Allegan County Board of Commissioners

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Allegan, MI 49010
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269-686-5331 Main Fax
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BOARD PLANNING SESSION-AGENDA *REVISION #1 – 5/25/21

Thursday, May 27, 2021, @ 9:00AM
Pursuant to MCL 15.263a, the Board will conduct its meeting via electronic communications to prevent the spread of COVID.
Virtual Meeting – Connectivity Instructions Attached

9:00AM CALL TO ORDER:

ROLL CALL:

OPENING PRAYER: Commissioner Mark DeYoung

PLEDGE OF ALLEGIANCE:

PUBLIC PARTICIPATION:

ADDITIONAL AGENDA ITEMS:

APPROVAL OF AGENDA:

DISCUSSION ITEMS:

1. Hopkins Township–request participation/support of Tax Increment Finance and DDA Plan (201-479)
2. Off Road Vehicle Ordinance Review
3. Water Study Group
4. *Volunteer Recognition Policy
5. Administrative Update

OTHER ITEMS:

PUBLIC PARTICIPATION:

ADJOURNMENT: Next Meeting–Thursday, June 10, 2021, 9:00AM @ VIRTUAL MEETING.

Mission Statement
"The Allegan County Board of Commissioners shall plan, develop, and evaluate the necessary policies and resources to ensure our county continues to progress and prosper"

Allegan County
Board of Commissioners
Meeting

May 27, 2021

Connecting via Zoom Webinar

Allegan County
3283 122nd Ave
Allegan, MI 49010

STEP 1: Connect to the Zoom Site

- OPTION 1: Telephone
  - Call (929) 205-6099 -or- (312) 626-6799 -or- (253) 215-8782
  - Type in Meeting ID: 827 1258 0894, then #, then # again
  - Type in Meeting Password: 52721, then #

  - To raise your hand to speak, press *9
  - To Mute and Unmute, press *6

<STOP here>

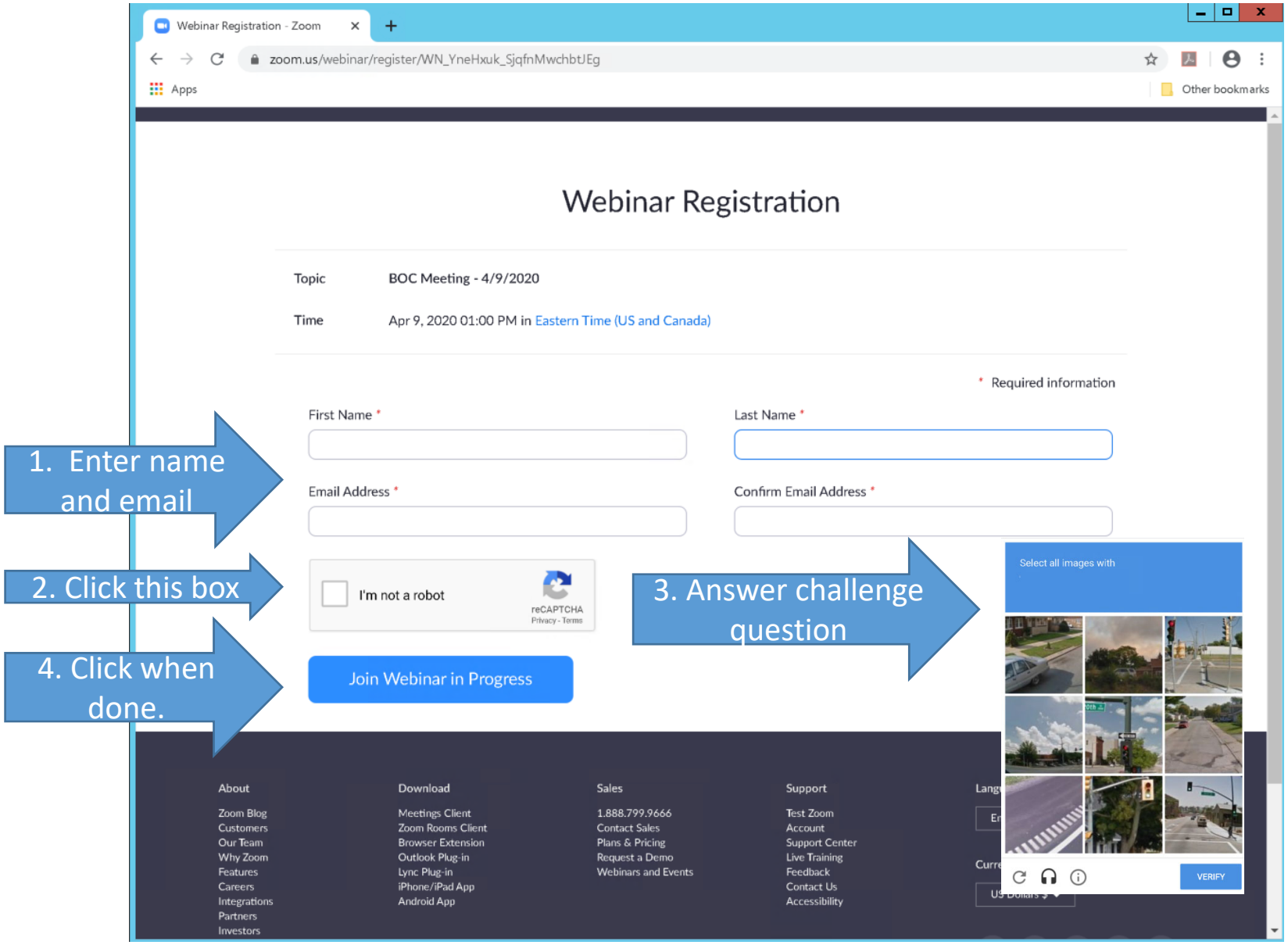
You do not have to continue reading the rest of the instructions.

- OR -

- OPTION 2: Web browser
  - Open Internet Explorer or Chrome
  - Navigate to https://zoom.us/j/82712580894
  - Meeting Password: 52721

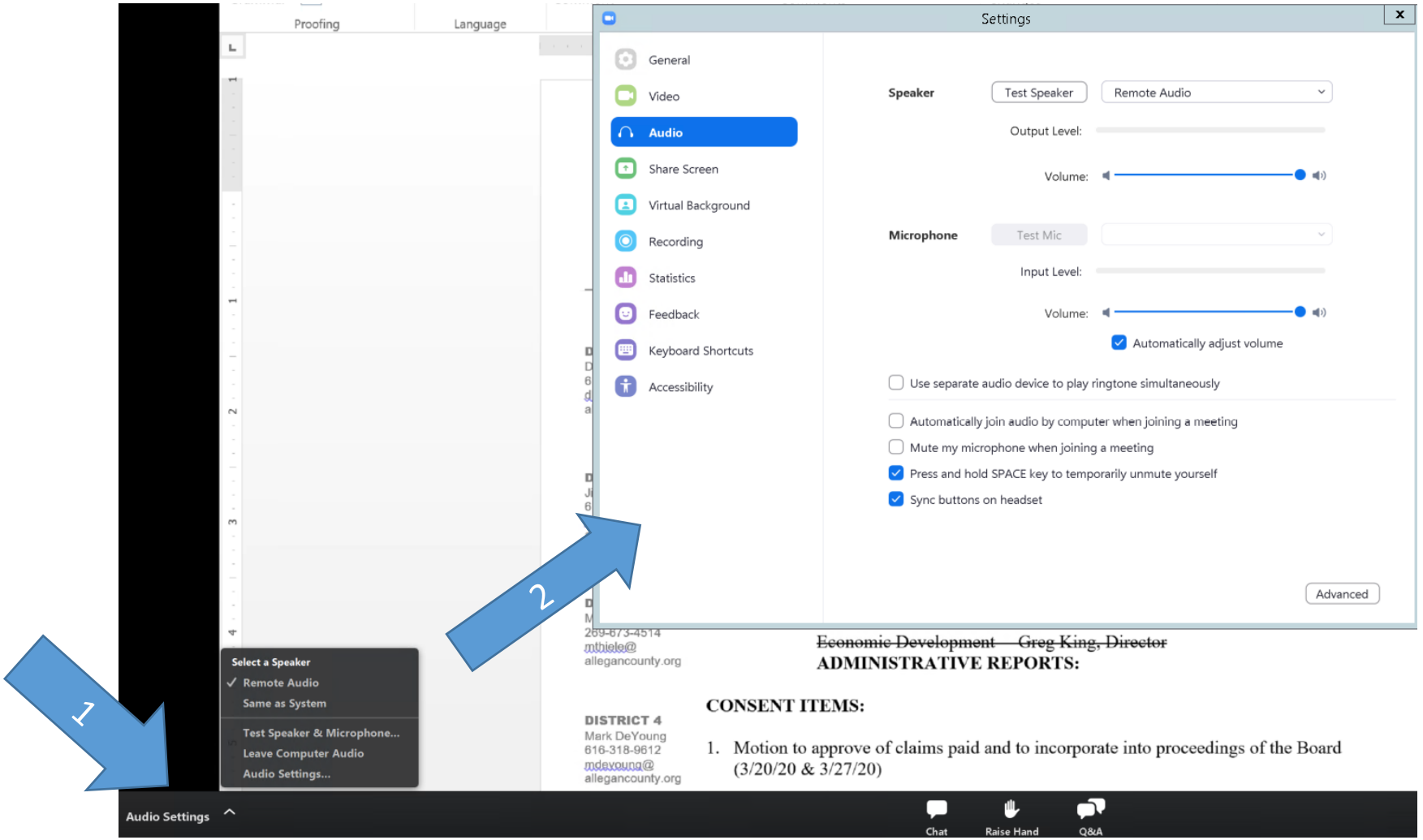
<Continue with the rest of the instructions>

STEP 2: Enter registration information



STEP 3: This Window will appear when connected.

STEP 4: Adjust audio settings (if needed)



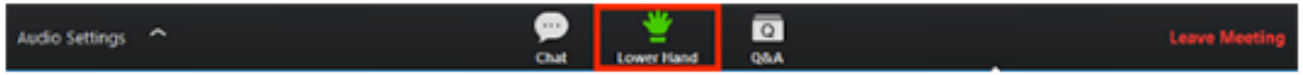
STEP 5: Raise hand to be recognized to speak.

- Once “Raise Hand” is clicked, the Board Chairperson will receive notice and may UNMUTE your microphone when ready and verbally recognize you to speak.

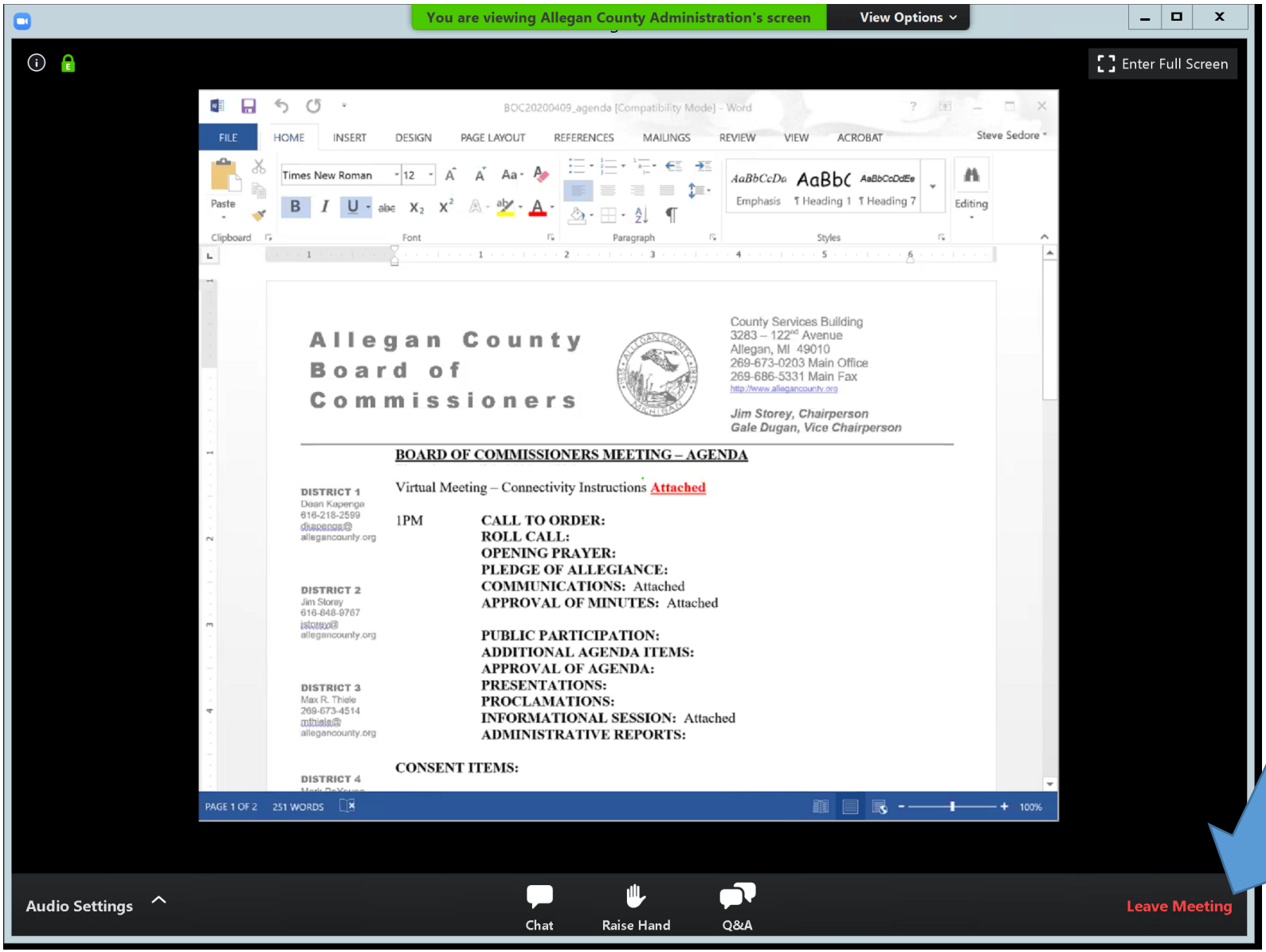
<u>On bottom of screen.</u>

1. Click **Raise Hand** in the Webinar Controls.

2. The host will be notified that you've raised your hand.
3. Click **Lower Hand** to lower it if needed.



STEP 6: To leave the meeting



Hopkins Township

Mark Evans
1451 124th Ave
Hopkins, MI 49328
269.793.3184
E-mail:
supervisor@hopkinstownship.org
Website:
Hopkinstownship.org

Township Board

Mark Evans, Supervisor
Sandy Morris, Treasurer
Eric Alberda, Clerk
Bob Modreske, Trustee
Chuck Wamhoff, Trustee

Planning Commission

Mark Forbes, Chair
Tadd Heft, Co- Chair
Jason Veenstra, Secretary
Chuck Wamhoff, HTB Rep.
Ken Rutgers, BOA Rep.
Frederick Morely
Stephen Wamhoff

Board of Appeals

Bruce Modreske, Chair
Kathy Laseur, Secretary
Bob Modreske, HTB Rep.
Ken Rutgers, PC Rep.
Craig Tucker

Date: May 11, 2021

To: Allegan County
Board of Commissioners
3283 122nd Ave
Allegan, MI 49010

From: Hopkins Township Supervisor

RE: Requesting participation & support of the Hopkins Township Tax Increment Finance and DDA Plan

Dear Commissioners,

The Hopkins Township Board has implemented a Tax Increment Finance and DDA Plan. (Copy of plan attached) Hopkins Township is requesting the Board of Commissioner support and participation in this plan. The Tax Increment Finance and DDA Plan is a small upfront investment to make that will produce long term growth to the taxpayers of Hopkins Township and Allegan County. Please add this request to your agenda.

Please let me know if you need addition information to process this request.

