



8555 Kalamazoo Ave., SE
Caledonia, MI 49316

www.gainestownship.org

Phone: 616-698-6640
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April 3, 2024

Gaines Township Board of Trustees
8555 Kalamazoo Ave SE
Caledonia, MI 49316

RE: April 8, 2024, Township Board Meeting

Township Board Members:

Greetings! It looks like spring has finally arrived. Let's hope that it stays.

The agenda for the upcoming meeting is very manageable. There are a few items coming from the Planning Department. At the March meeting a public hearing was set for the rezoning of 7610 Division Ave. You will be asked to consider this item at the meeting as well. You will also be asked to consider having a Natural Resources Inventory performed in the Township.

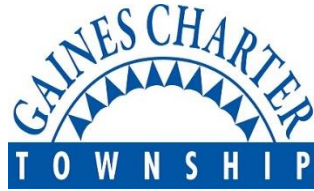
There are a few other things that will be presented for your consideration. A request recently came into the Township Office for a Temporary Retail Fireworks Stand. Another item that will be considered will be a waiver to the Township Cemetery Ordinance to allow the installation of a bench at Blain Cemetery. The 20-year-old riding lawnmower at the Dutton Fire Department died at the end of the mowing season last year. You will be presented with some options to purchase a new one. Lastly, you will be asked to consider the Personnel Committee's recommendations for the Township Manager's annual review.

If you should have any questions about any of these items, please don't hesitate to reach out to me.

Best regards,

Roderick J. Weersing

Rod Weersing
Township Manager



CHARTER TOWNSHIP OF GAINES
MEETING LOCATION: 8555 Kalamazoo Ave., SE, Caledonia, MI 49316
Township Board of Trustees Meeting
PRELIMINARY AGENDA
MONDAY – April 8, 2024
Time: 7:00PM

- 1. Opening Prayer ~ Michael Brew**
- 2. Pledge of Allegiance**
- 3. Call to Order and Attendance ~**
Supervisor DeWard absent with prior notice
- 4. Declaration of Conflict of Interest**
- 5. Review of Consent Agenda ~** *items must be removed from the consent agenda in order to be discussed*
- 6. Approval of Agenda**
- 7. Communications ~ Informational items ~** *letters, reports, updates, etc.*
 - a. March 2024 Building Department Revenue Report**
 - b. March 2024 Dutton Fire Run Report**
 - c. March 2024 Cutlerville Fire Run Report**
 - d. March 2024 Community Policing Officer Report**
 - e. March 2024 Kent County Road Commission Newsletter**
- 8. Scheduled Speakers - NONE**
- 9. Public Comments –** *Public may speak regarding anything on the agenda which is NOT scheduled for a public hearing (comments limited to 3 minutes per speaker)*
- 10. Public Hearings –**
 - a. Rezoning of 7610 Division Ave., SE from Heavy Industrial to Neighborhood Commercial**
- 11. Consent Agenda:**
 - a. Minutes ~ March 11, 2024 Meeting Minutes**

b. Check Registers for month of March 2024

i. General Fund (101):	\$112,220.64
ii. Public Safety SAD (205):	\$272,428.49
iii. Building Inspections (549):	\$ 47,777.09
iv. Water and Sewer (590 & 591):	\$457,201.83
TOTAL OF ALL FUNDS:	\$889,628.05

c. Treasurer's Financial Report

12. New Business

- a. Consider ~ Rezoning of 7610 Division Ave., SE from Heavy Industrial to Neighborhood Commercial**
- b. Consider ~ Hoffman Meadows Phase II Preliminary Plat Approval**
- c. Consider ~ Township's Natural Resources Inventory**
- d. Consider ~ Request for Temporary Fireworks Stand**
- e. Consider ~ Ordinance waiver for cemetery bench**
- f. Consider ~ Purchase of mower for DFD**
- g. Consider ~ Thornapple Farms Street Light Special Assessment District**
- h. Consider ~ W&S Development Contract Prairie Wolf Station**
- i. Consider ~ Township Manager's annual review**

13. Public Comments ~ *On any topic (comments limited to 3 minutes per speaker)*

14. Manager's Comments

15. Supervisor's Comments

16. Trustee's Comments

NEXT SCHEDULED BOARD OF TRUSTEES MEETING: April 22, 2024 (if needed)

May 13, 2024

ANY INTERESTED PERSONS ARE INVITED TO ATTEND AND PARTICIPATE IN ALL TOWNSHIP BOARD OF TRUSTEE MEETINGS. PERSONS WITH DISABILITIES NEEDING ANY SPECIAL ACCOMMODATIONS SHOULD CONTACT THE TOWNSHIP OFFICES ONE WEEK PRIOR TO THE MEETING TO REQUEST MOBILITY, VISUAL OR ANY OTHER ASSISTANCE.

****Preliminary Agenda – Subject to Change****

The contents of supporting documents (such as text, graphics, images, information, and references) are created and supplied by the author.



Revenue Breakdown Report

Page: 1 of 25

04/01/2024

Filter: All Records, Transaction.DateToPostOn Between 3/1/2024 12:00:00 AM AND 3/31/2024 11:59:59 PM

Unit Totals		
Unit Name	Records	Revenue
	152	49,032.00
TOTAL	152	49,032.00

Record Type Totals		
Unit:	Records	Revenue
Name	1	15.00
Permit	151	49,017.00
UNIT TOTAL:	152	49,032.00

Record Type Breakdowns		
Unit:	Records	Revenue
Record Type: Name	1	15.00
TOTAL:	1	15.00

Record Type: Permit	Records	Revenue
Building	21	26,141.00
Commercial Sign	2	180.00
Deck	1	130.00
Demolition	1	155.00
Electrical	30	4,937.00
Furnace Replacement	2	220.00
Mechanical	55	9,590.00
Mobile Home Plumbing	1	85.00
Plumbing	22	6,139.00
Residential Roofing	7	630.00
Storm Drain	3	255.00
Swimming Pool	1	130.00
Water Heater Replacement	5	425.00
TOTAL:	151	49,017.00

Incidents by Category and Month

Jan 01, 2023 12:00 AM to Apr 01, 2024 05:14 PM



Incident Type Category	2024				2024		2023		YTD % Change
	Jan	Feb	Mar	Apr	Grand Total - Current	% of Total Incidents - Current	Grand Total - Previous	% of Total Incidents - Previous	
1 - Fire	5	7	4	0	16	7%	6	3%	166.67%
2 - Overpressure Rupture, Explosion, Overheat (No Fire)	0	0	0	0	0	0%	1	0%	-100%
3 - Rescue & Emergency Medical Service Incident	63	43	45	0	151	63%	142	68%	6.34%
4 - Hazardous Condition (No Fire)	7	2	3	0	12	5%	6	3%	100%
5 - Service Call	5	3	1	0	9	4%	12	6%	-25%
6 - Good Intent Call	6	12	10	0	28	12%	23	11%	21.74%
7 - False Alarm & False Call	13	5	6	0	24	10%	19	9%	26.32%
Grand Total	99	72	69	0	240	100%	209	100%	14.83%

Incidents by District/Zone

Jan 01, 2023 12:00 AM to Apr 01, 2024 05:13 PM

District/Zone	2024				2024		2023		YTD % Change
	Jan	Feb	Mar	Apr	Grand Total - Current	% of Total Incidents - Current	Grand Total - Previous	% of Total Incidents - Previous	
Byron Twp Fire - Byron Twp	0	0	0	0	0	0%	3	1%	-100%
Caledonia Township	3	3	2	0	8	3%	6	3%	33.33%
Cutlerville - Byron Township	1	2	1	0	4	2%	5	2%	-20%
Cutlerville - Gaines Township	13	7	5	0	25	10%	20	10%	25%
Kentwood	2	2	1	0	5	2%	5	2%	0%
Leighton Township	0	0	0	0	0	0%	1	0%	-100%
Zone 01S - Dutton	2	1	1	0	4	2%	6	3%	-33.33%
Zone 02S - Dutton	14	9	7	0	30	13%	26	12%	15.38%
Zone 03S - Dutton	6	5	1	0	12	5%	20	10%	-40%
Zone 04S - Dutton	21	14	11	0	46	19%	32	15%	43.75%
Zone 05S - Dutton	8	3	11	0	22	9%	0	0%	N/A
Zone 06S - Dutton	4	2	4	0	10	4%	14	7%	-28.57%
Zone 07S - Dutton	4	4	9	0	17	7%	14	7%	21.43%
Zone 08S - Dutton	5	3	0	0	8	3%	8	4%	0%
Zone 09S - Dutton	4	4	6	0	14	6%	23	11%	-39.13%
Zone 10S - Dutton	0	0	1	0	1	0%	0	0%	N/A
Zone 11R - Dutton	1	0	1	0	2	1%	1	0%	100%
Zone 12R - Dutton	1	3	1	0	5	2%	3	1%	66.67%
Zone 13R - Dutton	0	2	0	0	2	1%	3	1%	-33.33%
Zone 14R - Dutton	2	1	0	0	3	1%	2	1%	50%
Zone 15R - Dutton	1	0	1	0	2	1%	1	0%	100%
Zone 16R - Dutton	1	5	1	0	7	3%	2	1%	250%
Zone 17R - Dutton	0	0	0	0	0	0%	2	1%	-100%
Zone 18R - Dutton	3	0	1	0	4	2%	0	0%	N/A
Zone 19R - Dutton	0	0	0	0	0	0%	5	2%	-100%
Zone 20R - Dutton	1	2	2	0	5	2%	2	1%	150%
Zone 21R - Dutton	0	0	1	0	1	0%	2	1%	-50%
Grand Total	99	72	69	0	240	100%	209	100%	14.83%

District/Zone	2024				2024		2023		YTD % Change
	Jan	Feb	Mar	Apr	Grand Total - Current	% of Total Incidents - Current	Grand Total - Previous	% of Total Incidents - Previous	
Zone 22R - Dutton	2	0	1	0	3	1%	2	1%	50%
Zone 23R - Dutton	0	0	0	0	0	0%	1	0%	-100%
Grand Total	99	72	69	0	240	100%	209	100%	14.83%

Monthly Call Volume Year over Year

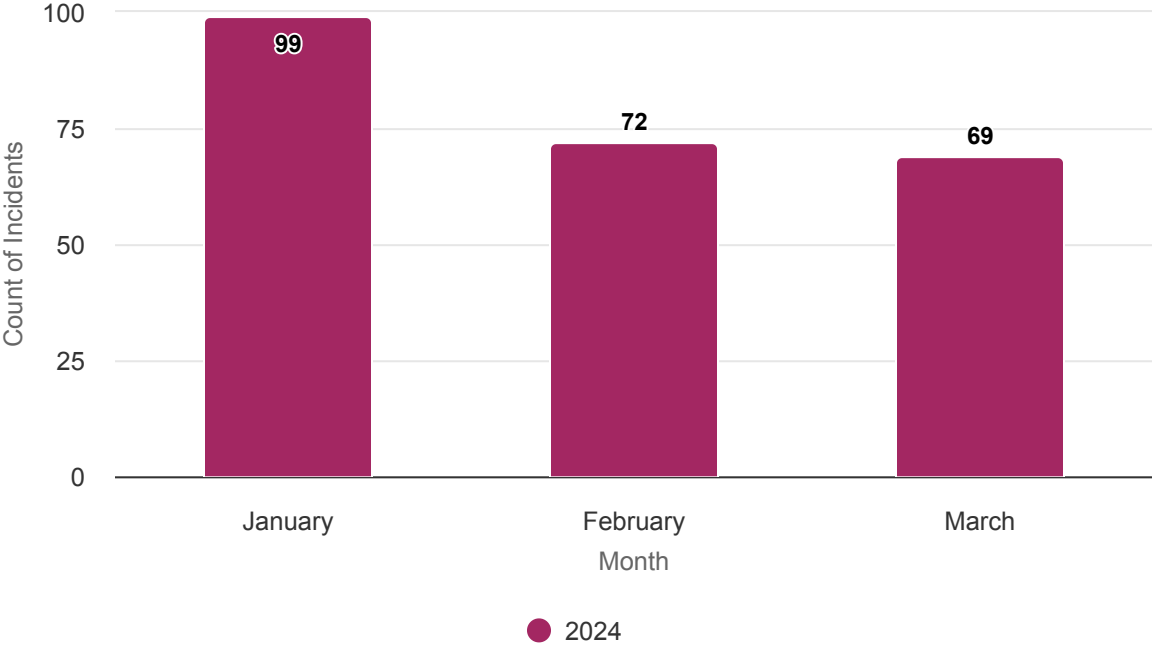
Jan 01, 2023 12:00 AM to Apr 01, 2024 05:16 PM



Month Name	2024		2023		YTD % Change
	Grand Total - Current	% of Total Incidents - Current	Grand Total - Previous	% of Total Incidents - Previous	
January	99	41%	66	32%	50%
February	72	30%	68	33%	5.88%
March	69	29%	71	34%	-2.82%
April	0	0%	4	2%	-100%
Grand Total	240	100%	209	100%	14.83%

Incidents by Month

Jan 01, 2024 to Mar 31, 2024



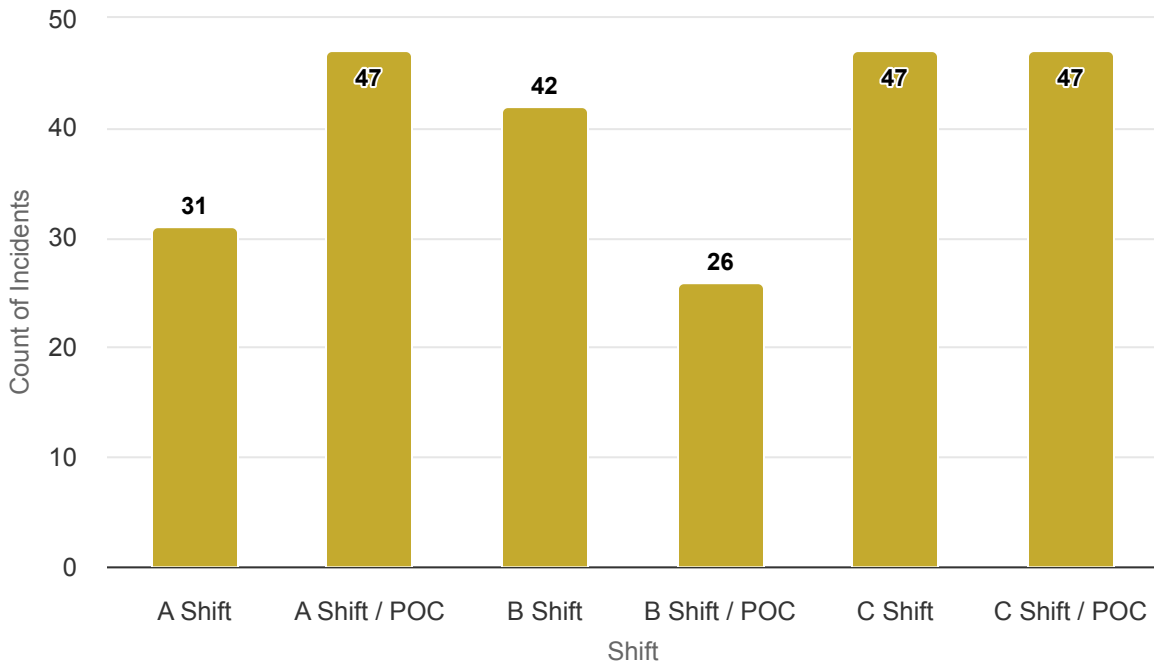
Incidents by Day and Hour

Jan 01, 2024 to Mar 31, 2024

		0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Day of Week	Sunday	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	1	2	3	1	0
	Monday	2	1	1	0	0	0	1	1	0	2	1	2	8	1	4	1	2	0	0	1	2	1	3	0
	Tuesday	0	0	0	0	0	1	1	1	0	2	5	3	1	0	3	2	2	4	3	4	2	1	1	1
	Wednesday	0	0	0	0	0	1	1	3	3	3	6	1	5	3	2	5	4	4	3	1	2	1	1	1
	Thursday	0	0	1	0	0	0	0	1	3	2	1	2	1	3	0	2	2	5	3	0	1	1	1	1
	Friday	1	1	0	2	0	3	2	1	0	2	4	3	1	3	0	2	0	7	3	3	1	0	0	2
	Saturday	2	2	1	1	0	0	1	1	3	2	0	3	6	2	3	3	2	1	0	1	3	0	1	0

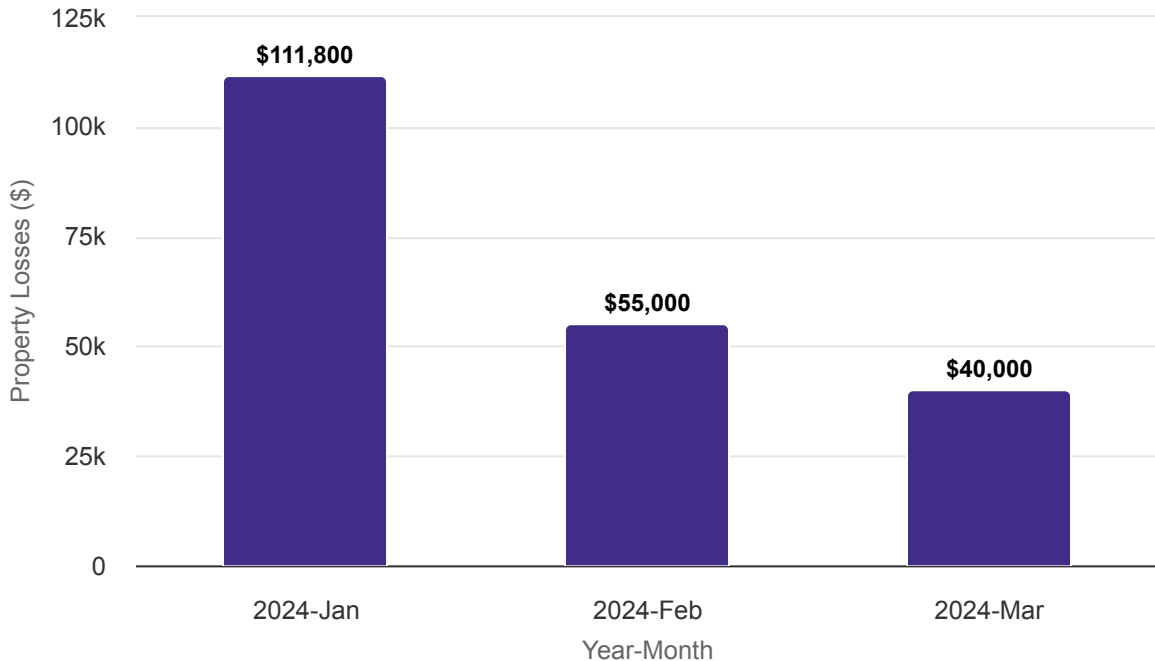
Incidents by Shift

Jan 01, 2024 to Mar 31, 2024



Property Losses by Month

Jan 01, 2024 to Mar 31, 2024



Aid Given and Received Summary

Jan 01, 2024 to Mar 31, 2024

Fire Department	Automatic Aid Given	% of Total Automatic Aid Given	Automatic Aid Received	% of Total Automatic Aid Received	Mutual Aid Given	% of Total Mutual Aid Given	Mutual Aid Received	% of Total Mutual Aid Received
Caledonia Township Fire Department	4	0%	2	0%	3	0%	2	0%
City of Kentwood Fire Department	4	0%	4	0%	0	0%	1	0%
Cutlerville Fire Department	4	0%	4	0%	18	0%	9	0%
Leighton Township Fire Department	0	0%	1	0%	0	0%	0	0%
Overall	12	100%	11	100%	21	100%	12	100%

Calls in Progress



Jan 01, 2024 12:00 AM to Mar 31, 2024 11:59 PM

Calls in Progress	Occurrences	% of Occurrences	Hours	% of Hours
0 Calls In Progress	226	46.99%	2,083.66	95.41%
1 Call In Progress	240	49.90%	97.59	4.47%
2 Calls In Progress	15	3.12%	2.74	0.13%
Totals	481	100%	2,184	100%

Incidents by Category and Month

Jan 01, 2023 12:00 AM to Apr 01, 2024 04:54 PM



Incident Type Category	2024				2024		2023		YTD % Change
	Jan	Feb	Mar	Apr	Grand Total - Current	% of Total Incidents - Current	Grand Total - Previous	% of Total Incidents - Previous	
1 - Fire	6	9	5	0	20	4%	14	3%	42.86%
2 - Overpressure Rupture, Explosion, Overheat (No Fire)	0	0	0	0	0	0%	1	0%	-100%
3 - Rescue & Emergency Medical Service Incident	155	129	105	2	391	71%	384	71%	1.82%
4 - Hazardous Condition (No Fire)	9	1	4	0	14	3%	7	1%	100%
5 - Service Call	3	2	2	0	7	1%	7	1%	0%
6 - Good Intent Call	27	18	17	0	62	11%	64	12%	-3.12%
7 - False Alarm & False Call	16	21	17	0	54	10%	54	10%	0%
8 - Severe Weather & Natural Disaster	0	0	1	0	1	0%	0	0%	N/A
9 - Special Incident Type	0	2	2	0	4	1%	8	1%	-50%
Grand Total	216	182	153	2	553	100%	539	100%	2.60%

Incidents by District/Zone

Jan 01, 2023 12:00 AM to Apr 01, 2024 04:53 PM

District/Zone	2024				2024		2023		YTD % Change
	Jan	Feb	Mar	Apr	Grand Total - Current	% of Total Incidents - Current	Grand Total - Previous	% of Total Incidents - Previous	
B1U - Byron Township	8	4	1	0	13	2%	8	1%	62.50%
B2U - Byron Township	21	32	19	1	73	13%	75	14%	-2.67%
B3U - Byron Township	11	6	9	0	26	5%	34	6%	-23.53%
B4U - Byron Township	33	26	16	0	75	14%	63	12%	19.05%
B5S - Byron Township	0	0	0	0	0	0%	6	1%	-100%
B6S - Byron Township	13	14	13	0	40	7%	38	7%	5.26%
B7R - Byron Township	2	3	4	0	9	2%	1	0%	800%
B8R - Byron Township	1	0	1	0	2	0%	2	0%	0%
Byron Township Fire	5	0	2	0	7	1%	7	1%	0%
Dutton Fire Department	8	5	3	0	16	3%	4	1%	300%
G1U - Gaines Township	35	18	24	0	77	14%	108	20%	-28.70%
G2S - Gaines Township	19	15	11	1	46	8%	52	10%	-11.54%
G3U - Gaines Township	34	34	25	0	93	17%	72	13%	29.17%
G4S - Gaines Township	4	9	6	0	19	3%	10	2%	90%
G5S - Gaines Township	11	6	7	0	24	4%	28	5%	-14.29%
G6S - Gaines Township	3	1	3	0	7	1%	8	1%	-12.50%
G7R - Gaines Township	2	1	5	0	8	1%	6	1%	33.33%
G8R - Gaines Township	2	1	1	0	4	1%	3	1%	33.33%
Kentwood	2	6	3	0	11	2%	9	2%	22.22%
Wyoming	2	1	0	0	3	1%	5	1%	-40%
Grand Total	216	182	153	2	553	100%	539	100%	2.60%

Monthly Call Volume Year over Year

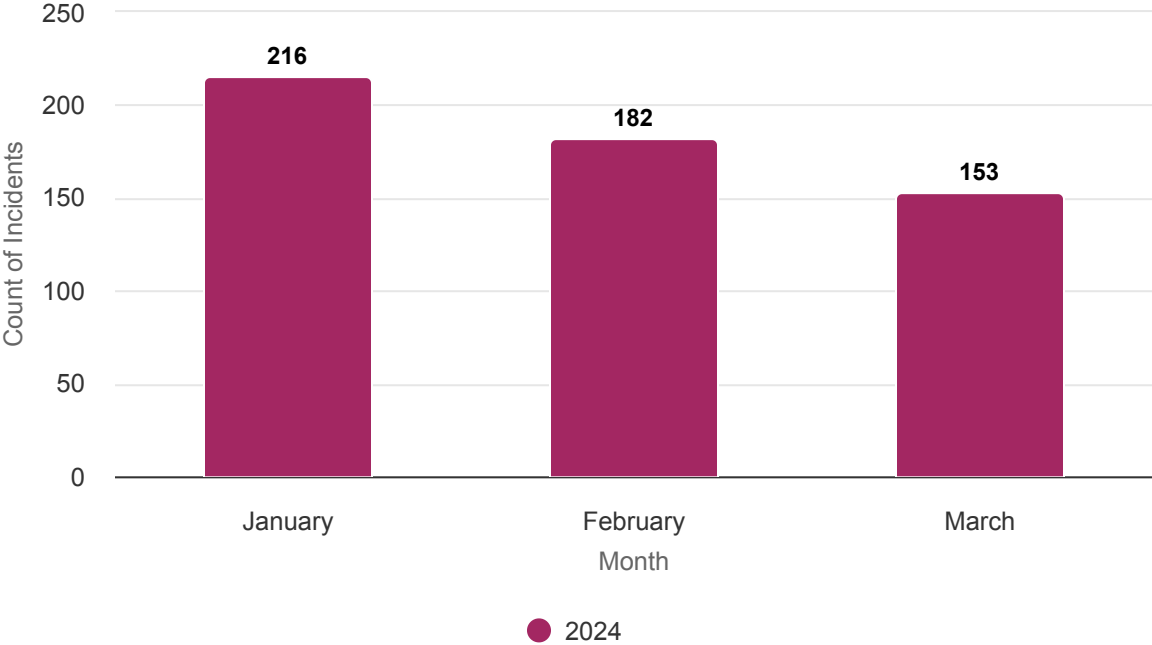
Jan 01, 2023 12:00 AM to Apr 01, 2024 04:55 PM



Month Name	2024		2023		YTD % Change
	Grand Total - Current	% of Total Incidents - Current	Grand Total - Previous	% of Total Incidents - Previous	
January	216	39%	184	34%	17.39%
February	182	33%	161	30%	13.04%
March	153	28%	192	36%	-20.31%
April	2	0%	2	0%	0%
Grand Total	553	100%	539	100%	2.60%

Incidents by Month

Jan 01, 2024 to Mar 31, 2024



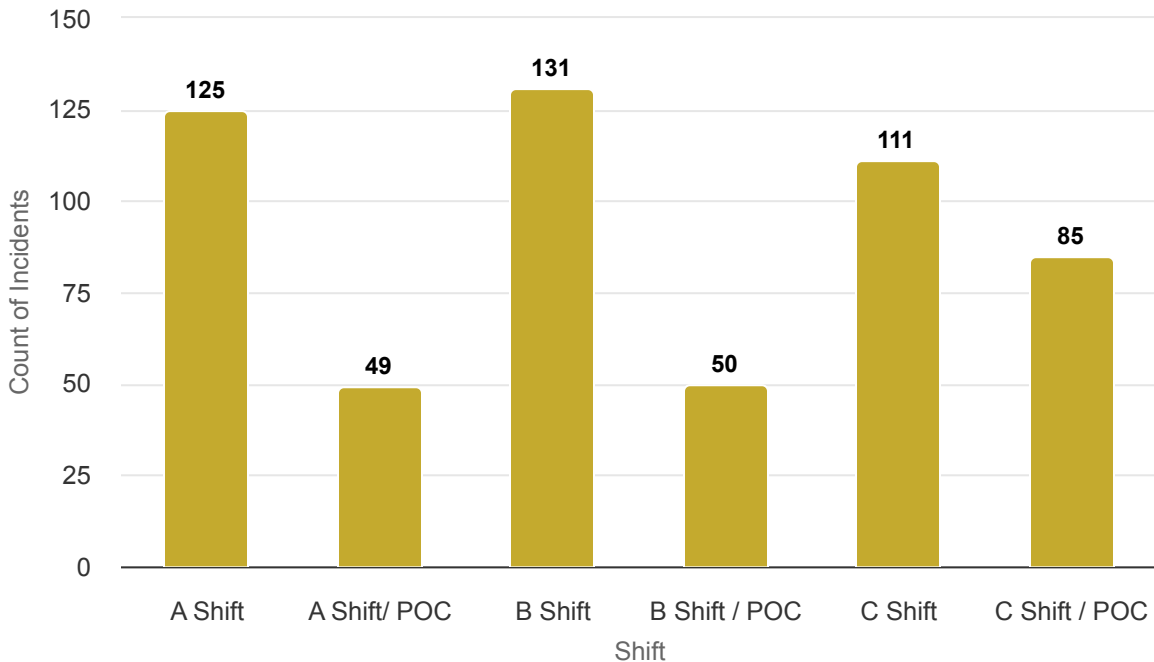
Incidents by Day and Hour

Jan 01, 2024 to Mar 31, 2024

		0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Day of Week	Sunday	2	1	2	0	0	2	1	1	3	2	2	0	4	5	3	2	6	4	3	5	2	6	1	5
	Monday	4	2	1	0	3	2	3	1	6	9	3	5	5	4	4	5	3	3	5	5	1	2	5	3
	Tuesday	2	1	3	4	1	5	7	2	6	1	5	8	2	2	5	2	3	6	3	5	6	5	7	1
	Wednesday	2	1	0	1	1	4	2	3	2	3	4	7	2	8	7	6	2	1	2	4	3	3	3	0
	Thursday	2	2	4	2	1	4	3	1	2	6	2	7	6	2	4	7	3	7	3	4	7	2	4	1
	Friday	2	2	0	2	1	2	2	1	8	4	4	6	4	1	5	4	8	4	6	11	5	2	4	4
	Saturday	5	4	0	0	5	0	0	2	2	1	5	5	2	3	2	4	1	2	2	2	8	3	3	3

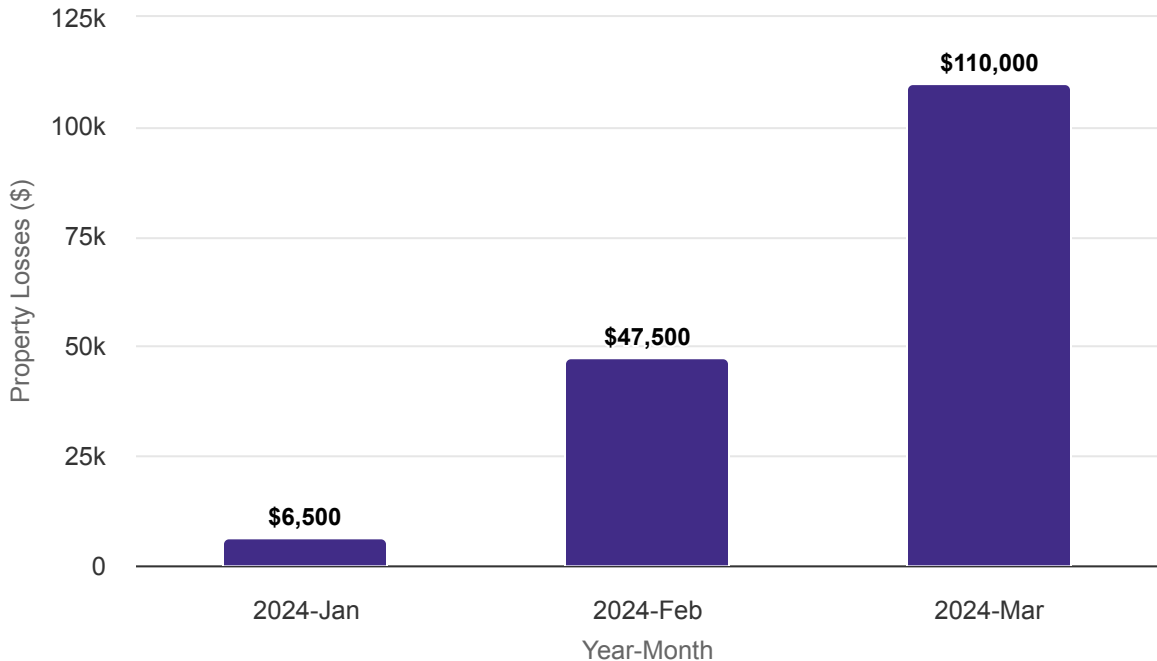
Incidents by Shift

Jan 01, 2024 to Mar 31, 2024



Property Losses by Month

Jan 01, 2024 to Mar 31, 2024



Aid Given and Received Summary

Jan 01, 2024 to Mar 31, 2024

Fire Department	Automatic Aid Given	% of Total Automatic Aid Given	Automatic Aid Received	% of Total Automatic Aid Received	Mutual Aid Given	% of Total Mutual Aid Given	Mutual Aid Received	% of Total Mutual Aid Received
Byron Township Fire Department	3	0%	4	0%	0	0%	12	0%
City of Kentwood Fire Department	2	0%	7	0%	0	0%	5	0%
City of Wyoming Fire Department	1	0%	2	0%	1	0%	2	0%
Dutton Fire Department	5	0%	4	0%	9	0%	18	0%
Overall	11	100%	17	100%	10	100%	37	100%

Calls in Progress

Jan 01, 2024 12:00 AM to Mar 31, 2024 11:59 PM

Calls in Progress	Occurrences	% of Occurrences	Hours	% of Hours
0 Calls In Progress	498	45.19%	1,995.31	91.36%
1 Call In Progress	549	49.82%	178.21	8.16%
2 Calls In Progress	53	4.81%	10.20	0.47%
3 Calls In Progress	2	0.18%	0.28	0.01%
Totals	1,102	100%	2,184	100%



Michelle LaJoye-Young
SHERIFF

Bryan Muir
UNDERSHERIFF

MARCH 2024 GAINES TOWNSHIP CP REPORT

COMPLETED

- Dealt with a Parking Issue on Campus Park
- Met with Legacy Christian for a safety meeting
- Assisted Kentwood MHP management with a resident issue on N. Kenbrook
- Assisted a resident with a trailer theft (walk up to SSUB)
- Had several online trainings
- Assisted a resident on Faraday with a child issue
- Worked with Kentwood SRO on a student issue
- Met with Rod and Rob on several things
- Conducted a directed patrol targeting the Crystal Springs neighborhood
- Worked with a business at 6630 Kalamazoo on an alarm issue
- Responded to a OWI / CCW (drunk driving / carrying a concealed weapon) call at Meijer with Road Patrol
- Conducted several patrols of Rapids Drive (multiple violations each time)
- Started work on National Night Out (Helicopter requests)
- Looked into a parking issue at Woodfield for their management
- Spoke with a resident on several occasions about some homeless people living at the Grand Motel in a camper
- Worked with a Gaines resident to get property back from a neighboring county law enforcement agency involving their deceased child
- Assisted a road deputy with an issue at Southwood MHP
- Attended the Gaines Chamber luncheon



- Assisted on a lost child 68th / Hanna Lake
- Assisted South Christian with a student issue
- Issued a parking ticket on Highview Dr for an ongoing parking issue
- Looked into an ordinance issue 400blk of Brownell and turned it over to Dakota/Dan
- Dealt with a semi parking issue on Coleman St
- Spoke with Dan Wells about an ongoing issue 900blk of 60th St
- Assisted a citizen with some home / money issues 6400blk of S Division
- Responded to a missing endangered subject on Sandown SW
- Worked with 2 local students on recruitment to the Metro Police Academy
- Assisted a citizen with parking issue on Penny Lane
- Assisted a local business with a homeless subject sleeping on their front steps
- Attended the Township Department Head meeting

ONGOING / UPCOMING

- Attending an Elections tabletop exercise
- Continued patrols of Rapids Dr to remove parking violations





Subscribe to updates from Kent County,
Michigan

Email Address
name@example.com

e.g.

Kent County Board of Commissioners March Newsletter

Kent County, Michigan sent this bulletin at 03/29/2024 09:45 AM EDT

Share Bulletin



[View as Webpage](#)



**Board of
Commissioners
Update**
March 2024

Commissioners Visit Lansing To Engage With State Legislators



Several Commissioners and County staff recently visited the Capitol, where they met with Speaker of the House Joe Tate, Senate Majority Leader Winnie Brinks, the Kent County Legislative Delegation, and leaders from the [Michigan Association of Counties](#). They had productive discussions about the Board's [legislative priorities](#) and how we can work together to better serve the residents of Kent County.

We're grateful for the involvement of our legislators in advocating for our county's needs at the state level.

Grant Funding Approved for Vital Community Assistance

In March, the Board approved several grants that will further assist [Kent County Community Action \(KCCA\)](#) to provide essential support to community members in need.

Diaper Bank Program: This initiative will supply diapers and diapering supplies to households in need, supporting approximately 200 households and an estimated 250 children.

Local Water Utility Affordability Program: With a focus on assisting 400 households with water and wastewater bill assistance, along with providing plumbing improvements for 20 households, this program ensures access to clean water for residents below 200% of the federal poverty limit.

Weatherization Deferral Reduction Program: Aimed at making homes eligible for weatherization services, this program will benefit approximately 101 homes with repairs and improvements, increasing energy efficiency.

By addressing critical needs such as childcare, water affordability, and home weatherization, KCCA continues to make a positive impact on the lives of individuals and families throughout the county.

Celebrating Meals on Wheels

The Board's dedication to celebrating outstanding achievements within our community continued as we honored Meals on Wheels.

Commissioner Dan Burrill recently presented a proclamation to Lisa Wideman, President & CEO of Meals on Wheels, designating March 2024 as a month to celebrate this vital program. Meals on Wheels serves is a pillar of support to our senior residents, providing not only essential nutrition but also companionship and care. Together, let's celebrate the spirit of service embodied by Meals on Wheels!

We invite community members to reach out to their [County Commissioner](#) if you have a special event or achievement that you would like



[County Commissioner](#) if you have a special event or achievement that you would like recognized.

Parks, Recreation and Natural Areas Master Plan



At yesterday's Board of Commissioner's Meeting, a resolution passed to adopt the [Kent County Parks Department's 2024 - 2028 Parks, Recreation and Natural Areas Master Plan](#).

The plan is a cooperative effort to improve and provide diverse and equitable experiences for Kent County area residents and visitors. To review the full

Master Plan, visit [here](#).

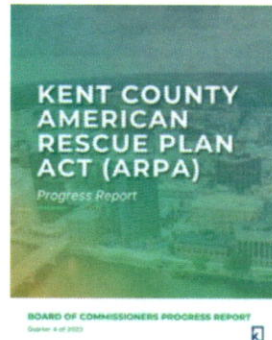
Kent Conservation District Showcase

The [Kent Conservation District](#) hosted the annual Conservation Showcase on March 21 in Rockford. Commissioners Hennessy, Pachla and Ponstein attended along with several state legislators and County staff. Following an introduction by Kent Conservation District Board Chair Jerry Miller, staff members highlighted their programs, funding sources, accomplishments and opportunities to get involved in the District's work.



The team also recognized the Conservation Farmer of the Year, Volunteer Stewardship and Friend of Conservation award winners. The evening was a valuable opportunity to learn about the team and the programs underway to protect and enhance the natural resource of Kent County. For more information about the Kent Conservation District, including the popular Spring Native Plant Sales, visit [here](#).

Q4 of 2023 ARPA Report



We're thrilled to share with you the American Rescue Plan Act (ARPA) [fourth quarter report for 2023](#), providing a narrative update on the progress of various projects.

In this edition of the report, we've included an image highlighting the completed projects for easy reference. We've also included information on the last projects funded by our ARPA dollars.

The funded projects have been making significant strides, and we look forward to witnessing their positive impact on our community. Stay tuned for more updates and announcements in the coming months!

Commissioners' Board Meeting Highlights

The Board of Commissioners meet on the second and fourth Thursdays. Engaging in these meetings, whether attending in person or [via livestream](#), provides a valuable opportunity to stay updated and engaged with issues affecting the community.

Here are videos summarizing key moments from our March Board meetings:

March 14, 2024 Meeting



- Resolution Passed to Accept Grant Funds from the Michigan Department of Health and Human Services to the Diaper Bank Program
- Resolution Passed to Accept Grant Funds from the Michigan Department of Transportation to The Rapid's Interurban Transit Partnership Program
- Resolution Passed to Approve an Amendment to the MDHHS Comprehensive Agreement for the Sewer Network Program
- Resolution Passed to Allocate Ready by Five Millage Funds to the YMCA of Greater Grand Rapids' Proposed Child and Family Advocate Program

March 28, 2024 Meeting

- Presentation by The Right Place
- Resolution Passed to Transfer Ownership of Former Sheriff's North Substation to Tyrone Township and Parcel Split
- Resolution Passed to Accept and Appropriate Grant Funds from MDHHS to the 2024 Low Income Home Energy Assistance Program's Weatherization Assistance Program
- Resolution Passed to Adopt the Parks Department's proposed 2024 - 2028 Parks, Recreation and Natural Areas Master Plan
- Resolution Passed to Approve the Reappointment of Kenyatta Brame to the Jury Commission



Upcoming Meetings

- Tuesday, April 16: Finance and Physical Resources Committee
- Thursday, April 18: Board of Commissioners Meeting
- Tuesday, April 23: Legislative and Human Resources Committee
- Tuesday, May 2: Board of Commissioners Meeting
- Tuesday, May 7: Finance and Physical Resources Committee
- Tuesday, May 14: Legislative and Human Resources Committee
- Thursday, May 16: Board of Commissioners Meeting
- Tuesday, May 21: Finance and Physical Resources Committee
- Tuesday, May 28: Legislative and Human Resources Committee

All Board and committee meetings start at 8:30 a.m. and take place at the [County Administration Building](#) within the Board of Commissioners Chambers, unless otherwise specified.

[Click here](#) to access the meeting agenda and minutes and [click here](#) to keep apprised of any scheduling changes.

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300 Monroe Avenue NW
Grand Rapids, Michigan 49503

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**MINUTES OF GAINES CHARTER TOWNSHIP BOARD
FOR THE REGULAR 7:00 PM MEETING
March 11, 2024**

Present: Supervisor DeWard, Clerk Brew, Treasurer Lemke, Trustees Fryling, Haagsma, Terpstra, VanderStel

Absent with notice: None

Opening prayer was given by Board Member Vander Stel and the Pledge of Allegiance was recited

1. The meeting was called to order at 7:02 p.m. by Board Member DeWard.

2. Question of Conflict of Interest

None

3. Review of the Consent Agenda.

None

4. Meeting Agenda

Board Member DeWard added consideration of Resolutions 2024-04 and 2024-05 to the agenda

Motion by Board Member Haagsma and seconded by Board Member Vander Stel to approve the proposed agenda with the addition of Resolutions 2024-04 and 2024-05.

VOICE VOTE: 7 Aye. 0 Nay. Motion carried on voice vote.

5. Communications ~ Non-action Informational Items

- a) Grand Valley Metro Council (GVMC) Transportation Department Newsletter
- b) February 2024 Building Department Revenue Report
- c) February 2024 Dutton Fire Run Report
- d) February 2024 Cutlerville Fire Run Report
- e) February 2024 Community Policing Officer's Report

6. Resolution 2024-04 and Resolution 2024-05

Motion by Board Member Vander Stel and seconded by Board Member Terpstra to approve Resolution 2024-04 expressing the Township's appreciation for past work and sincere wishes for continued success to **Randy Foreman** for the contributions he has made and Resolution 2024-05 expressing the Township's appreciation for past work and sincere wishes for continued success to **Brett Holmes** for the contributions he has made.

ROLL CALL VOTE: Board Member Vander Stel - yes, Board Member Terpstra - yes, Board Member Lemke - yes, Board Member Haagsma - yes, Board Member Fryling - yes, Board Member DeWard - yes, Board Member Brew - yes. Motion carried.

7. Scheduled Speakers

Fire Chief Ken Van Hall presented a service recognition to Brett Holmes (in attendance) and Randy Foreman (in absentia).

8. Recognition of Individuals and/or Delegations for agenda and non-agenda items.

A resident asked the Township Board to enact ordinances against AirBnBs noting problems in the past years with renters parking, excessive speed, fights, and alleged marijuana use within his neighborhoods.

9. Public Hearings

None.

10. Approval of the Consent Agenda

Motion by Board Member Haagsma and seconded by Board Member Vander Stel to approve the Consent agenda including the February 12, 2024 Township Board meeting minutes; General fund expenditures from 02/1/2024 through 02/29/2024 totaling \$114,498.04; Public Safety Special Assessment District expenditures totaling \$172,004.25; Building inspections totaling \$25,054.67; Water and sewer fund expenditures \$450,857.32; and Treasurer's report for January 2024.

ROLL CALL VOTE: Board Member Haagsma – yes, Board Member Vander Stel - yes, Board Member Lemke - yes, Board Member Fryling - yes, Board Member DeWard - yes, Board Member Brew - yes, Board Member Terpstra – yes. Motion carried.

11. New Business

A. Renewal of Liquor Licenses

1. Logan's Restaurant #531

Motion by Board Member Terpstra and seconded by Board Member Lemke to approve the Liquor License renewal for Logan's Restaurant.

ROLL CALL VOTE: Board Member Terpstra - yes, Board Member Lemke - yes, Board Member Haagsma - yes, Board Member Fryling - yes, Board Member DeWard - yes, Board Member Brew - yes, Board Member Vander Stel - yes. Motion carried.

2. JD Holdings, LLC – Peppino's

Motion by Board Member Vander Stel and seconded by Board Member Haagsma to approve the Liquor License renewal for Peppino's.

ROLL CALL VOTE: Board Member Vander Stel - yes, Board Member Haagsma - yes, Board Member Fryling - yes, Board Member DeWard - yes, Board Member Brew - yes, Board Member Terpstra - yes, Board Member Lemke - yes. Motion carried.

3. TSF Apple Venture, LLC – Applebee's

Motion by Board Member Vander Stel and seconded by Board Member Haagsma to approve the Liquor License renewal for Applebee's.

ROLL CALL VOTE: Board Member Vander Stel - yes, Board Member Haagsma - yes, Board Member DeWard - yes, Board Member Brew - yes, Board Member Terpstra - yes, Board Member Lemke - yes, Board Member Fryling - yes. Motion carried.

4. Stonewater Country Club – Fire Rock Grille

Motion by Board Member Vander Stel and seconded by Board Member Terpstra to approve the Liquor License renewal for Fire Rock Grille.

ROLL CALL VOTE: Board Member Vander Stel - yes, Board Member Terpstra - yes, Board Member Brew - yes, Board Member Lemke - yes, Board Member Haagsma - yes, Board Member Fryling - yes, Board Member DeWard - yes. Motion carried.

5. Grinning Mitton, dba Raitown

a. Microbrewer Manufacturers License

Motion by Board Member Vander Stel and seconded by Board Member Terpstra to approve the Liquor License renewal for Grinning Mitton Microbrewer.

ROLL CALL VOTE: Board Member Vander Stel - yes, Board Member Terpstra - yes, Board Member Lemke - yes, Board Member Haagsma - yes, Board Member Fryling - yes, Board Member DeWard - yes, Board Member Brew - yes. Motion carried.

b. Small Wine Maker Manufacturers License

Motion by Board Member Vander Stel and seconded by Board Member Terpstra to approve the Liquor License renewal for Grinning Mitton Small Wine Maker.

ROLL CALL VOTE: Board Member Vander Stel - yes, Board Member Terpstra - yes, Board Member Lemke - yes, Board Member Haagsma - yes, Board Member Fryling - yes, Board Member DeWard - yes, Board Member Brew - yes. Motion carried.

6. Celebration Banquets, LLC

Motion by Board Member Vander Stel and seconded by Board Member Terpstra to approve the Liquor License renewal for Celebration Banquets.

ROLL CALL VOTE: Board Member Vander Stel - yes, Board Member Terpstra - yes, Board Member Lemke - yes, Board Member Haagsma - yes, Board Member Fryling - yes, Board Member DeWard - yes, Board Member Brew - yes. Motion carried.

7. Briarwood Golf Course

Motion by Board Member Haagsma and seconded by Board Member Vander Stel to approve the Liquor License renewal for Briarwood Golf Course.

ROLL CALL VOTE: Board Member Haagsma - yes, Board Member Vander Stel - yes, Board Member Fryling - yes, Board Member DeWard - yes, Board Member Brew - yes, Board Member Terpstra - yes, Board Member Lemke - yes. Motion carried.

