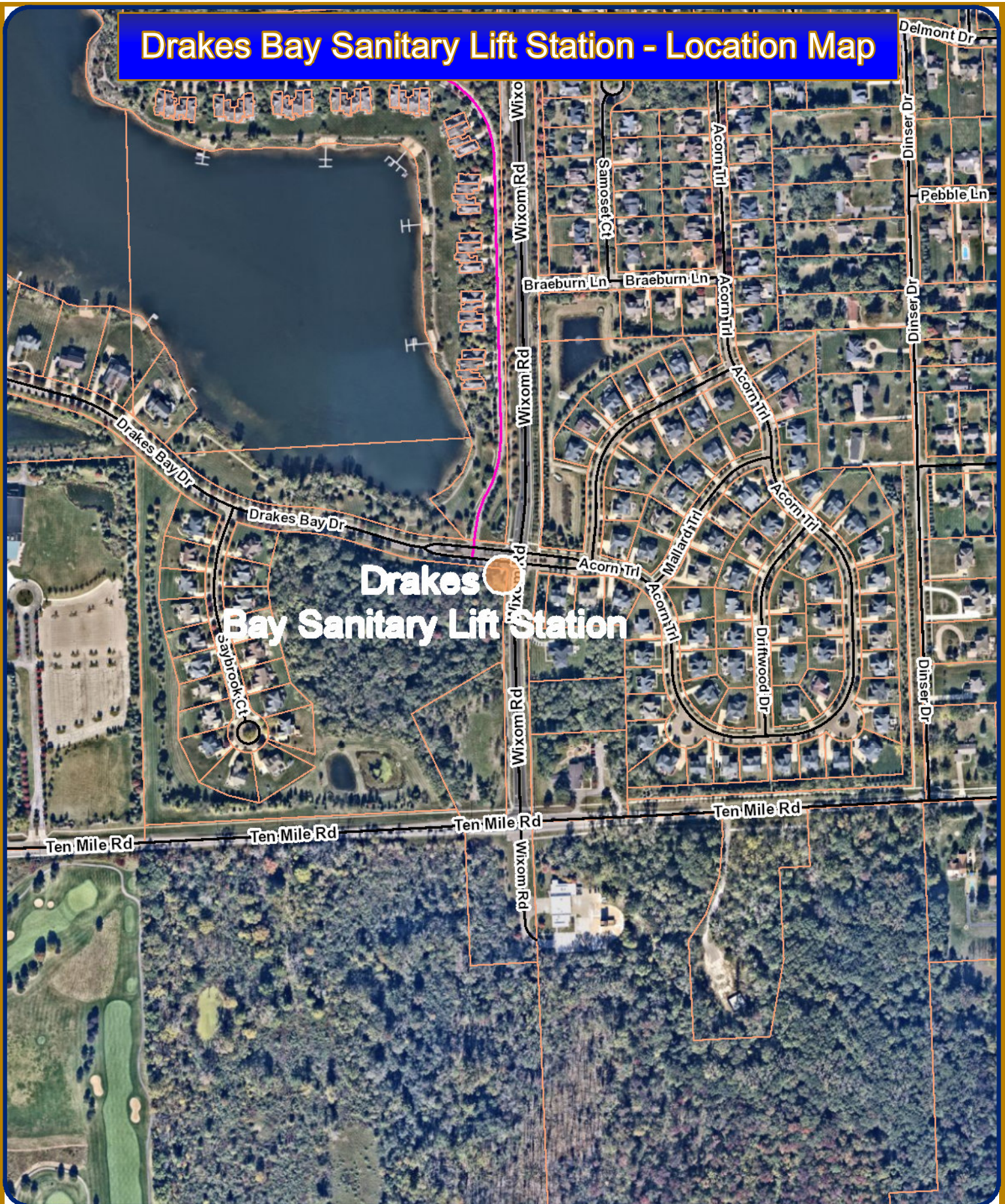
Having worked successfully with CSM Mechanical, LLC (CSM) on the Garfield, Wixom, and Drakes Bay Sanitary Lift Stations months prior to this incident, staff utilized their resources again due to the emergency nature of the work. Staff met with CSM on site to determine the extent of the damage and the best course of action moving forward. City staff issued CSM a purchase order in the amount of \$9,706.00 to construct a temporary control panel to safely operate the station; have the ability to construct the permanent controls offline; and buy time for a 12-to-16-week lead time on the permanent control cabinet.

Attached is the quote from CSM to fully rework the station with a new permanent control panel, wiring and primary power rerouting, new telemetry and communication hardware; and new outer panels/skins for the existing natural gas generator. CSM was given authorization to proceed with ordering the new panel now in order to lessen the amount of lead time for delivery.

In the meantime, the Clerk's Office has been in direct communication with the City's and vehicle owners' insurance companies for reimbursement of some or all related costs. The City's internal Engineering, Water and Sewer, and Building Inspector staff will coordinate and inspect this rework, eliminating the need for consultants.

RECOMMENDED ACTION: Approval of a contract to CSM Mechanical, LLC,. for an emergency repair of the Drakes Bay Sanitary Lift Station in the amount of \$161,967.50.

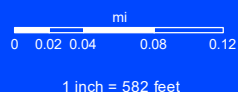
Drakes Bay Sanitary Lift Station - Location Map



MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi.

Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.



Map Print Date:
3/11/2025



City of Novi

45175 Ten Mile Rd
Novi, MI 48375
cityofnovi.org



March 10, 2025

City of Novi
45175 W. Ten Mile Road
Attn: Purchasing Department
Novi, MI 48375

ATTENTION: Scott Roselle and Aaron Staup

Quotation No.: CSM 2670

SUBJECT: Drakes Bay Dr. Pump Station EMERGENCY Repair

CSM Mechanical, LLC is pleased to provide a proposal for City of Novi in Novi, MI.

OUR PROPOSAL INCLUDES:

Pump Station Repair \$161,967.50

- Provide skilled labor, material, equipment, and consumables necessary to repair the damaged Drake's Bay pump Station in Novi, Michigan, including jobsite mobilization, supervision and demobilization.
- Removal of existing control panel that was damaged by a vehicle incident.
- Provide one (1) EXPEDITED new pump station control panel, including the procurements, placements, and installation of the low-voltage wiring/controls and the primary power routing/terminations.
- Install one (1) temporary panel for the station operation during panel replacement operations.
- Provide confined space equipment deployment, entry and competent person supervision for float installation to temporary panel and new panel.
- Provide check, test, and start-up.
- Provide Sky-Track deployment, pickup, and delivery for panel replacement/placement rigging services.
- Provide New Generator Skins in place of Damaged Skins from the accident.

Material Description	Qty	Unit Price	Subtotal
Vehicle / Tool Allowance	5	\$85.00	\$425.00
Confined Space Equipment Rental (daily)	5	\$312.50	\$1,562.50
Mattic Electric, Temp Panel install, Demo of Damaged electrical equipment, conduit, wiring, and install new equipment and rack as required plus New Generator Skins from American Generator	1	\$82,955.50	\$82,955.50
Control Panel Provided by Kennedy Industries	1	\$58,069.50	\$58,069.50
CSM Skytrack/Rigging	1	\$975.00	\$975.00
Misc. Mechanical Material	1	\$1,300.00	\$1,300.00
Material Total			\$145,287.50

Labor	Qty	Unit Price	Subtotal
Mechanical Labor: 3 Men - 5 Days	120	\$125.00	\$15,000.00
Project Management / Coordination	12	\$140.00	\$1,680.00
		Labor Total	\$16,680.00

OUR PROPOSAL TO PROVIDE THE ABOVE SERVICES IS:
\$161,967.50

QUALIFICATIONS:

- State and/or Federal taxes have been included in this proposal
- Electrical power and/or interlock wiring has been excluded from this proposal
- Mechanical insulation of any sort has been excluded from this proposal
- Mechanical permits, licensing fees and/or inspections have been excluded from this proposal

This proposal is based on LUMP SUM billing practices with payment terms of Net (30) days per occurrence and straight time working hours, Monday through Friday, 7:00 am until 3:30 pm.

This quotation is valid for thirty (30) days. The proposed work will begin upon receipt of signed proposal.

If you have any further questions regarding the above proposal, please do not hesitate to contact our office at your earliest convenience.

Respectfully,
Craig Mortz
CSM Mechanical, LLC

“Relentlessly Helping Our Customers Achieve Success by Being an Integral, Caring and Innovative Mechanical Solutions Provider.”

1235 Holden Ave, Milford , MI 48381 (248) 302-2078



CITY OF NOVI CITY COUNCIL
MARCH 24, 2025

SUBJECT: Consideration to approve a Resolution to vacate a portion of Gen Mar Drive north of Ten Mile Road and west of Novi Road, and consideration to approve the Act 51 Resolution to decertify/vacate a portion of Gen Mar Drive, removing 0.292 miles of roadway from the City's public street system.

SUBMITTING DEPARTMENT: Department of Public Works, Engineering Division

KEY HIGHLIGHTS:

- A dead end was created following construction of the bridge over the railroad.
- The City would like to exclude this segment of Gen Mar Drive from future maintenance.
- Conveying this ROW to the adjoining parcel to the north would maintain appropriate access for that parcel.
- An Act 51 resolution is required to remove this portion of the street from the City's public street system and for purposes of Act 51 funding.

BACKGROUND INFORMATION:

Scores Livonia LLC has requested that the City vacate and convey that portion of Gen Mar Drive that is south of its Parcel 22-22-276-003 (north of the bridge on Novi Road crossing the CSX railroad). The 2012 construction of the Novi Road bridge over the railroad created a dead-end on Gen Mar, which was then rerouted further south on Novi Road. The subject portion of Gen Mar Drive is not necessary for the purpose of providing access to any other parcel on Gen Mar Drive. Parcel 22-22-276-017, which is on the south side of the area proposed for vacation, has access to its parcel from its west and south sides along the remaining portion of Gen Mar Drive.

DPW sees no public benefit to continuing to maintain that portion of Gen Mar Drive south of 22-22-276-003. The City will retain a utility easement over the vacated ROW as shown in the attached Resolution for the City's water main and other public utilities. Since the public street was not designed as a part of a plat, but was conveyed to the City by a deed, the vacated land does not automatically go to the adjacent property owner.

Additionally, the enclosed Act 51 resolution satisfies the Michigan Department of Transportation requirement for removing 0.292 miles of roadway from Act 51 funding. The City Council has been asked to consider the draft resolutions to vacate the above-described portion of Gen Mar Drive.

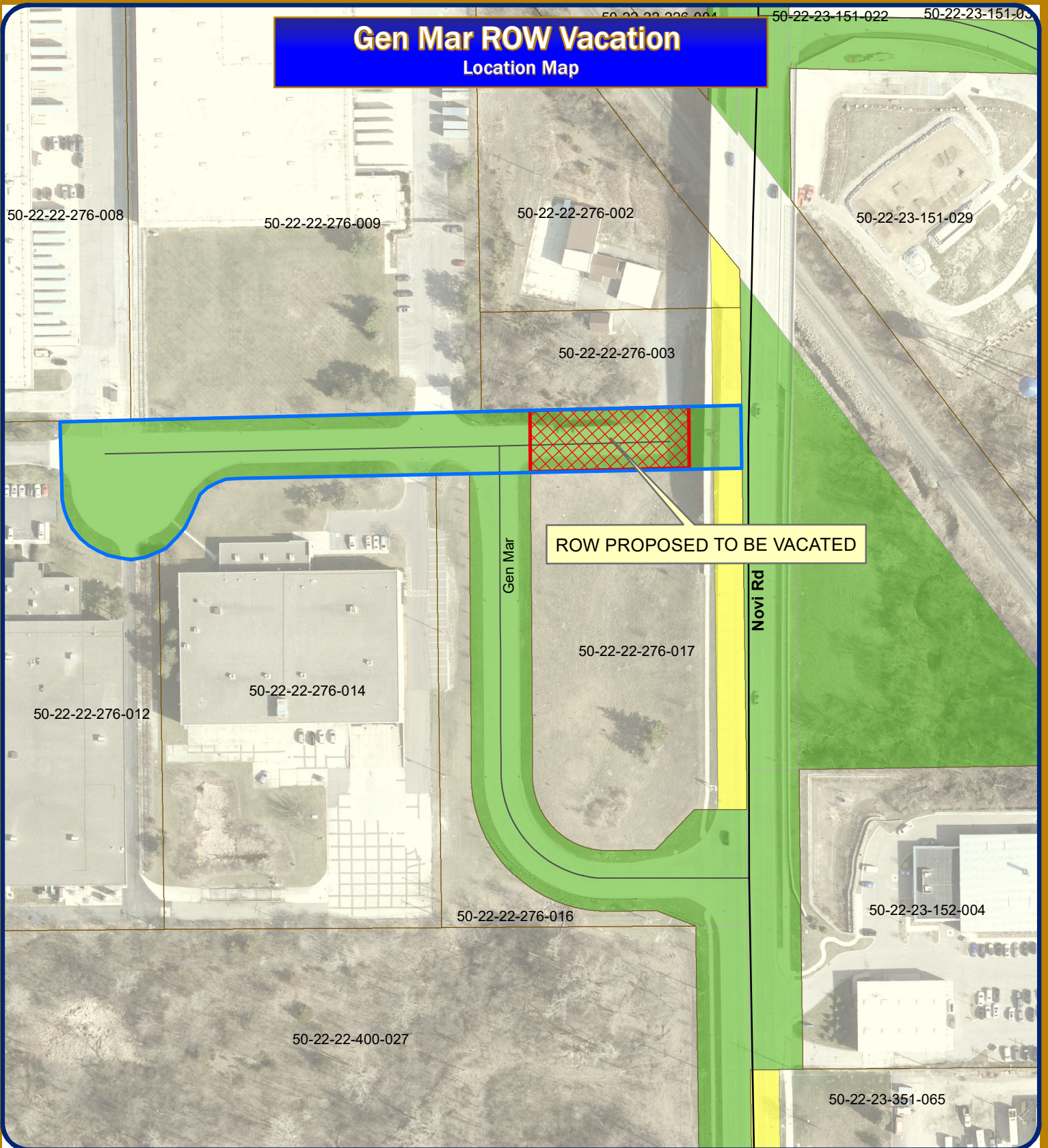
Procedure for Street Vacation

Section 7.6 of the City Code provides the procedure for vacating public streets:

- (a) Action to Vacate Public Places. Action to vacate, discontinue or abolish any highway, street land, alley or other public place, or part thereof, shall be by resolution. After the introduction of such a resolution and before its final adoption, the Council shall hold a public hearing thereon and shall publish notice of such hearing at least one week prior thereto.

RECOMMENDED ACTION: Approval of a Resolution to vacate a portion of Gen Mar Drive north of Ten Mile Road and west of Novi Road, and approval of the Act 51 decertification/vacation of a portion of Gen Mar Drive, removing 0.292 miles of roadway from the City's public street system.

Gen Mar ROW Vacation Location Map



ROW PROPOSED TO BE VACATED

Map Author: Croy
Date: Jan 2025
Project: Gen Mar ROW
Version #: v1.4

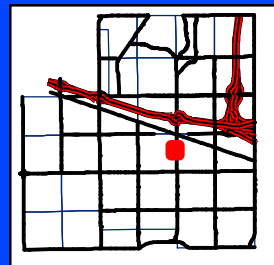
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Map Legend

Right of Way

- Dedicated
- Prescriptive
- Private



City of Novi

Engineering Division
Department of Public Works
26300 Lee BeGole Drive
Novi, MI 48375
cityofnovi.org

Feet
0 30 60 120 180
1 inch = 150 feet



ELIZABETH KUDLA SAARELA
esaarela@rsjalaw.com

27555 Executive Drive, Suite 250
Farmington Hills, Michigan 48331
P 248.489.4100 | F 248.489.1726
rsjalaw.com



ROSATI | SCHULTZ
JOPPICH | AMTSBUECHLER

March 14, 2025

Ben Croy, City Engineer
City of Novi
Department of Public Works
Field Services Complex
26300 Lee BeGole Drive
Novi, MI 48375

Re: Gen Mar Drive Vacation

Dear Mr. Croy:

Attached please find the following documents required to vacate a portion of Gen Mar Drive:

1. Resolution Vacating a Portion of a Public Street Known as Gen-Mar Drive in the City of Novi
2. Resolution for Decertification/Vacation of Right-of-Way
3. Quit Claim Deed

Procedure to Vacate Public Right-of-Way

The property owner to the north of the portion of Gen Mar Drive that is the subject of the attached Resolutions has requested that the City vacate and convey that portion of Gen Mar Drive that is south of its Parcel 22-22-276-003. The City's Engineering Division has confirmed that portion of Gen Mar Drive is not necessary for the purpose of providing access to any other parcel on Gen Mar Drive.

Section 7.6 of the Charter sets forth the required process for vacation of a street or alley:

- (a) Action to Vacate Public Places. Action to vacate, discontinue or abolish any highway, street, lane, alley, or other public place, or part thereof, shall be by resolution. After the introduction of such resolution and before its final adoption, the Council shall hold a public hearing thereon and shall publish notice of such hearing at least one week prior thereto.
- (b) Action Requiring Affirmative Vote of Five (5) Members of Council. The following action shall require the affirmative vote of five members of the Council for the effectiveness thereof:
 - (1) Vacating, discontinuing or abolishing any highway, street, lane, alley or other public place or part thereof:

If City Council decides to vacate the right-of-way after holding a public hearing, the Resolution Vacating a Portion of a Public Street Known as Gen-Mar Drive in the City of Novi should be signed and recorded with the Oakland County Register of Deeds. The Resolution for Decertification/Vacation of Right-of-Way should be filed with MDOT. Once vacated, the City may quit claim the vacated right-of-way to the applicant, subject to the retained utility easement described in the attached Quit Claim Deed and Resolution. The Quit Claim Deed may also be recorded with the Register of Deeds in the usual manner.

If you have any questions regarding the above, please do not hesitate to contact me.

Very truly yours,

ROSATI SCHULTZ JOPPICH
& AMTSBUECHLER PC



Elizabeth Kudla Saarela

Enclosure

C: Cortney Hanson, Clerk (w/Enclosure)
Jeffrey Herczeg, Director of Public Works (w/Enclosure)
Rebecca Runkel, Project Engineer (w/Enclosure)
Thomas R. Schultz, Esquire (w/Enclosure)

QUIT CLAIM DEED

KNOW ALL PERSONS that, for \$1.00, the City of Novi, a Michigan Municipal Corporation, whose address is 45175 Ten Mile Road, Novi Michigan, 48375, ("Grantor"), Quit Claim(s) to Scores Livonia LLC, a Michigan limited liability company, whose address is 22643 Foxmoor Dr., Novi, MI 48374, the following described premises situated in the City of Novi, County of Oakland, State of Michigan, to-wit:

LEGAL DESCRIPTION, ATTACHED AS "EXHIBIT A," INCORPORATED BY REFERENCE HEREIN

Reserving a Utility Easement, described as:

Commencing at a point distant N0°23'56"E 523.76 feet from the E ¼ corner of Section 22, T.1N., R.8E., City of Novi, Oakland County, Michigan, thence S89°56'53"W 60.00 feet to the west right of way line for Novi Road to the point of beginning, thence S89°56'53"W 181.86 feet along the north line of parcel 22-22-276-017, thence N0°45'22"E 70.00 feet to the south line of parcel 22-22-276-003, thence N89°56'56"E 181.42 feet along the south line of parcel 22-22-276-003 to the west right of way line for Novi Road, thence S0°23'56"W 70.00 feet along the west right of way line for Novi Road to the point of beginning and containing 0.292 acres of land more or less.

Grantor reserves a nonexclusive perpetual easement for public utilities, to install, repair, replace, improve, modify and maintain the public utility, and all necessary appurtenances thereto, within the easement herein granted over, upon, across, in, through, and under the above described real property and to enter upon sufficient land adjacent to said public utility easement for the purpose of exercising the rights and privileges granted herein.

Grantor agrees not to build or to convey to others permission to build any permanent structures on, over, across, in, through, or under the above-described easement, except that, subject to Grantee's approval as part of an approved site plan, the Grantor may construct and/or install surface improvements to the property, including paved driveways, parking and/or walkways; landscaping; utilities and/or similar improvements, which improvements do not interfere with use, operation, maintenance, repair and replacement of the all utilities in the easement area described above.

If this parcel is unplatted, the following applies: The grantor grants to the grantee the right to make 0 divisions under section 108 of the land division act, Act No. 288 of the Public Acts of 1967, as amended. This property may be located within the vicinity of farmland or a farm operation. Generally accepted agricultural and management practices which may generate noise, dust, odors and other associated conditions may be used and are protected by the Michigan right to farm act.

Exempt from county and state taxation pursuant to MCL 207.505(a) and MCL 207.526(a).

WHEREFORE, upon approval by the City of Novi, City Council, the undersigned Grantor hereby creates, confirms, and conveys the Quit Claim Deed described herein for the sum of \$1.00.

Dated this _____ day of _____ 2025.

GRANTOR:
THE CITY OF NOVI, a Michigan municipal corporation

Justin Fischer, Mayor

Cortney Hanson, Clerk

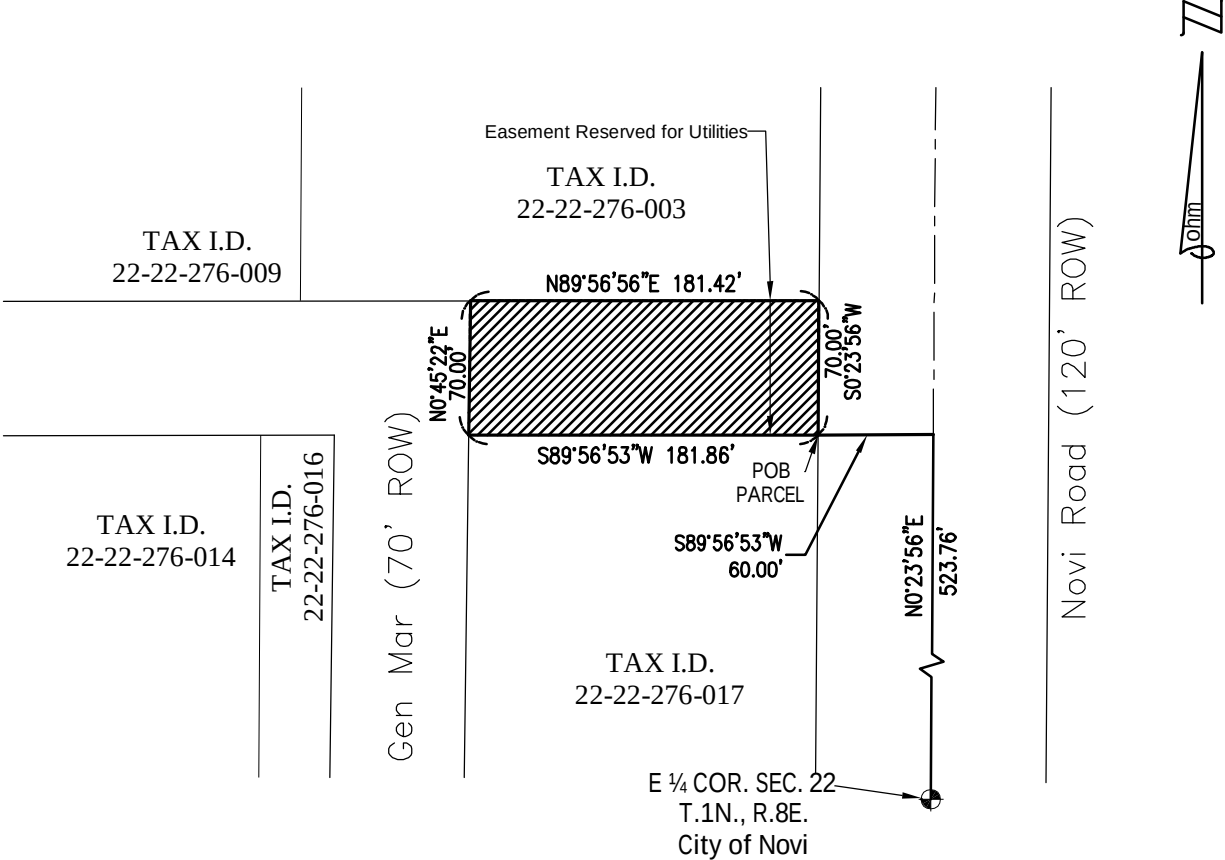
COUNTY OF OAKLAND)
) ss.
STATE OF MICHIGAN)

On this _____ day of _____ 2025, Justin Fischer, Mayor, and Cortney Hanson, Clerk, executed the foregoing document before me and, being duly sworn, on behalf of the City of Novi with its full authority and as its free act and deed.

Notary Public
Acting in Oakland County, Michigan
My commission expires: _____

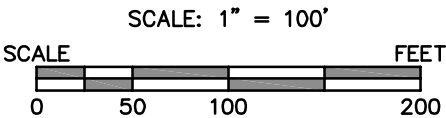
EXHIBIT A

EXHIBIT A SKETCH AND DESCRIPTION



LEGEND

ROW	RIGHT-OF-WAY
POB	POINT OF BEGINNING
Utility Easement	



PARCEL DESCRIPTION:

A parcel of land, being a part of the NE ¼ of Section 22, T.1N., R.8E., City of Novi, Oakland County, Michigan, being described as follows:

Commencing at a point distant N0°23'56"E 523.76 feet from the E ¼ corner of Section 22, T.1N., R.8E., City of Novi, Oakland County, Michigan, thence S89°56'53"W 60.00 feet to the west right of way line for Novi Road to the point of beginning, thence S89°56'53"W 181.86 feet along the north line of parcel 22-22-276-017, thence N0°45'22"E 70.00 feet to the south line of parcel 22-22-276-003, thence N89°56'56"E 181.42 feet along the south line of parcel 22-22-276-003 to the west right of way line for Novi Road, thence S0°23'56"W 70.00 feet along the west right of way line for Novi Road to the point of beginning and containing 0.292 acres of land more or less.

UTILITY EASEMENT DESCRIPTION:

The entire parcel described above is subject to a utility easement containing 0.292 acres of land more or less.

SKETCH AND DESCRIPTION A PARCEL OF LAND SITUATED IN THE NE 1/4 OF SECTION 22 T.1N., R.8E., NOVI TOWNSHIP, OAKLAND COUNTY, MICHIGAN			SCALE H: 1"=100'
			SHEET 1 OF 1
DATE: 02-06-2025	CLIENT: CITY OF NOVI	JOB # 0163-24-0011	
34000 Plymouth Road Livonia, MI 48150 P (734) 522-6711 F (734) 522-6427 WWW.OHM-ADVISORS.COM			
COPYRIGHT 2024 OHM ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF OHM AND THE SAME MAY NOT BE DUPLICATED, DISTRIBUTED, OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF OHM			



CITY OF NOVI

OAKLAND COUNTY, MICHIGAN

RESOLUTION VACATING A PORTION OF A PUBLIC STREET
KNOWN AS GEN-MAR DRIVE
IN THE CITY OF NOVI

At a meeting of the City Council of the City of Novi, Oakland County, Michigan, held on March __, 2025, at the City Hall, 45175 Ten Mile Road, Novi, Michigan 48375.

WHEREAS, the Novi City Council held a public hearing on _____, 2025, to consider and hear objections to the proposed vacation of a portion of a public road known as Gen-Mar Drive with the City of Novi, County of Oakland, State of Michigan, and legally described as:

A parcel of land, being a part of the NE 1/4 of Section 22, T.1N., R.8E., City of Novi, Oakland County, Michigan, being described as follows:

Commencing at a point distant NO°23'56"E 523.76 feet from the EIA corner of Section 22, T.1N., R.8E., City of Novi, Oakland County, Michigan, thence S89°56'53"W 60.00 feet to the west right of way line for Novi Road to the point of beginning, thence S89°56'53"W 181.86 feet along the north line of parcel 22-22-276-017, thence NO°45'22"E 70.00 feet to the south line of parcel 22-22-276-003, thence N89°56'56"E 181.42 feet along the south line of parcel 22-22-276-003 to the west right of way line for Novi Road, thence S0°23'56"W 70.00 feet along the west right of way line for Novi Road to the point of beginning and containing 0.292 acres of land more or less.

WHEREAS, the portion of Gen-Mar Drive is not within a platted subdivision, but is owned by the City in fee simple title, and the City Council has the jurisdiction and authority to vacate such portion of road; and

WHEREAS, the Novi City Council is satisfied that the described portion of such road may be vacated without any adverse effects on the public health, safety, and/or welfare, subject to the reservation of an easement under the vacated road for utilities;

NOW, THEREFORE, IT IS HEREBY RESOLVED by the Novi City Council that:

1. The portion of that certain road known as Gen-Mar Drive located in the City of Novi, County of Oakland, State of Michigan, and legally described as follows:

Commencing at a point distant N0°23'56"E 523.76 feet from the E ¼ corner of Section 22, T.1N., R.8E., City of Novi, Oakland County, Michigan, thence S89°56'53"W 60.00 feet to the west right of way line for Novi Road to the point of beginning, thence S89°56'53"W 181.86 feet along the north line of parcel 22-22-276-017, thence N0°45'22"E 70.00 feet to the south line of parcel 22-22-276-003, thence N89°56'56"E 181.42 feet along the south line of parcel 22-22-276-003 to the west right of way line for Novi Road, thence S0°23'56"W 70.00 feet along the west right of way line for Novi Road to the point of beginning and containing 0.292 acres of land more or less.

shall be and hereby is vacated.

2. The City hereby reserved the following Utility Easement:

Commencing at a point distant N0°23'56"E 523.76 feet from the E ¼ corner of Section 22, T.1N., R.8E., City of Novi, Oakland County, Michigan, thence S89°56'53"W 60.00 feet to the west right of way line for Novi Road to the point of beginning, thence S89°56'53"W 181.86 feet along the north line of parcel 22-22-276-017, thence N0°45'22"E 70.00 feet to the south line of parcel 22-22-276-003, thence N89°56'56"E 181.42 feet along the south line of parcel 22-22-276-003 to the west right of way line for Novi Road, thence S0°23'56"W 70.00 feet along the west right of way line for Novi Road to the point of beginning and containing 0.292 acres of land more or less.

A nonexclusive perpetual easement for public utilities, to install, repair, replace, improve, modify and maintain the public utility, and all necessary appurtenances thereto, within the easement herein granted. over, upon, across, in, through, and under the above described real property and to enter upon sufficient land adjacent to said public utility easement for the purpose of exercising the rights and privileges granted herein.

3. The City Clerk shall record a certified copy of this Resolution with the Oakland County Register of Deeds, and shall file a copy of this Resolution with the office of the Michigan State Treasurer.

4. The vacation shall be effective on the date this Resolution is recorded with the Oakland County Register of Deeds, and upon the vacation of the portion of such road becoming effective, the portion of such road shall be removed from the street plan map and any other official maps or street plans for the City of Novi.

STATE OF MICHIGAN)

COUNTY OF OAKLAND)ss.
)

I, CORTNEY HANSON, the duly-qualified Clerk of the City of Novi, Oakland County, Michigan, do hereby certify that the foregoing is an a true and complete copy of a Resolution adopted by the City Council of the City of Novi with at least five (5) affirmative votes, at a duly-called meeting held on _____, 2025, a copy of which is on file in my office.

CORTNEY HANSON
Clerk, City of Novi

This Resolution was signed and acknowledged before me on _____, 2025 by CORTNEY HANSON, the duly-authorized Clerk for the City of Novi, a Michigan municipal corporation.

Notary Public, Oakland County, Michigan
My Commission Expires:_____

Recording Fee: \$____.00

Not Subject to Transfer Taxes: MCL 207.502 and MCL 207.523

PREPARED BY
THOMAS R. SCHULTZ (P42111)
ROSATI, SCHULTZ, JOPPICH
& AMTSBUECHLER
27555 EXECUTIVE DRIVE
STE 250
FARMINGTON HILLS, MI 48331

UPON RECORDING RETURN TO:
CORTNEY HANSON, CITY CLERK
45175 Ten Mile
Novi, MI 48375

CITY OF NOVI
COUNTY OF OAKLAND, MICHIGAN

RESOLUTION

DECERTIFICATION/VACATION OF RIGHT-OF-WAY

A portion of Gen Mar Drive

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 March 24, 2025, at 7:00 o'clock P.M. Prevailing Eastern Time.

PRESENT: Councilmembers_____

ABSENT: Councilmembers_____

The following preamble and Resolution were offered by Councilmember _____ and supported by Councilmember _____.

WHEREAS; the City's Act 51 Program Manager is requesting formal decertification/vacate a portion of Gen Mar Drive and,

WHEREAS; that a total decertification/vacation length of .03 miles of roadway shall be removed from the City's public street system, in the location set forth in the attached Exhibit A.

NOW THEREFORE, IT IS THEREFORE RESOLVED that the Mayor and Novi City Council hereby decertify/vacate a portion of right-of-way on Gen Mar Drive and direct such to be removed from the City's public street system.

AYES:

NAYS:

RESOLUTION DECLARED ADOPTED.

Cortney Hanson, City Clerk

CERTIFICATION

I hereby certify that the foregoing is a true and complete copy of a resolution adopted by the City Council of the City of Novi, County of Oakland, and State of Michigan, at a regular meeting held this 24th day of March, 2025 and that public notice of said meeting was given pursuant to and in full compliance with Act No. 267, Public Acts of Michigan, 1976, and that the minutes of said meeting have been kept and made available to the public as required by said Act.

Cortney Hanson, City Clerk
City of Novi

**SPECIAL MEETING OF THE COUNCIL OF THE CITY OF NOVI
MONDAY, MARCH 3, 2025, AT 7:00 P.M.**

Mayor Fischer called the meeting to order at 5:30 P.M.

PLEDGE OF ALLEGIANCE

ROLL CALL: Mayor Fischer, Mayor Pro Tem Casey, Council Members Gurumurthy, Heintz, Smith, Staudt, Thomas

ALSO PRESENT: Victor Cardenas, City Manager
Danielle Mahoney, Assistant City Manager

APPROVAL OF AGENDA:

CM 25-03-27 Moved by Casey, seconded by Thomas; MOTION CARRIED: 7-0

To approve the agenda as presented.

Roll call vote on CM 25-03-27	Yeas: Casey, Gurumurthy, Heintz, Smith, Staudt, Thomas, Fischer
	Nays: None

PURPOSE OF SPECIAL MEETING: City Council Workshop Session

Long Range Strategic Foresight Workshop "The Big Sort" with Futurist Rebecca Ryan

City Council and City staff explored long-term trends, uncertainties, and potential scenarios that may impact Novi by 2050. They discussed cognitive bias, then analyzed and ranked emerging trends based on their potential impact and Novi's readiness.

AUDIENCE COMMENTS: None

ADJOURNMENT – There being no further business to come before Council, the meeting was adjourned at 7:52 P.M.