Sincerely
Mark Evans
Mark Evans,
Hopkins Township, Supervisor

HOPKINS TOWNSHIP
DOWNTOWN DEVELOPMENT AUTHORITY

THE TAX INCREMENT FINANCING AND DEVELOPMENT PLAN

Adopted by Hopkins Township DDA Board: _____

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EXHIBITS

A. Ordinance 2 of 2020, Adopting Hopkins DDA 2021 Plan, Map and description.

B. Notice of a Public Hearing on the Hopkins Township 2020 Tax Increment Financing and Development Plan for Improvement to DDA Area.

C. Estimated Revenues.

D. 2002 infrastructure cost analysis.

E. 2020 Sewer cost analysis.

F. Professional services USDA application cost proposal.

INTRODUCTION

On July 29, 2020 the Township Board for the Township of Hopkins (the "Township") adopted Ordinance No. 2-2020, which established the Hopkins Township Downtown Development Authority (DDA). Ordinance No. 2-2020 also designated the boundaries of the downtown district within which the DDA may legally work (the "Downtown District"). The Ordinance is attached as Exhibit A.

SECTION I. TAX INCREMENT FINANCING PLAN

A. AN EXPLANATION OF THE TAX INCREMENT PROCEDURE.

Tax increment financing is a method by which a municipality may finance development in areas in an effort to enhance and protect against stagnation or decline in property values. Tax increments, under Act 57 of the Public Acts of Michigan of 2018 ("Act 57"), are the property taxes that are generated by the increase in assessed value in a particular year over the assessed value in a beginning, or initial year. Act 57 allows a municipality to establish a Downtown Development Authority (the "Authority"), which may operate within its Downtown District, and to adopt a plan to use tax increment revenues for public improvements within an area designed in the Plan (the "Development Area"). The Plan which an Authority may adopt includes a tax increment financing plan (the "TIF Plan") and a development plan (the "Development Plan") (the TIF plan and the Development plan referred to jointly as the "TIF Development Plan"), and, after adoption of a TIF Development Plan by the municipality, the Authority may capture tax increment revenues attributable to any increases in the value of real and personal property within the Development Area. These increases in property value may be attributable to new construction, rehabilitation, remodeling, alteration, additions, inflation or any other factors the Assessor may deem relevant.

Once a TIF Development Plan has been adopted, the most recent taxable value, of all Personal and Real taxable property within the area in which certain development will take place is called the "initial taxable value." In each year after the TIF Development Plan is adopted, the total taxable value of real and personal property within the Development Area is referred to as the "current taxable value." The difference between the current and initial assessed values in each year is known as the "captured Taxable value." The property tax revenue attributable to the captured taxable value of properties within the Development Area is known as "tax increment revenue." Property which is exempt from taxation is given an initial assessed value of zero.

While the TIF Development Plan is in force, local taxing jurisdictions continue to receive the full amount of tax revenues attributable to the initial taxable value of all property within the Development Area. If properties within the Development Area increase in value, however, those tax revenues attributable to this increase are transferred to the Authority for expenditure according to the TIF Development Plan. Pursuant to the TIF Development

Plan, tax increment revenues are used to finance development which increases property values and stimulates investment in the Development Area.

This TIF Plan provides for the use of all of the captured tax increments. The DDA shall expend the tax increments received for the development program only in accordance with the TIF Plan. Tax increment revenues in excess of the estimated tax increment revenues or in excess of the actual cost of the Plan to be paid by the tax increment revenues may be retained by the DDA only for purposes that, by resolution of the DDA Board, are determined to further the development program in accordance with the Plan. The excess revenue not so used shall revert proportionately to the respective taxing jurisdictions. These revenues shall not be used to circumvent existing property tax laws or a local charter, which provides a maximum authorized rate for the levy of property taxes.

Unless the DDA with the approval of the Hopkins Township Board decides to levy a millage, taxpayers shall see no change in their tax bills, rates of taxation or methods of payment. Tax increment financing mandates the transfer of tax increment revenues by municipal and county treasurers to authorities created under the Act in order to effectuate the legislative government programs to eliminate property value deterioration and to promote economic growth. The way in which a downtown development authority makes use of the tools made available depends on the problems and priorities of each community. This Plan has been developed within the purposes of Act 57 and the problems and priorities as perceived by the Hopkins Township DDA and as submitted for the approval of the Hopkins Township Board of Trustees.

The Township may accept tax increment revenues from the DDA to reimburse it for expenses incurred in the preparation and adoption of this Plan. The purposes of the projects defined in the Development Plan include promoting safer vehicular movements; improving the pedestrian circulation system; augmenting the appearance of the Development Area; providing landscaping as a beautifying agent; and encouraging the economic revitalization of the Development Area. The Development Plan sets forth development projects to be financed by this Plan in whole or in part. Other financing mechanisms may include donations to the DDA, tax increments, monies borrowed, grants, or other funding sources as contained in Act 57.

B. MAXIMUM AMOUNT OF BONDED INDEBTEDNESS TO BE INCURRED.

MCL 125.4213 states that, "[t]he authority may borrow money and issue its negotiable revenue bonds under the revenue bond act of 1933, 1933 PA 94, MCL 141.101 to 141.140." The Township by majority vote of the members of its Township Board may pledge its full faith and credit to support the authority's revenue bonds. *Id*. The maximum amount of bonded indebtedness to be incurred under this TIF Plan shall only be with Township Board approval and not greater than 30 times the district annual revenue or as otherwise provided for by law. Bonds issued to finance the cost of the improvements contained in this TIF Plan and Development Plan may be issued in any form authorized under Act 57 or permitted by law.

C. DURATION OF THE PROGRAM.

This plan is in effect until dissolved by recommendation of the DDA Board and the approval of the Hopkins Township Board. While the Plan may be terminated, the plan shall not be terminated before the Authority has collected tax increment revenues in such sum as shall fully pay for the construction of the projects or has otherwise provided for the payment of the projects, and the Plan will not be terminated before the principal and interest on any bonds which are outstanding have been paid in full, or funds sufficient for such payment have been segregated.

D. ESTIMATED IMPACT OF THE TAX INCREMENT FINANCING PLAN UPON THE REVENUES OF HOPKINS TOWNSHIP AND ALLEGAN COUNTY

As of the adoption of the original plan, initial base value of the Development Area is $6,127,492. The taxable value of the Development Area in 2020 is $6,127,492, accounting for a captured value of $121,082. When this TIF Development Plan has terminated these taxing jurisdictions will receive property tax revenues arising from all taxable property located within the Development Area, including new development and appreciation in value stimulated by the development projects.

Without regard for special voted millage, each taxing jurisdiction levies the following millages on property within the Development Area: Hopkins Township, 5.7 mills, Allegan County, 7.193 mills, Wayland schools 26.4 mills, Allegan Intermediate School District 4.9405, State Ed Tax 6 Mills, and Hopkins District Library .60 mills.

E. USE OF TAX INCREMENT REVENUE

The tax increment revenue paid to the DDA by the municipal and county treasurers is to be disbursed by the DDA from time to time in such manner as the DDA may deem necessary and appropriate in order to carry out the purposes of the Development Plan, including but not limited to the following:

1. The principal, interest and reserve payments required for any bonded indebtedness to be incurred in its behalf for purposes provided in the Development Plan.

2. Cash payments for initiating and completing any improvements or activity called for in the Development Plan

3. Any annual operating deficits, that the DDA may incur from acquired and/or leased property in the Development Area.

4. Interest payments on any sums that the DDA should borrow before or during the construction of any improvement or activity to be accomplished by the Development Plan, after approval by Hopkins Township.

5. Payments required to establish and maintain a capital replacement reserve.

6. Payments required to establish and maintain a capital expenditure reserve.

7. Payments required to establish and maintain any required sinking fund.

8. Payments to pay the costs of any additional improvements to the development area that are determined necessary by the DDA and approved by Hopkins Township.

9. Any administrative expenditure required to meet the cost of operation of the DDA and to repay any cash advances provided by the Hopkins Township. This may include quarterly payments to the Township to support overhead expenses.

10. The DDA may modify the priority of projects and payments at any time if, within its discretion, such modification is necessary to facilitate the development plan then existing and is permitted under the term of any outstanding indebtedness.

11. See Exhibit C for the estimated impact of the capture of tax increment revenues.

SECTION II. DEVELOPMENT PLAN

This Development Plan includes projects to be carried out by the Authority. The objectives of the Development Plan are to promote safer vehicular movements; improve the pedestrian circulation system; augment the appearance of the Development Area; provide landscaping as a beautifying agent; and encourage the economic revitalization of the Development Area. Promote and provide sewer, water, storm drainage and road improvements. Each project helps to accomplish the objectives.

A. BOUNDARIES OF THE DEVELOPMENT AREA.

The boundaries of the Development Area are the same as those of the Downtown District. The boundaries are illustrated in Exhibit A. The Development Area is the area to which the Development Plan applies.

B. EXISTING OR NEW STREETS AND OTHER PUBLIC FACILITIES WITHIN THE DEVELOPMENT AREA, EXISTING AND PROPOSED LAND USES WITHIN THE DEVELOPMENT AREA.

Existing or new streets, public facilities and land uses within the Development Area, and proposed land uses are:

1. Streets. The Development Area, as originally established included the following public streets:
    - 12th Street from 128th Avenue to 135th Avenue
    - 13th Street from 128th Avenue to 135th Avenue

2. Public facilities. New public facilities within the Development Area include, but not limited to, parking lots, streets, sidewalks, a right of way for an alley, utility lines and easements, a cemetery, a library and the township hall and fire barn.

3. Current land uses. Present private land uses within the Development Area include agriculture, commercial, residential, land. Present public land uses in the Development Area include roads; approximate acreages of land uses are as follows:
    - Agricultural- 860 acres
    - Commercial- 160 acres
    - Industrial- 1 acre
    - Institutional- 0 acres
    - Residential- 93 acres
    - Rights-Of-Way- 71 acres

4. Proposed land uses. There will be no changes in public or private land use within the development area resulting directly from the Development Plan. However, it is the intent of this Development Plan to generate private sector interest in the Development Area, ultimately resulting in new private investment.

5. Boundaries of Development Area. The Development Area includes the portions of the Development Area approved in 2020.

    Property located in Hopkins Township, Allegan County, Michigan and described as follows:

    Legal description: See exhibit A

C. EXISTING IMPROVEMENTS TO THE DEVELOPMENT AREA TO BE DEMOLISHED, REPAIRED OR ALTERED, A DESCRIPTION OF ANY SUCH REPAIRS OF ALTERATIONS, AND AN ESTIMATE OF THE TIME NEEDED FOR COMPLETION.

None.

D. LOCATION, EXTENT, CHARACTER AND ESTIMATED COST OF THE PLANNED IMPROVEMENTS, INCLUDING REHABILITATION, AND AN ESTIMATE OF THE TIME REQUIRED FOR COMPLETION.

The planned improvements consist of those described in Section II.D. It is estimated that approximately $20,610,000 and 40 years would be required.

E. STATEMENT OF THE CONSTRUCTION OR STAGES OF CONSTRUCTION PLANNED AND ESTIMATED TIME REQUIRED FOR COMPLETION OF EACH STAGE:

Item No.	Extent and Character	Estimated Cost	Potential Completion
1	Hire Professional services to apply for grants, loans, bonds, and to setup a special assessment area.	$50,000	2021-2022
2	On 12th street properties provide sewer, water, storm drainage, Extension of natural gas and high-speed internet	$18,000,000	2021-2060
3	Construct and build 12th Street for 128th to 135th Ave to an all-season road.	$2,000,000	Ongoing
4	Convert overhead electrical to underground electrical	$300,000	Ongoing
5	Purchase, install and maintain decorative street lighting from on 12th Street from 128th to 135th	$100,000	Ongoing
6	Purchase land, install and maintain clock tower at community gateway.	$130,000	Ongoing
7	Install gateways signage at Township gateways and beautify gateways with landscaping and other plant materials	$10,000	Ongoing
8	Develop logo and marketing materials for Hopkins DDA	$20,000	Ongoing
	Total	$20,610,000	As Identified

Phase One: Hire Professional services to apply for grants, loans, bonds, to funds project. Work with the Hopkins Township Board to establish a special assessment district with in the DDA district to assess revenue to construct sewer plant and to purchase, install collection lines and lift stations.

Phase Two: Work with Allegan County Road Commission to Construct primary road on 12th Street from 135th Avenue to 129th Avenue.

Phase Three: Convert overhead electrical to underground. Purchase, install and maintain decorative street lighting from on 12th Street from 128th to 135th electrical. Purchase land, install and maintain

clock tower at community gateway. Install gateways signage at Township gateways and beautify gateways with landscaping and other plant materials. Develop logo and marketing materials for Hopkins DDA.

F. DESCRIPTION OF ANY PARTS OF THE DEVELOPMENT AREA TO BE LEFT AS OPEN SPACE AND THE USE CONTEMPLATED FOR THE SPACE.

None.

G. DESCRIPTION OF ANY PARTS OF THE DEVELOPMENT AREA THAT THE AUTHORITY DESIRES TO SELL, DONATE, EXCHANGE, OR LEASE TO OR FROM THE TOWNSHIP AND PROPOSED TERMS.

None.

H. DESIRED ZONING CHANGES AND CHANGES IN STREETS, STREET LEVELS, INTERSECTIONS AND UTILITIES

The DDA may work collaboratively with the Hopkins Township Planning Commission and Township Board to recommend revisions to the Hopkins Township Zoning Ordinance to establish design standards for the Development Area. The Township Board has the legislative authority to approve or deny amendments to the Township Zoning Ordinance.

I. ESTIMATED COST OF THE DEVELOPMENT AND A STATEMENT OF THE PROPOSED METHOD OF FINANCING AND THE AUTHORITY'S ABILITY TO ARRANGE THE FINANCING.

The total estimated cost of professional services to assist with applications for grants and other revenue sourcing is $50,000. Actual improvement costs are estimated to be an additional 20,560,000. Revenues to support all costs shall be derived from any of the following sources, or from a combination of these sources:

1. The issuance of one or more series of revenue bonds which may be supported by a limited tax pledge if authorized by resolution of the Hopkins Township Board of Trustees, or if authorized by the voters of the Township, the unlimited tax, full faith and credit of the Township;

2. Tax increment bonds of the DDA which are secured by tax increment revenue to be received from property within the Development Area or tax increment bonds of the Township which are secured by tax increment revenue and by a limited tax pledge of Hopkins Township if authorized by resolution of the Hopkins Township Board of Trustees, or if authorized by the voters of the Hopkins Township, the unlimited tax, full faith and credit of the Hopkins Township;

3. Municipal securities or obligations issued by Hopkins Township on behalf of the DDA;
4. Other municipal securities issued by the DDA;
5. Funds borrowed from the Hopkins Township at rates and terms to be agreed upon or as set forth elsewhere in the Development Plan and Tax Increment Financing Plan; and,
6. Cash.
7. The DDA may work with the Hopkins Township Board to establish a special assessment to generate revenue to pay for any legal needs for all or part of the DDA area.

Tax collections expected to be generated by the captured assessed value of property within the Development Area are expected to be adequate to provide for payment of principal and interest on bonds or funds borrowed from the Township.

The amounts of bonded indebtedness or indebtedness to be incurred by the DDA and/or the Township for all bond issues or loans including payments of capitalized interest, principal and required reserve shall be determined by the Township, upon the recommendations of the DDA.

J. PERSONS TO WHOM ALL OR A PORTION OF THE DEVELOPMENT IS TO BE LEASED, SOLD, OR CONVEYED, AND FOR WHOSE BENEFIT THE PROJECT IS BEING UNDERTAKEN.

The projects are entirely public projects and will be owned by the Township, unless otherwise indicated through an inter-local agreement, or as otherwise authorized by law. The development projects are being undertaken for the benefit of the citizens of Hopkins Township to eliminate and prevent blight and to encourage economic development and revitalization.

K. PROCEDURES FOR BIDDING FOR THE LEASING, PURCHASING OR CONVEYING OF ALL OR A PORTION OF THE DEVELOPMENT, ABSENT A PRIOR AGREEMENT TO DO SO.

Not applicable.