B. Repair of Trail Bridge

Motion by Board Member Vander Stel and seconded by Board Member Haagsma to accept the bid from Fence Consultants for \$8200.00 to fix the bridge near Countryside Elementary.

ROLL CALL VOTE: Board Member Vander Stel - yes, Board Member Haagsma - yes, Board Member Fryling - yes, Board Member DeWard - yes, Board Member Brew - yes, Board Member Terpstra - yes, Board Member Lemke - yes. Motion carried.

C. Parking lots and Driveway Repaving

Motion by Board Member Haagsma and seconded by Board Member Vander Stel to accept the quote from Rieth-Riley for \$163,410.00 with the Kent County Sheriff providing \$56,144.90 and Gaines Charter Township providing \$107,265.10.

ROLL CALL VOTE: Board Member Haagsma - yes, Board Member Vander Stel - yes, Board Member DeWard - yes, Board Member Brew - yes, Board Member Terpstra - yes, Board Member Lemke - yes, Board Member Fryling - yes. Motion carried.

Motion by Board Member Haagsma and seconded by Board Member Vander Stel to fund the Gaines Charter Township portion of the parking lot and driveway repaving reallocating funds from the ARPA federal grant in place of the Brewer Park project previously approved.

ROLL CALL VOTE: Board Member Haagsma - yes, Board Member Vander Stel - yes, Board Member Brew - yes, Board Member Terpstra - yes, Board Member Lemke - yes, Board Member Fryling - yes, Board Member DeWard - yes. Motion carried.

D. Appointment to Parks & Trails Committee

Motion by Board Member Haagsma and seconded by Board Member Lemke to accept the recommendation from the Supervisor's office to appoint Sandra Woltjer to the Parks & Trails committee for the term that ends in 2025.

VOICE VOTE: 7 Aye. 0 Nay. Motion carried on voice vote.

E. Right Place Contribution

Motion by Board Member Terpstra and seconded by Board Member Vander Stel to approve the \$4,000 contribution to The Right Place.

ROLL CALL VOTE: Board Member Terpstra - yes, Board Member Vander Stel - yes, Board Member Lemke - yes, Board Member Haagsma - yes, Board Member Fryling - yes, Board Member DeWard - yes, Board Member Brew - yes. Motion carried.

F. Fire Department Name

Motion by Board Member Lemke and seconded by Board Member Haagsma to approve the Cutlerville Fire Department Advisory Committee to name the Gaines Charter Township new fire entity Gaines Charter Township Fire Department to take effect January 1, 2025.

ROLL CALL VOTE: Board Member Lemke - yes, Board Member Haagsma - yes, Board Member Fryling - yes, Board Member DeWard - yes, Board Member Brew - yes, Board Member Vander Stel - yes, Board Member Terpstra - yes. Motion carried.

G. Hanna Lake Sidewalk Project Community Development Block Grant (CDBG)

Motion by Board Member Fryling and seconded by Board Member Haagsma to decline the CDBG grant money and proceed with portions of the Hanna Lake sidewalk project utilizing new development in the area to provide other portions of the sidewalk.

VOICE VOTE: 7 Aye. 0 Nay. Motion carried on voice vote.

H. Meeting per diem Change

Motion by Board Member Lemke and seconded by Board Member Haagsma to change the meeting per diem for the Board of Review to mirror other sub-committee per diems.

ROLL CALL VOTE: Board Member Lemke - yes, Board Member Haagsma - yes, Board Member Fryling - yes, Board Member DeWard - yes, Board Member Brew - yes, Board Member Vander Stel - yes, Board Member Terpstra - yes. Motion carried.

I. Allocation of ARPA Dollars

Motion by Board Member Haagsma and seconded by Board Member Lemke to allocate \$1.2 million to purchase the fire truck on order for Cutlerville Fire Department.

ROLL CALL VOTE: Board Member Haagsma - yes, Board Member Lemke - yes, Board Member DeWard - yes, Board Member Brew - yes, Board Member Vander Stel - yes, Board Member Terpstra - yes, Board Member Fryling - yes. Motion carried.

J. Supervisor's Hours

Motion by Board Member Lemke and seconded by Board Member Fryling to approve reducing the Supervisor's hours to 16 hours to begin November 2024 with the new board.

ROLL CALL VOTE: Board Member Lemke - yes, Board Member Fryling - yes, Board Member Brew - yes, Board Member Vander Stel - yes, Board Member Terpstra - yes, Board Member Haagsma - yes, Board Member DeWard - yes. Motion carried.

K. Rezoning Request, 76th and Division – 1st Read

Motion by Board Member Haagsma and seconded by Board Member Vander Stel to set a Public Hearing for rezoning 7610 Division Avenue SE for April 8, 2024.

VOICE VOTE: 7 Aye. 0 Nay. Motion carried on voice vote.

L. Private Drive Width Requirement Waiver Request – 92nd Street

Motion by Board Member Lemke and seconded by Board Member Haagsma to grant a shared drive waiver for a 50-foot easement for access to 589 and 549 92nd Street.

ROLL CALL VOTE: Board Member Lemke - yes, Board Member Haagsma - yes, Board Member Terpstra - yes, Board Member Fryling - yes, Board Member DeWard - yes, Board Member Brew - yes, Board Member Vander Stel - yes. Motion carried.

M. Thornapple Farms Phase One Water and Sewer Development Contract

Motion by Board Member Haagsma and seconded by Board Member Terpstra to approve the Thornapple Farms Phase One Water and Sewer Development Contract.

ROLL CALL VOTE: Board Member Haagsma - yes, Board Member Terpstra - yes, Board Member Lemke - yes, Board Member Fryling - yes, Board Member DeWard - yes, Board Member Brew - yes, Board Member Vander Stel - yes. Motion carried.

N. Thornapple Farms Phase Two Water and Sewer Development Contract

Motion by Board Member Lemke and seconded by Board Member Vander Stel to approve the Thornapple Farms Phase Two Water and Sewer Development Contract.

ROLL CALL VOTE: Board Member Lemke - yes, Board Member Vander Stel - yes, Board Member Haagsma - yes, Board Member Fryling - yes, Board Member DeWard - yes, Board Member Brew - yes, Board Member Terpstra - yes. Motion carried.

O. Thornapple Farms Trunk Sewer Development Contract

Motion by Board Member Haagsma and seconded by Board Member Terpstra to approve the Thornapple Farms Trunk Sewer Development Contract.

ROLL CALL VOTE: Board Member Haagsma - yes, Board Member Terpstra - yes, Board Member Fryling - yes, Board Member DeWard - yes, Board Member Brew - yes, Board Member Vander Stel - yes, Board Member Lemke - yes. Motion carried.

P. Pine Rest Water and Sewer Development Contract

Motion by Board Member Lemke and seconded by Board Member Vander Stel to approve the Pine Rest Water and Sewer Development Contract.

ROLL CALL VOTE: Board Member Lemke - yes, Board Member Vander Stel - yes, Board Member DeWard - yes, Board Member Brew - yes, Board Member Terpstra - yes, Board Member Haagsma - yes, Board Member Fryling - yes. Motion carried.

Q. Grooters Phase Two Water and Sewer Development Contract

Motion by Board Member Haagsma and seconded by Board Member Vander Stel to approve the Grooters Phase Two Water and Sewer Development Contract.

ROLL CALL VOTE: Board Member Haagsma - yes, Board Member Vander Stel - yes, Board Member Brew - yes, Board Member Terpstra - yes, Board Member Lemke - yes, Board Member Fryling - yes, Board Member DeWard - yes. Motion carried.

R. Ashford Woods 1A Water and Sewer Development Contract

Motion by Board Member Haagsma and seconded by Board Member Lemke to accept the Ashford Woods 1A Water and Sewer Development Contract.

ROLL CALL VOTE: Board Member Haagsma - yes, Board Member Lemke - yes, Board Member Vander Stel - yes, Board Member Terpstra - yes, Board Member Fryling - yes, Board Member DeWard - yes, Board Member Brew - yes. Motion carried.

12. Public Comments

A representative of the United Veteran's Council of Kent County spoke inviting the Townships participation in the annual Memorial Day Parade Saturday, May 25, 2024 at 10:00 am.

A citizen announced his intention to be a candidate for county commissioner in the November 2024 election.

13. Manager's comments

Fire Department interviews are scheduled for Friday, March 15, 2024.

14. Supervisor's comments.

None.

15. Trustees comments

Pine Rest security issue is still under discussion.

Staff will review and give trustees information on AirBnB rental restrictions throughout the State of Michigan.

16. Adjournment

Supervisor DeWard adjourned the meeting at 08:41 p.m.

Michael Brew, Clerk

Robert DeWard, Supervisor

04/02/2024

CHECK DISBURSEMENT REPORT FOR GAINES CHARTER TOWNSHIP
CHECK DATE FROM 03/01/2024 - 03/31/2024

Check Date	Bank	Check #	Payee	Description	Amount
03/01/2024	GEN 2	33342#	AMAZON CAPITAL SERVICES	BATTERY BACKUP SURGE PROTECTOR	180.48
03/01/2024	GEN 2	33342	AMAZON CAPITAL SERVICES	LAMINATOR	199.31
03/01/2024	GEN 2	33342	AMAZON CAPITAL SERVICES	CALCULATOR AND RUBBER FINGERS	19.77
				CHECK GEN 2 33342 TOTAL FOR FUND 101:	399.56
03/01/2024	GEN 2	33343	CHARTER COMMUNICATIONS	TELECOMMUNICATIONS	529.90
03/01/2024	GEN 2	33345#	CONSUMERS ENERGY	ELECTRIC	3,344.56
03/01/2024	GEN 2	33345	CONSUMERS ENERGY	ELECTRIC	100.65
03/01/2024	GEN 2	33345	CONSUMERS ENERGY	ELECTRIC	101.55
03/01/2024	GEN 2	33345	CONSUMERS ENERGY	ELECTRIC	29.24
03/01/2024	GEN 2	33345	CONSUMERS ENERGY	ELECTRIC	647.66
				CHECK GEN 2 33345 TOTAL FOR FUND 101:	4,223.66
03/01/2024	GEN 2	33346#	DTE ENERGY	NATURAL GAS	1,808.35
03/01/2024	GEN 2	33346	DTE ENERGY	NATURAL GAS	505.88
				CHECK GEN 2 33346 TOTAL FOR FUND 101:	2,314.23
03/01/2024	GEN 2	33347	FIRE FIGHTER SALES & SERVICE	ANNUAL SERVICE	117.00

03/01/2024	GEN 2	33348	FIRST BANKCARD CENTER	ELECTION MEALS,COFFEE POT, CAMERA (FOR THE LI	778.07
03/01/2024	GEN 2	33348	FIRST BANKCARD CENTER	ELECTION MEALS,COFFEE POT, CAMERA (FOR THE LI	1,146.42
				CHECK GEN 2 33348 TOTAL FOR FUND 101:	1,924.49
03/01/2024	GEN 2	33350	HORIZON COMMUNITY PLANNING LLC	ZONING CODE UPDATE,PLAN REVIEW FOR 1160 76TI	1,072.50
03/01/2024	GEN 2	33351	IDA YOUNG	MILEAGE	149.45
03/01/2024	GEN 2	33353	JND SNOWPLOWING INC	INVOICE , 5 OF 7, SNOWPLOWING/ 2024	2,357.14
03/01/2024	GEN 2	33354	KENT COMMUNICATIONS INC	POSTAGE	1,641.07
03/01/2024	GEN 2	33355	KENT COUNTY TREASURER	TAXES	74.40
03/01/2024	GEN 2	33356	LAMPHEAR SERVICE COMPANY INC	MID- SEASON INSPECTION, CHANGED FILTERS	643.00
03/01/2024	GEN 2	33358	MAYNARDS WATER CONDITIONING LLC	SALT, (12)	189.60
03/01/2024	GEN 2	33359	MICHAEL BREW	MILEAGE	94.32
03/01/2024	GEN 2	33361#	T-MOBILE	TELECOMMUNICATIONS	21.60
03/01/2024	GEN 2	33361	T-MOBILE	TELECOMMUNICATIONS	43.20
03/01/2024	GEN 2	33361	T-MOBILE	TELECOMMUNICATIONS	21.60
03/01/2024	GEN 2	33361	T-MOBILE	TELECOMMUNICATIONS	38.60
03/01/2024	GEN 2	33361	T-MOBILE	TELECOMMUNICATIONS	223.04
03/01/2024	GEN 2	33361	T-MOBILE	TELECOMMUNICATIONS	47.24

CHECK GEN 2 33361 TOTAL FOR FUND 101:

395.28

03/01/2024	GEN 2	33362	WEST MICHIGAN DOCUMENT SHREDDING LL	SHREDDING SERVICE	40.00
03/07/2024	GEN 2	33364	123.NET	TELECOMMUNICATIONS	251.50
03/07/2024	GEN 2	33365#	ARROWASTE INC	TRASH PICK UP	160.94
03/07/2024	GEN 2	33365	ARROWASTE INC	BLAIN CEMETERY	63.80
03/07/2024	GEN 2	33365	ARROWASTE INC	TRASH PICK UP	80.80
				CHECK GEN 2 33365 TOTAL FOR FUND 101:	305.54
03/07/2024	GEN 2	33366	BETH WILDER	JANITORIAL SERVICES FOR ELECTION	175.00
03/07/2024	GEN 2	33369	CHRIS HOLWERDA	MONTHLY PHONE USAGE	25.00
03/07/2024	GEN 2	33370#	CONSUMERS ENERGY	ELECTRIC	1,818.41
03/07/2024	GEN 2	33370	CONSUMERS ENERGY	ELECTRIC	12,961.12
03/07/2024	GEN 2	33370	CONSUMERS ENERGY	ELECTRIC	118.80
03/07/2024	GEN 2	33370	CONSUMERS ENERGY	ELECTRIC	102.42
03/07/2024	GEN 2	33370	CONSUMERS ENERGY	ELECTRIC	98.51
03/07/2024	GEN 2	33370	CONSUMERS ENERGY	ELECTRIC	34.78
03/07/2024	GEN 2	33370	CONSUMERS ENERGY	ELECTRIC	28.77
				CHECK GEN 2 33370 TOTAL FOR FUND 101:	15,162.81
03/07/2024	GEN 2	33371	DENNIS FORSYTHE	ELECTION TRAINING	45.00
03/07/2024	GEN 2	33372	FIRST BANKCARD CENTER	MMTA REGISTRATION, 2024 BASIC INSTITUTE CONFE	698.00

03/07/2024	GEN 2	33373	FIRST BANKCARD CENTER	CORDS AND CORD REEL	212.85
03/07/2024	GEN 2	33374#	FIRST BANKCARD CENTER	LENVO THINKPAD P16S GEN 2-16 ,DELL OPTPLEX 70	1,794.08
03/07/2024	GEN 2	33374	FIRST BANKCARD CENTER	LENVO THINKPAD P16S GEN 2-16 ,DELL OPTPLEX 70	1,509.40
				CHECK GEN 2 33374 TOTAL FOR FUND 101:	3,303.48
03/07/2024	GEN 2	33375	FIRST BANKCARD CENTER	ANT BAIT, PEA GRAVEL,ICE MELT,PLASTIC ANCHOR	29.85
03/07/2024	GEN 2	33376	FIRST BANKCARD CENTER	JOBS SPONSORED ON INDEED.COM, PRINTER,USFC	233.95
03/07/2024	GEN 2	33376	FIRST BANKCARD CENTER	JOBS SPONSORED ON INDEED.COM, PRINTER,USFC	199.68
				CHECK GEN 2 33376 TOTAL FOR FUND 101:	433.63
03/07/2024	GEN 2	33378	GREATAMERICA FINANCIAL SERVICES	CONTRACTED SERVICES	1,191.59
03/07/2024	GEN 2	33379	INTERURBAN TRANSIT PARTNERSHIP	CONTRACT FOR MARCH 2024	3,203.17
03/07/2024	GEN 2	33379	INTERURBAN TRANSIT PARTNERSHIP	CONTRACT SERVICE FOR MARCH 2024	655.89
				CHECK GEN 2 33379 TOTAL FOR FUND 101:	3,859.06
03/07/2024	GEN 2	33380#	JACK'S LAWN & SNOWPLOWING, INC	SNOWPLOWING	2,062.38
03/07/2024	GEN 2	33380	JACK'S LAWN & SNOWPLOWING, INC	SNOWPLOWING	690.04
03/07/2024	GEN 2	33380	JACK'S LAWN & SNOWPLOWING, INC	SNOWPLOWING	285.71
03/07/2024	GEN 2	33380	JACK'S LAWN & SNOWPLOWING, INC	SNOWPLOWING	285.71
03/07/2024	GEN 2	33380	JACK'S LAWN & SNOWPLOWING, INC	SNOWPLOWING	1,030.81
				CHECK GEN 2 33380 TOTAL FOR FUND 101:	4,354.65
03/07/2024	GEN 2	33382	KIM TRIPLETT	MILEAGE,PHONE USAGE	73.56
03/07/2024	GEN 2	33382	KIM TRIPLETT	MILEAGE,PHONE USAGE	25.00

				CHECK GEN 2 33382 TOTAL FOR FUND 101:	98.56
03/07/2024	GEN 2	33384	LYDIA HILTON	PICK UP ELECTION EQUIPMENT	45.00
03/07/2024	GEN 2	33385#	MEYERS CLEANING SERVICE INC	GENERAL CLEANING AND CLEANING SUPPLIES,VACI	1,247.60
03/07/2024	GEN 2	33385	MEYERS CLEANING SERVICE INC	GENERAL CLEANING AND CLEANING SUPPLIES,VACI	1,265.25
				CHECK GEN 2 33385 TOTAL FOR FUND 101:	2,512.85
03/07/2024	GEN 2	33386	NOAH HILTON	PICK UP ELECTION EQUIPMENT	45.00
03/07/2024	GEN 2	33387	THE SUN AND NEWS	DISPLAY : 2024 REVIEW FEB.10, FEB.17,FEB 24, FEB.,	406.20
03/07/2024	GEN 2	33388	TOTAL FIRE PROTECTION	MONTHLY MONITORING (MARCH 2024 - FEBRUARY :	540.00
03/07/2024	GEN 2	33389#	VRIESMAN & KORHORN LLC	0085 MISCELLANEOUS ENGINEERING	243.00
03/07/2024	GEN 2	33389	VRIESMAN & KORHORN LLC	0085 MISCELLANEOUS ENGINEERING	736.37
03/07/2024	GEN 2	33389	VRIESMAN & KORHORN LLC	0655 STONECO PUD	250.37
03/07/2024	GEN 2	33389	VRIESMAN & KORHORN LLC	1199 CALEDONIA MEADOWS	326.68
03/07/2024	GEN 2	33389	VRIESMAN & KORHORN LLC	1284 HOFFMAN MEADOWS PHASE 2	234.00
03/07/2024	GEN 2	33389	VRIESMAN & KORHORN LLC	1297 THORNAPPLE VILLAGE	192.01
03/07/2024	GEN 2	33389	VRIESMAN & KORHORN LLC	1319 STONEPRO- 6141 EAST PARIS	1,411.37
				CHECK GEN 2 33389 TOTAL FOR FUND 101:	3,393.80
03/07/2024	GEN 2	33391	WILMA FORSYTHE	ELECTION TRAINING	45.00
03/15/2024	GEN 2	33392#	AMAZON CAPITAL SERVICES	WIRELESS KEYBOARD AND MOUSE	64.99
03/15/2024	GEN 2	33392	AMAZON CAPITAL SERVICES	PENS NOTE PAD,FOLDERS KEYBOARD,PAPER CLIPS,I	197.72

03/15/2024	GEN 2	33392	AMAZON CAPITAL SERVICES	TWP OFFICE EASEL MARKERS, CHART TABLET	61.89
				CHECK GEN 2 33392 TOTAL FOR FUND 101:	324.60
03/15/2024	GEN 2	33393#	BLOOM SLUGGETT	CLERK FOIA AND DEVELOPMENTS	72.00
03/15/2024	GEN 2	33393	BLOOM SLUGGETT	CLERK FOIA AND DEVELOPMENTS	2,496.00
				CHECK GEN 2 33393 TOTAL FOR FUND 101:	2,568.00
03/15/2024	GEN 2	33394	BLUE CROSS HSA	VISION	547.14
03/15/2024	GEN 2	33395	BUSINESS SYSTEM SOLUTIONS, INC	MONTHLY BILLING FOR MARCH,GEN. ADMINISTRATI	4,611.38
03/15/2024	GEN 2	33397#	DELTA DENTAL		106.65
03/15/2024	GEN 2	33397	DELTA DENTAL		164.00
03/15/2024	GEN 2	33397	DELTA DENTAL		261.54
03/15/2024	GEN 2	33397	DELTA DENTAL		35.82
03/15/2024	GEN 2	33397	DELTA DENTAL		208.96
03/15/2024	GEN 2	33397	DELTA DENTAL		45.77
03/15/2024	GEN 2	33397	DELTA DENTAL		134.15
				CHECK GEN 2 33397 TOTAL FOR FUND 101:	956.89
03/15/2024	GEN 2	33398	EVERETT'S LANDSCAPE MANAGEMENT INC	WATERING BAGS	487.50
03/15/2024	GEN 2	33401	KAREN GEHRLS	2023 MILEAGE RATE	9.17
03/15/2024	GEN 2	33402	KC ASSOC OF ASSESSING OFFICERS	DEPRECIATION ANALYSIS	400.00
03/15/2024	GEN 2	33403	KC ASSOC OF ASSESSING OFFICERS	INCOME APPROACH TO VALUATION II	500.00

03/15/2024	GEN 2	33404	LAMPHEAR SERVICE COMPANY INC	COMPLETED THE LOCHINVAR BOILER #1 REPAIR	6,522.00
03/15/2024	GEN 2	33405	LAURIE LEMKE	MILEAGE STATIONARY, LUNCH	5.82
03/15/2024	GEN 2	33405	LAURIE LEMKE	MILEAGE STATIONARY, LUNCH	19.87
03/15/2024	GEN 2	33405	LAURIE LEMKE	MILEAGE STATIONARY, LUNCH	121.27
				CHECK GEN 2 33405 TOTAL FOR FUND 101:	146.96
03/15/2024	GEN 2	33407	MEDMUTUAL LIFE	LIFE INSURANCE ADD 1	469.00
03/15/2024	GEN 2	33408	MEDMUTUAL LIFE	ELECTED OFFICIALS	210.00
03/15/2024	GEN 2	33409	MINER SUPPLY COMPANY	LIB SUPPLIES	157.10
03/15/2024	GEN 2	33411	ULINE SHIPPING SUPPLY	TRASH CONTAINER FOR PARK ENTRANCE	701.35
03/15/2024	GEN 2	33412	VRIESMAN & KORHORN LLC	1194 HANNA LAKE SIDEWALK	162.00
03/22/2024	GEN 2	33413	ACCIDENT FUND	INSURANCE	2,230.96
03/22/2024	GEN 2	33416#	BUSINESS SYSTEM SOLUTIONS, INC	WORKSTATION SETUP FOR CHRIS HOLWERDA	199.00
03/22/2024	GEN 2	33416	BUSINESS SYSTEM SOLUTIONS, INC	WORKSTATION SETUP FOR DAKOTA SWAN	199.00
				CHECK GEN 2 33416 TOTAL FOR FUND 101:	398.00
03/22/2024	GEN 2	33417	CINTAS	BLACK MATS (10)	90.13

03/22/2024	GEN 2	33419#	DJ'S LANDSCAPE MANAGEMENT	CONTRACT MONTHLY INSTALLMENT - FOR GAINES T	2,228.78
03/22/2024	GEN 2	33419	DJ'S LANDSCAPE MANAGEMENT	GAINES TWP LIBRARY, MONTHLY INSTALLMENT	187.00
				CHECK GEN 2 33419 TOTAL FOR FUND 101:	2,415.78
03/22/2024	GEN 2	33420	ELECTION SOURCE	THERMAL PAPER ROLLS, FUTURE VOTER STICKERS 1	416.75
03/22/2024	GEN 2	33421	FIRST UNUM LIFE INSURANCE COMPANY	INSURANCE	1,390.07
03/22/2024	GEN 2	33422	GAINES TOWNSHIP TAX FUND	REIMBURSE TAX FUND FOR AMAZON TAX REFUND	2,292.64
03/22/2024	GEN 2	33423	GORDON WATER	7 5GAL. WATER,H/C COOLER RENT	56.19
03/22/2024	GEN 2	33424	INTEGRA REALTY RESOURCES	APPRAISAL SERVICES (PHASE 1)	8,500.00
03/22/2024	GEN 2	33425	LAMPHEAR SERVICE COMPANY INC	NEW UNIT INSTALLATION OF AIR HANDLER	5,283.80
03/22/2024	GEN 2	33426	MINER SUPPLY COMPANY	TOWELS,40-45 GL LINERS	230.38
03/25/2024	GEN 2	33430#	AMBER VANDERMOLLEN	ELECTION MILEAGE, KCCA MILEAGE, ELECTION COF	199.75
03/25/2024	GEN 2	33430	AMBER VANDERMOLLEN	ELECTION MILEAGE, KCCA MILEAGE, ELECTION COF	9.49
03/25/2024	GEN 2	33430	AMBER VANDERMOLLEN	ELECTION MILEAGE, KCCA MILEAGE, ELECTION COF	55.70
				CHECK GEN 2 33430 TOTAL FOR FUND 101:	264.94
03/25/2024	GEN 2	33431	CHOICE FINANCIAL	2023 HSA CONTRIBUTION	582.99

03/25/2024	GEN 2	33432#	DTE ENERGY	GAS, GANES TWP HALL	1,434.32
03/25/2024	GEN 2	33432	DTE ENERGY	GAS , GAINES TWP LIBRARY	405.33
				CHECK GEN 2 33432 TOTAL FOR FUND 101:	1,839.65
03/28/2024	GEN 2	33436#	AMAZON CAPITAL SERVICES	CLERK, PAPER, LOCK BOX, FILE SORTER, SCISSORS,	214.07
03/28/2024	GEN 2	33436	AMAZON CAPITAL SERVICES	COFFEE, 3 HOLE PUNCH, CLEANER, NOTE PADS, CO	19.99
03/28/2024	GEN 2	33436	AMAZON CAPITAL SERVICES	COFFEE, 3 HOLE PUNCH, CLEANER, NOTE PADS, CO	105.54
03/28/2024	GEN 2	33436	AMAZON CAPITAL SERVICES	PRINTER PAPER FOR ELECTIONS	28.75
				CHECK GEN 2 33436 TOTAL FOR FUND 101:	368.35
03/28/2024	GEN 2	33439	CHARTER COMMUNICATIONS	TELECOMMUNICATIONS	529.90
03/28/2024	GEN 2	33440	CHRIS HOLWERDA	PHONE	25.00
03/28/2024	GEN 2	33441	CONSUMERS ENERGY	ELECTRIC, 7261 DIV. STREET LIGHT	** VOIDED **
03/28/2024	GEN 2	33442#	CONSUMERS ENERGY	TWP HALL	3,526.68
03/28/2024	GEN 2	33442	CONSUMERS ENERGY	TWP ROUND ABOUT	94.30
03/28/2024	GEN 2	33442	CONSUMERS ENERGY	DUTTON CEMETERY	28.77
03/28/2024	GEN 2	33442	CONSUMERS ENERGY	ELECTRIC ,FOR 421 68TH ST. , LIBRARY	631.62
				CHECK GEN 2 33442 TOTAL FOR FUND 101:	4,281.37
03/28/2024	GEN 2	33448#	MIKE VISBARA	ASSESSING MILEAGE, BOR FOOD	29.46
03/28/2024	GEN 2	33448	MIKE VISBARA	ASSESSING MILEAGE, BOR FOOD	47.70
				CHECK GEN 2 33448 TOTAL FOR FUND 101:	77.16

03/28/2024	GEN 2	33449	MINER SUPPLY COMPANY	LIBRARY , FOR JAN. 24 2024	302.67
03/28/2024	GEN 2	33451	STAR 2 STAR COMMUNICATIONS	TELECOMMUNICATIONS	912.74
03/28/2024	GEN 2	33452	THYSSENKRUPP ELEVATOR CORP	ELEVATOR	2,666.88
03/28/2024	GEN 2	33453#	VRIESMAN & KORHORN LLC	0085 MISCELLANEOUS ENGINEERING	243.00
03/28/2024	GEN 2	33453	VRIESMAN & KORHORN LLC	1214 BLAIN CEMETERY EXPANSION	1,134.00
03/28/2024	GEN 2	33453	VRIESMAN & KORHORN LLC	0085 MISCELLANEOUS ENGINEERING	250.37
03/28/2024	GEN 2	33453	VRIESMAN & KORHORN LLC	1199 CALEDONIA MEADOWS	81.00
03/28/2024	GEN 2	33453	VRIESMAN & KORHORN LLC	1297 DUTTON CENTER	567.00
03/28/2024	GEN 2	33453	VRIESMAN & KORHORN LLC	1319 STONEPRO -6141 EAST PARIS	405.00
03/28/2024	GEN 2	33453	VRIESMAN & KORHORN LLC	1323 KPS SOUTHWOOD ELEMENTARY	921.35
03/28/2024	GEN 2	33453	VRIESMAN & KORHORN LLC	1324 KENTWOOD PUBLIC SCHOOLS	1,030.02
03/28/2024	GEN 2	33453	VRIESMAN & KORHORN LLC	1331 - KENTWOOD PUBLIC SCHOOLS	324.00
				CHECK GEN 2 33453 TOTAL FOR FUND 101:	4,955.74
03/28/2024	GEN 2	33454	WEST MICHIGAN DOCUMENT SHREDDING LL	SHREDDING SERVICE	40.00
03/28/2024	GEN 2	33456	CONSUMERS ENERGY	DIVISION AVE STREET LIGHTS	95.49
				Total for fund 101 GENERAL FUND	112,320.64

'#'-INDICATES CHECK DISTRIBUTED TO MORE THAN ONE DEPARTMENT

04/02/2024

CHECK DISBURSEMENT REPORT FOR GAINES CHARTER TOWNSHIP
CHECK DATE FROM 03/01/2024 - 03/31/2024

Check Date	Bank	Check #	Payee	Description	Amount
03/01/2024	GEN 2	33342#	AMAZON CAPITAL SERVICES	BATTERIES	47.75
03/01/2024	GEN 2	33342	AMAZON CAPITAL SERVICES	OFFICE CHAIR	229.99
03/01/2024	GEN 2	33342	AMAZON CAPITAL SERVICES	PAPER TOWELS (3)	68.97
				CHECK GEN 2 33342 TOTAL FOR FUND 205:	346.71
03/01/2024	GEN 2	33344	COMCAST	TELECOMUNICATIONS	237.89
03/01/2024	GEN 2	33345	CONSUMERS ENERGY	ELECTRIC	935.71
03/01/2024	GEN 2	33346#	DTE ENERGY	NATURAL GAS	129.83
03/01/2024	GEN 2	33346	DTE ENERGY	NATURAL GAS	1,054.30
				CHECK GEN 2 33346 TOTAL FOR FUND 205:	1,184.13
03/01/2024	GEN 2	33349	HALT FIRE, INC	GAUGE, PUMP INTAKE	198.02
03/01/2024	GEN 2	33357	MACQUEEN EMERGENCY	TURNOUT GEAR	912.07
03/01/2024	GEN 2	33360	PHOENIX SAFETY OUTFITTERS	FIRE UNIFORMS	688.78
03/01/2024	GEN 2	33360	PHOENIX SAFETY OUTFITTERS	FIRE UNIFORMS	381.42
				CHECK GEN 2 33360 TOTAL FOR FUND 205:	1,070.20

03/01/2024	GEN 2	33361#	T-MOBILE	TELECOMMUNICATIONS	21.60
03/01/2024	GEN 2	33361	T-MOBILE	TELECOMMUNICATIONS	85.70
				CHECK GEN 2 33361 TOTAL FOR FUND 205:	107.30
03/01/2024	GEN 2	33363#	WEX BANK	FUEL	80.00
03/01/2024	GEN 2	33363	WEX BANK	FUEL	1,225.45
				CHECK GEN 2 33363 TOTAL FOR FUND 205:	1,305.45
03/07/2024	GEN 2	33365#	ARROWASTE INC	TRASH REMOVAL	128.79
03/07/2024	GEN 2	33365	ARROWASTE INC	TRASH PICK UP	53.52
				CHECK GEN 2 33365 TOTAL FOR FUND 205:	182.31
03/07/2024	GEN 2	33367	CADE YOUNG	EMS LICENSE RENEWAL	25.00
03/07/2024	GEN 2	33368	CASCADE TOWNSHIP FIRE DEPARTMENT	ANNUAL CONTRIBUTION	2,000.00
03/07/2024	GEN 2	33370	CONSUMERS ENERGY	ELECTRIC	1,038.09
03/07/2024	GEN 2	33376#	FIRST BANKCARD CENTER	JOBS SPONSORED ON INDEED.COM, PRINTER,USFCR CONTRACTOR PACKAGE WITH SAM REGISTRATION	199.66
03/07/2024	GEN 2	33376	FIRST BANKCARD CENTER	JOBS SPONSORED ON INDEED.COM, PRINTER,USFCR CONTRACTOR PACKAGE WITH SAM REGISTRATION	85.42
03/07/2024	GEN 2	33376	FIRST BANKCARD CENTER	JOBS SPONSORED ON INDEED.COM, PRINTER,USFCR CONTRACTOR PACKAGE WITH SAM REGISTRATION	199.66
03/07/2024	GEN 2	33376	FIRST BANKCARD CENTER	JOBS SPONSORED ON INDEED.COM, PRINTER,USFCR CONTRACTOR PACKAGE WITH SAM REGISTRATION	85.42
				CHECK GEN 2 33376 TOTAL FOR FUND 205:	570.16

03/07/2024	GEN 2	33377	GAINES WATER & SEWER FUND	FIRE PROTECTION, SEWER USAGE, WATER USAGE	169.06
03/07/2024	GEN 2	33380#	JACK'S LAWN & SNOWPLOWING, INC	SNOWPLOWING	981.72
03/07/2024	GEN 2	33380	JACK'S LAWN & SNOWPLOWING, INC	SNOWPLOWING	981.72
				CHECK GEN 2 33380 TOTAL FOR FUND 205:	1,963.44
03/07/2024	GEN 2	33381	KENT COUNTY TREASURER	GAINES CP OFFICER- JAN 2024, TOWNSHIP LAW - JAN. 2024	115,337.91
03/07/2024	GEN 2	33383	KLEYN MOBILE REPAIR LLC	ENGINE REPAIR	684.20
03/07/2024	GEN 2	33388	TOTAL FIRE PROTECTION	ANNUAL FIRE ALARM MONITORING	540.00
03/07/2024	GEN 2	33390#	WEX BANK	FUEL	900.34
03/07/2024	GEN 2	33390	WEX BANK	FUEL	16.54
				CHECK GEN 2 33390 TOTAL FOR FUND 205:	916.88
03/15/2024	GEN 2	33392#	AMAZON CAPITAL SERVICES	TRAINING, NOTEBOOK AND GEL PENS	58.47
03/15/2024	GEN 2	33392	AMAZON CAPITAL SERVICES	HAND TOWEL, COFFEE	168.80
03/15/2024	GEN 2	33392	AMAZON CAPITAL SERVICES	TRAINING, NOTEBOOK AND GEL PENS	62.56
03/15/2024	GEN 2	33392	AMAZON CAPITAL SERVICES	DFD HOSE NOZZLE, RAZOR BLADE	17.00
				CHECK GEN 2 33392 TOTAL FOR FUND 205:	306.83
03/15/2024	GEN 2	33395#	BUSINESS SYSTEM SOLUTIONS, INC	MONTHLY BILLING FOR MARCH,GEN. ADMINISTRATION,CFD,DFD	1,095.45
03/15/2024	GEN 2	33395	BUSINESS SYSTEM SOLUTIONS, INC	MONTHLY BILLING FOR MARCH,GEN. ADMINISTRATION,CFD,DFD	485.00
				CHECK GEN 2 33395 TOTAL FOR FUND 205:	1,580.45

03/15/2024	GEN 2	33396	COMCAST	TELECOMMUNICATIONS	308.28
03/15/2024	GEN 2	33397#	DELTA DENTAL		517.06
03/15/2024	GEN 2	33397	DELTA DENTAL		323.57
				CHECK GEN 2 33397 TOTAL FOR FUND 205:	840.63
03/15/2024	GEN 2	33399	FIRST BANKCARD CENTER	CFD FITNESS EQUIP, FOOD, SHIPPING	25.42
03/15/2024	GEN 2	33399	FIRST BANKCARD CENTER	CFD FITNESS EQUIP, FOOD, SHIPPING	79.87
03/15/2024	GEN 2	33399	FIRST BANKCARD CENTER	CFD FITNESS EQUIP, FOOD, SHIPPING	113.02
03/15/2024	GEN 2	33399	FIRST BANKCARD CENTER	CFD FITNESS EQUIP, FOOD, SHIPPING	533.59
				CHECK GEN 2 33399 TOTAL FOR FUND 205:	751.90
03/15/2024	GEN 2	33400	FIRST BANKCARD CENTER	VAN HALL DFD HEX PLUG	8.26
03/15/2024	GEN 2	33406	MARK GROOTERS	CFD EMT 2024	25.00
03/15/2024	GEN 2	33410	SAFEWARE INC	DFD LEL SENOR	137.17
03/22/2024	GEN 2	33413#	ACCIDENT FUND	INSURANCE	3,997.13
03/22/2024	GEN 2	33413	ACCIDENT FUND	INSURANCE	3,067.57
				CHECK GEN 2 33413 TOTAL FOR FUND 205:	7,064.70
03/22/2024	GEN 2	33414	AMAZON CAPITAL SERVICES	DFD , BUTTER DISH,FRIDGE MAGNETS,PAPER CLIPS,ORGANIZER,PENS	31.70
03/22/2024	GEN 2	33414	AMAZON CAPITAL SERVICES	DFD , BUTTER DISH,FRIDGE MAGNETS,PAPER CLIPS,ORGANIZER,PENS	36.86
03/22/2024	GEN 2	33414	AMAZON CAPITAL SERVICES	PAD HOLDER LOCK	29.95
				CHECK GEN 2 33414 TOTAL FOR FUND 205:	98.51

03/22/2024	GEN 2	33415	BOUND TREE MEDICAL LLC	SILICONE NASOPHARYNGEAL AIRWAY	2.89
03/22/2024	GEN 2	33415	BOUND TREE MEDICAL LLC	LANCET SURGILANCE,CURAPLEX OB KIT,GAUZE,HYFIN	
				CHEST SEAL,BANDAGE,NASOPHARYNGEAL AIRWAY	335.33
				CHECK GEN 2 33415 TOTAL FOR FUND 205:	338.22
03/22/2024	GEN 2	33418#	DINGES PARTNERS GROUP LLC	FIRE - BRAKE, 5 GALLON PAIL. CFD	545.00
03/22/2024	GEN 2	33418	DINGES PARTNERS GROUP LLC	DFD FIRE- BRAKE 5 GALLON	358.16
				CHECK GEN 2 33418 TOTAL FOR FUND 205:	903.16
03/22/2024	GEN 2	33422	GAINES TOWNSHIP TAX FUND	REIMBURSE TAX FUND FOR AMAZON TAX REFUND	2,567.89
03/22/2024	GEN 2	33427	PHOENIX SAFETY OUTFITTERS	FIRE BOOTS	755.49
03/22/2024	GEN 2	33429	STAR 2 STAR COMMUNICATIONS	TELECOMMUNICATIONS	469.78
03/25/2024	GEN 2	33432#	DTE ENERGY	GAS ,CFD	102.78
03/25/2024	GEN 2	33432	DTE ENERGY	GAS, DFD	745.93
				CHECK GEN 2 33432 TOTAL FOR FUND 205:	848.71
03/25/2024	GEN 2	33433#	WEX BANK	DFD, CFD, FUEL,	59.77
03/25/2024	GEN 2	33433	WEX BANK	DFD, CFD, FUEL,	1,243.78
				CHECK GEN 2 33433 TOTAL FOR FUND 205:	1,303.55

03/28/2024	GEN 2	33436#	AMAZON CAPITAL SERVICES	CFD, TRASH BAGS,OFFICE CHAIR	19.49
03/28/2024	GEN 2	33436	AMAZON CAPITAL SERVICES	CFD, INK CARTRIDGE	106.89
				CDF, OFFICE CHAIR,DISHWASHER AND DETERGENT SOAP	
03/28/2024	GEN 2	33436	AMAZON CAPITAL SERVICES	PODS, PAPER TOWELS	51.01
03/28/2024	GEN 2	33436	AMAZON CAPITAL SERVICES	CFD,PAPER TOWELS,FOAM, FLARE (36)PA	93.91
				CFD PICTURE HANGER, HOOD CATCH, WHITE BOARD, EXAM	
03/28/2024	GEN 2	33436	AMAZON CAPITAL SERVICES	GLOVES, MARKERS	130.05
03/28/2024	GEN 2	33436	AMAZON CAPITAL SERVICES	CFD,PAPER TOWELS,FOAM, FLARE (36)PA	145.00
				CFD PICTURE HANGER, HOOD CATCH, WHITE BOARD, EXAM	
03/28/2024	GEN 2	33436	AMAZON CAPITAL SERVICES	GLOVES, MARKERS	94.41
03/28/2024	GEN 2	33436	AMAZON CAPITAL SERVICES	CFD, TRASH BAGS,OFFICE CHAIR	191.99
				CDF, OFFICE CHAIR,DISHWASHER AND DETERGENT SOAP	
03/28/2024	GEN 2	33436	AMAZON CAPITAL SERVICES	PODS, PAPER TOWELS	191.99
				DFD STORAGE ORGANIZER, AIR FRESHENER,WALL HOOKS,	
03/28/2024	GEN 2	33436	AMAZON CAPITAL SERVICES	DISHWASHER SOAP, PAPER TOWELS	109.47
				DFD STORAGE ORGANIZER, AIR FRESHENER,WALL HOOKS,	
03/28/2024	GEN 2	33436	AMAZON CAPITAL SERVICES	DISHWASHER SOAP, PAPER TOWELS	21.98
				CHECK GEN 2 33436 TOTAL FOR FUND 205:	1,156.19
03/28/2024	GEN 2	33437	BOUND TREE MEDICAL LLC	CFD BANDAGES, BLOOD PRESSURE CUP, LANCET	149.46
				CFD AIRWAY, DEFIBRILLATION ELECTRODE, O2 MASK,	
03/28/2024	GEN 2	33437	BOUND TREE MEDICAL LLC	CLAMP AND SCISSORS	237.02
				CHECK GEN 2 33437 TOTAL FOR FUND 205:	386.48
03/28/2024	GEN 2	33438	BYRON TOWNSHIP TREASURER	CFD WATER SEWER	231.80
03/28/2024	GEN 2	33442	CONSUMERS ENERGY	DFD	884.30
03/28/2024	GEN 2	33443	DARRYL OLIVER	DFD, EMS LICENSE RENEWAL	25.00
03/28/2024	GEN 2	33446	KENT COUNTY TREASURER	FEB. GAINES CP OFFICER, TWP LAW	118,715.13

03/28/2024	GEN 2	33447	MACQUEEN EMERGENCY	CFD, LEATHER FRONT WITH RAISED LETTERS	70.23
03/28/2024	GEN 2	33447	MACQUEEN EMERGENCY	CFD, CENTER RAISED LETTERS,GOLD BADGE	120.15
				CHECK GEN 2 33447 TOTAL FOR FUND 205:	190.38
03/28/2024	GEN 2	33450#	RESCUE RESOURCES LLC	DFD-CFD EFORCE FULL SET	28.12
03/28/2024	GEN 2	33450	RESCUE RESOURCES LLC	DFD-CFD EFORCE FULL SET	1,170.00
03/28/2024	GEN 2	33450	RESCUE RESOURCES LLC	DFD-CFD EFORCE FULL SET	28.13
03/28/2024	GEN 2	33450	RESCUE RESOURCES LLC	DFD-CFD EFORCE FULL SET	585.00
				CHECK GEN 2 33450 TOTAL FOR FUND 205:	1,811.25
03/28/2024	GEN 2	33455	ZYLSTRA DOOR INC	CFD DOOR REPAIR AFTER HOURS	994.90
				Total for fund 205 PUBLIC SAFETY SAD	272,428.49

'#'-INDICATES CHECK DISTRIBUTED TO MORE THAN ONE DEPARTMENT

04/02/2024

CHECK DISBURSEMENT REPORT FOR GAINES CHARTER TOWNSHIP
CHECK DATE FROM 03/01/2024 - 03/31/2024

Check Date	Bank	Check #	Payee	Description	Amount
03/01/2024	GEN 2	33342	AMAZON CAPITAL SERVICES	KEYBOARD AND MOUSE, MONITOR, STANDING DESK	458.42
03/01/2024	GEN 2	33352	INTEGRITY OFFICE	OFFICE SUPPLIES	231.81
03/01/2024	GEN 2	33361	T-MOBILE	TELECOMMUNICATIONS	43.20
03/01/2024	GEN 2	33361	T-MOBILE	TELECOMMUNICATIONS	727.99
				CHECK GEN 2 33361 TOTAL FOR FUND 549:	771.19
03/07/2024	GEN 2	33376	FIRST BANKCARD CENTER	JOBS SPONSORED ON INDEED.COM, PRINTER,USFCR CONTRACTOR PACKAGE WITH SAM REGISTRATION	170.84
03/15/2024	GEN 2	33392	AMAZON CAPITAL SERVICES	KEYBOARD AND MOUSE WITH CREDIT MEMO 11QV-76LF-FMWR	64.99
03/15/2024	GEN 2	33392	AMAZON CAPITAL SERVICES	KEYBOARD AND MOUSE WITH CREDIT MEMO 11QV-76LF-FMWR	(59.99)
				CHECK GEN 2 33392 TOTAL FOR FUND 549:	5.00
03/15/2024	GEN 2	33397	DELTA DENTAL		92.28
03/22/2024	GEN 2	33428	PROFESSIONAL CODE INSPECTIONS INC	INSPECTIONS FOR MECHANICAL, PLUMBING,AND ELECTRICAL	12,929.50
03/28/2024	GEN 2	33444	INTEGRITY OFFICE	NAME PLATE	13.05
03/28/2024	GEN 2	33445	INTRNL ASSOC OF ELECTRIC INSPECTORS	MEMBERSHIP RENEWAL	105.00
				Total for fund 549 BUILDING INSPECTIONS DEPT	14,777.09

03/29/2024 11:56 AM		CHECK REGISTER FOR GAINES CHARTER TOWNSHIP		Page: 1/1
User: TRACY		CHECK DATE FROM 03/01/2024 - 03/31/2024		
DB: Gaines Township				
Check Date	Check	Vendor Name	Description	Amount
Bank WSCK2 WATER/SEWER CHECKING				
03/20/2024	5771	BYRON GAINES UTILITY AUTHORITY	FEB 24 OP EXP, METERS & MXUS	168,528.38
			WYOMING WATER & SEWER FEB 24	234,285.19
			OP EXP PAYROLL, INSP	40,514.89
				443,328.46
03/20/2024	5772	EXTEND YOUR REACH	FEB 24 BILLING	367.70
03/20/2024	5773	MIKA MEYERS BECKETT & JONES	INTERFUND LOAN OPINION, INT RATE FOR 202	240.00
03/20/2024	5774	VRIESMAN & KORHORN	KPS WATER MTR BLDG	321.00
			4640 60TH GROOTERS	162.00
			RAPIDS DR EXT	538.78
			THORNAPPLE FARMS	432.00
			PINE REST CHILDRENS HOSP	621.00
			PRAIRIE WOLF LIFT STATION	1,620.00
			PRAIRIE WOLF STATION	243.00
			THORNAPPLE FARMS TRUNK SEWER	864.00
			THORNAPPLE FARMS PH2	405.00
			DUTTON CHR MIDDLE SCHOOL	1,782.00
			ASHFORD WOODS PH 1B	2,866.02
			PRAIRIE WOLF UTILITY EXT	1,134.00
			MISC WATER SYS	1,165.02
			MISC SEWER SYS	702.35
			GPS UTILITY PICKUP	270.00
			WATER/SEWER ADMIN	139.50
				13,265.67
WSCK2 TOTALS:				
Total of 4 Checks:				457,201.83
Less 0 Void Checks:				0.00
Total of 4 Disbursements:				457,201.83