Cortney Hanson, City Clerk

Justin Fischer, Mayor

Transcribed by Becky Dockery,
Account Clerk

Date approved: March 10, 2025

**REGULAR MEETING OF THE COUNCIL OF THE CITY OF NOVI
MONDAY, MARCH 10, 2025, AT 7:00 P.M.**

Mayor Fischer called the meeting to order at 7:00 P.M.

PLEDGE OF ALLEGIANCE

ROLL CALL: Mayor Fischer, Mayor Pro Tem Casey, Council Members Gurumurthy, Heintz, Smith, Staudt, Thomas

ALSO PRESENT: Victor Cardenas, City Manager
Danielle Mahoney, Assistant City Manager
Elizabeth Saarela, City Attorney

APPROVAL OF AGENDA:

CM 25-02-28 Moved by Casey, seconded by Smith; MOTION CARRIED: 7-0

To approve the agenda as presented.

Roll call vote on CM 25-02-28	Yeas: Casey, Gurumurthy, Heintz, Smith, Staudt, Thomas, Fischer Nays: None
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PUBLIC HEARINGS: None

PRESENTATIONS: None

CITY MANAGER REPORT: None

ATTORNEY REPORT: None

AUDIENCE COMMENTS:

Ryan Husaynu, an attorney who is located at 401 S. Old Woodward Suite 40 in Birmingham, was present to talk about Cantaritos Fiesta Mexican Restaurant which is going into the old Chili's location. Also present were Cantaritos' owners Victor Vasques, Fernando Herrera, Roberto Torrios and his wife Maribel. They're excited to have the liquor license transfer and to being open. The restaurant offers authentic, fresh Mexican food and great drinks. One of the Council members has been to the location in Royal Oak. They are excited to be in Novi and look forward to opening.

CONSENT AGENDA REMOVALS AND APPROVALS:

- A. Approve Minutes of: February 24, 2025 - Regular Meeting
- B. Approval of a resolution to increase the marriage ceremony fee from \$50 to \$100
- C. Approval to move the June 16, 2025 Council meeting to Monday, June 23, 2025.
- D. Approval of a Resolution to close Meadowbrook Road from 25075 Meadowbrook to Ten Mile and close 10 Mile Road from Meadowbrook to the Civic Center at 45175 Ten Mile Road for the 2025 Memorial Day Parade from 10:00 AM to 12:00 PM on Monday, May 26, 2025.

- E. Approval to modify the Memorandum of Understanding to provide accounts payable and light accounting services to Michigan High Intensity Drug Trafficking Areas (HIDTA) and authorize the Mayor to sign a Memorandum of Understanding after review and final approval of the City Attorney and City Manager.
- F. Consideration of request to transfer ownership of an existing Class C Resort liquor license from Brinker Michigan, Inc. to Cantaritos Fiesta Mexican Restaurant, LLC, located at 20901 Haggerty Road, Novi, MI 48375.
- G. Enter Executive Session immediately following the regular meeting of March 10, 2025, in the Council Annex for confidential written correspondence from legal counsel and to discuss union negotiations.
- H. Approval of claims and warrants – Warrant 1175

CM 25-02-29 Moved by Casey, seconded by Smith; MOTION CARRIED: 7-0

To approve the consent agenda as presented.

Roll call vote on CM 25-02-29

**Yeas: Gurumurthy, Heintz, Smith, Staudt,
Thomas, Fischer, Casey**

Nays: None

MATTERS FOR COUNCIL ACTION:

- 1. Consideration to adopt a resolution placing a question on the August 2025 ballot whether to authorize the City to issue bonds and levy a new millage specific to the acquisition, construction, and rehabilitation of public safety facilities.**

City Manager Cardenas said they've been down a long road to get to this path and a lot of work has been done. He wanted to thank all of his colleagues and their partners with Plante Moran Realpoint. Three representatives from three different consultants that have help the City get to this consideration. They have a quick presentation that has already been shared earlier to hopefully get them to the point where they can address any questions Council may have to ultimately get this on the ballot for the August election.

Todd Fenton, Plante Moran Realpoint, was also present at the January special meeting, said their job was to aggregate a lot of the information that the City, some of the City's consultants and Redstone Architects had compiled and, in their review, determine whether those recommendations for the new public safety facilities were reasonable. As was pointed out in their first presentation, the current facilities were built when the population of Novi was 20,000 and it has nearly tripled since then. They also added a facility assessment of these building to their scope and determined that their recommendation was that it made more sense to build new than to try to renovate or repurpose the existing facilities. The resolution that came out of the meeting in January directed them and the City's administration to continue their due diligence for the public safety program consisting of a new public safety building that would be a combined police station and fire station #1, the construction of new fire stations #2 and #3 with an authorized budget of between \$85 million and \$125 million. They were also directed to work on what the ballot language would look like for this proposal and how it would be financed. They are here today to discuss this at a high level, their preliminary budget and then a financial analysis from PFM followed by Patrick McGowan from Miller Canfield to discuss the actual ballot language.

Brian Weber, Plante Moran Realpoint, said they broke this down into five major components. They have public safety, road improvements which they extend Crescent Boulevard down to Lee BeGole to Eleven Mile, fire station #2, fire station #3 and fire station #4, with an allowance for approximately \$2 million for that facility with a scope that's yet to be determined. The public safety building would be the combination of the police and fire station #1, located at Lee BeGole and Eleven Mile adjacent to the Department of Public Works building with approximately 78,500 square feet for that facility. A lot of these assumptions are based on their Redstone architect who had provided a programming report that they were able to review, validate and vet through with the City and the administrative staff. The road improvements would extend from Crescent Boulevard east down to Eleven Mile with a traffic circle planned for Eleven Mile and then continue Eleven Mile to Grand River Boulevard. Fire station #2, understanding that a property has not yet been determined, they've accounted for 14,500 square feet for that building and then the same for fire station #3, still finalizing a location but they have 14,500 square feet for that facility as well. Wrapping up with fire station #4, the scope is not yet determined as they have not yet had a chance to give an analysis of that building and give an assessment to that building but there are potential renovations or potential scope at about \$2 million that they're going to dive into further with the team and understand what the needs are from that facility. They are not accounting for any property acquisition for the public safety building. They do have dollars set aside for both fire stations #2 and #3. Under professional services and fees, this is where they house future architects, consultants, surveyors, geo-technical and a lot of the professional services. Site costs which would be the development of not only the existing property and the utilities, understanding there is work with existing utilities or tapping into utilities for the new buildings, but also includes demolition and clearing of existing facilities once the new projects are completed. Under regulations are standard permits, plan review fees and inspection fees. They account for that based on discussions in their meetings. Owner costs would be miscellaneous legal fees, mover's fees and anything that would be a direct thing that they would not want to run through a construction manager, to avoid any necessary markup. Construction is hiring the electrician, the construction manager, the mason, all the trades for the project. Furniture and fixtures are for appliances, furniture, weight room equipment as they want to isolate that away from the construction management package. Equipment excludes vehicles, apparatus or any personal equipment or supplies for any of the staff. It's strictly for the facility upgrade in the site upgrades. They have accounted for a healthy technology budget to make sure these buildings are properly equipped. Knowing that these buildings are not going to be bid out for the next two to three years, they plan for a bid package in 2026 and potentially 2027. They carry an escalation factor and right now they're assuming around 4% escalation, understanding that's normal market conditions minus any black swan events or major effects. They'd have to adjust accordingly. Lastly there would be a project contingency of 15%. Right now, this is high level conceptual and it's something that once they refine and define the scope a bit more, then can reel that contingency in, understanding that they have control of it and set it aside or assign it accordingly. Total project cost totals \$120 million. They know that there's not an architect on board yet. They did have to have conversations, assume and clarify exactly how they got to these numbers to understand the path moving forward. They can always reference back to where they started. It is assumed to be a reasonable expectation for this budget, given the scope of work, that these prices fall within reason and they're comfortable moving forward based on the assumptions that they have at this time.

Sean Wahl, PFM Financial Advisors, stated his company is responsible for the numbers and the bonding projections. They're looking at \$120 million over two bond series, which is a one mill increase. Broken down over 25 years, the City is looking at \$91.8 million in a public safety headquarters, \$13.1 million in the NW City quadrant, another \$13 million in the SE City quadrant and \$2 million in the SW City quadrant. They're presenting a two bond series, one to be issued in 2026 and one to be issued in 2028. The first one in 2026 is contemplated at \$40 million, in 2028

to round out the \$120 million is another \$80 million. There are a few assumptions that they have to make when they do these bonding assumptions. One is interest rates, and the other is taxable value growth rates. This is a millage, levied upon taxable value growth in the future. For these projections, they assuming a 4% growth in 2024, 4% for the next four years and then 3% thereafter in order to make this fit within that one mill target. Issuance costs are conservative in this sense and are roughly offset by investment earnings so as project dollars are spent, that money is invested in an account earning interest to roughly offset those. That's generally how they will set this up getting to a total project amount of just under \$120 million. For the projects they talked about, they contemplate two repayment periods of 25 years per bond series for a total interest cost of just under \$90 million. Their estimated interest rate for both series is about 4.5%. The first year millage is one mill for a simple average millage of .95 mills. A \$500,000 market value house with a taxable value of \$250,000 is going to have an annual increase on their tax bill of \$250 for a project like this. A zero mill has the highest passage success at over 80% but just under a mill to about a mill is anywhere from a 45% to 55% passage rate since 2019.

Pat McGowan, Miller Canfield, discussed what the language would look like on the ballot proposal to be sent to voters. Whenever a community is looking at doing a voted bond issue, there's four required elements that have to be in the ballot proposal under state law. First, is the principal amount to be borrowed. Second, the maximum number of years the debt will be outstanding. Third, is a statement of the purpose that the bonds are being issued for. Fourth, the estimated millage of the first year and an average millage rate over the life of the bonds. There's not a lot of flexibility in how these are worded. The most important thing he wanted to focus on is how they describe the project. When looking at a bond proposal, whether for the City or for the school districts, the idea is to try to synthesize all the different elements that are being included within the bond project in something that's reasonably understandable, concise and yet including the most important details. The proposed bond includes the following language, *"So shall the City of Novi borrow the principal sum not to exceed \$120 million and issue it's unlimited tax general obligation bonds in one or more series payable and not to exceed 25 years from the date of issue."* The proposed language that addresses the purpose states, *"To pay the cost of acquiring, constructing, furnishing, equipping a new public safety facility, including police department and fire department facilities, two new fire department facilities to replace fire stations 2 and 3 and renovations and improvements to fire station 4, including site acquisition, demolition, and related road and site improvements."* The proposed language includes the need to acquire sites and demolition which includes the new facility, if anything, as well as the new site or also the existing facilities that are going to be repurposed. The language also talks about the related road and site improvements such as the road that needs to be done to connect along Crescent. Site improvements would be parking and other site improvements such as water, sewer, et cetera. The last sentence of the proposed language addresses the estimated millage impact, which according to PFM calculations, would be one mill in the first year of the levy and the annual would be .95 mills. The proposed structure has split this into two different bond issues. They don't get into that level of detail, but they do indicate the bonds to be issued in one or more series and that the payable of each series is not to exceed 25 years. That's the original proposal and things may change. The millage estimates may not be correct by the time they get there but they're making reasonable assumptions because whatever the interest rates on the bonds are and the taxable value growth of the community will dictate what the actual millage is. The nice thing about a voted bond proposal, from a financial standpoint, is that it gives the City the authority to levy a tax to be used to pay the debt service each year at whatever millage rate you need to pay the debt service. If the values of the City grow at a rate higher than is projected, the City would be able to lower that millage and if the rate of growth wasn't as great, the City would be able to bump up that millage only to the amount needed to cover the debt service in the next year. Many of these points are required elements but he thinks there is wiggle room in the description of the projects. They want to make sure the language includes the components and elements being looked for in this

project in a way that is clear and understandable to the voters. The timing on this from the bonding standpoint requires the ballot proposal to be approved by the City Council and filed with the City and County Clerks 12 weeks before the election which would be May 13th. They can get this before Council, answer their questions and that would give Council more time to begin their education campaign with the community as to what's included in the proposal.

Todd Fenton concluded the consultants' presentation by saying once the ballot language is approved, the City will launch its educational plan. They've been working diligently with the communication staff at the City. They're here to provide support. They will begin drafting and getting ready to issue RFPs for architects, engineers, and construction managers. The idea being that if this passes in August, they can hit the ground running immediately thereafter. In the interim, they're going to refine the budget, refine the scope of the project and they've got fire station 4 that they've now added to their scope. They're going to continue on the site acquisition and site selection for fire stations 2 and 3.

Member Staudt said that about four years ago, he and Mayor Gatt started looking at the future of the repairs that were necessary for a police station and the fire stations. It appeared that those numbers were going to be extraordinary. At that time, Mayor Gatt decided to put together a task force of a combination of current and former public safety members, some Council members and some people from the community in general. They started talking as a group and had a study done by Redstone. That study opened their eyes to where they stood and added some urgency to move forward. Then, maybe a year later, they started talking about it amongst this Council, which at the time was relatively new to the whole public safety discussion. What they determined was that it was in their best interest as fiduciaries for taxpayers' dollars to not throw new money at old buildings. As a result, they moved forward to one of their better decisions and hired Plante Moran Cresa to help with the process. During the past two years they have worked through it. This has been a multi-year process that has been done with many partners, the biggest of which is the Public Safety department as they have looked at every angle and know how important and difficult a decision this is for Council to ask for a bond to be issued. This is his 18th year on City Council. The last bond they had was in 2007 and that was to fund the library. They did it successfully and under budget. The reason for hiring a firm like Plante Moran is to look out for the City's best interest and \$120 million is a lot of money and they want to spend it in the best way. There's been discussion about demolition. He thinks it's in all of their interests that they demolish all the buildings when they complete their replacements. There's been discussion in the past about the police headquarters and if you read the study by Plante Moran, you'll find that the building was built for one purpose and that is to be a police station. To tear it down and start over will provide a nice location on the campus for maybe a future senior or recreation center. It isn't the best location for having an expanded modern police department. He thinks that for the most part, Council agrees that demolishing the buildings is a good thing. The timing is right to do this in August. They've talked about this for a number of years and it's time to bring it forward with the voters. They have a responsibility as elected officials to do what's in the best interest of the City. This is going to take multiple years from the time they pass to issuing the bond to getting things designed. He'd be happy to see a shovel in the ground a year to a year and half from now. Expectations are that it's going to take them time so that's another issue about why they want to get this done sooner rather than later. This is a big decision on their behalf, and they have to be cautious with the taxpayers' dollars and a \$120 million bond. Maybe that's something that other cities do on a regular basis but not Novi. It's something that's new and very different but it is something that he can get behind 100%. He thinks the voters are going to see that they're going to provide them with something that is of great value. Not only helps them in the case of personal emergency but also it helps increase the property value of their homes. There's just so many positives to doing this.

CM 25-02-30

Moved by Staudt, seconded by Casey; MOTION CARRIED: 7-0

Approval of a resolution placing a question on the August 2025 ballot authorizing the City to issue bonds in an amount not to exceed One Hundred Twenty Million Dollars (\$120,000,000) and to levy a new millage in the estimated amount of 1 mill for and specific to the acquisition, construction, and rehabilitation of public safety facilities.

Member Smith said he will be supporting this also. He's been hearing the residents' questions about demolition and glad it's being included. Residents have also been asking what's happening to the new sites and that is a question for a future council. They just don't know at this point what will go in there. These buildings were built before he moved to Novi 40 some years ago. They're definitely outdated. There'll be some efficiencies by combining police and fire. They'll have new more energy efficient buildings, less environmental impact. They'll have new buildings to show people when they bring in potential hires for police and fire. Hopefully that will be a good thing for recruiting. The only thing he is concerned about is the potential construction cost impacts of tariffs. Hopefully by August they'll know more about what that's going to look like.

Member Gurumurthy is excited about this project. Anyone she talks to, one of the first reasons they say they move to Novi is for safety reasons so she thinks this is a much needed thing and cannot wait to continue advocating for this in the community. When she looked at the preliminary budget assumptions and clarifications, she requests that in terms of the energy efficiency, she wants to make sure that it is part of the assumptions in terms of the energy codes and to also think long term regarding infrastructure, foundation, or the materials and to keep sustainability in mind. Also, if there is something that can be done today in regard to smart technology, although viewed as a luxury item, that would be great for our future. She would encourage them to look at it and make sure that the components they add to the facility, technology and everything for the buildings. There was a note about direct cost of relocation of the recycling center which have not been included, and she knows they are exploring that option now and it's not clear how that will span out, but she would request that before their budget session they have some kind of idea, and they can think through for the next three years if they have to plan anything in the budget. She saw in the construction area in the assumptions that there were several things that were out of scope that could lead to some cost, and it would be nice to have some idea before the budget session. She asked for clarification on how the consultants came up with \$40 million for the initial amount. Brian Weber said they're not looking at the full \$120 million right off the bat because they would have to spent that within three years due to requirements. If they had all the money up front it would expedite design construction that would enforce that process faster than they'd want to. Getting the \$40 million would allow them to start the design process, road improvements, land clearing, and site development costs in those first few years and then handle the balance of the scope when they get the balance of the money.

Member Heintz echoes everyone's comments already. He appreciates how the four different elements of the bond were laid out and saying what's required with the bond wording. He wanted to know how the order of those elements are determined and if it's a structured order that's required to start out, for example, with the principal amount required. Pat McGowan responded that there is no statutorily required order in which that's presented and that it's the normal presentation to start with the amount, the duration, and the purpose. The estimated millage impact, which was actually added to the law only in the last 20 or so years, is usually at the end because it's an add-on. Sometimes it's said it's not part of the ballot because the estimates can change and the actual number may be different so that's why they usually start off with the dollar amount, the duration, the purpose, and have that estimate at the end.

Member Thomas said it was difficult for her to get there on this because there's so much money that's being outlined and she thinks that it really could cause limits to other things they could do, other things that they need for the community. However, when touring the facilities, it can be seen that the facilities are woefully behind on what they actually need to have the police and fire be able to function to their best and be able to keep the best people in the facilities. She doesn't move forward with any of this lightly. She understands it is a large commitment given all the other things that they would like to do that would be good for the community. She does understand the importance. They have toured the facilities that exist, and they do need to be replaced. They've toured new facilities that other communities have built, and it can be seen some of the things that Novi police and fire should have access to. They should have the training facilities, the equipment and the efficiencies. More importantly is the technology and new facilities. Obviously things are growing by leaps and bounds, technologically speaking, and they need to make sure that they're prepared for the future, and she is glad they have that focus on technology moving forward. It's hard for her to come to grips with all of the buildings needing to be torn down and replaced all at once. She is hoping that they move forward in a way that they're responsible with the money that the community, should they vote for, would be putting into this. And they are giving the police and fire the facilities that they deserve and are necessary to keep the community safe. It's not easy for her but when you look at the facts, there isn't another choice. She hopes that they're able to make great decisions as they go through this and make sure that they leave a better position for the people who come after them. When talking about the timeframe from when the bonds are issued to when the money has to be spent, she wanted to know would the idea be that these buildings be built simultaneously since several new buildings need to be built. Brian Weber responded that they do have rough timelines now. Once there is an architect on board they'll further develop it. Initially they were thinking of first bid package in the Fall of 2026 whether that be the road improvement and then those site packages to get foundations or what they can do from there. Once the balance of the money is available, they would plan out the vertical portion of the public safety building and then also time out fire stations 2 and 3 to coincide with each other understanding that it is a new facility so they can still run at their existing facilities and not impact that process. From a construction standpoint, the larger facility is a year and a half to two years and the fire stations probably a year to a year and a half of construction once those get going. The goal would be, and this is something they would package out with a construction manager, to construct the fire stations at the same time. It could be one package that they can get some efficiencies out of. Same thing with the public safety building. Member Thomas then asked if it was known, for these types of projects, what tariffs could mean and how much of the resources are coming from outside the United States as of this moment. Brian Weber replied that they have active projects all over the place right now and they're constantly talking to their suppliers and construction managers. They have not had any immediate impacts to date. The big thing is not understanding what equipment may come from across the border whether it's electrical gear or aluminum or glazing. It's all unknown right now. They're still maintaining their 4% to 6% escalation that they have included and then understanding that other 15% contingency they do have to hold that for some unknowns on site, but they can adjust accordingly. If it comes down to having a value engineer or something throughout the process, working with the design team and if they get surprised by anything, that's something they can work on building alternates into the bid of some of the stuff that was mentioned that's not in scope. It's like a shopping list when you go out understanding if they're a bit tight, they get good bids on bid day and then they can understand what that price is and accept that at that time. It's still a competitively bid option that give them the best bang for the buck at the time. They'll adapt accordingly. If anything does happen, they obviously communicate with the whole design team understanding what those impacts are and what priorities are that they'd have to adjust to accommodate and stay within that \$120 million.

Mayor Pro Tem Casey said she appreciates all the comments of the previous speakers and is in full support of putting this in front of the voters and asking them to hopefully join with Council in

trying to provide top-notch public safety facilities for this community. She thinks it's been previously said that not only is it going to help raise the value of homes within the community because they have a top-notch safety department but that it will also help with recruitment and retention. She thinks that the team does need to work in buildings that match the level of service they provide. The Mayor Pro Tem reiterated they are seeking a bond issuance in 2026 and also issuing the RFPs for construction managers, the architects to start building designs in 2026 or will that come sooner. Brian Weber replied that the RFPs would be coming sooner and that they can actually start the drafts now, understanding if this passes in August, they've hit the ground running. They do have that document with potential firms lined up, as a selection of part of that and then start designing from there. The first priority would be getting the architect on board. They also sometimes hire technology consultants that go hand in hand with the design team and understand that the technology will come with it. That would start in 2025. They'll provide plenty of timelines, charts and whatever Council needs to understand as they work through it as well. Mayor Pro Tem then said the RFPs for construction managers and architects in 2025, bond issued in 2026, and they start site developments and road improvements with the first \$40 million. She then asked how far can they get with that \$40 million before the second issuance comes in 2028. Brian Weber responded that site development is probably around \$30 million so that leaves them some cushion. From there they would be able to finish that design process issues in the next bid package likely ahead of 2028, like late 2027, understanding they can have contractors on board, they're not spending that money right away but at least have the contracts locked in, understanding what those costs are and cash hits a couple of months later and that's when they'll going to break ground for some of the other work. They'll coincide the timing of bidding to when they know of cash in hand. Mayor Pro Tem stated that information helps because she's trying to see when the residents can see the fruits of the money that they've hopefully graciously agreed to contribute towards this. Future wise, she's looking forward to seeing a clean timeline in one of their packages. She then asked the City Manager when the educational content goes live on the website. City Manager Cardenas replied that he thinks that it is already in place. Ms. Walsh Malloy has been feverishly working on that, and he wouldn't be surprised if they hear that in an upcoming speech. He thinks that they'll go live with that rather quickly. They've been working in conjunction with Plante Moran, and the communications team has been working on making sure that goes live. He thinks they're already teeing up HOA meeting as well. They know they have to hit the ground running because they are already behind the eight ball. The Mayor Pro Tem concluded that it goes without saying that the City has the support of the seven Council members as well as the educational campaign continues. She thanked all the team in advance that doing the work to build those materials.

Mayor Fischer asked Pat McGowan if he had ever seen bond proposal language where they start with the mill rate and Mr. McGowan responded no, he has not because that's an estimate. It was a late addition to the statute and usually comes in last as simply an estimate. It's there more as an explanatory type item. Mayor Fischer said he had concerns about how the language near the end where they say, "Fire Station 4, including site acquisition, demolition and related road and site improvements", he gets concerned because it seems to him like the way it's written, it seems like those components only relate to fire station 4 given how the semicolons and colons are. He asks Miller Canfield to take another look at that and make sure that everybody's super comfortable with that prior to being officially sent for approval. Pat McGowan said he understands what the Mayor is saying. It's a question of does that just relate to fire station 4. The Mayor said obviously they want to make sure that they're very clear with the voters and make sure that they continue to have the flexibility in doing what they want to on all the different sites. He's not looking for an answer today but it's something that caught his eye as he was reading it that could cause consternation in the future. Mr. McGowan commented that if after "fire stations 2 and 3" make that comment semi and then after "the improvements to fire station 4" make that a semicolon, that would make that clearer.

**AMENDED MOTION
CM 25-02-30**

Moved by Staudt, seconded by Casey; MOTION CARRIED: 7-0

Approval of a resolution placing a question on the August 2025 ballot authorizing the City to issue bonds in an amount not to exceed One Hundred Twenty Million Dollars (\$120,000,000) and to levy a new millage in the estimated amount of 1 mill for and specific to the acquisition, construction, and rehabilitation of public safety facilities; and to reflect the updates to the ballot language in the resolution as discussed.

The Mayor said Member Staudt did a good job of giving a history of where they've come from with this. He thinks that they as a Council have done all they can at this point, and it is incumbent upon them at this time to go to the voters and ask them if they are with Council, do they think it's important and are they willing to help fund it. He thinks that the package and everyone whose worked on it has done a lot of due diligence, walking through buildings, and reading reports to come up with what he thinks is a very reasonable ask from the residents in order to take public safety to the next level. They often talk about how hard the public safety department works and they've done an excellent job keeping the current buildings as maintained as they are. If they want to sit there and expect to continue to be the best public safety department in the area, then they also need to continue to make those investments and that's exactly what they're doing tonight. He's excited and appreciative of the work that has been put into this. Someone alluded to the timing as well and they have a lot of different asks in the future of Novi voters. He knows that the team there, the City staff had to march quickly to try to get something in August in advance of some of these things, but the timing is right. He wanted to give thanks to the staff that had to go into this over the last couple of months and years all while having a real day-to-day job and that really means a lot to move this project forward. Finally, he wanted to thank City Manager Cardenas because he's had council members yelling at him, staff yelling at him and consultants to deal with. Council has put him through the wringer and has done an excellent job marching this forward to where it is as well.

Member Staudt asked Chief Zinser to speak about how the women and men under his charge would benefit from a new facility. Chief Zinser replied that it means a lot to them and shows that Council supports everything that the public safety folks do day in and day out. It shows that they recognize the facilities are outdated and not adaptable. It shows they want to provide the best facilities they can in the City of Novi for them. In regard to recruiting, you want to be able to show the best facilities available and by moving forward tonight, it shows that they have the support of their city leadership. Member Staudt stated that there's going to be a lot of discussion internally and externally during that process and wanted to know if there will be opportunities for the public to provide their input and thoughts on the priorities that are important to them. Chief Zinser replied absolutely, there would be whether it's through some kind of website questions and answers sort of things and they've already got some HOA meetings scheduled right now with more in the process of being scheduled. That'll be an excellent opportunity to get feedback from the residents on how they feel about the project and that it will be ongoing, he would imagine, until they actually start building buildings. Member Staudt said he appreciates the time Chief Zinser has spent on this and the input he's given to Member Staudt and the committee during the past several years. He said this would be an important part of Chief Zinser's career. They all appreciate the commitment that police and fire have made. They all run on the same public safety platform, and they actually mean it. He's looking forward to engaging the voters and convincing them that this is a good investment.

Roll call vote on CM 25-02-30

**Yeas: Heintz, Smith, Staudt, Thomas, Fischer,
Casey, Gurumurthy**

Nays: None

2. Consideration to approve the recommendation from the Long-Range Strategic Planning Committee to approve BerryDunn as consultant for the Facilitation of a Community Strategic Planning Process.

City Manager Cardenas said this began with Council's goal setting session some time ago when they created the Long-Range Strategic Planning Committee. That committee then charged them to create a request for proposal. They got the most bids they've ever received for any kind of bid, 19. The staff team narrowed that 19 to four and that was brought forward to the Committee who interviewed the top two. With that, they came forth before Council and after doing interviews and having discussions, they recommend BerryDunn to help facilitate the process and now leads them into the next 15 months in helping to create the strategic plan. They're confident this consultant will help them get to the end goal.

Mayor Pro Tem Casey wanted to thank the team that reviewed the 19 bids to make their top recommendations for the committee to consider. Also, she thanked her colleagues and the staff that attended the futurist session last Monday. That was one of the first steps in the process to build out the long-range strategic plan. She appreciates everyone's willingness and their engagement in the different conversations they had. For anyone who enjoys the Now You Novi podcast, the latest episode is a wonderful recap and start of a conversation about what they learned from the futurist and how they are going to use that going forward. The consultant that is being recommended is definitely a strong recommendation from the committee. This is an organization that has a long tenure. They have multiple locations across the U.S., and they have done work here in Michigan. They have the bench depth that she thinks they all want to see and have teams that deal with municipal finance, construction and urban planning. All in all, this is a strong recommendation from the committee. She appreciates the work the committee did to get to this point. She thinks going forward, they'll start to see things move relatively quickly in terms of outreach to them as council members, the community and staff to start driving some of the questions and learning so they can get this going forward.

CM 25-02-31 Moved by Casey, seconded by Smith; MOTION CARRIED: 7-0

Approve the recommendation from the Long-Range Strategic Planning Committee to approve BerryDunn as consultant for the Facilitation of a Community Strategic Planning Process.

Member Smith said the biggest take away from the futurist session, was one of the first things that their consultant said was a quote from Jonas Salk, "The most important question to ask ourselves is, are we being good ancestors?" That way of thinking is important to bring into a job like this. He thinks that strategic planning is critical, and this is a great first step to get that going.

Member Heintz said this is a great opportunity and ties into so much of what City Council's interested in. We want to do so much, not only right now, but with long-term aspirations. He thinks this will be synergistic with many of their goals.

Member Gurumurthy said being part of the Long-Range Strategic Committee has been a great journey. That was a systematic process and thanked the staff and team for narrowing it down. They spent quite a bit of time hearing from the vendors directly and then being able to do some follow-ups and determine who would be the best. She's excited about this because they always

go more reactive or have a lot of things going on in the next three or five years, but this is going to be a good foundation that they will be able to lay down for 2050.

Member Staudt, as one of the committee members, wanted to thank Member Gurumurthy and most importantly, Mayor Pro Tem Casey who has enthusiastically pursued this for a number of years to the point of sometimes annoyance on his part. Something like this is difficult to get going in the right direction. And not only do they have it going in the right direction, but they also picked one of the best consultants in the country to provide them with services. Moving forward, they're going to actually have some positive feedback from this group. In the end, it all is going to come back under Council to provide the direction and pick the priorities and he's looking forward to that. This is going to be a good use of taxpayer money because it provides the current Council and future Councils with a roadmap to the future.

Member Thomas said in regard to the futurist session, she thought it was interesting to see how the futurist looked at things in a way that was different than what she would've thought of. She often thinks about not knowing what the future will bring but there are some things they do know and the things that may or may not happen and ask how important they are. It gave good light to understand more about how strategic planning can work. She found that a valuable activity. She thinks that it is important to make sure they are good ancestors and to make sure they're thinking about the people who come behind them and not just what their needs are. She is looking forward to this and thanked her colleagues who were able to do the work to determine the correct consultant for this position.

Roll call vote on CM 25-02-31

**Yeas: Smith, Staudt, Thomas, Fischer, Casey,
Gurumurthy, Heintz
Nays: None**

3. Approval of resolution to authorize Budget Amendment #2025-4

City Manager Cardenas stated that this is not normally done but this is to recognize and allocate dollars associated with projects that have been advocated by City Council. There is one change he encourages Council to make on the motion and that is to reflect the expenditure for the Long-Range Strategic Plan should not come out of the City Manager's budget but instead the City Council's budget, under 816, which is professional services.

CM 25-02-32 Moved by Staudt, seconded by Casey; MOTION CARRIED: 7-0

Approval of resolution to authorize Budget Amendment #2025-4.

Mayor Fischer commented that the Realpoint owner's rep fees are currently being taken out of the CIP fund, and he doesn't believe that is the right place for that. The CIP fund should be spent on capital items. In this instance, they're looking to do a capital project with the police and fire buildings, but the owner's rep fees, professional services fees, would be spent out this fund that won't actually be funding the future project because they're potentially doing this bond if they go through with that. He would recommend that the Plante Moran Realpoint owner's rep fees be moved from CIP and also put against the general fund.

AMENDED MOTION

CM 25-02-32 Moved by Staudt, seconded by Casey; MOTION CARRIED: 7-0

Approval of resolution to authorize Budget Amendment #2025-4, including the correction that the Plante Moran Realpoint owner's rep fee would be moved from the CIP and put against the general fund.

The Mayor further commented that he talks about budget amendments often. He and Mr. Cardenas have had some of these discussions on this as a Council because he holds staff to be accountable to the budget they recommend, and Council approves. In his last comments during a budget amendment, he said they need to start doing a better job of living within that budget and actually seeing things like interest income, good news, flow through to the bottom line. He wants to remind themselves as a council, that they too need to make sure that as they go through the budget process coming up, that they do include these things. He fully supports the futurist. He fully supports the Long-Range Strategic Plan. He thinks that as a council they need to make sure they are incorporating these things into the budget at the appropriate time. When things pop up, which they will, and they have every right to make these kinds of adjustments throughout the year, they understand they're going to have to take it from the fund balance. It isn't incumbent upon the City Manager to fund them. They should live within their budget.

Roll call vote on CM 25-02-32

**Yeas: Staudt, Thomas, Fischer, Casey,
Gurumurthy, Heintz, Smith
Nays: None**

4. Consideration of approval of proceeding with one of two estimated preventative maintenance options for Ajax Paving Industries, Inc. on Beck Road, 11 Mile Road to Grand River Avenue.

City Manager Cardenas said this is a project that is hopefully funded in 2026/2027 by the feds. This is a long-standing process but leading up to that, the road looks bad right now. It's relatively rough to get from Eleven Mile to Grand River. These dollars are coming out of capital competitive maintenance in their road funds. The options that are presented to Council are: option 1: micro-mill and ultra-thin pave new asphalt on the through lanes only of Beck Road from 11 Mile Road to Grand River Avenue or option 2: micro-mill and ultra-thin pave new asphalt for the drive lanes and deceleration lanes of Beck Road from 11 Mile Road to Grand River Avenue. The center lane will stay the same as it is in relatively good shape but if Council wants to do that, it's an extra \$40,000.

CM 25-02-33

Moved by Staudt, seconded by Smith; MOTION CARRIED: 7-0

Approval of proceeding with Option 2 – micro-mill and ultra-thin pave new asphalt for the drive lanes and deceleration lanes of Beck Road from 11 Mile Road to Grand River Avenue.