L. ESTIMATED NUMBER OF PERSONS RESIDING IN THE DEVELOPMENT AREA AND THE NUMBER OF FAMILIES AND INDIVIDUALS TO BE DISPLACED.

At the present time it is estimated that less than 100 persons reside in the Development Area. No families or individuals are to be displaced by the project. No occupied residences will be acquired or demolished by the Authority.

M. PLAN OF PRIORITY FOR RELOCATION OF DISPLACED PERSONS IN ANY NEW HOUSING WITHIN THE DEVELOPMENT AREA.

None. No person will be displaced within the Development Area.

N. PROVISIONS FOR THE COSTS OF RELOCATING DISPLACED PERSONS.

No person will be displaced by the development. A plan pursuant to Act No. 227 of 1972 is not applicable.

O. PLAN IS IN COMPLIANCE WITH PUBLIC ACTS OF 57 of 2018.

This Development Plan satisfies the provisions of Public Act 57 of 2018.

P. TRANSMITTING AND EXPENDING TAX INCREMENTS REVENUES; REVERSION OF SURPLUS FUNDS; ABOLISHMENT OF TAX INCREMENT FINANCING PLAN; CONDITIONS.

The Township and County Treasurers shall transmit to the authority tax increment revenues. The Authority shall expend the tax increment revenues received for the development program only pursuant to the tax increment financing plan. Surplus funds shall revert proportionately to the respective taxing bodies. These revenues shall not be used to circumvent existing property tax limitations. The governing body of the municipality may abolish the tax increment financing plan when it finds that the purposes for which it was established are accomplished. The tax increment financing plan shall not be abolished, allowed to expire, or otherwise terminate until the principal of, and interest on, bonds issued pursuant to section 216 of PA 57 of 2018 have been paid or funds sufficient to make the payment have been segregated.

Q. ANY OTHER INFORMATION THE DDA BOARD DEEMS RELEVANT.

HOPKINS TOWNSHIP

ALLEGAN COUNTY, MICHIGAN

ORDINANCE NO. 2-2020

DOWNTOWN DEVELOPMENT AUTHORITY ORDINANCE

ADOPTED: July 29, **2020**

EFFECTIVE: Upon Publication after adoption, **2020**

An ordinance to establish a Downtown Development Authority in Hopkins Township.

THE TOWNSHIP OF HOPKINS
ALLEGAN COUNTY, MICHIGAN
ORDAINS:

SECTION 1
TITLE

This Ordinance shall be known and cited as the Hopkins Township Downtown Development Ordinance.

SECTION 2
DEFINITIONS

The terms used in this Ordinance shall have the same meaning as given to them in Act 57 or hereinafter in this section provided, unless the context clearly indicates to the contrary. As used in this Ordinance:

Act 57 means Act No. 57 of the Public Acts of Michigan of 2018, as now in effect or hereinafter amended.

Authority means the Hopkins Township Downtown Development Authority created by this Ordinance.

Board or Board of Directors means the Board of Directors of the Authority, the governing body of the Authority.

Chief Executive Officer means the Supervisor of the Township.

Downtown District means the Downtown District designated by this Ordinance as now existing or hereafter amended.

Township means the Hopkins Township, Allegan County, Michigan.

Township Board means the Township Board of Hopkins Township.

SECTION 3
DETERMINATION OF NECESSITY

The Township Board hereby determines that it is necessary for the best interests of the public and the Township to halt property value deterioration and increase property tax valuation where possible in the downtown business district of the Township, to eliminate the causes of deterioration and to promote economic growth by establishing a downtown development authority pursuant to Act 57.

SECTION 4
CREATION OF THE AUTHORITY

There is hereby created pursuant to Act 57 a Downtown Development Authority for the Township. The Authority shall be a public body corporate and shall be known as and exercise its powers under the title of "Hopkins Township Downtown Development Authority". The Authority may adopt a seal, may sue and be sued in any court of this State and shall possess all of the powers necessary to carry out the purpose of its incorporation as provided by this Ordinance and Act 57. The enumeration of a power in this Ordinance or in Act 57 shall not be construed as a limitation upon the general powers of the Authority.

SECTION 5
DESCRIPTION OF THE DOWNTOWN DISTRICT

The Downtown District in which the Authority shall exercise its powers as provided by Act 57 shall consist of the described territory in the Township, subject to this Ordinance and Act 57, as set forth in Exhibit A, attached hereto and made a part hereof.

SECTION 6
BOARD OF DIRECTORS

The Authority shall be under the supervision and control of the Board of Directors consisting of the Chief Executive Officer of the Township and not less than eight or more than twelve members as determined by the Township Board. The members shall be appointed by the Chief Executive Officer of the Township, subject to the approval by the Township Board. If the Township has a population of less than 5000, it may cause it's Planning Commission to serve as downtown development authority board. If the Township Board does not select it's Planning Commission, then not less than a majority of the members shall be persons having interest in property located in the Downtown District. Not less than one of the members shall be a resident of the Downtown District, if the Downtown District has 100 or more persons residing within it. Of the members first appointed, an equal number, as near as is practical, shall be appointed for one year, two

years, three years and four years. Members shall hold office until the members' successor is appointed. Thereafter, each member shall serve for a term of four years. An appointment to fill a vacancy shall be made by the Chief Executive Officer of the Township for the unexpired term only. Members of the Board shall serve without compensation but shall be reimbursed for actual and necessary expenses.

SECTION 7
POWERS OF THE AUTHORITY

The Authority shall have all powers enumerated or implied by law in Act 57.

SECTION 8
FISCAL YEAR; ADOPTION OF BUDGET

A. The fiscal year of the Authority shall begin on April 1 of each year and end on March 31 of the same year, or such other fiscal year as may hereafter be adopted by the Township.
B. The Board shall annually prepare a budget and shall submit it to the Township Board on the same date that the proposed budget for the Township is required by law to be submitted to the Township Board. The Board shall not finally adopt a budget for any fiscal year until the budget has been approved by the Township Board. The Board may, however, temporarily adopt a budget in connection with the operation of any improvements which have been financed by revenue bonds were required to do so by the Ordinance authorizing the revenue bonds.
C. The Authority shall be audited by the same independent auditors auditing the Township. Copies of the audit report shall be filed with the Township Board.

SECTION 9
DISSOLUTION

Upon completion of the purpose, the Authority may be dissolved by an ordinance duly adopted by the Township Board. The property and assets of the Authority, after dissolution and satisfaction of its obligations, shall revert to the Township.

SECTION 10

SECTION HEADINGS; SEVERABILITY; REPEALER

Section headings in this Ordinance are furnished for convenience only and shall not be considered to be part of this Ordinance. All other Ordinances, resolutions and orders or parts thereof in conflict with the provisions of this Ordinance are, to the extent of such conflict, hereby repealed, and each section of the Ordinance and each subdivision of any section thereof is hereby declared to be independent, and the finding or holding of any section of subdivision thereof to be invalid or void shall not be deemed or held to affect the validity of any other section or subdivision.

SECTION 11
PUBLICATION, RECORDING AND EFFECTIVE DATE

This Ordinance is hereby determined by the Township Board to be immediately necessary for the interests of the Township and shall be in full force and effect upon publication after adoption.

CERTIFICATE OF AUTHENTICITY

I, Eric Alberda, the duly elected Clerk of Hopkins Township, hereby certify that the foregoing Ordinance Amendment was adopted by the Township Board of said Township at the Special meeting of said Board on Wednesday, July 29, 2020 at which meeting a quorum was present. The foregoing Ordinance Amendment was offered by Board Member Chuck Wamhoff

and supported by Board Member Eric Alberda

Upon roll call vote, the following voted aye:

Modreske (Morris) (Alberda) (Wamhoff) (Evans)

And the following voted nay:

Modreske Morris Alberda Wamhoff Evans

[signature] 7-29-2020

Eric Alberda, Hopkins Township Clerk — Date

TOWNSHIP OF HOPKINS
ALLEGAN COUNTY, MICHIGAN
AN ORDINANCE CREATING THE HOPKINS TOWNSHIP DOWNTOWN DEVELOPMENT AUTHORITY AND DESIGNATING BOUNDARIES OF THE DOWNTOWN DISTRICT

The shaded portion of the map below depicts the proposed boundaries of the Downtown District. The proposed boundaries of the Downtown District include the following parcel numbers located within the Township:

03-10-001-018-00	03-10-012-005-00	03-10-013-002-50	03-10-012-022-00
03-10-001-018-30	03-10-012-008-00	03-10-013-008-00	03-10-012-024-10
03-10-001-018-50	03-10-001-018-20	03-10-013-009-20	03-10-013-002-00
03-10-001-020-00	03-10-001-018-41	03-10-024-001-00	03-10-013-007-00
03-10-001-022-00	03-10-001-019-00	03-10-024-003-10	03-10-013-009-10
03-10-012-001-10	03-10-001-021-30	03-10-012-011-00	03-10-013-010-00
03-10-012-003-00	03-10-012-001-00	03-10-012-019-00	03-10-024-003-00
03-10-012-003-40	03-10-300-005-10	03-10-012-021-00	03-10-024-004-20
03-10-012-004-10	03-10-012-002-10	03-10-012-024-00	03-10-024-005-00
03-10-012-007-00	03-10-012-003-20	03-10-013-001-10	03-10-024-008-00
03-10-001-018-10	03-10-012-004-00	03-10-013-006-00	03-10-300-001-00
03-10-001-018-40	03-10-012-006-00	03-10-013-009-00	03-10-300-004-00
03-10-001-018-60	03-10-012-009-00	03-10-013-009-30	03-10-300-006-00
03-10-001-021-00	03-10-012-010-00	03-10-024-002-00	03-10-024-006-00
03-10-001-901-01	03-10-012-011-20	03-10-024-004-10	03-10-025-001-00
03-10-012-002-00	03-10-012-020-00	03-10-012-011-10	03-10-300-002-00
03-10-012-003-10	03-10-012-023-00	03-10-012-019-10	03-10-300-005-00
03-10-012-003-50	03-10-013-001-00	03-10-024-007-00	03-10-025-001-10
03-10-300-003-00			

The proposed Downtown District is legally described as:

LAND BEING PART OF TOWN 3 NORTH, RANGE 12 WEST, HOPKINS TOWNSHIP, ALLEGAN COUNTY, MICHIGAN MORE PARTICULARLY DESCRIBED AS:

ALL THAT PART OF THE SOUTHEAST 1/4 OF SECTION 1 LYING WEST OF THE WEST RIGHT OF WAY LINE OF HIGHWAY US-131

AND ALL THAT PART OF THE EAST 1/2 OF SECTION 12 LYING WEST OF THE WEST RIGHT OF WAY LINE OF HIGHWAY US-131

AND ALL THAT PART OF THE EAST 1/2 OF SECTION 13 LYING WEST OF THE WEST RIGHT OF WAY OF HIGHWAY US-131

AND THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 13, EXCEPT THE EAST 264 FEET OF THE SOUTH 660 FEET

AND ALL THAT PART OF THE EAST 1/2 OF SECTION 24 LYING WEST OF THE WEST OF THE WEST RIGHT OF WAY LINE OF HIGHWAY US-131, EXCEPT PARCEL NUMBER 0310-024-004-00 WHICH IS THE LAND HELD IN TRUST FOR THE MATCH-E-BE-NASH-SHE-WISH BAND OF POTTAWATOMI INDIANS AND DESCRIBED AS FOLLOWS: BEGINNING AT THE EAST 1/4 CORNER POST THENCE WEST 1653 FEET ALONG THE EAST & WEST1/4 LINE; THENCE

SOUTH 319 FEET; THENCE WEST 344 FEET; THENCE NORTH 319 FEET TO THE EAST & WEST 1/4 LINE; THENCE WEST TO THE CENTER OF SECTION 24; THENCE SOUTH ALONG THE NORTH & SOUTH 1/4 LINE TO THE SOUTH SECTION LINE; THENCE EAST ALONG SAID SOUTH SECTION LINE TO A POINT 1320 FEET WEST OF THE EAST SECTION LINE; THENCE NORTH 660 FEET; THENCE EAST 1320 FEET TO THE EAST SECTION LINE; THENCE NORTH ALONG SAID SECTION LINE 530.9 FEET THENCE WEST 200 FEET; THENCE NORTH 383.6 FEET TO A POINT ON THE SOUTH EDGE OF PIERCE DRAIN; THENCE SOUTH 75 DEGREES EAST 207.06 FEET ALONG SAID SOUTH EDGE OF SAID DRAIN TO THE EAST SECTION LINE; THENCE NORTH ALONG SAID SECTION LINE TO THE POINT OF BEGINNING; EXCEPT US HWY 131

AND THE NORTH 1/2 OF THE NORTHEAST 1/4 OF SECTION 25 LYING WEST OF THE WEST RIGHT OF WAY LINE OF HIGHWAY US-131

AND THE EAST 33 FEET OF THE WEST 1/2 OF SECTIONS 12, 13 AND 24, AND ALSO THE EAST 33 FEET OF THE SOUTHWEST 1/4 OF SECTION 1, AND ALSO THE EAST 33 FEET OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 25, BEING THE WEST HALF OF 13TH STREET FROM THE CENTER OF SECTION 1 TO THE SOUTH LINE OF THE NORTH 1/2 OF THE NORTH 1/2 OF SECTION 25.

Parcel No. 0310-024-004-00 is description of the land in trust that is excepted out of the proposed Downtown District boundaries and is legally described as:

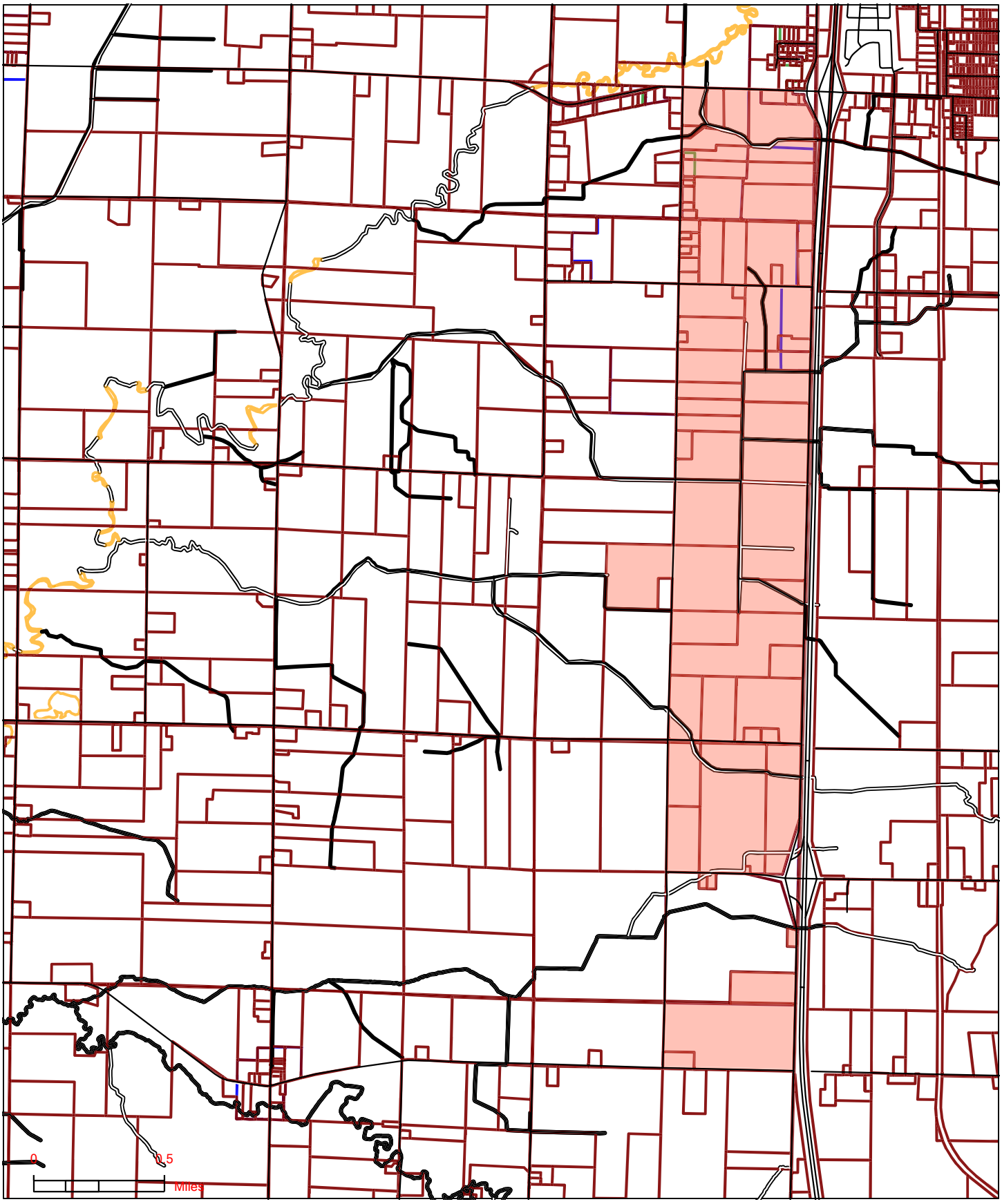
COM AT E 1/4 COR PST TH W 1653' ALG E & W 1/4 LIN TH S 319' TH W 344' TH N 319' TO E & W 1/4 LIN TH W TO CTR OF SEC TH S ALG N & S 1/4 LIN TO S SEC LIN TH E ALG SD S SEC LIN TO A PT 1320' W OF E SEC LIN TH N 660' TH E 1320' TO E SEC LIN TH N ALG SD SEC LIN 530.9' TH W 200' TH N 383.6' TO A PT ON S EDGE OF PIERCE DRAIN TH S 75 DEG E 207.06' ALG SD S EDGE OF SD DRAIN TO E SEC LIN TH N ALG SD SEC LIN TO POB EX US HWY 131 SEC 24 T3N R12W (2001)