GAINES CHARTER TOWNSHIP
LAURIE J LEMKE, TREASURER
CASH, INVESTMENTS; CD'S , MM AND POOL ACCOUNTS
February of 2024

Date	Bank	Type	Amount	APR	Term	Maturity Date
GENERAL FUND						
	Macatawa Checking	Ckg	\$ 3,258,840.23		4.07%	
419	Sidewalk & Trails	Assigned	\$ 15,765.75			
420	CFD - Truck Fund	Assigned	\$ 400,000.00			
422	DFD - Truck Fund	Assigned	\$ -			
425	Cemetery	Assigned	\$ 10,000.00			
426	Township Hall & Grounds	Assigned	\$ 44,129.00			
427	Division Ave. Improvements	Assigned	\$ 24,000.69			
	Total General Fund Checking		\$ 3,752,735.67			
Macatawa MM Savings						
PA245 of 1999	Building Department	Restricted	\$ 1,778,327.00			
PA188 of 1954	Streetlights	Restricted	\$ 110,565.00			
	GF Investment		\$ 777,675.93			
	Interest Paid to Date		\$ 100,636.68			
		127409	\$ 2,767,204.61		4.07%	
Investments						
2/4/1998	Kent Co. Pool - General	Pooled	\$ 1,182,589.02		3.90%	
5.19.2015	Michigan Class	Pooled	\$ 919,840.11		5.45%	
6.5.2023	CIBC	CD	\$ 550,000.00		5.20% 365 Days	6.4.2024
4.4.2023	Consumers Credit Union	CD	\$ 311,980.10		4.50% 18 Mos.	10.4.2024
			\$ 2,964,409.23			
	GENERAL FUND TOTAL		\$ 9,484,349.51			
4.15.2022	Kent Co. Pool - ARPA Funds	Pooled	\$ 2,203,176.02		3.90%	
	DIVISION AVE CORRIDOR		\$ 15,482.04			
	TRUST & AGENCY		\$ 291,519.15			
	TAX FUND		\$ 6,033,447.41			
	PETTY CASH		\$ 267.25			

WATER & SEWER						
Date issued	Bank		Amount	APR	Term	Maturity Date
8.1.2021	Macatawa Bank	Checking	\$ 2,654,578.04	4.07%		
2/17/1998	Kent Co. Pool	Pooled	\$ 9,595,109.22	3.90%		
8.1.2017	Michigan Class	Pooled	\$ 1,674,375.98	5.45%		
6.1.2015	Consumers Credit Union	Share	\$ 27.74			
6.1.2015	Consumers Credit Union	MMM	\$ 369,912.83	3.50%		
12.1.2022	Huntington Investments	Meeder PF	\$-			
3.26.2023	Grand River Bank	CD	\$ 302,862.92	4.65%	12 Months	4.3.2024
4.7.2022	West MI Community Bank	CDars	\$ 311,454.98	3.92%	52 Weeks	4.4.2024
4.9.2023	Choice One Bank	CD	\$ 251,422.02	4.33%	12 Months	4.9.2024
11.9.2023	Horizon Bank	CD	\$ 600,000.00	5.17%	6 Months	5.9.2024
6.1.2023	Choice One Bank	CD	\$ 1,002,774.76	5.13%	12 Months	6.1.2024
6.8.2023	West MI Community Bank	CDars	\$ 521,115.02	4.64%	52 Weeks	6.6.2024
7.21.2023	West MI Community Bank	CD	\$ 750,000.00	5.25%	365 Days	7.20.2024
8.10.2023	CIBC USA Bank	CD	\$ 1,013,066.66	5.40%	365 Days	8.9.2024
9.14.2023	Horizon	CD	\$ 1,081,139.20	5.06%	365 Days	9.19.2024
10.20.2022	Mercantile Bank of MI	CD	\$ 1,056,422.64	5.25%	365 Days	10.23.2024
11.7.2024	Flagstar Bank	CD	\$ 1,029,019.47	5.08%	12 Months	11.7.2024
6.19.2023	First National Bank of A	CD	\$ 523,813.36	4.40%	18 Months	12.17.2024
10.5.2023	Flagstar Bank	CD	\$ 1,059,556.17	5.08%	17 Months	3.3.2025
2.16.2024	Macatawa Bank	CD	\$ 779,535.61	431.00%	13 Months	3.17.2025
	Restricted W&S Fees	Committed	\$ 24,576,186.62			



MEMO

Staff Communication

DATE: April 8th, 2024

TO: Gaines Charter Township Board of Trustees

FROM: Dan Wells, Community Development Director; Dakota Swan, Assistant Planner

RE: 7610 Division Avenue SE – Rezone from Heavy Industrial to Neighborhood Commercial

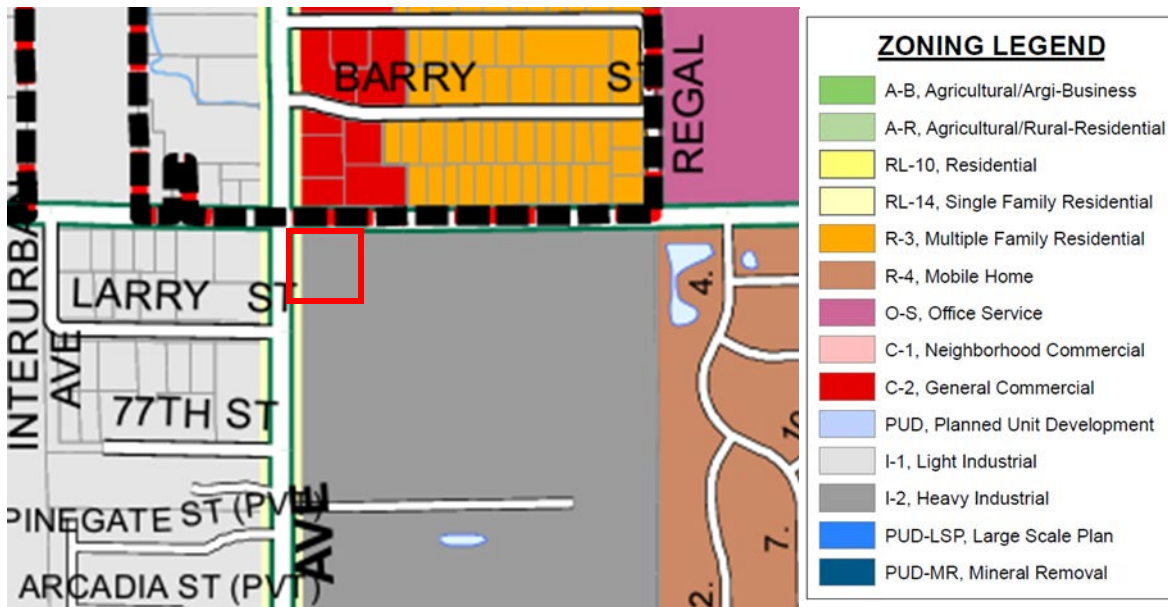
SUMMARY OF TOPIC:

The applicant requests the rezoning of 1.0-acre of a 2.3-acre parcel of land from Heavy Industrial (I-2) to Neighborhood Commercial (NC).

The subject parcel is located at the intersection of 76th and Division and is currently partially vacant, and partially developed with a self-storage facility. The vacant portion of the parcel is subject to rezoning request and redevelopment, the storage facility will remain in place. The final use of the parcel is undetermined at this point, however, there is confidence that this busy corner of the township will be an ideal location for a neighborhood commercial enterprise.

Surrounding zoning:

	NORTH: General Commercial (C-2)	
WEST: Byron Township	SUBJECT PARCEL	EAST: Heavy Industrial (I-2)
	SOUTH: Heavy Industrial (I-2)	



Current Zoning

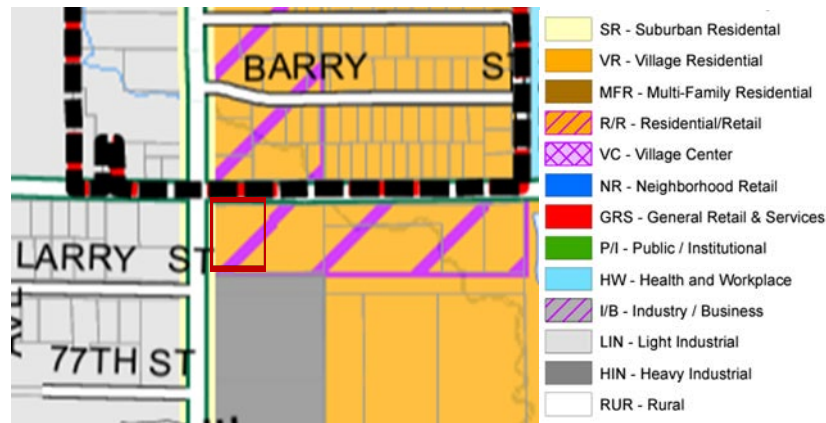
STANDARDS OF REVIEW

The request has been reviewed using the applicable review standards of Section 27.4, Review Standards for Amendments, which states:

In reviewing an application for the rezoning of land, whether the application is made without or with an offer of conditions (as in a conditional rezoning request), factors that should be considered by the Planning Commission and the Township Board include, but are not limited to, the following:

A. Whether the proposed rezoning is consistent with the policies and uses proposed for that area in the Township's Master Land Use Plan;

Meets standard. The Township's current Future Land Use Plan designates the subject area parcel as Residential/Retail which is best described as a mixed-use category combining Neighborhood Commercial with Medium density residential. The applicant is requesting a rezoning to NC, which in the Master Plan is outlined as Neighborhood Retail.



Future Land Use Plan

From the Master Plan regarding “Residential and Neighborhood Retail and Services”:

Neighborhood Commercial development would be allowed on main roads, in existing commercial buildings, or designated commercial areas within the overall development. The intent is to integrate the commercial with the surrounding neighborhood, not to mix the uses in a checkerboard, but to allow low intensity commercial activity adjacent to Village Residential (medium density) use.

Buffer areas between the two may include narrow parking lots, fencing, or landscaped areas. Pedestrian access between the two should be well integrated with sidewalks and pleasantly landscaped to promote a walkable connection. Site improvements should be included that encourage the use of alternative forms of transportation (e.g., bike racks, transit shelters).

These lots were considered for NC designation due to this being a “gateway” into the township from US-131 to the west. The current uses of surrounding properties are not conducive to residential use, and in that sense pure commercial use might be considered appropriate at this time.

Regarding “Neighborhood Retail and Services” in the Master Plan:

Small scale and designed to provide goods, restaurants, and services primarily to meet the needs of the immediate neighborhood and township residents. Facilities will be developed in harmony with the area’s natural features and in a scale and form to encourage pedestrian and multi-modal access and to minimize auto-pedestrian conflicts.

B. *Whether all of the uses and structures allowed under the proposed rezoning would be compatible with other zones and uses in the surrounding area;*

Meets standard. The parcel in question is in a transitional commercial area, with industrial to the south, and commercial use to the west and east. There are residential homes on the north side of 76th and Brookshire Meadows mobile home park ca. 725 feet to the east. Neighborhood Commercial zoning on this specific parcel would not conflict with any of the current uses on immediately surrounding properties which include self-storage, a nearly abandoned industrial building to the south and the 76th Street/Division Avenue intersection which are four and five-lane roads.

C. *Whether any public services and facilities would be significantly adversely impacted by a development or use allowed under the requested rezoning;*

Meets standard. The area is served by all utilities necessary for commercial use and would not be adversely affected by development.

D. *Whether the proposed zoning would be reasonable;*

Meets standard. Any of the uses listed under Neighborhood Commercial would be appropriate for this parcel, and development of this lot would be an improvement to the corner, and a signal of reinvestment in the Division corridor.

E. *Whether circumstances in the area have changed;*

Meets standard. This stretch of Division has seen very little reinvestment over the last decade. However, the Brewer Park Apartments a mile to the south were recently approved and are anticipated to be built over the next 2-3 years.

F. *Whether the uses allowed under the proposed rezoning would be equally or better suited to the area than uses allowed under the current zoning of the land.*

Meets standard. Due to the limited size of the parcel and its location at a crossroad, it is better suited for commercial development than industrial. It is unlikely to attract industrial users engaging in actual manufacturing, and other industrial uses would likely be considered eyesores on this high visibility corner.

FINANCIAL IMPACT:

This project is not anticipated to have a financial impact on the township. Costs associated with the review process are borne by the applicant through administrative and escrow fees.

BUDGET ACTION REQUIRED:

N/A.

RECOMMENDATION:

The Planning Commission held a public hearing on February 22nd, 2024, and recommended approval to the Township Board of Trustees based on the standards of 27.4 being met.

The Planning Commission recommended a condition be applied; the parcel will be divided into two parcels within 60 days of board approval, contingent on the rezoning to separate the two zoning categories.

This is the second read and public hearing for the Township Board of Trustees, and the rezone may be considered for a final decision. If the rezone is approved, it will be noticed in a newspaper and become effective 7 days after publication.

**GAINES CHARTER TOWNSHIP
KENT COUNTY, MICHIGAN
(ORDINANCE NO. ____)**

At a _____ meeting of the Township Board for Gaines Charter Township held at the Township offices on _____, 2024, beginning at ____ p.m., the following Ordinance was offered for adoption by Township Board Member _____, and was seconded by Township Board Member _____:

**AN ORDINANCE TO AMEND THE GAINES CHARTER TOWNSHIP ZONING
ORDINANCE AS PROVIDED FOR IN CHAPTER 27 THEREOF BY AMENDING
SECTION 1.6 AND THE TOWNSHIP ZONING MAP**

THE CHARTER TOWNSHIP OF GAINES (the “Township”) ORDAINS:

Section 1. Amendment. The Gaines Charter Township Zoning Ordinance is hereby amended by the amendment of Section 1.6 thereof, the Zoning Map, so as to rezone the following property from Heavy Industrial (I-2) to Neighborhood Commercial (NC), the land being commonly described as parcel 41-22-18-101-020 located at 7610 Division Avenue Southeast. The legal description is as follows:

The North 300 feet of the West 223 feet of the NW ¼ of Section 18, Township 5 N, Range 11 W, Gaines Township, Kent County, Michigan

Section 2. Effective Date. This Ordinance shall become effective seven (7) days after a summary is published in a newspaper of general circulation within the Township.

The vote in favor of this Ordinance was as follows:

YEAS: _____

NAYS: _____

ABSENT/ABSTAIN: _____

ORDINANCE DECLARED ADOPTED

Township Board Ordinance No. 24-_____
_____, 2024

CERTIFICATION

I hereby certify that the above is a true copy of an Ordinance adopted by the Township Board for Gaines Charter Township at the time, date, and place specified above pursuant to the required statutory procedures.

Respectfully submitted,

By _____

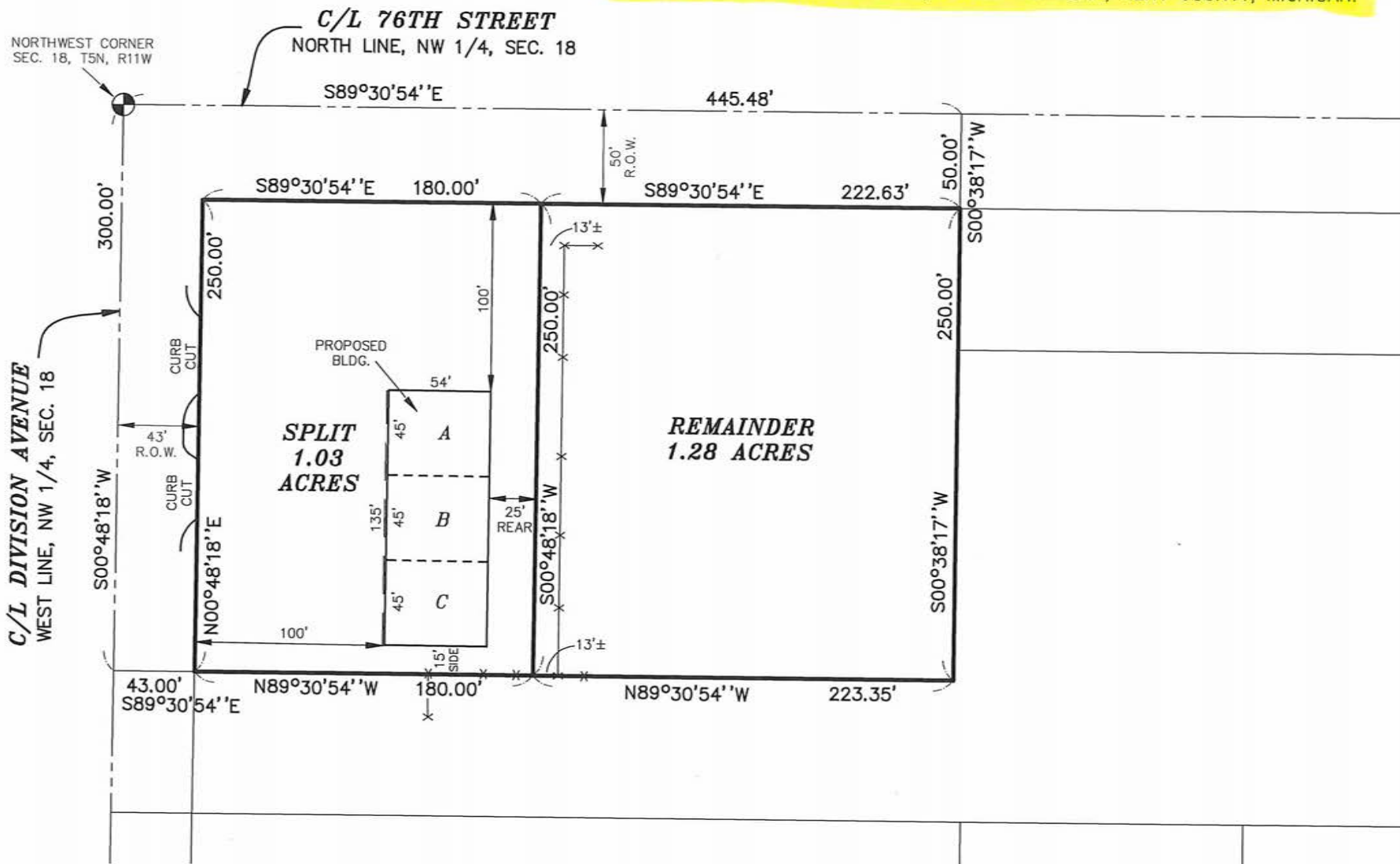
Michael Brew

Gaines Charter Township Clerk

I-1 LIGHT INDUSTRIAL LAYOUT

LEGAL DESCRIPTION OF CORNER PARCEL FOR REZONING:

THE NORTH 300 FEET OF THE WEST 223 FEET OF THE NW 1/4 OF SECTION 18,
TOWN 5 NORTH, RANGE 11 WEST, GAINES TOWNSHIP, KENT COUNTY, MICHIGAN.





MEMO

Staff Communication

DATE: April 8th, 2024

TO: Gaines Charter Township Board of Trustees

FROM: Dan Wells, Community Development Director

RE: Hoffman Meadows Phase 2 Preliminary Plat

SUMMARY OF TOPIC:

The applicant requests approval of the Preliminary Plat for Phase 2 of Hoffman Meadows. Phase 2 is 15.36 acres and includes 55 single-family detached home lots (numbers 41-95). The Gaines Charter Township Board of Trustees gave tentatively preliminary approval for Phase II at a regular meeting held on December 11, 2023.

Surrounding zoning:

	NORTH: RL-10/PUD	
WEST: RL-10/RL-14	SUBJECT PARCEL	EAST: PUD (Sienna Pointe/Alexander Trails)
	SOUTH: RL-14	

FINANCIAL IMPACT:

The project is not anticipated to have a negative financial impact on the Township. The applicant bears costs associated with the review process through administrative and escrow review fees. Water and sewer extension and connections, road construction, and stormwater management improvements will be at the expense of the developer. Tax revenue will increase with the improvement of the property.

BUDGET ACTION REQUIRED:

N/A.

REVIEW:

The Preliminary Plat has received approvals from the following entities:

- Kent County Drain Commission
- Kent County Road Commission
- Kent County Plat Board

Approvals are not necessary from State Department of Transportation, Kent County Health Department.

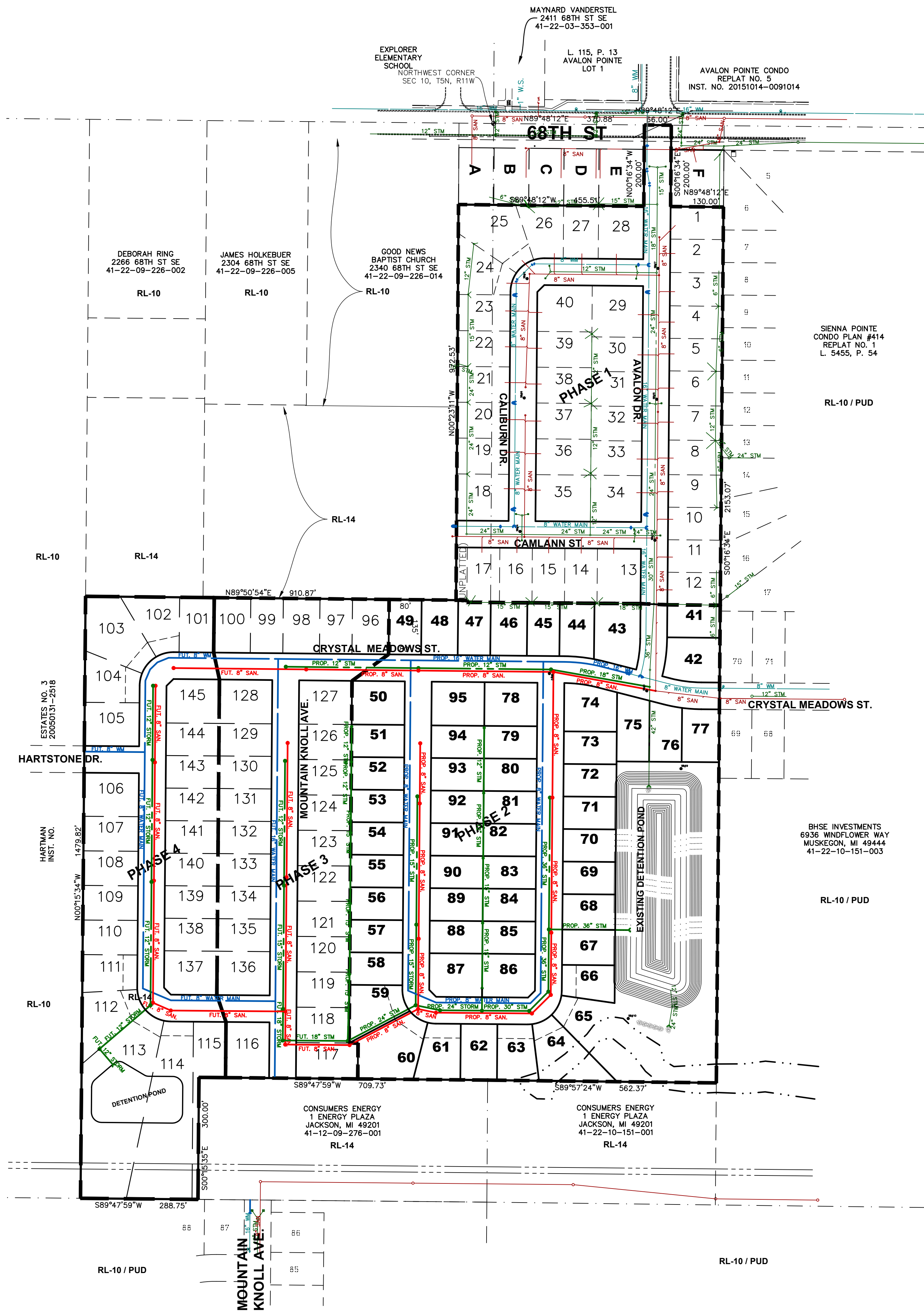
Approval or a waiver from review has not been provided by the applicant by the Department of Environment, Great Lakes and Energy.

STAFF RECOMMENDATION:

If the applicant can provide documentation from EGLE that Department review is not necessary, staff recommends approval. If not, Staff recommends tabling the decision until that is provided.

Final Plat approval is recommended with the following conditions:

1. Staff shall confirm that no less than five house models that meet the requirements of the GCTZO Section 6.4 A are built within the Plat.
2. Staff shall enforce the street tree requirement of the GCTZO Section 16.13 A at the time of building permitting.
3. The applicant shall request the creation of a Street Light Assessment District before applying for residential building permits.
4. All infrastructure, including roads, sidewalks, stormwater facilities, and utilities, shall be completed unless a performance guarantee, such as a bond, is posted to ensure completion. The Township Engineer and Community Development Director shall confirm that all performance guarantees are in place.
5. The Township Clerk notation shall be updated to Michael Brew, Township Clerk.



LOT AREAS

LOT #	AREA	LOT #	AREA
1	10,400 SQ. FT.	74	14,401 SQ. FT.
2	10,660 SQ. FT.	75	12,783 SQ. FT.
3	10,660 SQ. FT.	76	11,242 SQ. FT.
4	10,400 SQ. FT.	77	11,976 SQ. FT.
5	10,400 SQ. FT.	78	13,928 SQ. FT.
6	11,050 SQ. FT.	79	10,400 SQ. FT.
7	11,050 SQ. FT.	80	10,400 SQ. FT.
8	11,050 SQ. FT.	81	10,400 SQ. FT.
9	10,400 SQ. FT.	82	10,400 SQ. FT.
10	10,400 SQ. FT.	83	10,400 SQ. FT.
11	10,400 SQ. FT.	84	10,400 SQ. FT.
12	10,400 SQ. FT.	85	10,400 SQ. FT.
13	14,415 SQ. FT.	86	13,766 SQ. FT.
14	10,778 SQ. FT.	87	13,768 SQ. FT.
15	10,778 SQ. FT.	88	10,400 SQ. FT.
16	10,778 SQ. FT.	89	10,400 SQ. FT.
17	10,778 SQ. FT.	90	10,400 SQ. FT.
18	14,878 SQ. FT.	91	10,400 SQ. FT.
19	11,313 SQ. FT.	92	10,400 SQ. FT.
20	11,306 SQ. FT.	93	10,400 SQ. FT.
21	11,324 SQ. FT.	94	10,400 SQ. FT.
22	11,337 SQ. FT.	95	13,965 SQ. FT.
23	11,481 SQ. FT.	96	12,150 SQ. FT.
24	14,082 SQ. FT.	97	10,800 SQ. FT.
25	20,213 SQ. FT.	98	12,150 SQ. FT.
26	12,533 SQ. FT.	99	10,800 SQ. FT.
27	11,180 SQ. FT.	100	12,150 SQ. FT.
28	14,430 SQ. FT.	101	11,475 SQ. FT.
29	15,770 SQ. FT.	102	14,392 SQ. FT.
30	10,625 SQ. FT.	103	21,585 SQ. FT.
31	10,625 SQ. FT.	104	13,637 SQ. FT.
32	10,625 SQ. FT.	105	14,425 SQ. FT.
33	10,625 SQ. FT.	106	14,433 SQ. FT.
34	14,261 SQ. FT.	107	11,466 SQ. FT.
35	15,427 SQ. FT.	108	11,468 SQ. FT.
36	11,902 SQ. FT.	109	11,470 SQ. FT.
37	11,878 SQ. FT.	110	11,472 SQ. FT.
38	11,882 SQ. FT.	111	12,041 SQ. FT.
39	11,880 SQ. FT.	112	16,952 SQ. FT.
40	15,245 SQ. FT.	113	62,891 SQ. FT.
41	10,400 SQ. FT.	114	51,224 SQ. FT.
42	14,322 SQ. FT.	115	15,337 SQ. FT.
43	16,807 SQ. FT.	116	14,652 SQ. FT.
44	11,260 SQ. FT.	117	13,368 SQ. FT.
45	10,438 SQ. FT.	118	11,310 SQ. FT.
46	11,726 SQ. FT.	119	11,310 SQ. FT.
47	10,514 SQ. FT.	120	11,310 SQ. FT.
48	12,150 SQ. FT.	121	11,310 SQ. FT.
49	10,800 SQ. FT.	122	11,310 SQ. FT.
50	13,928 SQ. FT.	123	11,310 SQ. FT.
51	10,400 SQ. FT.	124	11,310 SQ. FT.
52	10,400 SQ. FT.	125	11,310 SQ. FT.
53	10,400 SQ. FT.	126	11,310 SQ. FT.
54	10,400 SQ. FT.	127	13,965 SQ. FT.
55	10,400 SQ. FT.	128	14,020 SQ. FT.
56	10,400 SQ. FT.	129	10,400 SQ. FT.
57	10,400 SQ. FT.	130	10,400 SQ. FT.
58	10,400 SQ. FT.	131	10,400 SQ. FT.
59	14,466 SQ. FT.	132	10,400 SQ. FT.
60	21,235 SQ. FT.	133	10,400 SQ. FT.
61	13,629 SQ. FT.	134	10,400 SQ. FT.
62	12,395 SQ. FT.	135	10,400 SQ. FT.
63	13,033 SQ. FT.	136	14,002 SQ. FT.
64	18,984 SQ. FT.	137	13,858 SQ. FT.
65	215,786 SQ. FT.	138	10,400 SQ. FT.
66	10,931 SQ. FT.	139	10,400 SQ. FT.
67	11,310 SQ. FT.	140	10,400 SQ. FT.
68	11,310 SQ. FT.	141	10,400 SQ. FT.
69	10,400 SQ. FT.	142	10,400 SQ. FT.
70	10,400 SQ. FT.	143	10,400 SQ. FT.
71	10,400 SQ. FT.	144	10,400 SQ. FT.
72	10,400 SQ. FT.	145	13,913 SQ. FT.
73	10,400 SQ. FT.		

PROPERTY DESCRIPTION:

Part of the Northeast 1/4 of Section 9 and the Northwest 1/4 of Section 10; Commencing 85.02 feet S89°50'54"W along the North Section line and 1042.88 feet S00°23'11"E from the Northeast 1/4 corner of Section 9; thence S00°23'11"E 129.72 feet; thence S89°50'54"W 910.87 feet to the East line of the West 330 feet of the East 1/2 of the Northeast 1/4 of said Section 9; thence S00°15'34"E 1479.82 feet along said East line to the East and West 1/4 line of said Section 9; thence N89°47'59"E 288.75 feet along said East and West 1/4 line to the East line of the West 618.75 feet of the East 1/2 of the Northeast 1/4 of said Section 9; thence N00°15'35"W 300.00 feet along to the North line of the South 300.00 feet of the Northeast 1/4 of said Section; thence N89°47'59"E 709.74 feet along said North line to the East line of Section 9; thence Northerly along said East Section line to the South line of Lot 17 of Hoffman Meadows; thence Westerly along said South line to the Westerly line of said Plot; thence Northerly along said Westerly line to the Southerly line of said Plot; thence S89°43'18"W 26.89 feet to the Point of Beginning. ALSO commencing N89°48'12"E 566.88 feet along the North line of Section 10 and S00°16'34"E 1179.00 feet along the West line of the East 760.00 feet of the West 1/2 of the Northwest 1/4 of Section 10 from the Northwest corner of said Section 10; thence S00°16'34"E along said West line 1174.07 feet to the North line of the South 300.00 feet of the Northwest 1/4 of said Section; thence S89°57'24"W 562.37 feet along said North line to the West line of said Section 10; thence Northerly along said West Section line to the South line of Hoffman Meadows; thence N89°43'18"E to the Southeast corner of Lot 13 of said Plot; thence S00°16'34"E 10.00 feet; thence S88°21'29"E 66.04 feet; thence N00°16'34"W 10.00 feet; thence N89°48'12"E 130.00 feet along the South line of Lot 12 to the Point of beginning.

REQUIREMENTS:

- PROJECT DESCRIPTION:
A RESIDENTIAL DEVELOPMENT WITH 145 SINGLE FAMILY HOME LOTS. STREETS TIE INTO 68TH ST. AND CRYSTAL MEADOWS ST. WITH FUTURE STUBS TOWARD HARTMAN ST. AND MOUNTAIN KNOLL AVE.
- ZONING REQUIREMENTS: RL-10 (LOW DENSITY RESIDENTIAL) ZONING

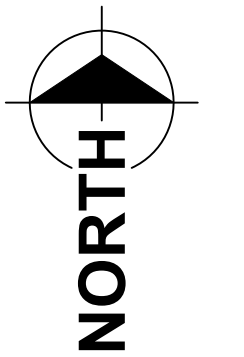
FRONT YARD:	35 FEET
REAR YARD:	35 FEET
SIDE YARD:	8 FEET
LOT AREA:	10,000 SQUARE FEET
MINIMUM LOT WIDTH:	80 FEET
- OVERALL PLAT STATISTICS

GROSS ACREAGE:	59.08 ACRES
NET ACREAGE:	46.58 ACRES
GROSS DENSITY:	2.45 UNITS/ACRE
NET DENSITY:	3.11 UNITS/ACRE
- PHASE 2 STATISTICS

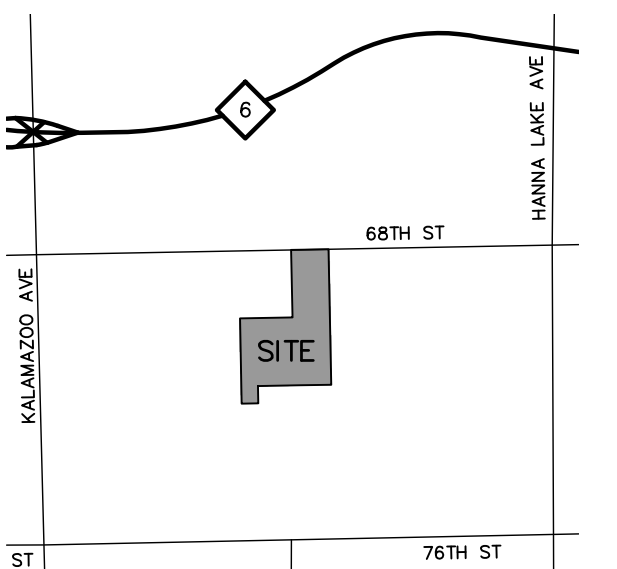
LOTS	55
GROSS ACREAGE:	15.36 ACRES
NET ACREAGE:	12.82 ACRES
GROSS DENSITY:	1.95 UNITS/ACRE
NET DENSITY:	2.34 UNITS/ACRE
- PROPOSED IMPROVEMENTS
 - All street right of ways shall be public, 66 feet in width
 - Streets shall be 30 foot bituminous valley curb and gutter per Kent County Road Commission standards and specifications.
 - This plat shall be serviced with public water and sewer.
 - Drainage design shall conform to the Kent County Drain Commission standards and specifications.
 - Gas mains shall be installed per KCRC requirements.
 - There shall be a 12 foot private easement for public utilities adjacent to all street right of ways.
 - Lot sizes are approximate and may vary with the final plat.
 - Sidewalks shall be placed at the time of house construction in public right of ways.
 - Street trees shall be planted in accordance to Section 16.13.A of the Gaines Charter Township Zoning Ordinance.

NOTE:

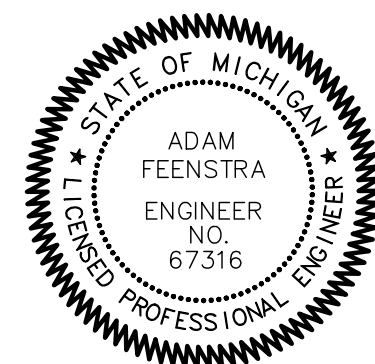
- Staff shall confirm that no less than five house models that meet the requirements of the GCTZO Section 6.4 are built within the plat.
- Staff shall enforce the street tree requirement of the GCTZO Section 16.13 A at the time of building permit.
- The applicant shall request the creation of a Street Light Assessment District before applying for residential building permits.



SCALE: 1" = 150'



LOCATION MAP
NOT TO SCALE



www.CALL811.com

REVISIONS
LAYOUT - 10-04-23
LOT DIMENSION - 11-20-23

LEGEND

T - TOWN	SECTION CORNER
R - RANGE	SET CAPPED IRON
N - NORTH	FOUND IRON OR NAIL
S - SOUTH	STORM SEWER MANHOLE
E - EAST	SANITARY SEWER MANHOLE
W - WEST	CATCH BASIN
SEC. - SECTION	HYDRANT
POB - POINT OF BEGINNING	VALVE
PROPOSED BLACKTOP	UTILITY POLE
PROPOSED CONCRETE	GUY WIRE
EXISTING BLACKTOP	LIGHT POLE
EXISTING CONCRETE	WALL MOUNTED LIGHT
EXISTING PEDESTAL	PEDESTAL
BUILDING	TRANSFORMER
	SIGN

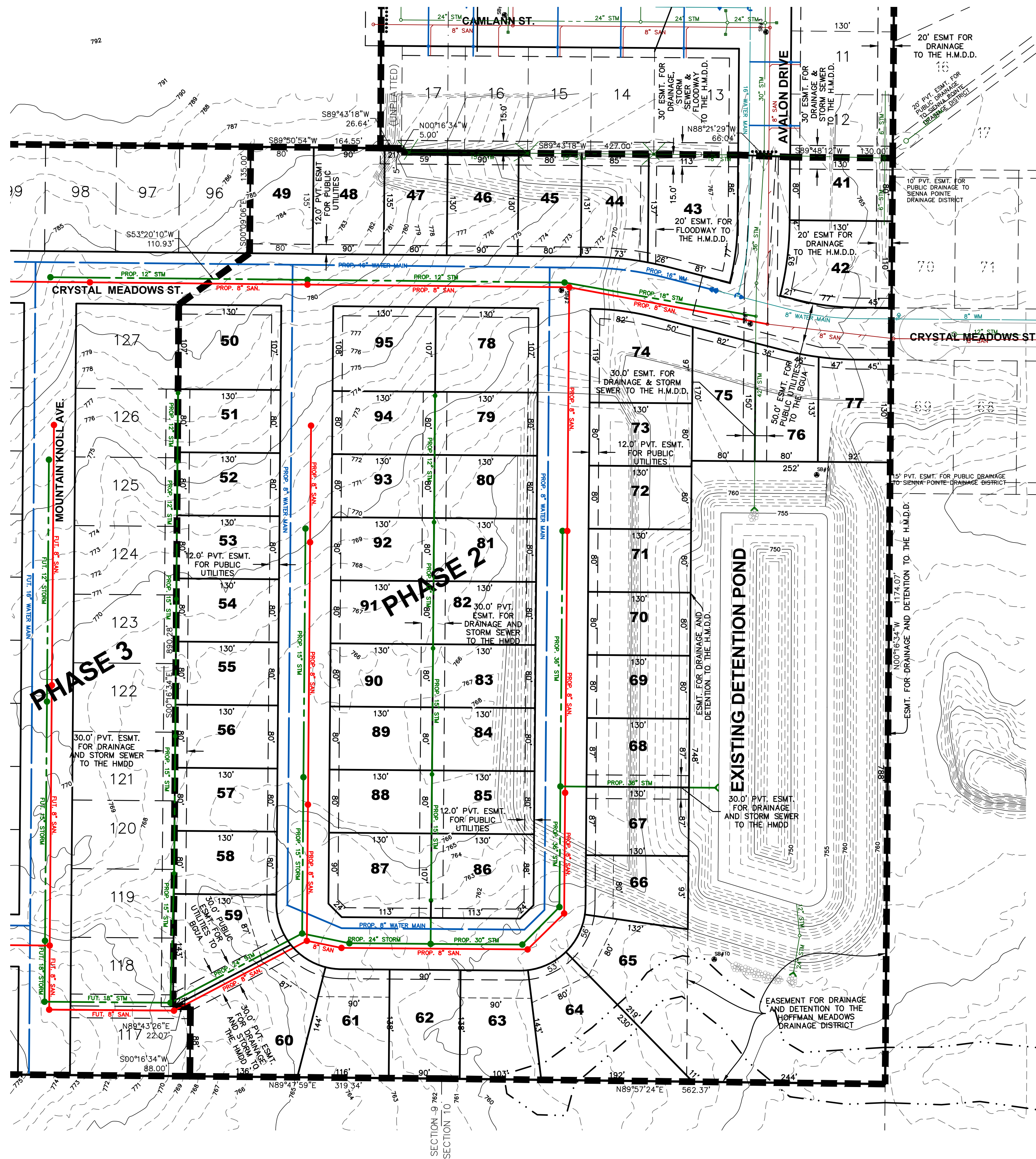
HOFFMAN MEADOWS NO. 2
PRELIMINARY PLAT
2464 68TH STREET SE

FOR: JASONVILLE LLC
4910 68TH STREET SE
CALEDONIA, MI 49316
(616) 554-3700

PART OF THE NORTHEAST 1/4 OF SECTION 9 AND PART OF THE NORTHWEST 1/4 OF SECTION 10, T5N, R11W, GAINES TOWNSHIP, KENT COUNTY, MICHIGAN

Feenstra
& Associates, Inc.
CIVIL ENGINEERS & SURVEYORS
3145 Prairie St SW
Grandville, MI 49418
Phone: 616.457.7050
www.feenstrainsc.com

C1



PHASE 2 DESCRIPTION:

Part of the Northeast 1/4 of Section 9 and the Northwest 1/4 of Section 10, T5N, R11W, Gaines Township, Kent County, Michigan, described as: Commencing at the Northeast corner of Section 9 (also known as the Northwest corner of Section 10); thence S89°50'54"W 85.02 feet along the North line of said Section 9; thence S00°23'11"E 1172.60 feet along the West line of Hoffman Meadows to the Point of Beginning; thence S89°50'54"W 164.55 feet; thence S00°09'06"W 135.00 feet; thence S53°20'10"W 110.93 feet; thence S00°16'34"E 890.28 feet; thence N89°43'26"E 22.07 feet; thence S00°34'16"W 88.00 feet to the North line of the South 300 feet of the Northeast 1/4 of said Section 9; thence N89°47'59"E 319.34 feet along said North line to the East line of said Section 9; thence N89°57'24"E 562.37 along the North line of the South 300 feet of the Northwest 1/4 of said Section 10 to the West line of the East 760.00 feet of the West 1/2 of the Northwest 1/4 of said Section 10; thence N00°16'34"W 1174.07 feet along said West line to the Southeast corner of Lot 12 of Hoffman Meadows; thence S89°48'12"W 130.00 feet; thence N88°21'29"W 66.04 feet; thence S89°43'18"W 427.00 feet (the previous three calls being along the South line of Hoffman Meadows Plat; thence N00°16'34"W 5.00 feet; thence S89°43'18"W 26.64 feet to the Point of Beginning.

Contains 15.36 Acres

REQUIREMENTS:

- PROJECT DESCRIPTION:
A RESIDENTIAL DEVELOPMENT WITH 145 SINGLE FAMILY HOME LOTS. STREETS TIE INTO 68TH ST. AND CRYSTAL MEADOWS ST. WITH FUTURE STUBS TOWARD HARTMAN ST. AND MOUNTAIN KNOLL AVE.
- ZONING REQUIREMENTS: RL-10 (LOW DENSITY RESIDENTIAL) ZONING

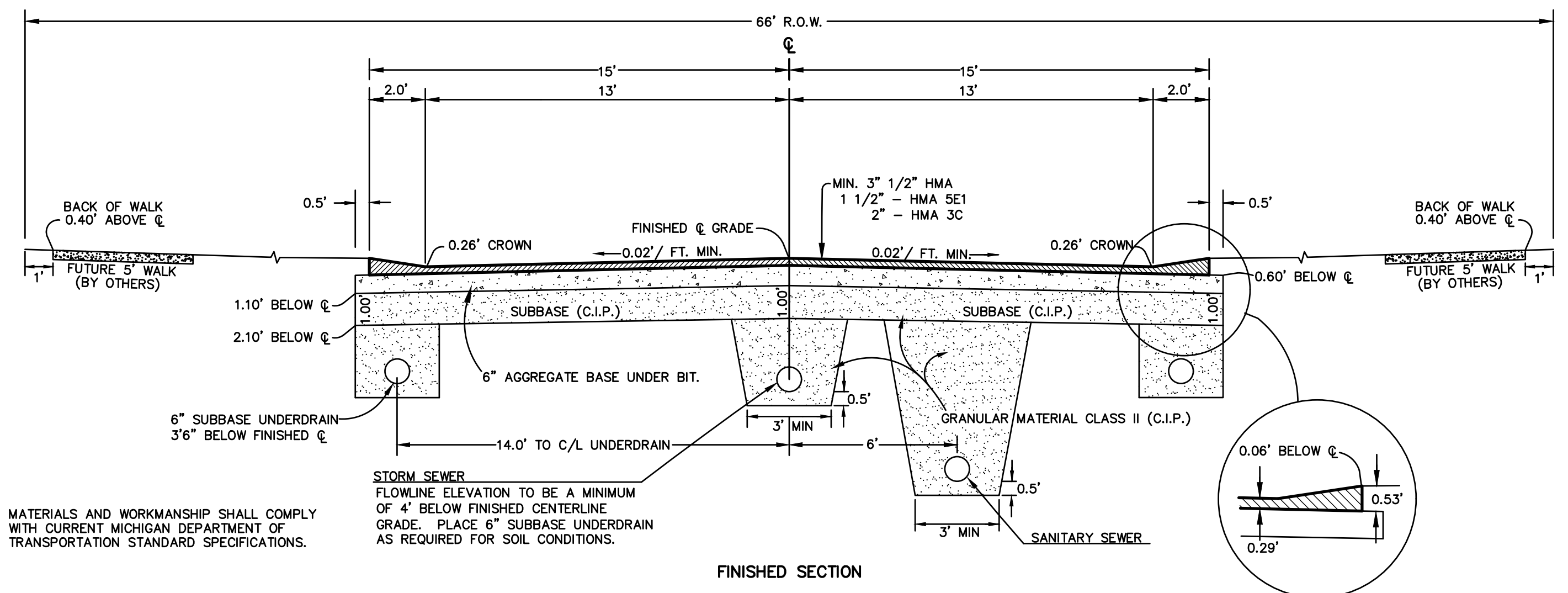
FRONT YARD:	35 FEET
REAR YARD:	35 FEET
SIDE YARD:	8 FEET
LOT AREA:	10,000 SQUARE FEET
MINIMUM LOT WIDTH:	80 FEET
- OVERALL PLAT STATISTICS

GROSS ACREAGE:	59.08 ACRES
NET ACREAGE:	46.58 ACRES
GROSS DENSITY:	2.45 UNITS/ACRE
NET DENSITY:	3.11 UNITS/ACRE
- PHASE 2 STATISTICS

GROSS ACREAGE:	15.36 ACRES
NET ACREAGE:	12.82 ACRES
GROSS DENSITY:	1.95 UNITS/ACRE
NET DENSITY:	2.34 UNITS/ACRE
- PROPOSED IMPROVEMENTS
 - All street right of ways shall be public, 66 feet in width
 - Streets shall be 30 foot bituminous valley curb and gutter per Kent County Road Commission standards and specifications.
 - This plat shall be serviced with public water and sewer.
 - Drainage design shall conform to the Kent County Drain Commission standards and specifications.
 - Gas mains shall be installed per KCRC requirements.
 - There shall be a 10 foot private easement for public utilities adjacent to all street right of ways.
 - Lot sizes are approximate and may vary with the final plat.
 - Sidewalks shall be placed at the time of house construction in public right of ways.
 - Street trees shall be planted in accordance to Section 16.13.A of the Gaines Charter Township Zoning Ordinance.