Member Heintz commented that has drove down the road north and south to get a sense of the quality of the road and agrees with what the City Manager said about the quality of the road. He asked Director Herczeg, since the proposal does not impact the center lane, where does the water go when it rains if there's some unevenness for the roads. Director Herczeg replied that there would be little impact because what they'll do is mill three quarters of an inch down and then repave to the same height of the turn lane and the road will have the same pitch on it. There'd be no changes to the drainage. He wouldn't call it preventative maintenance but heavy maintenance. In place of going out and spray patching, which is what they've been doing for the last few years to try to hold everything together, or pothole patching this is an opportunity. They have a contractor that has done the preventative maintenance for them and has agreed to hold prices to do this quickly. Member Heintz commented that it's not a major lift, but the primary lanes would have a

light impact and Director Herczeg replied no, they'll be exactly the same profile. They'll mill it and it'll be put back in the same profile. There may be a small transition in the turn lane, but it won't be a bump. Director Herczeg also said that it doesn't make sense to do the turn lane given the fact that they're due for the project in 2026 and there's not a lot of traffic in the turn lane. Member Heintz maybe there's a slight aesthetic difference too and Director Herczeg replied yes, there will be a quilting look to it. They'll raise some questions and handle that through social posts before they do the project. Member Heintz said that to him it doesn't justify the need to do the center line. There is an \$80,000 difference between the options in front of them and wondered what the benefit was to option 2 to include the deceleration lanes. Director Herczeg said it was recommended to do the deceleration lanes because there is deterioration there but it's Council prerogative.

The Mayor then asked Director Herczeg what option he would go with. Director Herczeg said he'd probably just do the primary lanes but there's deterioration in the deceleration lanes because they get the second most traffic. Everyone in the center lane is either waiting to merge or making a left hand turn so there's not a lot of drive on it. Transitionally and aesthetically, it might look strange to just have the drive lanes done. By the same token, someone might question why the turn lanes weren't done, instead of doing spray patching or pothole patching, which would be to the tune of about \$50,000 this year, they would do this instead. They're going to spend money on it anyway it's just a question of how much of the road does Council want to mill. Mayor Fischer said it's a well-traveled section of road in Novi and thinks it's borderline dangerous given how uneven it is.

Member Staudt asked is the \$40,000 not included in option 2 and the Mayor replied that either option would require an additional \$40,000 if they wanted to do the center lane. Member Staudt then asked why they wouldn't do that, and Director Herczeg commented that he doesn't think it's money well spent because it is not necessary as there's not a lot of traffic on there. The drive lanes and the decel lanes make a lot of sense. Considering where they are in the process with the reconstruction and the condition of the center turn lane isn't nearly as bad as the drive lane. Member Staudt said he'll stick with option 2.

Member Thomas wanted to know exactly when they are expected to have the 2026 reconstruction start and Director Herczeg replied hopefully out of the gate in 2026. It's hard to say right now. They're still in the EA process but he feels better about the timeline. However, no one seems to have a real pulse on what's happening with unfunded federal projects. That's going to be a conversation between now and when they finish EA. There could be a pause or a delay or an impact on that construction timeline.

Member Smith he was going to ask about potential federal impacts to that 2026 project. He thinks it's prudent to fix what they have, get those deceleration lanes done now and then if it has to hold out for another couple of years, it's in good shape. Director Herczeg stated that if something happened where they were delayed or the funding didn't meet the EA requirements, they would come back and do some kind of mill over that center left turn lane. They would do a deeper mill with a larger or deeper profile and fix the entire road. The reason to dismiss the left center turn lane is because it's going to happen either way.

Member Heintz said he's in support of this option and it was helpful for Director Herczeg to clarify his general recommendation, which is option 1. To him, option 1 saves money but not wanting to derail or cause any hiccups, the best process is to be supportive of the success of the project.

Mayor Fischer said the motion on the table is for option 2 which at this point includes the deceleration lanes and he will be in support of that motion. He thinks the money is well spent to do the deceleration lanes as well.

Roll call vote on CM 25-02-33

**Yeas: Thomas, Fischer, Casey, Gurumurthy,
Heintz, Smith, Staudt**

Nays: None

COMMITTEE REPORTS:

1. Long Range Strategic Planning Committee

Mayor Pro Tem Casey feels she gave enough of an update earlier and will close out there and looks forward to giving her colleagues an update after their next meeting.

MAYOR AND COUNCIL ISSUES: None

COMMUNICATIONS: None

ADJOURNMENT – There being no further business to come before Council, the meeting was adjourned at 8:20 P.M.

Cortney Hanson, City Clerk

Justin Fischer, Mayor

Transcribed by Becky Dockery,
Account Clerk

Date approved: March 24, 2025



CITY OF NOVI CITY COUNCIL
MARCH 24, 2025

SUBJECT: Approval of request for Pyrotechnics Display Permit by Brightmoor Christian Church to be operated by James Herr, from April 7, 2025 to April 13, 2025

SUBMITTING DEPARTMENT: City Clerk

KEY HIGHLIGHTS:

- This is not a traditional fireworks display, but indoor pyrotechnics.
- There will be two types of pyrotechnics used: 4 theatrical flashes and 6 theatrical torches.
- Two fire safety officers will be present at each event.

BACKGROUND INFORMATION:

Brightmoor Christian Church would like to enhance upcoming programs with the addition of a pyrotechnics displays from April 7, 2025 to April 13, 2025.

The pyrotechnics will be displayed indoors from the worship center stage. During each performance, there will be two types of pyrotechnics used. Four theatrical flashes that will produce bright light and a cloud of smoke and 6 theatrical stage torches. The handheld torches have a "dead man's switch" so when a person lets go of the torch and switch, it automatically shuts off.

The Michigan Fireworks Safety Act requires the applicant to furnish adequate insurance coverage with the Fireworks Permit Application. The Certificate of Liability Insurance is acceptable and provides an endorsement listing the City of Novi as an Additional Insured.

The Novi Fire Department has conducted a site inspection, and an additional inspection will occur once the show is complete. Fire Department personnel will be assigned for the duration of the event to ensure that all safety measures and processes are adhered to according to the fireworks permit.

RECOMMENDED ACTION: Approval of request for Pyrotechnics Display Permit by Brightmoor Christian Church to be operated by James Herr, from April 7, 2025 to April 13, 2025



March 19, 2023

TO: Courtney Hanson- City Clerk

FROM: Fire Marshal Kevin S. Pierce

CITY COUNCIL

Mayor

Justin Fischer

Mayor Pro Tem

Laura Marie Casey

Dave Staudt

Brian Smith

Ericka Thomas

Matt Heintz

Priya Gurumurthy

City Manager

Victor Cardenas

Director of Public Safety

Chief of Police

Erick W. Zinser

Fire Chief

John B. Martin

Assistant Chief of Police

Scott R. Baetens

Assistant Fire Chief

Todd Seog

SUBJECT: **Indoor Pyrotechnics for Brightmoor Christian Church**
40800 Thirteen Mile Rd, Novi MI 48377

EVENT DATES & TIMES: April 7, 2025 @ 7pm

April 8, 2025 @ 7pm

April 9, 2025 @ 7pm

April 10, 2025 @ 7pm

April 11, 2025 @ 7pm

April 12, 2025 @ 3 and 7pm

April 13, 2025 @ 3pm

I have reviewed the application for a Fireworks Permit at the above location. This application is **recommended for approval with conditions** and is contingent upon a satisfactory fire safety inspection prior to each of the performances. Along with the fire safety inspection, there will be two fire safety officers for each show on fire standby.

- 1) NFPA 6.4 **Pre-Show Review and Demonstration.** A walk-through and a representative demonstration of the pyrotechnics shall be approved by the authority having jurisdiction before permit is approved.
- 2) **MUST** provide Fire Department exact location where fireworks will be ignited.
- 3) **MUST** provide additional fire extinguishers behind the stage. Extinguishers must follow IFC 2012 for locations.
- 4) Conduct a fire safety inspection prior to each performance.
- 5) NFPA 6.5.1.1: An applicant for licensing as an operator shall provide evidence of actual experience as an operator or assistant as part of demonstrating competency to the authority having jurisdiction.
- 6) NFPA 8.1.1* **Portable Fire-Fighting Equipment.** Four or more fire extinguishers of the classification and size as approved by the authority having jurisdiction shall be readily accessible while the pyrotechnics are being loaded, preparing for firing or fired.

Novi Public Safety Administration

45125 Ten Mile Road

Novi, Michigan 48375

248.348.7100

248.347.0590 fax

cityofnovi.org

- 7) NFPA 8.1.1.1* In all cases, at least two pressurized water, Class 2-A extinguishers and two Class 10-BC extinguishers shall be provided, in addition to those required by NFPA 10, for the building.
- 8) NFPA 8.4 Separation Distance for Audiences:
 - Concussion mortars and concussion effects shall be a minimum of 25' separation.
 - Glowing or flaming particles shall be 10' or greater.

MEMORANDUM



TO: CORTNEY HANSON, CITY CLERK
FROM: ERICK W. ZINSER 
DIRECTOR OF PUBLIC SAFETY / CHIEF OF POLICE
INITIATED BY: MICHAEL BENDER, DETECTIVE 
SUBJECT: PYROTECHNIC APPLICATION-
BRIGHTMOOR CHURCH
DATE: MARCH 19, 2025

APPLICANT:
James Herr
2247 Charms Ravine
Wixom, MI 48393

VENUE OF EVENT:
Brightmoor Church
40800 W. Thirteen Mile Rd
Novi, MI 48377

DATES OF EVENT:
04-07-25 through 04-13-25

SOURCE:
This request was received by the Novi Police Department on March 17th, 2025. A response is requested by March 19th, 2025.

INFORMATION:
The Novi Police Department received this request from the Novi City Clerk's Office to review a Theatrical Pyrotechnic application which will be displayed at Brightmoor Church, on the main worship center platform.

INVESTIGATION:
An ICHAT, Sex Offender Registry and CLEMIS. The check revealed nothing of concern that would disqualify any applicant from approval.

MEMORANDUM



TO: Melissa Morris, Deputy City Clerk

FROM: Charles Boulard, Director of Community Development



SUBJECT: BRIGHTMOOR CHURCH FIREWORKS

DATE: 03/17/25

-
- ☐ Auctions
 - ☐ Liquor license
 - ☐ Arcade license
 - ☐ Massage license
 - ☐ Outdoor gathering
 - ☐ Outdoor seating
 - ☒ Other: Brightmoor Christian Church (40800 Thirteen Mile Rd.) Fireworks Display April 7, 2025 through April 13, 2025, at 7 P.M. each night.

The Building Division does not object to the proposed fireworks show being held at Brightmoor Christian Church on April 7, 2025, through April 13, 2025, provided appropriate fire safety measures are provided. Should you have any further questions with regards to this matter please feel free to contact me at (248) 347-0423.

2024 Permit for Fireworks Other than Consumer or Low Impact

Authority:	2011 PA 256	The LEGISLATIVE BODY OF CITY, VILLAGE OR TOWNSHIP BOARD will not discriminate against any individual or group because of race, sex, religion, age, national origin, color, marital status, disability, or political beliefs. If you need assistance with reading, writing, hearing, etc., under the Americans with Disabilities Act, you may make your needs known to this Legislative Body of City, Village or Township Board.
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This permit is not transferable. Possession of this permit authorizes the herein named person to possess, transport and display fireworks in the amounts, for the purpose of and at the place listed below only through permit expiration date.

TYPE OF PERMIT(S) (Select all applicable boxes) ☐ Agricultural or Wildlife Fireworks ☒ Articles Pyrotechnic ☐ Display Fireworks ☐ Public Display ☒ Private Display ☐ Special Effects Manufactured for Outdoor Pest Control or Agricultural Purposes		FOR USE BY LEGISLATIVE BODY OF CITY, VILLAGE OR TOWNSHIP BOARD ONLY. PERMIT(S) EXPIRATION DATE (ENTER DATE OF EXPIRATION)	
NAME OF PERSON PERMIT ISSUED TO James Herr		AGE (18 YEARS OR OLDER) ☒ YES ☐ NO	
ADDRESS OF PERSON PERMIT ISSUED TO 40800 W. 13 Mile Road Novi, MI 48377			
NAME OF ORGANIZATION, GROUP, FIRM OR CORPORATION Brightmoor Christian Church			
ADDRESS 40800 W. 13 Mile Road Novi, MI 48377			
NUMBER AND TYPES OF FIREWORKS (Please attach additional pages if necessary) (4) Large Theatrical Flash (6) Theatrical Stage Torches			
EXACT LOCATION OF DISPLAY OR USE Main Worship Center Platform			
CITY, VILLAGE, TOWNSHIP Novi		DATE 4/7/25-4/13/25	TIME 7:00pm
BOND OR INSURANCE FILED ☒ YES ☐ NO			AMOUNT \$900,000

Issued by action of the Legislative Body of the

☐ City ☐ Village ☐ Township of _____ on the _____ day of _____, 2024.

(Signature and Title of Legislative Body Representative)

THIS FORM IS VALID UNTIL THE DATE OF EXPIRATION OF PERMIT

FOR USE BY LEGISLATIVE BODY OF CITY, VILLAGE OR TOWNSHIP BOARD ONLY
DATE PERMIT(S) EXPIRE:

BFS-417 (Rev 01/25)

Application for Fireworks Other Than Consumer or Low Impact

[illegible]

Instructions for Application for Fireworks Other Than Consumer or Low Impact

Applications shall be submitted to the legislative body of a city, village or township board. A permit may be issued as a result of official action by the legislative body. A permit shall be valid only for use within the limits of the jurisdiction of the legislative body of a city, village or township board.

1. Type of Permit – check all boxes that may apply to the type of permit needed. You may select several permit types depending on your fireworks display. You may check with your legislative body of a city, village or township board for assistance when making your selection. Please review the following definitions to determine which type of permit to select:
 - Agricultural or Wildlife Fireworks – devices distributed to farmers, ranchers, and growers through a wildlife management program administered by the US Department of Interior or Michigan DNR.
 - Articles Pyrotechnic – 1.4G fireworks for professional use only that is classified as UN0431 or UN0432.
 - Display Fireworks – 1.3G fireworks for professional use only
 - Special Effects Manufactured for Outdoor Pest Control or Agricultural Purposes – devices with a combination of chemical elements or compounds capable of burning independently of the oxygen of the atmosphere and designed and intended to produce an audible, visual, mechanical or thermal effect for pest or animal control.
 - Public Display – a fireworks display that is open to all persons for viewing.
 - Private Display – a fireworks display that is not open to the general public for viewing.
2. Name of applicant – list the name of the applicant. The applicant may be a person representing an organization, group, firm or corporation, or self. If the applicant is also the operator, enter the same name in the operator's section.
3. Address of applicant – complete the address of the applicant; include the street address, city, state and zip code.
4. Name of person or resident agent representing corporation, LLC, DBA or other – list the name of the person or resident agent that represents the corporation, LLC, DBA or other.
5. Address of person or resident agent that represents the corporation, LLC, DBA or other – list the address of the person or resident agent representing the corporation, LLC, DBA or other.
6. Non-resident applicant – list the name of the non-resident applicant. A non-resident applicant shall appoint a Michigan attorney or Michigan resident agent in writing to be the applicant's legal representative upon whom all service of process in any action or proceeding may be served.
7. Name of pyrotechnic operator – list the name of the pyrotechnic operator. The pyrotechnic operator is the person in charge of the display. The legislative body of a city, village or township board shall rule on the competency and qualifications of the operator before granting a permit and may require an affidavit from the applicant as to the operator's experience, former pyrotechnic accidents, criminal record, sobriety, etc.
8. Address of pyrotechnic operator – list the address of the pyrotechnic operator; include the street address, city, state and zip code.
9. Age of the pyrotechnic operator – list the age of the pyrotechnic operator; the operator must be 18 years of age or older.
10. Name of assistant – list the name of the assistant to the pyrotechnic operator;
11. Address of assistant – list the address of the assistant; include the street address, city, state and zip code. If there is more than one assistant, please list additional assistants on a separate sheet and include the address and age of those additional assistants.
12. Age of assistant – list the age of the assistant to the pyrotechnic operator; the assistant must be 18 years or older.
13. Name of other assistant – list the name of other assistant to the pyrotechnic operator.
14. Age of other assistant – list the age of the assistant to the pyrotechnic operator; the assistant must be 18 years or older.
15. Exact location of proposed display – list the address of the exact location of the proposed fireworks display.
16. Date of proposed display – indicate the date of the proposed fireworks display; only one display date can be used per application.
17. Time of proposed display – indicate the time of the proposed fireworks display.
18. Manner and place of storage - indicate the manner and place of storage within the legislative body of a city, village or township board of fireworks that are ready for display, just prior to the display in the area of exhibition. The legislative body of a city, village or township board shall obtain approval from the local fire authorities of the manner and place of storage before any permit is issued.

19. Amount of bond or insurance - the issuing legislative body of a city, village or township board shall set the amount of and proof of bond or insurance for the protection of the public to satisfy claims for damages to property or personal injuries arising out of any act or omission on the part of the person, firm or corporation, or any agent or employee of the applicant. The applicant shall assure the bond or insurance required is provided.
20. Name of bonding corporation or insurance company – provide the name of the bonding corporation or insurance company for which the bond was issued through.
21. Address of bonding corporation or insurance company – list the address of the bonding corporation or insurance company; include the street address, city, state and zip code.
22. Number of fireworks and kind of fireworks to be displayed– indicate the total amount of fireworks proposed for the display or use and a description of the type of fireworks for display; such as 10 aerial bombs, 30 aerial rocket bursts, etc.
23. The application is valid for the calendar year in which the application was received and permit was issued.
24. Permit fees shall be established by the legislative body of a city, village or township board and shall be submitted to and retained by legislative body of a city, village or township board.
25. Permitting will be in compliance with the [Michigan Fireworks Safety Act, PA 256 of 2011](#), [MCL 28.466, Section 16](#).
26. **Mail the application to the legislative body of a city, village or township board within the location jurisdiction of the display.** DO NOT mail the application to the Bureau of Fire Services (BFS). If mailed to the BFS, it will be returned to the sender.



16th September 2019

SAFETY DATA SHEET

SECTION 1 – PRODUCT IDENTIFICATION

1.1 Product identifier

Product Name: FLASHES, ROBOTICS & SPDS

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Articles pyrotechnic for technical purposes

1.3 Details of the Supplier of the Safety Data Sheet

Supplier: Le Maitre Ltd
Street/P.O. Box: 6 Forval Close
Postcode/City: CR4 4NE, Mitcham
Country: England
Telephone number: +44 (0)20 8646 2222
Email: info@lemaitreltd.com

1.4 Emergency telephone number

Please contact: +44 (0)151 951 3317 Health and Safety Executive (HSE) Chemicals Regulation Directorate
Other comments: Only available during office hours

SECTION 2 – HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

H204: Fire or projection hazard

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 (CLP)

Hazard category: Division 1.4
Signal word: Warning
Hazard statement: H204 Fire or projection hazard
Precautionary Statements Prevention: P210, P234
Precautionary Statements Response: P370 + P372 + P380 + P373
Precautionary Statements Storage: P401
Precautionary Statements Disposal: P501

Hazard pictograms:



2.3 Other hazards

There are no chronic effects from handling the product appropriately
When used in the correct manner, any fallout does not pose a risk to personal health.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Name	CAS No.	EC No.
Aluminium powder	7429-90-5	231-072-3
Ammonium Perchlorate	7798-98-9	232-235-1
Barium Nitrate	10022-31-8	233-020-5
Chlorinated Rubber	9006-03-5	918-668-5
Copper Carbonate	1184-64-1	214-671-4
Diphenylamine	122-39-4	204-539-4
Graphite	7782-42-5	231-955-3
Magnesium powder	7439-54-4	231-104-6
Nitrocellulose	9004-70-0	603-037-0
Potassium Nitrate	7757-79-1	231-818-8
Potassium Perchlorate	7778-47-7	231-912-9
Sodium Nitrate	7631-99-4	231-554-3
Strontium Nitrate	10042-76-9	233-131-9
Talc	14087-96-6	238-877-9
Titanium powder	7440-32-6	231-142-3

List above covers all products within the Flash, Robotic & SPD families

SECTION 4 – FIRST AID MEASURES

4.1 Description of first aid measures

General notes: In the case of accident or sickness, seek medical advice immediately.

Following inhalation: Remove casualty to fresh air and keep warm and at rest.

Following skin contact: Wash immediately with soap and water

Following eye contact: Immediately flush with water

Following ingestion: If accidentally swallowed, rinse the mouth with plenty of water (only if the person is conscious) and obtain medical attention

Self protection of the first aider: Pay attention to self protection!

4.2 Most important symptoms and effects, both acute and delayed

Irritation to the eyes and irritation to the skin

4.3 Indication of any immediate medical attention and special treatment needed

First aid, decontamination, treatment of symptoms

SECTION 5 – FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: If there is a small flame persisting from the effect itself (or from the surrounding area) this can be extinguished with a dry powder or Carbon Dioxide Fire Extinguisher if trained to do so.

For larger fires do not attempt to extinguish any fire unless specifically trained to do so. Evacuate area and contact emergency services

Unsuitable extinguishing media: N/A

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products may be produced.

Pyrotechnic devices can burn violently and the state of the fire will be dependent on composition, packaging and containment.

5.3 Advice for firefighters

Exercise extreme caution. Special protective equipment for firefighters: wear self-contained breathing apparatus and chemical protective clothing

SECTION 6 – ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

6.1.1 For non-emergency personnel: Suitable personal protective equipment. Remove ignition sources.

6.1.2 For emergency responders: Remove persons to safety. Isolate hazard area and deny entry. Ventilate closed spaces before entering.

6.2 Environmental precautions

Prevent large spillages from entering surface water or drains.

6.3 Methods and material for containment and cleaning up

Dispose of as special waste in compliance with local and national regulations.

6.4 Reference to other sections

See sections 8 and 13

SECTION 7 – HANDLING AND STORAGE**7.1 Precautions for safe handling**

Protective measures: Handle with caution.

Measures to prevent fire: No smoking and no naked flames.

Measures to prevent aerosol and dust generation: Do not tamper with the item.

Advice on general occupational hygiene: Do not eat, drink or smoke in work areas. Wash hands after use.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions: Store in cool, dry place.

Requirements for storage rooms and vessels: Always store in original packaging with appropriate marking and labelling. Stores should be adequately secured and identified.

7.3 Specific end use(s)

The identified use for this product is detailed in section 1.2.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION**8.1 Control parameters**

Workplace exposure limits.

8.2 Exposure controls

8.2.1 Appropriate engineering controls: Provide adequate ventilation.

8.2.2 Personal protection equipment: Appropriate Safety goggles.

8.2.3 Environmental exposure controls: No specific measures.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Appearance: Solid sealed tube

As this is a sealed unit chemical properties are not applicable

9.2 Other information

No additional information relevant to safe use.

SECTION 10 – STABILITY AND REACTIVITY**10.1 Reactivity**

No specific data related to reactivity available.

10.2 Chemical stability

Stable under recommended conditions of storage and use.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Avoid high temperatures, shock, static discharge, vibrations or other physical stresses that might result in a hazardous situation.

10.5 Incompatible materials

As this is a sealed unit incompatible materials are not applicable.

10.6 Hazardous decomposition products

Decomposition does not occur during normal circumstances of storage, transport and handling.
Upon functioning various gases may be emitted including oxides.

SECTION 11 – TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects**

As this is a sealed unit this only applies to spillages.
May cause eye and skin irritation. Inhalation or ingestion may cause discomfort.

SECTION 12 – ECOLOGICAL INFORMATION**12.1 Toxicity**

Not classified as dangerous for the environment/aquatic toxicant

12.2 Persistence and degradability N/A

12.3 Bioaccumulative potential N/A

12.4 Mobility in soil N/A

12.5 Results of PBT and vPvB assessment N/A

12.6 Other adverse effects N/A

SECTION 13 – DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

No specific regulations apply to packagings or spent devices.

Unused devices should be returned to the manufacturer, functioned in a safe manner or soaked in a vessel of water for 48 hours. If soaked in water review local and national requirements prior to disposal.

SECTION 14 – TRANSPORT INFORMATION**14.1 UN number**

UN0431 or UN0432

14.2 UN proper shipping name

Articles pyrotechnic for technical purposes

14.3 Transport hazard class(es)

1.4G (UN0431) or 1.4S (UN0432)

14.4 Packing group

N/A

14.5 Environmental hazards

None

14.6 Special precautions for user

No smoking or naked flames

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

N/A

SECTION 15 – REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Explosives Regulations 2014 and all orders of council, HSG 36, Local Authorities and the Health and Safety Executive.

Pyrotechnic Articles European Directive 2013/29/EU

15.2 Chemical Safety Assessment

N/A

SECTION 16 – OTHER INFORMATION

Information for this safety data sheet was obtained from sources considered technically accurate and reliable. Whilst every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of, or reliance on, any information contained in this form.



BRIGH-3

OP ID: MB

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
03/17/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Shilton & Associates, Inc. Dave Shilton 660 Cascade West Parkway, SE Grand Rapids, MI 49546 Jared Nathan Shilton		616-956-5300		CONTACT NAME: Jared Nathan Shilton PHONE (A/C, No, Ext): 616-956-5300 E-MAIL ADDRESS: jared@shiltoninc.com		FAX (A/C, No): 616-956-9993	
INSURED Brightmoor Christian Church 40800 W 13 Mile Rd Novi, MI 48377-2327				INSURER(S) AFFORDING COVERAGE INSURER A : Brotherhood Mutual INSURER B : INSURER C : INSURER D : INSURER E : INSURER F :			
				NAIC #			

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PRO-JECT ☐ LOC OTHER:	X		21MRA0437802	09/01/2024	09/01/2025	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 3,000,000 PRODUCTS - COMP/OP AGG \$ 3,000,000
A	☒ AUTOMOBILE LIABILITY ☐ ANY AUTO OWNED AUTOS ONLY ☒ HIRED AUTOS ONLY ☒ SCHEDULED AUTOS ☒ NON-OWNED AUTOS ONLY			21A5A0437786	09/01/2024	09/01/2025	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
A	☒ UMBRELLA LIAB ☒ EXCESS LIAB DED ☐ RETENTION \$			21MRA0437802	09/01/2024	09/01/2025	EACH OCCURRENCE \$ 6,000,000 AGGREGATE \$ 6,000,000
A	☒ WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) ☐ Y / N If yes, describe under DESCRIPTION OF OPERATIONS below		N / A	21WRA0437775	09/01/2024	09/01/2025	☒ PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT \$ 500,000 E.L. DISEASE - EA EMPLOYEE \$ 500,000 E.L. DISEASE - POLICY LIMIT \$ 500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Certificate Holder listed as additional insured for general liability with regard to the event to be held April 7-April 14, 2025. Coverage for additional insureds is strictly subject to the terms of the policy. ~see notes for High Hazard Coverage~

CERTIFICATE HOLDER

CANCELLATION

CITYONO City of Novi 45175 Ten Mile Road Novi, MI 48375	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE

High Hazard Activities
Fireworks Sales \$0 per person \$100,000 \$300,000
Fireworks Display \$0 per person \$300,000 \$900,000
School High Hazard Sports Activities
(Concussive Impact) \$300,000 \$900,000



CITY OF NOVI CITY COUNCIL MARCH 24, 2025

SUBJECT: Adoption of a Resolution requesting the Michigan Department of Transportation (MDOT) include the existing bridge on Ashbury Drive over the Middle Branch of the Rouge River in the State Local Bridge Program List for Replacement. If MDOT selects the bridge, the City of Novi will accept 100% of the design engineering costs and 5% of the total construction cost.

SUBMITTING DEPARTMENT: Department of Public Works, Engineering Division

KEY HIGHLIGHTS:

- Inspection of the Ashbury Drive bridge has identified some deterioration in the bridge deck and abutments.
- The overall condition of the bridge is poor (rated a 4 out of 10).
- Grant would provide 95% of the funding needed for the bridge rehabilitation.

BACKGROUND INFORMATION:

City engineering consultant, OHM Advisors, completed an annual inspection of the Ashbury Drive bridge over the Middle Branch of the Rouge River in September 2024. The bridge is recommended for replacement through the Michigan Department of Transportation (MDOT) Local Bridge Program due to the structure being in poor condition.

MDOT is currently accepting applications for the (FY 2028) Local Bridge Program and staff are submitting the Ashbury Drive bridge in the Local Bridge Program. If the bridge is selected, the City would only be responsible for 5% of the construction costs. The bridge's estimated construction cost is \$783,000. The City would be responsible for 100% of the associated design and construction engineering fees in the amount of \$105,705 (7.25% for design and 6.25% for construction engineering). The estimated construction cost the City would be responsible for is \$39,150 (5% of \$783,000).

As part of the application process, the applicant is required to provide a current resolution, signed and dated, from the governing board supporting the project. The adoption of the proposed resolution would demonstrate support from the City to MDOT for the replacement of the bridge and that the City will make the reasonable

effort necessary to accomplish this effort. Any application not containing a signed resolution will be considered incomplete and will be rejected.

The City Attorney has reviewed the resolution and sees no legal impediment (Beth Saarela, March 12, 2025).

RECOMMENDED ACTION: Adoption of Resolution requesting the Michigan Department of Transportation (MDOT) include the existing bridge on Ashbury Drive over the Middle Branch of the Rouge River in the State Local Bridge Program List for Replacement. If MDOT selects the bridge, the City of Novi will accept 100% of the design engineering costs and 5% of the total construction cost.

CITY OF NOVI

COUNTY OF OAKLAND, MICHIGAN

**RESOLUTION REQUESTING THAT THE MICHIGAN DEPARTMENT OF TRANSPORTATION
INCLUDE THE BRIDGE ON ASHBURY DRIVE OVER THE MIDDLE ROUGE RIVER IN THE STATE
LOCAL BRIDGE PROGRAM LIST FOR REPLACEMENT**

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 March 24, 2025, at 7 o'clock P.M. Prevailing Eastern Time.

PRESENT: Councilmembers_____

ABSENT: Councilmembers_____

The following preamble and Resolution were offered by Councilmember _____ and supported by Councilmember _____.

WHEREAS; OHM Advisors, Consulting Engineers for the City of Novi, completed the 2024 annual inspection of twelve bridges in the City; and

WHEREAS; based on the 2024 inspection, OHM Advisors prepared a 2024 Bridge Inspection Report for the bridge on Ashbury Drive over the Middle Rouge River; and

WHEREAS; the 2024 Bridge Inspection Report concludes that the bridge on Ashbury Drive over the Middle Rouge River is in need of replacement; and

WHEREAS; based on the findings and recommendations of OHM Advisors, the DPW Director recommends that City Council authorize OHM Advisors to submit the LAP Bridge Applications to the Michigan Department of Transportation for the bridge on Ashbury Drive over the Middle Rouge River on the Local Bridge Program for Replacement funding; and

WHEREAS; the City of Novi's cost participation amount would be 5% of the total cost and 100% of the design and construction engineering cost; and

WHEREAS; the Mayor and City Clerk are authorized to execute said resolution.

NOW THEREFORE, IT IS THEREFORE RESOLVED that the City of Novi is actively seeking financial participation to replace the bridge on Ashbury Drive over the Middle Rouge River and authorizes OHM Advisors to submit the LAP Bridge application to the Michigan

Department of Transportation to include this bridge on the State Local Bridge Program List for Replacement, to make application for financial assistance from the State of Michigan and Federal Government and to do those things reasonably necessary or required in order to accomplish the replacement of this bridge.

AYES:

NAYS:

RESOLUTION DECLARED ADOPTED.

Cortney Hanson, City Clerk

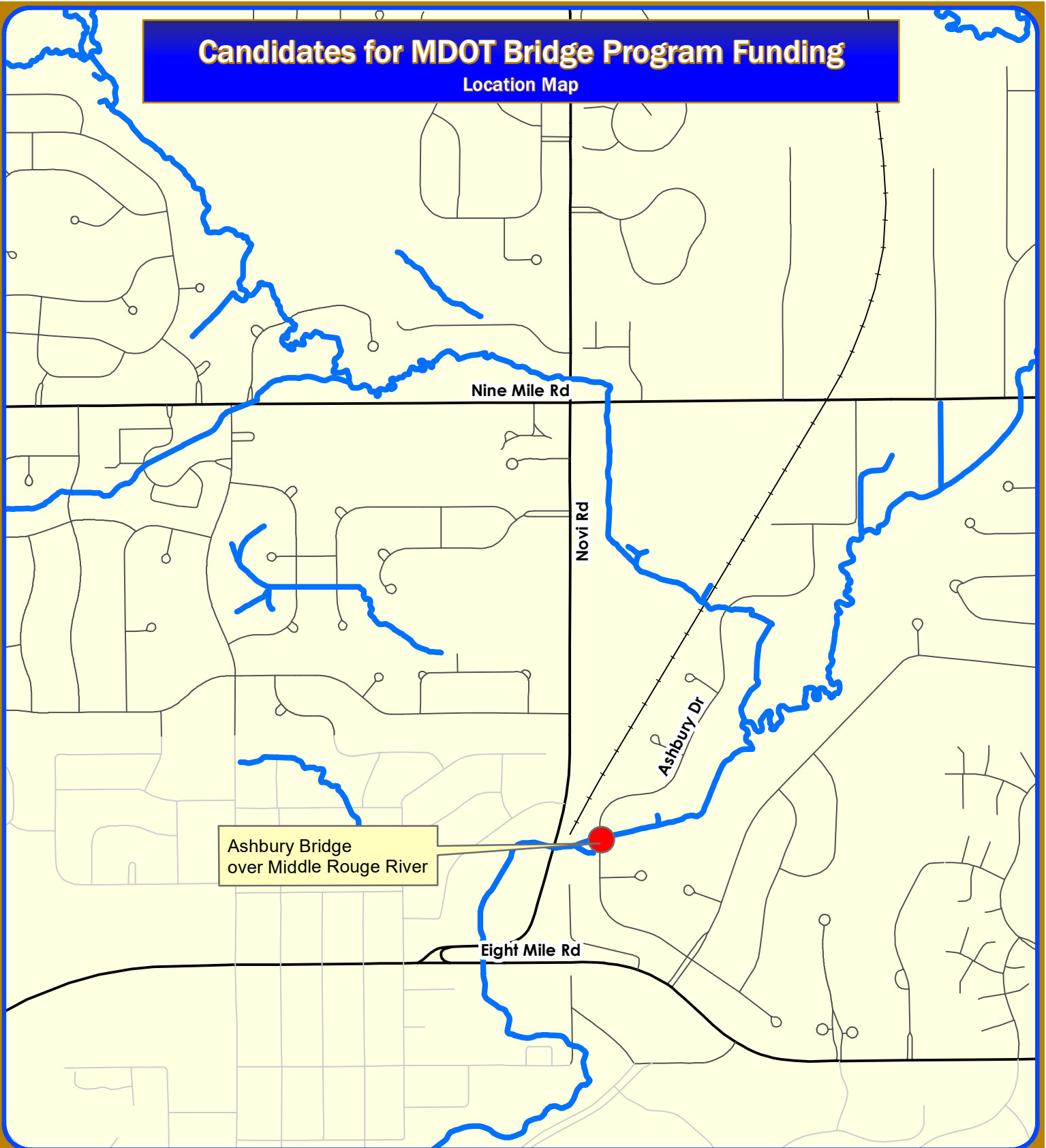
CERTIFICATION

I hereby certify that the foregoing is a true and complete copy of a resolution adopted by the City Council of the City of Novi, County of Oakland, and State of Michigan, at a regular meeting held this 24th day of March, 2025, and that public notice of said meeting was given pursuant to and in full compliance with Act No. 267, Public Acts of Michigan, 1976, and that the minutes of said meeting have been kept and made available to the public as required by said Act.