Below is the description for the parcel that is on the eastside of 13th street. This is one parcel that has a description on both sides of 13th street. For taxing reasons, the whole parcel will be in the DDA district:

Parcel No. 0310-013-002-00:

SW 1/4 NE 1/4 ALSO SE 1/4 NW 1/4 SEC 13 EX THE E 264' OF S 660' SE 1/4 NW 1/4 SEC 13 T3N R12W (86)

HOPKINS TWP 2020 MAP



TELEPHONIC SPECIAL BOARD MEETING NOTICE
HOPKINS TOWNSHIP BOARD OF TRUSTEES
ALLEGAN COUNTY, MICHIGAN

Wednesday, July 29, 2020
7:30 p.m.

To: The residents and property owners of the Township of Hopkins, Allegan County, Michigan and any other interested persons.

PLEASE TAKE NOTICE that the Hopkins Township Board of Trustees will hold a remote special meeting on Wednesday, July 29, 2020 at 7:30 p.m. via electronic teleconference due to concerns of COVID-19 and in compliance with the Governor's Executive Orders. The public may participate in this special board meeting by calling **1-978-990-5000** and entering ID No. **344706#.** You can also view the meeting at the following link: **https://join.freeconferencecall.com/hopkinstownshipconference**

The purpose(s) of the Special Board Meeting is to consider the following agenda item:

1. **The Proposed Hopkins Township Downtown Development Ordinance**

Members of the public will only be able to speak during the public comment portion of this Special Board Meeting and such comments will be limited to three minutes per person. To provide for orderly public participation, a person wishing to speak must state their name and request to be recognized by the Township Supervisor. The Supervisor will recognize all persons wishing to speak during the public comment. The Township recommends that all interested parties call-in to the meeting room by 7:20 p.m. so the Township may ensure all interested parties who want to attend are in the remote meeting room before the special meeting begins. The special board meeting will not start until 7:30 p.m.

PLEASE TAKE FURTHER NOTICE a copy of the meeting material may be found on the link on the Township's homepage at http://www.hopkinstownship.org/. Anyone interested in reviewing the Ordinance or documents regarding Hopkins Township DDA prior to the Special Board Meeting may request to examine a copy of these documents by contacting Eric Alberda, Township Clerk, by telephone at 269-806-7547, by email to clerk@hopkinstownship.org, or by mail at PO Box 217, Hopkins, MI 49328.

PLEASE TAKE FURTHER NOTICE THAT if members of the public have certain questions or wish to provide input on any business that will be addressed at the Special Board Meeting, then such persons may contact the Township Board Member through Eric Alberda, Township Clerk, by email to supervisor@hopkinstownship.org or clerk@hopkinstownship.org, by telephone at 269-806-7547, or by mail at PO Box 217, Hopkins, MI 49328.

PLEASE TAKE NOTICE that the Township Board may take action on the proposed Hopkins Township Downtown Development Ordinance. All persons are invited to participate in discussion on the above.

PLEASE TAKE FURTHER NOTICE that Hopkins Township will provide necessary, reasonable auxiliary aids and services at the hearing to individuals with disabilities upon 72-hour notice to the Hopkins Township Clerk of the need for the same. Individuals with disabilities requiring auxiliary aids or services should contact the Township Clerk by writing or by calling the Clerk at 269-806-7547 or clerk@hopkinstownship.org.

Hopkins Township Proposed DDA Revenue at 2% CPI only

Could be more deppending on how many parcels come uncaped

2019 TV	**TV 2020**	**TV 2021**	**TV 2022**	**TV 2023**	**TV 2024**	**TV 2025**
		2%	2%	2%	2%	2%
$ 5,983,198.00	$ 6,054,115.00	$ 6,175,197.00	$ 6,298,701.00	$ 6,424,675.00	$ 6,553,168.00	$ 6,684,231.00
		$ 6,054,115.00	$ 6,054,115.00	$ 6,054,115.00	$ 6,054,115.00	6,054,115.00
	TV Captured	$ 121,082.00	$ 244,586.00	$ 370,560.00	$ 499,053.00	$ 630,116.00
		$ 121.08	$ 244.59	$ 370.560	$ 499.053	$ 630.116
	42.3303 Mills	42.3303	$ 42.3303	$ 42.3303	$ 42.3303	42.3303
	DDATotal	$ 5,125	$ 10,353	$ 15,686	$ 21,125	$ 26,673

WATER AND WASTEWATER FEASIBILITY STUDY

WAYLAND TOWNSHIP
AND
HOPKINS TOWNSHIP
ALLEGAN COUNTY, MICHIGAN

U.S. 131 Corridor, East Lake, Herlan Lake, Ingerson Lake, Geenva Lake, and Selkirk Lake Wastewater Collection and Treatment
and
Water System
Feasibility Study

September 2002
No. 14051 and 14052

FLEIS & VANDENBRINK
ENGINEERING, INC.
4771 - 50th Street SE, Grand Rapids, MI 49512
Ph. 616/541-6000 Fax 616/541-6010

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I. INTRODUCTION AND PURPOSE

Representatives of Wayland Township and Hopkins Township have recognized the desire for public sewer and water supply systems to serve portions of the Township. Development of public sewer and water supply systems is critical to the long-term growth needs of the Township and provides viable means for potential economic development of future business and industry. In addition, a public sewer system protects the lake environment while a public water system provides consistent water and also improves fire protection.

The purpose of this Water and Wastewater Feasibility Study is to identify sewer and water system master plans and service area capable of meeting the requirements for water supply, storage, and distribution and for wastewater collection and treatment. The study also estimates costs for the recommended improvements and examines potential funding alternatives. In conclusion, the study identifies a sewer and water system capital improvement plan that is capable of servicing Township residences, businesses, and potential development needs as they relate to present and future requirements within the identified service area. Areas of the Townships included as part of the study include (see Figure 1):

- 12th Street and US-131 Corridor in Hopkins Township, from 136th Avenue south to 124th Avenue. The width of the service area varies as indicated in Figure 1.
- East Lake area in Hopkins Township.
- Herlan Lake and Ingerson Lake areas in Hopkins Township.
- Geneva Lake and Selkirk Lake areas in Wayland Township.
- 129th Avenue from 131 east to 6th Street (Bradley Area) and 124th Avenue from 7th Street east to Patterson Road in Wayland Township (the area from 7th Street east to Patterson would likely only be served if the chosen wastewater treatment option is the existing Gun Lake system.

The US-131 Corridor is located in Sections 1, 12, 13 and 24 of Hopkins Township, just south of the Village of Wayland in Allegan County, Michigan. East Lake is located in Section 18 of Hopkins Township, north of the Village of Hopkins while Herlan Lake and Ingerson Lake are located in Section 32 of Hopkins Township, south of the Village of Hopkins. Geneva Lake and Selkirk Lake are located in Sections 29 and 32 of Wayland Township, south and east of the Village of Bradley. The Village of Bradley is the proposed location of a casino. The casino developers intend to provide an independent water and sewer system, but have indicated a willingness to work with the Township in establishing a Township system. The study area includes the areas described above with existing or potential future development as shown in Figure 1.

This report includes the review of alternatives to the existing on-lot method of sewage treatment and a review of alternatives to individual private water wells for domestic water. The alternatives are evaluated based on practicality and economic feasibility with related recommendations.

II. EXISTING CONDITIONS

Existing conditions are based on previous studies completed and reviewed as part of this study, information from public officials including Township representatives, Allegan County Health Department, and others.

Information requested from Allegan County Health Department and Allegan County GIS department indicate areas along the US 131 corridor are inadequate for on-site sewage disposal. The County Health Department indicates a moratorium has been issued for new systems within this portion of the study area.

Selkirk and Geneva Lake completed a study within the last couple of years. Our review of this study finds no significant changes from the assumptions made then. With respect to the lake's areas of the study area, the following general assumptions typically apply:

1. The systems are undersized. When some of the houses were built, the septic system design was based on the house being used as a cottage rather than a full time residence, which most of the homes have become. Under-sizing is also due to small lot sizes. Most wells are on the roadside of the house, forcing drain fields to be located in a floodplain area between the house and the lake. For this same reason even a mound septic system could not be adequately sized for many homes.

2. High water table and poor soil conditions. The ground water table is typically high around lakes making the separation between the drain field and water table minimal. A review of soils based on the County soil survey indicates portions of the study area have heavy soil conditions that reduces the ability of the effluent to discharge into the ground. Soil conditions are illustrated in Figure 2.

3. Tank Condition. The age and type of construction of the tanks decrease their ability to operate properly.

A majority of the existing septic tank systems were constructed prior to the establishment of Health Department permit requirements and regulations concerning size, isolation distances, ground water separation distances, and soil percolation requirements for on-site systems. As a result, a large number of the existing systems do not comply with current standards.

The Herlan and East Lake areas as well as the US-131 and 12th Street corridor have similar soil and ground water characteristics and a lower developed density.

Key items included in current Allegan County standards regarding the use of septic tank and drain fields are:

1. Drain fields or dry wells must be located a minimum of two feet above the high ground water level. This standard is considered lenient compared to most Michigan Counties. The State of Michigan recommends a minimum of four feet and approximately two-thirds of Michigan Counties require three feet or more. This is significant around Crockery Lake since many of the wells are shallow.

2. Drain fields or dry wells must be a minimum of 50 feet from lakes or streams and 50 feet from domestic water wells.

3. Minimum septic tank liquid capacity of 1,000 gallons, with greater capacities required for homes with 3 or more bedrooms.

4. Minimum absorption field trench area of 400 square feet with greater areas required for soils with low percolation rates or larger homes.

The County now requires an investigation of existing wastewater systems during the sale/purchase of any property. Due to small lot sizes, shallow ground water depths and poor soil drainage characteristics, many of the existing septic tank systems cannot be upgraded to meet current standards. Those that can be upgraded to meet standards do not have space to upgrade, they need mound systems with pumps or deep excavations.

There are a variety of septic tanks currently being used within the study area at this time. The newer systems have precast concrete tanks, but many of the units are older concrete block and brick tanks.

Fleis & VandenBrink Engineering, Inc. has been in contact with the Allegan County Health Department and requested copies of septic and water well report records for the initial and proposed service area.

CONCLUSIONS

Due to the moratorium for on-site sewage disposal along the US 131 corridor, alternate methods of treatment must be provided for the anticipated development in this area. In addition, other areas of the service area have been identified as poor for on-site sewage disposal, as shown from the soils map (Figure 2), the floodplain map (Figure 5) and the hydric soils/wetlands map (Figure 6).

In addition, generally, the data indicates that the area around the lakes and the Bradley area are not suitable long-term for on-lot septic systems. Continuing this type of treatment will ultimately adversely affect the water quality of the lakes in the Townships.

III. WASTEWATER FLOWS AND LOADINGS

The initial service area considered for this study includes the area along the US-131 Corridor from 136th Avenue south to 124th Avenue and 129th from US-131 east to 6th Street (including the Bradley area), as shown on Figure 1. Figure 1 also shows the future service area consisting of the area along the US-131 Corridor from 136th Avenue south to 124th Avenue and the lake front properties immediately surrounding East Lake, Herlan Lake, Ingerson Lake, Geneva Lake and Selkirk Lake, which is the area immediately adjacent to the initial service area and includes areas most likely to see future development. The number of homes and lots to be served is based on site visits and on the Parcels and Parcel Numbers map provided by Allegan County GIS Department (See Figure 3).

The wastewater flows are estimated based on the number of single-family homes currently occupied around Geneva Lake and Selkirk Lake, assuming 3.3 persons per home to estimate the Population Equivalents (P.E.). The 20-year projected flow rates include a 5% population growth per year for the first five years, then a 4% population growth per year for the last fifteen years of the 20-year study period. The projected flow rates also include the addition of service area to include East Lake, Herlan Lake and Ingerson Lake, industrial/commercial development of 350 acres in the US-131 corridor with an average of 1,500 gallons per acre per day (or 525,000 gallons per day). The 5-year (or 2007) projected flow rates include 5% population growth per year and assuming 20% of the industrial/commercial development occurs in 5 years or 105,000 gallons per day. The proposed casino is comprised of the casino, casino restaurants and resort/hotel.

Table 1 summarizes the service area assumptions including the number of homes, flow rates per home (assuming 100 gallons per person per day) and total flow rates for the existing, 5-year and 20-year design periods with and without the casino wastewater flows.

TABLE 1
SERVICE AREA POPULATION AND FLOWS

	Number of Residential Equivalents (R.E.)	Population Equivalent (P.E.) (3.3*R.E.)	Flow rate per Population Equivalent	Total Flow Rate
Current Average Daily Flows	120	396	100 gpd[1]	39,600 gpd[1]
2007 Average Daily Flows[3]	471	1,554	100 gpd	155,400 gpd
2007 Average Daily Flow with casino[5]	835	2,756	100 gpd	275,600 gpd
2022 Average Daily Flows[6]	1,954	6,448	100 gpd	644,800 gpd
2022 Average Daily Flow with casino	2,318	7,650	100 gpd	765,000 gpd

1. gpd - gallons per day
2. 2007 Average Daily Flow includes 5% population growth per year and 20% of the projected 2022 industrial and commercial flows of 525,000 gallons per day (0.2 x 525,000 god = 105,000 gpd).
3. Peak hour flow is based on a peaking factor of 2.9 times the average daily flow.
4. It is assumed that the casino will be fully developed by 2007. The casino, restaurants and hotel/resort is estimated to add 364 Residential Equivalents (REUs) or 120,000 gpd.
5. 2022 Average Daily Flow includes 4% population growth per year from 2007 through 2022, this includes adding service to East Lake, Herlan Lake and Ingerson Lake areas, 350 acres along the 131 corridor is developed into industrial/commercial use (assuming 1,500 gallons per acre per day), and the fully developed casino and spin-off commercial development of the casino, and spin-off commercial development as a result of the casino.

Table 2 presents the contribution of estimated wastewater flows from the sectors identified. Domestic wastewater flow consists of residential flow, the casino includes the casino development of restaurants, casino and hotel/resort, and the industrial/commercial consists of industrial development, restaurants, hotels and stores.