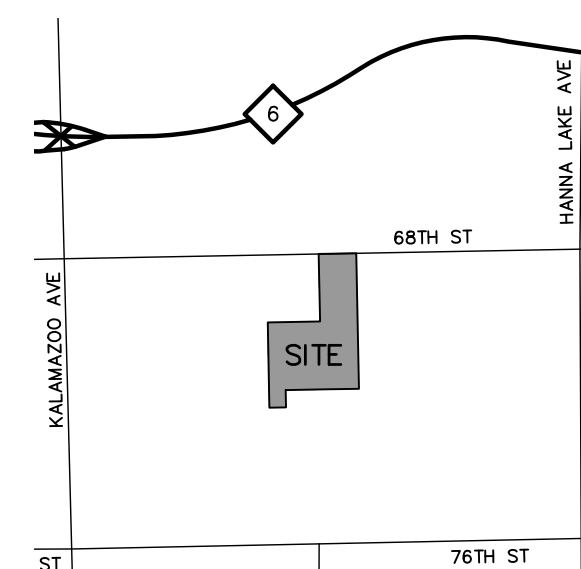
NOTE:

- Staff shall confirm that no less than five house models that meet the requirements of the GCTZO Section 6.4 are built within the plat.
- Staff shall enforce the street tree requirement of the GCTZO Section 16.13 A at the time of building permit.
- The applicant shall request the creation of a Street Light Assessment District before applying for residential building permits.

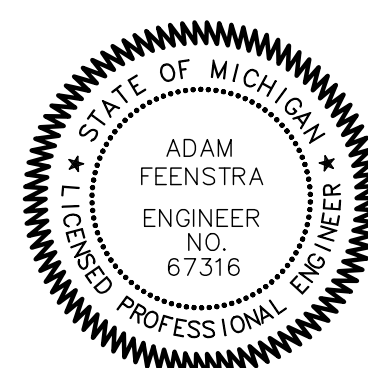


KENT COUNTY ROAD COMMISSION STANDARD 30' BITUMINOUS GUTTER SECTION

NOT TO SCALE



LOCATION MAP
NOT TO SCALE



REVISIONS
LAYOUT - 10-04-23
LOT DIMENSION - 11-20-23

LEGEND

T	TOWN	SECTION CORNER
R	RANGE	SET CAPPED IRON
N	NORTH	FOUND IRON OR NAIL
S	SOUTH	STORM SEWER MANHOLE
E	EAST	SANITARY SEWER MANHOLE
W	WEST	CATCH BASIN
SEC.	SECTION	HYDRANT
POB	POINT OF BEGINNING	VALVE
	PROPOSED BLACKTOP	UTILITY POLE
	PROPOSED CONCRETE	GUY WIRE
	EXISTING BLACKTOP	LIGHT POLE
	EXISTING CONCRETE	WALL MOUNTED LIGHT
		PEDESTAL
		TRANSFORMER
		SIGN

HOFFMAN MEADOWS PRELIMINARY PLAT 2410 68TH STREET

FOR: JASONVILLE LLC
4910 68TH STREET SE
CALEDONIA, MI 49316
(616) 554-3700

PART OF THE NORTHEAST 1/4 OF SECTION 9 AND PART OF THE NORTHWEST 1/4 OF SECTION 10, T5N, R11W, GAINES TOWNSHIP, KENT COUNTY, MICHIGAN

Feenstra
& Associates, Inc.
CIVIL ENGINEERS & SURVEYORS
3145 Prairie St SW
Grandville, MI 49418
Phone: 616.457.7050
www.feenstra.com

C2



OFFICE OF THE DRAIN COMMISSIONER

Ken Yonker, Drain Commissioner

December 6, 2023

David Hanco, P.E.

Via email: dave@feenstrainc.com

Feenstra & Associates, Inc.

3145 Prairie St SW, Ste 103

Grandville, MI 49418

**RE: Hoffman Meadows No 2
Sections 9 &10, T5N, R11W, Gaines Township
KCDC File No. 1997**

Dear Mr. Hanco,

The Drain Commissioner's Office pursuant to the Land Division Act, ACT 288 of 1967, and the published Development Drainage Rules has reviewed the preliminary plans submitted on November 27, 2023 for Hoffman Meadows No 2. Preliminary approval is granted at this time. We offer the following comments that shall be addressed with the construction submittal:

1. Construction plans and design computations shall be submitted for approval prior to construction. Construction shall NOT begin until construction approval has been granted. A profile shall be included of all storm sewer and floodways in the construction plans.
2. Detention facilities built with phase 1 will be used for the developed runoff. Provide an inspection report on the condition of the banks, sediment load and function of the outlet. Any maintenance of the basin while developing the additional phases will be placed on the developer until the site is fully developed and stabilized.
3. Stabilization measures and soil erosion control measures for the protection of the storm sewer system shall be included on the construction plans. The following measures are required on backyard drainage swale and storm sewer structures:
 - Drainage swales shall be graded, seeded, topsoiled, and covered with erosion control matting, North American Green SC-150. The recommended minimum grade for backyard swales is 2%.
 - Inlet protection around a yard basin shall be installed through the use of a filter sock, Filtrex Inlet Soxx. The filter sock shall be placed around the perimeter of the yard basin at a 5-ft distance with the area inside the 5-ft perimeter to be stabilized with erosion control matting.
 - No under the grate silt sacks will be allowed in backyard yard basins. These types of sedimentation control measures have not worked in the past and typical

result in failure. Silt-Saver with filter Frames shall replace these measures that perform at the surface and can be reused.

4. Extend and add lands to the existing drainage district under Section .433 (5) of the Drain Code. The developer shall deposit 5% of the construction costs up to \$2500 for all branches added to the drainage district. Please provide a break down of these costs for the Drain Commissioner's approval.
5. The following design computations shall be submitted for approval:
 - Storm sewer sizing and provide the HGL computations. HGL shall be started at the spillway elevation of the detention basin.
 - Provide a completed LGROW Design Spreadsheet showing that the Channel Protection Volume and TSS Removal have been met per the new standards.
 - A drainage study map that shows contributing area to each component in the storm network. Include any offsite contribution.
 - No net increase calculations for the backyards of Lots 60-65.
6. Provide access easements to the backyard storm sewer along Lots 50-59 and 78-95.
7. If sump pumps are to be installed, the Office of the Drain Commissioner recommends that storm sewer leads be installed for all lots for the connection of the sump discharges.

If you have any questions, please contact the Drain Office.

Sincerely,

Angie E. Latvaitis
Deputy Drain Commissioner
Office of the Kent County Drain Commissioner

cc. file
Plat Board
Darren Vink, Road Commission
Chris VanderHoff, Jasonville LLC, Developer
Jeff Gritter, Vriesman & Korhorn
Robert DeWard, Gaines Township Supervisor



Kent County Road Commission

December 12, 2023

The Board of County Road Commissioners of the County of Kent (KCRC), at a regular meeting held on December 12, 2023, authorized preliminary plat approval, with conditions included below in this letter of the following proposed project:

Name of Project: **Hoffman Meadows No. 2.**

Name of Owner: Chris VanderHoff

Surveyor & Engineer: Feenstra & Associates (Adam Feenstra)

Township: Gaines (T5N, R11W) Description: NE ¼ 9, NW ¼ 10.

Approval expires on: December 12, 2025

Preliminary plat approval covers lot layout (Lots 41-95), location, street alignment, width of right-of-way, and street cross section only. All project plans and documents shall conform to the current "Requirements and Specifications for Plat Development". Final approval will be given after all the requirements are fulfilled for the following roadway(s):

Avalon Drive (980± feet), **Crystal Meadows Street** (250± feet), **Unnamed Street #1** (250± feet), **Unnamed Street #2** (250± feet), and **Unnamed Street #3** (250± feet),

Subject to the following special conditions, requirements, and modifications:

- (1) At the time the Final Plat document is submitted for Board action, the proprietor shall provide title commitment to demonstrate that there are no existing encumbrances within limits of proposed street right of ways for review and evaluation by staff.
- (2) Proprietor shall acquire termination of encumbrances, easements, restrictions, etc., in favor of the Board of County Road Commissioners for that part of the land division that includes all proposed public streets.
- (3) Proprietor shall acquire acceptable subordinations of existing mortgages, etc. in favor of the Board of County Road Commissioners within the proposed public street right of way.
- (4) Proprietor is advised to abstain from encumbering land proposed to be conveyed to the Board without obtaining prior concurrence from the Deputy Managing Director, Engineering (County Highway Engineer).
- (5) Proprietor shall obtain the required permits from the Kent County Drain Commission and provide copies to KCRC staff.

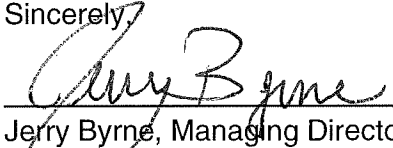
Hoffman Meadows No. 2 – Preliminary Plat

December 12, 2023

- (6) Proprietor shall provide private utility easements adjoining the proposed streets for private public utilities which shall in no way encroach, nor encumber, proposed street right of way. Recommend coordinating with private public utilities to accommodate their specific requirements to the extent possible.
- (7) Proprietor is advised to require that private public utilities design and install their facilities in conformance with the Board's requirements, regulations, specifications, etc., including obtaining highway permit for said private public utility facilities.
- (8) Proprietor shall coordinate with the United States Post Office for the location of mailbox(es) and shall provide written confirmation from the local postmaster or station master confirming that customer mail delivery requirements conform to their requirements and conform to KCRC requirements as directed by the County Highway Engineer.
- (9) Proprietor shall provide a 10' maintenance strip deeded to the Kent County Road Commission at the end of Crystal Meadows Street for future extension of public streets.
- (10) The Board retains the sole discretion to determine time and conditions for the take-over of proposed public streets.

Kent County Road Commission promotes Complete Streets and permits amenities within the public road right-of-way to the extent practical.

Sincerely,



Jerry Byrne, Managing Director
Kent County Road Commission

Attachment(s)

c: Feenstra & Associates.
Clerk, Gaines Township
Kent County Drain Commission
File

REGISTER OF DEEDS

KENT COUNTY ADMINISTRATION BUILDING
300 MONROE AVENUE, N.W.
GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 632-7610



LISA POSTHUMUS LYONS
County Clerk/Register

JEROME CZAJA
Chief Deputy Register

December 7, 2023

Mr. Randal Feenstra
Feenstra & Associates, Inc.
7482 Main Street
Jensonia, MI 49428

To Whom This Matter Concerns:

The Kent County Plat Board Met on December 7, 2023. Tentative approval was given to the preliminary plat **Hoffman Meadows No. 2**, located in the Township of Gaines. Tentative approval is given, subject to the approval of all other units of government receiving copies of the preliminary plat.

Sincerely,

A handwritten signature in black ink, appearing to read "Jerome Czaja", is written over a horizontal line. The signature is stylized with a large, sweeping flourish extending to the right.

Jerome Czaja
Chief Deputy Register of Deeds



MEMO

Staff Communication

DATE: April 8th, 2024

TO: Gaines Charter Township Board of Trustees

FROM: Dan Wells, Community Development Director; Dakota Swan, Assistant Planner

RE: Natural Features Inventory Proposal- Calving College Biology Department

SUMMARY OF TOPIC:

The Township has received a proposal from the Biology Department at Calvin University to perform a Natural Features Inventory (NFI) for Gaines Charter Township. The NFI would be a field survey of lands within the Township that identifies ecologically significant natural areas. The data gathered during the fieldwork will occur over the summer growing season (either 2024 or 2025 depending on staff availability) and will help identify areas that staff will prioritize for eventual purchase, preservation, and passive recreational use using Department of Natural Resources Michigan Natural Resources Trust Fund grant money.

The Township continues to see loss of natural areas through development activities, and land costs are rising. During public input for the Master Plan and 2023 Parks and Trails Plan residents indicated a strong desire to have more open space recreation sites available to them. Land acquisition is identified in the Goals and Objectives Section of the Parks and Trails Plan, as is utilizing all available state funding for it. The Action Program Section also calls for Property Acquisition but does not have a guide for priority. Anecdotally, planning staff has consistently heard concerns from residents regarding the loss of open space across the Township, and feel strongly that the time to act on land acquisition is now, before land costs rise higher.

The state does have grant money available for land acquisition and does prioritize areas in rapidly developing areas like our Township. The NFI will help justify using state funds by showing the value of the natural resources through field data. The areas of the Township that are likely to be developed over the next decade are also the ones at the headwaters of the Plaster and Buck Creek watersheds, preservation of some of these areas will help preserve water quality of these creeks downstream, which is a priority of the state.

An example of an NFI performed for Ada Township is attached. Staff deleted the bulk of the report for brevity, but pertinent sections remain so the Board will have a good sense of the deliverable. Full copies are available upon request. Calvin has done NFI for Vergennes Township, some Kent County Parks, is currently doing NFIs for Grand Rapids' Parks.

FINANCIAL IMPACT:

The proposal is for \$35,052.16. \$35,000 for the project was included in the 2024 budget.

BUDGET ACTION REQUIRED:

The Board of Trustees will need to vote on the proposal via resolution.

RECOMMENDATION:

Staff recommends approving the funding for Calvin College to perform the NFI as it will help obtain state funding to purchase significant natural areas within the Township to and preserve open space for future use by Township residents.

<u>Item</u>	<u>remuneration</u>	<u>duration</u>	<u>amount</u>	<u>FICA (7.65%)</u>	<u>Total Amount</u>
Student researcher	\$15/hour	15 weeks	\$9,000	\$550.80	\$9,550.80
Student researcher	\$15/hour	15 weeks	\$9,000	\$550.80	\$9,550.80
Faculty supervisor - Crow	\$5000 stipend		\$5,000	\$382	\$5,382
Faculty supervisor - Warner	\$5000 stipend		\$5,000	\$382	\$5,382
Transportation budget	\$1,000				\$1,000
Supplies budget	\$1,000				\$1,000
					\$31,865.60
Institutional Overhead (10%)					<u>\$3,187</u>
				Total:	\$35,052.16

Natural Areas Inventory of Ada Township 2006



Foreword

In 1998, Ada Township began preparation of an Open Space Protection Plan, an effort that arose in response to the Township's accelerating loss of open lands due to the trend of outward expansion of residential development from the Greater Grand Rapids Metropolitan area. After completion of the Open Space Protection Plan, Township voters in 2002 approved a 15-year dedicated funding source for acquiring high priority open space lands. Implementation of these funds is carried out with the advice and oversight of a formal Open Space Preservation Advisory Board.

As part of the preparation of the initial Open Space Protection Plan, a broad brush inventory of high quality natural areas in the Township was conducted in 1999 by two biologists and several undergraduate research assistants from Calvin College. This initial natural features inventory was part of a larger effort conducted in 1999-2000 for the 11 townships that immediately border the metropolitan area of Grand Rapids. This effort was funded by the Grand Valley Metropolitan Council through a grant to the Land Conservancy of West Michigan.

Since the completion of this initial inventory, a more complete and thorough protocol has been developed and is being used by the Calvin College faculty for a more specific assessment of natural areas on a single township level. In 2005 a grant was secured from the Urban Cooperation Board for conducting such an inventory in Ada Township. This report is the product of the inventory that was funded by this grant.

This inventory was conducted by Dr. David Warners, an ecologist from Calvin College, with the assistance of two senior undergraduate Biology majors, Nathan Haan and Ben VanderWeide. The study focuses on botanical inventories of sites identified from public sources, the Open Space Preservation Advisory Board, aerial photographs and consultation with township residents. Botanical inventories are the focus of this report because, from similar work done throughout the state of Michigan, it has been found that biodiversity of all organisms depends upon the diversity of plant species present within the landscape. Therefore, sites in this study identified as harboring high botanical diversity will also, by ecological extension, be home to many other life forms.

Acknowledgements

We are grateful to the work of the Ada Township Open Space Preservation Advisory Board for obtaining the funding for this project from the Urban Cooperation Board and for providing valuable encouragement and direction throughout the course of this study. In addition, a Jansma Fellowship through the Calvin College Science Division funded the participation of Ben VanderWeide. Calvin College also made available technological assistance for the completion of this work. Mr. Jim Ferro, the Ada Township Planning Director and Mr. George Haga, the Township Supervisor, together with the staff of the Ada Township Hall greatly assisted in various aspects of this project. Finally, we would like to thank the helpful residents of Ada Township, particularly those who granted access to their property for this work.

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Executive Summary

During the summer of 2006, a team from Calvin College lead by Dr. David Warners conducted a 3 month botanical survey of Ada Township. The purpose of the survey was to identify high quality natural areas according to criteria that are focused on plant community composition and integrity. A combination of published data sources and field surveys were used to identify sites of high plant diversity representative of both historic and contemporary Michigan plant communities. Sites of potentially high botanical diversity were surveyed in 30 sections of the Township (plus one site in the additional southeast section). From this review a total of 17 sites, which included land that is located in 20 sections, were visited for an in-depth inventory. This inventory yielded the following summary results:

- From all the surveyed parcels 15 different plant communities recognized by the Michigan Natural Features Inventory were identified. 60% (9/15) of the community types encountered were wetland communities. 43% of the actual community type occurrences found (45/105) were upland communities (prairie and forest). (**Table 2**)
- A total of 771 plant species were identified from the 17 highest quality sites. **Eighty two percent** of those species are Michigan natives; the remainder are species introduced to the area since European settlement (**Appendix IV**).
- Of the total species count **168 (22%)** were found at only one site in the Township, indicating that a significant portion of the plant biodiversity in the Township is quite limited in distribution and of tenuous status.
- Among the species identified, ten are listed by the State of Michigan as special concern, threatened or endangered because of their state-wide rarity and limited distribution. These species were identified on 9 different properties (**Table 3**).
- Among the species identified, 25 of the native Michigan plants were new records for Kent County (**Table 4**).
- A somewhat alarmingly high 23 non-native species were also recorded as new species for Kent County, suggesting a relatively recent origin.
- The measure used to assess the ecological integrity of sites in this survey, the floristic quality index (FQI), ranged from 47.8 to 75.9 (**Figure 35**). According to the Michigan Department of Natural Resources, values above 35 indicate communities with biodiversity of statewide significance and are considered to be unmitigable. Values above 50 indicate sites that are very rare and contain a significant component of Michigan's natural biological diversity. Of the highest quality sites in Ada Township, 15 of 17 (88%) were higher than 50. Preservation of the biodiversity of these sites should be made a high priority.

Because many of the sites studied in this survey lie in close proximity to each other or connect to natural and manmade corridors (such as railroad lines, power line right-of-ways, etc.), these sites have the potential of contributing to a network of high quality natural areas in the Township (**Figure 43**). The contemporary term for such a network is 'green infrastructure', calling attention to the fact that a livable, functioning natural environment depends not only on planned development of the built environment but also the planned conservation and restoration of a system of natural areas as well. Ada Township still holds the opportunity to protect large areas with mostly natural cover to serve as hubs in a green infrastructure. Such hubs should be built around high quality core areas such as those detailed in this study. To draw conserved and protected areas into an overall infrastructure, corridors should be created and protected to link those hubs. As planning proceeds in Ada Township, attention to the protection of existing natural areas and the creation of effective landscape corridors between natural areas should be a major consideration in all future planning decisions.

I. Background

Geology and Land Form

As is the case in most of Michigan, there is no exposed bedrock in Ada Township. The landscape we know today has been formed by the influence of the Wisconsin glaciation that finally receded from the area around 13,000 years ago. The activity of advancing and receding glaciers eventually resulted in the deposition of a variety of glacial debris. Much of the township consists of moraines and till plains, accumulations of mineral materials moved by the ice sheets and left in place once the ice melted. These deposited materials create a gentle rolling topography in the upland areas, described in early documents as a land of 'hill and dale'. Most of the township ranges in elevation between 600 and 850 feet above sea level.

The steepest slopes found today along creeks and rivers resulted from channels of ice melt and subsequent erosion of this glacial material. Oftentimes wetland seeps occur near the bases of these slopes where groundwater layers are exposed at the substrate surface. These percolating groundwater sites were an important source of clean water to the earliest immigrant settlers. Other wetlands are found in hollowed out basins that were either gouged by glacial activity or formed from the slower melting of large iceblocks. Today these basins are occupied by lakes such as Chase Lake and Downs Lake.

The Grand River divides the township unequally from southeast to northwest, and the Thornapple River (so named due to the pervasiveness of Hawthorns that lined its banks) flows northward into the Grand River at Ada Village. Surface waters in the township generally flow towards these major rivers, including Honey Creek and Egypt Creek from the northeast and Carl Creek from the west. The relatively low relief over which these creeks flow has resulted in numerous creekside wetlands, which often support areas of sedge meadow. Old river channels along the Grand River also harbor rich alluvial soils and, where they have not been tilled, provide interesting wetlands that are important refuges for uncommon wildlife and vegetation.

The diverse landscape of Ada Township, with its major river channels, creek corridors, wetland depressions and dry, sandy upland areas provide the township with a wealth of varied habitats. The upland areas were originally covered with oak forests, but also, particularly on south and west slopes, supported oak openings where dry prairie communities were found. Because the steep slopes and wetland seeps were unfavorable for agricultural and residential development, they have shown themselves to be particularly resilient to the significant land alteration that has occurred during the past 150 years. These are the areas that today tend to harbor the greatest concentration of presettlement vegetation.

Soils

The Kent County Soil Survey (USDA, Soil Conservation Service, 1986) identifies eight major soil associations in Ada Township. Three of these cover a majority of the upland areas and two predominate the lowland areas. The remaining three associations occupy only small areas in the Township (Appendix 1). Outside of the Grand and Thornapple River valleys, the soils are representative of relatively recent post-glacial landscapes. They are largely dominated by coarse-grained sands, but can grade into more fertile loams (mix of fine and coarse particles), particularly in low lying sites. Along the Grand River, and including the area at the confluence of the Thornapple River, there is a band of more fine-grained loamy soils. In the wetter depressions these soils increase in organic content and support a very unstable, mucky substrate. Where this band of lowland soils broadens out (particularly in the west and northwest sections of the township), seasonal flooding has periodically deposited fresh nutrients onto the landscape. These soils are very fertile and highly conducive to agriculture. Poorly drained loamy and mucky soils not associated with the river systems are present in the Chase Lake basin and drainage area (sections 2, 11). Smaller pockets of poorly drained organic soils can also be found distributed

along the two major creek systems, Honey and Egypt, as well as in occasional hollows left by the unevenly melting glacial ice.

The gently rolling topography in the uplands and flat, nutrient-rich riverine lowlands afford a varied assemblage of soil types in this single township. According to the Kent County Soils Survey, the diversity of soil types in Ada Township are well suited to a variety of agricultural activities. In areas that have not yet been developed, this same diversity of soil types that have been forming during the past 10,000 - 15,000 years, currently sustains biological diversity that is often highly specific to its supporting soil substrate. The conservation challenge that presents itself today is to maintain a tapestry for the Township soils that reflects concern for the well-being of all its residents, human and non-human.

Presettlement Vegetation

When the first European immigrants ventured into the area today known as Ada Township, the land was covered mostly by forests whose composition was largely influenced by soil type, soil moisture, and aspect (direction of slope). Work done by the Michigan Natural Features Inventory (MNFI) to interpret surveyor's records from the initial survey of the state (1816-1856) has produced a map of the presettlement vegetation of the state at a resolution of approximately one quarter of a section (Comer, *et al.*, 1995) (**Figure 1**). Based upon this analysis, the early 1800 vegetation of Ada Township was dominated by three upland communities and three wetland habitat types.

The two most extensive upland communities were **oak-hickory forest** and **mixed oak forest**. The oak-hickory community dominated the upland areas west of the Grand River, occurring on both the north and south sides of the Thornapple River, as well as a major portion of the northern section of the township. The dominant trees in these forests were Red and White oak (*Quercus rubra*, *Q. alba*) and Shagbark and Pignut hickory (*Carya ovata*, *C. glabra*). Red maple (*Acer rubrum*) was also a common overstory element among the oaks and hickories. These forests occurred on well-drained sandy to sandy loam soils.

The **mixed oak forest** was a very similar habitat, but in the township occurred mostly on the east side of the Grand River. In this community hickories are less abundant, but are replaced by the more dry-adapted Black oak (*Quercus velutina*) and Sassafras (*Sassafras albidum*). The mixed oak forest occurred on soils that were slightly better drained than those of the oak-hickory community, and occasionally gave way to the following community type.

On especially well drained sandy soils, particularly on south and west facing slopes, **Black oak barrens** were found. These were areas where tree cover provided by Black oak (*Quercus velutina*) and Wild black cherry (*Prunus serotina*) was relatively thin, tree stature was reduced and dryland prairie species could gain a foothold. Pockets of open dry prairie habitat occasionally occurred, supporting Prickly pear cactus (*Opuntia humifusa*), Common rockrose (*Helianthemum canadense*), Wormwood (*Artemisia campestris*), and other species more commonly associated with the open dune habitats that occur along Lake Michigan.

The most extensive wetland community present in the township prior to European settlement was **mixed hardwood swamp**. This was mostly a floodplain forest, occurring along the two major rivers on rich wet soil. The dominant trees in this community often grew to impressive size and included Silver maple (*Acer saccharinum*), Bur oak (*Quercus macrocarpa*), Hackberry (*Celtis occidentalis*), Red maple (*Acer rubrum*) and Sycamore (*Platanus occidentalis*). Where waters were more consistently high and slow moving, Black ash (*Fraxinus nigra*) swamps occurred.

Also appearing in sporadic low-lying cool pockets across the township, typically in slower moving waters were stands of **mixed conifer swamp**. Here the trees were Tamarack (*Larix laricina*), Black spruce (*Picea mariana*) and White cedar (*Thuja occidentalis*), but often joined by the almost

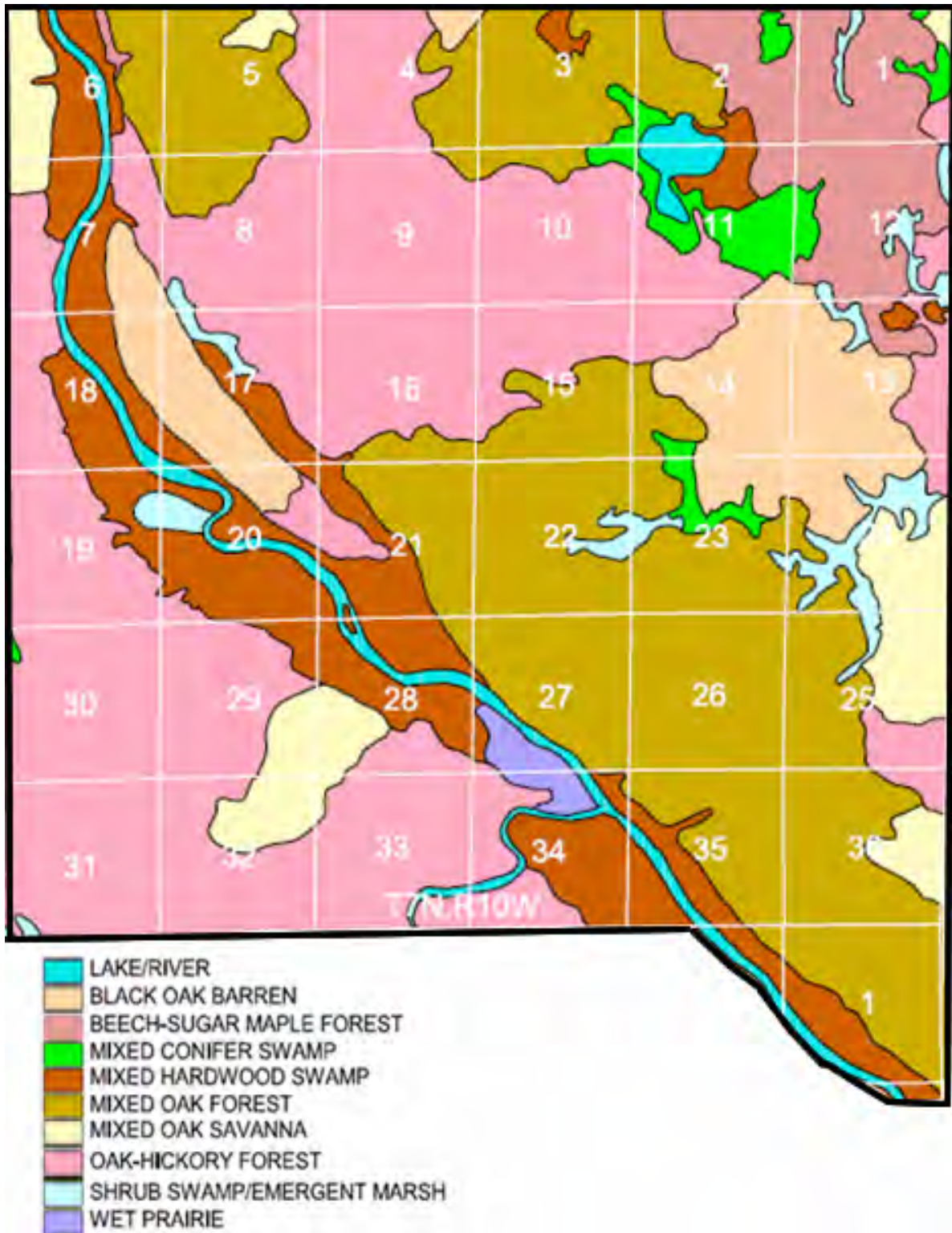


Figure 1. Dominant presettlement plant communities of Ada Township (from Comer et al. 1995)

ubiquitous Red maple (*Acer rubrum*). These lowland wet forests were areas that harbored many plant species that are found more abundantly in northern regions of the state.

The third wetland community with regular occurrence in presettlement times is termed **shrub swamp/emergent marsh**. These were areas usually along creek borders where the topography varied only slightly. Significant deposits of peat soil accumulated and a variety of open wetland perennials dominated, interspersed and occasionally overcome by a diversity of wetland shrubs.

One final habitat type of significance that was present immediately northwest of the confluence of the Thornapple and Grand Rivers was **wet prairie**. Wet prairies are an uncommon community type in Michigan that harbor numerous rare species. However, the occurrence of this community in Ada Township has been effectively lost, due to the channelization and relocation of the mouth of the Thornapple River and subsequent development of the area that today supports the large Alticor Corporation plant.

This summary of the presettlement plant communities of Ada Township provides a broad overview of the land cover that was present when first engaged by European settlers. Although it fails to recognize much of the small-scale variability that was certainly present at this time, our Phase 2 site descriptions later in this report provide a deeper appreciation for the nuanced diversity of habitat types that were and in many cases, still are present in the township. Comer, *et al.* (1995) point out that these communities were not only manifestations of a combination of geological and environmental forces, but that the presence of Native Americans and the early fur traders have also had significant influence on habitat assemblages. The Grand River and Thornapple River valleys were used extensively for transportation, agriculture and village sites by Native Americans of the Ottawa Tribe. It is also widely known that native peoples used fire extensively as a habitat management tool. Fire would have promoted more open woodlands and dry prairie habitats in the upland areas, but the frequency and influence of fire in Ada Township is poorly understood. The European fur trade also likely affected these habitats by greatly reducing the number of medium- to large-sized mammals, thereby significantly altering food chains and feeding patterns. Finally, it should be noted that the wetlands and creeks in Ada Township most certainly supported extensive beaver populations at one time, and the impact of the loss of this landscape-altering creature, although difficult to assess, must have been significant.

Township History

This township history has been pieced together from three early documents dated 1870, 1881 and 1918. See citations at the end of this section for complete bibliographies of these sources.

The first European immigrant to have spent time in Ada Township was Rix Robinson, who first began trading furs with the local Native Americans around 1821. Robinson set up several trading posts, the most central of which was located near present day Ada Village. Rix Robinson is described as the pioneer of the valley, one who 'paddled his own canoe' and who favorably interacted with the local people who were described as having been 'somewhat subdued by the influence of Christianity, and itinerant missionaries who were then laboring among them'. Robinson secured 600 acres in Section 2 by treaty with the Native peoples and married a local Native American woman, with whom he was still living in 1870. The Robinsons had one child, a son, who was known to be an 'energetic businessman' in the Grand River Valley. 'Uncle Rix' (as he was known) was the first township supervisor, and was later re-elected supervisor in 1842 and 1845.

The township and village were named after Miss Ada Smith (later Ada Miller), who was regarded as a 'highly respected lady' and the 'estimable daughter' of Sidney Smith, an early businessman who is known to be the second immigrant after Rix Robinson to have taken up residence in the township. The area first known as 'Ada' encompassed a region larger than the township, including land to the south now known as Cascade and Caledonia.

II. Methods

Overview

Since the purpose of this inventory is to identify and describe high-quality natural areas in Ada Township, our survey began by identifying properties of potential interest. This was accomplished by using a variety of resources including aerial photographs, maps, textual resources, and the Grand Rapids Metro Area Natural Areas Inventory (a two year survey carried out by faculty and students at Calvin College which included sites in Ada Township). Once areas of potential interest were identified, landowners with property in these areas were contacted to determine their willingness to participate in the inventory. Properties to which we were granted access received a preliminary review by two upper-level biology students from Calvin College. The purpose of this visit was to evaluate each property; assessing its habitat composition, species diversity, extent of invasion by non-native species, and impacts of human disturbance. Based on these criteria, we determined whether each site merited further review. If a site included intact or rare habitats, high species diversity, and low impact from invasive species and human disturbance, it was included in a subsequent survey, carried out by the student team and Dr. David Warners, a field botanist and plant taxonomist from Calvin College. During the second visit, a detailed plant species inventory was carried out, along with an evaluation of site quality and potential conservation value. The areas which received this more detailed survey are the central subject of this report. A more precise description of the methods used in this project can be found in the sections below.

Selecting Areas for Inventory

Areas that we initially identified as having potentially high ecological value were called **sites**. These sites housed what we perceived to be unique or relatively intact areas of vegetation, and varied in size, the smallest occupying approximately 12 acres, the largest spanning over 400 acres. Each site was composed of one to several individual properties, which will be referred to individually as **parcels**. Sites encompass a cohesive unit of interest to our study (insofar as it can be determined with aerial and map resources) and transcend property boundaries. In contrast, parcels within sites represent actual property boundaries and do not necessarily represent ecological or geomorphologic boundaries of interest to this project. Property boundaries may, however, coincide with habitat boundaries, depending on the history of land alteration and use on each parcel. The number of parcels that we reviewed within a site was limited primarily by willingness of property owners to grant access for survey.

To initially identify high-quality natural areas we used the Grand Valley Metropolitan Council's Regional Geographic Information System (REGIS), Michigan State University's LandScan Atlas of Aerial Imagery, the Michigan Natural Features Inventory's presettlement vegetation map (Fig. 1), the Kent County Soil Survey, Google Earth, and the Kent County plat map for Ada Township. We also consulted the Ada Township Open Spaces Protection Plan's Priority Lands for Protection map, which highlights areas of special interest for preservation in the township.

A number of criteria determined which sites were deemed appropriate for survey. The primary factor influencing our decision to pursue particular sites was the extent of vegetative cover and the appearance of being a relatively undisturbed natural area. Site size was also taken into account; a small or fragmented site's integrity is less likely to have been preserved. Wetlands, riparian areas, and areas with dynamic topography received special attention, as they are less likely to have been altered by farming or other land uses and often harbor unique habitats.

Since site boundaries were selected on the merits of their perceived natural qualities, and did not necessarily reflect property boundaries, the next step in gaining access for survey was to determine which parcels were most desirable for inventory. We gave preference to parcels that appeared to contain relatively intact habitats over those which appeared fragmented or significantly altered. Similarly, larger parcels were given preference over smaller ones. Although

III. GENERAL INVENTORY RESULTS

Landowner Contacts

Our preliminary search for areas of interest throughout the Township provided us with a number of roughly defined areas within which we would pursue permission to survey sites. We requested access to survey 188 parcels within these areas, belonging to 134 property owners within these areas. In all, 37 property owners granted us permission for preliminary phase 1 survey, and each of these properties were surveyed. Occasionally, two adjacent properties were surveyed together as one unit. Thus, the number of 'sites' surveyed does not quite match the number of properties we actually visited. When we visited two properties together, owners of both properties received letters describing our findings. At times, parcels we visited were actually made up of several smaller adjacent parcels, all belonging to the same landowner, which we treated as one unit for our purposes. For this reason, the number of "parcels" we initially identified for survey is quite high.

Table 1. Summary of landowner contact data.

Parcels identified for potential survey	188 (belonging to 134 property owners)
Landowners included in initial contacts	134
Landowners with successful initial contact	91 (68%)
Parcels with landowners not reached	43 (32%)
Landowners who granted access for survey	37 (41% of successful contacts)
Landowners who declined survey	54 (59% of successful contacts)
Phase 1 surveys conducted	31
Phase 2 surveys conducted	17

Many of those who granted us access to their property were enthusiastic about the survey and expressed interest and curiosity in the natural qualities of their property. Some landowners accompanied us during surveys, and possessed extensive and helpful knowledge of the plant life on their land. Other landowners were indifferent to the inventory but granted access nonetheless.

However, the majority of landowners we contacted were quite uncertain about letting us survey their land. Many were hesitant to grant us access because they felt that doing so would somehow be an infringement of their rights as property owners, or that the information collected during the survey might lead to property right infringements in the future. In some cases we were able to address these concerns, and were granted access for survey. Still, property owners' prevailing hesitancy to allow us access to survey their property was certainly one of the greatest limiting factors to the results of this survey.

Property owners in Ada Township demonstrate a true concern for their land, but for a vast array of reasons. Some property owners described their efforts to be stewards of their land and were prepared to undertake impressive measures to preserve the biodiversity on their property; namely, several property owners expressed interest in actively managing invasive plant species. Many were fascinated by our findings and shared sentiments of personal responsibility toward the preservation of their land. Several others seemed to value their land insofar as it yielded resources, including timber, gravel, or value for future development. Nearly everyone with whom we interacted found value in the wildlife on their property. Regardless of the diverse assortment of reasons, it is clear that many citizens of Ada Township place pride in their land and in the Township's rural and natural qualities.

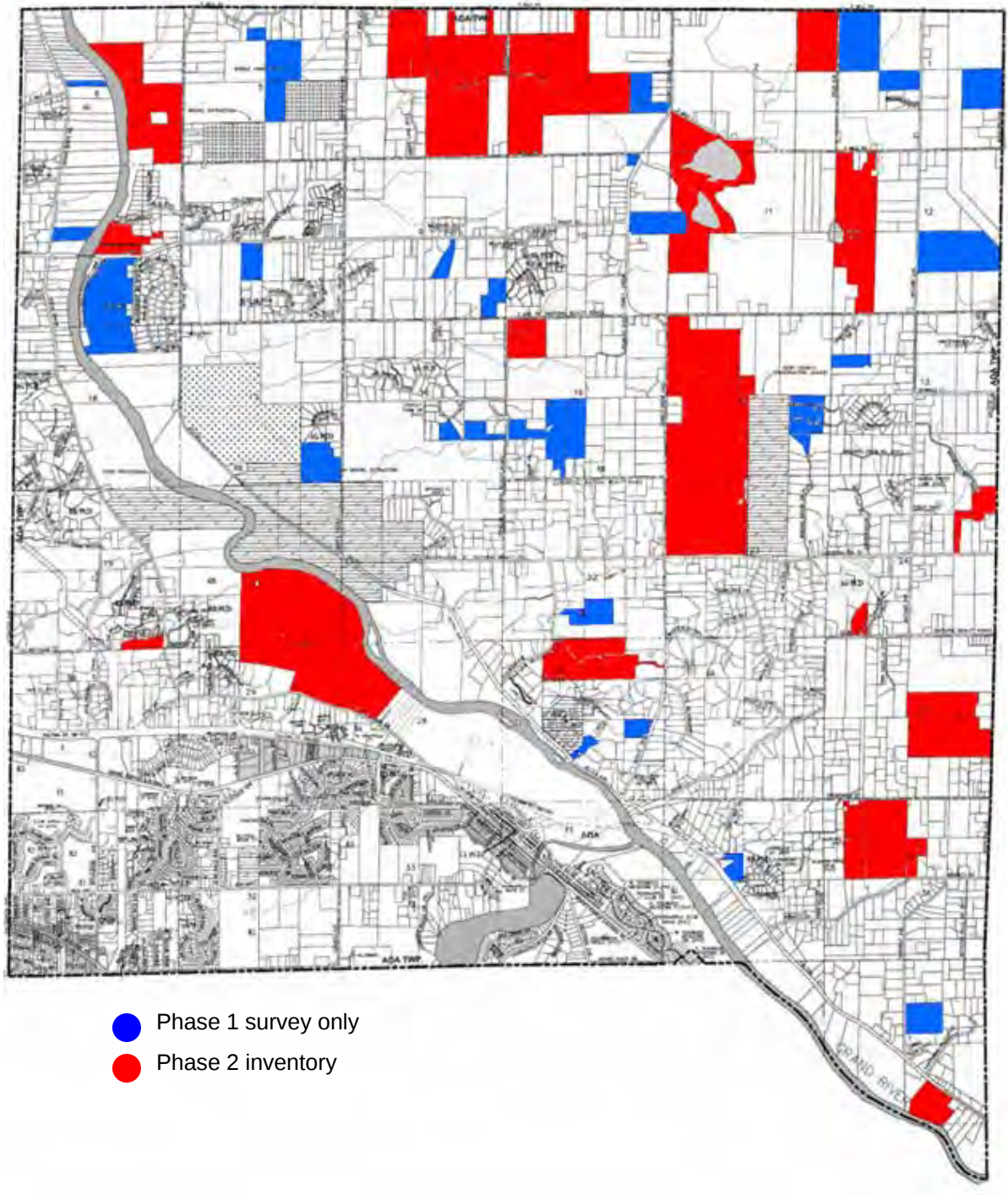


Figure 3. Summary of phase 1 and 2 sites surveyed throughout Ada Township. Parcels highlighted in blue underwent phase 1 survey only, while parcels highlighted in red were included in phase 2 surveys. Nine of the 17 phase 2 sites first underwent phase 1 review.

Ada Township, Section 1

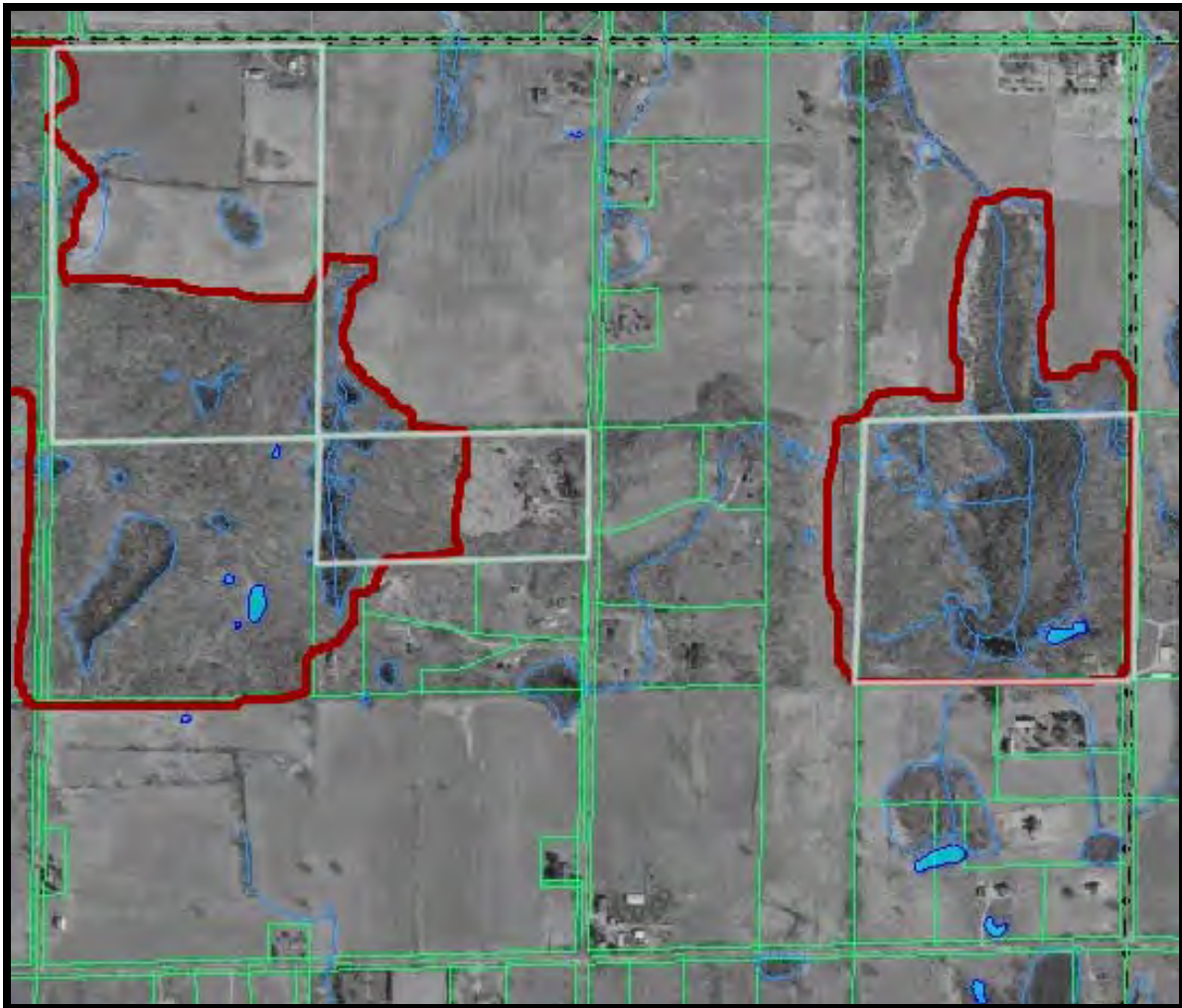


Figure 4. The mix of young woods and wetlands considered for review in Section 1. Phase 1 sites in this section contain mostly heavily disturbed thickets and wetlands. The wetlands in the east and west-central areas of the section drain to Ratigan Lake in Grattan Township. The westernmost wetlands (mostly immature swamp) contribute to the Chase Lake wetland complex.

Phase 1 parcels:

41-15-01-300-010
41-15-01-100-001
41-15-01-400-009

IV. Phase 2 Inventories: Gems of Biodiversity

A major purpose of this study is to identify sites in Ada Township that are particularly rich in botanical diversity and represent relictual landscapes of presettlement character. The values of identifying such parcels for an open space inventory are several. First, such sites harbor vestiges of pristine landscape that were developed during the past 10,000-12,000 years following glacial retreat. These sites offer a living legacy of the past and a valuable inheritance for the future inhabitants of the township, and by doing so underscore the importance of their continued preservation and careful management. Second, these areas of high botanical diversity represent relatively undisturbed habitats that are important to a wide range of insects and animals dependent on the plants that reside in these significant locations. Many of the uncommon birds and butterflies that so many residents find appealing depend on the vegetation found in these intact areas. These refuges are vital contributors to the rural aspect of the township that so many of its residents value and cherish. Third, these undisturbed areas offer many environmental services to the township as a whole. Forest cover helps to protect and enhance soil fertility. Wetlands (which are contained in nearly all of these parcels) serve as rainwater retention areas, mitigating local flood events and promoting groundwater recharge. Fourth, these high quality sites provide valuable recreation and aesthetic value to the township, offering numerous opportunities for outdoor activities such as bird watching, hiking, educational outings or hunting.

Based upon Phase 1 surveys conducted in this inventory, and local sources, we identified 17 sites that were subjected to an in-depth botanical inventory (Phase 2 survey). The Phase 2 inventories were conducted mostly during a single day visit and thusly should not be misconstrued to represent a complete species list for the site. Many plants are only identifiable for a limited time during the growing season, so these lists are all under-estimates of species prevalence. While nearly all sites contained a mixture of upland and wetland habitats, those with the greatest habitat diversity tended to harbor the greatest number of plant species. In addition, the size of these parcels varied dramatically, from only 11 acres to 422 acres. In general larger parcels supported greater numbers of species. These sites ranged from lowland river floodplains to upland dry prairies and were found scattered throughout the township, although most were located on the east side of the Grand River.

Table 3. The ten species with state listed status identified in the Ada Township natural areas inventory and the number of locations in which they were identified; CR = County Record, SSC = state special concern, ST = state threatened, SE = state endangered.