Cortney Hanson, City Clerk
City of Novi

Candidates for MDOT Bridge Program Funding

Location Map



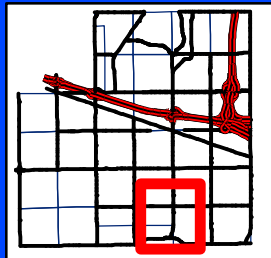
Map Author: Croy
Date: Mar 2025
Project: Bridge Candidates
Version: v2.0

MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.



Proposed
Bridge Candidate



City of Novi

Engineering Division
Department of Public Works
26300 Lee BeGole Drive
Novi, MI 48375
cityofnovi.org

0 212.5 425 850 1,275
Feet

1 inch = 1,042 feet



ELIZABETH KUDLA SAARELA
esaarela@rsjalaw.com

27555 Executive Drive, Suite 250
Farmington Hills, Michigan 48331
P 248.489.4100 | F 248.489.1726
rsjalaw.com



ROSATI | SCHULTZ
JOPPICH | AMTSBUECHLER

March 12, 2025

Ben Croy, City Engineer
City of Novi
Department of Public Works
Field Services Complex
26300 Lee BeGole Drive
Novi, MI 48375

Re: MDOT Local Bridge Program – Asbury Bridge over Middle Rouge River

Dear Mr. Croy:

You have indicated that the City will be resubmitting its application for participation in MDOT's 2025 Local Bridge Program. We have reviewed and approve use of the proposed Resolution Requesting that the Michigan Department of Transportation Include the Asbury Bridge over the Middle Rouge River in the State Local Bridge Program List. The Resolution is provided for the limited purpose of acknowledging that the City agrees pay 5% of the bridge replacement cost and 100% of the design and construction engineering cost in the event that a grant is awarded by MDOT.

Based on the limited purpose of the Resolution, we see no legal impediment to City Council approving the enclosed version of the Resolution.

If you have any questions regarding the above, please do not hesitate to contact me.

Very truly yours,

ROSATI SCHULTZ JOPPICH
& AMTSBUECHLER PC

Elizabeth Kudla Saarela

Enclosure

C: Cortney Hanson, Clerk (w/Enclosure)
Jeffrey Herczeg, Director of Public Works (w/Enclosure)
Rebecca Runkel, Project Engineer (w/Enclosure)
Thomas R. Schultz, Esquire (w/Enclosure)

CITY OF NOVI

COUNTY OF OAKLAND, MICHIGAN

**RESOLUTION REQUESTING THAT THE MICHIGAN DEPARTMENT OF TRANSPORTATION
INCLUDE THE BRIDGE ON ASHBURY DRIVE OVER THE MIDDLE ROUGE RIVER IN THE STATE
LOCAL BRIDGE PROGRAM LIST FOR REPLACEMENT**

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 March 24, 2025, at 7 o'clock P.M. Prevailing Eastern Time.

PRESENT: Councilmembers_____

ABSENT: Councilmembers_____

The following preamble and Resolution were offered by Councilmember _____ and supported by Councilmember _____.

WHEREAS; OHM Advisors, Consulting Engineers for the City of Novi, completed the 2024 annual inspection of twelve bridges in the City; and

WHEREAS; based on the 2024 inspection, OHM Advisors prepared a 2024 Bridge Inspection Report for the bridge on Ashbury Drive over the Middle Rouge River; and

WHEREAS; the 2024 Bridge Inspection Report concludes that the bridge on Ashbury Drive over the Middle Rouge River is in need of replacement; and

WHEREAS; based on the findings and recommendations of OHM Advisors, the DPW Director recommends that City Council authorize OHM Advisors to submit the LAP Bridge Applications to the Michigan Department of Transportation for the bridge on Ashbury Drive over the Middle Rouge River on the Local Bridge Program for Replacement funding; and

WHEREAS; the City of Novi's cost participation amount would be 5% of the total cost and 100% of the design and construction engineering cost; and

WHEREAS; the Mayor and City Clerk are authorized to execute said resolution.

NOW THEREFORE, IT IS THEREFORE RESOLVED that the City of Novi is actively seeking financial participation to replace the bridge on Ashbury Drive over the Middle Rouge River and authorizes OHM Advisors to submit the LAP Bridge application to the Michigan

Department of Transportation to include this bridge on the State Local Bridge Program List for Replacement, to make application for financial assistance from the State of Michigan and Federal Government and to do those things reasonably necessary or required in order to accomplish the replacement of this bridge.

AYES:

NAYS:

RESOLUTION DECLARED ADOPTED.

Cortney Hanson, City Clerk

CERTIFICATION

I hereby certify that the foregoing is a true and complete copy of a resolution adopted by the City Council of the City of Novi, County of Oakland, and State of Michigan, at a regular meeting held this 24th day of March, 2025, and that public notice of said meeting was given pursuant to and in full compliance with Act No. 267, Public Acts of Michigan, 1976, and that the minutes of said meeting have been kept and made available to the public as required by said Act.

Cortney Hanson, City Clerk
City of Novi

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13828

BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
ASHBURY DRIVE	42.4427 / -83.4728	635489000067B01	Poor Condition(4)
Feature	Length / Width / Spans	Owner	
MIDDLE BR ROUGE RIVER	46.1 / 44.4 / 1	City: NOVI(4890)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
CHASE FARMS SUBDIVISION	1991 / / /	Oakland(23)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
Metro(7) / Oakland(63)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	09/27/2024 / NJL2	8 Stable Above Footing



NBI INSPECTION

NJL2

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Adam Rychwalski	Orchard, Hiltz & McCliment Inc	12	09/27/2024

GENERAL NOTES

DECK

	09/22	09/23	09/24	
1. Surface (SIA-58A)	6	6	5	HMA surface with general cracking throughout. SE quad has break up of HMA at east curb line. General scaling of HMA surface along both curb lines. Random cracking throughout HMA with some unsealed. No waterproofing membrane evident. (09/24) HMA surface with sealed longitudinal crack at centerline. Two other sealed longitudinal cracks near mid span. Previously unsealed crack have been sealed. SE quad has break up of HMA at east curb line. General scaling of HMA surface along west curb line. Random cracking throughout HMA with some unsealed. (09/23) HMA surface with sealed longitudinal crack at centerline. Two other sealed longitudinal cracks near mid span. Previously unsealed crack have been sealed. SE quad has break up of HMA at east curb line. General scaling of HMA surface along west curb line. (09/22)
2. Expansion Joints	7	7	7	Sealed cracks at reference lines. Sealant sinking in areas but still intact. Some drying of HPJS. (09/24) Sealed cracks at reference lines. Sealant sinking in areas but still intact. Some drying of HPJS. (09/23) Sealed cracks at reference lines. Sealant sinking in areas but still intact. Some drying of HPJS. (09/22)
3. Other Joints	N	N	N	(09/24) (09/23) (09/22)
4. Railings	7	7	7	Concrete rail with painted timber insets and wood rail on top. Concrete has some vertical cracks at 5-6' spacing. Timber has been recently replaced. (09/24) Concrete rail with painted timber insets and wood rail on top. Concrete has some vertical cracks at 5-6' spacing. Timber has been recently replaced. (09/23) Concrete rail with painted timber insets and wood rail on top. Concrete has some vertical cracks at 5-6' spacing. Timber has been recently replaced. (09/22)
5. Sidewalks or Curbs	7	7	7	A few longitudinal and transverse cracks on sidewalk. (09/24) A few longitudinal and transverse cracks on sidewalk. (09/23) A few longitudinal and transverse cracks on sidewalk. (09/22)
6. Deck Bottom Surface (SIA-58B)	N	N	N	Side-by-side box beams. Leaking between all beams. Stalactites present at most beam lines and leachate at all of them. (09/24) Side-by-side box beams. Leaking between all beams. Stalactites present at most beam lines and leachate at all of them. (09/23) Side-by-side box beams. Leaking between all beams. Stalactites present at most beam lines and leachate at all of them. (09/22)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13828

BRIDGE SAFETY INSPECTION REPORT

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Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
Metro(7) / Oakland(63)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	09/27/2024 / NJL2	8 Stable Above Footing



7. Deck (SIA-58)	6	6	6	HMA surface with general cracking throughout. SE quad has break up of HMA at east curb line. General scaling of HMA surface along both curb lines. Random cracking throughout HMA with some unsealed. No waterproofing membrane evident. Top of beams exposed at sidewalk face near midspan on both sides of bridge. Evidence of leaking between all beams (09/24) HMA surface with sealed longitudinal crack at centerline. Two other sealed longitudinal cracks near mid span. Previously unsealed crack have been sealed. SE quad has break up of HMA at east curb line. General scaling of HMA surface along west curb line. Random cracking throughout HMA with some unsealed. Top of beams exposed at sidewalk face near midspan on both sides of bridge. Evidence of leaking between all beams (09/23) Surface has some cracking and there is leaking between all beams. Top of beams exposed at sidewalk face near midspan on both sides of bridge. (09/22)
8. Drainage				(09/24) (09/23) (09/22)

SUPERSTRUCTURE

	09/22	09/23	09/24	
9. Stringer (SIA-59)	7	7	7	Leaching between beams but no distress to beams. Few cracks on fascias at 4' spacing with leaching. (09/24) Leaching between beams but no distress to beams. Few cracks on fascias at 4' spacing with leaching. (09/23) Leaching between beams but no distress to beams. Few cracks on fascias at 4' spacing with leaching. (09/22)
10. Paint (SIA-59A)	N	N	N	(09/24) (09/23) (09/22)
11. Section Loss	N	N	N	(09/24) (09/23) (09/22)
12. Bearings	7	7	7	Not visible but not no signs of issues. Appear to be functioning as intended. Some drying of expansion paper along abutment face. (09/24) Not visible but not no signs of issues. Appear to be functioning as intended. Some drying of expansion paper along abutment face. (09/23) Not visible but not no signs of issues. Appear to be functioning as intended. (09/22)

SUBSTRUCTURE

09/22 09/23 09/24

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13828

BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
ASHBURY DRIVE	42.4427 / -83.4728	635489000067B01	Poor Condition(4)
Feature	Length / Width / Spans	Owner	
MIDDLE BR ROUGE RIVER	46.1 / 44.4 / 1	City: NOVI(4890)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
CHASE FARMS SUBDIVISION	1991 / / /	Oakland(23)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
Metro(7) / Oakland(63)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	09/27/2024 / NJL2	8 Stable Above Footing



13. Abutments (SIA-60)	4	4	4	Pack rust and scaling at base and top near beams is evident on both abutments and has progressed since the previous inspection. Some vertical cracks in concrete pile cap. Evidence of leaking from ends. Holes in sheet piling of north abutment near the middle of the base. Pack rust and scaling on north abutment is allowing water through but no material. Section loss is minor and there is leaching between the sheets of the southern abutment sheet piling. Hole near top of sheet pile reveals that the bridge is on pipe piles and the sheet piles are used as earth retention only. (09/24) Pack rust and scaling at base and top near beams is evident on both abutments and has progressed since the previous inspection. Some vertical cracks in concrete pile cap. Evidence of leaking from ends. Holes in sheet piling of north abutment near the middle of the base. Pack rust and scaling on north abutment is allowing water through but no material. Section loss is minor and there is leaching between the sheets of the southern abutment sheet piling. Hole near top of sheet pile reveals that the bridge is on pipe piles and the sheet piles are used as earth retention only. (09/23) Pack rust and scaling at base and top near beams is evident on both abutments and has progressed since the previous inspection. Some vertical cracks in concrete pile cap. Evidence of leaking from ends. Holes in sheet piling of north abutment near the middle of the base. Pack rust and scaling on north abutment is allowing water through but no material. Section loss is minor and there is leaching between the sheets of the southern abutment sheet piling. Hole near top of sheet pile reveals that the bridge is on pipe piles and the sheet piles are used as earth retention only. (09/22)
14. Piers (SIA-60)	N	N	N	(09/24) (09/23) (09/22)
15. Slope Protection	N	N	N	(09/24) (09/23) (09/22)
16. Channel (SIA-61)	6	6	6	Banks eroded ~2' high along the waterline. vegetation sloughing into channel. Main channel is relatively flat. Natural banks established within the bridge footprint. (09/24) Banks eroded ~2' high along the waterline. vegetation sloughing into channel. Main channel is relatively flat. Natural banks established within the bridge footprint. (09/23) Banks eroded ~2' high along the waterline. vegetation sloughing into channel. Main channel is relatively flat (09/22)
17. Scour Inspection	7	7	7	No scour evident. Flat rocky bottom. (09/24) No scour evident. Flat rocky bottom. (09/23) No scour evident. Flat rocky bottom. (09/22)

APPROACH

	09/22	09/23	09/24	
18. Approach Pavement	7	6	6	Isolated cracks throughout with some sealed and some unsealed. General wear of HMA surface. (09/24) Isolated cracks throughout with some sealed and some unsealed. General wear of HMA surface. (09/23) Sealed longitudinal crack in north approach. No cracks in south approach. General wear in HMA. (09/22)
19. Approach Shoulders Sidewalks	7	7	7	Sidewalk and curb have recently been replaced in all quadrants. (09/24) Sidewalk and curb have recently been replaced in all quadrants. (09/23) Sidewalk and curb have recently been replaced in all quadrants. (09/22)
20. Approach Slopes				Gentle grassed slopes with no erosion. (09/24) Gentle grassed slopes with no erosion. (09/23) Gentle grassed slopes with no erosion. (09/22)
21. Utilities				(09/24) (09/23) (09/22)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13828

BRIDGE SAFETY INSPECTION REPORT

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22. Drainage	(09/24)
Culverts	(09/23)
	(09/22)

MISCELLANEOUS

Guard Rail

<u>Item</u>	<u>Rating</u>
36A. Bridge Railings	1
36B. Transitions	0
36C. Approach Guardrail	0
36D. Approach Guardrail Ends	0

Other Items

<u>Item</u>	<u>Rating</u>
71. Water Adequacy	8
72. Approach Alignment	8
Temporary Support	0 No Temporary Supports
High Load Hit (M)	No
Special Insp. Equipment	2
Underwater Insp. Method	1

False Decking (Timber) Removed to Complete Inspection

N/A - No False Decking

Critical Feature Inspections (SIA-92)

	<u>Freq</u>	<u>Date</u>
92A. Fracture Critical		
92B. Underwater		
92C. Other Special		
92D. Fatigue Sensitive		

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13828

STRUCTURE INVENTORY AND APPRAISAL

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
ASHBURY DRIVE	42.4427 / -83.4728	635489000067B01	Poor Condition(4)
Feature	Length / Width / Spans	Owner	
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Bridge History, Type, Materials		Route Carried By Structure(ON Record)		Route Under Structure (UNDER Record)	
27 - Year Built	1991	5A - Record Type	1	5A - Record Type	
106 - Year Reconstructed		5B - Route Signing	5	5B - Route Signing	
202 - Year Painted		5C - Level of Service	0	5C - Level of Service	
203 - Year Overlay		5D - Route Number	00000	5D - Route Number	
43 - Main Span Bridge Type	5 05	5E - Direction Suffix	0	5E - Direction Suffix	
44 - Appr Span Bridge Type		10L - Best 3m Unclr-Lt	0 0	10L - Best 3m Unclr-Lt	
77 - Steel Type		10R - Best 3m Unclr-Rt	99 99	10R - Best 3m Unclr-Rt	
78 - Paint Type		PR Number		PR Number	
79 - Rail Type	9	Control Section		Control Section	
80 - Post Type		11 - Mile Point	0	11 - Mile Point	
107 - Deck Type	2	12 - Base Highway Network	0	12 - Base Highway Network	
108A - Wearing Surface	6	13 - LRS Route-Subroute	0000044017 42	13 - LRS Route-Subroute	
108B - Membrane	0	19 - Detour Length	2	19 - Detour Length	
108C - Deck Protection	0	20 - Toll Facility	3	20 - Toll Facility	
Structure Dimensions		26 - Functional Class	19	26 - Functional Class	
34 - Skew	4	28A - Lanes On	2	28B - Lanes Under	
35 - Struct Flared	0	29 - ADT	100	29 - ADT	
45 - Num Main Spans	1	30 - Year of ADT	1991	30 - Year of ADT	
46 - Num Apprs Spans	0	32 - Appr Roadway Width	24	42B - Service Type Under	5
48 - Max Span Length	39.5	32A/B - Ap Pvt Type/Width	24.02	47L - Left Horizontal Clear	
49 - Structure Length	46.1	42A - Service Type On	5	47R - Right Horizontal Clear	
50A - Width Left Curb/SW	6.8	47L - Left Horizontal Clear	0.0	54A - Left Feature	
50B - Width Right Curb/SW	6.8	47R - Right Horizontal Clear	28.0	54B - Left Underclearance	99 99
33 - Median	0	53 - Min Vert Clr Ov Deck	99 99	54C - Right Feature	
51 - Width Curb to Curb	28	100 - STRAHNET	0	54D - Right Clearance	99 99
52 - Width Out to Out	44.4	102 - Traffic Direct	2	Under Clearance Year	
112 - NBIS Length	Y	109 - Truck %	0	55A - Reference Feature	N
Inspection Data		110 - Truck Network	0	55B - Right Horiz Clearance	
90 - Inspection Date	09/27/2024	114 - Future ADT	115	56 - Left Horiz Clearance	
91 - Inspection Freq	12	115 - Year Future ADT	2011	100 - STRAHNET	
92A - Frac Crit Req/Freq	N	Freeway	0	102 - Traffic Direct	
93A - Frac Crit Insp Date		Structure Appraisal		109 - Truck %	
92B - Und Water Req/Freq	N	36A - Bridge Railing	1	110 - Truck Network	
93B - Und Water Insp Date		36B - Rail Transition	0	114 - Future ADT	
92C - Oth Spec Insp Req/Freq	N	36C - Approach Rail	0	115 - Year Future ADT	
93C - Oth Spec Insp Date		36D - Rail Termination	0	Freeway	
92D - Fatigue Req/Freq	N	67 - Structure Evaluation	4	Proposed Improvements	
93D - Fatigue Insp Date		68 - Deck Geometry	7	75 - Type of Work	
176A - Und Water Insp Method	1	69 - Underclearance	N	76 - Length of Improvement	
58 - Deck Rating	6	71 - Waterway Adequacy	8	94 - Bridge Cost	
58A/B - Deck Surface/Bottom	5 N	72 - Approach Alignment	8	95 - Roadway Cost	
59 - Superstructure Rating	7	103 - Temporary Structure		96 - Total Cost	
59A - Paint Rating	N	113 - Scour Criticality	8	97 - Year of Cost Estimate	
60 - Substructure Rating	4	Miscellaneous		Load Rating and Posting	
61 - Channel Rating	6	37 - Historical Significance	5	31 - Design Load	4
62 - Culvert Rating	N	98A - Border Bridge State		41 - Open, Posted, Closed	A
Navigation Data		98B - Border Bridge %		63 - Fed Oper Rtg Method	0
38 - Navigation Control	0	101 - Parallel Structure	N	64F - Fed Oper Rtg Load	1.67
39 - Vertical Clearance	0	EPA ID		64MA - Mich Oper Rtg Method	0
40 - Horizontal Clearance	0	Stay in Place Forms	0	64MB - Mich Oper Rtg	1
111 - Pier Protection		143 - Pin & Hanger Code		64MC - Mich Oper Truck	18
116 - Lift Brdg Vert Clear	0	148 - No. of Pin & Hangers		65 - Inv Rtg Method	0
				66 - Inventory Load	1
				70 - Posting	5
				141 - Posted Loading	
				193 - Overload Class	

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13828

WORK RECOMMENDATIONS

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
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WORK RECOMMENDATIONS

NJL2

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Adam Rychwalski	Orchard, Hiltz & McCliment Inc	12	09/27/2024

RECOMMENDATIONS & ACTION ITEMS

Recommendation Type	Priority	Description
Deck Patching	L	Seal cracks in surface.
HMA Overlay	H	Apply waterproofing underneath HMA overlay.
Substr Repair	M	Replace abutment sheet pile facing with more permanent solution.

2a. Situation Map

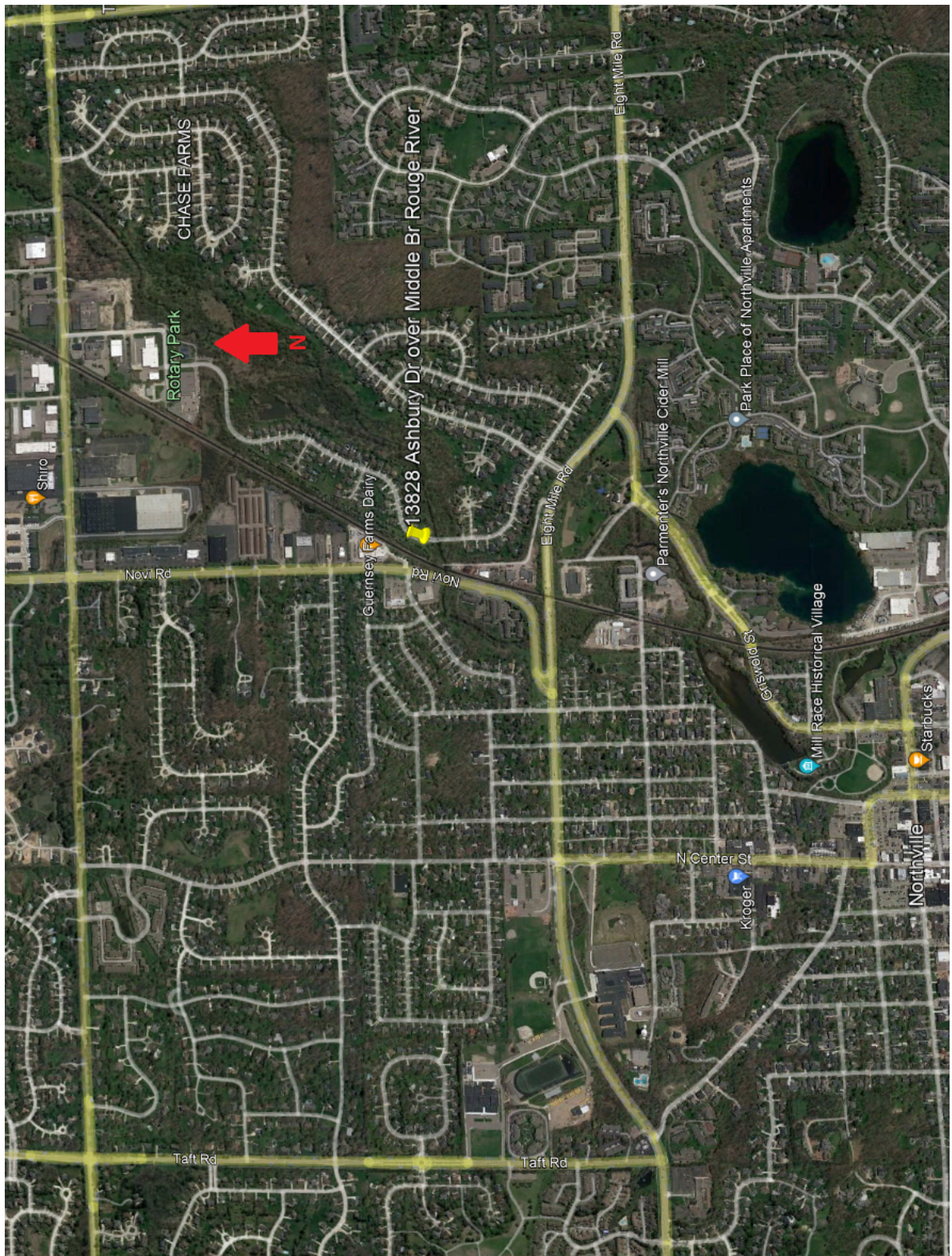


Image from Google Earth

2b. Detour Map

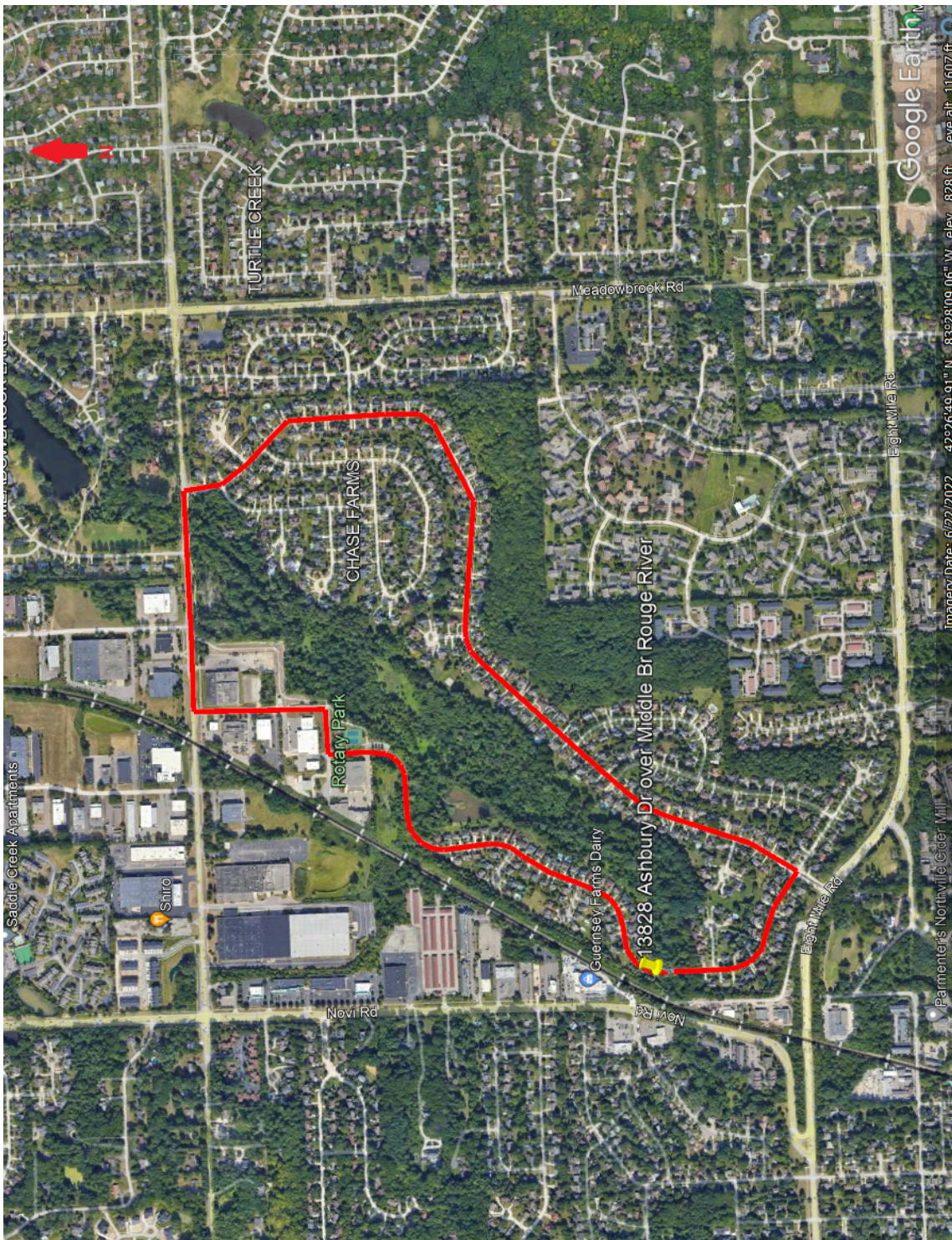


Image from Google Earth

Ashbury Dr to Roethel Dr
To 9 Mile Rd
To Novi Rd
To Chase Dr
Ashbury Dr

Detour Length: 2.77 Miles

3. Photographs



North Approach Looking South



Typical Deck Surface



South Elevation



Typical Deck Underside



North Abutment



South Abutment



North Abutment Sheeting Section Loss and Rusting



South Abutment Sheeting Section Loss and Rusting

4. Application Requirements for Ashbury Drive over Middle Br Rouge River

A. Local Agency Contact Person

Ben Croy, PE
City Engineer
City of Novi
26300 Lee BeGole Drive
Novi, MI 48375

B. The purpose of this application is for the rehabilitation of the bridge for Ashbury Drive over Middle Br Rouge River. Proposed work includes partial replacement of the substructure, approach replacement, and HMA overlay of the deck. The City of Novi will commit to providing 5% of the construction cost for local match on this project.

C. Economic Importance of the Structure

This structure is located approximately 2.1 miles west and 0.3 miles north of the interchange of I-275 and 8 Mile Road. Ashbury Drive is a north south road in Novi, serving the Chase Farms neighborhood.

Ashbury Drive is used by the Novi School District for busing to its elementary, middle, and high schools. Fire and police stations also use it to reach homes in the area for emergencies.

The current structure is a single span adjacent concrete box beam bridge. The overall condition of the bridge is poor and rated a 4. The superstructure is in good condition. The surface is HMA with sealed cracks in fair condition. The concrete box beams have leaching between beams and a few cracks on the fascia beams with leaching. The abutments are in poor condition and rated a 4. The abutments are pipe pile supported concrete caps, with steel sheet piling below the concrete cap to retain the approach backfill. The sheet piling has extensive pack rust at the base. The north abutment sheet piling has holes near the middle of the base and the pack rust and scaling on the north abutment is allowing water through. Pack rust and section loss on the south abutment is moderate and there is leaching between pile sheets. The rate of deterioration has accelerated since the last inspection.

Due to the poor condition of the abutment sheet piling, a partial substructure replacement is recommended. As the sheet piling continues to deteriorate, backfill material will spill through the abutment, causing sinkholes in the approaches. Repairing the existing holes is not recommended as the existing sheet piling will continue to deteriorate outside of the repairs. The bridge is supported on piles and a pile cap. The pile cap is in good condition and does not need to be replaced. A new concrete earth retaining system will be poured to protect and provide bracing to the existing piles and replace the existing sheet pile. To replace the substructure, the approaches and approach fill must be removed. New HMA and waterproofing membrane will be placed on the

bridge to provide a smooth transition from the approaches. This approach to rehabilitation is estimated at approximately one-third the cost of a complete replacement and is anticipated to extend the life of the structure for decades.

D. If there is a current detour, what does it affect?

Currently the bridge is open to traffic and there is no detour.

E. If the structure were to be closed, what would the detour affect?

If the structure were to be closed, the residents of the area would be impacted. Emergency services would also take longer to reach the neighborhood as they would have to detour around the bridge. As every second matters in an emergency, this could lead to public safety concerns. School buses would have to change their routes to be less efficient and would increase bussing duration for students.

F. The structure is not currently closed.

G. Maintenance of the Structure

The City has previously repaired portions of the barrier, performed crack sealing of the surface, and is currently monitoring the abutment sheet piling on a regular basis for evidence of holes opening up that would allow approach fill to bleed through.

5. Estimated Rehabilitation Costs

Partial Substructure Replacement	
A. Road Construction	\$ 160,000.00
B. Structure Construction	\$ 623,000.00
Total (A & B)	\$ 783,000.00

For a breakdown of Construction costs, see Appendix A.

6. Priority List

1. Ashbury Drive over Middle Br Rouge River

7. Resolution

The resolution is attached in Appendix B.

8. Previous Applications

It is understood that all previous applications have been discarded and that this application will be used to select funding.