TABLE 2
CONTRIBUTION OF WASTEWATER FLOWS (AVERAGE)

	2007	2022
Domestic (i.e. residential)	50,600 gpd	120,000 gpd
Casino	120,000 gpd	120,000 gpd
Industrial/Commercial	105,000 gpd	525,000 gpd
TOTAL	**275,600 gpd**	**765,000 gpd**

Besides flow, the wastewater strength/characteristic and level of treatment are other variables that require assumptions to calculate feasibility of wastewater treatment. The following is a discussion of some of the parameters of concern for the level of treatment required.

BOD_5 represents the 5-day biochemical oxygen demand, which is a measure of the organic strength of the wastewater. BOD_5 represents the oxygen that would be used by microorganisms in the oxidation of the organic matter. BOD_5 is one parameter used in the design and sizing of wastewater systems (e.g., facultative lagoons or aerated basins). Surface water discharge treatment facilities monitor BOD_5 in the treated effluent because it represents a source of oxygen depletion in surface waters.

The nutrients are also a concern, in particular nitrogen and phosphorus. Nutrient control within the treatment system is critical to the success of the system being able to consistently meet discharge permit limits. Excessive nitrogen and phosphorus can cause excessive weed and algae growth in the receiving waters. Nitrogen can also degrade groundwater if inadequately treated wastewater is allowed to build up nitrates in the groundwater discharges.

Suspended solids provide an indication of the strength of the influent raw wastewater to be treated and the solids generation (during the settling/clarification process) anticipated. Suspended solids can lead to the development of sludge deposits and anaerobic conditions when untreated wastewater is discharged in the aquatic environments

In the following Tables 3a, 3b and 3c, BOD_5, Suspended Solids, Nitrogen and Phosphorus loadings are broken down by each sector; domestic, industrial/commercial and casino. The loadings for domestic are calculated by taking the population equivalent times the application

rates. The loadings for both the casino and the industrial/commercial sectors is determined by multiplying the flow by the application rate.

Wastewater Loadings are presented in Table 3a through 3c and 4:

TABLE 3a
WASTEWATER LOADING AND FLOWS FOR DOMESTIC

	Application Rates	Initial Service Area	2007	2022
Population Equivalents (P.E.)		396	506	1,200
Flow (gallons per day)	100 gpd/P.E.	39,600	50,600	120,000
BOD_5 (pounds per day)	0.22 [1] lb/day/P.E.	87	111	264
Suspended Solids (pounds per day)	0.25 [1] lb/day/P.E.	99	127	300
Nitrogen (pounds per day)	0.033 [2] lb/day/P.E.	13	17	40
Phosphorus (pounds per day)	0.004 [2] lb/day/P.E.	1.6	2	5

1. BOD_5 and Suspended solids Application rates came from GLUMRB (Great Lakes Upper Mississippi River Board) Recommended Standards for Wastewater Facilities.
2. Wastewater Engineering Treatment, Disposal, Reuse by Metcalf and Eddy was used to determine application rates for industrial/commercial. (assumed a medium untreated domestic wastewater for loadings determination).

TABLE 3b
WASTEWATER LOADING AND FLOW FOR INDUSTRIAL/COMMERICAL

	Application Rates[1]	Initial Service Area	2007	2022
Flow (gallons per day)		0	105,000	525,000
BOD_5 (pounds per day)	400 mg/l	0	350	1751
Suspended Solids (pounds per day)	350 mg/l	0	306	1533
Nitrogen (pounds per day)	85 mg/l	0	74	372
Phosphorus (pounds per day)	15 mg/l	0	13	66

1. Wastewater Engineering Treatment, Disposal, Reuse by Metcalf and Eddy was used to determine application rates for industrial/commercial. (assumed a strong untreated domestic for loading determination).

TABLE 3c
WASTEWATER LOADING AND FLOW FOR CASINO

	Application Rates[1]	**Existing**	**2007**	**2022**
Flow (gallons per day)			120,000	120,000
BOD_5 (pounds per day)	310 mg/l	0	310	310
Suspended Solids (pounds per day)	285 mg/l	0	285	285
Nitrogen (pounds per day)	60 mg/l	0	60	60
Phosphorus (pounds per day)	12 mg/l	0	12	12

1. Wastewater Engineering Treatment, Disposal, Reuse by Metcalf and Eddy was used to determine application rates for Casino. (assumed an average between medium and strong untreated domestic wastewater to estimate loadings from the fully developed casino).

TABLE 4
WASTEWATER LOADING AND FLOW (TOTAL)

	Flow (gallons per day)	BOD_5 (pounds per day)	Suspended Solids (pounds per day)	Nitrogen (pounds per day)	Phosphorus (pounds per day)
2007 Domestic	50,600	111	127	17	2
2007 Industrial/Commercial	105,000	350	306	74	13
2007 Casino	120,000	310	285	60	12
2007 Total	**275,600**	**771**	**718**	**151**	**27**
2022 Domestic	120,000	264	300	40	5
2022 Industrial/Commercial	525,000	1751	1533	372	66
2022 Casino	120,000	310	285	60	12
2022 Total	**765,000**	**2,325**	**2,118**	**472**	**83**

IV. WASTEWATER COLLECTION ALTERNATIVES

This feasibility study will review alternatives for Wastewater Collection that include both gravity and pressure systems. In general, two (2) modifications of each of these two types of wastewater collection systems were evaluated for this project and are listed below:

Gravity Systems:	CONVENTIONAL GRAVITY SMALL DIAMETER GRAVITY
Pressure Systems:	GRINDER PUMP SYSTEM SEPTIC TANK EFFLUENT PUMP (STEP)

Gravity Sewer Systems:

1. Conventional Gravity: Conventional gravity sewer systems utilize 8 inch and larger diameter pipe to carry wastewater. They are installed at a minimum slope to keep the sewage moving downhill. Manholes are provided at periodic intervals for access, cleaning and inspection. As these sloped sewer lines get deeper into the ground, lift stations are required to pump the wastewater up to sewers that are not as deep.

   For the proposed service area, conventional gravity sewers could serve most of the US-131 Corridor and 129th Avenue and 124th Avenue in Wayland Township. Due to topography around the Lakes areas (see Figure 4 and Figure 7), a pressure system may be required for these areas. There are some buildings that are considerably lower than the roadway. These buildings may require individual pumps to lift the wastewater up to the sewer elevation. There are also homes with first floor elevations similar to the road and walk-out basements at a lower level near of the lake. In these instances, the sewer could be placed in the road and only the first floor and above served by gravity. The homeowner would be responsible for providing a small lift pump if they desire basement sewer service. Many of these homes already have basement pumps to pump to their septic tanks.

   The gravity sewer system would require lift stations for the collection portion of the system. Each station consists of 2 underground chambers. An electrical panel would be located above ground at each location. Total required easement area for each station would be approximately 30’ x 50’.

   A layout of a conventional gravity system to serve the immediate service area is shown in Figure 8. The predesign cost estimates for the service areas vary depending on the location of the wastewater treatment facility. Table 8e summarizes the treatment costs for each of the areas and treatment options.

2. Small Diameter Gravity: Small diameter gravity sewer is an alternative to conventional gravity systems for instances when gravity sewers are expensive due to terrain or other construction restraints. The system utilizes septic tanks at each building to separate out the solids from the wastewater. The effluent or gray water from the septic tanks then travels by gravity into the sewer collection lines. These lines are usually only 2” to 6” in diameter and require less slope than conventional gravity lines due to the lack of solids. Manholes are not

necessary and are replaced with slightly less expensive cleanouts. Individual pumps are required at low homes just as with conventional gravity sewer. Lift stations are also required periodically as with conventional gravity.

Septic tank pumping would be required once every 2 to 4 years and the sludge would have to be disposed of per State and County regulations. Septic tank pumping would be completed as part of the system maintenance.

For Hopkins and Wayland Townships, the system layout would be similar to the conventional gravity system except with septic tanks at each building and smaller diameter and shallower collection sewer lines. It is estimated that 85% of the existing septic tanks would need to be replaced with water tight tanks. This is important especially in areas of high groundwater since groundwater infiltration into the small diameter lines would greatly reduce the capacity of the system. Septic tank location would be difficult due to the small lot sizes. Variances would be required on many lots for isolation to houses, lot lines, the lake and wells. Due to these issues, the cost of a small diameter gravity system would be equal to or greater than a pressure sewer system described below.

Pressure Sewer Systems:

Pressure sewers is another alternative to conventional gravity sewers. In areas of hilly terrain or around lakes where the homes are much lower than the road, pressure sewers follow the contour of the road. Since they are placed only 5 to 6 feet deep, they are less expensive to install.

A pressure system utilizes a small, single pump unit at each building or larger dual pump units for 2 or more homes. These pumps force the sewage into and through the collector pressure lines in the street. The collector line sizes are normally 1-1/2 inches to 6 inches in diameter since the sewage is grinded or removed of solids and pumped through the lines. Manholes are not necessary although cleanouts are utilized throughout the system. There are generally two types of pressure systems as described below.

1. Grinder Systems. A grinder system utilizes grinder pumps with small sewer lines. We have assumed one grinder pump for each building, although it may be possible to cluster some buildings into a common pump if so desired. Combining buildings into a common unit can reduce costs but requires additional easement acquisition with separate power service provided by the municipality as opposed to power being provided by each building. It also can cause problems if one homeowner is disposing of improper items into the sewer and thereby causing mechanical problems. In this case all homeowners connected to the common pump would be affected by the pump outage and resulting repair or replacement costs.

   Advantages of the grinder system are the ease of installation of the smaller, shallower collection lines. All buildings would also be provided with basement service including the walkouts that have lower levels below the road elevation. The predesign cost estimates for the service areas with pressure sewers are summarized in Tables 8a-8d.

2. Septic Tank Effluent Pump (STEP) System. STEP systems are essentially the same as the grinder system except they utilize an on-lot septic tank and efficient pump instead of a grinder pump. The septic tank settles out the solids so the pump is not

required to grind the sewage. The efficient pumps are less costly since they only need to pump the septic tank effluent through the pressure lines. The septic tanks would require pumping every 2-4 years and the sludge would require disposal per State and County regulations.

For Hopkins and Wayland Townships, a STEP system layout would be relatively the same as the grinder system. Placing septic tanks would be difficult due to the small lot sizes. Although the pump and collection line cost would be less than for the grinder system, the overall collection system cost would be higher due to the necessity of placing new septic tanks at an estimated 85% of the properties. This alternative was not considered in further detail since the disadvantages clearly out-weigh the advantages of the other alternatives.

V. WASTEWATER TREATMENT ALTERNATIVES

Various wastewater treatment alternatives were considered for the service area. Alternatives considered include:

- Connection to the Wayland WWTP
- Connection to the Gun Lake Sewer and Water Authorities system
- Connection to the Hopkins WWTP
- Connection to the Plainwell WWTP (via Martin)
- Construction of a new WWTP for the service area.

The following paragraphs provide a brief description of each treatment alternative considered.

Connection to Wayland WWTP

A letter request for information was sent to the Wayland WWTP regarding the connection to the treatment system. Wayland indicated connection to the treatment plant would require either a change in the City's ordinance and a significant connection fee. For the proposed flows indicated, the Wayland WWTP would require expansion. The new customer would pay the cost of expansion. In summary, it was determined unlikely that connection to the Wayland WWTP could be accomplished.

Connection to Gun Lake Sewer & Water Authority

The Gun Lake Sewer and Water Authorities treatment plant is currently operating at half of it's design capacity. It includes a sewer authority comprising Wayland Township, Yankee Springs Township, Martin Township and Orangeville Township. Expanding service to portions of Hopkins Township would require acceptance by all four of the existing Townships. Service to the areas of the study area within Wayland Township would currently be allowed. Based on the 20 year projected flows, we estimate the existing plant would need to be expanded to accommodate this entire flow. Construction of a new plant would likely be more cost effective than providing expansion to an existing plant given the projected flows due to the combined cost of expansion and transmission to a remote plant.

Connection to Hopkins WWTP

Hopkins Township indicates that the WWTP does not have capacity to accept additional wastewater at this time. Expansion of the plant would be required to provide service to additional areas in the Township. Similar to the GLSWA option, we believe construction of a new plant would be more cost effective than expanding an existing plant, given the projected flows.

Connection to Dorr-Leighton WWTP

A letter requesting information was sent to the operator of the Dorr-Leighton plant. The letter was forwarded on to the Township's engineer. No response has been received as of the date of this report.

Connection to Plainwell WWTP (via Martin)

The City of Plainwell indicated that the Plainwell plant currently has capacity, but this excess capacity is dedicated for the plant's current service area. In order to connect to the Plainwell treatment plant, the City would require the entities wishing to connect to pay for expansion of the plant, thus reserving the plants existing capacity for the current users. In addition, conversations with the Village of Martin indicated that its existing forcemain would not have capacity to transmit the additional flows (due to the expansion of the Martin Speedway) from Hopkins and Wayland Township. In summary, it was determined unlikely that connection to the Plainwell WWTP could be economically accomplished.

CONSTRUCT A NEW TREATMENT PLANT:

Since it would be cost prohibitive to build a plant to serve the much greater 20 year flows, and there are many variables affecting the 20 year flows, each of the system options below were reviewed using the projected five-year flows from Table 6. In five years, it is assumed that the Casino would be fully operational (i.e., fully developed) and that 20% of the industrial/commercial development that is being projected for the 20-year development plan has occurred. This flow also includes the current domestic flow plus an addition 5% per year for population growth.

Natural Treatment Systems

Facultative Lagoons
Aerated Lagoons
Subsurface Infiltration (Community Septic System)

Mechanical Treatment Systems

Sequencing Batch Reactor (SBR)
Oxidation Ditch

Note: Each of the treatment system options summarized above include treated effluent storage to accommodate a seasonal discharge permit.

A general description of each of the treatment alternatives considered with project specifics and considerations is presented below:

Natural Treatment Systems

Treatment of wastewater in natural systems is achieved by natural physical, chemical and biological processes that occur in the ecosystem, mainly soil, water and plant. Natural systems are capable of removing almost all of the major and minor constituents of wastewater that are considered pollutants, for example suspended solids, organic matter, nitrogen, phosphorus, trace metals, organic compounds and microorganisms. Since using natural treatment systems use natural processes which take longer to achieve the effluent parameters, the land required by natural treatment systems are usually significantly greater than the land required for a mechanical treatment system. The aerated lagoon system is a modified natural treatment system that involves the use of some mechanical equipment.

1. Facultative Lagoon

Facultative wastewater treatment lagoons provide both storage and treatment of the wastewater. A facultative lagoon system provides the stabilization of wastes by a combination of aerobic, anaerobic, and facultative bacteria activity. Treated water could either be discharged to surface water or groundwater for final disposal. For further discussion on surface water and groundwater discharges, refer to the "Types of Discharge" section.

Typically this system is a controlled discharge type system, which is classified as a Class L (lagoons) Waste Stabilization Lagoon system by MDEQ. This type of system functions by storing wastewater with release or discharge of treated effluent on an approximate semi-annual basis. Treated wastewater, or effluent, is typically released during high flow conditions in the receiving stream (e.g., surface water discharge) in the spring and fall of each year. Detention time of 180 days is required to meet the systems storage needs. Treatment volume for this type of system occupies the space above the bottom two feet of the lagoons. The volume occupied by the bottom two feet is allocated for sludge storage. This system is designed for the lagoons to operate in parallel or series mode.

The design of the lagoon liner system is based on the requirement for dual or composite liner system for the construction of new lagoons. Due to the potential for a lower discharge limit on phosphorus, this treatment alternative also includes a chemical feed system to control phosphorus prior to discharge periods.

Residuals management practices will be typical of lagoon wastewater treatment system operations, where biosolids are digested in the bottom two feet of the cells. Biosolids will require removal periodically based on solids accumulation. Frequency of biosolids removal depends on influent wastewater loading characteristics and reduction in volatile suspended solids in the lagoons.

Based on typical trends in wastewater flow to the lagoons, the two primary lagoons should provide approximately 10 to 20 years of storage before cleaning and disposal is recommended. Reduction in volatile suspended solids content from approximately 75% to 45% can be expected with proper biosolids management. The residuals from the lagoons will have to be land applied as fertilizer on farmland or dewatered and properly disposed of in a landfill. To dispose of the residuals on farmland, the residuals must meet the State and Federal Regulations (Part 503) for stabilization, including volatile solids reduction and pathogen and vector attraction reduction. This will require testing the residuals at the time of removal.