Scientific Name	Common Name	Status	# Occurrences
<i>Aster praealtus</i>	Willow aster	SSC	2
<i>Carex davisii</i>	Sedge	SSC	4
<i>Carex festucacea</i>	Sedge	CR, SSC	1
<i>Castanea dentata</i>	American chestnut	SE	1
<i>Diarrhena americana</i>	Beak grass	CR, ST	2
<i>Euonymus atropurpurea</i>	Wahoo	SSC	1
<i>Gymnocladus dioicus</i>	Kentucky coffee tree	SSC	1
<i>Lithospermum latifolium</i>	Broad-leaved puccoon	SSC	1
<i>Poa paludigena</i>	Bog bluegrass	CR, ST	1
<i>Rudbeckia fulgida</i>	Black-eyed Susan	SSC	5

Phase 2 inventories identified a total of 771 species of which 83% were native Michigan plants. A somewhat alarmingly large number of species (145 or 22.7%) were found in only one of the Phase 2 sites. This trend indicates the precipitous status of many plants in the township and an intense localization of much of its biodiversity. Forest clearing, livestock grazing, as well as agricultural and urban development has replaced most of the natural areas of the township,

leaving these relict areas vulnerable to further degradation. In addition, it is our strong feeling that the robust population of White-tailed deer in the township is an increasingly significant threat to the remaining natural areas.

Ten of the 640 native species identified in the Phase 2 inventories are state-listed species. Two of these are threatened in the state and one is endangered (Table 3). In addition, 24 of these native plants were never before recorded in Kent County, a remarkably high number considering the extensive botanical work done in this part of the state dating back to the late 1800s (Table 4). County records that have been collected will be processed and submitted to the University of Michigan Herbarium Michigan Flora Project for official recognition. We also recorded 23 non-native species as county records, illustrating the continual influx of 'biological pollution' into these natural areas (Table 4). The presence of these non-native species, particularly the prevalence of a select, problematic group of them indicates the need for management efforts in these natural areas to preserve the valuable presettlement character they exhibit.

Table 4. The 24 native species that are county records for Kent County (i.e. not recognized by Voss 1972, 1985, 1996 as having been documented from Kent County).

Scientific Name	Common Name	Status	# Occurrences
<i>Agrimonia parviflora</i>	Swamp agrimony	CR	1
<i>Andropogon virginicus</i>	Broomsedge	CR	5
<i>Aristida purpurascens</i>	Three-awned grass	CR	4
<i>Carex davisii</i>	Sedge	SSC	4
<i>Carex festucacea</i>	Sedge	CR, SSC	1
<i>Carex longii</i>	Sedge	CR	1
<i>Carex merritt-fernaldii</i>	Sedge	CR	1
<i>Carex suberecta</i>	Sedge	CR	1
<i>Carya laciniosa</i>	Kingnut hickory	CR	3
<i>Ceratophyllum echinatum</i>	Spiny hornwort	CR	1
<i>Diarrhena americana</i>	Beak grass	CR, ST	2
<i>Galium brevipes</i>	Short-stalked bedstraw	CR	1
<i>Galium palustre</i>	Marsh bedstraw	CR	1
<i>Muhlenbergia tenuiflora</i>	Slender satin grass	CR	2
<i>Myosotis laxa</i>	Small forget-me-not	CR	1
<i>Myosotis verna</i>	White forget-me-not	CR	1
<i>Panicum dichotomiflorum</i>	Panic grass	CR	1
<i>Panicum xanthophysum</i>	Panic grass	CR	4
<i>Paspalum ciliatifolium</i>	Hairy lens grass	CR	1
<i>Pinus banksiana</i>	Jack pine	CR	6
<i>Poa nemoralis</i>	Bluegrass	CR	2
<i>Poa paludigena</i>	Bog bluegrass	CR, ST	1
<i>Quercus bicolor</i>	Swamp white oak	CR	12
<i>Spirodela polyrhiza</i>	Great duckweed	CR	1

As can be seen in Figure 41, the species totals for the Phase 2 sites ranged from 165 to 365. These totals were strongly influenced by parcel size as well as habitat diversity. Although similarly influenced by parcel size and habitat diversity, the Floristic Quality Index of these sites ranged from 47.8 to 75.9, with eight of the 17 sites scoring an FQI greater than 65. According to the Michigan Department of Natural Resources (Herman et al. 2001), areas registering an FQI of 50 and above are extremely rare in the state and represent a 'significant component of Michigan's native biodiversity and natural landscapes'. Only one of our sites elicited an FQI score lower than 50, and due to our methods of generating a species list on only one day of surveying, it is

assured that this and all of our Phase 2 sites would have even higher FQI values if a season-long inventory were performed.

Table 5. The 23 non-native species that are county records for Kent County (i.e. not recognized by Voss 1972, 1985, 1996 as having been documented from Kent County).

Scientific Name	Common Name	Status	# Occurrences
<i>AJUGA REPTANS</i>	Carpet bugle	CR	2
<i>ANTHOXANTHUM ODORATUM</i>	Sweet vernal grass	CR	1
<i>ARTEMISIA VULGARIS</i>	Mugwort	CR	1
<i>BERBERIS THUNBERGII</i>	Japanese barberry	CR	12
<i>CARDAMINE IMPATIENS</i>	Bitter cress	CR	1
<i>CELASTRUS ORBICULATA</i>	Oriental bittersweet	CR	7
<i>CONVALLARIA MAJALIS</i>	Lily-of-the-valley	CR	2
<i>EPILOBIUM HIRSUTUM</i>	Great hairy willow-herb	CR	4
<i>FESTUCA ARUNDINACEA</i>	Tall fescue	CR	2
<i>GALIUM MOLLUGO</i>	White bedstraw	CR	2
<i>HEMEROCALLUS FULVA</i>	Orange day lily	CR	3
<i>LAMIUM PURPUREUM</i>	Purple dead-nettle	CR	1
<i>LOTUS CORNICULATA</i>	Birdfoot tre-foil	CR	4
<i>LYTHRUM SALICARIA</i>	Purple loosestrife	CR	7
<i>MALUS PUMILA</i>	Apple	CR	6
<i>ORIGANUM VULGARE</i>	Wild marjoram	CR	1
<i>POLYGONUM CUSPIDATUM</i>	Japanese knotweed	CR	1
<i>ROSA MULTIFLORA</i>	Multiflora rose	CR	13
<i>STELLARIA GRAMINEA</i>	Starwort	CR	1
<i>TORILIS JAPONICA</i>	Hedge-parsley	CR	10
<i>TYPHA ANGUSTIFOLIA</i>	Narrow-leaved cat-tail	CR	4
<i>VERONICA OFFICINALIS</i>	Common speedwell	CR	1
<i>ULMUS PUMILA</i>	Siberian elm	CR	2

Therefore, these 17 sites should not only be recognized as valued parcels for the township, but they are also important vestiges of presettlement vegetation for the state of Michigan as a whole. The presence of these high quality relicts within a township such as Ada that has experienced significant land conversion over that past 150 years is truly remarkable. Their persistence in the landscape to the present time underscores the importance of protecting and maintaining these sites in as natural a condition as possible, as a living testimony of our shared natural heritage for future generations.

The remainder of this chapter reports the findings for each of the 17 Phase 2 sites we inventoried in Ada Township. The accounts give summary information for each site, a detailed narrative of the communities and noteworthy species encountered, as well as mention of problematic invasive elements that are present. For each Phase 2 site we have also included an aerial photograph and at least one picture, illustrating some of the significant land forms and species found therein. Plant names used in these accounts are those found in Herman et al. (2001). A complete listing of the plant species by site from this entire inventory is given in Appendix V.

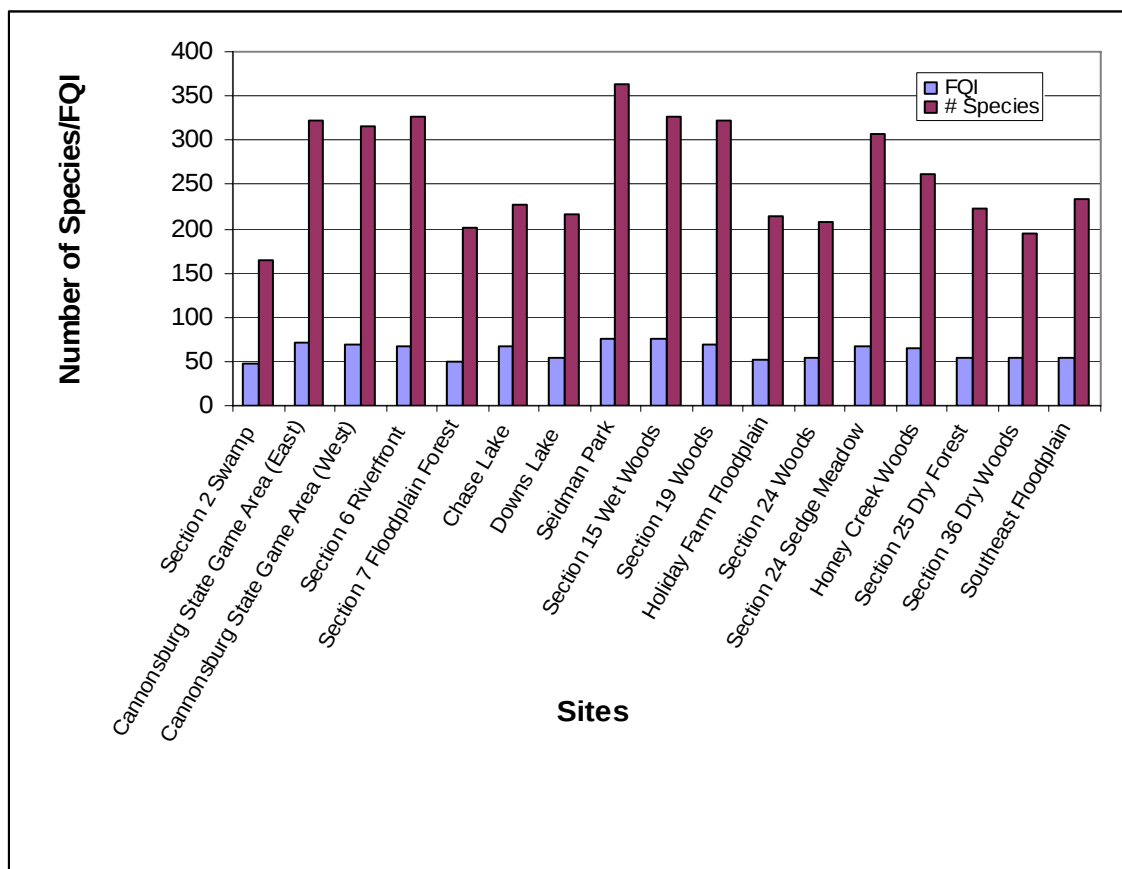


Figure 41. Comparison of the number of species identified at each Phase 2 inventory site and the floristic quality index (FQI) generated for each site.

SITE NAME:

SECTION 2 SWAMP

SITE LOCATION

Parcel Numbers:

41-15-02-200-001, -002

Address:

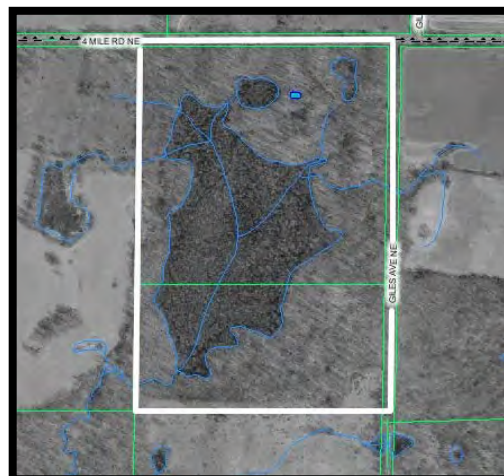
8700 4 Mile Rd., 3511 Giles Ave.

Access:

The woods is on the corner of Giles and 4 Mile. Access is available from either road.

Date First Visited:

June 7, 2006



PHYSICAL FEATURES

Size (acres):

62

Topographic Features:

Many ridges with steep sides throughout the property that fall away into a central hardwood swamp.

Soil Types:

Parkhill loam, Marlette loam, and Houghton muck

Disturbance:

Paths cut through portions of the property, apparently to harvest walnut trees. Trash flows in from property to the east.

Comments:

COMMUNITY INFORMATION

Pre-settlement Communities: Mixed Conifer Swamp

Present Communities: Mesic Southern Forest and Southern Hardwood Swamp

Maturity: Most is fairly mature

Total Species: 165

FQI: 47.8

Native to Non-Native Ratio: 5.9

Notable Elements: Several tulip trees (*Liriodendron tulipifera*) are present

Problem Elements: Some multiflora rose is present, trash from neighboring fields is a problem, and two-tracks to harvest walnut trees.

Comments:

LANDSCAPE INFORMATION

Watershed: Egypt Creek watershed

Corridor Component: A peripheral part of the Chase Lake wetland complex.

Problem Adjacencies: Nearly the whole property is bordered by fields, making it susceptible to invasion by non-native species.

Comments:

DESCRIPTION

The 62 acre parcel owned by the Alticor Corporation is located at the southwestern corner of Giles and 4-mile road. Mostly because of the relative lack of habitat diversity, this property has the lowest FQI of any of our Phase II surveys, yet supports a high quality forest ecosystem that consists of both moist woodlands and classic swamp. The swamp at this site is particularly noteworthy, both for its natural aesthetic beauty and also because this wetland is situated at the headwaters of the Chase Lake drainage. Therefore protection of this parcel will not only benefit the plants and creatures that exist here, but it will also provide benefits to the natural areas that receive groundwater from this wetland complex.

The moist woodlands, found primarily towards the northeast section of the property are clearly dominated by Sugar maple (*Acer saccharum*), which is joined by American beech (*Fagus grandifolia*), White ash (*Fraxinus americana*), Wild black cherry (*Prunus serotina*), Basswood (*Tilia americana*) and Black walnut (*Juglans nigra*) (although we also noted several large walnut trees that had been recently cut). Also noteworthy is the presence of several large Tulip trees (*Liriodendron tulipifera*), the only location in the township where we encountered this impressive species. Although this is second growth forest (regrown after logging), many of the trees here are quite large, some even approaching 1m in diameter. The forest occurs on undulating topography, with lower areas occasionally supporting standing water, together with many moisture-loving species.

These shaded, moist conditions are optimal for sedges (Genus *Carex*), of which 24 different species were recorded. Among the more common sedges are *Carex brunnescens*, *C. pensylvanica*, *C. sparganioides*, *C. rosea*, *C. cephalophora* and *C. pedunculata*. Yellow trout lily (*Erythronium americanum*) and Canada mayflower (*Maianthemum canadense*) are abundant groundlayer wildflowers, but are joined by several others, including Wood anemone (*Anemone quinquefolia*), Jack-in-the pulpit (*Arisaema triphyllum*), Enchanter's nightshade (*Circaea lutetiana*), Woodland strawberry (*Fragaria vesca*), Wild geranium (*Geranium maculatum*), Great waterleaf (*Hydrophyllum appendiculatum*), May apple (*Podophyllum peltatum*), Bloodroot (*Sanguinaria canadensis*), False spikenard (*Smilacina racemosa*), Canada violet (*Viola canadensis*) and Yellow violet (*Viola pubescens*). The wildflower community here is clearly thriving, and even more of these spring ephemerals are sure to be seen during an early springtime visit.

The extensive area of swamp found mostly in the southwestern portion of the property is forested, but also inundated with standing water at times knee deep or deeper. This area is dominated by Silver maple (*Acer saccharinum*), Black ash (*Fraxinus nigra*), Red ash (*Fraxinus pennsylvanica*) and Swamp white oak (*Quercus bicolor*). Growing on the upturned root masses of fallen trees, as well as on other assorted hummocks in the swamp are several species of ferns, including Cinnamon fern (*Osmunda cinnamomea*), Royal fern (*Osmunda regalis*) and Sensitive fern (*Onoclea sensibilis*). Several shrubs are also present in the swamp, the most abundant being Smooth highbush blueberry (*Vaccinium corymbosum*), Common elder (*Sambucus canadensis*), Buttonbush (*Cephalanthus occidentalis*) and Silky dogwood (*Cornus amomum*). The cool microclimate within this swamp also harbors several species that are uncommon in Kent county. Included in this group is Partridge berry (*Mitchella repens*), Honewort (*Cryptotaenia canadensis*), Water-parsnip (*Sium suave*) and Bristly blackberry (*Rubus setosus*).

An additional point of interest is that just south of 4-mile road there is an active coyote den at this site. Several disassembled deer skeletons are scattered around three large holes, with abundant fresh tracks. Also, bird diversity here appeared very high. During our morning survey we observed Ruby-throated hummingbirds, Rose-breasted grosbeaks, Scarlet tanagers, Cedar waxwings, Eastern wood peewees, Red-bellied woodpeckers and several other species.

This parcel contains the best example of a hardwood swamp in the township. Its aesthetic beauty and wildlife habitat value are significant. Furthermore, the important location of this wetland complex at the headwaters of the Chase Lake drainage further emphasizes the importance of preserving this parcel. It is a remarkably beautiful component of the natural character of the township.



The swamp, inundated with standing water, is dominated by silver maple (*Acer saccharinum*).

SITE NAME (NUMBER):

CHASE LAKE (11.1)

SITE LOCATION

Parcel Numbers:

41-15-02-300-011, 41-15-10-200-056, 41-15-11-100-006

Address:

8325 3 Mile Rd. NE, 2790 Honey Creek Ave NE, and 2750 Honey Creek Ave. NE

Access:

3 Mile Rd. east of Honey Creek Ave. dead ends into the lake access.

Date First Visited:

June 29, 2006

PHYSICAL FEATURES

Size (acres):

217

Topographic Features:

Most of the area is at or slightly above the water level of the lake, except for the southwest corner and the finger of land between the two lakes.

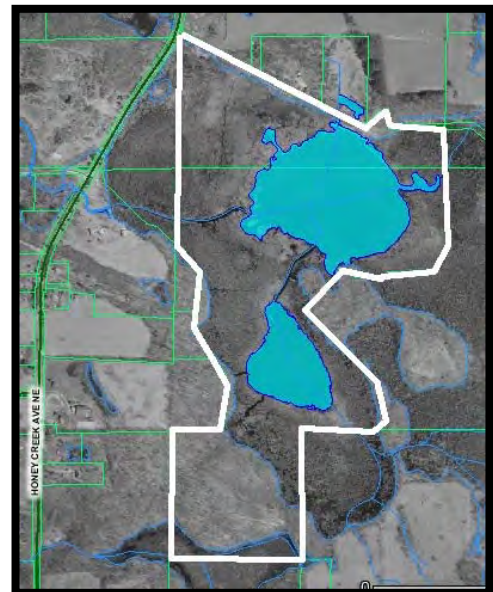
Soil Types:

Houghton muck and Chelsea loamy fine sand

Disturbance:

Access area on north side of lake is mowed and muck in front has been dredged. Owner has a small crane to remove weeds from the channels. Some hunting.

Comments:



COMMUNITY INFORMATION

Pre-settlement Communities: Mixed Conifer Swamp, Mixed Hardwood Swamp, and Oak-Hickory Forest

Present Communities: Bog, Hardwood Conifer Swamp, Emergent Marsh, and Mesic Southern Forest

Maturity: The bog is mature, as are some wooded areas, while some of the surrounding woods are middle-aged because of previous logging or farming.

Total Species: 228

FQI: 66.2

Native to Non-Native Ratio: 11.7

Notable Elements: The bog and wetland areas are uncommon habitat types in this area. The ratio of native to non-native plants at this site is more than twice the average of all phase 2 sites we inventoried. Also, more than 10% of plants identified here occur nowhere else in the township.

Problem Elements: Purple loosestrife (*Lythrum salicaria*) and Reed Canary Grass (*Phalaris arundinacea*) are present in some of the wetlands.

Garlic mustard (*Alliaria petiolata*) is thick on the properties on the west side of the lakes. Evidence of deer grazing.

Comments:

LANDSCAPE INFORMATION

Watershed:

Egypt Creek

Corridor Component:

The cornerstone of the complex of wetlands in the northeast portion of the township, this site lies between Cannonsburg State Game Area and Seidman Park.

Problem Adjacencies:

The properties to the west of the lakes are thickly covered with garlic mustard (*Alliaria petiolata*).

Comments:

DESCRIPTION

This property includes a large section of Chase Lake with additional adjacent shoreline, as well as a swamp and upland forest. The parcel elicits a very high FQI of 67. Two aspects of this property that help to illustrate its significant value as a natural area are: 1) This site has a ratio of native:non-native species of 11.67, which is more than twice the average for phase II sites in the township and over 4 points higher than the second highest ratio; and 2) Of the 210 native species we found here, more than 10% (24) were found nowhere else in the township. This is a truly wild site, one whose presettlement character is largely intact and supportive of a wide diversity of life forms.

The Lake itself is remarkable for its almost completely intact natural shoreline. A lake this large and found so close to extensive agricultural and urban areas that displays minimal human impact is a particular jewel in the Township's natural features. The aquatic flowering plants here are not extremely diverse, yet they are nearly all species with very high coefficients of conservatism. The Sweet-scented waterlily (*Nymphaea odorata*) and Yellow pond-lily (*Nuphar variegata*) are two floating-leaved aquatics that are the most noticeable initially. Yet under the water surface this lake supports several submerged aquatics that are even more notable, including two native species of Water-milfoil (*Myriophyllum exalbescens* and *M. verticillatum*), Slender naiad (*Najas flexilis*), Pondweed (*Potamogeton alpinus*), Flat-stemmed pondweed (*Potamogeton zosteriformis*), Pickerel weed (*Pontedaria cordata*), and three species of Bladderwort (*Utricularia gibba*, *U. minor*, *U. vulgaris*). It is wonderfully surprising that we found no presence of the two most invasive non-native aquatics – Eurasian water milfoil (*Myriophyllum spicatum*) and Curly pond weed (*Potamogeton crispus*) – anywhere in this lake.



Nearly the entire circumference of Chase Lake is surrounded by intact vegetation. Here, along the south end, the marshy shore is dominated by Whorled loosestrife (*Decodon verticillatus*), Leatherleaf (*Chamaedaphne calyculata*), and Marsh fern (*Thelypteris palustris*).

The vegetation supported in the shallow marshy edges indicate that this wetland complex is somewhat acidic. Along these quaking shores are several bog indicators such as Round-leaved sundew (*Drosera rotundifolia*), Pitcher-plant (*Sarracenia purpurea*), Leatherleaf (*Chamaedaphne calyculata*), Bog birch (*Betula pumila*), Marsh cinquefoil (*Potentilla palustris*), Wiregrass sedge (*Carex lasiocarpa*), Whorled loosestrife (*Decodon verticillata*), Marsh St. John's-wort (*Triadenum fraseri*), Three-way sedge (*Dulichium arundinaceum*) and Stalked water horehound (*Lycopus rubellus*). Although our visit occurred

long after Orchids flower, this habitat is perfect for several species of orchid and we suspect an earlier, spring visit would likely encounter at least a few of these rare plants as well.

Another less striking, but equally notable habitat is the swamp community found at the southeastern end of the property, and extending further east off this parcel. Here the dominant woody species include Poison sumac (*Toxicodendron vernix*), Tamarack (*Larix laricina*), Buttonbush (*Cephalanthus occidentalis*), Michigan holly (*Ilex verticillata*), Silky willow (*Salix sericea*), Red maple (*Acer rubrum*) and Silver maple (*Acer saccharinum*). In the standing water and hummocks underneath this



Poison sumac (*Toxicodendron vernix*) was a common sight throughout the swamp areas and around the marshy lake edges.

canopy are found several uncommon sedges (*Carex disperma*, *C. leptalea*, *C. aquatilis*, *C. pseudo-cyperus*), Spring cress (*Cardamine bulbosa*), Southern blue-flag (*Iris virginica*), Tufted loosestrife (*Lysimachia thyrsiflora*), Water-parsnip (*Sium suave*) and Arrow-arum (*Peltandra virginica*). This is also a rich area for ferns and fern allies such as Clinton's woodfern (*Dryopteris clintoniana*), Water horsetail (*Equisetum fluviatile*), Sensitive fern (*Onoclea sensibilis*), Cinnamon fern (*Osmunda cinnamomea*) and Royal fern (*Osmunda regalis*).

However, to suggest this parcel is highlighted solely by wetland habitats would miss an extremely impressive moist forest community that is located directly south of the lake. Here the dominant trees can approach 1m diameter and include some very large White pines (*Pinus strobus*), White ash (*Fraxinus americana*), White oak (*Quercus alba*), Yellow birch (*Betula alleghaniensis*) and American hornbeam (*Carpinus caroliniana*). A jewel of the herbaceous community in this woods is the striking Large-leaved shinleaf (*Pyrola elliptica*), which is joined by several uncommon species such as Poke milkweed (*Asclepias exaltata*), Squawroot (*Conopholis americana*), three species of bluegrass (*Poa languida*, *P. nemoralis*, *P. sylvestris*) and two uncommon sedges (*Carex digitalis* and *C. virescens*).

In total there are 22 species at this site with a coefficient of conservatism of 8 or higher, six of which are 10s. A further indicator that this parcel supports high quality natural areas is that we documented 30 different species of native sedge (genus *Carex*), even though habitat diversity was somewhat limited. Two problematic invasive species, Purple loosestrife (*Lythrum salicaria*) and Reed canary grass (*Phalaris arundinacea*) are present here, yet they occur in relatively isolated populations and may be at least partially held in check by factors related to water chemistry.

The Chase Lake wetland complex, of which this parcel includes a significant, yet incomplete portion, provides an extraordinary display of undisturbed, native habitat that bears significance not only for Ada Township, but for the broader region of West Michigan as well. We feel strongly that securing the preservation of this ecosystem should be one of the top priorities of township planners.



Pitcher plant (*Sarracenia purpurea*; left) and Sundew (*Drosera rotundifolia*; above) were two insectivorous plants we encountered in the boggy area on the northwest side of Chase Lake.

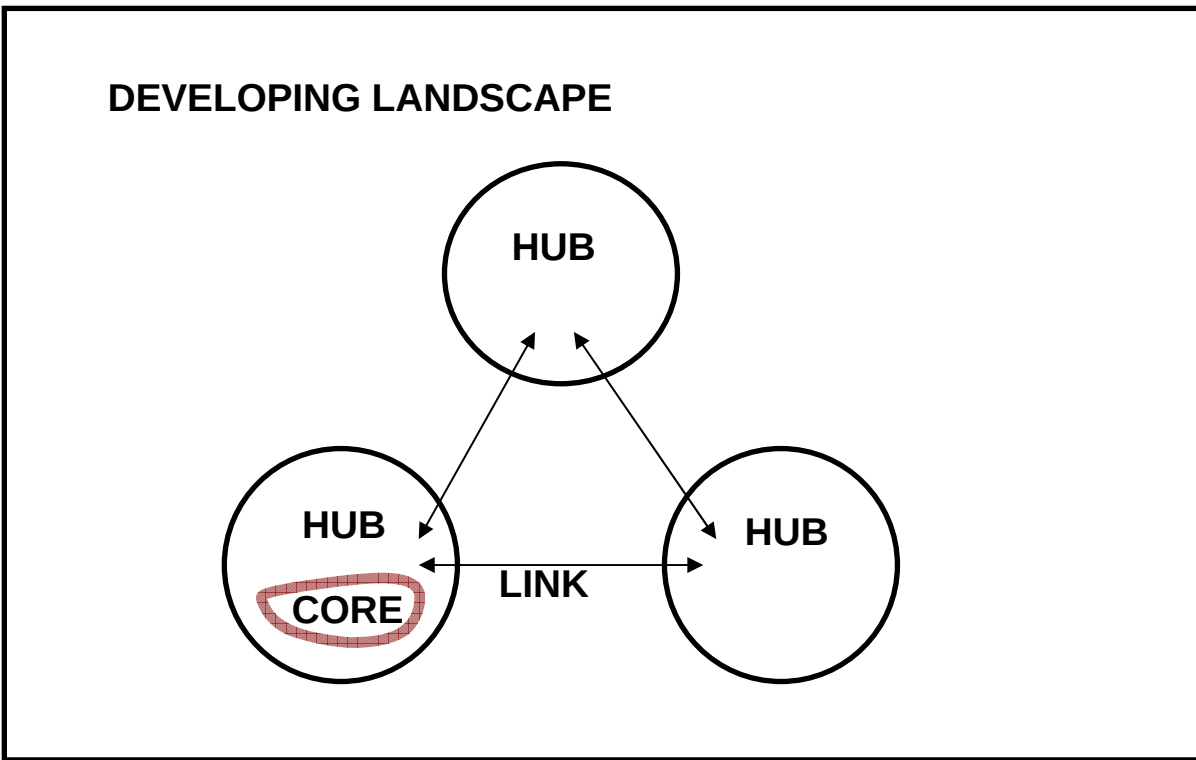


Figure 42. Elements of a green infrastructure in a regional landscape being transformed by development.

parcels we visited exist in larger sites which might serve as protective hubs around the core areas of high botanical diversity and ecological importance (Figure 42). One example of such an area is the small wetland, prairie and forested stream complex in Section 19, which contains unusually high botanical diversity for such a small parcel. However, it exists within a broader area of apparently high quality habitat that, if preserved, can offer a buffering capacity for maintaining its richness.

In Figure 43 and Figure 44 potential links between hubs and cores are illustrated with arrows. Areas within the large Chase Lake drainage in sections 1,2 and 3 (including Downs Lake) are connected by small creek channels eastward to Chase Lake, which is further connected northeastward to the Cannonsburg State Game Area by way of Egypt Creek. Similarly the shrub/sedge meadow wetland complex in Section 24 is connected to the larger hub of Seidman Park by way of the Honey Creek corridor. There is another very notable core area present in Section 15, a relatively small parcel that is home to incredible habitat and botanical diversity. This site is connected to the north end of Seidman park via a distinct power line right-of-way that itself supports significant prairie and dry woodland remnants. Other major hubs and core areas exist all along the Grand River Valley and are connected by the river and its floodplain margins.

The principle large core areas of the township include the Cannonsburg State Game Area (together with Egypt Valley Country Club), Chase Lake and Seidman Park in the northeast, an area of dry woodland and prairie openings in Sections 25 and 36 in the southeastern portion of the Township, and several large parcels along the Grand River including Ada Township Park, Roselle Park and a particularly striking river floodplain habitat along the west side of the river that is situated in Section 20. Protection and restoration of these major hubs, together with their connecting smaller hubs and core areas and the linkages between them will play a significant role in integrating the larger green space areas described in this report into a functional green infrastructure for the Township.

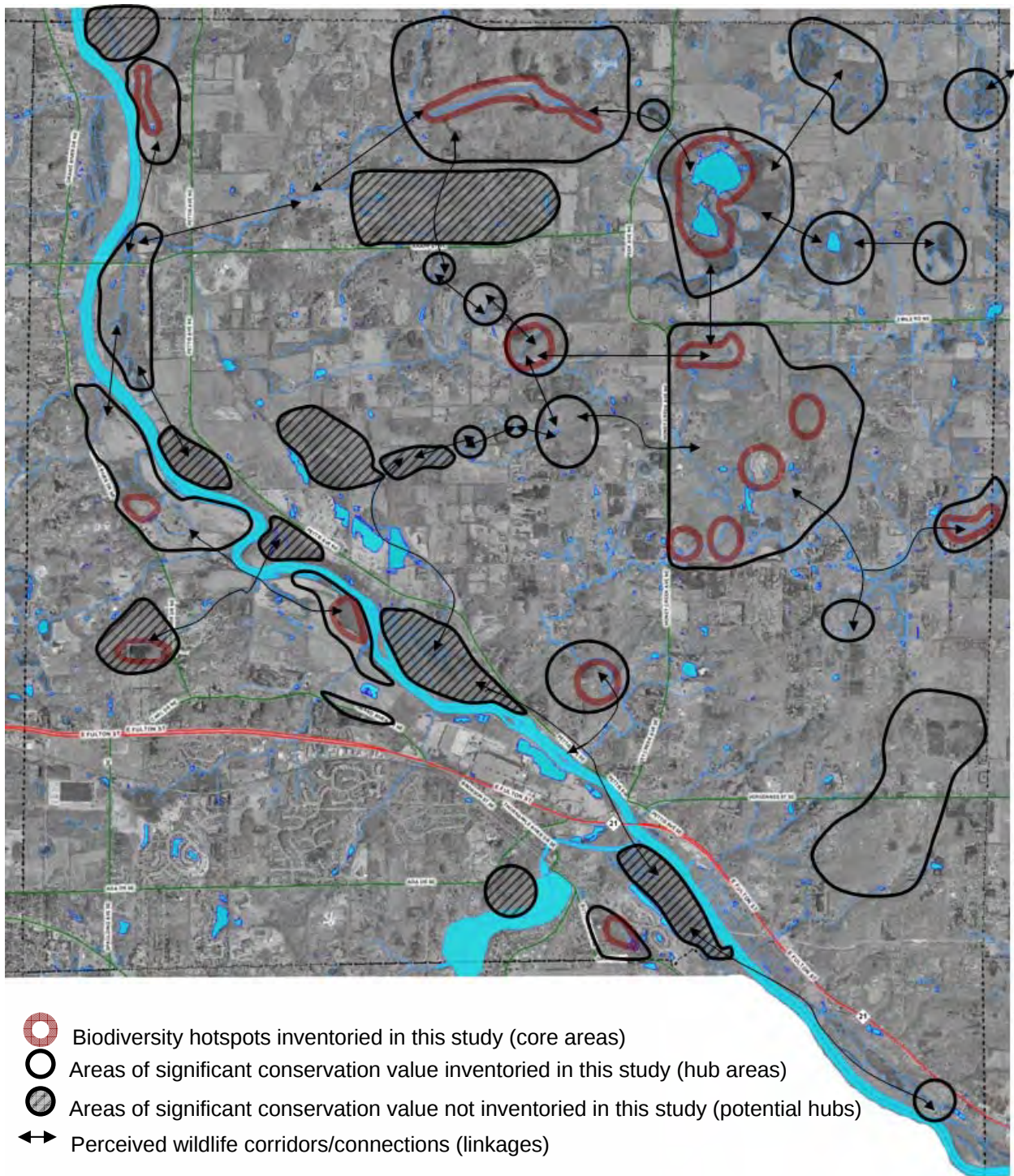


Figure 43. Potential green infrastructure for Ada Township.

Recommendations

With the goal of creating a green infrastructure for Ada Township as the framework for open space protection, there are many steps that can be taken to promote an effective open space program.

- **Planning.** In all aspects of Ada Township planning, the time is ripe for promoting land use measures that will contribute to the integration of natural areas that remain in the Township. Efforts to inform the general populace about the value of a functional green infrastructure network should be advanced whenever possible. Part of this planning should engage recreational activities of the expanding population of Ada Township so as to make available various options, both active and passive, but doing so in a way that the integrity of the involved natural areas is not compromised.
- **Preservation.** Efforts should be taken as soon as is practical to protect the areas identified in this report and others that future inventories might identify. Numerous mechanisms are available for land preservation in Ada Township, and these efforts, when possible, should be coordinated with those of the Land Conservancy of West Michigan, The Nature Conservancy, and the Michigan Natural Features Inventory. Working to preserve the most sensitive areas of high biodiversity is an urgent task, as is underscored by the rapid turnover of private lands and by our findings that so many rare plant species (22%) were recorded as only existing within a single site in the survey.
- **Protection.** Critical links between natural areas may require particular protection strategies. For example, the linkage function of stream corridors is reduced whenever streamside vegetation is cleared abruptly to the stream edge. An effective riparian ordinance limiting such development along stream banks should be considered. Not only would such an ordinance keep the vegetation corridor intact, it would also improve water quality in the affected streams and basins into which they drain. Similarly, any coordinated efforts to limit herbicide application and other efforts to quell native plant growth in power line right-of-ways and along railroad verges would help protect these important linkages.
- **Education.** Education can serve two essential roles in creating a green infrastructure. First, education can promote the values of open space and help to develop a vision for a viable green infrastructure for the Township. Creating such a collective vision is essential to building governmental and community support for land protection. Education of Township residents in the proper care of private and public lands can help in maintaining existing natural areas and the network of links that integrates them. For example, an education effort with regard to the negative impacts of invasive plants like Autumn olive, Multiflora rose and Garlic mustard could help in reducing the presence and spread of these invasives in the Township. Efforts to encourage private landowners to shift their formal landscaping to utilize more native species could also significantly contribute to this end.
- **Restoration.** Even the large hub areas which already have protected status, if simply left alone, will continue to exhibit consistent degradation due to the influx of non-native species and from the absence of natural disturbance patterns such as fire. Community efforts to help eradicate non-native species will yield restoration of ecological functions, educational benefits as well as general community building. Such efforts, which are already being planned, should be affirmed and advanced whenever possible.
- **Development strategies.** In general, promoting development strategies that preserve open space in accordance with the green infrastructure plans developed by the Township should be part of all discussions of future plans for Ada Township.
- **Networking.** Participation with adjoining townships and local land conservancy organizations to share information and strategies will make a significant contribution to building a broader regional green infrastructure in Kent County.

It is encouraging to work for a community like Ada Township, where the vision for green infrastructure encouraged in this report has already been embraced by many residents and township officials. We hope that the information contained in this report will provide added impetus to work toward open space preservation and integration in the Township. Such work is sure to have lasting value for future generations of Township residents, securing their ability to continue benefiting from the area's rich natural heritage.

Appendix II
Landowner Contact Documents



Ada Township Natural Areas Inventory Property Owner Report

Property Owner: Jane Doe
Address: 0000 4 Mile Rd. NE
Date Visited: July 6, 2006

Comments

Your property includes plant communities that represent Southern Floodplain Forest. It was surveyed with the property immediately to the south, so the plant species list includes species from both properties. The wooded area close to the house supported a rich groundcover with a diversity of plants. The dominant trees in this area are hackberry (*Celtis occidentalis*) and bur oak (*Quercus macrocarpa*). Closer to the river, the canopy is dominated by huge silver maples (*Acer saccharinum*). We also found sycamore (*Platanus occidentalis*) and honey locust (*Gleditsia triacanthos*) trees in this area. Some of the interesting plants in this area include a rare relative of the jack-in-the-pulpit, the green dragon (*Arisaema triphyllum*) and wild ginger (*Asarum canadense*). This area plays an important role in the natural area bordering the Grand River, providing a reservoir for floodwaters, a filtering area for runoff before it reaches the river, and providing habitat for many animal species that depend on floodplain forest. We have included a general description of the southern floodplain forest developed by the Michigan Natural Features Inventory to describe similar habitats. We have also included some information to help you identify and control the worst of the invasive species on your property. Removing these species will increase the quality of the habitat for wildlife and native plants.

Michigan Communities Observed (MNFI):

Plants often grow together in characteristic communities defined by the different species that live in them. We found areas representing the following plant communities on your property.

SOUTHERN FLOODPLAIN FOREST

Overview: A bottomland deciduous forest type located south of the transition zone and occurring on mineral soil (less frequently on shallow muck). (The transition zone divides lower Michigan into two regions, a southern and northern half.)

Physiology and geology: Located along streams which are third order or greater.

Soils: Loam or silt loam (sometimes sandy loam and occasionally thin muck); neutral pH.

Dominant plants: Dominant plants nearly always include *Acer saccharinum* (silver maple), often *Fraxinus pennsylvanica* (red ash), and sometimes *Acer rubrum* (red maple). *Ulmus americana* (American elm) was once important but was eliminated from the canopy by elm blight. Several other species can be important, especially in the southernmost watersheds, resulting in complex patterns of dominance. These additional species include *Juglans cinerea* (butternut), *Acer nigrum* (black maple), *Aesculus glabra* (Ohio buckeye), *Acer negundo* (box elder), *Fraxinus nigra* (black ash), *Salix nigra* (black willow), and *Populus deltoides* (cottonwood), the last two in former channels and on low riverbanks. *Ulmus rubra* (red elm) is occasionally important.

Associated species: When sufficient elevation in the floodplain exists, species of surrounding higher ground will invade (e.g. *Acer saccharum* (sugar maple), *Fagus grandifolia* (American beech), *Tilia americana* (linden; basswood), *Fraxinus americana* (white ash), *Carya cordiformis* (bitternut hickory)). Other typical canopy species include *Quercus bicolor* (swamp white oak), *Platanus occidentalis* (sycamore) (which may dominate less frequently flooded "flats"), *Celtis occidentalis* (hackberry) and *Juglans nigra* (black walnut). *Crataegus* spp. (hawthorne), *Lindera benzoin* (spicebush), *Cornus alternifolia* (alternate-leaved dogwood), *Carpinus caroliniana* (horn-beam; blue-beech), and *Cercis canadensis* (redbud; Judas tree) often occur in the understory. A number of species reach their northern limit in this forest type, including *Aesculus glabra* (Ohio buckeye), *Asimina triloba* (paw-paw), *Camassia scilloides* (wild hyacinth), *Cercis canadensis* (redbud; Judas tree), *Diarrhena americana* (beak grass), *Fraxinus quadrangulata* (blue ash), *Gleditsia triacanthos* (honey locust), *Gymnocladus dioica* (Kentucky coffee tree), *Mertensia virginica* (virginia bluebells), *Morus rubra* (red mulberry), *Trillium nivale* (snow trillium), *T. recurvatum* (red trillium), *T. sessile* (toadshade).

Similar communities: SOUTHERN SWAMP, MESIC SOUTHERN FOREST

Disturbance effects: Flooding and perhaps Indian-set fires introduced frequent disturbance to floodplain forest, indicated by the tendency for canopy species to stump sprout, grow fast, and be fire tolerant; by the few shrub species; and by weedy exotics and natives like *Ambrosia trifida* (giant ragweed), *Alliaria officinalis* (garlic mustard), *Lysimachia nummularia* (moneywort), and *Urtica dioica* (nettle). Grass and herb dominated opening of *Phalaris* (canary grass), *Elymus virginicus* (Virginia wild-rye), *Elymus riparia* (riverbank wild-rye), and *Solidago altissima* (tall goldenrod) are often present.

Ada Township Natural Areas Inventory

Property Owner Report

Invasive Species Identification and Control

Autumn Olive (*Eleagnus umbellata*) –

Description: Bushy shrub, usually about 5 to 10 feet in height. Leaves 1-3 inches long with smooth edges and have silvery-white scales on their undersides. Fruit is pink/red fleshy berries. Often grows in old fields.

Control: The cut stump treatment is probably the most effective method. This technique involves two steps, first cutting the plant down close to the ground and then applying a liquid herbicide to the stump. The plant can be cut with a chainsaw or handsaw. A formulation of glyphosate (Round-Up), in a 20-50 percent solution, is then applied immediately to the cut stump surface by using a low pressure hand held sprayer or a sponge brush. This type of treatment has proved effective in killing the root system and preventing resprouting when applied late in the growing season (July-September) but is also effective during the dormant season.

Resources: www.inhs.uiuc.edu/chf/outreach/VMG/autolive.html
<http://rnnext.cas.psu.edu/PDFs/Autumn%20Olive.pdf>

Buckthorn (*Rhamnus cathartica* & *R. frangula*)

Description: A European species first planted as a hedge. Commonly invade hedgerows of open fields, then spreading to the whole field. Often found on edges of woods. Buckthorn is a small tree or shrub that can reach a height of 25 feet. Fruits often abundant, becoming dark blue to black as they ripen and remain into winter. Has orange inner bark.

Control: Small plants can be pulled in the spring when the ground is soft. The cut stump treatment is probably the most effective method for larger trees. This technique involves two steps, first cutting the plant down close to the ground and then applying a liquid herbicide to the stump. The plant can be cut with a chainsaw or handsaw. A formulation of glyphosate (Round-Up), in a 20-50 percent solution, is then applied immediately to the cut stump surface by using a low pressure hand held sprayer or a sponge brush. Female trees with berries should be removed preferentially to reduce seed bank.

Resources: www.nps.gov/plants/alien/fact/khca1.htm
www.dnr.state.mn.us/invasives/terrestrialplants/woody/buckthorn/index.html

Multiflora Rose (*Rosa multiflora*)

Description: Introduced as a rootstock for ornamental roses and sometimes planted for erosion control. Recognized as a noxious weed in some states because of its tenacious and unstoppable growth. It occurs in dense woods, prairies, along stream banks and roadsides, and in open fields and pastures. It is a thorny perennial shrub with arching stems and leaves divided into 5 to 11 sharply toothed leaflets. Whitish flowers in early summer, with bright red fruits later.

Control: The cut stump treatment is probably the most effective method late in the growing season. This technique involves two steps, first cutting the plant down close to the ground and then applying a liquid herbicide to the stump. The plant can be cut with a chainsaw or handsaw. A formulation of glyphosate (Round-Up), in a 20-30 percent solution, is then applied immediately to the cut stump surface by using a low pressure hand held sprayer or a sponge brush. Follow-up treatments may be necessary.

Resources: www.nps.gov/plants/alien/fact/romu1.htm
www.dnr.state.wi.us/invasives/fact/rose.htm

Garlic Mustard (*Alliaria petiolata*)

Description: Garlic mustard is a cool-season, biennial herb with stalked, triangular to heart-shaped, coarsely-toothed leaves that give off an odor of garlic when crushed. First year plants appear as a rosette of leaves close to the ground which remain green through the winter and develop into mature flowering plants the following spring. Flowering plants reach from 2-3.5 feet in height and produce button-like clusters of small white flowers, each with 4 petals in the shape of a cross. It outcompetes native wildflowers by shading them out. Occurs in moist, shady areas.

Control: Plants produces many seeds, so it is best to pull the second year plants before they flower (late April). The seeds can remain viable in the soil for about 5 years, annual removal to deplete the seedbank will be necessary. The entire root should be removed because new plants can sprout from root fragments. If possible, remove plants from site in trash bags to prevent spreading seeds.