APPENDIX A

Exhibit 4 - Cost Estimating Worksheet

2025

BRIDGE COST ESTIMATE WORKSHEET - CPM, REHAB, REPLACE -

REV. 02/6/2024

DATE: 3/6/2025

ENGINEER: AJR

OWNER: NOVI
REGION: Metro
TSC: Oakland

FISCAL YEAR: 2028

PR: #N/A MP: #N/A

LENGTH 46.1
Out to Out WIDTH 44.4
Curb to Curb WIDTH 28.0

STRUCTURE ID: 13828

BRIDGE ID: N/A

LOCATION: ASHBURY DRIVE over MIDDLE BR ROUGE RIVER

PRIMARY WORK ACTIVITY Partial Substructure Replacement

OTHER WORK:

DECK AREA: 2,047
CLEAR ROADWAY: 1,291

SFT
SFT

STR. TYPE: Prestressed Concrete
Box Beam or Girders - Mul

WORK ACTIVITY	MDOT Bridge Design Guides	QUANTITY	UNIT	UNIT COST	TOTAL
NEW BRIDGE (increase deck area based on design standards and hydraulic requirements)					
Single or Multiple Spans, Grade Separation	(add demo, approach, MOT)		SFT	\$435.00 /SFT	
Single Span, Over Water	Length < 100ft (add demo, approach, MOT)		SFT	\$525.00 /SFT	
Multiple Spans, Over Water	Length > 100ft (add demo, approach, MOT)		SFT	\$470.00 /SFT	
Precast Culvert	Length < 40ft (add demo, approach, MOT)		SFT	\$565.00 /SFT	
NEW SUPERSTRUCTURE					
New Superstructure, Grade Separation	(incl. remove exist deck/super; add MOT & approach)		SFT	\$310.00 /SFT	
New Superstructure, Over Water	(incl. remove exist deck/super; add MOT & approach)		SFT	\$315.00 /SFT	
WIDENING					
Structure Widening, _____ ft	(incl. deck/super/sub widening, add approach transition)		SFT	\$630.00 /SFT	
NEW DECK					
New Bridge Deck & Barrier	(incl. remove exist deck/railing, add approach, MOT)		SFT	\$150.00 /SFT	
DEMOLITION					
Entire Structure, Grade Separation			SFT	\$75.00 /SFT	
Entire Structure, Over Water			SFT	\$95.00 /SFT	
DECK REPAIR / TREATMENTS					
Bridge Railing Replacement	(incl. removal and replacement)		FT	\$750.00 /FT	
Concrete Brush Block / Curb Patch	(incl. hand chipping and formwork)		FT	\$29.00 /FT	
Concrete Barrier Patch	(incl. hand chipping and formwork)		SFT	\$85.00 /SFT	
Concrete Deck Patch	(incl. hand chipping)		SFT	\$68.00 /SFT	
Deep Overlay	(incl. joint repl & hydro)		SFT	\$46.00 /SFT	
Epoxy Overlay	(incl. warranty)		SYD	\$48.00 /SYD	
Expansion Joint Gland Replacement	(remove and replace elastomeric gland)		FT	\$125.00 /FT	
Expansion Joint Replacement	(incl. removal)		FT	\$860.00 /FT	
Full Depth Patch			SFT	\$140.00 /SFT	
Healer / Sealer	(penetrates cracks in bridge deck)		SYD	\$30.00 /SYD	
HMA Overlay with WP membrane		143.4	SYD	\$60.00 /SYD	\$8,605.33
Overlay Removal	(Epoxy: \$22/syd Latex: \$26/syd HMA: \$7/syd)	143.4	SYD	\$7.00 /SYD	\$1,003.96
Reseal Bridge Joints			FT	\$28.00 /FT	
Shallow Overlay	(incl. joint repl & hydro)		SFT	\$46.00 /SFT	
SUPERSTRUCTURE REPAIR					
Bearing Realignment / Replacement	(incl. temporary supports)		EA	\$6,450.00 /EA	
Heat Straightening	(incl. clean and coat)		EA	\$57,000.00 /EA	
Pack Rust Repair	(greater than 3/8" separation)		FT	\$1,150.00 /FT	
Paint - Complete	(incl. clean & coat)		SFT	\$30.00 /SFT	
Paint - Partial / Spot / Zone	(incl. clean & coat - \$20k minimum)		SFT	\$60.00 /SFT	
PCI Beam End Blockout	(incl. temporary supports)		EA	\$7,200.00 /EA	
Pin & Hanger Replacement	(incl. temporary supports)		EA	\$17,000.00 /EA	
Structural Steel Repair	(based on 6ft repair length)		EA	\$4,000.00 /EA	
Structural Steel Repair - Stiffener	(includes each side of beam)		EA	\$1,500.00 /EA	
SUBSTRUCTURE REPAIR					
Substructure Patching	(measured x 2) replace if repair area > 30%		CFT	\$360.00 /CFT	
Substructure Replacement	(incl. temporary supports, excavation)		CFT	\$375.00 /CFT	
Substructure Horizontal Surface Sealer			SYD	\$75.00 /SYD	
Temporary Supports	(add Structural Steel Repair - Stiffener for ea steel beam)		EA	\$4,000.00 /EA	
Partial Substructure Replacement	(includes concrete, rebar, forming)	200.0	CYD	\$1,650.00 /CYD	\$330,000.00
Partial Substructure Replacement Earthwork		1,166.7	CYD	\$70.00 /CYD	\$81,666.67
MISCELLANEOUS					
Articulating Concrete Block System (ACB)			SYD	\$320.00 /SYD	
Concrete Surface Coating			SYD	\$47.00 /SYD	
Culvert Cleanout			FT	\$125.00 /FT	
Epoxy Crack Injection	(structural crack repair)		FT	\$70.00 /FT	
Metal Mesh Panels	(48" width, max 6'-6" length)		SFT	\$28.00 /SFT	
Pressure Relief Joint	(use when approach concrete roadway exceeds 1,000ft)		FT	\$110.00 /FT	
Riprap	(assume 10ft distance around perimeter of substructure)		SYD	\$275.00 /SYD	
Silane Treatment	(penetrating sealer for concrete surfaces)		SFT	\$7.00 /SFT	
Slope Protection Repairs			SYD	\$150.00 /SYD	
Other					

STRUCTURE CONSTRUCTION BUDGET \$421,276

ROAD WORK					
Approach Pavement, 12" RC	(incl. removal; add curb, gutter, guardrail) 40' ea. end		SYD	\$230.00 /SYD	
Approach Curb & Gutter	(incl. removal) 40' ea. quadrant	160.0	FT	\$57.00 /FT	\$9,120.00
Guardrail Anchorage to Bridge	(each quadrant)	4.0	EA	\$2,540.00 /EA	\$10,160.00
Guardrail	(incl. removal) < 200ft beyond reference line		FT	\$41.00 /FT	
Guardrail Terminal	(each quadrant)	4.0	EA	\$3,900.00 /EA	\$15,600.00
Roadway Approach Work	(beyond approach pavement)	1.0	LSUM	\$10,000.00 /LSUM	\$10,000.00
Utilities		1.0	LSUM	\$20,000.00 /LSUM	\$20,000.00
HMA Approach	(includes removal)	1,400.0	SFT	\$13.00 /SFT	\$18,200.00
TRAFFIC CONTROL Unit Cost to be determined by Region or TSC Traffic & Safety					
Part Width Construction			LSUM		LSUM
Crossovers			EA		/EA
Temporary Traffic Signals			set		/set
RR Flagging			LSUM		LSUM
Detour		1.0	LSUM	\$25,000.00 /LSUM	\$25,000.00

RELATED ROAD/TRAFFIC CONSTRUCTION BUDGET \$108,080

CONTINGENCY	(10% - 20%) (use higher contingency for small projects)	20	%	\$529,000.00	\$106,000
MOBILIZATION	(estimate at 10%)	10	%	\$635,000.00	\$64,000
INFLATION	(assume 4% per year, beginning in 2025)	12	%	\$699,000.00	\$84,000

(Does not include PE or CE)

TOTAL CONSTRUCTION BUDGET \$783,000

APPENDIX B



CITY OF NOVI CITY COUNCIL
MARCH 24, 2025

SUBJECT: Approval to purchase ASHRAE Level II energy audits through Information & Energy Services, Inc. in the amount of \$28,917, and amend the budget.

SUBMITTING DEPARTMENT: Integrated Solutions – Facilities Management

KEY HIGHLIGHTS:

- ASHRAE Level II energy audit to be performed at the Civic Center, DPW, Fire Station 4, Firearms Training Center, and Novi Ice Arena.
- This is the first phase of the previously approved \$100,000 grant agreement between EGLE and the City of Novi.
- The City of Novi will receive reimbursement for the costs of performing the energy audits through the grant funds secured. The remaining funds will be available to address the actionable items in the reports.

FINANCIAL IMPACT

	FY 24/25	Total
EXPENDITURE REQUIRED	\$ 28,917	\$ 28,197
BUDGET		
1. Energy Audit CEMS Grant 101-265.00-816.074	\$ 100,000	\$ 28,197
2. State Grants – CEMS 101-000.00-540.100	\$ 100,000	\$ 0
APPROPRIATION REQUIRED	\$ 0	\$ 0
FUND BALANCE IMPACT	\$ 0	\$ 0

BACKGROUND INFORMATION:

In November 2024, the City Council approved the \$100,000 grant agreement with the Department of Environment, Great Lakes, and Energy (EGLE) for the Community Energy Management Program (CEM). City Staff submitted a two-phased approach as part of the grant application approval. Phase 1 will conduct an American Society of Heating, Refrigeration, and Air-Conditioning (ASHRAE) Level II audit at five municipal facilities.

An ASHRAE Level II audit aims to identify possible areas where energy and water may be conserved. The Novi Civic Center, DPW, Fire Station 4, Firearms Training Center, and Novi Ice Arena buildings will benefit the most from these energy audits. The amount of HVAC equipment, lighting, domestic water heating, appliances, roofing, insulation, bathroom fixtures, and miscellaneous equipment in these structures makes them an ideal choice for immediate energy savings. Once the energy audit has been completed, the City will receive a comprehensive report on each building showing where energy can be conserved through repairs, upgrades, or best practices.

A Request for Proposal (RFP) was posted on the Michigan Intergovernmental Trade Network (MITN) website to solicit companies to perform the energy audits. Seven proposals were received and reviewed by City Staff. Of the proposals, Information & Energy Services, Inc. was the lowest bidder for \$28,917, has experience working with municipalities on energy audits, and fully understands the scope of work. If approved, costs incurred by the City of Novi to purchase this service will be reimbursed with the grant funds already secured through the CEM Program.

RECOMMENDED ACTION: Approval to purchase ASHRAE Level II energy audits through Information & Energy Services, Inc. in the amount of \$28,917, and amend the budget.

Information & Energy Services, Inc.

Request for Proposals – City of Novi Energy Audit

Attn: Finance Department
45175 Ten Mile Road
Novi, MI 48375

Due March 6, 2025 by 2:00pm

Legal Name of Firm: Information & Energy Services, Inc. (IES)

Company Headquarters: 21951 Purebred Ln. Escondido, CA 92029

Michigan Office: 815 Sleeth Rd. Commerce, MI 48382

Contact Name/Owner: Michael Rogers

Primary Contact Phone Number: 760-908-6321

Primary Contact Email: mrogers@iesenergy.com

Tax ID Number (EIN): 55-0830534





INFORMATION & ENERGY SERVICES, INC.

February 24, 2025

City of Novi
Attn: Finance Department
45175 Ten Mile Road
Novi, MI 48375

Re: Request for Proposals – Energy Audits

To Whom it May Concern,

Information & Energy Services, Inc. (IES) was established in 2003 and is headquartered in San Diego, CA. IES employees combined have over 130 years of experience in the energy industry. IES has satellite offices located throughout the United States including one located in Commerce, MI. Over the years, we have successfully served a diverse clientele, including but not limited to municipalities, military bases, Federal Government, K-12 schools, universities, hospitals, commercial, industrial facilities and various other facility types.

At the core of our energy initiatives are comprehensive energy audits, which serve as the foundation for recommending energy-saving measures tailored to each customer. These audits encompass high-level investment grade assessments, ASHRAE Level I, II, and III audits, as well as renewable energy feasibility assessments. In the past calendar year alone, IES conducted nationwide energy audits at over 300 buildings, with over half of those being for municipalities.

We are grateful for the opportunity to collaborate with the City of Novi to recommend possible energy and water conservation projects.

Sincerely,

Michael B. Rogers, P.E., C.E.M.
President
760-908-6321
mrogers@iesenergy.com

Firm Information

Firm Name: Information & Energy Services, Inc. (IES)

Owner/Principal's Name: Michael Rogers P.E., C.E.M

Number of Employees: 13

Years in Business: 21 years (inc. May 2003)

Headquarter Location: 21951 Purebred Lane, Escondido, CA 92029

Michigan Location: 815 Sleeth Rd. Commerce, MI 48382

Types of Certifications:

IES holds a variety of licenses and credentials including two CA Professional Engineers (PE #M30484, #M41755), AZ Professional Engineer (PE# M54788), NV Professional Engineer (PE# 027837), TX Professional Engineer (PE# 148031) California General Contractor License (CCL #867847), as well as multiple staff certifications for Certified Energy Manager (CEM) (#003596, #004768 and 26348), LEED Green Associate (#11093877, U.S. Green Building Council), Certified Building Commissioning Professional (CBCP# 2174 Association of Energy Engineers) Building Commissioning Professional Certification (BCxP# 8395185), and Project Management Professional PMP (#1939222, Project Management Institute).

IES was incorporated in 2003 in and has spent the last 21+ years performing a variety of energy consulting services throughout the United States. IES has audited thousands of locations throughout the United States, providing millions of dollars in energy savings recommendations. These services include, but are not limited to:

- Energy efficiency audits (ASHRAE Levels 1, 2 and 3, investment grade audits, etc.)
- Measurement & verification (M&V) services following IPMVP standards
- Whole building energy modeling
- Targeted energy modeling
- Renewable energy project feasibility studies and project development, including an emphasis on resiliency through microgrids, battery energy storage systems (BESS), etc.
- Electric vehicles (EVs), charging infrastructure and planning studies
- Utility provider rate analysis
- Assisting in compliance with new & changing building regulations
- Retro-Commissioning (RCx) Projects including those facilities with very tight tolerance such as hospitals and other research facilities
- Preparation of RFPs, bid support and construction management support on behalf of clients

Our mission is to improve energy and water efficiency for our customers, eliminating energy waste wherever possible while reducing energy costs in the process. At the same time, we understand the financial constraints many of our customers face and strive to identify all No & Low-Cost opportunities, available rebates/incentives and grants or other funding mechanisms. Many of our jobs have resulted in the implementation of high efficiency HVAC, LED lighting, Controls optimized for reducing consumption and implementing demand response procedures, improving electrical distribution, and Battery Energy Storage Systems (BESS). In some instances, these improvements were completely paid for by utility incentives.

IES has grown alongside the energy market and done work on both the supply and demand side of past projects. As a small company we remain flexible in our operations, realizing from the start that 100% customer satisfaction is vital to success. This flexibility allows us to perform services in a time-efficient matter at a competitive cost. As we continue to grow, we do not want to lose sight of our customer-oriented focus. Forming close relationships with our customers is vitally important to our continuing vision. IES takes pride in maintaining a multi-contractual relationship with many of our customers. We aim to make every client feel as if they are a part of the team themselves. We are always just a phone call away no matter the question and work to get requests done in a timely and effective manner.

Project Understanding and Approach

IES has extensive experience providing energy conservation and advising services to Industrial, Commercial, Federal, School Districts, and other types of facilities throughout the United States. IES has successfully completed hundreds of ASHRAE Level I, II and III audits across a wide range of facility types, including over 200 municipal buildings. These audits resulted in \$240.9 million worth of contracted energy efficiency projects at 129 municipal buildings, with those measures in various stages of completion at present. We feel that our experience with multiple types of facilities qualifies us to perform the tasks set forth in the objectives of the RFP in an expert fashion.

To meet the City of Novi energy goals, IES will investigate all aspects of energy usage. These areas generally include:

- Lighting
- HVAC
- Controls for HVAC, Lighting, Refrigeration, etc. (optimize Sequence of Operation for Energy Efficiency & Reducing Demand)
- Plug Load Appliances
- Refrigeration
- Energy Use and Behavior
- Renewable Energy Potential and Opportunities

Project Approach

The IES ASHRAE Level II Energy Audit Process will be conducted as follows:

- IES will conduct a Preliminary Meetings (Kick Off) through teleconference or in person where our Team will meet with the City Staff including the facilities management and other key representatives to lay out the audit process and to get a feel for each building's energy and water use. This will sharpen our focus towards the buildings energy saving goals and tailor recommendations towards those City Staff are interested in. We will consider the current energy usage; occupancy schedule and what buildings have had recent upgrades to determine optimal recommendations.
- After gaining the information from the Preliminary Meeting IES will work with the customer or Customer's Utility Providers (DTE, State of MI Energy Office, Federal Agencies, etc.) to gather at least the last 12 months of utility data. This is an integral part of establishing "Baseline" energy use for each building.
- Working directly with the City of Novi, IES will schedule a date to audit each building. IES plans on conducting all the on-site audits over 2 to 3 days in a single week. IES will need full access to these buildings in order to collect detailed

information on all energy consuming equipment and identify energy savings measures. Primary audit goals include but are not limited to:

- Identify all data necessary on Equipment/Systems operation
 - Identifying both low cost and capital energy and water conservation measures
 - Interview with site staff to determine optimal efficiency strategies given current building practices
 - Identify onsite renewable energy opportunities: Solar PV, solar thermal, cogeneration
 - Identify offsite renewable energy opportunities
 - Identify load shedding opportunities using battery storage systems
- IES will develop a report which meets an ASHRAE Level II survey including full utility analysis, building load profiles, energy conservation measure (ECM) recommendations including measure descriptions along with the modeled outputs such as the load balance broken out by energy using equipment, ECM savings, estimated costs, available rebates and overall payback.
 - IES anticipates developing a single report for the City of Novi. This report will outline findings for all buildings and organize energy conservation measures (ECMs) by building, along with recommendations for which measures should be pursued. IES is agreeable to providing separate reports for each site if desired.

Throughout the process, IES will give bi-monthly (every 2 weeks) updates on the current status of the energy audits and savings analysis through project close. IES will continue to support the City and key representatives post-audit to answer any ongoing questions about measures and provide support in the implementation of recommended measures.

The ASHRAE Level II audit report will include:

- **Executive Summary** of process and results
- **Synopsis** of site characteristics, including:
 - Facility overview
 - Site map
 - Energy systems summary for lighting, HVAC, refrigeration, etc.
 - Utility data analysis of last fiscal year for electricity, gas and water
 - Overview of previous energy projects
- **Site Energy Use Index (EUI)**

- **Load Balance and Energy Modeling**
- **Recommended Measures**
 - Measure description (area served, operating schedules and sequences, suspected issues, etc.)
 - Measure savings, cost impacts, CO2 levels, etc.
 - All measures will have a Simple Payback Period of less than 50 years unless approved for Targeted Measures only.
- **Renewable Energy Opportunity Summary** of renewable measures which could benefit the site
- **Any Additional Recommendations**
 - Includes measures with longer paybacks to be considered in the future as well as any improvements to health, safety and environment
- **Full Calculation Appendix**
 - Includes all calculations for measures described in the report
 - Includes full equipment database for lighting, HVAC, CO2 levels and other energy using equipment
- **Submission of the Report**

Finally, IES will ensure that the City and other key representatives have a working understanding of all energy savings measures and any new practices or equipment and will continue to be available for a walk of the five sites at the conclusion of the report to point out the energy efficiency improvement opportunities and after the project term to support the City of Novi's efforts.

Experience

The following summaries of both current and recent projects detail work which would be relevant to the services the City of Novi is requesting. Project references are included as well.

City of Fresno Phase 2 Energy Efficiency Project, Fresno, CA

Project Reference: Jake Torres, Director of Sales at ABS Energy, (858) 886-9447. 12520 High Bluff Dr. Ste. 345., San Diego, CA 92130

Dates of work: January 2021 to Present (Phased Approach, currently in phase 2)

IES has worked with ABS Energy on several projects within the last 5 years. One of the largest projects IES worked on was the City of Fresno Energy Conservation Project. The project encompassed identifying energy conservation measures throughout 59 facilities across all the city's parks, community centers, all police and fire stations, and several Administrative Buildings. IES was responsible for conducting site walkthroughs and developing full lighting (interior & exterior), HVAC, electrical distribution, pumping and controls assessments at each of these facilities.

IES has been responsible for developing project recommendations for replacement of interior and exterior lighting with LED fixtures, replacement of old HVAC units, addition of new HVAC controls and replacement of old transformers. Solar systems were also assessed at several locations. Within the recommendations an economic evaluation was conducted in both a simple payback and a life cycle analysis.

The final project will deliver over 2,500,000 kWh annual savings, saving over \$550,000 per year from the optimization, a savings of approximately 36% over the baseline. This energy savings equates to a reduction in CO2 Emissions of 1,953 Tons annually. IES has worked with implementation contractors and the city through contracting and implementation is going to be completed very soon. A follow-up project at the Fresno Zoo was also completed which evaluated similar measures in addition to specialty measures affecting animal enclosures and support structures.

City of Tempe Comprehensive Energy Audits, Tempe, AZ

Project Reference: Charlie Bladine, Facilities Manager, (480) 350-8563. 31 E. 5th St., Tempe, AZ 85281

Dates of work: March 2022 to Present

IES was selected to perform comprehensive ASHRAE level 2 energy audits for several facilities managed by the City of Tempe. To date, IES has audited two water treatment facilities for the City. Our recommendations of these two sites did not include any process

related (i.e.) pumping operations at the request of the City- however, identified savings measures would save over 300,000 kWh/ year and 24,000 gallons of water/year if measures were implemented. We continue to stand by as a resource for the City in the event that they wish to pursue implementing any of the requested measures, or should they wish to have more City facilities audited.

Sweetwater Union High School District, Chula Vista, CA

Project Reference: Ronald Malone, Director of Maintenance for SUHSD, (619) 691-5565. 642 Arizona St. Chula Vista, CA 91911

Dates of work: 2016 through Present

IES has worked with Sweetwater Union High School District (SUHSD) on numerous projects going back to 2008. Our most recent efforts began in 2016 with California's Proposition 39 project, which granted millions of dollars in State funding to K-12 public schools for the purpose of updating their energy using equipment to more efficient technologies. This involved performing ASHRAE Level 2 audits at all sites and developing a comprehensive project to utilize the Prop. 39 funds across all schools in an equitable manner. We worked with the District's Superintendent and Maintenance Office, along with the District's third party planners to develop a project bringing interior and exterior LED lighting and controls retrofits to all 27 campuses. HVAC and HVAC controls replacements were also included at nearly half of the schools in the District. The project was developed in a way to maximize energy savings and meet the District's equipment replacement needs while staying within the budget constraints of the State grant funds and ensuring that all sites received a significant portion of those funds. We worked with the District in tracking the performance of the newly installed measures and completed a State verification report tracking the use of the grant funds. The implementation of these measures reduced the District's electricity use by 17%.

IES has acted as the District's Energy Manager since the conclusion of the Prop. 39 program. We oversaw energy expenditures over this time, including during the COVID-19 pandemic. This was extremely unique with regards to forecasting the district's energy expenditures during a constantly evolving scenario. Along with providing an accurate forecast of the district's energy expenditures in these years, these actions led to several recommendations and actions to reduce energy use, which were realized. The most significant of these actions was the ongoing review and changes made to the District's multiple control systems, which eliminated unnecessary HVAC use while campuses were closed. Between April 2020 and June 2021, the approximate value of the avoided HVAC use came out to \$2.6 million, a decrease of 43% from their stated FY 20-21 energy budget of \$6.1 million, which was a direct result of our engineers' identifying areas where the

HVAC could be shut down and then directly adjusting site schedules to shut down the HVAC upon District approval.

Our energy management tasks have also included: setting up a monthly utility tracking matrix where energy is tracked by meter and by site, development of an HVAC condition matrix, site walks during District breaks to determine if any equipment was running while the campuses were closed, post site visit in depth analysis of each campus within the District, energy reporting on a District wide campus by campus basis, benchmarking of schools types utilizing EUI to determine which campuses are higher energy performers and which ones are lower energy performers, numerous reviews and adjustments of the District's HVAC control systems through the pandemic, continuous optimization of controls with respect to scheduled hours along with holidays to eliminate excess runtime without, the creation and upkeep of inventory matrices for the District's HVAC equipment, lighting and refrigeration, ongoing monthly review of the District's utility billing and review of the solar generation and power purchase agreements (PPAs) at each of the District's solar-equipped sites, identification of funding sources for energy related programs such as electric buses and electric vehicle charging stations and review of energy saving technologies presented to the District throughout our term.

The HVAC matrix we have developed and continue to maintain is utilized to easily decide which units at which sites need replacement soonest, making it easier to budget accordingly. This matrix has assisted in developing an HVAC controls replacement project enhancing the systems at five of the campuses with additional scope for HVAC replacements.

Additionally, we were able to identify solar PV metering issues with the District's PPA provider and worked with the provider to correct these issues.

As a result of our management, the District saved over \$2.6 million from its FY 20-21 energy budget of \$6.1 million. Other accomplishments were identifying and renewing the District's 3rd party power agreements and managing the installation of new energy efficient lighting, controls, high efficient HVAC and a battery energy storage system through SDG&E's IDSM program. This program installed over \$600,000 worth of energy saving technologies at the District Office which will save the site approximately \$31,000 per year in energy costs, reducing electricity consumption by 47% while minimizing their carbon footprint, all at no cost to the District.

Integrated Demand Side Management (IDSM) Pilot Program, San Diego County, CA
Project Reference: Sandra Williams, Project Manager III for SDG&E, (619) 676-8850.
8330 Century Park Ct. San Diego, CA 92123

Dates of work: 2019 through March 2024

IES designed, administered and managed the IDSM pilot program on behalf of SDG&E. Through the program, select customer sites within SDG&E's service territory received energy efficient LED lighting, lighting controls, HVAC, HVAC controls, energy efficient transformers, battery energy storage systems (BESS) and refrigeration optimization at no cost to the customers. Customers included local Grocery Outlet grocery stores, a school district office building, Petco Park, a local university campus and a couple of commercial manufacturing buildings.

The scope of work IES developed and subsequently oversaw included:

- retrofitting recessed troffer lighting fixtures with an LED troffer retrofit kit with integrated lighting controls.
- Lighting controls were optimized to the desired maximum output and outfitted with dimming capabilities for ambient light levels and occupancy on an individual fixture basis. The lighting controls in select spaces were programmed to respond to demand response (DR) events, dimming where allowable during such events and reducing building load.
- Select HVAC units were replaced as needed with new high efficiency units, and networked programmable web-based thermostats were installed to allow for a highly functional and cost-effective control solution. These were programmed to allow for a temperature set-back during a DR event, reducing building energy loads in these events.
- Transformers were replaced as needed with new high efficiency transformers to decrease load losses in the electrical distribution system and further improve building efficiency.
- A (62.5kW/250kW) battery energy storage system (BESS) was installed at most sites and was programmed with a sequence of operation based upon each site's individual load profile and utility rate tariff to reduce the overall cost of power by discharging the battery at peak times.
- Finally, sites which had a walk-in refrigeration system had those system's optimized through an initial retro-commission of the walk-in unit and then the installation of a thermal energy storage (TES) system with controls. The added thermal mass from the TES allows for the refrigeration system to run at a constant lower load thus improving efficiency. The additional thermal mass allows the box to stay colder for extended periods during power outages, improving resiliency at these locations.

The IDSM project was very comprehensive with respect to the work performed by IES as we:

- designed the Program Offering (measures offered, quantity of units to be replaced, etc.),
- selected the trade contractors through a formal RFP process for lighting, HVAC replacement, controls (lighting & HVAC), transformers, refrigeration optimization and battery storage systems, and
- managed the selected contractors through project completion, facilitating all communications regarding project milestones with each Customer and the utility.

The program has wrapped up with successful installations at seven (7) sites throughout San Diego County.

Fee Proposal Form



CITY OF NOVI
ENERGY AUDIT
FEE PROPOSAL FORM

We the undersigned as proposer, propose to furnish to the City of Novi, according to the specifications, terms, conditions and instructions attached hereto and made a part thereof:

Site Name	Square Footage	Cost per Square Ft	Total Cost
Civic Center	71,000	\$0.12	\$ 8,520
DPW	75,000	\$0.12	\$ 9,000
Firearms Training Ctr	7,800	\$0.15	\$ 1,170
Fire Station #4	11,380	\$0.15	\$ 1,707
Novi Ice Arena	71,000	\$ 0.12	\$ 8,520

TOTAL \$ 28,917

We acknowledge receipt of the following Addenda: Addendum #1
(please indicate numbers)

EXCEPTIONS TO SPECIFICATIONS (all exceptions must be noted here):

COMMENTS: _____

REFERENCES: Please provide at least three client (3) references for projects of similar scope done in the last 3 years.

Company ABS Energy
Address 12520 High Bluff Dr. Ste 345 San Diego, CA 92130
Phone 858-886-9447 Contact name Jake Torres

Company City of Tempe
Address 31 E. 5th St. Tempe, AZ 85281
Phone 480-350-8563 Contact name Charlie Bladine

Company Sweetwater Union High School District
Address 642 Arizona St. Chula Vista, CA 91911
Phone 619-691-5565 Contact name Ronald Malone

THIS PROPOSAL SUBMITTED BY:

Company (Legal Registration) Information & Energy Services, Inc.

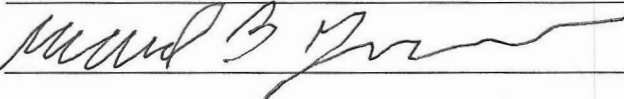
Address 21951 Purebred Ln

City Escondido State CA Zip 92029

Telephone 760-908-6321 Fax _____

Representative's Name Michael B. Rogers

Representative's Title President

Authorized Signature 

E-mail mrogers@iesenergy.com

Date 3/5/2025



Energy Audit Report

REPORT DATE: Date

PROPERTY INFORMATION:

Client Project Name

Property Address

City, County County, State Zip

PROJECT INFORMATION:

AEI Project No. Sample Project

Site Assessment Date: Date

PREPARED FOR:

Client Name

Client Address

Client City, State Zip Code

PREPARED BY:

AEI Consultants - Corporate Headquarters

2500 Camino Diablo

Walnut Creek, California 94597



Date

Client Contact Name

Client Name

Client Address

Client City, State Zip Code

Subject: Energy Audit Report

Client Project Name

Property Address

City, State Zip

AEI Project No. Sample Project

Dear Client Contact Name:

AEI Consultants is pleased to provide the *Energy Audit Report* of the above referenced property. This assessment was authorized and performed in accordance with the scope of services engaged.

We appreciate the opportunity to provide services to you. If you have any questions concerning this report, or if we can assist you in any other matter, please contact me at Phone Number or Email Address.

Sincerely,

A handwritten signature in black ink, reading "Brian Morgan". The signature is written in a cursive, flowing style.

AEI Contact

AEI Consultants

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APPENDIX C: ENERGY STAR EXISTING CONDITIONS SEP REPORT
APPENDIX D: QUALIFICATIONS
APPENDIX E: LIST OF COMMONLY USED ABBREVIATIONS

1.0 CERTIFICATION/DISCLAIMER

AEI has completed an Energy Audit for the Property located at Property Address, City, County County, State (the "Property"). AEI visited the site on Date.

The energy conservation opportunities contained in this report have been reviewed for technical accuracy. The reader is reminded that energy savings ultimately depend on variable factors including occupant behavior, weather, and quality of installation. Estimated installation costs are based on a variety of sources, including our own experience at similar facilities, our own pricing research using local contractors and vendors, and cost handbooks such as those produced by RS Means. The cost estimates represent the best judgment of the auditors for the proposed action. The Owner is encouraged to confirm these cost estimates independently since actual installed costs can vary widely for a particular installation. AEI does not guarantee installed cost estimates and shall in no event be liable should actual installed costs vary from the estimated costs herein.

AEI does not guarantee the costs savings estimated in this report. AEI shall in no event be liable should the actual energy savings vary from the savings estimated herein.

AEI certifies that it has no undisclosed interest in the Property and that AEI's employment and compensation are not contingent upon the findings or estimated costs to remedy any deficiencies due to deferred maintenance and any noted component or system replacements.

2.0 EXECUTIVE SUMMARY

AEI Consultants (AEI) was retained by Client Name to conduct an ASHRAE Level II Energy Audit, in conformance with the scope and limitations of ASHRAE *Procedures for Commercial Building Energy Audits*, Second Edition (2011), and ANSI/ASHRAE/ACCA Standard 211-2018, *Standard for Commercial Building Energy Audits* for the Property located at Property Address, City, County County, State (the "Property"). The Energy Efficiency Measures (EEMs) from the audit will be used to prepare a Statement of Energy Design Intent showing the effect of energy use reduction on the energy performance score.

2.1 ENERGY AUDIT - PURPOSE AND SCOPE

AEI has performed a comprehensive analysis of the Property to identify possible areas where Energy and Water may be conserved. The areas being considered include HVAC equipment, lighting, domestic water heating, appliances, fenestrations, insulation, roofing, bathroom fixtures, and miscellaneous equipment. AEI may also use infrared thermography to identify areas that may be losing energy.

Utility Analysis

AEI has performed a comprehensive utility analysis to determine the Energy and Water consumption of the buildings. The analysis utilizes at least 12 months of common area utility bills and as many tenant utility bills as possible. By observing peak loads during the year, a baseline for energy and water consumption can be determined.

Energy Audit Process

Where possible, in addition to the Site Survey, AEI has utilized construction drawings, interviews, repair records, etc. to determine the actual current efficiency of the Property's building envelopes and equipment.

Accuracy of Analysis

AEI used energy use simulation tools and spreadsheet calculations that base estimated savings on the as-built facility and energy consuming equipment's current operating condition. The simple payback calculations are based on the labor and material cost of the new equipment divided by the cost savings per year. AEI shall not be responsible for equipment that may not reach the end of its useful life or costs more to operate than noted in the EEMs.

Current Energy Code

The energy code adopted by State at the time of this report is 2021 International Energy Conservation Code (2021 IECC) or equivalent for Residential//Commercial construction. [<https://www.energycodes.gov/status-state-energy-code-adoption>]

2.2 SUMMARY OF ENERGY EFFICIENCY MEASURES (EEMs)

The following table presents the ASHRAE Energy Efficiency Measure table from *Procedures for Commercial Building Energy Audits*. Note that the water savings do not register in the tables. We have included our [Energy and Water Efficiency Measure tables](#) later in this report.

EEM Summary

		ANNUAL ENERGY & COST SAVINGS			PAYBACK WITH INCENTIVE				
Measure Number	Measure Description	Electricity Savings (kWh)	Gas/Fuel Savings (Therms)	Total Cost Savings	Measure Cost	Potential Utility Incentive	Net Measure Cost	NPV*	Simple Payback (Year)
EEM-1	Program Supply Temperature Reset (approximately 2.5 F) from 48 F to 50.5 F for the LAB AHU's at Building 1	102,261	20,450	\$26,770	\$5,500		\$5,500	\$176,903	0.2
EEM-2	Program Supply Temperature Reset (approximately 3 F) from 55 F to 58 F for the three Packaged Rooftop Units at Building 1	108,137	11,772	\$19,984	\$7,500		\$7,500	\$128,666	0.4
EEM-3	Program Demand Control Ventilation for the three Packaged Rooftop Units at Building 1, and install CO2 sensors at the office spaces	29,350	-	\$2,725	\$7,500		\$7,500	\$11,065	2.8
EEM-4	Provide Daylight Controls Near Skylights and Exterior Glass	3,264	-	\$303	\$720		\$720	\$1,142	2.4
EEM-5	Install 35 kW DC Solar PV system on available roof area-Since roof area is limited, a ground mount or placement at parking garage roof is possible. (Approximately 100 modules.) Note that a 30% Federal Investment Tax Credit is available for commercial systems, or a production credit of \$0.026/kWh of production credit for commercial systems, if the systems meet labor requirements issued by the Treasury Department, but neither are included in the pricing.	50,315	-	\$4,671	\$113,750	\$34,125	\$79,625	(\$39,859)	17.0
TOTALS (Recommended Measures)		293,327	32,222	\$54,453	\$134,970	\$34,125	\$100,845	\$277,916	1.9

2.3 ENERGY AND WATER EFFICIENCY MEASURES (EWEM) TABLE

The following EWEMs have been analyzed using calculations based on occupant usage, localized climate conditions, HVAC and ventilation operating hours, and lighting hours. The HVAC operating hours are approximations and may vary depending on the severity of the weather. Water consumption is based on the number of occupants and assumed running times for water consuming devices. The Property has been carefully evaluated for the EWEMs. The chart shows the initial investment, utility savings, utility cost savings, and paybacks for each EWEM. The utility cost increase over the life of the EWEMs implemented was not considered as a factor in the cost savings calculations.

EWEM Summary

EWEM Summary Description	Initial Cost	Electric Savings kWh	Gas Savings Therm	Water/ Sewer Savings kGal	Annual Utility \$ Savings	Simple Pay Back (Years)	Owner % Energy Savings	Owner % Water Savings	Projected GHG Emissions Reduction MTCO ₂ e
Program Supply Temperature Reset (approximately 2.5 F) from 48 F to 50.5 F for the LAB AHU's at Building 1801	\$5,500	102,261	20,450	0	\$26,770	0.2	4.42%	0.00%	140.16
Program Supply Temperature Reset (approximately 3 F) from 55 F to 58 F for the Packaged Rooftop Units at Building 1	\$7,500	108,137	11,772	0	\$19,927	0.4	2.85%	0.00%	96.30
Program Demand Control Ventilation for the three Packaged Rooftop Units at Building 1, and install CO ₂ sensors at the office spaces	\$7,500	29,350	0	0	\$2,725	2.8	0.18%	0.00%	9.30
Provide Daylight Controls Near Skylights and Exterior Glass	\$720	3,264	0	0	\$303	2.4	0.02%	0.00%	1.03
Install 35 kW DC Solar PV system on available roof area- Since roof area is limited, a ground mount or placement at parking garage roof is possible. (Approximately 100 modules.) Note that a 30% Federal Investment Tax Credit is available for commercial systems, or a production credit of \$0.026/kWh of production credit for commercial systems, if the systems meet labor requirements issued by the Treasury Department, but neither are included in the pricing.	\$113,750	50,315	0	0	\$4,670	24.4	0.32%	0.00%	15.94
Totals	\$134,970	293,327	32,222	0	\$27,229	4.96	7.79%	0.00%	262.73

2.4 ENERGY BENCHMARKING

The owner obtained whole Property utility data from the utility company. The campus' energy use was input into Energy Star Portfolio Manager to produce a baseline year Statement of Energy Performance (SEP) score. However, for this property type, a SEP score cannot be produced. The site energy use intensity (EUI) is calculated to be 278 kBtu/ft² and the National Median site EUI is 175 kBtu/ft².