Preliminary design basis information is summarized in Table 9. The wastewater flow rate is estimated to be 0.276 MGD in 2007, the five-year design, with a loading of approximately 771 pounds of BOD_5 per day. The lagoons would be sized to provide up to 180 days of storage to accommodate a seasonal discharge. The preliminary review of the facultative lagoon size indicates approximately 31 acres are required. We would recommend the

construction of three (3) lagoons or cells with the third cell providing polishing and a higher quality effluent (over a 2-lagoon system). The system would be designed to allow for future expansion as flows increase beyond the 5-year planning period.

Including isolation distances and area for system facilities, a total of 40 acres is estimated for this treatment alternative. The pre-design cost estimate for this alternative is $4,027,000. Annual OM & R costs are estimated at $80,000. Additional acreage and project costs ($550,000) would be required if a groundwater discharge is needed, refer to the "Types of Discharge" section for more detail.

Advantages of this method of treatment include: proven technology; and low labor and maintenance costs to operate the system. One disadvantage to this alternative includes the inability of the system to remove nitrogen in cold climates. This can be major concern if a groundwater discharge is required and can limit the discharge until early June if nitrogen limits are included in the discharge permit. The MDEQ provided a preliminary surface water discharge permit for wastewater stabilized lagoon effluent in response to a request submitted by the Gun Lake Gaming Facility. The preliminary discharge permit did not contain limits for any nitrogen compounds.

2. Aerated Lagoon

The main function of aerated lagoons is waste conversion. Additional (beyond natural oxygen sources such as wave action and photosynthesis) oxygen is usually supplied by means of surface aerators or diffused air units. As with other suspended-growth systems, the turbulence created by the aeration devices is used to maintain the contents of the lagoon in suspension. There are several factors that must be considered in designing aerated lagoons they are: Biological Oxygen Demand (BOD) removal, effluent characteristics, oxygen requirements, temperature effects, and energy requirements for mixing and solid separation.

One preliminary design would have the wastewater enter into the first of 2 aerated cells or lagoons each approximately 1.5 acres. The aeration requirements is estimated to be approximately 60 horsepower of aeration in the first cell and 10 horsepower of aeration in the second cell. Following the aerated lagoons, clarification or solids settling is required. This can be done in a non-aerated lagoon or a circular concrete clarifier tank. Chemical additional of coagulant and/or a flocculent can be added to aid in the solids settling. Effluent from the clarification step would flow to a storage-polishing pond. The storage pond would have the capacity to hold 180 days of flow (a total of 49.6 million gallons). From the storage – polishing pond the wastewater would be ready for final disposal, either a surface water or groundwater discharge.

The design of the lagoon liner system is based on the requirement for dual or composite liner system for the construction of new lagoons. Due to the potential for a lower discharge limit on phosphorus, this treatment alternative also includes a chemical feed system to control (i.e., precipitate) phosphorus prior to discharge periods.

Solids removal from the clarification process would be pumped to a sludge storage lagoon. The sludge/solids residuals from the sludge storage lagoons would either be land applied or disposed of in a landfill. To dispose of the residuals on farmland, the residuals must meet the State and Federal Regulations (Part 503) for stabilization.

The system would be designed to allow for future expansion as flows increase beyond the 5-year planning period.

Including isolation distances and area for system facilities, a total of 25 acres is estimated for this treatment alternative. The pre-design cost estimate for this alternative is $4,250,000. Annual OM & R costs are estimated at $125,000. Additional acreage and project costs ($550,000) would be required if a groundwater discharge is needed, refer to the "Types of Discharge" section for more detail.

Advantages of this method of treatment include a smaller footprint than the facultative lagoon system and provides for better nutrient control by removing and storing the settled solids in a separate storage lagoon. Nitrogen removal during cold weather months is a concern in this alternative as well. The aerated lagoon system also requires a higher level of labor and maintenance costs than the facultative lagoon system.

3. Sub-Surface Infiltration (Community Septic System)

Sub-surface infiltration is another term for a drainfield. Wastewater is required to be pretreated via individual septic tanks located at each home or by being pumped to a grit removal and primary solids settling tank(s). The septic tanks or primary settling tanks provide screening and remove settleable solids from the wastewater (primary treatment). Primary treatment effluent wastewater is then dosed to the drainfield in a controlled manner. A dosing station would be constructed at the drainfield to dose the various beds evenly and to alternate between beds. The wastewater is treated by insitu soil bacteria during infiltration at the drainfield. Stabilization of the wastewater occurs primarily by removal of organic, oxygen-demanding material and sorption of wastewater bacteria to the soil. Nitrates present in the wastewater are not reliably treated using this method.

Site and soil suitability is a major factor in locating a site. The same criteria applies as with individual drainfields. Well-drained soils are needed as well as a groundwater table that is a minimum of 4' below the surface.

The drainfield area required would be approximately 13 acres for good to well-draining soil is available. A reserve drainfield area equal to the design drainfield area is required to be set aside for future use. An MDEQ groundwater discharge permit would be required for subsurface infiltration. Discharge limits for phosphorous and nitrogen would likely be applied. For this reason, additional treatment may be necessary to meet the limits.

The system would be designed to allow for future expansion as flows increase beyond the 5-year planning period.

Including isolation distances and area for system facilities, a total of 35 acres is estimated for this treatment alternative. The pre-design cost estimate for this alternative is $4,345,000. OM & R costs are estimated at $110,000.

Advantages of this method of treatment include a relatively low labor and maintenance cost to operate. However, because drainfields have a finite life (ability of insitu soil treatment eventually becomes exhausted), replacement costs for a new drainfield are anticipated. Additional treatment requirements to meet discharge limits may restrict the use of this alternative.

Mechanical Treatment Systems.

Mechanical treatment of wastewater typically consists of an accelerated treatment with the use of a biological (activated-sludge) process. This technology does not depend on nature for treatment to occur. Mechanical treatment systems have smaller site size requirements than natural treatment systems. However one disadvantage to a mechanical treatment system is that the operation, maintenance and replacement costs are generally higher than in a natural treatment system.

For discussion, following are two (2) types of mechanical treatment systems that have proven cost-effective for the 0.276 mgd to 0.765 mgd flow rate identified in the 5-year to 20-year design.

4. Sequencing Batch Reactor (SBR)

The SBR is a mechanical form of treatment that incorporates activated sludge treatment in which aeration, sedimentation and decant are all performed in a single reactor. The system typically requires a post equalization tank and some type of disinfections such as an ultraviolet (U.V.) system. The SBR systems have proven to be successful where mechanical treatment of small wastewater flows (i.e., under 1.0 million gallons per day) is desired. An SBR system could discharge to either surface water or groundwater.

Effluent limitations for the SBR alternative are anticipated to be more stringent than the lagoon alternative based on the draft surface water discharge permit the Gun Lake Gaming Facility received from the MDEQ. Due to the potential for a lower discharge limit on phosphorus, this treatment alternative also includes a chemical feed system to control phosphorus prior to discharge.

Current MDEQ permitting requirements requires a minimum of 2 SBR units with an equalization basin and grit removal system at the head of the system. A sludge stabilization process (e.g., aerobic or anaerobic digestion) and a holding tank (required to hold 180 days of solids) are required prior to disposal or land application.

The system would be designed to allow for future expansion as flows increase beyond the 5-year planning period.

A minimum of 15 acres of land would be required to accommodate the 5 year anticipated flows, this would give the desired isolation and the ability to expand the SBR system to achieve the 20-year flow rates of 765,000 gpd, if needed. The pre-design cost estimate for this alternative is $5,300,000. Annual OM & R costs are estimated at $250,000. Additional acreage and project costs ($550,000) would be required if a groundwater discharge is needed, refer to the “Types of Discharge” section for more detail.

Some of the advantages of the SBR system are its reliability and ability of producing a high quality effluent. SBR’s require less land area than a natural treatment type system. SBR’s also adapt well to wide flow variations and are well suited for expansion. Some disadvantages are that mechanical systems have a finite design life and eventually components and parts will need to be replaced. Operation of an SBR requires a skilled operator(s) that will increase the annual operating costs. Operation typically takes more

attention to process controls and the electrical/instrumentation systems than other types of feasible, small, mechanical plant systems, including the oxidation ditch, which is presented in the next system description.

5. Oxidation Ditch

The oxidation ditch is another mechanical form of treatment that uses the activated sludge biological treatment process and is usually classified as a complete mix, long-term aeration system. The construction of two oxidation ditches operating in parallel is required with a grit removal system ahead of them. Sedimentation is handled in separate tanks. Additionally, a solids digester and holding tank (required to hold 180 days of solids) is included for solids storage prior to disposal or land application. An oxidation ditch system could discharge to either surface water or groundwater.

A polishing pond was included in the development of this alternative to ensure reliable dechlorination and control of solids. Due to the potential for a lower discharge limit on phosphorus, this treatment alternative also includes a chemical feed system to control phosphorus prior to discharge.

The system would be designed to allow for future expansion as flows increase beyond the 5-year planning period.

A minimum of 15 acres of land would be required to accommodate the 5 year anticipated flows, this would give the desired isolation and the ability to expand the oxidation ditch system to achieve the 20-year flow rates of 765,000 gpd, if needed. The pre-design cost estimate for this alternative is $5,301,000. Annual OM & R costs are estimated at $250,000. Additional acreage and project costs ($550,000) would be required if a groundwater discharge is needed, refer to the “Types of Discharge” section for more detail.

Some of the advantages of the oxidation ditch process are the abilities to produce a high quality effluent on a reliable basis and to handle variable flows well. Operator attention and skill is typically equal or less than other comparable mechanical treatment systems based upon ease of operation and maintenance. The oxidation ditch requires less land area than a natural treatment type system, but will require land slightly more land than an SBR system. The oxidation ditch process is well established with many successful installations in Michigan.

Types of Discharge

F&V submitted an effluent limits request to the MDEQ – Surface Water Quality Division in regards to discharging into Buskirk Creek, which is a tributary to the Rabbit River. A response from the MDEQ on March 8, 2002 stated that they received our effluent limits request and that the application is currently being reviewed. As of September 5, 2002 a response has not been received. Until we receive a response from MDEQ, we have assumed the same type of effluent limitations that were given to the Gun Lake Gaming Facility (GLGF) from their effluents limit request. Note, the GLGF request was for discharge of treated wastewater into the same Buskirk Creek.

Following is a description of both surface water discharge and groundwater discharge, along with their advantages and disadvantages.

1. Surface Water

   With a surface water discharge, the treated effluent from any wastewater treatment process will discharge into the Rabbit River (via the Buskirk Creek). The discharge limit parameters in the GLGF's draft permit for a controlled lagoon discharge included BOD_5, suspended solids and fecal coliform bacteria. Parameters in the secondary (mechanical) treatment discharge permit included carbonaceous BOD_5, suspended solids, total phosphorus, fecal coliform bacteria, total residual chlorine, dissolved oxygen and pH.

   The receiving stream directly affects the surface water discharge permit limits. A preliminary review of the Rabbit River indicates it is a second order stream rated as second quality.

   The Kalamazoo River watershed includes Albion to the east, Battle Creek, Kalamazoo/Portage to the south, and Allegan to the west. It discharges into Lake Michigan west of Allegan. The Kalamazoo River watershed is one of the few State watersheds that has a strict Total Mass Discharge Limit (TMDL) for phosphorus. We are anticipating that any new surface water discharges will require additional treatment and control of phosphorus below the typical 1.0 mg/L limit.

2. Groundwater

   Discharges to groundwater are regulated under Act 451 of the Public of 1994, Part 22) as amended in August 1999. Typical parameters monitored in a groundwater discharge permit include monitoring the treated effluent and groundwater surrounding the discharge location ammonia, nitrate and nitrite nitrogen compounds, sodium, chloride, phosphorus and pH.

   Two options for groundwater discharges include: applying the treated effluent to the surface of a filter bed and allowing the effluent to percolate into the soil; or spray irrigating the treated effluent on agricultural crops and again letting the effluent percolate into the soil. While a groundwater discharge requires the construction of an additional unit process, it allows for additional polishing of the treated effluent (specifically nitrogen and phosphorus) for nutrient control. In a watershed that has restrictive limits on nutrients, a groundwater discharge providing additional effluent polishing may be required.

   In the Cost Estimate section, we have provided pre-design cost estimate for both of these groundwater discharge options

Other Considerations

Other considerations, which are addressed and could provide a basis of comparison of the alternatives, including industrial wastewater treatment needs, residuals management and facility growth capacity/reliability. The following summarizes other considerations during the alternatives comparison.

1. **Residuals management needs.** Each alternative provides for solids handling. Facultative lagoons and aerated lagoons provide solids storage in the lagoons for approximately 10 years. Therefore, solids disposal would not be needed for

approximately 10 years. The other alternatives would require solids treatment and disposal on a semi-annual basis. The solids would either be stabilized and land applied to a farm field or dried and disposed of in a landfill.

2. **Industrial waste treatment needs.** No industrial facilities exist in the project area currently, however the 5 -year design flow estimates that industrial/commercial will make up 38% of the influent. Facultative lagoons, aerated lagoons and infiltration systems are not designed to handle significant discharge from industrial facilities. Sequencing Batch Reactor (SBR) and the oxidation ditch systems are capable of handling an industrial facility with some process additions depending on the source. A well-implemented Industrial Pretreatment Program would need to be in place for a wastewater treatment system that accepts wastewater from industrial facilities.

3. **Industrial Pretreatment Program (IPP).** The requirement for an IPP is based upon the presence on any of the following:

   - Any industrial user subject to categorical pretreatment standards; or
   - Any other industrial user that discharges POTW an average of 25,000 gallons or more per day of process wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater): or
   - Any other industrial user that contributes a process waste stream which makes up 5% or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or
   - Any other industrial user that is otherwise designated by the WWTF superintendent as significant industrial user on the basis that the industrial user has a reasonable potential to adversely affect the operation of the POTW or to violate any pretreatment standard or requirements.

1. **Facility growth capacity/reliability.** Each of the alternatives would provide for growth over 20 years, the major difference between the alternatives is the amount of land required.

2. **Operation, Maintenance and Replacement Costs.** Annual operation cost would be the lowest for the facultative lagoon, due to the low maintenance and labor required. The aerated lagoon system and the infiltration system have a higher operation and maintenance cost due to labor and equipment costs for the solids handling operations. The infiltration system also includes a replacement cost for the drainfield. The SBR and oxidation ditch systems have the highest annual operational cost since skilled operators are required along with additional time necessary to operate the plant, solids disposal and equipment replacement costs.

COST ESTIMATES

The preliminary cost estimates are based on the 5-year design flow of 0.276 MGD, since the 20-year flow estimate includes too many variables to plan for and may never be reached. Following are preliminary cost estimates for each of the alternatives. A preliminary review of costs to

purchase local land indicates that to purchase less than 40 acres, the cost is approximately $10,000 per acre. To purchase 40 or more acres, the cost is approximately $5,000 per acre. Because of the cost discrepancy in the cost per acre depending on land purchase size (i.e., 20 acres would cost the same as 40 acres), the cost estimates below assume a land purchase of 40 acres for each of the treatment alternatives. The exception is the spray irrigation system, which requires more than 40 acres.