Resources: www.nps.gov/plants/alien/fact/alpe1.htm

Plant Species List and Floristic Quality Assessment

Roselle Park

<u>Habit</u>	<u>Scientific Name</u>	<u>COMMON NAME</u>	<u>N/</u>	<u>C</u>	<u>CW</u>	<u>R</u>	<u>Notes</u>
Fern	<i>Athyrium filix-femina</i>	LADY FERN	N	4	0	1	
Fern	<i>Equisetum arvense</i>	COMMON or FIELD HORSETAIL	N	0	0	3	
Fern	<i>Equisetum hyemale</i>	SCOURING RUSH	N	2	-2	2	
Fern	<i>Onoclea sensibilis</i>	SENSITIVE FERN	N	2	-3	3	
Fern	<i>Osmunda cinnamomea</i>	CINNAMON FERN	N	5	-3	2	
Fern	<i>Osmunda claytoniana</i>	INTERRUPTED FERN	N	6	-1	1	
Fern	<i>Osmunda regalis</i>	ROYAL FERN	N	5	-5	1	
Fern	<i>Pteridium aquilinum</i>	BRACKEN FERN	N	0	3	2	
Fern	<i>Thelypteris palustris</i>	MARSH FERN	N	2	-4	3	
Forb	<i>Achillea millefolium</i>	YARROW	N	1	3	2	
Forb	<i>Acorus calamus</i>	SWEET-FLAG; CALAMUS	N	6	-5	1	
Forb	<i>Agrimonia gryposepala</i>	TALL AGRIMONY	N	2	2	1	
Forb	<i>Agrimonia pubescens</i>	SOFT AGRIMONY	N	5	5	1	
Forb	<i>Alisma plantago-aquatica</i>	WATER-PLANTAIN	N	1	-5	2	
Forb	<i>ALLIARIA PETIOLATA</i>	GARLIC MUSTARD	A	*	0	1	
Forb	<i>Allium canadense</i>	WILD GARLIC	N	4	3	1	
Forb	<i>ALLIUM VINEALE</i>	FIELD GARLIC	A	*	3	1	
Forb	<i>Ambrosia trifida</i>	GIANT RAGWEED	N	0	-1	3	
Forb	<i>Anemone canadensis</i>	CANADA ANEMONE	N	4	-3	4	
Forb	<i>Anemone quinquefolia</i>	WOOD ANEMONE	N	5	0	1	
Forb	<i>Anemone virginiana</i>	THIMBLEWEED	N	3	5	1	
Forb	<i>Angelica atropurpurea</i>	ANGELICA	N	6	-5	2	
Forb	<i>ANTHEMIS COTULA</i>	DOG FENNEL	A	*	3	1	
Forb	<i>Apios americana</i>	GROUNDNUT; INDIAN-POTATO	N	3	-3	1	
Forb	<i>Apocynum cannabinum</i>	INDIAN HEMP; HEMP DOGBANE	N	3	0	2	
Forb	<i>Arabis glabra</i>	TOWER MUSTARD	N	3	5	1	
Forb	<i>ARCTIUM MINUS</i>	COMMON BURDOCK	A	*	5	2	
Forb	<i>Arisaema dracontium</i>	GREEN DRAGON; DRAGON-ROOT	N	10	-3	1	
Forb	<i>Arisaema triphyllum</i>	JACK-IN-THE-PULPIT; INDIAN-TURNIP	N	5	-2	1	
Forb	<i>Asarum canadense</i>	WILD-GINGER	N	5	5	1	
Forb	<i>Asclepias incarnata</i>	SWAMP MILKWEED	N	6	-5	2	
Forb	<i>Asclepias syriaca</i>	COMMON MILKWEED	N	1	5	2	
Forb	<i>Aster firmus</i>	SMOOTH SWAMP ASTER	N	4	-5	3	
Forb	<i>Aster puniceus</i>	SWAMP ASTER	N	5	-5	1	
Forb	<i>BARBAREA VULGARIS</i>	YELLOW ROCKET	A	*	0	2	
Forb	<i>BERTEROA INCANA</i>	HOARY ALYSSUM	A	*	5	1	
Forb	<i>Bidens frondosus</i>	COMMON BEGGAR-TICKS	N	1	-3	2	
Forb	<i>Blephilia hirsuta</i>	WOOD MINT	N	8	4	1	
Forb	<i>Boehmeria cylindrica</i>	FALSE NETTLE	N	5	-5	2	
Forb	<i>BRASSICA JUNCEA</i>	INDIAN, CHINESE or BROWN MUSTARD	A	*	5	1	
Forb	<i>BRASSICA NIGRA</i>	BLACK MUSTARD	A	*	5	1	
Forb	<i>Caltha palustris</i>	MARSH-MARIGOLD; COWSLIP	N	6	-5	1	

Appendix V

Summary Plant Species List of all Phase 2 Sites

This appendix reports the master list of all species found in our Phase 2 inventories. This summary compilation allows for a visual assessment of all the species we encountered and the number of sites in which they were found. Since each list was compiled during a single day visit, none of these inventories should be misunderstood to represent a complete listing for any of the sites. Instead, this summary table represents those species encountered when compiling a list for each of these sites on the particular day when the site was visited.

Key to Information in Plant List

Type = Plant growth form

CC = Coefficient of Conservatism

A number assigned to a plant species (0-10) according to the plant's ability to tolerate disturbance.

CW = Coefficient of Wetness

A number assigned to a plant species ranging from -5 (obligate wetland) to +5 (dry upland) according to where the plant is most likely to occur in nature. Most plants with a coefficient between -4 and +4 will thrive in average soil.

RA = Relative Abundance

A number assigned to the plants ranging from 1 (sparse) to 5 (very abundant) indicating how prevalent the species is in a specific location. In the plant list the number assigned each species at a given site is a relative abundance value.

CR = County Record

A species not documented from Kent County by a Michigan flora project (Voss 1972, 1985, 1996)

SC = Special Concern

ST = State Threatened

SE = State Endangered

Type	Scientific Name	Common Name	CC	CW	Section 2 Swamp	Cannonsberg SGA East	Cannonsberg SGA West	Section 6 Riverfront	Section 7 Floodplain Forest	Chase Lake	Downs Lake	Seidman Park	Section 15 Wet Woods	Section 19 Woods	Holiday Farm Floodplain	Section 24 Sedge Meadow	Section 24 Woods	Section 25 Dry Woods	Honey Creek Woods	Section 36 Dry Woods	Southeast Floodplain	TOTAL SITES	Special Status																						
Fern	<i>Adiantum pedatum</i>	MAIDENHAIR FERN	6	1	1	1							2	2			1		2	2		5	Special Status																						
Fern	<i>Asplenium platyneuron</i>	EBONY SPLEENWORT	2	3	1	3	2	2	1		1	1	1	1							11	Special Status																							
Fern	<i>Athyrium filix-femina</i>	LADY FERN	4	0	2	1					1	1	1	2			1				6			Special Status																					
Fern	<i>Botrychium oneidense</i>	BLUNT-LEAVED GRAPE-FERN	7	5								1									1				Special Status																				
Fern	<i>Botrychium virginianum</i>	RATTLESNAKE FERN	5	3		2	1				1										3					Special Status																			
Fern	<i>Diphasiasstrum complanatum</i>	GROUND CEDAR	5	2		1	2		1		1	1					1	1			6						Special Status																		
Fern	<i>Dryopteris carthusiana</i>	SPINULOSE WOODFERN	5	-2	3	3	2	3	3	3	3	3	3	4		1	2	2	3	2	14							Special Status																	
Fern	<i>Dryopteris clintoniana</i>	CLINTON'S WOODFERN	8	-4	1		2	3	2	2	2	1				1	2				6								Special Status																
Fern	<i>Dryopteris cristata</i>	WOODFERN	6	-5										1		2	1				3									Special Status															
Fern	<i>Equisetum arvense</i>	COMMON HORSETAIL	0	0	2	1	1	2	2	1	1	2	2	2	2	2		1			12										Special Status														
Fern	<i>Equisetum fluviatile</i>	WATER HORSETAIL	7	-5	1				2	1				2	1						5											Special Status													
Fern	<i>Equisetum hyemale</i>	SCOURING RUSH	2	-2	1	2	1	2			1		2	1	1		1		2		9												Special Status												
Fern	<i>Equisetum laevigatum</i>	SMOOTH SCOURING RUSH	2	-3	1		2	1			1		1			1				1	7													Special Status											
Fern	<i>Equisetum sylvaticum</i>	WOODLAND HORSETAIL	5	-3									1								1														Special Status										
Fern	<i>Huperzia lucidula</i>	SHINING CLUBMOSS	5	-1	1	1															2															Special Status									
Fern	<i>Lycopodium clavatum</i>	RUNNING GROUND-PINE	4	0	1																1																Special Status								
Fern	<i>Lycopodium obscurum</i>	GROUND-PINE	5	3					1												1																	Special Status							
Fern	<i>Matteuccia struthiopteris</i>	OSTRICH FERN	3	-3									2	3	2	3		1			3																		Special Status						
Fern	<i>Onoclea sensibilis</i>	SENSITIVE FERN	2	-3	3	3	3	4	3	4	4	3	3	3		4	3	1	2	3	15																			Special Status					
Fern	<i>Osmunda cinnamomea</i>	CINNAMON FERN	5	-3	2	3	2	2	4	2	3	3	3	4		1	3		2		12																				Special Status				
Fern	<i>Osmunda claytoniana</i>	INTERRUPTED FERN	6	-1								1	2								2																					Special Status			
Fern	<i>Osmunda regalis</i>	ROYAL FERN	5	-5	3		2		3	3	3	2	1	1		2		2	2	2	10																						Special Status		
Fern	<i>Polystichum acrostichoides</i>	CHRISTMAS FERN	6	5	1	3		1		1			2					2			6																							Special Status	
Fern	<i>Pteridium aquilinum</i>	BRACKEN FERN	0	3	3	3	2		2			2	2	2		2	2	2		2	9																								Special Status
Fern	<i>Thelypteris noveboracensis</i>	NEW YORK FERN	5	-1														1			1																								
Fern	<i>Thelypteris palustris</i>	MARSH FERN	2	-4		2	2	3	2	4			2	2	2	4	1		2	3	12		Special Status																						
Forb	<i>Achillea millefolium</i>	YARROW	1	3		1	2	2				1	2	2	1	2	2	2	2	2	12	Special Status																							
Forb	<i>Actaea pachypoda</i>	DOLL'S-EYES	7	5						1											1			Special Status																					
Forb	<i>Actaea rubra</i>	RED BANEBERRY	7	5	1			1				1	1	2					1		6				Special Status																				
Forb	<i>Agrimonia gryposepala</i>	TALL AGRIMONY	2	2	2	2	1	2	1	2	2	2	1	1		2	1	1	1	1	14					Special Status																			
Forb	<i>Agrimonia parviflora</i>	SWAMP AGRIMONY	4	-1		1															1						Special Status																		
																												CR																	



MEMO

Staff Communication-Action Required

DATE: April 5, 2024
TO: Gaines Charter Township
FROM: Kim Triplett, Executive Assistant
RE: Request for Temporary Fireworks Stand

SUMMARY OF TOPIC:

Jason Lambracht contacted staff regarding doing a tent sale of fireworks in our Township, June 14th thru July 7th.

Staff researched the request and determined that although we do not have an ordinance against "tent" sales, Section 8.4. of our Zoning Ordinance states:

**Section 8.4 Additional Standards for O-S, NC, and GC Zoning
Districts**

A. Outdoor Activity: Except for automobile parking and off-street parking, all business, service or processing shall be conducted wholly within a completely enclosed building, unless approved in advance as part of the Site Plan Review process.

Staff has attached the site plan, and a letter from Mr. Lambracht. The letter includes Mr. Lambracht's agreement to add Gaines Charter Township as an additional insured party on the Insurance binder for \$10 million in coverage.

He has also indicated that he has received the "go ahead" from the owner of the property and all occupants of the strip mall.

BUDGET ACTION REQUIRED: NONE

STAFF RECOMMENDATION:

Staff recommends the request be approved with the following conditions:

1. Copies of all permits received/filed with the State be submitted to the Township, no later than June 1st.

2. A copy of the insurance binder showing Gaines Charter Township as an additional insured party be submitted to the Township, no later than June 1st.
3. Should Mr. Lambracht fail to submit these documents by June 1st, the Township will revoke approval.

We have been in the business of selling fireworks in the State of Michigan for the past 11 years and are based out of Grand Rapids. We're looking to do a tent sale in your area and were told by Kim Triplett to submit a proposal to be heard at the meeting on April 8th, 2024

This is the request for a site plan review for a temporary structure to sell consumer fireworks at the property of 3555 68th st. Dutton, MI 49316

Dates of operation: June 14th - July 7th

Location: 3555 68th st. Dutton, MI 49316

Hours: 9am - 9pm, (except July 3rd and 4th, 9am - 11pm)

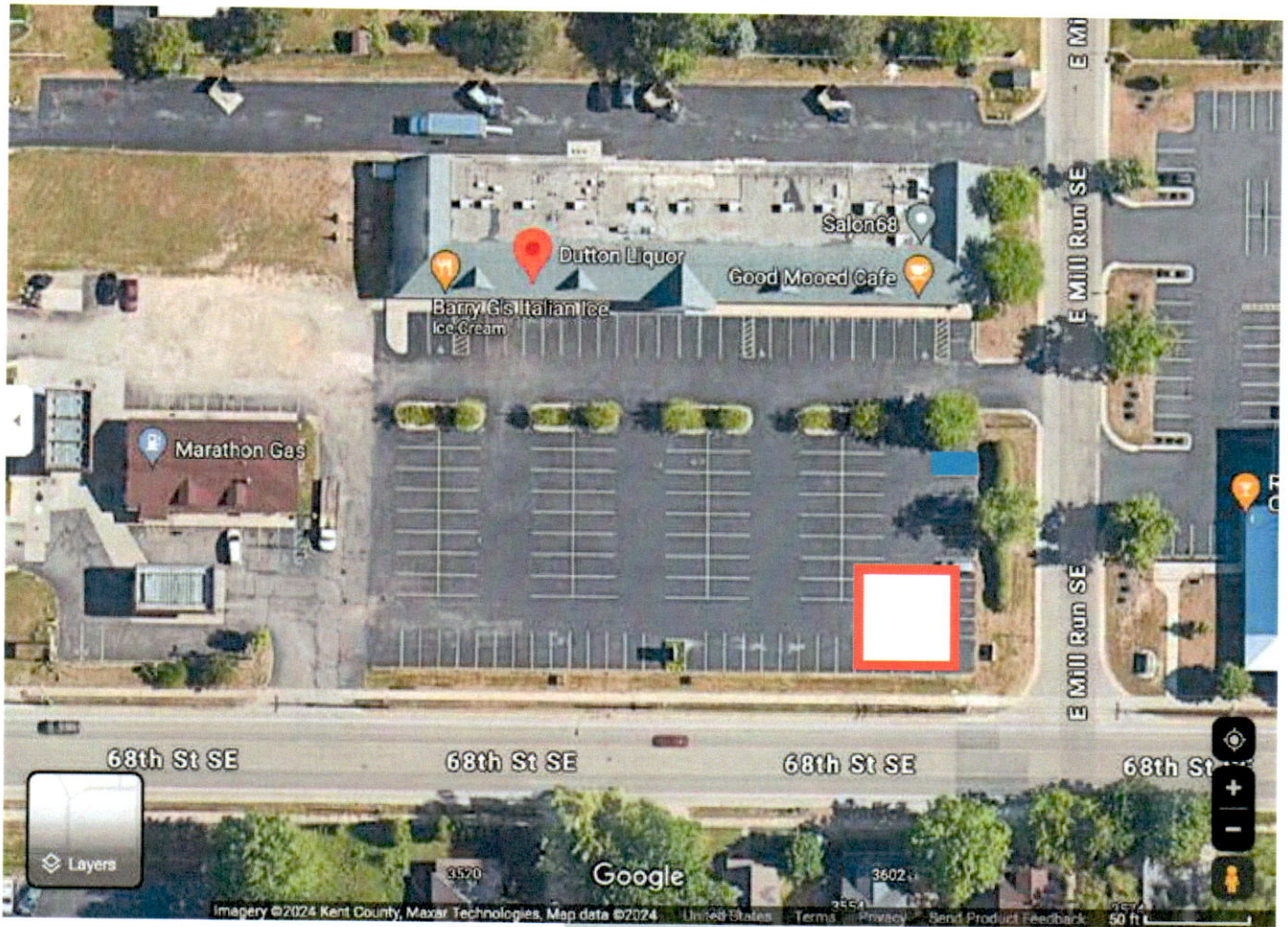
Storage for all fireworks: One shipping container 10' x 20' on site. Locked with D-locks, disc locks, and truck handle locks.

Site Plan Included

State Permits, Local Permits, and Insurance in the amount of \$10 million per occurrence (with Gaines Charter Township as an additional insured) will be completed before June 1st providing approval by the board.

We plan to be at the meeting and can answer any additional questions needed.

Thank you so much,
Jason Lambracht
Christopher Hitt



Stake Perimeter - 50' x 50'



Tent 40' x 40'



Container 20' x 10'





MEMO

Staff Communication-Action Required

DATE: April 2, 2024
TO: Gaines Charter Township
FROM: Michael Alex Brew, Township Clerk
RE: Bench Monument at Blain Cemetery

SUMMARY OF TOPIC:

Patten Monument Company contacted the Township about placing a foundation in Blain Cemetery for a completed monument. Patten Monument was unaware of our cemetery rules that prohibit bench monuments in Township owned cemeteries. Patten Monument is seeking an exemption from our Township cemetery rules as the monument is already created.

Several bench monuments have been placed in Blain cemetery without authorization. Our sexton is concerned that two existing benches do not have solid foundations and are a safety hazard of toppling on someone that bumps against them. One monument is suspected of having cremains contained within which is a violation of our ordinance.

BUDGET ACTION REQUIRED: NONE

STAFF RECOMMENDATION:

1. Grant the exemption with the condition that Patten Monument works with our sexton to ensure a proper foundation is set at the Patten Monument's expense.
2. Schedule a board workshop to review and revise the cemetery ordinances for Gaines Township.



Gaines Charter Township Cemetery Restrictions

For the benefit of all who have loved ones laid to rest in this cemetery and for the proper maintenance of the graves, the following rules are expected to be followed.

Cemetery Rules

- Limit 1 container per grave. Example: Shepherds hook with hanging basket, planter, or urn with flowers, or flowers planted in the ground.
- Natural flowers are only permitted to be planted in front of the gravestones (to the East.) These flowers must be maintained and have at least 2" space between them and the grass.
- Artificial flowers are permitted but must be in a container and maintained.
- No artificial ground cover is permitted. This includes marble stone, lava rock, wood chip etc.
- No brick or stone borders may be used. No fencing, railing, or edging is permitted.
- All planters must be placed directly next to the headstone. They also must be in proportion to the headstone.
- No trees, shrubs or evergreens may be planted without the Sexton approval.
- **No benches allowed.**

Items not allowed on graves:

Glass vases, solar lights, decorative flags, stuffed animals, and other personal items

Flowers are allowed from April 1 to November 1. Holiday wreaths allowed from December 1 to April 1.

Gaines Township is not responsible for damage to the headstone or any items around the headstone.

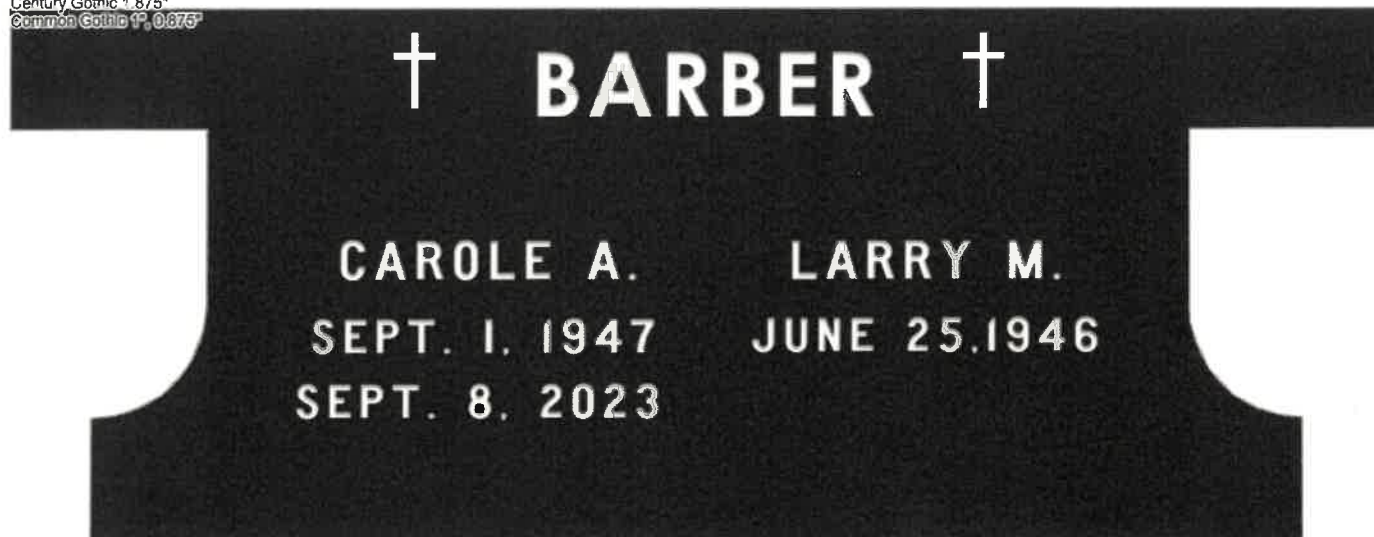
The sexton will use his discretion in removing any display that does not follow these rules or add to the overall order of the cemetery.



To:
PO#:
Material:
Message:

MV Cross 031v

Fonts:
Century Gothic 1.875"
Common Gothic 1", 0.875"

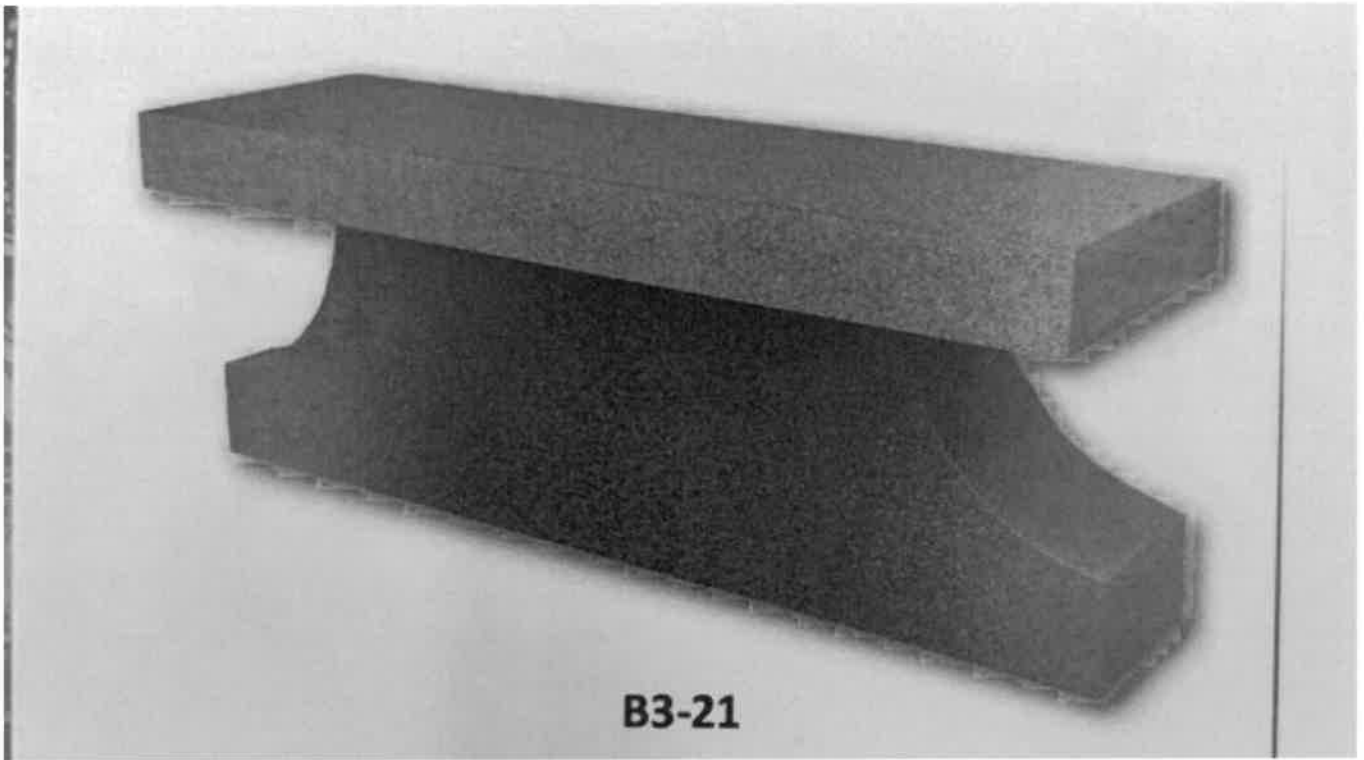


Tablet: 36" x 8" x 14" P5

Note to Manufacturer: Please make any minor adjustments necessary in this conceptual design to insure best quality production. Thank you.

Signed _____ Date _____

Copyright Notice: This design, layout, look, appearance and graphics are property of MonumentPro Inc. and the memorial company listed above and is protected by applicable copyright laws. Unauthorized use or duplication is prohibited.



B3-21



MEMO

Staff Communication-Action Required

DATE: April 3, 2024
TO: Gaines Charter Township
FROM: Rod Weersing, Township Manager
RE: DFD Lawn Mower

SUMMARY OF TOPIC:

The lawnmower that had been used by the Dutton Fire Department to mow their yard quit working last fall. It was close enough to the end of the mowing season to hold off on the purchase of a new mower. Four different models were reviewed from two different vendors for a possible replacement. Captain Darryl Oliver was consulted as he has a vast knowledge of this type of power equipment.

BUDGET ACTION REQUIRED:

This item was not part of the 2024 budget and will most likely require a transfer of funds at the end of the year.

STAFF RECOMMENDATION:

Staff recommends that the Toro Titan Max mower from Walters Equipment be purchased at the quoted price of \$7,903.46



Printed On : 03/27/2024 3:21:31 PM (Sales Rep ::ZV - Contact ID :5142)

Status : **Open**

Invoice # : **92922**

Type : **Major Unit Quote**

Date : **11/10/2023**

Contact ID : **13191**

Walters Equipment & Rentals

8433 Centre Industrial Dr
BYRON CENTER, MI 49315
Main: **616-878-3868**

Gaines Township

Rod

8555 Kalamazoo Ave SE
CALEDONIA, Michigan 49316
UNITED STATES
rod.weersing@gainestownship.org
616-656-0181 Ext.Rod - Work

Selected Units for Sale

N/U	Year	Make	Model	Unit Type	VIN/Serial	MSRP	Sale Price	Setup	PDI
N/A	Toro		76601 60" TITAN MAX 26HP KOHLER	Zero Turn		\$8,400.96	\$7,099.00	\$0.00	\$0.00

Item Number	Bin	Description	Qty Req	Qty Del	Item Price	Total Discount	Ext. Price
140-5120	Miscel	KIT-STRIPING, 54/60"	1	0	\$125.99	\$0.00	\$125.99
115-9649-03	BR-119	BLADE-HI FLOW	3	0	\$26.49	\$0.00	\$79.47
DELIVERY	Miscel	Delivery/Pick-up	1	1	\$70.00	\$70.00	\$0.00
5108189FS	Miscel	SEAT SUSPENSION	1	0	\$920.00	\$321.00	\$599.00

Total Parts Requested : 6 Total Parts Delivered : 1

Invoice Notes

Includes delivery up to 5 miles. Price valid for 30 days.

Other Charges

Item Total	+	\$1,195.46
Parts Discount	-	\$391.00
Total Other Charges=		\$804.46

Special Order(s)

Item Total	+	\$125.99
*** S/O Total	=	\$125.99
** S/O Deposit	=	\$125.99

Totals

Sub Total	+	\$7,777.47
*** Invoice Total	=	\$7,777.47
** S/O Deposit	+	\$125.99
Amount Paid	-	\$0.00
*** Transaction Total	=	\$7,903.46
Balance Due =		\$7,903.46

Deposit Paid \$0.00

Tax Name
Exempt

Tax Amount
\$0.00

Signature _____



Printed On : 03/27/2024 2:27:51 PM (Sales Rep ::SW - Contact ID :3)

Status : **Open**

Invoice # : **95507**

Type : **Major Unit Quote**

Date : **03/26/2024**

Contact ID : **13191**

Walters Equipment & Rentals

8433 Centre Industrial Dr
BYRON CENTER, MI 49315
Main: **616-878-3868**

Gaines Township

Rod

8555 Kalamazoo Ave SE
CALEDONIA, Michigan 49316
UNITED STATES
rod.weersing@gainestownship.org
616-656-0181 Ext.Rod - Work

Selected Units for Sale

N/U	Year	Make	Model	Unit Type	VIN/Serial	MSRP	Sale Price	Setup	PDI
	N/A	Ferris	5902078	Zero Turn		\$14,699.00	\$11,999.00	\$0.00	\$0.00
			ISX2200Z 28HP						
			VANGUARD EFI						
			OGS, 60" DECK,						
			HIGH BACK						
			SUSP SEAT						

Item Number	Bin	Description	Qty Req	Qty Del	Item Price	Total Discount	Ext. Price
84011065	Miscel	KIT, STRIPER, 60"	1	0	\$109.99	\$0.00	\$109.99
5101755S	BR-84	BLADE SET 61 DECK (3)	1	0	\$71.75	\$0.00	\$71.75
DELIVERY	Miscel	Delivery/Pick-up	1	1	\$70.00	\$70.00	\$0.00

Total Parts Requested : 3 Total Parts Delivered : 1

Invoice Notes

Includes delivery up to 5 miles. Price valid for 30 days.

Other Charges

Item Total + \$251.74
Parts Discount - \$70.00

Total Other Charges= \$181.74

Special Order(s)

Item Total + \$109.99

*** S/O Total = \$109.99

** S/O Deposit = \$109.99

Totals

Sub Total + \$12,070.75

*** Invoice Total = \$12,070.75

** S/O Deposit + \$109.99

Amount Paid - \$0.00

*** Transaction Total = \$12,180.74

Balance Due = \$12,180.74

Deposit Paid \$0.00

Tax Name

Exempt

Tax Amount

\$0.00

Signature _____



Prepared For

Rod Weersing
Gaines Charter Township
rod.weersing@gainestownship.org
616-656-0181

Prepared By

Scott Tiemeyer
Wolf Kubota (#320S531)
430 100th St SW
Byron Center, MI 49315
(616) 877-0800
scott@wolfkubota.com

Quote # 1031456
Quote Type Bid
Created On 3/26/2024

Image	Equipment	CSP	Quote Price	Quantity	Extended Price
	2024 Lazer Z E-Series 25.5 HP* Kaw FX801V w/60" UltraCut Series 4 Deck, Susp Seat & Wide Semi-Pneum (LZE801GKA604A1)	\$13,699.00	\$10,959.00	1	\$10,959.00
	KIT,TILT FRAME AND ISO MOUNT (116-0941)	\$357.99	\$286.00	1	\$286.00

Notes

Equipment Total	\$11,245.00
Sales Tax (0.000%)	\$0.00
Total	\$11,245.00

DUE TO THE VOLATILE COMMODITY MARKET, PRICING IS SUBJECT TO CHANGE AND IS NOT FIRM UNTIL PRODUCT DELIVERY BY YOUR LOCAL DEALER.
PRICES SHOWN ARE IN USD.



MEMO

Staff Communication-Action Required

DATE: April 3, 2024
TO: Gaines Charter Township
FROM: Kim Triplett, Executive Assistant
RE: Special Assessment Streetlighting District – Thornapple Farms Phases I & II

SUMMARY OF TOPIC:

Staff has received a request from Ryan Leary, of Westview Capital, LLC to form a Special Assessment Streetlighting District for phases I & II of the Thornapple Farms development.

All documentation required by Consumers Energy has been submitted, and at this time we are waiting for the notification # and cost estimate.

A letter from Mr. Leary, requesting the formation of the district, and committing to paying for the work that needs to be completed by Consumers Energy, is attached.

Under normal circumstances we would have the cost estimate, etc., from Consumers Energy, however they have not provided them as of this writing. Staff's first communication with Mr. Leary was on March 14, 2024. As Mr. Leary contacted Consumers Energy directly, the process has taken a little longer than usual, and it appears many of Consumers' employees are enjoying spring break.

Even though we have not been given the estimate or notification #, staff has been guaranteed the process is well underway. The next step is the scheduling of a public hearing.

BUDGET ACTION REQUIRED:

NONE

STAFF RECOMMENDATION:

Staff recommends the Board schedule a public hearing regarding the formation of a Special Assessment Streetlighting District for Phase I & II of the Thornapple Farms development for the May 13th meeting of the Board of Trustees.

Michiana Land Development, LLC
795 Clyde Ct
Byron Center, MI 49315

March 14th, 2024

Gaines Charter Township
8555 Kalamazoo Ave., SE.
Caledonia, MI 49316

Subject: Thornapple Farms Phases 1 & 2 – Request for Streetlight Special Assessment District

Dear Mrs. Triplett,

This letter is a formal request to establish a special assessment district, or districts, for the billing of the Consumer streetlights within Phase 1 & 2. Our company has solo ownership of all lots within both phases and is requesting a public hearing in front of the township board to review our request.

I previously sent you an email explaining the process for requesting the Consumer's notification numbers needed to start the streetlight process. Upon issuance of these notification numbers, Consumers will start the design process, then submit the design and billing to the township for review and approval. Please forward me the designs once they are received. I will cross-check them to verify there are no design conflicts with the placement of our houses.

I will plan to cut a check to the township or Consumers for the installation cost once the invoice is issued. Please let me know what this cost is, and who you would like it sent to.

Please reach out if you have any questions.

Best Regards,

Ryan Leary
Land Development
Westview Capital, LLC
616.268.0364

Residential Scoping Document



Please return completed application to one of the following (e-mail preferred):

E-mail: EDRequestCenter@cmsenergy.com

Phone: 1-844-316-9537

Fax: 1-517-374-2424

Mail: Energy Delivery Request Center, Lansing Service Center Room 122,
PO Box 30162, Lansing, MI 48909-7662

Consumers Energy's Preferred Load data method is Full Project Prints, including: (Site Plan, Mechanical Plan, Electric Panel Schedule and Survey) **Consumers Energy cannot provide a cost or design without ALL Complete and Accurate Information for the Utility Type Requested.** Additional forms may be required.

Authorization

I certify that I own, or am the authorized representative of the person(s) who owns, the property indicated in this application. I certify the information provided is accurate and will promptly inform Consumers Energy of any plan revisions. If installation requirements differ from what is submitted on this application, I understand these changes may result in an increased cost to me and delay my project.

Signature: _____ Printed Name: _____ Date: _____

Service Request

☐ New ☐ Existing / Change / Upgrade

Notification Number: _____

☐ Gas ☒ Electric ☐ Both

Ready For Service Date: 9-1-2024

Customer Contact Information

Customer Name <u>Gaines Charter Township</u>	Customer E-mail Address <u>kim.triplett@gainestownship.org</u>	Customer Phone Number <u>616.504.4332</u>
Address of Job Location (If no address, please include Road Name, City, Cross Roads, Lot #, Parcel ID #, County and Township) <u>Thornapple Farms Phase 2 - Streetlight Notification Number Request</u> <u>3316 68TH ST SE, Caledonia, MI 49316</u>		

Site Contact Information

Builder Name & Company <u>Michiana Land Development, LLC</u>	Builder E-mail Address <u>rlery@allenedwin.com</u>	Builder On-Site Phone Number <u>616.268.0364</u>
Electrician Name & Company	Electrician E-mail Address	Electrician On-Site Phone Number
Mechanical Contractor Name & Company	Mechanical Contractor E-mail Address	Mechanical Contractor On-Site Phone #

Site Information

Property Description - Check appropriate box(es): ☐ Single Family Dwelling ☐ Multi-Family Dwelling (i.e. Duplex) ☐ Mobile Home ☐ Non-Dwelling (i.e. Pole Barn, Garage) ☒ Other <u>Development</u> ☐ Temporary	Current Construction Status: ☒ Not started ☐ Site Grading (3" to Final) ☐ Backfilled ☐ Foundation ☐ Staked ☐ Electrical Inspection ☐ Framed
--	---

Building Square Footage Request tied to #1069668768

Customer Loads: Only fill in the section for the utility you are requesting. Accurately completing this section allows us to review and size our facilities.

Electric Service Information and Requirements (You may need to partner with your electrician to complete the following sections.)

Electric Service Type ☐ Overhead ☐ Underground	Electric Service Load Side Conductor ☐ Single ☐ Parallel ☐ Aluminum ☐ Copper Conductor Size from Panel to Meter Socket _____ Mast Size _____ Proposed Service Panel Size _____
---	--

Gas Service Information and Requirements

Gas Service Load Requirements - Complete Load Table Below: No. of Meters _____ Fuel Line Size _____ Type _____	If Existing (Converting) - Type of Fuel: ☐ Propane ☐ Fuel Oil No. of Gallons per Year _____ Price per Gallon _____
---	---

Delivery Pressure

☐ Typical Pressure (7" W.C.) ☐ Elevated Pressure (above 7" W.C.) - Consumers Energy Approval Required
If Elevated, what pressure are you requesting? _____ - Equipment Spec Sheet Required

***Gas Pressures available - 7" W.C. (Typical), Elevated, (11" W.C. 1, 2, 5, 10, psig)**

Residential Scoping Document



Customer Loads (Continued)

Notification Number: _____

Is your home larger than 2,500 square feet? Do you have an on demand tankless water heater, an air conditioning unit greater than 3 tons, an electric service entrance greater than 200 amps, geothermal, a natural gas generator, or a natural gas pool heater?

If you answered **yes** to any of the questions above, please check here ☐ and fill in the chart below.

*Only fill out information for the utility you are requesting. To find the size of equipment, refer to the name plate or data plate that is located on the back / side / inside, typically in sticker form. You may need to work with your Builder / Electrician / Mechanical contractor for load information.

Appliance	Quantity	Natural Gas Load (in BTU's)	Electric Load (in hp, kW, or Amps)
Furnace / Boiler			
Standard Water Heater			
Tankless Water Heater			
Stove / Range			
Clothes Dryer			
Pool Heater			
Fireplace			
Other			
Air Conditioning: Number of Units _____ Ton / Unit _____ Locked Rotor Amps _____ Rated Load Amps _____			
Geothermal: Number of Units _____ Largest Unit _____ Pump Size _____ Ton / Unit _____			
Natural Gas Generator: Number of Units _____ Required Pressure _____ Size (kW) _____ Size (BTU) _____			

General Information

- According to public code, your natural gas meter cannot be located under or within 18" of an opening window or within 2' of the side of doors which open or in front of basement windows, and must be at least 3' from a power air intake or any source of ignition.
- Meter(s) must be attached to a living unit (residential applications). Meter(s) cannot be placed on the backside of the residence.
- Meter(s) will be installed between 2' to 6' 6" for gas and between 3' 6" to 5' for electric above final grade.
- Consumers Energy reserves the right to determine the final meter(s) location; verify location prior to wiring and installation.**
- The service line(s) must be at least 3' away from a septic field and cannot run through it.
- Service(s) should not be located under concrete and must be accessible from property line to meter. However, Consumers Energy is able to bore under sidewalks and driveways, and service(s) may cross under them at an additional charge.
- For safety and accessibility, if the meter(s) are to be located on the driveway-side of the residence, a minimum of 3' is needed between driveway and building.
- The gas meter will be set and prepared to connect to the fuel line. If your fuel lines are tied into the bracket prior to the meter set, Consumers Energy will need access to the home. If the home's gas consumption requires a larger capacity meter or is a multiple meter installation, it will be necessary to call 1-800-477-5050 to have your meter(s) installed. Your fuel lines must be tied into the meter bracket and at least one gas appliance must be connected.
- Your electric service will require electric inspection prior to meter set.
- After service(s) are installed, excavation will be backfilled. **Final restoration is your responsibility.**

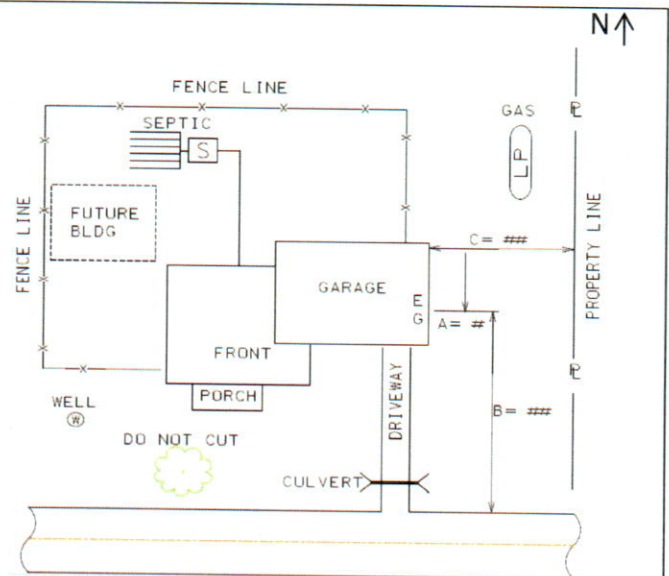
Site Sketch

If you have a full set of electronic plans, you do not need to fill out a site sketch.

Please email your electronic plans with this scoping document.

An example of a minimum site sketch is to the right.

Please use Form 1483 and the instructions to complete a site sketch.



Residential Scoping Document



Please return completed application to one of the following (e-mail preferred):

E-mail: EDRequestCenter@cmsenergy.com

Phone: 1-844-316-9537

Fax: 1-517-374-2424

Mail: Energy Delivery Request Center, Lansing Service Center Room 122,
PO Box 30162, Lansing, MI 48909-7662

Consumers Energy's Preferred Load data method is Full Project Prints, including: (Site Plan, Mechanical Plan, Electric Panel Schedule and Survey) **Consumers Energy cannot provide a cost or design without ALL Complete and Accurate Information for the Utility Type Requested.** Additional forms may be required.

Authorization				
I certify that I own, or am the authorized representative of the person(s) who owns, the property indicated in this application. I certify the information provided is accurate and will promptly inform Consumers Energy of any plan revisions. If installation requirements differ from what is submitted on this application, I understand these changes may result in an increased cost to me and delay my project.				
Signature: _____	Printed Name: _____	Date: _____		
Service Request				
☐ New	☐ Existing / Change / Upgrade	Notification Number: _____		
☐ Gas	☒ Electric	☐ Both		
		Ready For Service Date: <u>9-1-2024</u>		
Customer Contact Information				
Customer Name <u>Gaines Charter Township</u>	Customer E-mail Address <u>kim.triplett@gainestownship.org</u>	Customer Phone Number <u>616.504.4332</u>		
Address of Job Location (If no address, please include Road Name, City, Cross Roads, Lot #, Parcel ID #, County and Township) <u>Thornapple Farms Phase 1 - Streetlight Notification Number Request</u> <u>3316 68TH ST SE, Caledonia, MI 49316</u>				
Site Contact Information				
Builder Name & Company <u>Michiana Land Development, LLC</u>	Builder E-mail Address <u>rlery@allenedwin.com</u>	Builder On-Site Phone Number <u>616.268.0364</u>		
Electrician Name & Company	Electrician E-mail Address	Electrician On-Site Phone Number		
Mechanical Contractor Name & Company	Mechanical Contractor E-mail Address	Mechanical Contractor On-Site Phone #		
Site Information				
Property Description - Check appropriate box(es):		Current Construction Status:		
☐ Single Family Dwelling	☐ Multi-Family Dwelling (i.e. Duplex)	☒ Not started	☐ Site Grading (3" to Final)	☐ Backfilled
☐ Mobile Home	☐ Non-Dwelling (i.e. Pole Barn, Garage)	☐ Foundation	☐ Staked	
☒ Other <u>Development</u>	☐ Temporary	☐ Electrical Inspection	☐ Framed	
Building Square Footage <u>Request tied to #1069668766</u>				
Customer Loads: Only fill in the section for the utility you are requesting. Accurately completing this section allows us to review and size our facilities.				
Electric Service Information and Requirements (You may need to partner with your electrician to complete the following sections.)				
Electric Service Type	Electric Service Load Side Conductor			
☐ Overhead	☐ Single	☐ Parallel	☐ Aluminum	☐ Copper
☐ Underground	Conductor Size from Panel to Meter Socket _____		Mast Size _____	Other <u>Streetlights</u>
			Proposed Service Panel Size _____	
Gas Service Information and Requirements				
Gas Service Load Requirements - Complete Load Table Below:			If Existing (Converting) - Type of Fuel:	
No. of Meters _____			☐ Propane	☐ Fuel Oil
Fuel Line Size _____	Type _____		No. of Gallons per Year _____	Price per Gallon _____
Delivery Pressure				
☐ Typical Pressure (7" W.C.) ☐ Elevated Pressure (above 7" W.C.) - Consumers Energy Approval Required				
If Elevated, what pressure are you requesting? _____ - Equipment Spec Sheet Required				
*Gas Pressures available - 7" W.C. (Typical), Elevated, (11" W.C. 1, 2, 5, 10, psig)				

Residential Scoping Document



Customer Loads (Continued)

Notification Number: _____

Is your home larger than 2,500 square feet? Do you have an on demand tankless water heater, an air conditioning unit greater than 3 tons, an electric service entrance greater than 200 amps, geothermal, a natural gas generator, or a natural gas pool heater?

If you answered **yes** to any of the questions above, please check here ☐ and fill in the chart below.

*Only fill out information for the utility you are requesting. To find the size of equipment, refer to the name plate or data plate that is located on the back / side / inside, typically in sticker form. You may need to work with your Builder / Electrician / Mechanical contractor for load information.

Appliance	Quantity	Natural Gas Load (in BTU's)	Electric Load (in hp, kW, or Amps)
Furnace / Boiler			
Standard Water Heater			
Tankless Water Heater			
Stove / Range			
Clothes Dryer			
Pool Heater			
Fireplace			
Other			
Air Conditioning: Number of Units _____ Ton / Unit _____ Locked Rotor Amps _____ Rated Load Amps _____			
Geothermal: Number of Units _____ Largest Unit _____ Pump Size _____ Ton / Unit _____			
Natural Gas Generator: Number of Units _____ Required Pressure _____ Size (kW) _____ Size (BTU) _____			

General Information

- According to public code, your natural gas meter cannot be located under or within 18" of an opening window or within 2' of the side of doors which open or in front of basement windows, and must be at least 3' from a power air intake or any source of ignition.
- Meter(s) must be attached to a living unit (residential applications). Meter(s) cannot be placed on the backside of the residence.
- Meter(s) will be installed between 2' to 6' 6" for gas and between 3' 6" to 5' for electric above final grade.
- Consumers Energy reserves the right to determine the final meter(s) location; verify location prior to wiring and installation.**
- The service line(s) must be at least 3' away from a septic field and cannot run through it.
- Service(s) should not be located under concrete and must be accessible from property line to meter. However, Consumers Energy is able to bore under sidewalks and driveways, and service(s) may cross under them at an additional charge.
- For safety and accessibility, if the meter(s) are to be located on the driveway-side of the residence, a minimum of 3' is needed between driveway and building.
- The gas meter will be set and prepared to connect to the fuel line. If your fuel lines are tied into the bracket prior to the meter set, Consumers Energy will need access to the home. If the home's gas consumption requires a larger capacity meter or is a multiple meter installation, it will be necessary to call 1-800-477-5050 to have your meter(s) installed. Your fuel lines must be tied into the meter bracket and at least one gas appliance must be connected.
- Your electric service will require electric inspection prior to meter set.
- After service(s) are installed, excavation will be backfilled. **Final restoration is your responsibility.**

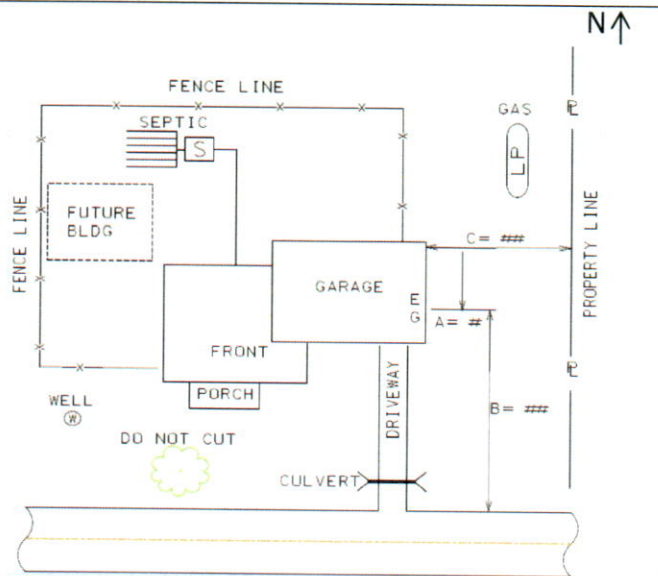
Site Sketch

If you have a full set of electronic plans, you do not need to fill out a site sketch.

Please email your electronic plans with this scoping document.

An example of a minimum site sketch is to the right.

Please use Form 1483 and the instructions to complete a site sketch.