3.0 BACKGROUND

3.1 PROPERTY DESCRIPTION

The Property is a parcel totaling approximately 20.38 acres and is located at Property Address in a commercial area of City, State. The Property is improved with One commercial building with lab in One two story building with other stories added recently in the major renovation. The older portion of the building was previously operated as department store in the early 1950's.

The net rentable area of all the combined units is 195,000 square feet and the gross building area of the Property is 195,000 square feet. The Property was originally developed in 1950 and underwent a substantial renovation in 2014.

The facility description is as follows: Property. follows the science, to find new ways to manage rare and often hard-to-treat diseases. By deciphering new pathways, and to discover first-of-their-kind treatments.

Since their start in 2002 with a small number of scientists, chemists and biologists in City, State, Client Name has grown into a global organization with a robust portfolio of treatments across Oncology and Inflammation & Autoimmunity. Today this passion for innovation is stronger than ever with a team of more than 2,000 employees.

The company takes a comprehensive approach to identifying new treatments for patients with cancer, enabling the company to explore both single agents and combinations of targeted and immuno-therapies from both within and beyond their portfolio. The company appears to collaborate with major universities and other companies to bring additional discovery platforms and therapeutics forward. Incyte's targeted therapy discovery efforts focus on identifying therapeutic intervention points within interdependent pathways that drive tumor growth, enabling them to leverage cross-program knowledge. Complementary to that is their immuno-therapy discovery strategy, which is built on a deep understanding of functional genomics, pharmacodynamics and state-of-the-art bioinformatics. Insights into the nuances of immune surveillance in health and disease are leading us to new opportunities to harness the immune system to fight cancer. The facility has world-class chemistry and biology groups to apply these learnings to develop small molecule, monoclonal antibody and bispecific antibody drug candidates for clinical testing.

As a result of the vast research several process systems (mainly industrial lab ventilation systems) are used for scientific and biologic research into various diseases including cancer. Several hundred lab fume hoods are used in conjunction with conducting research and clinical trials.

Amenities include a central cafeteria room with kitchen which is quite large in floor space. The Property does have an in-ground automatic sprinkler system.

The Project Team assessed a representative sample of the tenant spaces. The assessment also included the roof, parking areas and structures, building operational and structural components, and all exterior and common areas.

The site contact was Key Site Manager Name; phone: (215) 917-5226

Photographs



Side Elevation at the Building



LED Lights Lunch Area



Office LED Lighting-Typical



Rooftop at Bldg 1

EXISTING ENERGY AND WATER EFFICIENCY MEASURES AT THE PROPERTY

The following existing energy and water efficiency improvements were observed at the subject property:

1. High efficiency LED lighting for most areas
2. Double glazed metal framed windows
3. High efficiency air handling units with integrated variable speed drives
4. Occupancy sensors for all major lighting zones in the corridor and private offices
5. Occupancy sensor camera devices as part of the phoenix control valves at all lab spaces
6. CHW and HHW pumps equipped programmed for variable flow and variable speed drives
7. Programmable thermostats and Central EMS system which controls all the Lab exhaust fans, air handling units, and the three large packaged rooftop units.

3.2 OCCUPANCY AND USE SCHEDULES

The facility consists of several office spaces and lab spaces which encompass a large percentage of building 1. The estimated occupancy schedule is shown below.

Occupancy Schedule

Space	# of Occupants	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
Leasing Office	800	9 hours	9 hours	9 hours	9 hours	9 hours	0	0
Lab Spaces	1000	24/7	24/7	24/7	24/7	24/7	24/7	24/7
Facility office	15 (Estimated)	8 hours	8 hours	8 hours	8 hours	8 hours	4 hours-estimated	0
Cafeteria	200-depending on lunch and breakfast schedules	4 hours	4 hours	4 hours	4 hours	4 hours	0	0

3.3 UTILITY ANALYSIS

The utility analysis covers the period of September 2022 to August 2023 and is based on bills obtained from the property owner. In the case of tenant bills a sample is normally used to establish an average energy consumption for the different size units. Both the electric and gas utilities are then converted to a common unit (kBtu's) so that the total energy can be examined and project an Energy Use and Cost Intensity for the property. The EUI can then be used to compare the property against similar properties to determine how efficiently the building is being operated.

EEM Summary Table		
Current Building Energy Usage	54,203,297	kBtu
Current Building Energy Cost	\$904,650	\$\$\$
Proposed Energy Savings	4,223,318	kBtu
Proposed Energy Cost Savings	\$27,229	\$\$\$
Energy Savings	7.8%	%
Energy Cost Savings	3.0%	%
Investment for ECM's	\$134,970	\$\$\$
Payback for Investments	4.96	Years
Site Energy Use		
Current Electric Site Energy	23,813,240	kBtu
Current Natural Gas Site Energy	30,390,056	kBtu
Total Building Area	185,000	SF
Proposed Electric Savings (kBtu)	1,001,125	kBtu
Proposed Gas Savings (kBtu)	3,222,193	kBtu
Site Energy Use Intensity		
Current Site Energy Use Intensity	277.97	kBtu/SF
Proposed Site Energy Use Intensity	256.31	kBtu/SF
Site Greenhouse Gas Emissions		
Current Site GHG Emissions	3812.69	MTCO2e/Yr
Proposed Site GHG Emissions	3549.96	MTCO2e/Yr
Source Energy Use Intensity		
Current Source Energy Use Intensity	505.57	kBtu/SF
Proposed Source Energy Use Intensity	473.85	kBtu/SF

3.3.1 UTILITY PROVIDERS

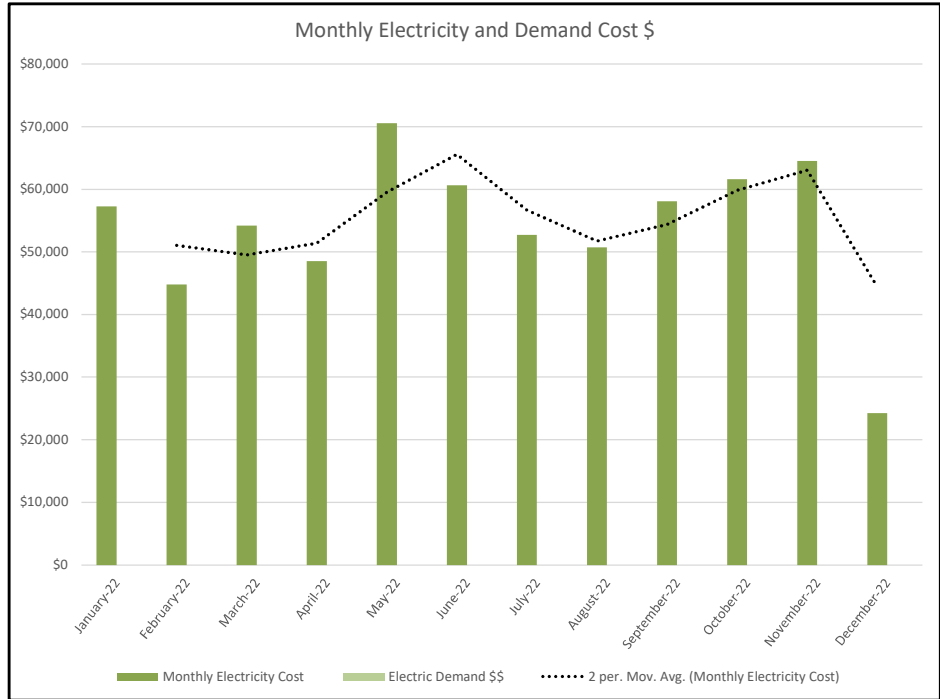
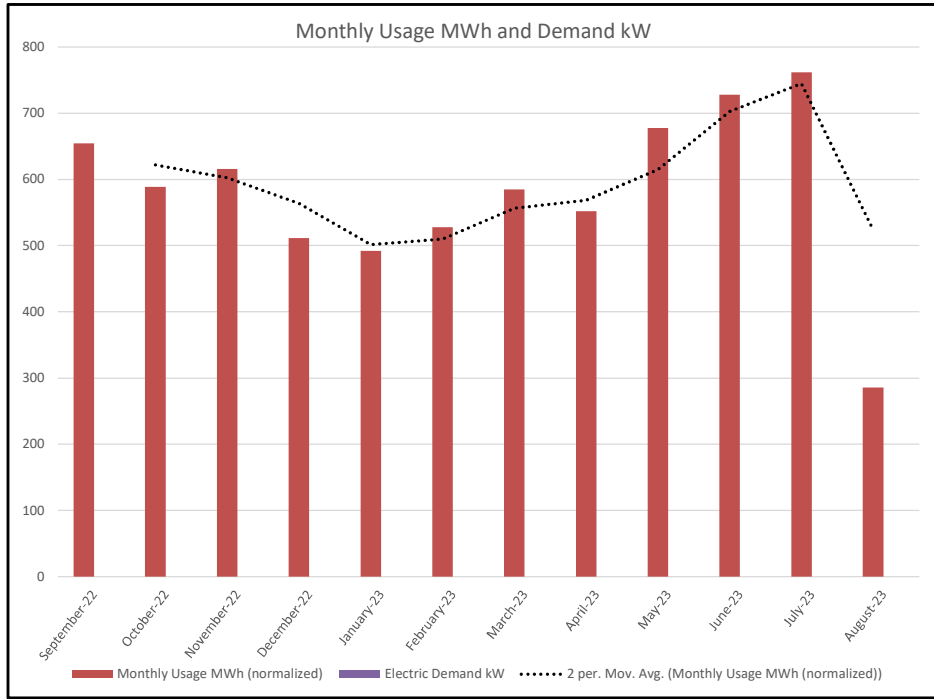
Utility Type	Utility Provider Name
Electricity	Utility Provider
Natural Gas	Utility Provider
Water	Utility Provider
Sewage Disposal/Treatment	Utility Provider

3.3.2 ELECTRICITY

The chart below shows the monthly consumption and cost of electric power for the Property. The cost per kWh is calculated in the fourth column. The bottom row shows the annual electrical power consumption and cost for the Property.

Electricity Chart

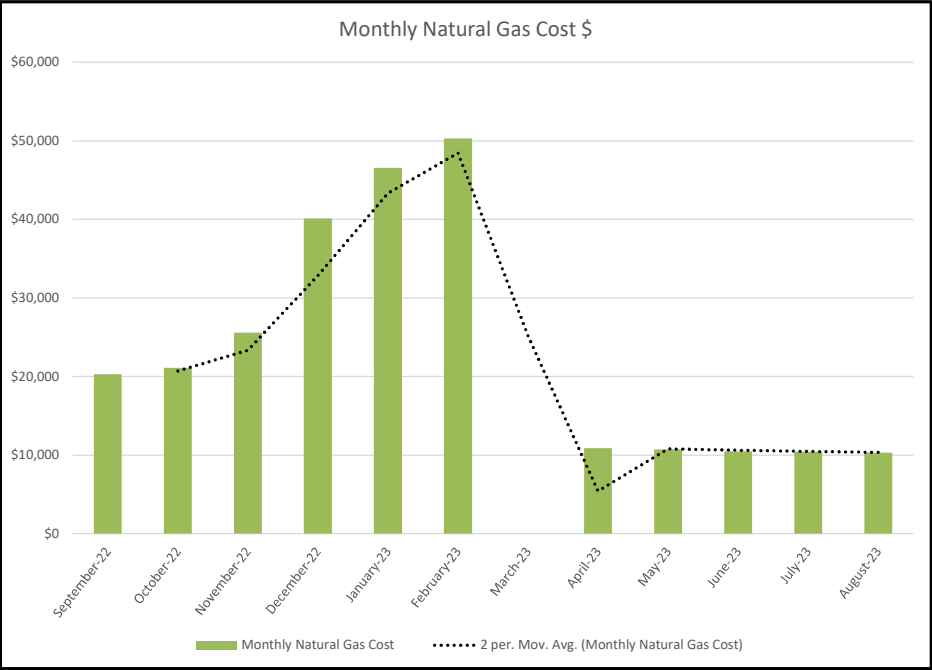
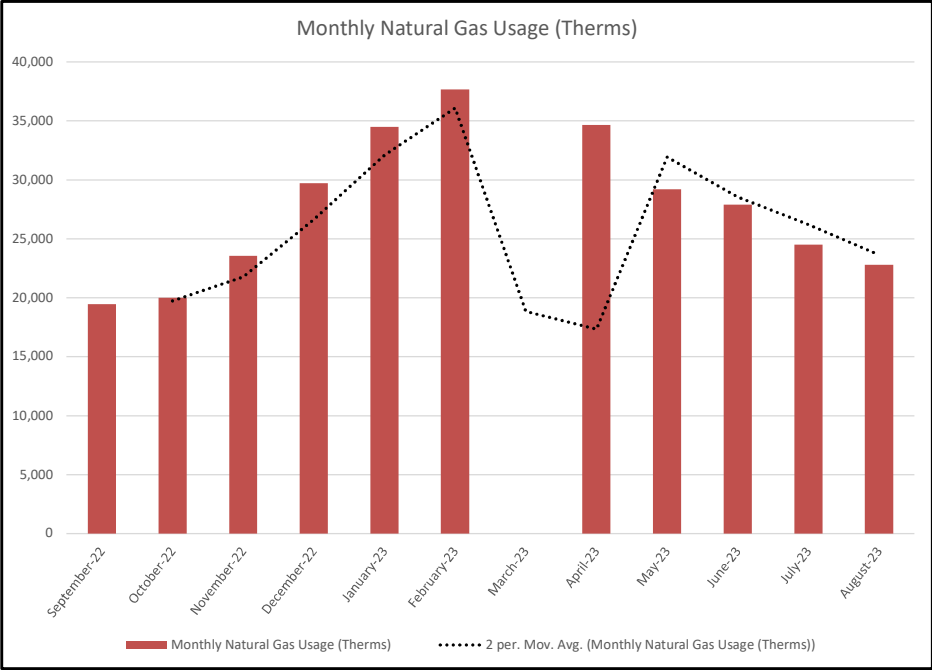
Billing Month & Year	Monthly Electricity Usage (kWh)	Monthly Electricity Cost	Cost per kWh	kBTU Usage (kWh x 3.41)
September-22	654,630	\$57,271	\$0.09	2,233,598
October-22	588,902	\$44,821	\$0.08	2,009,334
November-22	615,968	\$54,232	\$0.09	2,101,683
December-22	511,272	\$48,552	\$0.09	1,744,460
January-23	491,712	\$70,517	\$0.14	1,677,721
February-23	527,684	\$60,612	\$0.11	1,800,456
March-23	584,849	\$52,721	\$0.09	1,995,505
April-23	551,960	\$50,730	\$0.09	1,883,288
May-23	677,398	\$58,043	\$0.09	2,311,282
June-23	727,726	\$61,600	\$0.08	2,483,001
July-23	761,546	\$64,518	\$0.08	2,598,395
August-23	285,615	\$24,286	\$0.09	974,518
Annual Electricity Usage & Cost:	6,979,262	\$647,902	\$0.09	23,813,240



3.3.3 NATURAL GAS

The chart below shows the monthly consumption and cost of the natural gas for the Property. The cost per Therm is calculated in the fourth column. The bottom row shows the annual natural gas consumption and cost for the Property.

Billing Month & Year	Monthly Natural Gas Usage (Therms)	Monthly Natural Gas Cost	Cost per Therm	kBTU Usage (Therms x 100)
September-22	19,466	\$20,296	\$1.04	1,946,564
October-22	19,986	\$21,104	\$1.06	1,998,635
November-22	23,550	\$25,577	\$1.09	2,355,048
December-22	29,706	\$40,115	\$1.35	2,970,587
January-23	34,489	\$46,565	\$1.35	3,448,942
February-23	37,677	\$50,295	\$1.33	3,767,709
March-23	0	\$0	\$0.00	0
April-23	34,659	\$10,859	\$0.31	3,465,924
May-23	29,196	\$10,723	\$0.37	2,919,642
June-23	27,887	\$10,500	\$0.38	2,788,698
July-23	24,501	\$10,426	\$0.43	2,450,085
August-23	22,782	\$10,287	\$0.45	2,278,221
Annual Natural Gas Usage & Cost:	303,901	\$256,748	\$0.84	30,390,056



3.3.4 WATER AND SEWER

Water consumption and cost data were not provided.

3.4 END USE ANALYSIS

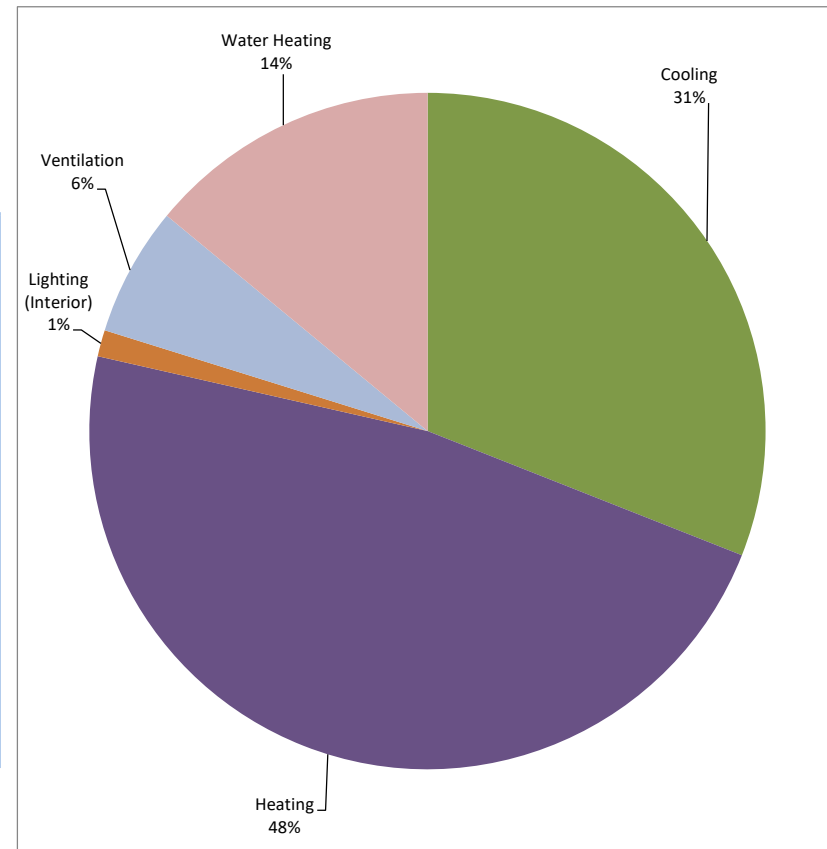
The following table presents the approximate end use analysis for all energy utilities on the Property:

Conversion Factor to kBtu

Input Unit 1	kWh	3.412142
Input Unit 2	therms	100
Input Unit 3	gallons (propane)	91.33
Combined Output Units	kBtu	1
Building Gross Floor Area	195,000	
Floor Area Units	ft^2	

End Use	Input Energy Units			Combined Energy Use	
	kWh	therms	gallons (propane)	kBtu	%
Air Compressors	-	-	-	-	0%
Cooking	-	-	-	-	0%
Cooling	4,922,667	-	-	16,796,838	31%
Heating	875,000	227,926	-	25,778,255	48%
Lighting (Exterior)	-	-	-	-	0%
Lighting (Interior)	200,665	-	-	684,697	1%
Miscellaneous	-	-	-	-	0%
Office Equipment	-	-	-	-	0%
Other Plug Loads	-	-	-	-	0%
Process	-	-	-	-	0%
Pumps	-	-	-	-	0%
Refrigeration	-	-	-	-	0%
Ventilation	980,930	-	-	3,347,072	6%
Water Heating	-	75,975	-	7,597,514	14%
Total Estimated	6,979,262	303,901	-	54,204,377	100%
Historical Billing	6,979,262	303,901	-	54,204,288	
Percent of Actual	100.0%	100.0%	0.0%	100.0%	
Total per ft^2	35.8	1.6	-	278.0	

Combined Fuel End-Use Breakdown



4.0 BUILDING SYSTEMS

4.1 OCCUPANCY

AEI visited approximately 80% of the building and 100% of all common areas which include all exterior common areas, observed the central BAS system, and conducted surveys on all of the mechanical equipment.

4.2 BUILDING ENVELOPE

4.2.1 FOUNDATION

The lab and corporate office buildings appear to be a steel braced frame structure and consists of a shallow foundation (thickened and reinforced concrete slab). The ground floor has standard concrete slab-on-grade construction that span to concrete beams, columns, and bearing walls. The foundations appeared to be in good condition.

4.2.2 FLOOR

4.2.3 STRUCTURE

The structures appears to be metal wood framed with wood truss joists and wood load bearing beams and columns.

4.2.4 EXTERIOR WALLS

The primary cladding on the exterior appears to be high end stucco with smooth brick and metal framing, with R-15 insulation (estimated). The exterior cladding appears to be in good condition.

Photographs



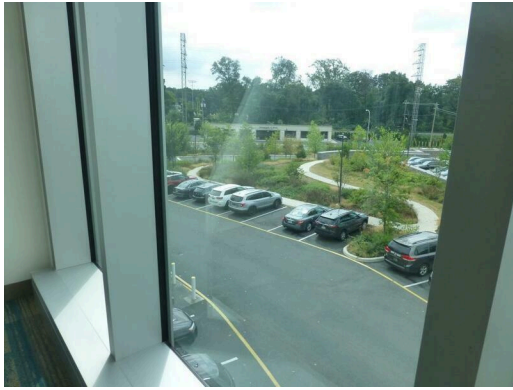
Side Elevation at the LAB Bldg 1801

4.2.5 DOORS AND WINDOWS

The entry doors into the buildings are metal framed. The weather stripping on each observed door appeared to be in good condition.

Glazing systems at the property consist of aluminum framed curtain wall ribbon window systems. The high curtain wall systems appear to be mostly double pane windows with metal frames, but the windows do not appear to be storm rated. Flashing at the building appears to be in good condition.

Photographs



Dual Pane Metal Framed Window

4.2.6 ROOF

The roof type is a standard TPO (Thermoplastic Polyolefin). No roof warranty was provided for our review. Roof accessories consist of mechanical equipment, plumbing vents, roof hatch, metal platform, limited telecommunication arrays and utility lines. No mechanical screen walls appear to be on the roof structure. The low-slope roof areas drain to internal roof drains oriented at structural low spots. Overflow drainage is provided by secondary drains adjacent to the primary drains. Internal roof drains appear to discharge to a subgrade drainage system. Skylight structures were observed on the roof which provide daylight to atrium areas on the lower floors.

Low roofs only have primary drains with no secondary drains. Consideration should be made to include secondary drains with next roof replacement. According to estimates, the insulation consists of R-15 rigid insulation.

Photographs



Rooftop at Bldg XXXX

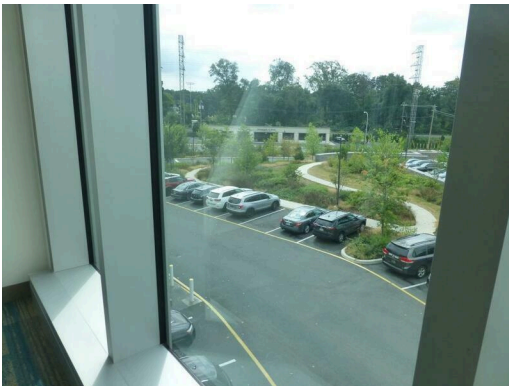


Skylights with LED Lights

4.2.7 INSULATION SUMMARY

Envelope Component	U-Factor	Insulation R-Value
Exterior Walls	0.065	R-15
Rigid Roof Insulation (Polyurethane-Estimated)	0.045	R-25
Windows	0.55	R-1.81
Doors	0.65	R-1.5
Ground Floor	0.35	R-2.85
Between Floors	0.07	R-14 (Estimated)

Photographs



Dual Pane Metal Framed Window

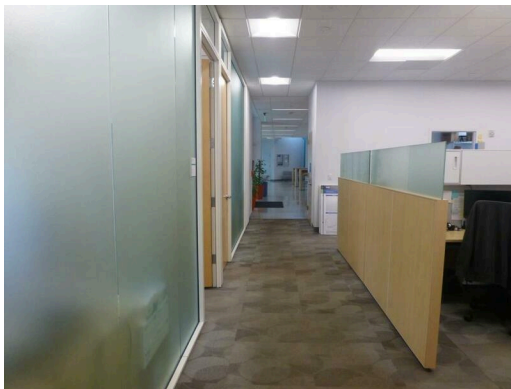
4.2.8 LIGHTING

The following tables provide an inventory of observed lighting fixtures, lamp type, and wattage.

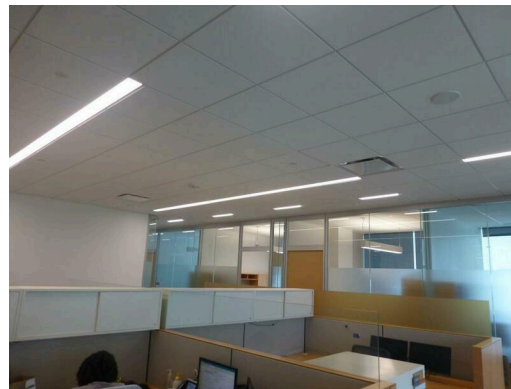
Lighting Audit (Common Area)

Area of Building	Existing Fixture	Total # Fixtures	Lamps Per Fixture	Total # of Lamps	LED Equivalent Wattage	Current kWh Usage	kWh Usage w/ LED	kWh Saved Per Year	Cost Per kWh	Current Annual Op Cost	Annual Cost Using LEDs	Savings	Cost to Install Lighting	Payback
Exterior Pole Lighting	1B 60W LED	50	1	50	0	13140	0	0	0.09	\$1,220	\$0	\$0	\$0	-
Wall Packs	1B 22W LED	80	1	80	0	7709	0	0	0.09	\$716	\$0	\$0	\$0	-
Parking Garage Lighting	1B 50W LED	20	1	20	0	8760	0	0	0.09	\$813	\$0	\$0	\$0	-
Office Recessed Can	1B 15W LED	120	1	120	0	5616	0	0	0.09	\$521	\$0	\$0	\$0	-
Common Corridor	1B 20W LED	150	1	150	0	9600	0	0	0.09	\$891	\$0	\$0	\$0	-
Office Linear Fixtures	2B 30W LED	550	2	1100	0	105600	0	0	0.09	\$9,803	\$0	\$0	\$0	-
Stairwells	2B 20W LED	350	2	700	0	44800	0	0	0.09	\$4,159	\$0	\$0	\$0	-
Common Corridor with Glass-Near Daylight	1B 20W LED	80	1	80	0	5,440	2,176	3,264	\$0.09	\$505	\$202	\$303	\$720	2.4

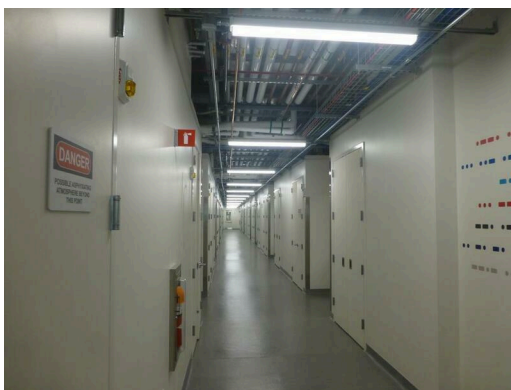
Photographs



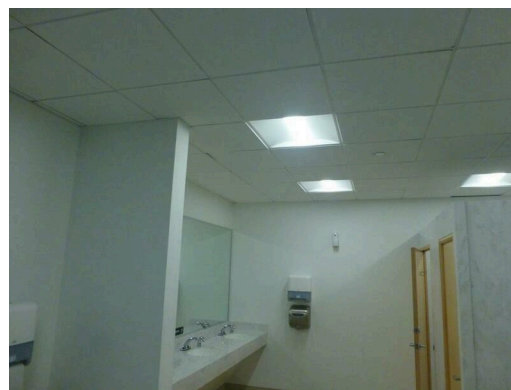
2nd View Office LED Lighting



Corporate Office LED Lighting



Corridor LED Lighting



LED Lighting At Restroom

4.2.9 BUILDING MECHANICAL SYSTEMS

The heating and cooling systems consist of three large rooftop packaged AC units which serve the general occupied areas at various sections of the building. Additionally there are five large air handling units (AHU's) which primarily serve the lab spaces in the building on most floors of the building. There are three large exhaust lab hood fans which simultaneously exhaust air from the lab spaces and associated areas that need to be continuously exhausted from the areas that undergo biological and chemical processes in the building.

The ductwork from the lab units contains several zones which contain heating hot water reheat coils supplied by the central boilers for the heating source. The tonnages of the packaged rooftop units range from 60 to 80 tons. The supply fans on each of these large RTU's are equipped with VFD's. The rated efficiency of these units is approximately 9.5 to 10 EER.

The building is heavily centered on the function of laboratory fume hoods utilizing phoenix controls and occupancy camera sensors which can affect the sash opening levels. There are approximately 250 lab hoods in the building and are monitored by the building automation system. The AHU's serving the Lab areas have a supply temperature of 48°F to maintain

approximately 70°F in all the lab zones. Two 500 ton variable speed water cooled chillers provide chilled water to the five air handling units and utilize a variable chilled water pumping system, in which the chilled water pumps are equipped with VFD's.

The heating and cooling systems throughout Building 1 are controlled by the central BMS system. The front end is located in the facility manager's office however it appears the facility manager indicated the system can be controlled remotely as the system is web based and can be accessed at any location.

Domestic hot water is produced by four large natural gas water heaters that provide comfort and process domestic hot water throughout the building.

HVAC Equipment

Location or Unit Address	Description	Manufacturer	Model No.	Year of Manufacture	RUL	Quantity	Heating Fuel	Heating Capacity	Heating Efficiency (AFUE, TE, COP, HSPF)	Cooling Capacity (Tons)	Efficiency
Rooftop	Lab Exhaust Fans with VFD's	Strobic	TS4L750 Series	2014	12	3	N/A	N/A	0.9	1.1	11 EER (Est)
Rooftop-RTU's	Gas fired RTU	Daikin	MPS075E	2014	12	3	Gas	800 MBH	0.8	72	9.2 EER
Rooftop-LABs	AHU's	Aerofin	W120AW	2014	12	5	HHW	11.2 MBH	N/A	120	N/A
Mechanical Room	Water Cooled Chiller	York	YKH3F3P8	2014	16	2	N/A	N/A	N/A	500	11 EER
Zone Level	VAVs with hydronic reheat	Envirotech	SDR	2014	16	35	HHW	6 to 25 MBH	0.8	N/A	N/A
Mechanical Room	Steam Boiler	Triad High Press	Ser. 2000	2014	20	3	Gas	1513 lbs	0.7	N/A	N/A

Domestic Water Heating

Location of Unit Address	Manufacturer	Model No.	Year of Manufacture	Storage Capacity (Gal)	Input Capacity	Input Units of Measure (kW, BTUH, MBH)	Fuel (e.g., electric, natural gas)	Quantity	RUL	Efficiency (TE, AFUE, Energy Factor, etc.)
Mechanical Room	PVI	Unknown	2016	100	150	MBH	natural gas	4	12	96% TE

Photographs



Domestic Water Heater for LAB Areas



Strobic Fans and Rooftop



2nd set of Strobic Fans



Typical LAB Hood with Sash Control

4.2.10 APPLIANCES

There are no major appliances at the property.

4.2.11 LAUNDRY EQUIPMENT

There are no central laundry systems on the Property.

5.0 RECOMMENDED EEMS

The EEMs in the chart at the beginning of the report have been analyzed using calculations based on occupant usage, localized climate conditions, HVAC and ventilation operating hours, and lighting hours. The HVAC operating hours are approximations and may vary depending on the severity of the weather. Water consumption is based on the number of occupants and assumed running times for water consuming devices. The Property has been carefully evaluated for the EEMs. The chart shows the initial investment, utility savings, utility cost savings, and paybacks for each EEM. The utility cost increase over the life of the EEM implemented was not considered as a factor in the cost savings calculations.

5.1 NO-COST/LOW-COST MEASURES

There were no low cost measures identified for this site. Capital measures have been identified in the Capital Projects section.

5.2 CAPITAL COST MEASURES

EEM #1- Program Supply Temperature Reset (approximately 2.5°F) from 48°F to 50.5°F for the LAB AHU's at Building 1

The existing EMS control system operating the five Lab air handling units appear to be currently at constant temperature setpoint of 48°F providing conditioned air to all the Lab spaces. It is proposed to provide a supply temperature discharge air temperature reset strategy which is selectable by the operator with an option for a fixed supply air temperature setpoint as well. All reset strategies shall be stepwise and reset every five (5) minutes (adj.). All reset values shall be adjustable and available to the operator.

The measure will include installation and is estimated at approximately \$5,500.

Increasing the setpoint will reduce energy consumption on the LAB air handling units and Strobic exhaust fans as well as decrease the cooling load on the existing VFD chillers. One concern is that the process equipment could increase in heat load however a mild reset (at approximately 2°F) is still recommended which may not cause a heavy impact to the work spaces. The discharge air temperature setpoint is selected by the operator and set to a fixed value.

Some control adjustments from the facility manager and or contracted controls contractor may be required

Potential O&M savings: the long term O&M savings will result from operating fans at lower RPM and power, generating less wear on fan belts, housing, and motors. Installation and commissioning of this control measure can be installed with little impact on occupants and personnel.

There may be custom rebates available thru Delmarva Power, however an inquiry needs to be made as to the dollar amount per kWh saved for which the measure will qualify. The following is the weblink for applying for custom rebates thru Delmarva Power, which is the link for custom incentives:

website.com

EEM #2- Program Supply Temperature Reset (approximately 3°F) from 55°F to 58°F for the three Packaged Rooftop Units at Building 1

The existing EMS control system operating the three main packaged units appear to be currently at constant temperature setpoint of 48°F providing conditioned air to all the Lab spaces

The measure will include installation and is estimated at approximately \$7,500 based on an average cost of \$2,500 per control point that would need to be adjusted.