Facultative Lagoon

Construction		
Wastewater Treatment Facility		$2,650,000
Land Purchase (40 acres @ $5,000/acre)		$ 200,000
Engineering/Legal/Hydrogeological		$ 662,000
	Sub-Total	$3,512,000
Contingency 15% of subtotal		$ 497,000
Non-Construction		
Administration		$ 17,000
	TOTAL:	**$4,027,000**
Annual Operation and Maintenance		
OM&R		$ 80,000

Aerated Lagoon

Construction		
Wastewater Treatment Facility		$2,804,000
Land Purchase (40 acres @ $5,000/acre)		$ 200,000
Engineering/Legal/Hydrogeological		$ 701,000
	Sub-Total	$3,705,000
Contingency 15% of subtotal		$ 526,000
Non-Construction		
Administration		$ 19,000
	TOTAL:	**$4,250,000**
Annual Operation and Maintenance		
OM&R		$ 125,000

Subsurface Infiltration

Construction		
Wastewater Treatment Facility		$2,870,000
Land Purchase (40 acres @ $5,000/acre)		$ 200,000
Engineering/Legal/Hydrogeological		$ 718,000
	Sub-Total	$3,788,000

Contingency 15% of subtotal		$ 538,000
Non-Construction		
Administration		$ 19,000
	TOTAL:	**$4,345,000**
Annual Operation and Maintenance		
OM&R		$ 150,000

Mechanical Treatment Systems (SBR and Oxidation Ditches)

Construction		
Wastewater Treatment Facility		$3,467,000
Land Purchase (40 acres @ $5,000/acre)		$ 200,000
Engineering/Legal		$ 949,000
	Sub-Total	$4,616,000
Contingency 15% of subtotal		$ 662,000
Non-Construction		
Administration		$ 23,000
	TOTAL:	**$5,301,000**
Annual Operation and Maintenance		
OM&R		$ 250,000

Groundwater Discharge Options

Option 1: Rapid Infiltration Beds (RIBs)

Construction		
Construction of Beds		$ 255,000
Land Purchase (40 acres @ $5,000/acre)		$ 200,000
Engineering/Legal/Hydrogeological		$ 51,000
	Sub-Total	$ 506,000
Contingency 15% of subtotal		$ 38,000
Non-Construction		
Administration		$ 3,000
	TOTAL:	**$ 547,000**
Annual Operation and Maintenance		
OM&R		$ 40,000

Option 2: Spray Irrigation Fields

Construction		
Construction of Spray Irrigation System		$ 180,000
Land Purchase (60 acres @ $5,000/acre)		$ 300,000
Engineering/Legal/Hydrogeological		$ 36,000
	Sub-Total	$ 516,000
Contingency 15% of subtotal		$ 27,000
Non-Construction		
Administration		$ 3,000
	TOTAL:	**$ 546,000**

Annual Operation and Maintenance

OM&R	$ 65,000

VI. COST ESTIMATES

Construction costs for the sanitary sewer collection system alternatives are presented in the attached tables. Tables 8a through 8d itemize proposed sanitary sewer collection systems for gravity sewer and grinder pumps and show the estimated cost for each of the systems. Table 9 summarizes the various collection system costs as they relate to the treatment alternatives and shows their present worth.

Tables 11 summarizes proposed wastewater treatment options.

VII. WATER SYSTEM REQUIREMENTS

A. WATER DEMAND

Water demand is defined as the volume of water consumed for domestic use over a given period of time. Throughout this report, demand will be expressed in terms of the flow rate in gallons per minute (gpm).

Each type of water customer in the system and their particular water needs must be considered when determining the demands to be placed on a new water system. For example, households, apartments and businesses each have their own unique demands for water. Houses typically use more water than apartments on a per capita basis due to a larger number of inhabitants and lawn sprinkling, while business water demand varies significantly with the type of business. In addition to each type of customer's demand varying, seasonal variations will also create a fluctuation in water demand. Each of these conditions have been noted and analyzed to estimate the water demand that will be placed on the Hopkins/Wayland Township water system.

From discussions with representatives of Hopkins and Wayland Township, the proposed water service area shown in Figure 1 includes potential industrial use along the US-131 corridor and the potential for future commercial users near Bradley. In addition, future service areas considered included Selkirk and Geneva Lake, Herlan Lake and Ingerson Lake

Part of the service area is currently developed and part is currently undeveloped. The first step taken to determine the water demand was estimating the number of homes that currently exist within the service area and estimating the total number of homes that would exist in a "built-out" or developed condition. To estimate the current number of homes in the service area, Township tax maps were reviewed and counts were taken during visits to the area. Statewide, the average number of people per home is estimated to be 3.3. This average was used to determine the service population. Additionally, an average of 100 gallons of water per person per day is used. The estimated current and future average day water demands are shown in Table 5.

TABLE 5
HOUSING, POPULATION, & AVERAGE WATER DEMAND

	Number of Residential Equivalents (R.E.)	Population Equivalent (P.E.) (3.3*R.E.)	Average Day Water Demand (gpm)
Current Condition	120	396	28
2007 Future Condition	471	1,554	108
2007 Future Condition (with Casino)	835	2,756	191
2022 Future Condition	1,954	6,448	448
2022 Future Condition (with Casino)	2,318	7,650	531

The average day water demand is the average flow of water out of the water system on a continuous basis throughout the year. Water system customers will use more water at peak times during the day and during the summer months and therefore, a peak day (or maximum day) demand must be calculated. To calculate the Max Day Demand, a multiplier or peaking factor is applied to the average day demand. This report considers a Max Day to Average Day Peaking factor of 3.0, which is typical of other communities. Table 6 below shows current and future Peak Day Demands.

TABLE 6
Peak Day Water Demands

	Average Day Water Demand (gpm)	Max Day Water Demand (gpm)
Current Condition	28	84
2007 Future Condition	108	324
2007 Future Condition (with casino)	191	573
2022 Future Condition	448	1,344
2022 Future Condition (with casino)	531	1,593

B. WATER SUPPLY

The Michigan Safe Drinking Water Act (ACT 399, PA 1976) requires municipal water systems to provide quality drinking water in a dependable and consistent fashion. This requirement has caused other communities similar to Hopkins and Wayland Township to establish groundwater systems as their source for water. These systems generally require little or no treatment, offer uniform water temperatures throughout the year, and are less expensive than impounding reservoirs. In addition, wells throughout the state often yield a consistent and high rate of flow.

Other sources of water that may be considered for a public system are nearby lakes and streams or extending water main from an existing system. However, the need to build a water filtration plant would make the first option cost-prohibitive based on service area size. Costs for extending water main from the nearest public system (Yankee Springs Township) were evaluated. This report will also consider groundwater wells as a feasible option for supplying water to residences in the Township. Another option, which has been discounted for now, is the proposed future County wide water filtration plant and distribution system being discussed. Conversations with the Engineer working on that study indicate that service to Hopkins and Wayland Township would be part of a later phase. The county-wide master plan would provide a water treatment plant in Laketon Township. If Hopkins/Wayland Township proceed with their own system, they could possibly connect into the County wide system at some point in the future.

Another aspect of the Michigan Safe Drinking Water Act requires that a municipal water system's firm capacity meet or exceed the maximum day demand plus fire flow. A water system's firm capacity is defined as the production capability of the waterworks system with the largest well, pump, or treatment unit out-of-service. Therefore, with a groundwater well system, the firm capacity of the system would be calculated with the largest producing well out-of-service.

With these requirements, two or more groundwater wells would be required to serve the Hopkins/Wayland Township system. The well's capacity, other than the largest well, would need to meet or exceed the future max day demand of 1,593 gallons per minute (calculated above). We recommend that the rated capacity of the two or more wells exceed the max day demand due to the difficulty in predicting future conditions and the minimal capital costs of increasing pump capacity. We recommend the new wells have a capacity of 1,600 gpm each for 2 wells or 800 gpm each for 3 wells, resulting in a system firm capacity of 1,600 gpm.

If connection was made to the Yankee Springs system to extend service to the service area in this report, a booster station would be required, at a minimum. An evaluation of the Yankee Springs system would have to be completed to determine if additional storage or an additional well would be required in the future. It is relatively safe to assume these items would be required, and they are included on the cost estimate attached.

C. WATER STORAGE

The purpose of water storage is to provide water during emergency periods (both wells out of service) and to provide fire protection. The water demands of a fire typically far outweighs the capacity of a water system's wells and pumps. Therefore, the volume of a storage tank must make up the difference. Water systems that do not have water storage typically only have very limited fire fighting capabilities. It is in Wayland and Hopkins Township's best interest to include a storage tank in their water system. Home insurance rates can be significantly reduced in a community with good fire fighting capabilities.

Several factors must be considered when attempting to provide adequate water storage for a small community. These factors include establishing the correct tank volume, height, and location with respect to the particular geographical limitations and population of the community. The topography of the proposed service area and availability of land further defines the height and location of the tank.

The Insurance Services Office (ISO) is a private company that rates municipal water systems for their ability to fight fires. Their ratings, in part, determine the costs of homeowners insurance throughout the subject community. The ISO also has guidelines on calculating the needed fire flow to combat a fire. The needed fire flow for any given building is based on many factors including the use of the building (residence, business, industry, etc.), the size of the building, and the type of building construction. A review of the ISO's guidelines indicate that the proposed service area for Hopkins and Wayland Township has a recommended fire flow of 3,000 gallons per minute for a duration of 3-hours. This recommended fire flow is based on providing service and fire projection to future businesses and industries within the service area.

With these ISO guidelines, the storage tank volume required is calculated as follows:

$$\text{Tank Capacity} = \left(\text{Fire Flow} + \text{Max Daily Demand} - \text{Firm Capacity}\right) \times \text{Duration}$$

$$= \left[\left(3{,}000\text{gpm} + 1{,}600\text{gpm}\right) - 1{,}600\text{gpm}\right] \times \left(3 \text{ hours} \times 60 \text{ minutes per hour}\right)$$

$$= \underline{\textbf{540,000 gallons}}.$$

The height of an elevated storage tank should be established based on the highest elevation of the potential service district and providing average static pressures of 55 to 75 pounds per square inch (psi) in the system. Further, it is desirable to position the tank in an area of the distribution system opposite the primary water supply or central to the system users to minimize pressure differences and increase system reliability. This way, under extreme flow conditions such as during a fire, a more consistent and dependable supply can be provided from either source.

The highest land in the vicinity of the Hopkins and Wayland Township water service area is located east of Bradley. Based on the criteria stated above, the most desirable location for a water storage tank would be in this area with the supply wells near 131 along 129th Avenue.

As an alternative to an elevated storage tank, it should be mentioned that the Township's may wish to consider a Hydro-pneumatic storage tank. Although this type of storage facility offers significant cost savings, it cannot deliver adequate fire protection to the community as recommended by the ISO and homeowner's insurance rates would reflect this. However, communities similar to Hopkins and Wayland Township have started new water supply systems with Hydro-pneumatic tanks with plans to upgrade their storage facilities at a later date. This two step approach provides a cost-effective means of establishing a distribution system and then providing fire protection when the community can afford to.

D. WATER DISTRIBUTION

The water distribution system recommended for the communities of Hopkins and Wayland Township would consist primarily of ductile iron watermains. Fire hydrants would typically be placed at approximately 400-foot intervals along the watermain. Isolation valves are typically provided at watermain intersections and/or approximately every 1,000 feet along transmission mains in rural areas. Valves are generally located to help isolate a smaller section of the system in the event of a watermain break or to facilitate general maintenance.

The diameter of a watermain is primarily based on flow and pressure requirements needed to reach the extremities of a network together with the required capacity to transport fire flow. The State of Michigan requires that all new watermain not be any smaller that 6" in diameter for general use. The recommended minimum size to provide adequate fire flow is 8" diameter pipe and systems distributing high volumes of water over long distances should not be less than 12" in diameter. In general, an efficient and low maintenance distribution network will include free flowing loops that connect back onto itself and minimize long "dead-ends". Figure 9 shows locations of recommended 8" and 12" watermains throughout the initial service area.

E. OPERATION AND MAINTENANCE

After the new water system has been installed and is ready to be placed into service, it will require the ongoing supervision of a licensed operations technician. The Michigan Safe Drinking Water Act has set forth three basic licensing classifications an operator must achieve prior to managing a system; F-1 through F-4, D-1 through D-4, and S-1 through S-4. In particular, an operator overseeing a system requiring full water treatment will need an F license, operators supervising systems with "limited" treatment facilities will need a D license, and operators functioning simple distribution systems with no treatment facilities will need an S license. The population of the community and the capacity of the water system determine an operator's required numerical sub-category.

The water system proposed above requires at least an S-4 water distribution license and a D-4 water treatment license. Unless extensive water treatment is required, an F license would most likely not be required. The State recommends that at least two people become licensed operators for a community system. This is a simple safe guard to help ensure the system is operated reliably and allow at least one person to be available at all times.

In addition to general operational duties, the operator must be prepared for maintenance of the distribution system. All municipal systems require the attention of regular and systematic maintenance of hydrants, valves and (in growing communities) the installation of service leads. Considerable attention must also be given to the operator's ability to respond to emergency repair situations. Both general and emergency maintenance activities will require the purchase and storage of materials such as watermain pipe, valves, fittings, meters and specialized tools.

Alternatively, the operator could function in the capacity of a maintenance manager and outsource all required repair work including emergencies to a local contractor. Even though certain materials may still need to be inventoried by the owner of the water system, a considerable cost savings could be realized. Emergency situations would require establishing a relationship with two or more contractors to ensure prompt attention is given to getting customers back in service.

F. COSTS

Table 12 presents the costs to extend water from the Yankee Springs water system to serve the immediate service area. Table 13 presents the cost of a new water system to serve the immediate area and additional costs to extend to the future service areas. Table 14 summarizes the water system costs for the two alternatives.

VIII. SUMMARY OF RECOMMENDED IMPROVEMENTS

It is recommended a new water system be installed jointly between Hopkins and Wayland Township, to serve proposed development in and around Bradley and the US-131 corridor from 136th Avenue to 124th Avenue.

Improvements recommended in this study have been categorized below into four areas of focus.

1. WATER SUPPLY

- Construct two (2) groundwater wells with 1,600 gpm capacity, located near US-131 and 129th Avenue. This work would include the new wells with submersible pumps and underground piping to a new well house and emergency generator (does not include land acquisition costs). If 1600 gpm cannot be achieved in a single well, we recommend 3-800 gpm wells, which would be more costly.

Estimated project cost: $690,000

2. WATER STORAGE

Construct an elevated water storage tank with a volume of 550,000 gallons and associated watermain to connect to the watermain distribution network. It is estimated one acre of land with access right-of-way or easement will be required to construct and maintain the proposed water storage tank. (Includes $50,000 land acquisition cost). If the amount of future development is still relatively uncertain at the time of construction, the Township could consider a smaller tank and adding a second tank when development occurs.

Estimated project cost: $1,510,000

3. WATER DISTRIBUTION

Construct a watermain distribution network in the locations as detailed in Table 3. Estimated project costs are based on $65 per linear foot water main.

Estimated project cost: $4,350,000

4. ANNUAL OPERATION

Annual operation and maintenance cost including repairs, administration, billing, meter reading, etc.

Estimated annual cost: $25,000

TOTAL CAPITAL COSTS $6,550,000

TOTAL ANNUAL COSTS $50,000

IX. FINANCING

The following paragraphs discuss potential financing options for the Wayland and Hopkins Township wastewater collection and treatment system and water system. It is likely that a combination of special assessments and monthly service charges would pay for the costs to build the project.

Besides conventional financing, there are other programs available to the Township: The State Revolving Loan Program, Drinking Water Revolving Fund, the Michigan Municipal Bond Fund and Rural Development grants or loans. It is possible that one or more of these sources could be used to fund a portion of the project. It is recommended that the Township's evaluate each of these alternatives based on the service area selected for each utility.

It should be noted, that some outside sources of funding will inherently increase the project cost due to administration, audits, potential additional system requirements and minimum construction wage rates. However, the overall affect of such funding will most likely reduce the cost to the users.

USER FEES AND ASSESSMENTS

User fees are an excellent source of steady income over the life of a water system. In addition, connection fees and assessments are tools used to generate larger sums of income is over a limited period of time. These sources of income can be used in combination with other revenues to help defray the cost of construction loans and annual operation costs.

Following is a review of how portions of this project might be funded by associated users in the community.

Special Assessments

In general, all of the properties in the project area that are served by new utilities can be specially assessed. Special assessments are typically based on the total costs for the material and construction of just the collection distribution systems alone, which includes piping, hydrants, valves, manholes, etc. In particular, the amount of an assessment maybe determined by dividing these specific costs by the total number of users that can become connected to the system and then multiplying that amount by the appropriate REU. Each home that benefits from the proposed utility can be specially assessed in this manner.