BENCHMARK #1 ELEVATION 774.39
TOP OF NW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #2 ELEVATION 751.12
TOP OF SW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #3 ELEVATION 751.14
TOP OF SW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #4 ELEVATION 764.21
TOP OF SW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #5 ELEVATION 770.45
TOP OF SW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #6 ELEVATION 770.51
TOP OF SW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #7 ELEVATION 773.18
TOP OF SW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

P.P. #41-22-11-101-008
DUTTON IND. REFORMED CHURCH
PROPERTY ADDRESS:
6950 HANNA LAKE AVE. SE
CALEDONIA, MI 49316

P.P. #41-22-11-101-005
DUTTON CHRISTIAN SCHOOL
PROPERTY ADDRESS:
6980 HANNA LAKE AVE. SE
CALEDONIA, MI 49316

P.P. #41-22-11-101-011
GAINES TOWNSHIP
PROPERTY ADDRESS:
7100 HANNA LAKE AVE. SE
CALEDONIA, MI 49316

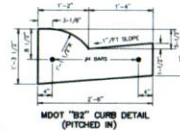
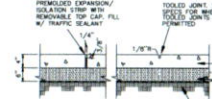
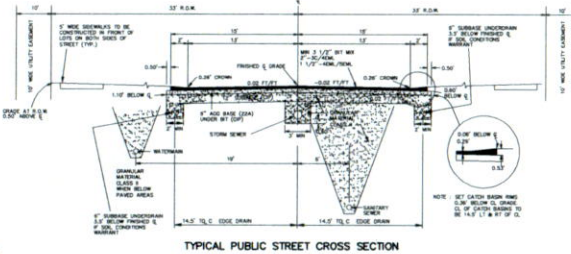
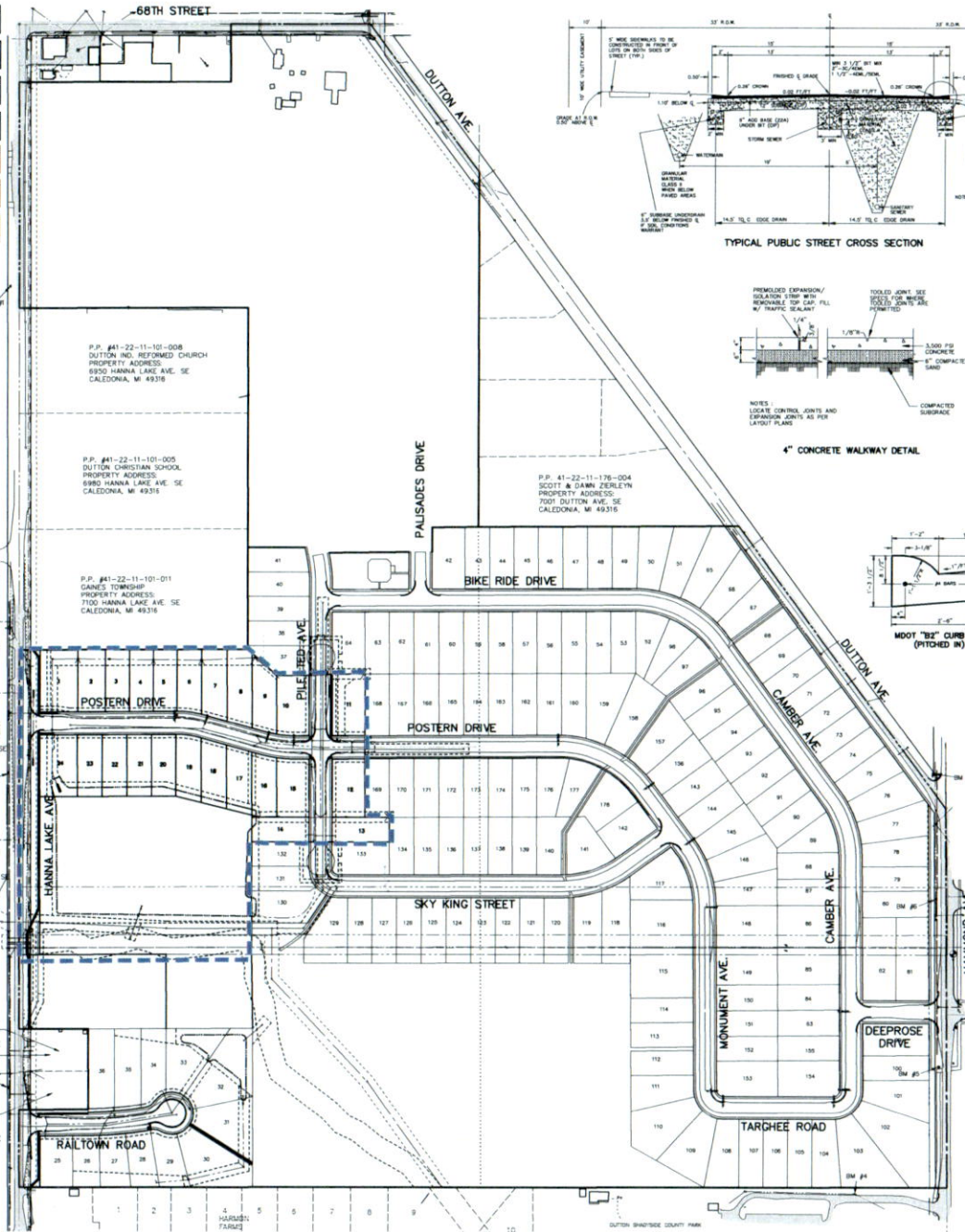
P.P. #41-22-10-276-002
JOEL & ANGELA VANDUYN
PROPERTY ADDRESS:
7200 HANNA LAKE AVE. SE
CALEDONIA, MI 49316

P.P. #41-22-10-276-003
JOEL & ANGELA VANDUYN
PROPERTY ADDRESS:
7200 HANNA LAKE AVE. SE
CALEDONIA, MI 49316

P.P. #41-22-10-400-070
JIM & SHERI MARTIN
PROPERTY ADDRESS:
7240 HANNA LAKE AVE. SE
CALEDONIA, MI 49316

P.P. #41-22-11-301-006
MICHAEL DOTY
PROPERTY ADDRESS:
7240 HANNA LAKE AVE. SE
CALEDONIA, MI 49316

P.P. #41-22-11-301-007
MICHAEL & AMIE DEVALT
PROPERTY ADDRESS:
7250 HANNA LAKE AVE. SE
CALEDONIA, MI 49316



- SHEET INDEX :**
1. COVER SHEET
 2. SANITARY SEWER/WATERMAIN IN PILEATED AVE.
 3. SANITARY SEWER/WATERMAIN IN POSTERN DRIVE
 4. IMPROVEMENTS IN PILEATED AVE.
 5. IMPROVEMENTS IN POSTERN DRIVE
 6. BACKYARD STORM SEWE FOR LOTS 1-9 AND 26
 7. PROPOSED LEFT TURN LANE AND STRIPING FOR HANNA LAKE AVE.
 8. GRADING AND SOIL EROSION CONTROL PLAN
 9. SANITARY SEWER DETAILS
 10. WATERMAIN DETAILS

GENERAL NOTES - PUBLIC STREET

- The performance of this work shall be governed by the Michigan Department of Transportation (MDOT) current Standard Specifications for Highway Construction unless otherwise modified by the requirements of the Kent County Road Commission (KCRC).
- Roadway construction shall conform to the KCRC Standards as follows:
STANDARD PLAN NO. MDOT (Dist. R-30-0) K-30-1
Concrete Curb and Gutter K-30-1
Culbasse and Manholes K-30-1
Culbasse and Manhole Covers K-30-1
Drainage Approaches K-30-1
Guard Poles, Drainage Marker Post, Blue/Orange and White Special Details K-30-1-182
- The KCRC and any affected agency or utility shall be notified a minimum of 3 working days before the start of construction, excluding Saturdays, Sundays and holidays.
- All necessary permits must be obtained prior to the beginning of work.
- Traffic signs, barricades, or other devices necessary to insure safety to the public shall be placed prior to the beginning of work.
- Soil and loam topsoil shall be removed the width of the subgrade and can be used outside of the roadway. Treatment of soil materials shall be in accordance with MDOT Standard Method A-1.
- Where unsuitable material is encountered, it shall be excavated the width of the subgrade to a depth of 3' below final grade and replaced outside the right-of-way. Stockpiles shall meet granular material Class 3 requirements.
- Where unforeseen subgrade conditions exist, a new pipe underdrain, approved by the KCRC Engineering Department, shall be placed during construction.
- Outlets of storm sewers, ditches, and areas where concentrations of runoff occur shall be protected against erosion by adding riprap, rock blankets, or other means approved by the Engineer. (End sections are required on all culverts).
- Where underdrain subgrade conditions exist, a new pipe underdrain, approved by the KCRC Engineering Department, shall be placed during construction.
- Drainage control posts shall be placed at the ends of all culverts and storm sewers 48\"/>

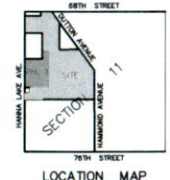
BYRON/GAINES UTILITY AUTHORITY STANDARD CONSTRUCTION REQUIREMENTS

I. Watermain and sanitary sewer construction shall be done in accordance with current Byron-Gaines Utility Authority Standard Construction Requirements.

STORM SEWER NOTES:

- All storm sewer yard drains shall have 2' slumps and 1/2\"/>

- PROPOSED UTILITIES LEGEND**
- REPRESENTS PROPOSED 8\"/>



PLANS PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER, REG. NO.: 62083

STATE OF MICHIGAN
JEFFREY VASCAR
ENGINEER
No. 62083
Professional Seal

COVER SHEET
RE: THORNAPPLE FARMS PHASE 1
FOR: GREEN DEVELOPMENT VENTURES
ATTN: DAN LARABEL
795 CLYDE COURT SW
BYRON CENTER, MI 49315
PART OF THE NW 1/4, SECTION 11, T1N, R11W, GAINES TOWNSHIP, KENT COUNTY, MICHIGAN

excel engineering, inc.
planners - engineers - surveyors
Phone (616) 531-5880 www.excelengineering.com

03/27/24	REV. PER OWNER	JD	01/28/24	REV. PER OWNER	JD
01/28/24	REV. PER K.C.R.C.	JD	01/27/24	REV. PER AGENCY REVIEW	JD
01/27/24	REV. PER AGENCY REVIEW	JD	01/26/24	REV. PER AGENCY REVIEW	JD
01/25/24	REV. PER AGENCY REVIEW	JD	11/29/23	REV. PER OWNER	JD
11/14/23	REV. PER AGENCY REVIEW	JD	11/14/23	REV. PER AGENCY REVIEW	JD

DRAWN BY: JD
APPROVED BY: JD
DATE: 03/27/24

PROJECT: PV
PROJECT NO.: 2212101
DATE: 03/14/2023

SHEET 1 of 10



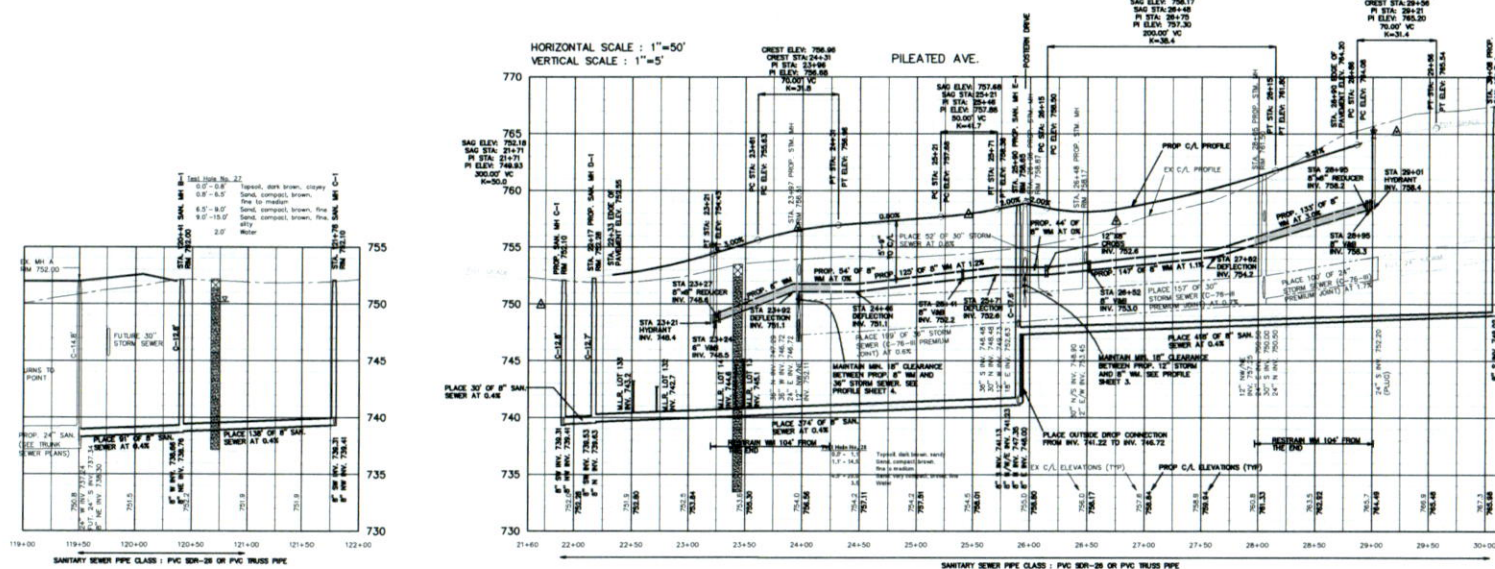
CAUTION 
OVERHEAD
ELECTRIC IN THE AREA!



PART OF THE NW 1/4, SECTION 11, T5N, R11W, GAINES TOWNSHIP, KENT COUNTY, MICHIGAN

PLACE : 105 LIN FT OF 1" COPPER WATER SERVICE TYPE
K & 3 SETS OF 1" COMP STOP AND CLAMP STOP

All copper water services shall be type K copper



BENCHMARK #1 ELEVATION 774.39
TOP OF 1/4" FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #2 ELEVATION 757.12
TOP OF 1/4" FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #3 ELEVATION 761.74
TOP OF 1/4" FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #4 ELEVATION 764.21
TOP OF 1/4" FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #5 ELEVATION 770.43
TOP OF 1/4" FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #6 ELEVATION 776.07
TOP OF 1/4" FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #7 ELEVATION 773.18
TOP OF 1/4" FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

SEE COVER SHEET FOR MORE
INFORMATION

PLACE: 1.135 LIN FT OF 8" SANITARY SEWER (PVC SD-28 ASTM D-3034)
OR (PVC TRUSS PIPE ASTM D-2682) TOTAL THIS SHEET

PLACE: 1.033 LIN FT OF 12" WATERMAIN IN CLASS 53
TOTAL THIS SHEET

PLACE: 1.000 LIN FT OF 1" CUPPER WATER SERVICE TYPE
K & 2.25 LBS OF 1" CUP STOP AND GUNN STOP
& BOX TOTAL THIS SHEET

C/A CURVE DATA
POSTERN DRIVE
D=107.28'
R=203.00'
L=81.02'
T=46.76'
CH=80.78'
MC=22.147°W
PC=8+47.71
PT=8+68.73

C/A CURVE DATA
POSTERN DRIVE
D=107.28'
R=203.00'
L=81.02'
T=46.76'
CH=80.78'
MC=22.147°W
PC=8+47.71
PT=8+68.73

CAUTION
OVERHEAD
ELECTRIC IN THE AREA!

Watermain and sanitary sewer construction shall be done in
accordance with current Byron-Gaines Utility Authority Standard
Construction Requirements.

All copper water services shall be type K copper.



Know what's below.
Call before you dig.



SANITARY/WATERMAIN IN POSTERN DRIVE

RE: THORNAPPLE FARMS PHASE 1

FOR: GREEN DEVELOPMENT VENTURES

ATTN: DAN LARABEL

795 CLYDE COURT SW

BYRON CENTER, MI 49315

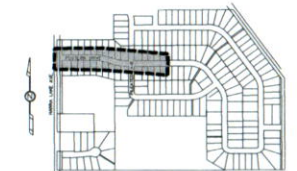
PART OF THE NW 1/4, SECTION 11, T14N, R14E, GAINES TOWNSHIP, KENT COUNTY, MICHIGAN

excel engineering, inc.
planners - engineers - surveyors
5302 Green Park, S.W., Grand Rapids, MI 49508
Phone: (616) 931-0800 www.excelengineering.com

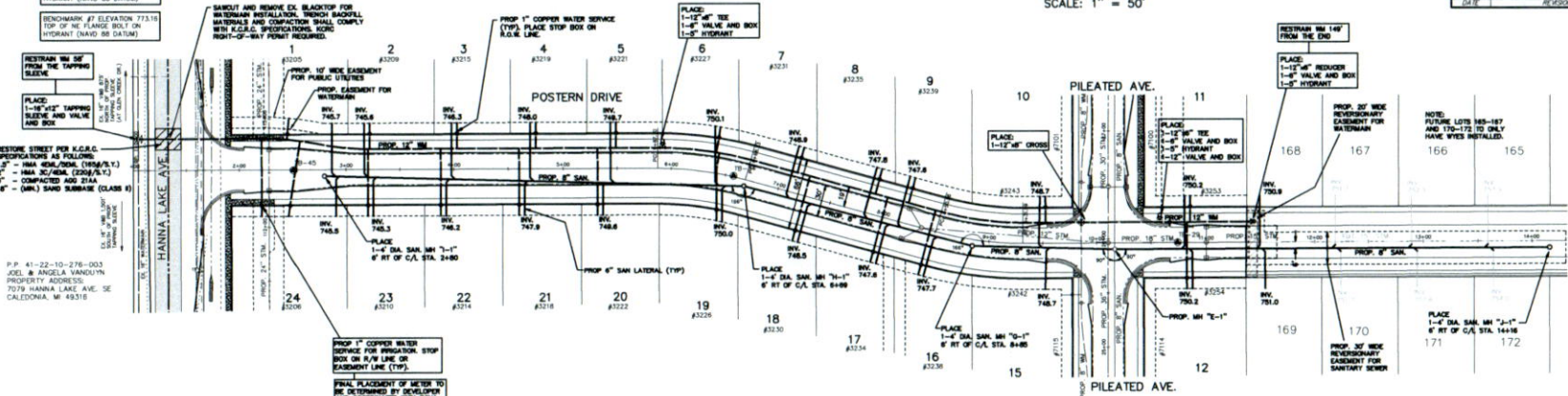
DRAWN BY: JSD PREP BY: JSD
APPROVED BY: JSD PROJECT: 09/14/2021
DATE: 09/14/2021

SHEET
3 of 10

SCALE: 1" = 50'

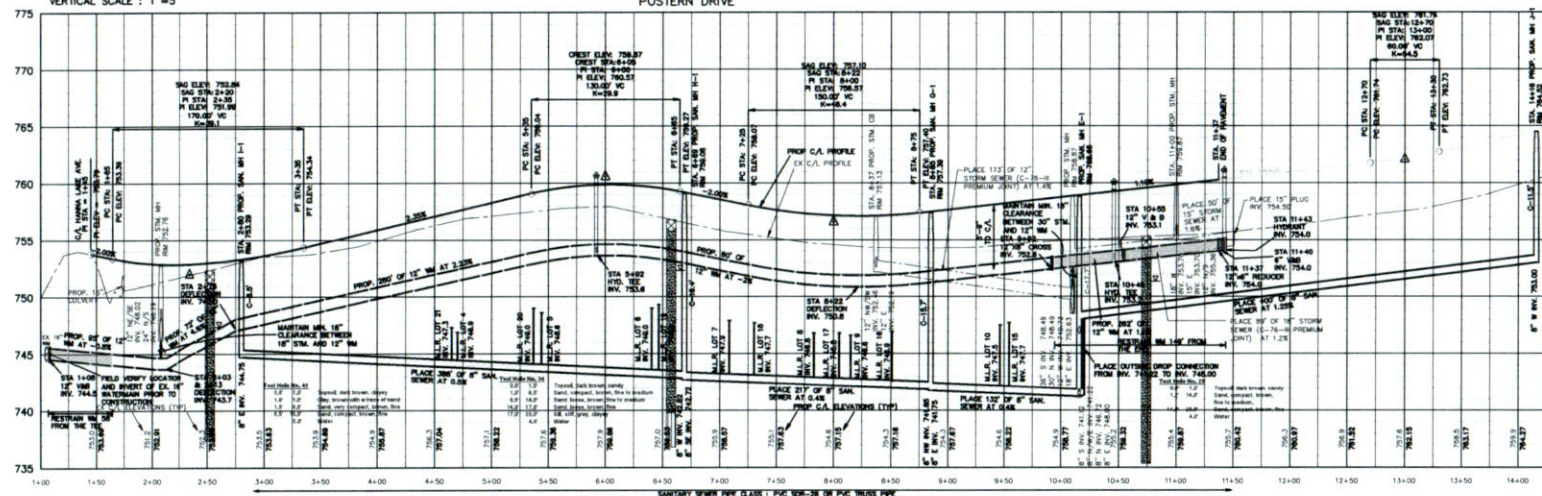


KEY MAP



HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=5'

POSTERN DRIVE



BENCHMARK #1 ELEVATION 774.36
TOP OF NW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #2 ELEVATION 751.12
TOP OF SW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #3 ELEVATION 761.74
TOP OF SW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #4 ELEVATION 764.21
TOP OF SW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #5 ELEVATION 770.63
TOP OF SW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #6 ELEVATION 778.07
TOP OF NW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #7 ELEVATION 773.16
TOP OF NE FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

SEE COVER SHEET FOR MORE
INFORMATION

CAUTION
OVERHEAD
ELECTRIC IN THE AREA!

NOTES:

1. VISUAL INSPECTION OF ALL STORM SEWER IS REQUIRED. ALL CITY VIDEOS FILES SHALL BE SENT TO KCCO AND KCCO WITH APPROPRIATE FILE NAMES TO REFERENCE THE SEWER REACHES BEING RECORDED.
2. ALL STORM SEWER IN PUBLIC STREET RIGHT-OF-WAY SHALL BE CONCRETE (C-76-48) WITH PREMIUM JOINTS.
3. ALL ROOF DRAIN LEADS ALSO SERVE AS FOOTING DRAIN LEADS.
4. BASEMENT UNDER-SLAB AND EACH LOT WERE CONNECTED TO STORM SEWER. THESE DRAINS MUST BE PUMPED BY SEWAGE PUMP WITH CHECK VALVE AND RELEASE A HYDRAULIC BREAK. A DIRECT GRAVITY CONNECTION TO THE STORM SEWER WHEN A CHECK VALVE IS PROVIDED, IS NOT ALLOWED.
5. ALL STORM SEWER SHALL BE MANHOLE TESTED AT LEAST 30 DAYS AFTER INSTALLATION. ALL STORM SEWER SHALL BE CONVEYED BY MANHOLE BOOT CONNECTIONS FOR PLASTIC PIPES.
6. YARD BASINS AND MANHOLES OUTSIDE THE ROAD PLACED WITH 18" X 24" R.O.D. SHALL BE CONNECTED OUTSIDE THE ROAD R.O.D. SHALL BE MAINTAINED WITH 18" X 24" R.O.D. SHALL BE CONNECTED WITH 18" X 24" R.O.D. SHALL BE CONNECTED WITH 18" X 24" R.O.D.

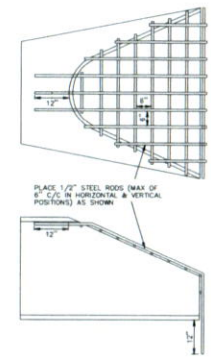
RIP RAP STABILIZED OUTLET,
INCLUDING FACING, MUST
CONFORM TO MCD
SPECIFICATIONS 2002.12.3.

PLACE 4.5' BY 6" R.O.D.
RAP: 8" R.O.D. OVER FACING,
PER MCD SPECIFICATIONS

811
Know what's below.
Call before you dig.

RIP RAP STABILIZED 36" OUTLETS DETAIL

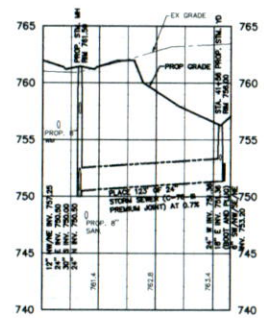
SCALE: 1" = 50'



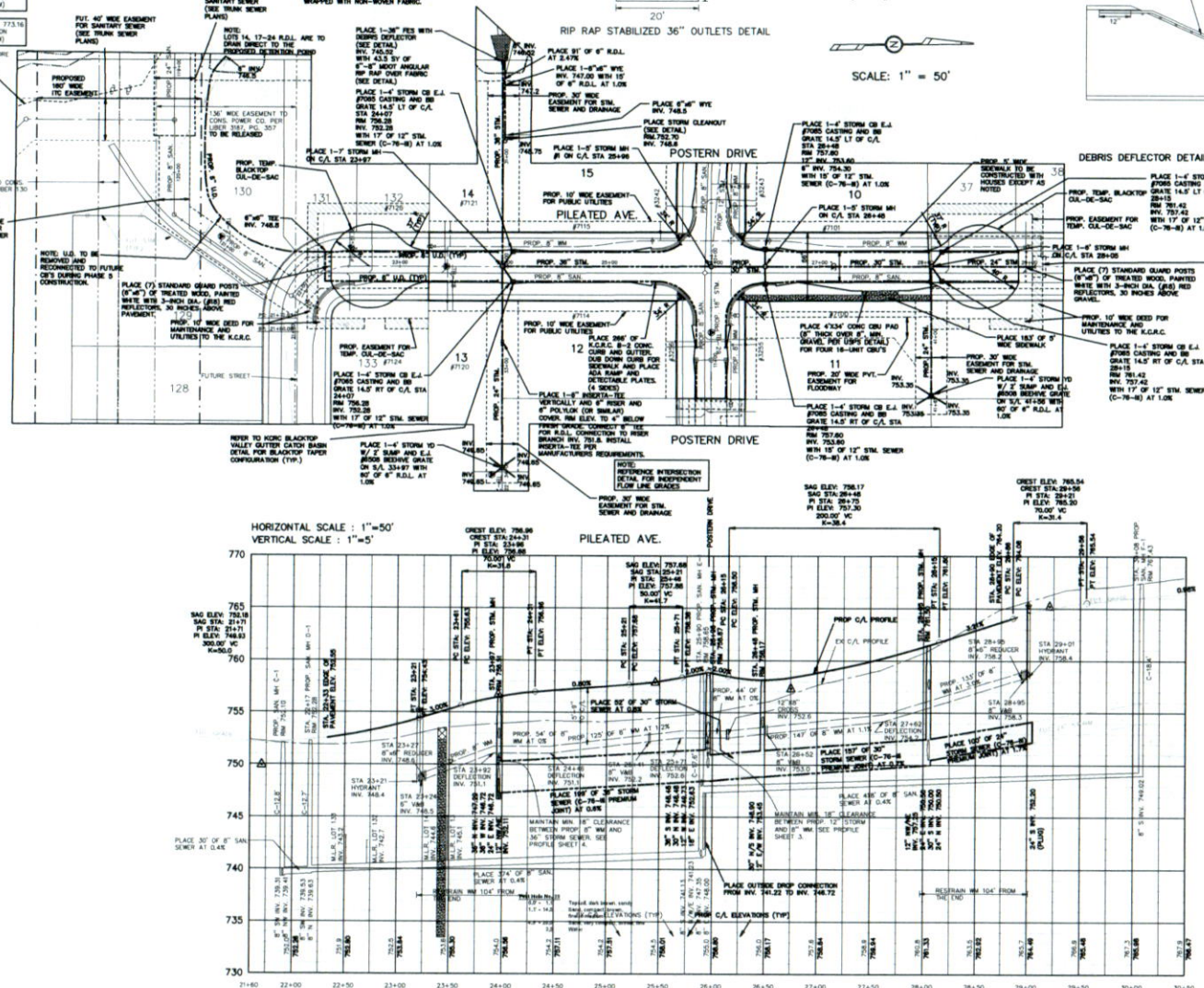
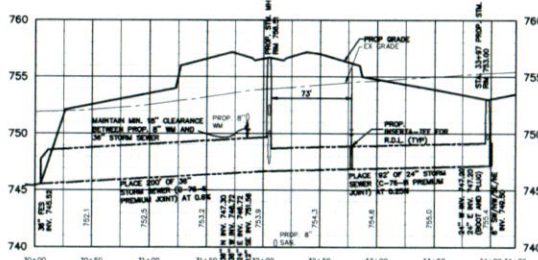
DEBRIS DEFLECTOR DETAIL

KEY MAP

STORM SEWER BETWEEN LOT 11 AND FUT. LOT



STORM SEWER BETWEEN LOTS 12/13 AND 14/15



BENCHMARK #1 ELEVATION 774.38
TOP OF NW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #2 ELEVATION 775.12
TOP OF SW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #3 ELEVATION 781.74
TOP OF SW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #4 ELEVATION 784.27
TOP OF SW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #5 ELEVATION 770.63
TOP OF SW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #6 ELEVATION 776.03
TOP OF NW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

BENCHMARK #7 ELEVATION 773.10
TOP OF NE FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

SEE COVER SHEET FOR MORE
INFORMATION

PLACE 18" OF 12" STORM
SEWER (C-76-40) AT 1.11E

NOTE: SEE SHEET 7 FOR
INTERSECTION DIMENSIONS

P.P. 41-22-10-276-003
JOEL & ANGELA HANOUTIN
PROPERTY ADDRESS:
7075 HANNA LAKE AVE. SE
CALEDONIA, MI 49316

PLACE 12" OF K&L/C
6-2 CONC. CURB AND
OUTSIDE, 6" CONC. CURB
FOR SEWER, AND PLACE
ADA MARK AND
DETECTABLE PLATES (60"X
60")

RELIGIOUS UTILITY HOLD
COORDINATE WITH UTILITY
COMPANY

CAUTION
OVERHEAD
ELECTRIC IN THE AREA!

C.A. CURVE DATA
POSTERN DRIVE
D=1728.28'
R=300.00'
L=40.00'
T=40.78'
CH=60.78'
PC=827.23+51.50
PT=867.23

C.A. CURVE DATA
POSTERN DRIVE
D=1728.28'
R=300.00'
L=40.00'
T=40.78'
CH=60.78'
PC=827.23+51.50
PT=867.23



Know what's below.
Call before you dig.

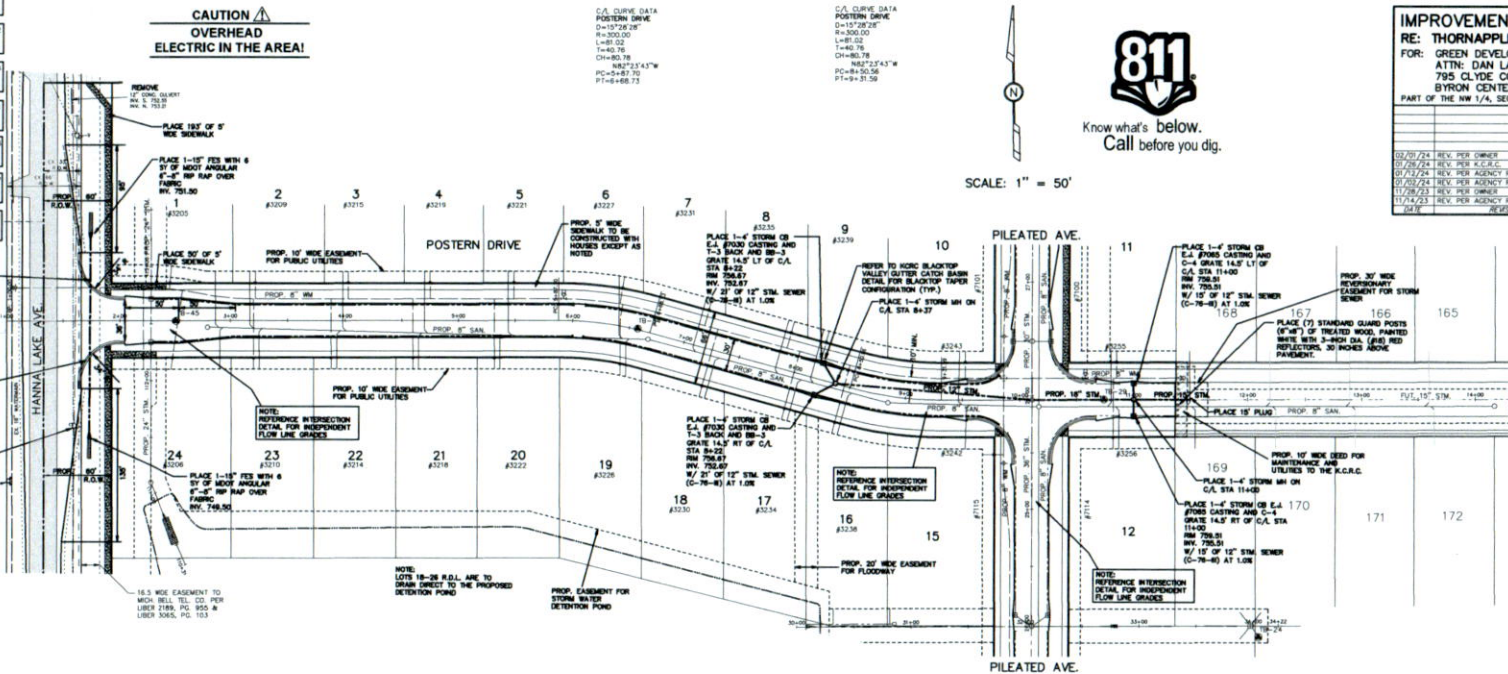
SCALE: 1" = 50'

IMPROVEMENTS IN POSTERN DRIVE RE: THORNAPPLE FARMS PHASE 1

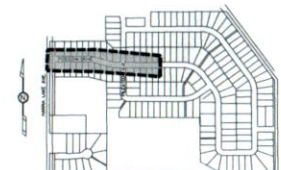
FOR: GREEN DEVELOPMENT VENTURES
ATTN: DAN LARABEL
BYRON CENTER, MI 49315
PART OF THE NW 1/4, SECTION 11, T24N, R17W, GAINES TOWNSHIP, KENT COUNTY, MICHIGAN



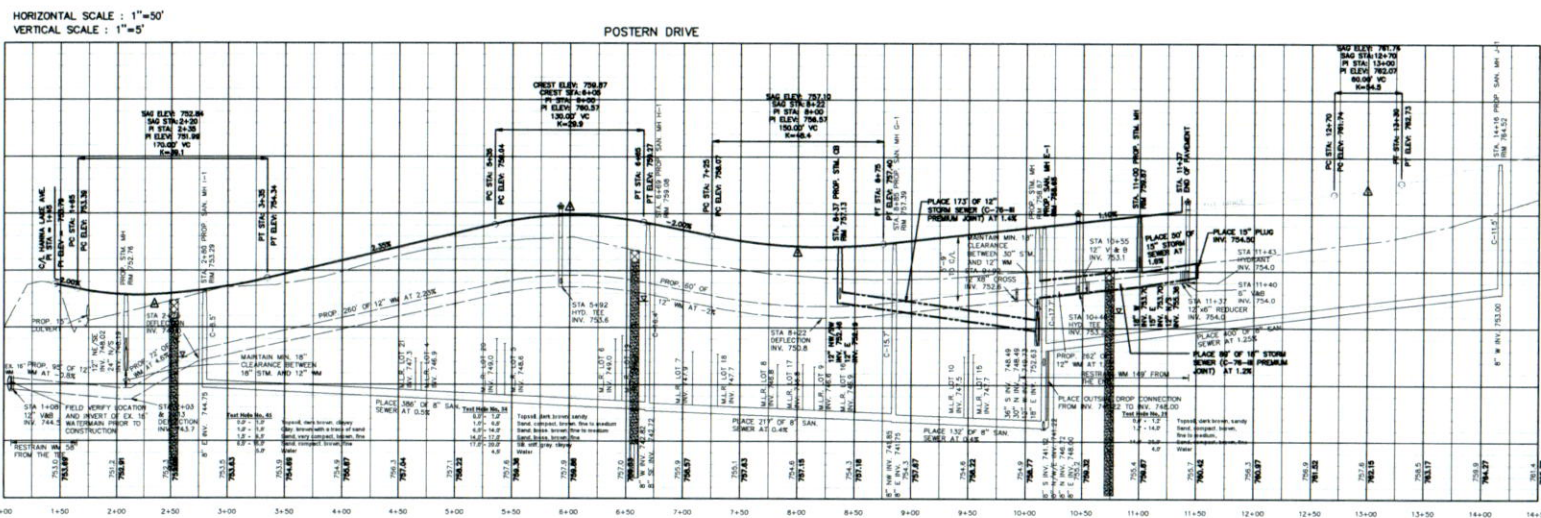
DATE: 09/14/2023
SHEET: 5 of 10



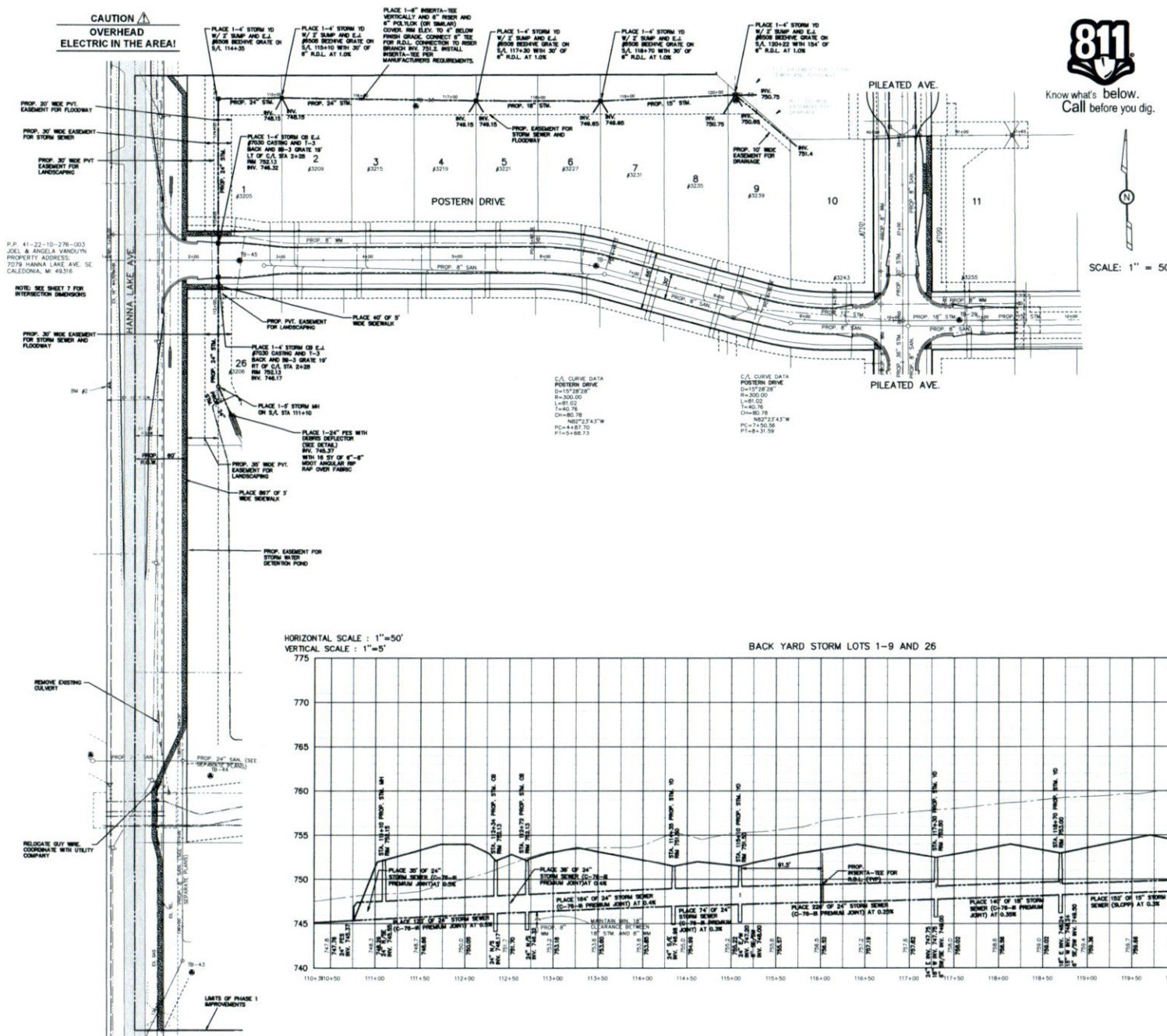
- NOTES:
- 1. VIDEO INSPECTION OF ALL STORM SEWER IS REQUIRED. ALL CITY RECORDS FILES SHALL BE SENT TO THE ENGINEER WITHIN 10 BUSINESS DAYS OF THE DATE OF THE VIDEO INSPECTION. RECORDS SHALL BE MAINTAINED FOR 10 YEARS.
 - 2. ALL STORM SEWER IN PUBLIC STREET RIGHT-OF-WAY SHALL BE CONCRETE (C-76-40) WITH PRECAST JOINTS.
 - 3. ALL ROOF DRAIN LEADS ALSO SERVE AS FOOTING DRAIN LEADS.
 - 4. BASEMENT DRAIN-SEAL AND BASEMENT FOOTING DRAIN-SEAL SHALL BE REQUIRED FOR EACH LOT WHERE CONNECTED TO EXISTING SEWER. THESE DRAINS MUST BE INSTALLED BY RAMP PUMP WITH CHECK VALVE AND CHECK VALVE IS PROVIDED. IT IS NOT ALLOWED.
 - 5. ALL PLASTIC PIPES OUTSIDE THE ROAD R.O.W. SHALL BE MANHOLE TESTED AT LEAST 30 DAYS AFTER INSTALLATION AND FINAL BACKFILL. A KENT COUNTY SEWER COMMISSION ENGINEER SHALL BE ON SITE FOR MANHOLE TESTING.
 - 6. PLASTIC PIPES SHALL HAVE BOOT CONNECTIONS FOR PLASTIC PIPES.
 - 7. ALL PIPE JOINTS AND YARD DRAIN AND MANHOLE CONNECTIONS OUTSIDE THE ROAD R.O.W. SHALL BE WRAPPED WITH NON-WOVEN FABRIC.



KEY MAP



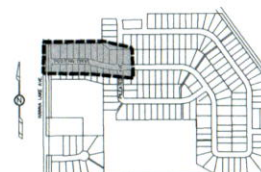
CAUTION 
**OVERHEAD
ELECTRIC IN THE AREA!**



Know what's below.
Call before you dig.

SCALE: 1" = 50'

				excel engineering, inc. engineers engineers surveyors	
				6255 Clyde Park, S.W. • Grand Rapids, MI 49509 Phone: (616) 531-5880 www.excelengineering.com	
02/07/24	REV PER OWNER	250			
02/07/24	REV PER S.C.R.C.	250			
03/13/24	REV PER AGENCY REVIEW	250			
03/05/24	REV PER AGENCY REVIEW	250			
11/28/23	REV PER OWNER	250			
12/03/23	REV PER OWNER	250			
DATE	REVISION	BY	PROJ. ENG. / PROJ. SURV. / DATE	SHEET 6 of 10	
		250	250	09/24/2023	



KEY MAP

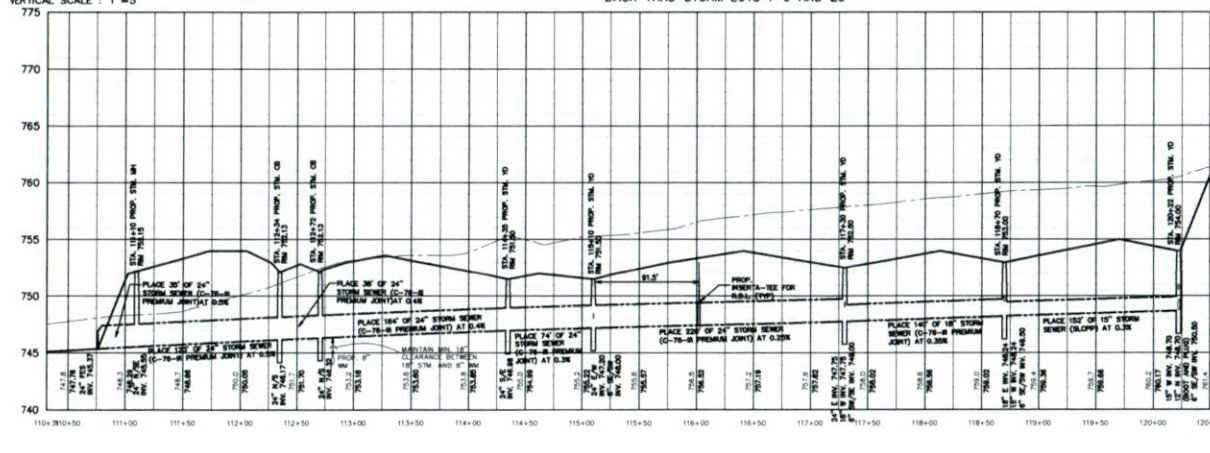
- [illegible]



DEBRIS DEFLECTOR DETAIL

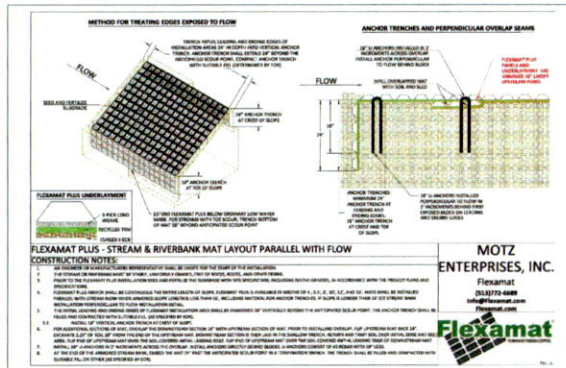
HORIZONTAL SCALE : 1"=50'
VERTICAL SCALE : 1"=5'

BACK YARD STORM LOTS 1-9 AND 26



BENCHMARK ELEVATION 751.12
TOP OF SW FLANGE BOLT ON
HYDRANT (NAVD 88 DATUM)

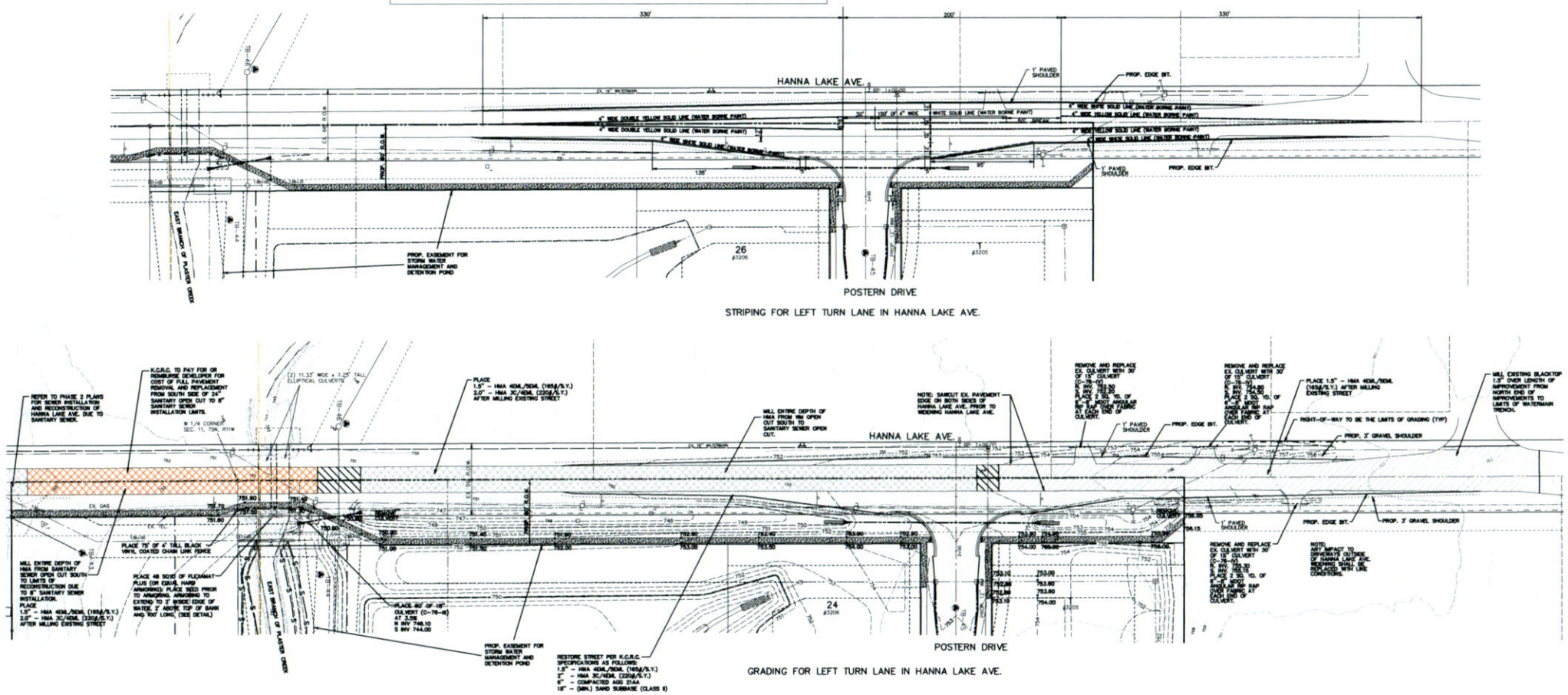
CAUTION
OVERHEAD
ELECTRIC IN THE AREA!