Increasing the setpoint will reduce energy consumption on the supply fans as well as decrease the cooling load on the existing Packaged RTU compressors This will also interactively reduce the heating required by the gas furnaces at the units and will save natural gas energy.

There should be no concerns on this measure as this resets the supply temperature by approximately 3°F during lower load conditions and appears to serve non-lab or non-critical areas of the building.

Some control adjustments from the facility manager and or contracted controls contractor may be required

Potential O&M savings: the long term O&M savings will result from operating fans at lower RPM and power, generating less wear on fan belts, housing, and motors. Installation and commissioning of this control measure can be installed with little impact on occupants and personnel.

There may be custom rebates available thru Delmarva Power, however an inquiry needs to be made as to the dollar amount per hp for which the measure will qualify.

The following is the weblink for applying for custom rebates through utility company, which is the link for custom incentives : website.com

EEM #3-Provide Demand Control Ventilation to three Packaged Rooftop Units with CO₂ sensor controls

The three existing Packaged Rooftop Units do not appear to be equipped with demand control ventilation

Measure will be installed at the unit with demand controls and CO₂ sensors to detect occupancy in some limited office spaces inside the building at office and limited corridor spaces.

Demand-controlled ventilation (DCV) is an energy-saving control strategy that reduces the rate at which outdoor air is delivered to a zone during periods of partial occupancy, which does appear to occur in the office portions of the building

The measure will include installation and is estimated at approximately \$7,500 based on an average cost of \$2,500 per control point that would need to be adjusted to re-program supply temperature setpoints. Assumes a constant supply temperature of approximately 55 F and some modulation of the outside air dampers but does not appear to be occupancy based, but rather temperature based.

Provide Demand Control Ventilation internal controls to three Packaged Rooftop Units with CO2 sensor controls. A sample case study is shown in the appendices.

Some control adjustments from the facility manager and or contracted controls contractor may be required

Potential O&M savings: the long term O&M savings will result from operating fans at lower RPM and power, generating less wear on fan belts, housing, and motors. Installation and commissioning of this control measure can be installed with little impact on occupants and personnel.

There may be custom rebates available thru Delmarva Power, however an inquiry needs to be made as to the dollar amount per hp for which the measure will qualify.

The following is the weblink for applying for custom rebates through Utility company which is the link for custom incentives : [Delmarva Power | Delmarva Power - An Exelon Company \(programprocessing.com\)](http://Delmarva Power | Delmarva Power - An Exelon Company (programprocessing.com))

EEM #4- Provide Daylight Controls Near Skylights and Exterior Glass at Building 1

Existing LED interior lighting have areas at the building that could be controlled by day light controls.

AEI recommends: Installing daylight controls in some glass areas and skylit areas of the building to provide day light harvesting and reduce lighting power when sufficient daylight is available.

Basis for how the measure will save energy: Installing high-efficiency day light sensor controls will significantly reduce the property's electrical consumption while maintaining equivalent or better light levels. In addition, many of the recommended bulbs and fixtures have longer lifespans, which will reduce the number of bulbs replaced at the property.

The measure is expected to cost approximately \$720.

Key analytical assumptions: Lighting without day light controls uses more energy as verified by nameplate and heat output

The selected LED lamps should have a color temperature around 2,700K to 3,000K to provide the same "feel" as incandescent lighting.

Energy usage will decrease and lamp replacement frequencies will be less frequent.

Rebates/Incentives available from utility company or municipality: Possible incentives are available through Utility Company Generally an account executive is assigned to the property and a custom rebate may be available. No prescriptive rebates were found for this measure.

EEM #5

Install 35 kW Solar PV system on available roof area. (Approximately 100 modules.). Note that a 30% Federal Investment Tax Credit is available for commercial systems, or a production credit of \$0.026/kWh of production credit for commercial systems, if the systems meet labor requirements issued by the Treasury Department, but neither are included in the pricing.

The building has a high electricity baseload, installation of a solar PV array would offset a percentage of the load.

There is ample space on the south flat roof sections to install a solar PV system. The property is located in a region with a significant solar days.

The estimated cost of this measure is \$113,750. A 30% Federal tax rebate is available, but is not accounted for the in the proposed cost.

Solar modules not only generate electricity but also provide shading to the roof membrane and partly protect it from weather.

The installation of the system will not affect any facility operation.

EEM SIMULATION RESULTS

Input parameters in each modeled building were changed to reflect the proposed changes in conditions then a simulation was run to predict the results. The simulation tool considers the interactive effects on all systems such as increased heating requirements from retrofitting high wattage lighting with lower wattage LED lighting. The following tables provide a summary of the EWEMs evaluated and the simulation results showing projected use per building type, subtotal for all buildings by type, total for all buildings, and the projected reduction in consumption.

Note that EEM #1 thru 3 was not modeled, but rather was the result of lighting calculations based on an inventory of common area and site lighting. Modeling was not necessary as consumption for lighting is included in the owner-paid utilities.

ENERGY MODEL ASSUMPTIONS

The following assumptions were made in building the building energy model:

An approximation was made on the following based on observations during the site visit and plan drawings

- Local Vegetation/shading
- Interior conditions and HVAC set points
- Air infiltration goals
- Building orientation (should rotate the model to 4 compass points and average the modeled usage).
- Lighting loads W/SF
- Plug loads W/SF
- Schedules (lighting, plug loads)
- HVAC equipment types and efficiencies
- Economizers and heat recovery
- Water heating systems
- Specialty Systems
- Renewable energy systems

6.0 SIGNATURES OF PARTICIPATING PROFESSIONALS

AEI Consultants performed this ASHRAE Level II Energy Audit for the Property located at Property Address, City, County County, State, in conformance with the scope and limitations of ASHRAE *Procedures for Commercial Building Energy Audits, Second Edition*, ANSI/ASHRAE/ACCA Standard 211-2018, *Standard for Commercial Building Energy Audits*.

Prepared By:
Project Manager

Reviewed By:
Vice President

APPENDIX B

SUPPORTING DOCUMENTATION

ASHRAE Equipment Life Expectancy chart

ASHRAE is the industry organization that sets the standards and guidelines for most all HVAC-R equipment.
For additional info about ASHRAE the website is www.ashrae.org.

Equipment Item	Median Years	Equipment Item	Median Years	Equipment Item	Median Years
Air conditioners		Air terminals		Air-cooled condensers	20
Window unit	10	Diffusers, grilles, and registers	27	Evaporative condensers	20
Residential single or Split Package	15	Induction and fan coil units	20	Insulation	
Commercial through-the wall	15	VAV and double-duct boxes	20	Molded Blanket	20
Water-cooled package	15	Air washers	17		24
Heat Pumps		Ductwork	30	Pumps	
Residential air-to-air	15	Dampers	20	Base-mounted	20
Commercial air-to-air	15	Fans		Pipe-mounted	10
Commercial water-to-air	19	Centrifugal	25	Sump and well	10
Roof-top air conditioners		Axial	20	Condensate	15
Single-zone	15	Propeller	15	Reciprocating engines	20
Multi-zone	15	Ventilating roof-mounted	20	Steam turbines	30
Boilers, hot water (steam)		Coils		Electric motors	18
Steel water-tube	24 (30)	DX, water, or steam	20	Motor starters	17
Steel fire-tube	25 (25)	Electric	15	Electric transformers	30
Cast iron	35 (30)	Heat Exchangers		Controls	
Electric	15	Shell-and-tube	24	Pneumatic	20
Burners	21	Reciprocating compressors	20	Electric	16
Furnaces		Packaged chillers		Electronic	15
Gas- or oil-fired	18	Reciprocating	20	Valve actuators	
Unit heaters		Centrifugal	23	Hydraulic	15
Gas or electric	13	Absorption	23	Pneumatic	20
Hot water or steam	20	Cooling towers		Self-contained	10
Radiant Heaters		Galvanized metal	20		
Electric	10	Wood	20		
Hot water or steam	25	Ceramic	34		



Caution: Photovoltaic system performance predictions calculated by PVWatts® include many inherent assumptions and uncertainties and do not reflect variations between PV technologies nor site-specific characteristics except as represented by PVWatts® inputs. For example, PV modules with better performance are not differentiated within PVWatts® from lesser performing modules. Both NREL and private companies provide more sophisticated PV modeling tools (such as the System Advisor Model at //sam.nrel.gov) that allow for more precise and complex modeling of PV systems.

The expected range is based on 30 years of actual weather data at the given location and is intended to provide an indication of the variation you might see. For more information, please refer to this NREL report: The Error Report.

Disclaimer: The PVWatts® Model ("Model") is provided by the National Renewable Energy Laboratory ("NREL"), which is operated by the Alliance for Sustainable Energy, LLC ("Alliance") for the U.S. Department Of Energy ("DOE") and may be used for any purpose whatsoever.

The names DOE/NREL/ALLIANCE shall not be used in any representation, advertising, publicity or other manner whatsoever to endorse or promote any entity that adopts or uses the Model. DOE/NREL/ALLIANCE shall not provide any support, consulting, training or assistance of any kind with regard to the use of the Model or any updates, revisions or new versions of the Model.

YOU AGREE TO INDEMNIFY DOE/NREL/ALLIANCE, AND ITS AFFILIATES, OFFICERS, AGENTS, AND EMPLOYEES AGAINST ANY CLAIM OR DEMAND, INCLUDING REASONABLE ATTORNEYS' FEES, RELATED TO YOUR USE, RELIANCE, OR ADOPTION OF THE MODEL FOR ANY PURPOSE WHATSOEVER. THE MODEL IS PROVIDED BY DOE/NREL/ALLIANCE 'AS IS' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED. IN NO EVENT SHALL DOE/NREL/ALLIANCE BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO CLAIMS ASSOCIATED WITH THE LOSS OF DATA OR PROFITS, WHICH MAY RESULT FROM ANY ACTION IN CONTRACT, NEGLIGENCE OR OTHER TORTIOUS CLAIM THAT ARISES OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE MODEL.

The energy output range is based on analysis of 30 years of historical weather data, and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

RESULTS

50,315 kWh/Year*

System output may range from 47,830 to 52,147 kWh per year near this location.

Month	Solar Radiation (kWh / m ² / day)	AC Energy (kWh)
January	3.12	3,092
February	3.92	3,432
March	4.99	4,707
April	5.75	5,060
May	5.72	5,033
June	6.14	5,188
July	6.13	5,248
August	5.71	4,941
September	4.99	4,222
October	4.20	3,882
November	3.38	3,144
December	2.41	2,365
Annual	4.71	50,314

Location and Station Identification

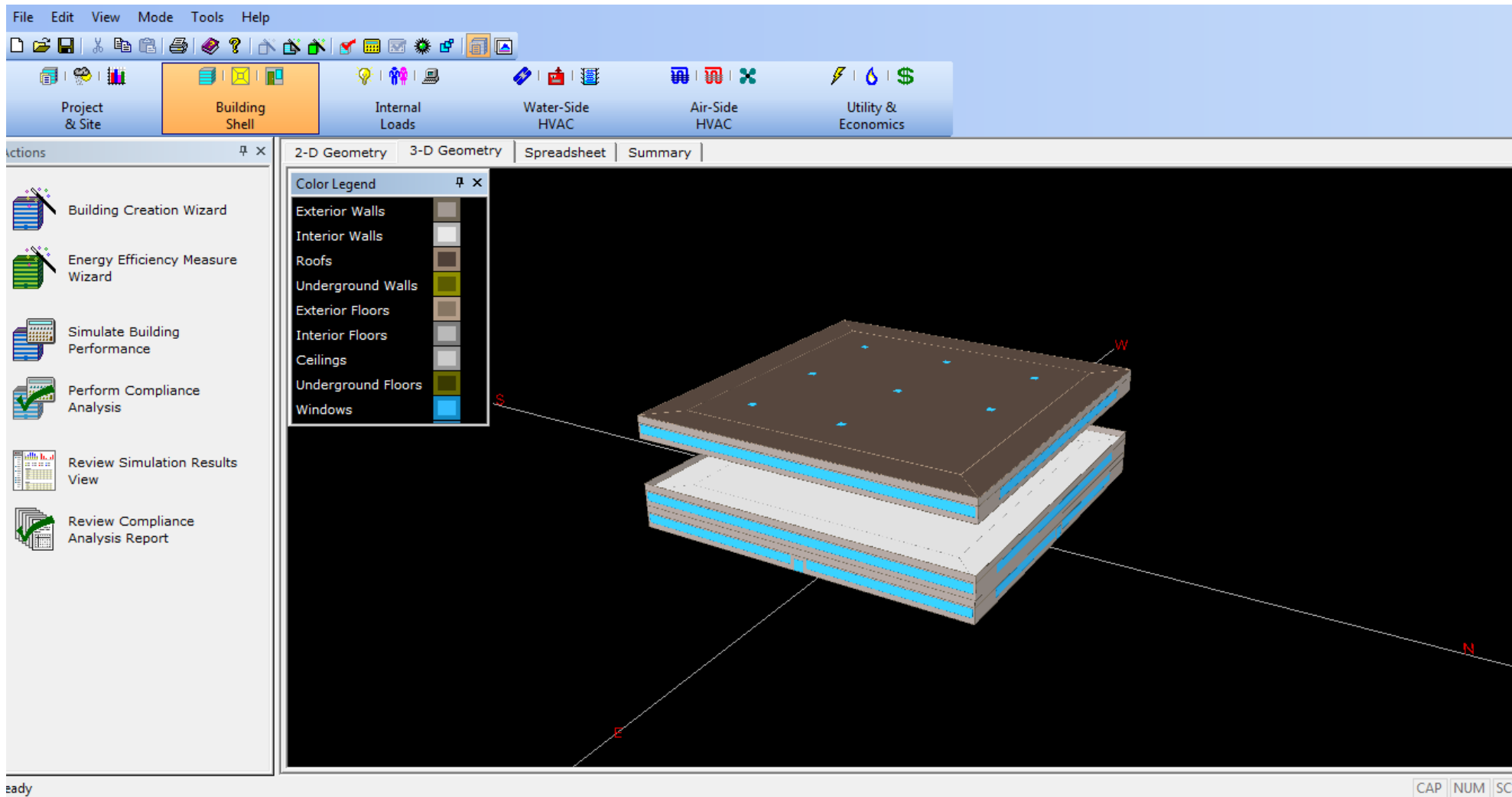
Requested Location	wilmington, de
Weather Data Source	Lat, Lng: 39.93, -75.06 29 mi
Latitude	39.93° N
Longitude	75.06° W

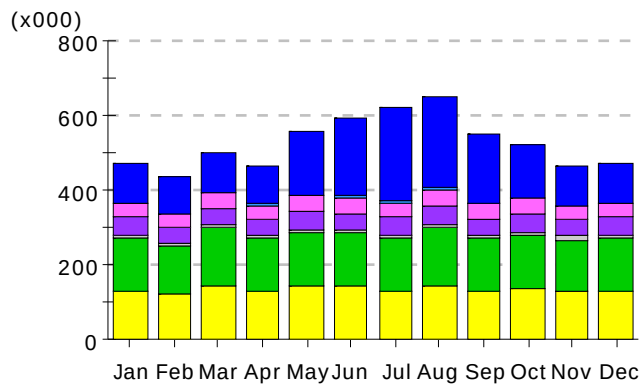
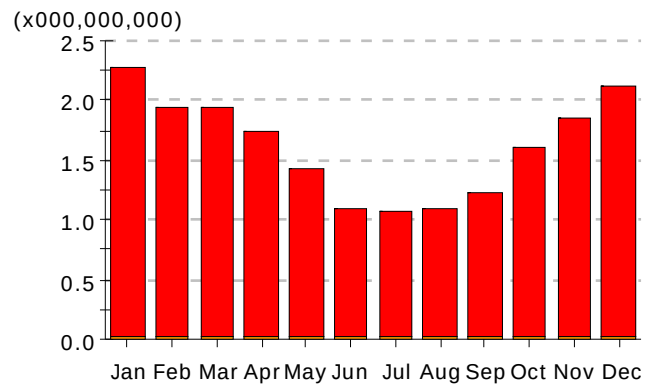
PV System Specifications

DC System Size	35 kW
Module Type	Standard
Array Type	Fixed (open rack)
System Losses	8%
Array Tilt	20°
Array Azimuth	180°
DC to AC Size Ratio	1.2
Inverter Efficiency	96%
Ground Coverage Ratio	0.4
Albedo	From weather file
Bifacial	No (0)
Monthly Irradiance Loss	Jan Feb Mar Apr May June
	0% 0% 0% 0% 0% 0%
	July Aug Sept Oct Nov Dec
	0% 0% 0% 0% 0% 0%

Performance Metrics

DC Capacity Factor	16.4%
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Electric Consumption (kWh)**Gas Consumption (Btu)****Electric Consumption (kWh x000)**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	103.1	95.2	106.3	103.7	170.3	209.7	248.9	243.1	180.0	142.6	107.2	104.1	1,814.5
Heat Reject.	0.4	0.4	0.8	1.0	3.6	5.3	6.8	6.3	4.2	2.5	1.1	0.6	33.1
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	38.9	35.6	40.4	38.2	40.7	40.2	40.4	42.0	39.0	39.8	37.8	38.7	471.8
Pumps & Aux.	47.5	42.7	47.0	45.2	47.6	46.8	48.3	48.6	46.2	47.1	45.1	46.7	558.8
Ext. Usage	9.3	7.2	7.9	7.7	5.5	5.3	5.5	8.9	8.6	8.9	9.0	9.3	93.3
Misc. Equip.	140.9	131.2	152.6	139.7	148.7	146.8	141.7	152.6	139.7	144.8	138.9	141.6	1,719.4
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	129.1	122.1	145.4	129.7	139.9	139.3	130.2	145.4	129.5	134.6	128.5	130.2	1,603.9
Total	469.3	434.4	500.4	465.3	556.4	593.5	621.9	646.9	547.2	520.4	467.7	471.2	6,294.7

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	2.24	1.92	1.92	1.71	1.41	1.08	1.05	1.07	1.22	1.59	1.84	2.09	19.13
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.02	0.02	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.28
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2.27	1.95	1.95	1.73	1.43	1.10	1.07	1.09	1.24	1.61	1.86	2.11	19.41

ABBREVIATIONS AND ACRONYMS

AC	Air Conditioning	kBTU	Kilo-British Thermal Unit
AEI	AEI Consultants	kGal	Kilogallons
ALTA	American Land Title Association	kW	Kilowatt
APN	Assessor's Parcel Number	kWh	Kilowatt hour
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers	LED	Light Emitting Diode
BTU	British Thermal Unit	M	Model
CH	Clubhouse	MBH	1,000 BTUs/hour
DHW	Domestic Hot Water	O	Occupied
ECM	Energy Conservation Measure	OFC	Office
EEM	Energy Efficiency Measures	OSHA	Occupational Safety and Health Administration
EUI	Energy Use Intensity	PCA	Property Condition Assessment
EUL	Estimated Useful Life	PCR	Property Condition Report
EWEM	Energy and Water Efficiency Measures	ROI	Return On Investment
F	Fahrenheit	RP	Responsible Party
FCU	Fan Coil Unit	SEDI	Statement of Energy Design Intent
Gal	Gallon	SF	Square Footage/Square Feet
GFA	Gross Floor Area	SIR	Savings to Investment Ratio
GPF	Gallons Per Flush	SP	Subject Property
GPM	Gallons Per Minute	SEP	Statement of Energy Performance
HUD	Department of Housing and Urban Development	V	Vacant
HVAC	Heating, Ventilation and Air Conditioning	ZAR	Zoning Analysis Report

RESOLUTION

NOW, THEREFORE BE IT RESOLVED that the following
Budget Amendment for the EGLE Grant revenue and expenditures is
authorized:

	INCREASE (DECREASE)
GENERAL FUND	
REVENUES	
State Grant (101-000.00-540.100)	100,000
TOTAL REVENUES	\$ 100,000
APPROPRIATIONS	
Other Services and Charges (101-265.00-816.074)	100,000
TOTAL APPROPRIATIONS	\$ 100,000
Net Increase (Decrease) to Fund Balance	\$ -

I hereby certify that the foregoing is a true and complete copy of a
resolution adopted by the City Council of the City of Novi
at a regular meeting held on March 25, 2025

Courtney Hanson
City Clerk



CITY OF NOVI CITY COUNCIL
MARCH 24, 2025

SUBJECT: Approval of claims and warrants – Warrant 1176

SUBMITTING DEPARTMENT: Finance

BACKGROUND INFORMATION:

Per Section 8.10 of the City's charter all funds drawn by the treasury department must be approved by City Council. This approval occurs through a warrant system and appears on all City Council's agenda. The most recent Warrant, #1176 comes before City council for approval.

RECOMMENDED ACTION: Approval of claims and warrants – Warrant 1176

CITY OF NOVI
Warrant 1176
Monday, March 24, 2025

Check	Vendor Name	Description	Amount
195563 - 195565	CONSUMERS ENERGY	HEAT	666.08
195566 - 195569	DTE ENERGY	ELECTRICITY	6,990.07
195570	DTE ENERGY	STREET LIGHTING	21,216.96
195571 - 195579	DTE ENERGY	ELECTRICITY	2,405.16
195580	WEX BANK	ACCOUNT 0496-00-369029-4 INVOICE 103223	183.72
195581	AT&T MOBILITY	ACCOUNT 830154504 INVOICE 830154504X021	306.71
195582	BORIEO, SANDRA	PROFESSIONAL SERVICES (HIDTA)	1,872.00
195583	CHADWICK, COREY	REIMBURSE TRAVEL EXPENSES (HIDTA)	1,394.15
195584	COMCAST BUSINESS	ACCOUNT 8529 10 205 0785285	221.76
195585	KELLEY, ERICA	REIMBURSE EQUIPMENT	264.99
195586	KUIACK, MATT	REIMBURSE TRAVEL EXPENSES (HIDTA)	1,955.80
195587	MICHIGAN PUBLIC HEALTH INSTITUTE	INVOICE 90058908 (HIDTA)	37,247.75
195588	TRANSUNION RISK AND ALTERNATIVE	ACCOUNT 2556421 INVOICE 2556421-202502 (HIDTA)	1,080.00
195589	VERIZON WIRELESS	ACCOUNT 242662063-00001 INVOICE 6104897	40.01
195590	WEX BANK	ACCOUNT 0496-00-893440-8 INVOICE 103403	10.00
195591	A AND R PLUMBING LLC	BUILDING MAINTENANCE	840.00
195592	ACCUFORM PRINTING & GRAPHICS INC	PRINTING AND PUBLISHING	139.80
195593	ADVANCE AUTO PARTS	VEHICLE MAINTENANCE	68.09
195594 - 195596	AECOM GREAT LAKES, INC	PROF'L SERV - TRAFFIC STUDY (PLANNING,ESCROW)	11,820.28
195597	AIRGAS USA, LLC	VEHICLE MAINTENANCE (DPW, FIRE, POLICE)	1,215.65
195598	ALLIED BUILDING SERVICE COMPANY	BUILDING MAINTENANCE (LIBRARY)	12,071.00
195599	AMAZON	LIBRARY BOOKS LENDING (LIBRARY)	1,800.38
195600	AMERICAN GENERATORS SALES	BUILDING MAINTENANCE (FIRE, W&S, FACILITIES)	5,377.09
195601	APOLLO FIRE APPARATUS SALES	INSURANCE DEDUCTIBLES (GF)	12,311.95
195602	APPLICANTPRO	PROFESSIONAL SERVICES	473.00
195603	APPLIED INNOVATION	PROFESSIONAL SERVICES	198.73
195604	ARAMARK REFRESHMENT SERVICES	OFFICE SUPPLIES (FIRE)	3,000.45
195605	ASCENSION MICHIGAN EMPLOYER	MEDICAL SERVICE - PRE EMPLOYMENT (W&S, FIRE)	2,181.00
195606	AXON ENTERPRISE, INC.	IN-CAR CAMERAS & BODY CAMERAS (POLICE)	73,185.83
195607	BAKER & TAYLOR, LLC	AUDIO VISUAL MATERIALS	52.59
195608	BALDRIDGE, TREND A	CHORALAIRES	450.00
195609	BANDIBOOKS	COLLECTIONS/MATERIALS EXPENSE	835.89
195610	BARNHILL III, JOHN H.	YOUTH BASKETBALL	360.00
195611	BAYYOUK, SALIM	BLDG. BOND REFUND (ESCROW)	8,400.00
195612	BELLE TIRE	VEHICLE MAINTENANCE (FIRE, COMM DEV)	3,473.84
195613	BERCHERT, NICHOLAS C.	WITNESS	18.60
195614	BERKSETH, SCOTT	PER DIEM CPSE CONFERENCE	220.00
195615	BESK, DANIEL	YOUTH BASKETBALL	520.00
195616	BOUND TREE MEDICAL LLC	OPERATING SUPPLIES (FIRE)	1,257.05
195617	BRENCAL CONTRACTORS INC	CONSTRUCT: DPW SALT DOME REPLACE (DRAIN)	154,875.30
195618	BRIGHTSOURCE LIGHTING SOLUTIONS LLC	OPERATING SUPPLIES	287.40
195619	BRODART CO.	LIBRARY BOOKS LENDING (LIBRARY)	5,838.60
195620	BULL AND MONKEY, LLC	PROGRAMMING EXPENSE (LIBRARY)	1,000.00
195621	CAMFIL USA, INC.	INDOOR GUN RANGE	255.36
195622	CAPITAL TIRE INC	VEHICLE MAINTENANCE (POLICE)	1,016.00
195623	CAUCHI, PATRICIA	PETTY CASH	48.88
195624	CBTS LLC	TELEPHONE MAINTENANCE	201.55
195625	CDW GOVERNMENT LLC	INTERNAL TECHNOLOGY - CITYWIDE (IT)	38,095.19
195626	CHILTON, KIMBERLY S.	OLDER ADULTS FITNESS (PARKS & REC)	2,712.00
195627	CINTAS CORP	SUPPLIES UNIFORMS (DPW, FACILITIES)	1,239.60
195628	CONSTANTINE, TOM	PER DIEM APWA SNOW/ICE CONFERENCE	187.00
195629 - 195653	CONSUMERS ENERGY	HEAT	19,814.31
195654	CORRIGAN RECORD STORAGE LLC	RECORDS STORAGE - CITYWIDE (CLERK)	4,769.35
195655	COSTAR REALTY INFORMATION INC	INTERNAL TECHNOLOGY (ASSESSOR, CM, COMM DEV)	1,910.12
195656	COUGAR SALES & RENTAL INC	WATER LINE MAINTENANCE	146.94

195657	COUNTRY CLUB LAWN LLC	ROUTINE MAINTENANCE (STREETS, W&S)	4,061.00
195658	COUNTY OF KENT	OPERATING SUPPLIES	90.00
195659	CRAIGIE, ALYSSA	MILEAGE REIMBURSEMENT	28.14
195660	CRAIGIE, ALYSSA	MILEAGE REIMBURSEMENT	16.08
195661	CRANDALL-WORTHINGTON INC	COMMUNITY CENTER SUPPLIES (PARKS & REC)	1,482.00
195662	CYNERGY WIRELESS PRODUCTS, INC.	RADIO MAINTENANCE (FIRE)	1,070.83
195663	DANIELSON, BARBARA	LIBRARY PROGRAMMING	187.50
195664	DELL MARKETING L.P.	INTERNAL TECHNOLOGY (DPW)	11,704.65
195665	DOBSON, MICHAEL JAMES	YOUTH BASKETBALL	200.00
195666	DORNBOS SIGN & SAFETY INC	TRAFFIC CONTROL SIGN REPLACEMENT	479.25
195667	DTN, LLC	INTERNAL TECHNOLOGY (POLICE, DPW)	2,274.04
195668	DUKE'S ROOT CONTROL, INC.	SEWER LINE MAINTENANCE (W&S)	6,045.86
195669	ELLSWORTH INDUSTRIES INC.	ROUTINE MAINTENANCE (LOCAL STREETS)	1,719.06
195670	EMPCO INC	PROFESSIONAL SERVICES (FIRE)	5,720.00
195671	EMPIRE PRINTING, LLC	ADULT BASKETBALL LEAGUE	47.36
195672	ENVISIONWARE, INC	COMPUTER SUPPLIES (LIBRARY)	1,166.88
195673	ETNA SUPPLY	WATER LINE MAINTENANCE (W&S)	1,643.00
195674	EVANSKI, JACKIE	PER DIEM 2025 ADMIN ADDISTANTS CONFERENC	82.00
195675	EVERBLADES INC	VEHICLE MAINTENANCE	500.00
195676	EVERON LLC	CONTRACTUAL SERVICES (PARKS MAINT)	1,515.79
195677	FARAHANI, AMIR	MILEAGE REIMBURSEMENT	113.40
195678	FARKAS, JULIE	PETTY CASH	71.17
195679	FELDMAN CHEVROLET OF NOVI	VEHICLE MAINTENANCE	450.47
195680	FERGUSON WATERWORKS #3386	WATER METERS (WATER & SEWER)	7,650.00
195681	FIRESTATIONFURNITURE.COM	LEATHER RECLINERS (8) FOR FIRE STATIONS (FIRE)	7,521.55
195682	FLEETPRIDE INC.	VEHICLE MAINTENANCE (DPW)	2,221.45
195683	FOSTER, SWIFT, COLLINS & SMITH, P.C	LEGAL FEES	714.00
195684	G2 CONSULTING GROUP, LLC.	MATERIAL TESTING: DPW SALT DOME REPLACE (DRAIN)	3,595.00
195685	GALE/CENGAGE LEARNING	LIBRARY BOOKS	68.74
195686	GANNETT MICHIGAN LOCALIQ	PRINTING AND PUBLISHING	416.69
195687	GARRIS, GERYLANN	PER DIEM 2025 ADMIN ADDISTANTS CONFERENC	82.00
195688	GATES, BRIAN	YOUTH BASKETBALL	400.00
195689	GDI SERVICES INC	JANITORIAL CONTRACTS (LIBRARY, FACILITIES)	28,252.00
195690	GLASS AMERICA	VEHICLE MAINTENANCE	977.39
195691	GLOCK PROFESSIONAL INC	EDUCATION AND TRAINING (POLICE)	1,200.00
195692	GORDON FOOD SERVICE PAYMENT PROC.	OLDER ADULTS SPECIAL EVENTS	126.65
195693	GRAINGER INC, W W	OPERATING SUPPLIES	470.41
195694	GRAPHIK CONCEPTS INC	VEHICLE NEW INSTALL (FORFEITURE)	3,522.18
195695	GRAY, SCOTT	YOUTH VOLLEYBALL	120.00
195696	GREAT AMERICA FINANCIAL SERVICES	OPERATING SUPPLIES	83.87
195697	GREAT LAKES POWER & LIGHTING INC.	BUILDING MAINTENANCE (FACILITIES, POLICE)	2,781.21
195698	GREAT LAKES PROFILES, INC.	PRE EMPLOYMENT TESTING	160.00
195699	HANS AUTO ELECTRIC	VEHICLE MAINTENANCE	155.00
195700	HANSON RENAISSANCE COURT REPORTERS	PROFESSIONAL SERVICES	921.00
195701	HAYWARD, BRANDON	VEHICLE MAINTENANCE	299.88
195702	HBGG LLC	BLDG. BOND REFUND (ESCROW)	400.00
195703	HEALEY FIRE PROTECTION INC.	BUILDING MAINTENANCE	900.00
195704	HOME DEPOT CREDIT SERVICES	OPERATING SUPPLIES - CITYWIDE	4,610.26
195705	HOSPITALITY HOUSE	HCD (COMMUNITY DEV BLOCK GRANT)	5,243.00
195706	HUNTINGTON NATIONAL BANK	BOND INTEREST EXPENSE (LIBRARY)	47,900.00
195707	IDENTISYS INC	OUTSIDE DATA PROCESSING (POLICE, FIRE)	2,037.17
195708	IMAGE 360 - NOVI	OPERATING SUPPLIES	137.50
195709	IMPERIAL DADE	BUILDING MAINTENANCE	927.26
195710	INTRADO LIFE & SAFETY, INC	TELEPHONE MAINTENANCE	440.19
195711	KENNEDY INDUSTRIES INC	LIFT STATION MAINTENANCE	486.00
195712	KENSINGTON FAMILY HOMES	BLDG. BOND REFUND (ESCROW)	750.00
195713	KIMBALL MIDWEST	VEHICLE MAINTENANCE (DPW, POLICE)	2,318.16
195714	KINOKUNIYA BOOK STORES OF AMERICA	LIBRARY BOOKS	576.81
195715	KNIGHT TECHNOLOGY GROUP, INC	COMPUTER SUPPLIES	700.00
195716	KNIGHT, COREY	YOUTH BASKETBALL	160.00
195717	LABSOURCE INC	OPERATING SUPPLIES	185.56
195718	LAFORCE INC.	BUILDING MAINTENANCE	148.00
195719	LANGUAGE LINE SERVICES	EMERGENCY COMMUNICATION SERVICE	408.51