SCALE: 1" = 40'
NOTE SCALE CHANGE
FROM OTHER SHEETS

HANNA LAKE AVE. - LEFT TURN AND STRIPING PLAN			
RE: THORNAPPLE FARMS			
FOR: GREEN DEVELOPMENT VENTURES			
ATTN: DAN LARABEL			
795 CLYDE COURT SW			
BYRON CENTER, MI 49315			
PART OF THE NW 1/4, SECTION 11, T24N, R17W, GAINES TOWNSHIP, KENT COUNTY, MICHIGAN			
08/20/24	REV. PER OWNER	250	
08/26/24	REV. PER S.C.D.	250	
09/17/24	REV. PER AGENCY REVIEW	250	
09/20/24	REV. PER AGENCY REVIEW	250	
11/28/23	REV. PER OWNER	250	
11/14/23	REV. PER AGENCY REVIEW	250	
04/24	REV. PER AGENCY REVIEW	250	
DRAWN BY: JSD		PROJ. ENG: PV	
APPROVED BY: JSD		PROJ. SUPER: PV	
DATE: 02/15/24		DATE: 09/14/2023	
SHEET			7 of 10

excel engineering, inc.
planners • engineers • surveyors
5252 Clyde Park, S.W. • Grand Rapids, MI 49508
Phone: (616) 531-5885 • www.excelengr.com



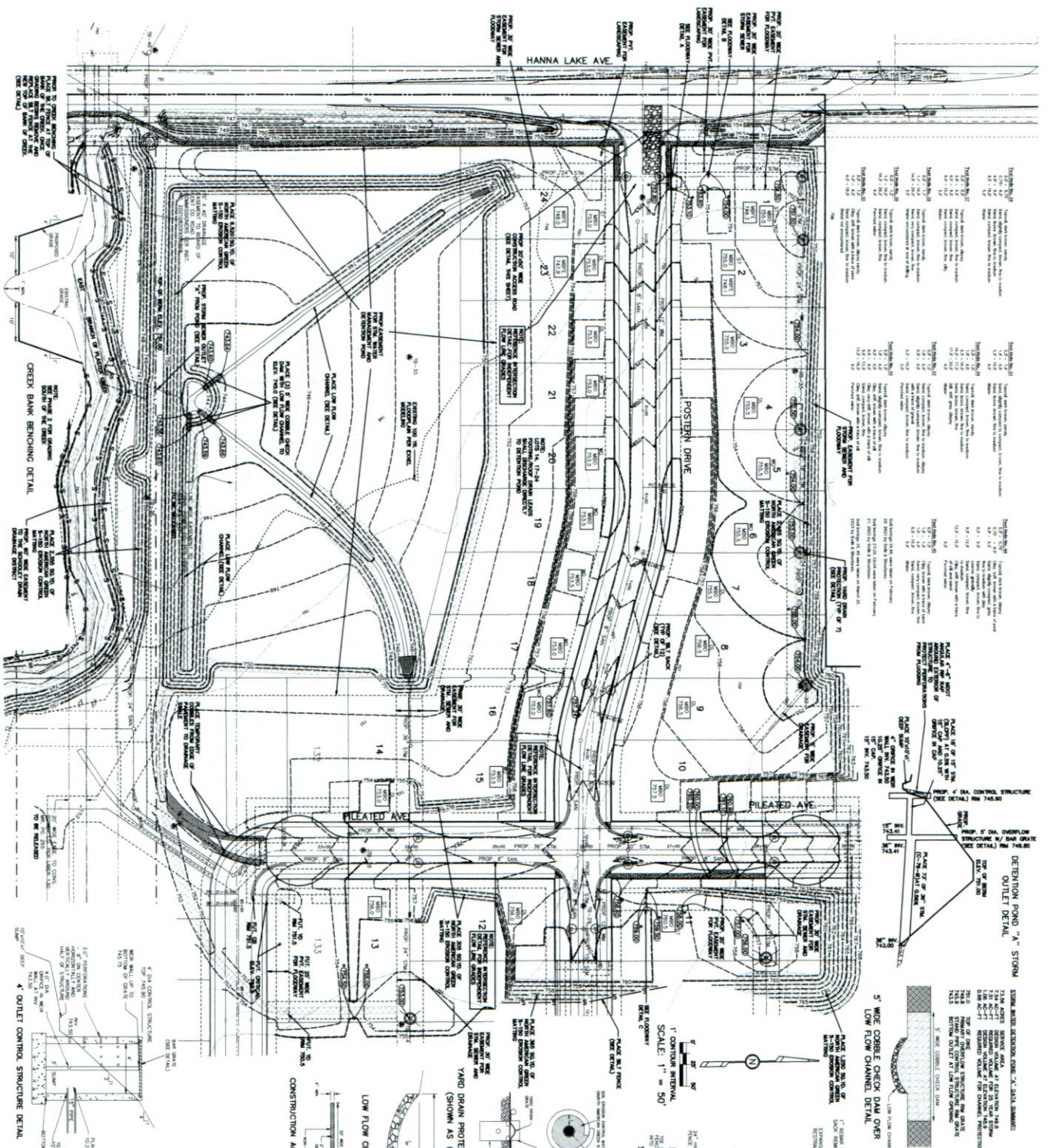


Table 1: Stationing and Elevation Data

Station	Point	Elevation
1	Top of Postern Drive	125.00
2	Top of Pileated Ave	124.50
3	Top of Milled Ave	124.00
4	Top of Hanna Lake Ave	123.50
5	Top of Detention Pond	123.00
6	Top of Floodway	122.50
7	Top of Outlet Structure	122.00
8	Top of Control Structure	121.50
9	Top of Floodway	121.00
10	Top of Outlet Structure	120.50
11	Top of Control Structure	120.00
12	Top of Floodway	119.50
13	Top of Outlet Structure	119.00
14	Top of Control Structure	118.50
15	Top of Floodway	118.00
16	Top of Outlet Structure	117.50
17	Top of Control Structure	117.00
18	Top of Floodway	116.50
19	Top of Outlet Structure	116.00
20	Top of Control Structure	115.50
21	Top of Floodway	115.00
22	Top of Outlet Structure	114.50
23	Top of Control Structure	114.00
24	Top of Floodway	113.50
25	Top of Outlet Structure	113.00
26	Top of Control Structure	112.50
27	Top of Floodway	112.00
28	Top of Outlet Structure	111.50
29	Top of Control Structure	111.00
30	Top of Floodway	110.50
31	Top of Outlet Structure	110.00
32	Top of Control Structure	109.50
33	Top of Floodway	109.00
34	Top of Outlet Structure	108.50
35	Top of Control Structure	108.00
36	Top of Floodway	107.50
37	Top of Outlet Structure	107.00
38	Top of Control Structure	106.50
39	Top of Floodway	106.00
40	Top of Outlet Structure	105.50
41	Top of Control Structure	105.00
42	Top of Floodway	104.50
43	Top of Outlet Structure	104.00
44	Top of Control Structure	103.50
45	Top of Floodway	103.00
46	Top of Outlet Structure	102.50
47	Top of Control Structure	102.00
48	Top of Floodway	101.50
49	Top of Outlet Structure	101.00
50	Top of Control Structure	100.50

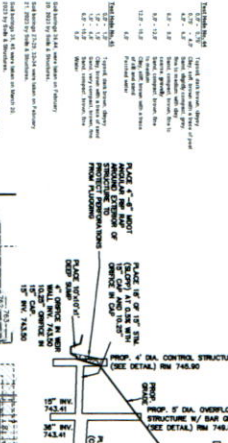


Table 2: Material and Construction Details

Item	Material	Quantity	Unit
1	Concrete	100	cu yd
2	Gravel	200	cu yd
3	Gravel	200	cu yd
4	Gravel	200	cu yd
5	Gravel	200	cu yd
6	Gravel	200	cu yd
7	Gravel	200	cu yd
8	Gravel	200	cu yd
9	Gravel	200	cu yd
10	Gravel	200	cu yd
11	Gravel	200	cu yd
12	Gravel	200	cu yd
13	Gravel	200	cu yd
14	Gravel	200	cu yd
15	Gravel	200	cu yd
16	Gravel	200	cu yd
17	Gravel	200	cu yd
18	Gravel	200	cu yd
19	Gravel	200	cu yd
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21	Gravel	200	cu yd
22	Gravel	200	cu yd
23	Gravel	200	cu yd
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43	Gravel	200	cu yd
44	Gravel	200	cu yd
45	Gravel	200	cu yd
46	Gravel	200	cu yd
47	Gravel	200	cu yd
48	Gravel	200	cu yd
49	Gravel	200	cu yd
50	Gravel	200	cu yd

GRADING AND SOIL EROSION CONTROL PLAN

RE: THORNAPPLE FARMS
FOR: ATTN: DAN LARSEN

750 CLARE COURT SW
SUITE 100
PORTLAND, OR 97205

DATE: 08/14/2024
SHEET: 8 OF 10

excelengineering, Inc.
1000 SW 10th Ave, Suite 100
Portland, OR 97205
503.222.1111
www.excelengineering.com

1. DETENTION POND "A" OVERFLOW OUTLET DETAIL

2. DETENTION POND "A" OVERFLOW OUTLET DETAIL

3. DETENTION POND "A" OVERFLOW OUTLET DETAIL

4. DETENTION POND "A" OVERFLOW OUTLET DETAIL

5. DETENTION POND "A" OVERFLOW OUTLET DETAIL

6. DETENTION POND "A" OVERFLOW OUTLET DETAIL

7. DETENTION POND "A" OVERFLOW OUTLET DETAIL

8. DETENTION POND "A" OVERFLOW OUTLET DETAIL

9. DETENTION POND "A" OVERFLOW OUTLET DETAIL

10. DETENTION POND "A" OVERFLOW OUTLET DETAIL

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44. DETENTION POND "A" OVERFLOW OUTLET DETAIL

45. DETENTION POND "A" OVERFLOW OUTLET DETAIL

46. DETENTION POND "A" OVERFLOW OUTLET DETAIL

47. DETENTION POND "A" OVERFLOW OUTLET DETAIL

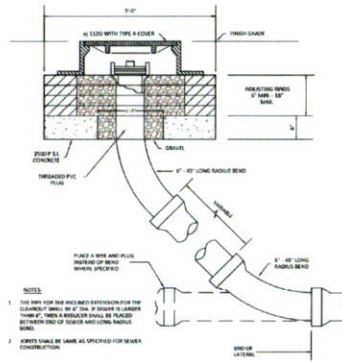
48. DETENTION POND "A" OVERFLOW OUTLET DETAIL

49. DETENTION POND "A" OVERFLOW OUTLET DETAIL

50. DETENTION POND "A" OVERFLOW OUTLET DETAIL

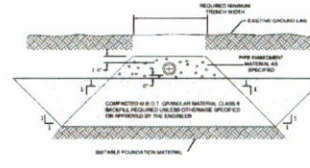
SANITARY SEWER NOTES:

1. ALL SANITARY SEWER MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE BYRON GAINES UTILITY AUTHORITY (BGUA) STANDARD CONSTRUCTION SPECIFICATIONS FOR SANITARY SEWER INSTALLATION.
2. SANITARY SEWER CONSTRUCTION IS TO BE INSPECTED BY VRIESMAN AND KORHORN CIVIL ENGINEERS. PRESURE AND MANHOLES TESTING AND TELEVISION WHEN REQUIRED OF THE SEWER IS TO BE PERFORMED BY THE CONTRACTOR, WITNESSED AND APPROVED BY VRIESMAN AND KORHORN CIVIL ENGINEERS. BELLS DISCOVERED BY TELEVISION OR VISUAL INSPECTION MUST BE REPAIRED.
3. EXISTING SEWER LINES ARE TO BE PROTECTED FROM DAMAGE AND CONTAMINATION. THE CONTRACTOR SHALL FURNISH & PLACE DOWNSTREAM PLUG (DURING CONSTRUCTION) AS REQUIRED BY THE TOWNSHIP OR THEIR REPRESENTATIVES.
4. THE CONTRACTOR SHALL NOTIFY VRIESMAN AND KORHORN CIVIL ENGINEERS 48 HOURS (TWO WORKING DAYS) PRIOR TO BEGINNING CONSTRUCTION.
5. ALL PIPE IS TO BE PVC SDR35 OR TRUSS LINES SPECIFIED OTHERWISE OR DIRECTED BY ENGINEER.
6. ALL SANITARY MANHOLE COVERS SHALL BE PLACED 1' ABOVE GRADE OUTSIDE THE INFLUENCE OF ROADWAY SHOULDER AND/OR DEVELOPED AREAS SUCH AS OPEN FIELDS, HIGHWAY OR COUNTY ROAD ROW'S, AS DETERMINED BY THE ENGINEER. GROUND AROUND STRUCTURE IS TO BE SLOPED ACCORDING TO STANDARD DETAIL.
7. LEADS IN MANHOLES WILL NOT BE PERMITTED.
8. MAXIMUM HEIGHT FROM RIM GRADE TO THE TOP OF THE PRECAST CONE IS 22" FOR ALL MANHOLES.
9. ALL MANHOLE STRUCTURES SHALL BE BACKFILLED WITH COMPACTED SAND WITHIN LIMITS OF EXCAVATION FOR THE MANHOLE.
10. ALL MANHOLE CASTINGS SHALL BE SECURED TO MANHOLE RINGS PER STANDARD DETAIL.
11. GROUT ENTIRE GAP BETWEEN SANITARY PIPE AND MANHOLE OPENING ON ALL MANHOLES.
12. STANDARD O-RING SEALS WILL BE USED ON ALL MANHOLE JOINTS. ALL EXTERIOR JOINTS OF MANHOLES WILL BE SEALED WITH A FLEXIBLE BUTYL RUBBER RASSED TAPE (12" WIDE). JOINTS SHALL BE CLEAN BEFORE APPLYING, AND PRIMER USED ACCORDING TO MANUFACTURER RECOMMENDATIONS.
13. ALL CONCRETE USED IN MANHOLES WILL MEET A MINIMUM 5,000 PSI. MANHOLES SHALL BE FABRICATED WITH ADEQUATE SLUMP. ROCK POCKETS OR HONEY COMBS WILL BE REJECTED. LEADS IN MANHOLES WILL BE FIRED BY THE MANHOLE MANUFACTURER OR CONTRACTOR USING AN ISO MULTIMETER OR APPROVED EQUAL. THE INSIDE JOINT MUST THEN BE SEALED WITH APPROVED HYDRAULIC CEMENT.
14. APPLY MASTIC COATING ON OUTSIDE OF ALL MANHOLE STRUCTURES.
15. ALL CONCILIATING CONNECTIONS WILL HAVE CONCRETE/ANCHOR CAST IN PLACE OUTSIDE TO SEAL JOINT AS SHOWN IN SEWER CASTING DETAIL. THIS SHEET. INSTALLATION OF 12" WIDE BUTYL TAPE WILL NOT BE CONSIDERED AN ACCEPTABLE ALTERNATIVE TO THE PLACEMENT OF CONCRETE MORTAR AT THIS LOCATION.
16. UTILITY MARKERS SHALL BE PLACED ON SANITARY MANHOLES, FORCEMAIN CLEANOUT AND FORCEMAIN VALVES IN UNDEVELOPED AREAS OR AS DETERMINED BY THE ENGINEER. THE MARKERS WILL BE RINGED 3-RAL UTILITY MARKER COMPOSITE POST. THE MARKERS SHALL BE 66-INCHES, 6-INCHES WIDE, GREEN, AND 3-RAL DESIGN. DECAL 840-5325 SHALL BE AFFIXED TO THE MARKER FOR SEWER MANHOLES, DECAL 840-5324 SHALL BE AFFIXED TO THE MARKER FOR FORCEMAIN. THE MARKERS SHOULD INCLUDE "BELL PATCH DECAL" FOR MISS DIG.
17. CONNECTIONS AND ADJUSTMENTS TO EXISTING MANHOLES WILL BE EVALUATED ON A CASE-BY-CASE BASIS BY THE TOWNSHIP ENGINEER. REHABILITATION OR REPLACEMENT OF THE EXISTING MANHOLE TO CURRENT BYRON GAINES UTILITY AUTHORITY (BGUA) STANDARDS WILL BE REQUIRED FOR CONNECTIONS AND ADJUSTMENTS. WHEN CONNECTING NEW PIPE TO EXISTING MANHOLES, THE OPENING SHALL BE MADE BY A CONCRETE DRILLING OR CORING MACHINE AND SHALL HAVE A MECHANICALLY COMPRESSED FLEXIBLE JOINT CONNECTOR INSTALLED. FLOW CHANNELS AND BENCH WALLS SHALL BE CONSTRUCTED PER BGUA STANDARDS.



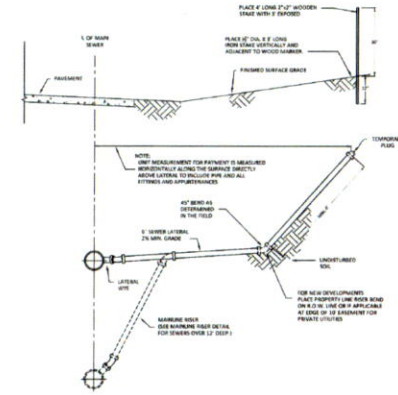
SEWER LATERAL CLEANOUT

6-20



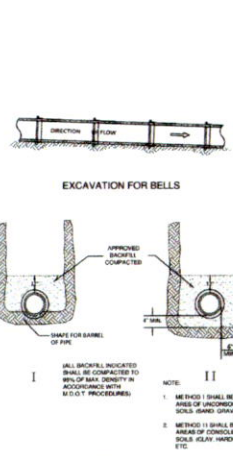
UNSTABLE SOIL REMOVAL FOR UTILITY

6-21



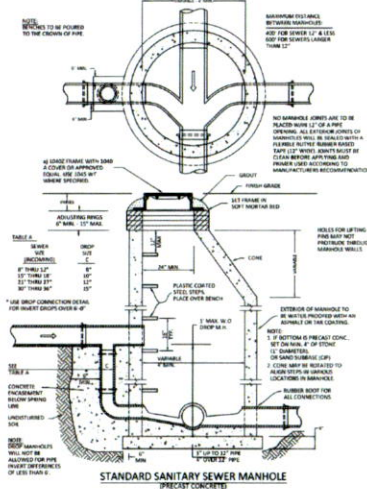
LATERAL AND PROPERTY LINE RISER DETAIL

6-21



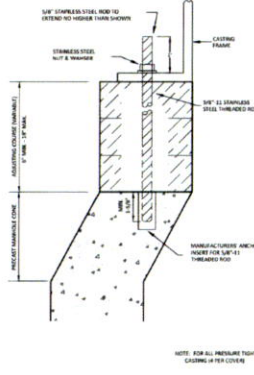
CLASS B PIPE EMBEDED

6-22



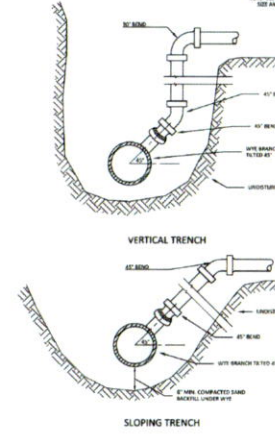
STANDARD SANITARY SEWER MANHOLE

6-23



ANCHOR DETAIL

6-24



MAINLINE RISER DETAILS FOR SEWERS OVER 12\"/>

6-25

PREPARED BY: VRIESMAN AND KORHORN CIVIL ENGINEERS

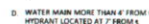
THORNAPPLE FARMS PHASE 1 SHEET 9 OF 10

NO.	DATE	REVISION	BY
0			

BYRON GAINES UTILITY AUTHORITY
KENT COUNTY, MICHIGAN
SANITARY SEWER
STANDARD DETAILS SHEET

VK CIVIL
Vriesman & Korhorn
Byron Center, MI (516) 277-2185 www.vkcivil.com

FILE NO: N/a
SCALE: N/a
SHEET NO: 1 of 1



* All lengths are given in feet

** if straight run of pipe on small side of reducer exceeds this value, then no restrained joints are necessary

THORNAPPLE FARMS PHASE 1 SHEET 10 OF 10

RESTRAINT SCHEDULE

FILE NO.	N/a
SCALE:	N/a
SHEET NO.	1 of 1

 **Vriesman
& Korhorn**
Byron Center, MI (516) 277-2185 www.VKcivil.com



Vriesman
& Korhorn

March 28, 2024
1251

Via Email: tracy.lawrence@gainestownship.org

Tracy Lawrence
Water & Sewer Administrator
Gaines Charter Township
8555 Kalamazoo Avenue, SE
Caledonia, MI 49316

RE: Prairie Wolf Station – Contract #1 – Offsite Watermain Improvements
 Water/Sewer Development Contract Recommendation

Dear Tracy:

Enclosed is the Water/Sewer Development Contract for Contract #1 of the Prairie Wolf Station project. Contract #1 of the project covers the watermain improvements along 92nd Street and Kalamazoo Avenue. The Water/Sewer Development Contract details the project which includes the extension of approximately 458 ft of 20" watermain and 37 ft of 16" watermain in the Eastern Avenue ROW, 5,363 ft of 20" watermain in the 92nd Street ROW, 4,468 ft of 16" watermain and 700 ft of 18" HDPE watermain in the Kalamazoo Avenue ROW. No sanitary sewer improvements are included in this development contract.

The watermain improvements are eligible for oversizing payment in the amount of \$817,636.65 based on the Prairie Wolf Station project requiring a 12-inch diameter watermain for water service and fire protection & the Township requirement to oversize the watermain to meet the future needs of this area of the Township. Exhibit C contains the details of the estimated oversizing payment and the final costs will be calculated based on installed quantities after the watermain is approved for use and is put into service.

The watermain improvements are also eligible for payback of Township connection fees (Availability Fees) if and when properties connect to new watermain improvements. The maximum payback that the Developer is eligible for is estimated to be \$1,551,958.74 but is not guaranteed as the number of properties that may connect to the watermain is unknown. The payback provisions of the Water/Sewer Development Contract expire 10-years after the watermain is approved for use and is put into service.

The proposed Water/Sewer Development contract has been reviewed by the Developer. The Developer will execute the proposed contract on April 10, 2024. We recommend that the Gaines Charter Township Board of Trustees authorize execution of the contract by the Township.

Thank you for your consideration in this matter. If you have any questions or concerns, please do not hesitate to call.

Sincerely,

VK Civil

A handwritten signature in blue ink, appearing to read "Jeff M. Gritter", with a stylized flourish at the end.

Jeffrey M. Gritter, P.E.

JMG/nfb

Encl.

**WATER AND/OR SEWER
DEVELOPMENT CONTRACT**

CONTRACT FACE PAGES

I. PARTIES

A. DEVELOPER (the “Developer”):

American Kendall Properties, LLC

Name

3600 Woodview Trace, Suite 130, Indianapolis, IN, 49268

Address

Limited Liability Company

Type of legal entity, i.e. corporation, partnership, limited liability
Company, individual, etc.

**B. CHARTER TOWNSHIP OF GAINES (the “Township”),
whose address is: 8555 Kalamazoo Avenue, S.E., Caledonia, MI 49316**

II. DESCRIPTION OF DEVELOPER'S DEVELOPMENT (the “Development”).

Prairie Wolf Station will be a mixed-use development on approximately 82.0 acres on the southeast corner of the intersection of 84th Street and Kalamazoo Avenue. The development will consist of 127 single family homes (127 dwelling units), 36 condominium units (36 dwelling units), 11 Townhome buildings with 44 dwelling units, 8 Haven apartment buildings with 116 dwelling units, 9 Parkway Flats apartment buildings with 91 dwelling units, 11 Canal Flats apartment buildings with 67 dwelling units, and 34 dwelling units over retail for a total of 515 dwelling units. Six commercial/office/retail buildings consisting of approximately 20,800 sqft, 1 Senior Living building with 110 senior living units, and two future commercial lots with undetermined building sizes. For additional details Exhibit B of the consent judgement should be referenced.

**III. DESCRIPTION OF WATER AND/OR SEWER
EXTENSIONS/IMPROVEMENTS TO BE CONSTRUCTED BY DEVELOPER IN
ACCORDANCE WITH THIS DEVELOPMENT CONTRACT (the “Project”).**

The project will include construction of 458 lineal feet of 20” ductile iron watermain in Eastern Avenue ROW, 37 lineal feet of 16” ductile iron watermain in Eastern Avenue ROW north of 92nd Street, 5,363 lineal feet of 20” ductile iron watermain in 92nd Street ROW from Eastern Avenue to Kalamazoo Avenue, 4,468 lineal feet of 16” ductile iron watermain in Kalamazoo Avenue ROW from 92nd Street to the entrance driveway of Gaines Township, 700 lineal feet of 18” HDPE watermain in the Kalamazoo Avenue ROW, and 80 lineal feet of 16” ductile iron watermain north of the entrance drive to Gaines Township in the Kalamazoo Avenue ROW.

Note: A map showing the location of the Development and the Project, which separately identifies the water and/or sewer extensions/improvements, must be attached to this Development Contract.

IV. **PROJECT COMPLETION DATE** (the “Completion Date”): June 26, 2024

V. **IRREVOCABLE LETTER OF CREDIT**

A. Required prior to commencement of construction:

YES _____ NO X _____

B. Amount of letter of credit: \$ N/A

VI. **WATER AVAILABILITY FEE**

A. Basis of Water Availability: N/A – Developer is extending watermain from the existing “1020 District” watermain located just south of the intersection of 92nd Street and Eastern Avenue. The extension will go north along Eastern Avenue, east along 92nd Street, and north along Kalamazoo Avenue to provide public water service to the Project known as Prairie Wolf Station; the property owned by the Developer at 8460 Kalamazoo Avenue, PPN: 41-22-21-100-011. The Availability Fee for the properties along Kalamazoo is satisfied by the extension of watermain described in section III.

B. Amount of Water Availability Fee: \$ N/A

C. Payment Terms: N/A

VII. **WATER TRUNKAGE FEE**

A. Basis of Water Trunkage Fee: N/A

B. Amount of Water Trunkage Fee: \$ N/A

C. Payment Terms: N/A

VIII. **WATERMAIN PAYBACK ARRANGEMENTS**

A. Basis of Payback Arrangements for Watermain: The developer is constructing approximately 5,858 feet of 20-inch & 16-inch watermain in the Eastern Avenue ROW and 92nd Street ROW and approximately 5,168 feet of 16-inch watermain Kalamazoo Avenue. The watermain is eligible for payback along both sides of said roadways except for parcel 41-22-21-100-011 which is owned by the developer, American Kendall Properties LLC. The watermain, once constructed, will be available for connection and use by adjacent property owners.

- B. Maximum Amount of Watermain Payback Payments to the Developer: Estimated to be \$1,551,958.74 which is the cost of an equivalent 8" watermain for the above described 11,130 feet of proposed watermain. The actual maximum amount eligible to be paid to the Developer will be based on the competitively bid unit prices for watermain construction, measured and installed quantities, plus 15% for engineering and administration. Water services installed as a part of the project by the Developer will also be eligible for payback under the same terms as the watermain. **See Exhibit B.
- C. Payment Terms: The Township agrees to remit to the Developer the township water availability fees that are imposed under the Township Water & Sewer Ordinance and collected as connections are made to the watermain described in this Agreement for the 10 years after the final acceptance of the watermain by the Township and Byron-Gaines Utility Authority. Water Availability Fees collected shall be remitted to the Developer annually on or around January 1st except in the final year of the payback in which fees so collected shall be remitted within 30 days after the end date of this agreement. The Township agrees to use the standard Township procedures in collection of availability fees but does not guarantee either the number of parcels that may actually connect nor the amount of availability fees that may be collected during the payback period.
- D. Expiration Date of Payback Arrangements: 10 years after date of final acceptance; (final acceptance of the watermain will be approximately August 1, 2024)
- E. The Developer acknowledges that the obligation of the Township to make payback payments is contingent upon future events (i.e., water and/or sewer connections) which are not within the control of the Township and therefore the Developer further acknowledges that the amount and frequency of payback payments is not guaranteed by the Township.

IX. **PAYMENT TO THE DEVELOPER FOR OVERSIZING WATERMAIN**

- A. Basis of Oversizing Payment for Watermain: Oversizing payment is based on the cost difference between constructing 20-inch and 16-inch watermain versus the cost of constructing a 12-inch watermain. The Township is requiring the proposed watermain to be oversized to 16-inch and 20-inch watermain and the Prairie Wolf Station project requires 12-inch watermain to adequately serve the project.
- B. Amount of Oversizing Payment to the Developer: Watermain oversizing is estimated to be \$817,636.65. The actual amount will be based on the bid unit prices for 20-inch and 16-inch watermain, the estimated unit prices of 12-inch watermain and the record plan measurements of installed quantities. **See Exhibit C.
- C. Payment Terms: A written request shall be made by the Developer's engineer after the watermain has been installed and approved for use. The request will be reviewed by the Township engineer, and a recommendation will be made for the

payment amount. The request shall be accompanied by a tabulation of installed quantities and as-built record plans.

Note: The payment for oversizing may be funded jointly by the Township of Byron and the Charter Township of Gaines in accordance with a separate cost sharing agreement between the Townships.

X. SEWER AVAILABILITY FEE

- A. Basis of Sewer Availability Fee: N/A
- B. Amount of Sewer Availability Fee: \$ N/A
- C. Payment Terms: N/A

XI. SEWER TRUNKAGE FEE

- A. Basis of Sewer Trunkage Fee: N/A
- B. Amount of Sewer Trunkage Fee: \$ N/A
- C. Payment Terms: N/A

XII. SANITARY SEWER PAYBACK ARRANGEMENTS

- A. Basis of Payback Arrangements for Sanitary Sewer: N/A
- B. Maximum Amount of Sanitary Sewer Payback Payments to the Developer:
\$ N/A
- C. Payment Terms: N/A
- D. Expiration Date of Payback Arrangements: N/A
- E. The Developer acknowledges that the obligation of the Township to make payback payments is contingent upon future events (i.e., water and/or sewer connections) which are not within the control of the Township and therefore the Developer further acknowledges that the amount and frequency of payback payments is not guaranteed by the Township.

XIII. PAYMENT TO THE DEVELOPER FOR OVERSIZING SANITARY SEWER

- A. Basis of Oversizing Payment for Sanitary Sewer: N/A

B. Amount of Oversizing Payment to the Developer: N/A

C. Payment Terms: N/A

Note: The payment for oversized may be funded jointly by the Township of Byron and the Charter Township of Gaines in accordance with a separate cost sharing agreement between the Townships.

XIV. PAYMENT OF PROJECT COSTS

Subject to oversized payments as summarized above, if any, the Developer shall pay all costs of the Project, including without limitation all costs related to construction of the public water main and/or public sewer main, water services, sewer laterals and related improvements and appurtenances, the cost of acquiring necessary interests in land and right of ways, engineering, restoration and replacement, the cost of connecting the Project to the existing water or sewer system, the cost of connecting the Development to the Project and the Permit, Plan Review and Construction Inspection Costs identified in XV below.

XV. PERMIT, PLAN REVIEW, AND CONSTRUCTION INSPECTION COSTS:

In addition to the payment of Project costs and applicable availability fees, trunkage fees and all other rates, charges and costs imposed by applicable Township ordinance, the Developer shall reimburse the Township for costs of (a) sanitary sewer and watermain construction permit submittals, (b) Township Engineer and staff review of plans, and (c) construction inspection performed by the Township or the Township's duly authorized representatives.

XVI. MISCELLANEOUS

N/A

XVII. AGREEMENT OF THE PARTIES:

In consideration of the mutual covenants and agreements contained in the attached Contract Terms, the parties mutually agree that the Developer will acquire and construct the Project at Developer's sole expense, that after completion of the Project ownership of the Project shall be transferred by the Developer to the Township in accordance with the Contract Terms, and that all aspects of the acquisition, construction, completion, and transfer of the Project shall be governed by the Contract Terms, attached hereto.

IN WITNESS WHEREOF, the parties have executed this Contract.

Witnesses:

DEVELOPER:

(1) _____

By: _____

Its: _____

(2) _____

By: _____

Its: _____

Dated: _____, 2024

Witnesses:

CHARTER TOWNSHIP OF GAINES:

(1) _____

By: _____

Robert DeWard
Its: Supervisor

(2) _____

By: _____

Michael Brew
Its: Clerk

Dated: _____, 2024

WATER AND/OR SEWER DEVELOPMENT CONTRACT

CONTRACT TERMS

Section 1. **PRECONSTRUCTION MATTERS.** Before commencing construction of the Project, the Developer shall complete all of the following:

(a) Obtain all necessary permits for the installation and construction of the Project from all state and county agencies having jurisdiction and all necessary permission to work in the public right-of-way from the Township, County Road Commission, Michigan Department of Transportation, and other public bodies.

(b) Submit to the Township for approval detailed plans and specifications for the Project prepared by a professional engineer licensed in Michigan. The plans and specifications are to be provided in a format acceptable to the Township. Construction of the Project shall not commence unless and until the Township reviews and approves these plans and specifications in writing. As part of the approval of the plans and specifications, the Township Engineer shall determine the location of the public water main or public sewer, and approve the construction methods and materials used in the construction, including in the case of a public water main extension, the installation of fire hydrant markers. The extension shall cover the entire road or public right of way frontage of the Development to be served by the extension. If the Township requests changes in the plans and specifications for the Project, the Developer agrees to make such changes as shall be requested by the Township provided, however, the Township shall not withhold its approval of the plans and specifications unreasonably and, further, that if Township requirements with respect to the plans and specifications are in conflict with those of the state or any county agency having jurisdiction, the requirements of the state or county agency shall control. The fact that the Township may require higher quality materials or better construction practices than a state or county agency shall not be deemed a conflict and Township requirements shall control. The plans and specifications shall provide for complete restoration to original condition of all paved street surfaces and bicycle paths as well as replacement of all driveways and landscaping disturbed or damaged in the course of the construction of the Project;

(c) Submit to the Township the names of the proposed general contractor and all subcontractors who will be constructing and completing the Project on behalf of the Developer. Construction of the Project shall not commence unless and until the Township has approved in writing the Developer's general contractor and all subcontractors, such approval not to be withheld unreasonably. On request, the Developer shall submit to the Township such additional information concerning the Developer's proposed contractors as the Township shall reasonably request;

(d) Submit to the Township a copy of a proposed written contract between the Developer and its general contractor. The Developer may remove from this contract price information. This contract shall not be signed until approved in writing by the Township. A copy of the final signed contract shall be provided to the Township. This contract shall contain the following provisions: "The construction project to be completed pursuant to this contract shall be completed in all respects in accordance with the Township's Specifications or the Byron-Gaines Utility Authority Standard Construction Specifications and all revisions thereof (together, the

“Specifications”), and all terms and provisions of this contract and all plans and specifications and other documentation incorporated by reference in this contract or applicable to the construction project provided for in this contract shall be subordinate to the provisions of the Specifications. The Township of Byron shall be deemed to be a third party beneficiary of this construction contract and all provisions of the construction contract in favor of the owner and/or the Charter Township of Gaines may be enforced by the Township of Byron; however, the Township of Byron shall not be obligated to enforce any such provisions;” and

(e) Transfer, in consideration of this Development Contract, to the Charter Township of Gaines and the Township of Byron, jointly (together, the “Townships”), all easements required to construct the Project. All easements shall be in such form and substance as shall be required by the Township. All easements shall be perpetual and shall be at least as wide as required by the Township but no less than twenty (20) feet in width in any event. The Developer shall provide to the Township such proof of title and other title documentation as the Township shall reasonably require in order to verify that the Township is receiving good title to all easements being transferred to the Township by the Developer.

Section 2. **PROJECT CONSTRUCTION.** The Developer shall cause the Project to be constructed in accordance with the approved plans and specifications in a good and workmanlike manner and so as to meet all quality standards and tests which would apply and be conducted if the Township itself constructed and acquired the Project. During construction of the Project, the Township shall have the right, at the cost of the Developer, to undertake with Township employees or third party contractors such inspection of the Project as the Township shall deem appropriate. No change order shall be issued with respect to the approved plans and specifications without prior written approval of the Township, such approval not to be withheld unreasonably.

Section 3. **DEWATERING.** If the Project requires dewatering, the Developer agrees that the Developer alone, at the Developer’s sole cost, is responsible for any negative impact caused by Project dewatering including, but without limitation, the drying of lakes, streams, or ponds or the quantity, quality and taste of the well water supply of any lands. No Project shall be transferred to the Township, and the Township will not approve any Project or accept ownership thereof, unless and until the Township is satisfied that all negative impact to well water supplies, or bodies of water, caused by the Project have been fully and satisfactorily corrected. The Township may require written documentation from the owner of lands whose well water supply, or body of water, has been affected by Project dewatering that such land owner is satisfied with his/her/their well water supply, or body of water, if the lands have not been connected to the public water system. In the event of a disagreement between the Township and the Developer as to whether a particular well or body of water has been adversely affected by the Project, the Township’s engineer shall make a written determination and this determination shall be final and binding on the Township and the Developer.

Section 4. **COMPLETION OF THE PROJECT.** The Project shall be completed and made available to the Township for final inspection and approval no later than the Completion Date. Upon completion of the Project and after final inspection and written approval by the Township, such approval not to be withheld unreasonably, the Project shall be transferred by the Developer, in consideration of this Development Contract, to the Charter Township of Gaines and the Township of Byron, jointly, (together the "Townships") pursuant to the Townships standard form Warranty Bill of Sale.

The Township shall not be obligated to approve the Project or accept ownership thereof unless and until the Township is satisfied the Project has been constructed in accordance with the approved plans and specifications and in a good and workmanlike manner and, further, that the Project meets all quality standards and tests which would apply and be conducted if the Township itself acquired and constructed the Project. In addition, the Township shall not be obligated to approve the Project and accept ownership thereof unless and until all of the restoration has been fully completed.

Prior to approval of the Project and acceptance of ownership thereof, the Township shall receive from the Developer such waivers of lien, affidavits and other documentation as the Township shall reasonably deem necessary to be assured that all contractor(s) and all pipe, equipment and other suppliers in connection with the Project have been paid in full and that there are no liens or other unpaid obligations outstanding with respect to the Project.

The Township also reserves the right to require, prior to approval of the Township and acceptance of ownership thereof and at the cost of the Developer, a written opinion from the Developer's consulting engineer that the Project has been constructed and completed in accordance with the approved plans and specifications.

If the Contract Face Pages require that the Developer provide an irrevocable letter of credit prior to commencement of construction in order to guarantee completion of the Project by the Completion Date, this irrevocable letter of credit shall be issued by a bank having an office in Kent County in favor of the Township in the amount shown on the Contract Face Pages. The letter of credit to be provided shall be in such form and with such provisions as the Township shall reasonably require.

The Project shall not be connected to the Township's sewer and/or water systems unless and until the Township has completed its final inspection and approved the Project in writing. If the Developer desires to connect the Project to the water and/or sewer systems in advance of this final inspection and written approval, the Developer shall provide to the Township an irrevocable letter of credit issued by a bank having an office in Kent County in favor of the Township in such amount as the Township shall reasonably determine is necessary to pay all costs and expenses related to completing the Project. The letter of credit to be provided shall be in such form and with such provisions as the Township shall reasonably require.

No portion of the Development shall be connected to the Project until the Project has been approved by the Township and the ownership of the Project has been dedicated and conveyed jointly to the Charter Township of Gaines and the Township of Byron in the manner provided by these Contract Terms.

The Developer shall cooperate with the Township at all times, whether before or after the conveyance of the Project to the Township, and to the fullest extent with all Project contract and warranty claims deemed necessary by the Township to be made or filed against the Developer's contractor.

If the Project is not completed by the Completion Date, the Township shall have the right to complete the Project at the Developer's expense and to pay the full cost of such completion by making a draw or draws against the Developer's letter of credit. The Developer shall reimburse the Township for all costs incurred in completing the Project including, but without limitation, engineering, third party contractors and the charges of Township personnel necessary to supervise the completion of the Project. To the extent the Township costs to complete the Project are not fully paid by a draw or draws on a letter of credit, the Developer shall pay such amounts to the Township on demand. Amounts not paid on demand shall bear interest at a rate of 1% per month or fraction of a month that the amount remains unpaid.

Section 5. **INSURANCE**. Beginning as and when construction of the Project is commenced, and continuing at all times while the Project or any part thereof is under construction, the Developer and/or its contractor(s) shall continuously carry and maintain the same insurance coverage which is routinely required by the Township with respect to the construction of its own water and sewer projects. The Charter Township of Gaines, the Township of Byron and their respective Township Board members, officers, agents, employees and Township engineers (together, the "Additional Insured's") shall all be named as additional insured under such insurance, and such insurance shall also provide that it is the primary source of coverage for all such parties named as additional insured's with respect to the Project and the acts of omission of the Developer and its contractor(s) related thereto.

Certificate(s) evidencing the acquisition of all insurance required by this section and that such insurance is in full force and effect shall be deposited with the Township before construction of the Project is commenced. The Developer shall furnish, or cause to be furnished, upon request of the Township, certified copies of all policies required pursuant to this section as well as all amendments and renewals. All insurance policies required pursuant to this section shall contain a provision that they are non-cancelable and not subject to material modification by the insurer except upon 30 days' prior written notice to the Township. At least 30 days prior to the expiration or cancellation of any such insurance policy, there shall be furnished to the Township evidence satisfactory to it that the policy has been renewed or replaced by another policy. Construction of the Project shall not commence unless and until the Township has approved the insurance required to be provided by the Developer and its contractor(s) pursuant to this section in writing, such approval not be withheld unreasonably.

With respect to the Project, the Developer agrees to indemnify the Townships and all of the other Additional Insured's named in the first paragraph of this section, from and against any and all claims, costs, actions, causes of action, liability, judgments, losses, or expenses (including reasonable attorney's fees and other expense of defense) resulting from or caused by the acts or omissions of Developer or its contractor(s) in acquiring, constructing and completing the Project or with respect to the legal title to the Project, including all necessary easements, rights of way and interests in land required for the Project.

Section 6. **CONNECTION CHARGES/RATES.** The Developer shall pay all availability fees and trunkage fees in the amounts and in the manner set forth on the Contract Face Pages. The Developer shall pay all rates and charges imposed by the Township pursuant to the applicable rate ordinance or rate resolution with respect to the Project on such terms and provisions as are provided in that rate ordinance or rate resolution. The Township shall be entitled to establish such water rates and/or sewer usage rates as the Township deems appropriate. The Developer will reimburse the Township for the costs of sanitary sewer and watermain construction permit submittals, Township Engineer and staff review of plans, and construction inspection performed by the Township or the Township's duly authorized representative. The fact the Developer has installed the Project at its expense shall not excuse the Developer or any party owning or utilizing lands and premises within the Development served by the Project or any part thereof from being obligated to pay water and sewer rates and charges or any other charges levied by the Township generally against water and/or sanitary sewer customers.

Section 7. **TOWNSHIPS' UTILIZATION OF THE PROJECT.** As and when the Project has been transferred to the Townships pursuant to the Warranty Bill of Sale referred to in Section 4 above, the Project shall become part of the Townships' water and/or sewer system, as the case may be, and may be utilized by the Townships in such manner as the Townships utilize other portions of their water and sewer systems. Without limiting the generality of the preceding sentence, the Townships may connect other water and/or sewer customers to the Project and may also connect water and/or sewer extensions to the Project and connect additional customers to those extensions, all without any obligation to make any payment or reimbursement to the Developer on account of the Developer having constructed the Project at the Developer's expense, unless there is a written agreement to the contrary set forth in the Contract Face Pages or otherwise.

Section 8. **ZONING AND OTHER APPROVALS.** Approval and execution of this Development Contract by the Township does not constitute or imply that the Developer has received or will receive from the Township or any other applicable governmental entity any or all land use, zoning and/or any other approvals from the Township which are required for or applicable to the Development under applicable Township ordinance or law and the Township makes no guarantee to the Developer that any of such approvals will be granted by the Township. The Developer at Developer's sole risk and expense is required to obtain from the Township or other applicable governmental entity all such applicable land use, zoning and/or other approvals for the Development before proceeding with the construction of the Project.

Section 9. **THIRD PARTY BENEFICIARY.** In consideration of the joint ownership by the Townships of the sanitary sewer and water systems located in the Township, the Township of Byron shall be a third-party beneficiary of this Development Contract and entitled to enforce the terms hereof in accordance with applicable law.

Section 10. **DEFINED TERMS.** All capitalized terms not otherwise defined in these Contract Terms shall have the meanings assigned thereto in the Contract Face Pages.

Section 11. **MISCELLANEOUS.** Neither this Contract nor any rights under it may be assigned nor may any duty be delegated without the prior written consent of the non-assigning or non-delegating party. Any attempt to assign or delegate rights or duties without prior written consent shall be void. This Contract shall inure to the benefit of and be binding upon the parties hereto and their respective successors and permitted assigns.

All notices and other documents to be served and transmitted hereunder shall be in writing and addressed to the respective parties hereto at the addresses stated on the Contract Face Pages or such other address or addresses as shall be specified by the parties hereto from time to time and may be served or transmitted in person or by ordinary or certified mail properly addressed with sufficient postage. This is an integrated contract. It contains the full understanding of the parties and supersedes all other understandings, agreements or conditions, written or oral, regarding the subject matter of this Contract. This Contract has been executed in the State of Michigan and shall be governed by Michigan law, except as to matters pertaining to choice of law. The waiver by any party hereto of a breach or violation of any provision of this Contract shall not be a waiver of any subsequent breach of the same or any other provision of this Contract. If any section or provision of this Contract is unenforceable for any reason, the unenforceability thereof shall not impair the remainder of this Contract, which shall remain in full force and effect. It is contemplated that this Contract will be executed in multiple counterparts, all of which together shall be deemed to be one contract. The captions in this Contract are for convenience only and shall not be considered as part of this Contract or in any way to amplify or modify the terms and provisions hereof. This Contract shall be enforceable only by the parties hereto and their successors in interest by virtue of an assignment which is not prohibited under the terms of this Contract and, with the exception of specified third party beneficiaries, no other person shall have the right to enforce any of the provisions contained herein. No amendment, modification or waiver shall be effective unless in writing and signed by both parties. All rights and remedies set forth in this Contract are cumulative and are in addition to any other legal or equitable rights and remedies.

[END OF CONTRACT TERMS]



MEMO

Staff Communication-Action Required

DATE: April 3, 2024
TO: Gaines Charter Township
FROM: Gaines Township Personnel Committee
RE: Township Manager One-Year Review

SUMMARY OF TOPIC:

A one-year review was completed for Township Manager Rod Weersing as stated in his employment contract. The review was compiled and reviewed by the Personnel Committee. Respondents included all Department Heads and Township Board Members. With this memo you will find a copy of the Executive Summary of the review.

BUDGET ACTION REQUIRED:

NONE

STAFF RECOMMENDATION:

The Personnel Committee recommendations are included in the Executive Summary.

Executive Summary

Weersing March 2024

- Rod is well respected by Staff and Trustees. He is regarded as highly professional, communicative, informed, and task oriented.
- Rod is able to provide context and rationale for decisions and shares his vision with Trustees and Staff.
- Rod has confidence to move projects and decisions forward.
- Rod is steady, careful, thoughtful and able to confidently manage staff and residents.

Recommendations to Trustees: Increase salary (\$5,000), as stated in contract, retroactive to the anniversary of the start date of February 27, extend current expiration from February 27, 2025, to February 27, 2026, following Rod's Birkman coaching, consider conducting a Birkman Assessment for all department heads, and consider providing executive style coaching for all department heads.