195720	LENNY'S HOME SERVICES	HCD (COMMUNITY DEV BLOCK GRANT)	5,077.00
195721	LIBERTY, MARVIN	YOUTH BASKETBALL	240.00
195722	LIBRARY DESIGN ASSOCIATES, INC.	BUILDING IMPROVEMENTS (LIBRARY)	33,000.00
195723	LIBRARY NETWORK, THE	ELECTRONIC RESOURCES	559.30
195724	LIMB WALKERS TREE & SNOW	9 MILE RD REHAB (MAJOR STREETS)	23,772.50
195725	LOOMIS	ARMORED CAR SERVICES	678.57
195726	M-2 AUTO PARTS, INC.	VEHICLE MAINTENANCE (DPW, POLICE)	1,877.71
195727	MACQUEEN EMERGENCY	SUPPLIES UNIFORMS	695.08
195728	MALINOWSKI, JUDITH M.	MEDICAL SERVICE	500.00
195729	MARK'S OUTDOOR POWER EQUIPMENT	LAWN MOWER MAINTENANCE	429.17
195730	MARSHALL, JUSTIN	YOUTH BASKETBALL	200.00
195731	MATTIES, JAMES	PER DIEM APWA SNOW/ICE CONFERENCE	123.00
195732	MAZUR, DANIELLE	MILEAGE REIMBURSEMENT	17.95
195733	MC AULIFFE, MICHAEL	YOUTH BASKETBALL	120.00
195734	MCKENNA ASSOCIATES INC	BUILDING, TRADE, & PLAN REVIEW SERV (COMM DEV)	1,850.00
195735	MEDLINE INDUSTRIES, LP	OPERATING SUPPLIES (FIRE)	6,741.48
195736	MERRI-CRAFT FLORIST	VALENTINE DADS/DAUGHTER (PARKS & REC)	1,050.00
195737	MES SERVICE COMPANY LLC	VEHICLE MAINTENANCE	261.08
195738	MGE CARPENTRY INC	BLDG. PAYMENT REFUND (ESCROW)	250.00
195739	MICHIGAN CAT	OPERATING SUPPLIES	97.01
195740	MICHIGAN LINEN SERVICE, INC.	BUILDING MAINTENANCE	1,804.25
195741	MIDWEST TAPE, LLC	LIBRARY BOOKS LENDING (LIBRARY)	11,041.56
195742	MILLEN, DANIEL W & RENEE	BLDG. BOND REFUND (ESCROW)	1,200.00
195743	MISSION COMMUNICATIONS, LLC	LIFT STATION MAINTENANCE	387.00
195744	MORNINGSTAR, BECK	BOOT REIMBURSEMENT	100.00
195745	MUNICIPAL WEB SERVICES, INC	COMMUNITY PROMOTION	352.50
195746	NAK4FIT	SPORTS CAMPS (PARKS & REC)	7,422.60
195747	NORTHSTAR MAT SERVICE	BUILDING MAINTENANCE	257.96
195748	NOVI WATER DEPARTMENT	WATER AND SEWER - CITY USE	1,157.71
195749	NOVI, CITY OF	CITY'S SHARE OF FEES RECEIVED	1,148.00
195750	O'REILLY AUTO PARTS	VEHICLE MAINTENANCE (DPW, FIRE, PARKS MAINT)	1,457.65
195751	O-SUN COMPANY	OPERATING SUPPLIES	212.01
195752	OAKLAND COMMUNITY COLLEGE	MEDICAL SERVICE	600.00
195753	OAKLAND COUNTY BUILDING OFFICIALS	MEMBERSHIP DUES	900.00
195754	OAKLAND COUNTY REGISTER OF DEEDS	PORSCHE SANITARY SEWER/WATER SYSTEM EASE	60.00
195755	OAKLAND COUNTY REGISTER OF DEEDS	LIVING AND LEARNING LICENSE AGREEMENT	30.00
195756	OAKLAND COUNTY REGISTER OF DEEDS	O'BRIEN SANITARY SEWER	30.00
195757	OAKLAND COUNTY REGISTER OF DEEDS	AUDI STORM WATER & SURFACE DRAINAGE	30.00
195758	OAKLAND COUNTY REGISTER OF DEEDS	CC STEM WATER SYSTEM EASEMENT	30.00
195759	OAKLAND COUNTY REGISTER OF DEEDS	CC STEM SANITARY SEWER MANHOLE	30.00
195760	OAKLAND COUNTY REGISTER OF DEEDS	CC STEM SANITARY SEWER SYSTEM EASEMENT	30.00
195761	OAKLAND COUNTY TREASURERS	ELECTION SUPPLIES, 2/25 SEWAGE (CLERK, W&S)	869,401.19
195762	OAKLAND COUNTY WATER RESOURCES	OCDL PERMIT	200.00
195763	OCCUPATIONAL HEALTH CENTERS OF	MEDICAL SERVICE	124.00
195764	OCLC INC/NET LIBRARY	COMPUTER SUPPLIES	762.81
195765	ORKIN	BUILDING MAINTENANCE	268.00
195766	OVERDRIVE, INC.	ELECTRONIC MEDIA (LIBRARY)	2,756.75
195767	PAUL JINGOZIAN	UB REFUND 22727 FOXMOOR DR (ESCROW)	1,119.63
195768	PAULK, JAMES	PER DIEM APWA SNOW/ICE CONFERENCE	123.00
195769	PEOPLE DRIVEN TECHNOLOGY, INC	INTERNAL TECHNOLOGY	225.00
195770	PEPPER & SON INC, J.W.	NOVI CONCERT BAND	92.00
195771	PERFECT CLEANERS OF DETROIT, INC	2024-25 UNIFORM CLEANING	872.35
195772	PERSON, KEVIN	YOUTH BASKETBALL	160.00
195773	POOLE, JUDY	REFUND PARKS	10.00
195774	POOLE, JUDY	REFUND PARKS	10.00
195775	POWER CLEANING SYSTEMS	EQUIPMENT MAINTENANCE	243.90
195776	POWER TECHNIQUES INC.	EMERGENCY COMMUNICATION SERVICE (POLICE)	5,492.13
195777	PPG ARCHITECTURAL FINISHES	OPERATING SUPPLIES	75.41
195778	PRECISE MRM LLC	INTERNAL TECHNOLOGY - CITYWIDE (IT)	3,358.00
195779	PROGRESSIVE HARDWARE SUPPLIERS LLC	BUILDING MAINTENANCE (FACILITIES)	2,600.00
195780	PROSCREENING, LLC	PROFESSIONAL SERVICE (HR)	1,320.00
195781	QUILL CORPORATION	OFFICE SUPPLIES	330.48
195782	REASON CONSULTING CORPORATION	PERSONAL PROPERTY AUDITOR (ASSESSOR)	3,333.00

195783	RED WING SHOE STORE	SUPPLIES UNIFORMS	514.23	
195784	REDOUTEY, GERALD	REIMBURSEMENT	10.00	
195785	REGISTER, KENNETH	PER DIEM APWA SNOW/ICE CONFERENCE	123.00	
195786	RESOURCE RECOVERY AND RECYCLING	RECYCLING CENTER (DPW)	2,294.00	
195787	RKA PETROLEUM COS., INC	GASOLINE AND OIL (DPW)	13,517.70	
195788	ROAD COMMISSION FOR OAKLAND COUNTY	TRAFFIC SERVICES (MAJOR STREETS)	4,544.52	
195789	ROSATI, SCHULTZ, JOPPICH	LEGAL FEES (POLICE, ESCROW, GF)	15,484.80	
195790	VOID	VOID	-	V
195791	ROSS, MICHAEL	YOUTH SPORTS (PARKS & REC)	1,175.00	
195792	ROYAL TRUCK & TRAILER SALES & SVC	VEHICLE MAINTENANCE	285.92	
195793	RUGGIRELLO, CHARLES	YOUTH BASKETBALL	440.00	
195794	SAM'S CLUB DIRECT	LIBRARY PROGRAMMING	51.64	
195795	SATKO, JOHN PETER	YOUTH BASKETBALL	200.00	
195796	SCHINDLER ELEVATOR CORPORATION	BUILDING MAINTENANCE (LIBRARY)	2,062.50	
195797	SCHOOLCRAFT COLLEGE	PROFESSIONAL SERVICES (FIRE, POLICE))	2,500.00	
195798	SERVICE EXPRESS, INC.	OPERATING SUPPLIES	148.39	
195799	SHIFMAN FOURNIER, PLC	LEGAL FEES - PERSONNEL (HR)	3,045.00	
195800	SIGNARAMA TROY	OFFICE SUPPLIES	162.50	
195801	SITEONE LANDSCAPE SUPPLY, LLC	GROUNDS MAINTENANCE	93.75	
195802	SMART BUSINESS SOURCE LLC	OFFICE SUPPLIES (FIRE, POLICE, CM, IT)	1,477.86	
195803	SMITH, TYLER	PER DIEM APWA SNOW/ICE CONFERENCE	123.00	
195804	SNAP-ON INDUSTRIAL	OPERATING SUPPLIES TOOLS (DPW)	1,228.10	
195805	SOCCER ASSIGNING LLC	YOUTH SOCCER LEAGUE (PARKS & REC)	23,518.50	
195806	SOUTH LYON FENCE & SUPPLY INC	SUPPLIES UNIFORMS	62.00	
195807 - 195810	SPALDING DE DECKER	PROFESSIONAL SERV (DPW, W&S, DRAIN, ESCROW)	89,910.45	
195811	SPORCLE, INC.	OLDER ADULTS SPECIAL EVENTS	337.00	
195812	SQUEAKY SHINE CAR WASH	VEHICLE MAINTENANCE	580.00	
195813	STATE OF MICHIGAN	LIVESCAN (POLICE, ESCROW)	2,158.00	
195814	STRYKER	SUPPLIES CITY WIDE AED EXPENSES (FIRE)	3,147.22	
195815	SYSTEMP CORPORATION	BUILDING MAINTENANCE (FACILITIES, FIRE, POLICE)	4,907.70	
195816	SZELAP, CHRISTINE E. HEFFERNAN	KARATE (PARKS & REC)	2,980.25	
195817	T-MOBILE USA, INC	TELEPHONE (LIBRARY)	1,036.07	
195818	TATE, MIKE	PER DIEM APWA SNOW/ICE CONFERENCE	123.00	
195819	VOID	VOID	-	V
195820	THE SAFETY COMPANY LLC DBA MTECH	VEHICLE MAINTENANCE	335.32	
195821	THOMSON REUTERS - WEST	SUPPLIES (POLICE)	1,106.94	
195822	TOTH, JUSTIN ALLEN	YOUTH BASKETBALL	160.00	
195823	TRAVELERS	INSURANCE DEDUCTIBLE	252.00	
195824	TRI-COUNTY INTERNATIONAL	VEHICLE MAINTENANCE	395.98	
195825	TRUCK & TRAILER SPECIALTIES, INC.	2025 QUOTE VEHICLE UPFITS (DPW, COMM DEV)	8,843.17	
195826	TRUE BLUE INVESTGATIONS LLC	RECRUITMENT (FIRE)	1,700.00	
195827	TURNOUT MANAGEMENT	UNIFORMS NEW RECRUITS	840.00	
195828	UNITED STATES POSTAL	POSTAGE	700.00	
195829	USA BLUEBOOK	WATER LINE MAINTENANCE	279.49	
195830	UTILISYNC, LLC	INTERNAL TECHNOLOGY (WATER & SEWER)	5,450.00	
195831	VALBRIDGE PROPERTY ADVISORS	TAX TRIBUNAL APPRAISALS (ASSESSOR)	10,000.00	
195832	VARIPRO	EMPLOYEE FLEX SPENDING REIMBURSEMENT	4,897.47	
195833	VARSITY LINCOLN, INC	VEHICLE MAINTENANCE (POLICE, DPW)	1,401.37	
195834	VERIZON WIRELESS	TELEPHONE	665.56	
195835	VESCO OIL CORPORATION	GASOLINE AND OIL (DPW)	4,636.14	
195836	WEINGARTZ SUPPLY CO INC	LAWN MOWER MAINTENANCE	516.12	
195837	WIKTOROWSKI, MATT	PER DIEM APWA SNOW/ICE CONFERENCE	187.00	
195838	MEDLINE INDUSTRIES, LP	OPERATING SUPPLIES	61.31	
195839	B & H PHOTO	INVOICE 910610392 (HIDTA)	35,093.99	
195840	CLOSE QUARTERS TACTICAL, LLC	INVOICE 2403 (HODTA)	1,000.00	
195841	SNOWA, JOHN	REIMBURSE TRAINING EXPENSES	608.87	
195842	UPPER LEVEL GRAPHICS, INC.	INVOICE 27358 (HIDTA)	4,525.00	
EFT	FIFTH THIRD BANK P-CARD	FEBRUARY PURCHASES	99,321.37	
AMAZON MKTPL 0B1HA1PK3		DPW: File cabinet	67.99	
WWW.VOLGISTICS.COM		IS: Man - Software Renewal	214.00	
AMAZON MARK 681S619N3		PD: Supplies	66.41	
KROGER #619		HR: Office supplies	7.98	
USPS.COM CLICKNSHIP		CLK: Passports	16.80	

AMAZON.COM V17KX7623	PRCS: labels	11.91
AMAZON MKTPL UJ6RH2UQ3	FM: Operating Supplies	5.99
AMAZON MKTPL CR2VF1Q13	FIN: Office Supplies	35.00
PAYPAL RODZINAINDU	PD: stamps	54.70
AMAZON MARK ZV8M21UJ2	CD: Office Supplies	147.66
B&H PHOTO 800-606-696	CR: Case and Antenna	682.88
AMAZON MKTPL JZ8X76L63	DPW: Desks	678.30
AMAZON MKTPL IB2XB0J63	DPW: Desk	349.30
GROUPMAP TECHNOLOGY	IS: Software Subscription	8.00
MICHIGAN RECREATION &	PRCS: Conference	570.00
MENARDS WIXOM MI	PM: R/C Track edging	479.96
AMAZON MKTPL KQ9IZ78H3	CD: Office Supplies	45.52
AMAZON MKTPL RI6P39DL3	CR: supplies	89.25
EIG CONSTANTCONTACT.C	CR: eNewsletter	405.00
AMAZON MKTPLCE PMTS	PD: Veh Maint	(17.45)
AMAZON MKTPL C43P587D3	CD: Office Supplies	12.96
AMAZON MARK YD1M78JV3	CC: Supply for Council Wksp	38.47
MICHIGAN ASSOC OF CHIE	PD: Conference	350.00
AMAZON RETA 8Y0XD1593	PD: Supplies	49.45
AMAZON RETA LO0MX3TM3	PD: Supplies	17.22
AGASERVICECO MAR TT	FD: Conference	11.00
AGASERVICECO MAR TT	FD: Conference	11.00
AMAZON MARK E81P53HK3	PD: Supplies	88.52
AMAZON MKTPL U11UU3XQ3	PD: Supplies	10.01
USPS.COM CLICKNSHIP	CLK: Passports	8.40
APWA - SNOW REGISTRATI	DPW: Conference	290.00
WHITLOCK BUSINESS SYST	TREAS: Postage for utility bills	1,705.62
WHITLOCK BUSINESS SYST	TREAS: Print utility bills	669.79
AMAZON MKTPL X282H32E3	IS: Hardware	47.58
AMAZON.COM YY5961G83	IS: Hardware	70.26
AMAZON.COM SR2Z57SB3	IS: Hardware	99.99
UNIV OF MD ONLINE PYMT	FD: Training	2,075.00
AFP LOCAL GOVERNMENT H	MGR: LHGN Membership Dues	175.00
AMAZON MARK Y04H182R3	PD: Supplies	56.04
AMAZON RETA XF2AX4D33	ASSES: office supplies	41.92
SHEA CHEVROLET	PD: Veh Maint	95.69
AMAZON MKTPL 8Z8NQ6U03	DPW: Op Supplies	136.56
AMAZON.COM 7H9KI4AJ3	PD: Office Supplies	12.32
MICHIGAN STATE PREMIER	PRCS: Program Expense	25.00
STATE EGLE SWIM POOL	PRCS: splashpad permit	181.00
AMAZON MKTPL 8H2RH80S3	CR: supplies	30.29
AMAZON MARK QR4HI6333	PD: Supplies	109.90
MICHIGAN ASSOC OF CHIE	PD: Dues	100.00
AMAZON MARK B57LQ6E43	PD: Supplies	112.46
AMAZON MARK KF51O3693	PD: Supplies	149.35
MICHIGAN ASSOCIATION O	CD: Training Registration	135.00
USPS.COM CLICKNSHIP	CLK: Passports	16.80
AMAZON MARK AI6Y519I3	ASSES: office supplies	23.80
AMAZON MKTPL CL92H2DU3	IS: Hardware	339.15
AMAZON MKTPL LG5C111M3	PD: Supplies	111.90
WAL-MART #5893	HR: Office supplies	10.48
NOVI COMMUNITY SCHOOL	PRCS: Diwali parking lot res	20.00
AMAZON MKTPLCE PMTS	CR: supplies	(59.95)
DELTA	FM: IFMA Conference	456.97
AMAZON MKTPL F44J50X73	PD: Supplies	23.88
ALLIANZ TRAVEL INS	FD: Conference	36.79
ALLIANZ TRAVEL INS	FD: Conference	26.43
AMAZON MKTPL Q229G0XB3	PD: Supplies	21.00
KROGER #632	HR: Office supplies	5.99
USPS.COM CLICKNSHIP	CLK: Passports	8.40
USPS.COM CLICKNSHIP	CLK: Passports	16.80
ATT CONS PHONE PMT	FACILITES - Utilities - Telephone	4,797.04
WEATHERTECH	W&S: Veh Maint	137.95

AMAZON MKTPL YN3X509U3	PD: Veh Maint	17.45
AMAZON MKTPLCE PMTS	CR: supplies	(11.99)
AMAZON MKTPL GX3PN2T13	PRCS: labels	9.45
DELTA	FD: Conference	480.48
AMAZON MARK D91YP6NR3	CD: Office Supplies	26.11
AMAZON MARK D91YP6NR3	CD: Uniforms	22.99
AMAZON MKTPL K33IT2RD3	CD: Office Supplies	44.00
AMAZON MKTPL NO9CM2LK3	FIN: Office Supplies	80.15
MISSION BBQ NORTHVILLE	PD: Meeting	253.35
AMAZON MARK JB59E6N73	CD: Office Supplies	25.44
ADOBE ADOBE	LIB: Comp Software/Licensing	29.99
STAMPS.COM	LIB: Postage	19.99
AMAZON MKTPL V47H138F3	FD: Operating Expense	296.99
AMAZON MKTPL C78EO9V13	FD: Operating expense	79.80
AFP MACEO	CD: Training	20.00
AFP MACEO	CD: Training	190.00
APPLE.COM/BILL	CR: iCloud Storage	2.99
USPS.COM CLICKNSHIP	CLK: Passports	8.40
AMAZON MKTPL 005J116M3	FIN: Office Supplies	125.20
PAYPAL RODZINAINDU	ASSES: stamps	43.24
CROAKER INC	FM: Custodial Supplies	137.43
APWA - SNOW REGISTRATI	DPW: APWA Snow and Ice Conf	670.00
PIZZA MARVELOUS	CR: supplies	290.34
USPS.COM CLICKNSHIP	CLK: Passports	16.80
KROGER #632	LIB: Programming	26.46
PAYPAL MSYSA	PRCS: Marketing Expense	721.00
AMAZON MKTPL 4P8GB2WO3	DPW: Mailbox repairs	316.00
VISTAPRINT	LIB: Office Supplies	673.79
BENITO S CAFE	PD: Operating Expense	116.74
MEIJER # 054	PRCS: Program Expenses	85.00
FOOD SAFETY OF MICHIGA	PRCS: Food Safety	139.00
USPS.COM CLICKNSHIP	CLK: Passports	16.80
AMAZON MKTPL IF1YN1XJ3	FIN: Office Supplies	17.00
AMAZON MKTPL V48SZ70F3	CLK: election supplies	61.40
AMAZON MKTPL 756ZT14B3	IS: Supplies	5.98
CODE OFFICIALS CONFERE	CD: COCM Membership	45.00
CODE OFFICIALS CONFERE	CD: Training	240.00
AMAZON MKTPL ZK0Z04S03	PD: Operating Expense	29.99
AMAZON MKTPL MP20H78V3	PD: Operating Expense	149.33
TST DETROIT WING CO -	HR: Health & Wellness	144.00
AMAZON RETA 340JL8OJ3	CLK: election supplies	72.05
GRIMCO INC	DPW: Signing Supplies	2,237.83
AMAZON MKTPL LP52N0QX3	IS: Hardware	44.99
AMAZON MKTPL GH0B23DM3	IS: Hardware	95.93
JAPAN AMERICA SOCIETY	CR: JAS Event	2,300.00
USPS.COM CLICKNSHIP	CLK: Passports	16.80
AMAZON MKTPL J44BP7S93	DPW: Phone charger	9.97
PODS	OAS: operating supplies	174.00
PAYPAL CAFE AR	PRCS: Villa Barr app software	475.00
GFS STORE #1985	HR: Health & Wellness	65.94
AMAZON MKTPL 7X7B105K3	PD: Operating supplies	84.92
FUELCLOUD	DPW: G&O	150.00
USPS STAMPS ENDICIA	LIB: Postage	100.00
NOV PUBLIC LIBRARY	LIB: Computer supplies	0.20
NOV PUBLIC LIBRARY	LIB: Computer Supplies	1.00
AMZN MKTP US	CR: refund	(30.99)
AMAZON MKTPL GE5VV7IW3	FD: Training	44.85
USPS.COM CLICKNSHIP	CLK: Passports	25.20
AMAZON MKTPL K70DC6V53	W&S: Phone Charger	8.99
AMZN MKTP US 0N70Y9PU3	CR: Supplies	12.31
AMAZON MKTPL 7J6UO2X73	FIN: Office Supplies	49.10
HOO HOOTSUITE INC	CR: Social Media Mgt Tool	2,988.00
AMAZON.COM 5X4C14N03	FIN: Office Supplies	75.18

ONE WORLD MARKET	LIB: Program	29.35
SPECTRUM	FACILITES - Utilities - Telephone	8,938.99
THE HOME DEPOT #2737	W&S: Lift Station Maintenance	43.96
DTV DIRECTV SERVICE	PD: Cable	40.00
AMAZON MKTPL OM5GG12P3	CR: Supplies	100.63
ORION KENNEL CLUB	PD: Operating Expense	391.23
FEDEX482210561	PD: FedEx	53.15
USPS.COM CLICKNSHIP	CLK: Passports	16.80
CHARGE.PREZI.COM	CR: supplies	159.00
MICHIGAN ASSESSORS ASS	ASSES: MAA Mmbrshp renewal	97.38
AMAZON.COM BV2YZ7HC3	FM: Operating Supplies	221.99
ROCKYS OF NORTHVILLE	PRCS: OAS Event Food	1,099.25
AMAZON.COM ZK7HF1AS3	FIN: Office Supplies	86.32
AMAZON MKTPL J47N89BR3	CR: supplies	14.98
AMAZON MKTPL 452VN4XT3	CR: supplies	46.15
GO LAW ENFORCEMENT LLC	HR: Police Officer Job ad	120.00
TIM HORTONS #915647	HR: Office supplies	49.47
USPS.COM CLICKNSHIP	CLK: Passports	16.80
MTU-CASHIERS OFFICE WE	DPW: Training	60.00
MTU-CASHIERS OFFICE WE	DPW: Training	60.00
DD/BR #336551	DPW: Winter Storm Review	53.96
PAYPAL PLUMBINGINS	CD: Membership	100.00
FSP OAKMAC SHRM	HR: SHRM Training	20.00
KROGER #366	LIB: Staff Recognition	21.99
SP BAMBULAB.US	PRCS: Supplies	60.00
SP BAMBULAB.US	PRCS: Supplies	24.00
SP BAMBULAB.US	PRCS: Supplies	1.93
AMAZON MARK 7D4JP31H3	PD: Supplies	30.16
SQ ALL STAR PRODUCTIO	PRCS: Program Expenses	3,000.00
HOBBY-LOBBY #645	CR: supplies	26.39
HOBBY-LOBBY #645	PRCS: Event Supplies	(17.97)
PANERA BREAD #600689 O	CC: Food for Committee Meeting	162.20
VZWRLSS APOCC VISB	FACILITES - Utilities - Telephone	9,765.02
AMAZON.COM FJ9P52KI3	DPW: Oper Supplies	67.72
TECHSOUP	LIB: Computer software/licensing	90.00
AMAZON MKTPLACE PMTS	CR: refund	(19.59)
WWW.IAFC.ORG	FD: Dues	22.09
USPS.COM CLICKNSHIP	CLK: Passports	8.40
USPS.COM CLICKNSHIP	CLK: Passports	16.80
AMAZON MKTPL EV1BI0UH3	IS: Hardware	30.99
SAMSCULUB.COM	FD: Operating expense	152.02
MICHIGAN THANKSGIVING	PRCS: staff retreat	100.00
ABPA	W&S: conferences, workshops	575.00
ABPA	W&S: membership, dues	105.00
HILTON	PD: Conference	(146.64)
HILTON	PD: Conference	(43.20)
HILTON	PD: Conference	(52.20)
HILTON	PD: Conference	(177.00)
HILTON	PD: Conference	(177.00)
AMZN MKTP US ZP43F0433	PD: Supplies	98.99
AMAZON MARK FZ6AG4GG3	PRCS: OAS Supplies	231.28
D J WSJ	MGR: WSJ	38.99
AMAZON MKTPL EI26478R3	PD: Operating Supplies	69.28
AMAZON MARK M60HQ8F93	PD: Supplies	102.14
AMAZON MARK 399JX7D73	PD: Supplies	9.50
USPS.COM CLICKNSHIP	CLK: Passports	16.80
AMZN MKTP US LH1OB9SE3	FM: Operating Supplies	45.27
WM SUPERCENTER #5893	PRCS: OAS Event Supplies	100.15
AMAZON MKTPL YK6AX8JU3	TREAS: Office Supplies	11.90
MAGICDESKTOP.COM	LIB: Comp Software/Licensing	298.00
SEC OF STATE BRANCH 43	PD: VM	143.00
AMZN MKTP US 0C8W96UV3	CR: supplies	36.00
STATE OF MI EMS	FD: Dues	25.00

MAGNET FORENSICS LLC	PD: Operating expense	6,965.00
AMAZON MKTPL N04ZJ4S03	PD: Operating supplies	330.46
MICHIGAN STATE PREMIER	PRCS: Program Expense	25.00
ELAVON SERVICE FEE	PD: Veh Maint	2.97
SQ BEAUTIFICATION COU	MGR: BCSEM Annual Member	25.00
BUSCH'S #1205	CC: council meeting	36.27
AMZN MKTP US HQ1DV5L33	TREAS: Office Supplies	16.50
FORTRA	IS: Software Renewal	1,024.47
FSP MGFOA	FIN: MGFOA-C.Johnson	135.00
MICHIGAN GREEN INDUSTR	PM: Parks Workshops	737.88
GDIT FAA 34ELTM4	PM: Drone Registration	5.00
GEORGE MATICK CHEVROLE	PD: Veh Maint	(51.50)
KROGER #366	LIB: Staff Recognition	96.92
PAYPAL ETSY INC	CR: refund	(1.70)
EB 13TH ANNUAL CROSS-	ED: Luncheon Workshop	370.20
MI STATE POLICE PMTS	PD: Training	125.00
USPS.COM CLICKNSHIP	CLK: Passports	25.20
AMAZON.COM 7J3M45MA3	IS: Hardware	199.99
AMAZON MKTPL D39EQ8BC3	FD: Operating Expense	23.99
AMAZON MARK LL76F87M3	CLK: supplies	28.77
QUADIENT INC ORACLE	CLK: supplies	248.90
HONEST MEDICAL	OAS: DME Loan Closet Supplies	15.99
ADOBE ADOBE	LIB: Computer Software	(1.80)
SPO HUBSTADIUM-NOVI	CR: program	111.63
HOBBY-LOBBY #645	PRCS: Event Supplies	52.83
BENITO S CAFE	PRCS: Meals	66.97
WHITLOCK BUSINESS SYST	TREAS: Print utility bills	495.18
WHITLOCK BUSINESS SYST	TREAS: Print Utility Bills	765.60
PREPFE	DPW: Training	61.99
PREPFE	DPW: Training	79.99
NCEES.ORG	DPW: Training	225.00
HARBOR FREIGHT TOOLS 6	W&S: equipment maintenance	43.96
ACDELCO TDS	DPW: Veh Maint	644.00
HILTON	PD: Conference	849.60
HILTON	PD: Conference	3,018.92
MEIJER # 122	PRCS: League Prizes	75.00
AMWAY GRAND PLAZA PARK	PD: Conference	100.00
HILTON	PD: Conference	1,203.60
MI STATE POLICE PMTS	PD: Training	125.00
USPS.COM CLICKNSHIP	CLK: Passports	8.40
USPS.COM CLICKNSHIP	CLK: Passports	16.80
BIG TOMMYS PARTHENON	FD: Operating Expense	71.82
CENTURYLINK LUMEN	FACILITIES - Utilities - Cable	174.08
123.NET, INC.	FACILITES - Utilities - Telephone	3,969.13
WHITLOCK BUSINESS SYST	TREAS: Postage for utility bills	1,793.01
REVELS TURF & TRACTOR	PM: Equipment Parts	297.63
OAKLAND COUNTY MI	PRCS: Food License	298.00
G2GCHARGE.COM SERVICE	PRCS: Food License	8.25
AMAZON MKTPL Z732875Q1	FD: Operating Supply	12.90
AFP IMAGIN INC	IS: GIS Conference	350.00
GEORGE MATICK CHEVROLE	PD: VM	615.51
JETS PIZZA - MI-150	LIB: Conferences	77.75
SP TABLECLOTHSFACTOR	CR: supplies	50.50
AMAZON MKTPL Z706W8XV1	CR: supplies	19.59
MATTRACKS INC	FLT: Maintenance supplies	97.40
AMAZON.COM U73CL3223	DPW: OS	27.22
IACP	PD: Dues	85.00
USPS.COM CLICKNSHIP	CLK: Passports	16.80
LANSING CENTER LOTS TI	W&S: Conference	10.00
MICHIGAN RECREATION &	PRCS: MParks seminar	25.00
CLARION EVENTS INC	FD: Conference	1,306.00
TST BAR LOUIE - NOVI	ENG: Recruitment	36.39
AMAZON.COM Z71LR1PC1	CR: supplies	18.99

AMZN MKTP US Z79N22BX0	PD: Supplies	140.00
HARBOR FREIGHT TOOLS 6	W&S: operating supplies	137.97
USPS.COM CLICKNSHIP	CLK: Passports	16.80
INTL FACILITY MGMT ASS	FM: Conference, Workshop	650.00
PAYPAL BWMSTRAININ	W&S: conferences,workshops	180.00
AMAZON MKTPL Z72BV3QD0	CR: supplies	19.99
AMAZON.COM Z77VO5ND1	CR: supplies	11.89
NATIONAL REGISTRY EMT	FD: Dues	25.00
MI STATE POLICE PMTS	PD: Training	125.00
KALAHARI RESORT- OH -	PD: Conference	129.00
LANSING CENTER LOTS TI	W&S: Operator Day	10.00
NORTH GRAND RAMP TIBA	DPW: Training	15.00
KALAHARI RESORT- OH -	PD: Conference	129.00
AMAZON RETA P37TZ4PW3	PD: SUPPLIES	107.00
AFP SMEMSIC	FD: Conference	445.00
AMAZON MARK Z78OB5L91	PRCS: Event Supplies	109.95
USPS.COM CLICKNSHIP	CLK: Passports	16.80
AMAZON MARK Z71W01ZV1	CLK: supplies	9.99
ALRO STEEL CORP	FLT: parts	118.44
GARTNER CONF PCC25	IS: Conf. Reg.	3,425.00
PAYPAL ETSY INC	CR: supplies	39.75
WALMART.COM 8009256278	CR: supplies	36.98
AMZN MKTP US Z79WJ1LN1	CR: supplies	30.99
JIMMY JOHNS - 396 - E-	CD: Master Plan Meeting	85.70
AMAZON MARK Z74Z25381	PRCS: Event Supplies	195.93
IACP	PD: Dues	220.00
IAFCI	PD: Dues	95.00
AMAZON MKTPL Z75UX1GR0	PD: Operating supplies	38.78
INT'L CODE COUNCIL INC	CD: Code Books	668.87
AMAZON MARK Z79X95140	PRCS: Supplies	20.57
AUNT FLOW	LIB: Operating Supplies	420.00
AMZN MKTP US Z71QY1EK0	FD: Operating supplies	39.75
DELTA	CR: GSMcon	501.96
ALLIANZ TRAVEL INS	CR: GSMcon	33.88
POLICE EXECUTIVE RESEA	PD: Dues	575.00
AMAZON MARK Z79YI61S0	PD: Supplies	220.84
WM SUPERCENTER #5893	HR: Health & Wellness	10.00
WM SUPERCENTER #5893	HR: Health & Wellness	50.00
FSP OAKMAC SHRM	HR: Conference fee	20.00
FSP OAKMAC SHRM	HR: Conference Fee	10.00
IN TOTAL TESTING	HR: Pre-employment testing	25.00
USPS.COM CLICKNSHIP	CLK: Passports	16.80
WEB NETWORKSOLUTIONS	IS: Domain Renewals	415.53
AMAZON MKTPL Z77GX5TW0	HR: Health & Wellness	12.95
AMAZON.COM Z749S8TD0	PRCS: Program supplies	7.16
PET SUPPLIES PLUS 0023	PD: Operating Expense	14.00
AMAZON WEB SERVICES	IS: Hosting Fee	0.15
GANNETT MEDIA CO	MGR: Newspaper Subscription	19.99
AMZN MKTP US ZC4FI5VA1	PRCS: Operating Supplies	14.58
AMAZON.COM ZC51R5BE1	DPW: Oper Supplies	31.91
JOANN STORES #1933	LIB: Computer Supplies	19.53
MICHIGAN ASSESSORS ASS	ASSES: MAA Membership	97.38
USPS.COM CLICKNSHIP	CLK: Passports	16.80
AMAZON.COM Z71F702K2	TREAS: Office Supplies	16.33
AMAZON.COM ZC36M41Q1	TREAS: Office Supplies	39.13
DOUBLETREE	MGR: conferences/workshops	286.38
TARGET 00014654	LIB: Programming	42.33
DOUBLETREE	MGR: Conference Accommodations	286.38
PARTY CITY 4124	PD: Recognition	20.08
WWW.VOLGISTICS.COM	IS: Man - Software Renewal	214.00
AMAZON.COM ZC2IP7E41	FIN: Office Supplies	50.16
AMAZON.COM ZC5TG79W0	PD: Operating Expense	53.98
FRANCE MEDIA	ASSES: Multifamily seminar	175.00

ICSC-NY	ASSES: Retail market seminar	125.00
MTU-CASHIERS OFFICE WE	DPW: Training	180.00
FRANCE MEDIA	ASSES: Local retail seminar	175.00
BESTBUYCOM807026214416	HIDTA	819.93
BESTBUYCOM807026214416	HIDTA	429.99
BESTBUYCOM807026214416	HIDTA	199.98
CARRIAGE CLEANERS	PRCS: Supplies	420.00
PAYPAL RODZINAINDU	PD: Supplies	37.90
AMAZON MKTPL ZC9214TB1	HR: Health & Wellness	26.44
AMAZON MKTPL ZC6916K00	HR: Health & Wellness	13.99
USPS.COM CLICKNSHIP	CLK: Passports	25.20

GRAND TOTAL

\$ 1,979,177.84

GENERAL FUND	101	478,209.17
MAJOR STREET FUND	202	28,317.02
LOCAL STREET FUND	203	3,233.31
MUNICIPAL STREET FUND	204	2,522.00
PARKS, REC & CULTURAL SVCS FUND	208	55,652.17
DRAIN FUND	211	169,658.30
TREE FUND	213	60.52
FORFEITURE FUND	262	3,927.41
LIBRARY FUND	271	47,713.21
LIBRARY CONTRIBUTION FUND	272	44,974.80
COMMUNITY DVLPMNT BLOCK GRANT FUND	274	10,320.00
STREET LIGHTING 204109 - WEST OAKS ST	281	428.78
STREET LIGHTING 204 81 - WEST LAKE DRIVE	286	263.11
STREET LIGHTING 204108 - TOWN CENTER ST	287	1,747.49
2008 LIBRARY CONSTRUCTION DEBT FUND	371	47,900.00
CAPITAL IMPROVMENT PRGRM (CIP) FUND	401	1,807.64
PEG CABLE - CAPITAL FUND	463	682.88
SENIOR HOUSING FUND	574	4,098.73
WATER AND SEWER FUND	592	932,782.48
AGENCY FUND	701	57,624.17
MI HIDTA	725	87,254.65

GRAND TOTAL

\$ 1,979,177.84