Connection Fees

A Connection Fee is a fee assigned when a customer attaches to the system. This fee can be based on total costs the installation of water or sewer to serve the customer.

Monthly User Fees

Monthly user fees are an important source of continued income for the Townships to offset the expense of operation and maintenance of a water system. User fees are calculated to pay for employee's wages, materials, maintenance, treatment, and general administration costs.

Since most of these expenses cannot be fixed, user fees must be periodically adjusted to ensure there is an adequate balance for timely payment. Typically, every five years the municipality will reevaluate the cost of operations and maintenance and make the appropriate

adjustments to monthly user fees. An illustration of the importance to perform a regular assessment of operational costs would be as the number of users on the system increases, the Township's gain income through monthly user fees. However, the additional customers could also increase administration costs for billing, maintenance costs, and inventory costs. Typically, as the number of customers on a water system increases, the monthly user fees will decrease.

We have provided some examples of funding by assessment district based on serving the 131 corridor and 129th Avenue (including casino) with water and sewer. It assumes the water system will be a new system and wastewater treatment will be by a new mechanical plant with ground water discharge.

TABLE 7

ESTIMATED COSTS TO THE USERS OF THE SYSTEM

131 Corridor and 129th Avenue Wastewater Collection with Mechanical Treatment

Assessment and Connection Fees	$ 2,750.00
Trunkage Fee	$ 4,250.00
TOTAL	**$ 7,000.00**
On-lot Cost: $10 to $20/foot sewer lead and $200 per septic tank/drywell abandonment approximately $500 to $2,000 per lot total, $1,200/lot average.	$ 1,200.00
Operation, Maintenance & Replacement Monthly User Fee/REU	$ 25.00
Monthly Debt Service Charge/REU	$ 21.00
TOTAL MONTHLY	**$ 46.00**

Notes: Assumes 6.5% interest on assessments and 5.5% interest on bonds over 20 years.

The above assessments and connection fees can be paid in cash or over a 20-year period with interest. When the assessments and connection fees are paid over time, 1/20 of the principal and interest on the outstanding balance is due each year.

The assessments and monthly user fees are based upon 2002 construction costs. Depending upon the year of construction, assessments and user fees should be adjusted accordingly.

ESTIMATED COSTS TO THE USERS OF THE SYSTEM

131 Corridor and 129th Avenue New Water System

Assessment and Connection Fees	$ 5,000.00
Capacity Fee	$ 1,000.00
TOTAL	**$ 6,000.00**
Operation, Maintenance & Replacement Monthly User Fee/REU	$ 5.00
Monthly Debt Service Charge/REU	$ 14.00
TOTAL MONTHLY	**$ 19.00**

Notes: Assumes 6.5% interest on assessments and 5.5% interest on bonds over 20 years.

The above assessments and connection fees can be paid in cash or over a 20 year period with interest. When the assessments and connection fees are paid over time, 1/20 of the principal and interest on the outstanding balance is due each year.

The assessments and monthly user fees are based upon 2002 construction costs. Depending upon the year of construction, assessments and user fees should be adjusted accordingly.

The appendix includes similar estimates for user costs for 3 other potential service areas. Table 15a serves Selkirk & Geneva Lake only with sewer (no casino); Table 15b services Selkirk & Geneva Lakes and Bradley area with sewer (with casino); and Table 15c serves 131 corridor only with water and sewer (no casino).

Potential Grant/Loan Programs:

State Revolving Fund (SRF):
The State of Michigan offers low-interest money as loans to communities under the State Revolving Fund (SRF) program for wastewater collection and treatment projects. To receive a low interest (approximately 2.5%) loan, the community must complete a Project Plan. The Project Plan report would provide a description of the problem, present and compare alternatives to solve the problem, select a preferred alternative to the problem, and review and evaluate impacts of the selected alternative with respect to environmental and community impacts. The Project Plan is submitted and the State ranks all projects based on the extent of the problem. Projects are funded based on this ranking until the money "runs out" for each year.

MI Bond Fund:
This fund is a source of financing for Michigan Communities at a low interest rate for water and wastewater projects.

Rural Utilities Service Grants or Loans (RUS, formerly FHA)
The Rural Utilities Service (RUS) provides grants and loans to lower income rural communities for infrastructure improvements including water and wastewater systems. There is typically as much as $40,000,000 each year to distribute. Funding assistance is typically arranged in a combination of a Grant and Loan. To qualify for a Rural Utilities Service Grant or Loan, the community must have a population of less than 10,000 people. A preference is given to those communities having less than 5,500 people.

Typically, an RUS grant and loan is awarded based on the need for the proposed improvements. Several factors are considered when determining the need, which include median household income, amount of available community funds, and a comparison of utility rates for similar communities. Communities with a median household income at the poverty level may be eligible for a 75% grant and 25% loan. While communities with a median household income of less than $32,449 may be eligible for a 45% grant and 55% loan. The interest rate on the loan portion is based on median household income. Current interest rates are between 3.25% and 4.375%. Hopkins Township median household income in 1989 was $30,511, while the 1990 poverty level was $25,959 (source: 1990 census data). Wayland Township had a 1989 median household income of $30,925. The 2000 census data will soon provide updated median income levels and RUS will also adjust their thresholds of funding.

Low interest loans may also be available. There are two types of loans available from RUS: direct loans and guaranteed loans. Direct loans are only issued if the Township is unable to obtain funding from other sources at reasonable rates. The current interest rate is between 4 and 5 percent. Guaranteed loans are made and serviced by commercial lenders such as banks and savings & loan institutions. Guarantees will not exceed 80 percent on any loss of interest and principal on the loan.

Community Development Block Grant (CDBG)
The CDBG program is administered by the Michigan Jobs Commission and distributes about $30,000,000 in grants to communities across Michigan each year. These grants are given for economic planning, rehabilitation, redevelopment, and infrastructure development. Three different types of CDBG grants are available, which are Economic Planning, Commercial and Industrial Rehabilitation/Redevelopment, and Economic Development of Infrastructure. In the case of developing a water system for Hart Township, an Economic Development Infrastructure Grant would be appropriate.

One of the major requirements of the grant is a commitment from a private company to add at least 10 full time jobs to the community for at least two years of employment. The private company would need to directly benefit from the proposed improvements. Core manufacturing companies are given a strong preference. The maximum grant available is $750,000 and a local match of 10% is also required.

Economic Development Administration Grants (EDA)
The US Economic Development Administration (EDA) gives grants and loans to communities for infrastructure improvements. Grants are provided to help distressed communities attract new industry, encourage business expansion, diversify local economies, and generate long-term, private sector jobs. The program is primarily intended to benefit communities with low and moderate-income populations. If industries were considering expanding or relocating to the Hart Township area as a result of the proposed infrastructure improvements, or an industry were going to expand in lieu of relocating, then this type of grant should be considered as a possible funding source.

Grant & Loan Summary
All of the above programs require submission of a project plan or engineering report with a detailed report outlining the scope of the proposed improvements together with a discussion regarding an assessment on any environmental issues including any impact the project may have on the community. The project plan can be prepared and submitted along with a grant application once a particular funding strategy is developed.

INSURANCE RATINGS

With the addition of an elevated storage tank in the new system, fire protection is afforded to each building served by water. This increased protection against loss by fire gives each homeowner the potential of reduced insurance rates.

To help determine a homeowner's insurance rate, the Insurance Service Office (ISO) will rate a community on a scale of 1 to 10 with 1 being the best protected and 10 the worst protected. Whenever fire protection in a community is increased, the ISO will typically adjust the rating to reflect the added margin of safety provided in the community. This in turn provides homeowners with the ability to seek lower costs for their insurance policy.

As an example, the Township may currently have an ISO rating of 9. With the proposed improvements in place, it is possible that the new ISO rating for the Community could drop to 7. In turn, an individual homeowner could realize a decrease in homeowners insurance premiums of $85 to $125 per year based on a home with a value of between $100,000 to $200,000.

Appendix A

Letters of Request and Response from Neighboring Communities

Appendix B

Figures

Appendix C

Cost Summary for Collection System and Water Distribution System

TABLE 15-A

ESTIMATED COSTS TO THE USERS OF THE SYSTEM

Selkirk and Geneva Lakes (without Casino) -Wastewater Collection with Aerated Lagoon Treatment

Assessment and Connection Fees		$ 7,000
Trunkage Fee		$ 3,000
	TOTAL	**$ 10,000**
On-lot Cost:	$10 to $20/foot sewer lead and $200 per septic tank/drywell abandonment approximately $500 to $2,000 per lot total, $1,200/lot average.	$ 1,200.00
Operation, Maintenance & Replacement Monthly User Fee/REU		$ 30
Monthly Debt Service Charge/REU		$ 69
	TOTAL MONTHLY	**$ 99**

Notes: Assumes wastewater treatment is new aerated lagoon treatment plant.

Assumes 6.5% interest on assessments and 5.5% interest on bonds over 20 years.

The above assessments and connection fees can be paid in cash or over a 20 year period with interest. When the assessments and connection fees are paid over time, 1/20 of the principal and interest on the outstanding balance is due each year.

The assessments and monthly user fees are based upon 2002 construction costs. Depending upon the year of construction, assessments and user fees should be adjusted accordingly.

TABLE 15-B

ESTIMATED COSTS TO THE USERS OF THE SYSTEM

Selkirk and Geneva Lakes and Bradley Area (with Casino) -Wastewater Collection with Mechanical Treatment

Assessment and Connection Fees		$ 3,000
Trunkage Fee		$ 2,000
TOTAL		**$ 5,000**
On-lot Cost:	$10 to $20/foot sewer lead and $200 per septic tank/drywell abandonment approximately $500 to $2,000 per lot total, $1,200/lot average.	$ 1,200.00
Operation, Maintenance & Replacement Monthly User Fee/REU		$ 13
Monthly Debt Service Charge/REU		$ 20
TOTAL MONTHLY		**$ 33**

Notes: Assumes wastewater treatment is new mechanical treatment plant.

Assumes 6.5% interest on assessments and 5.5% interest on bonds over 20 years.

The above assessments and connection fees can be paid in cash or over a 20 year period with interest. When the assessments and connection fees are paid over time, 1/20 of the principal and interest on the outstanding balance is due each year.

The assessments and monthly user fees are based upon 2002 construction costs. Depending upon the year of construction, assessments and user fees should be adjusted accordingly.

TABLE 15-C

ESTIMATED COSTS TO THE USERS OF THE SYSTEM

131 Corridor - Wastewater Collection with Mechanical Treatment to serve 2 year needs

Assessment and Connection Fees		$ 10,000
Trunkage Fee		$ 5,000
TOTAL		**$ 15,000**
On-lot Cost:	$10 to $20/foot sewer lead and $200 per septic tank/drywell abandonment approximately $500 to $2,000 per lot total, $1,200/lot average.	$ 1,200
Operation, Maintenance & Replacement Monthly User Fee/REU		$ 140
Monthly Debt Service Charge/REU		$ 102
TOTAL MONTHLY		**$ 242**

Notes: Assumes 6.5% interest on assessments and 5.5% interest on bonds over 20 years.

The above assessments and connection fees can be paid in cash or over a 20 year period with interest. When the assessments and connection fees are paid over time, 1/20 of the principal and interest on the outstanding balance is due each year.

The assessments and monthly user fees are based upon 2002 construction costs. Depending upon the year of construction, assessments and user fees should be adjusted accordingly.

ESTIMATED COSTS TO THE USERS OF THE SYSTEM

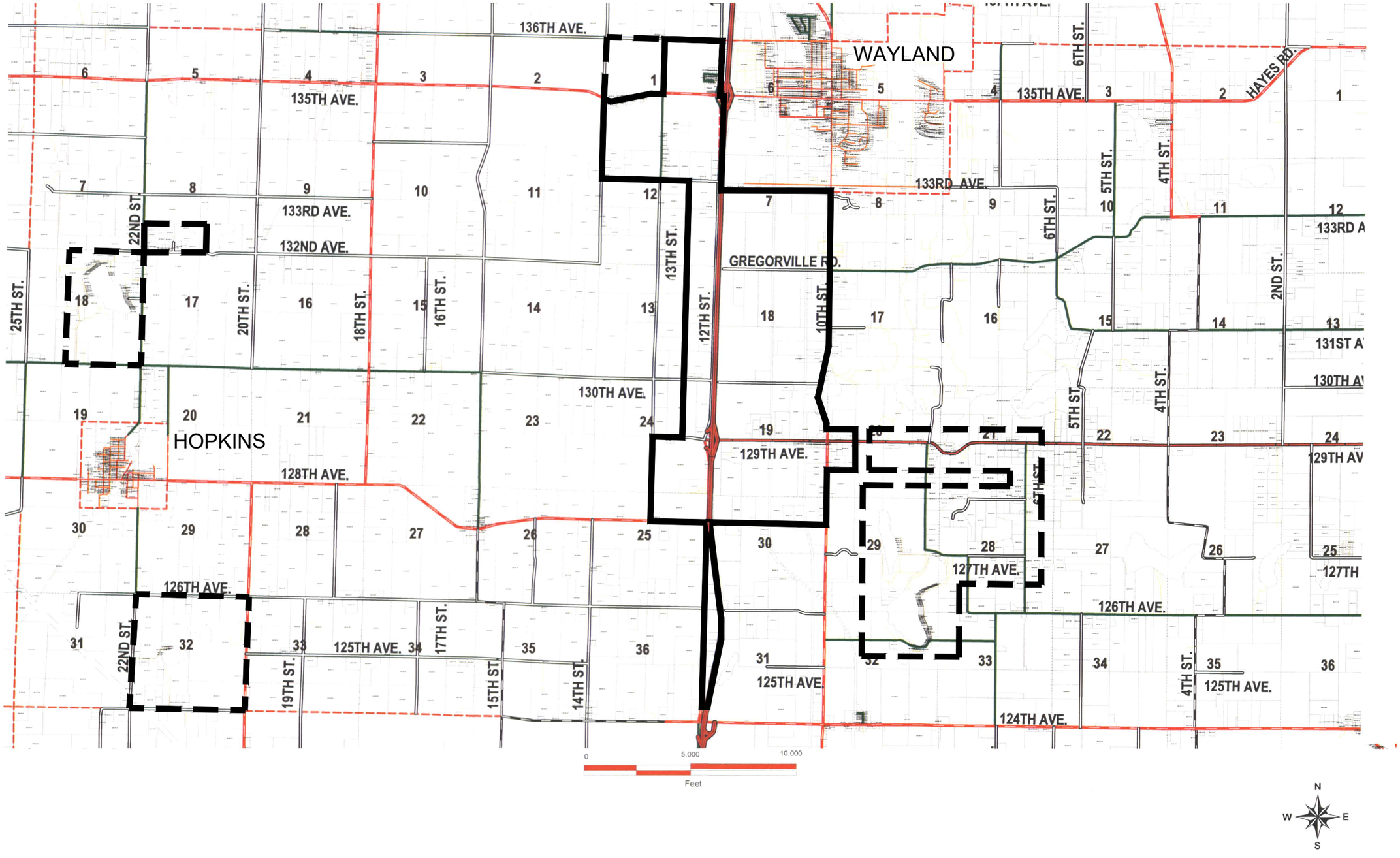
131 Corridor - New Water System

Assessment and Connection Fees	$ 7,000
Capacity Fee	$ 3,000
TOTAL	**$ 10,000**
Operation, Maintenance & Replacement Monthly User Fee/REU	$ 35
Monthly Debt Service Charge/REU	$ 340
TOTAL MONTHLY	**$ 375**

Notes: Assumes 6.5% interest on assessments and 5.5% interest on bonds over 20 years.

The above assessments and connection fees can be paid in cash or over a 20 year period with interest. When the assessments and connection fees are paid over time, 1/20 of the principal and interest on the outstanding balance is due each year.

The assessments and monthly user fees are based upon 2002 construction costs. Depending upon the year of construction, assessments and user fees should be adjusted accordingly.



INITIAL SERVICE AREA

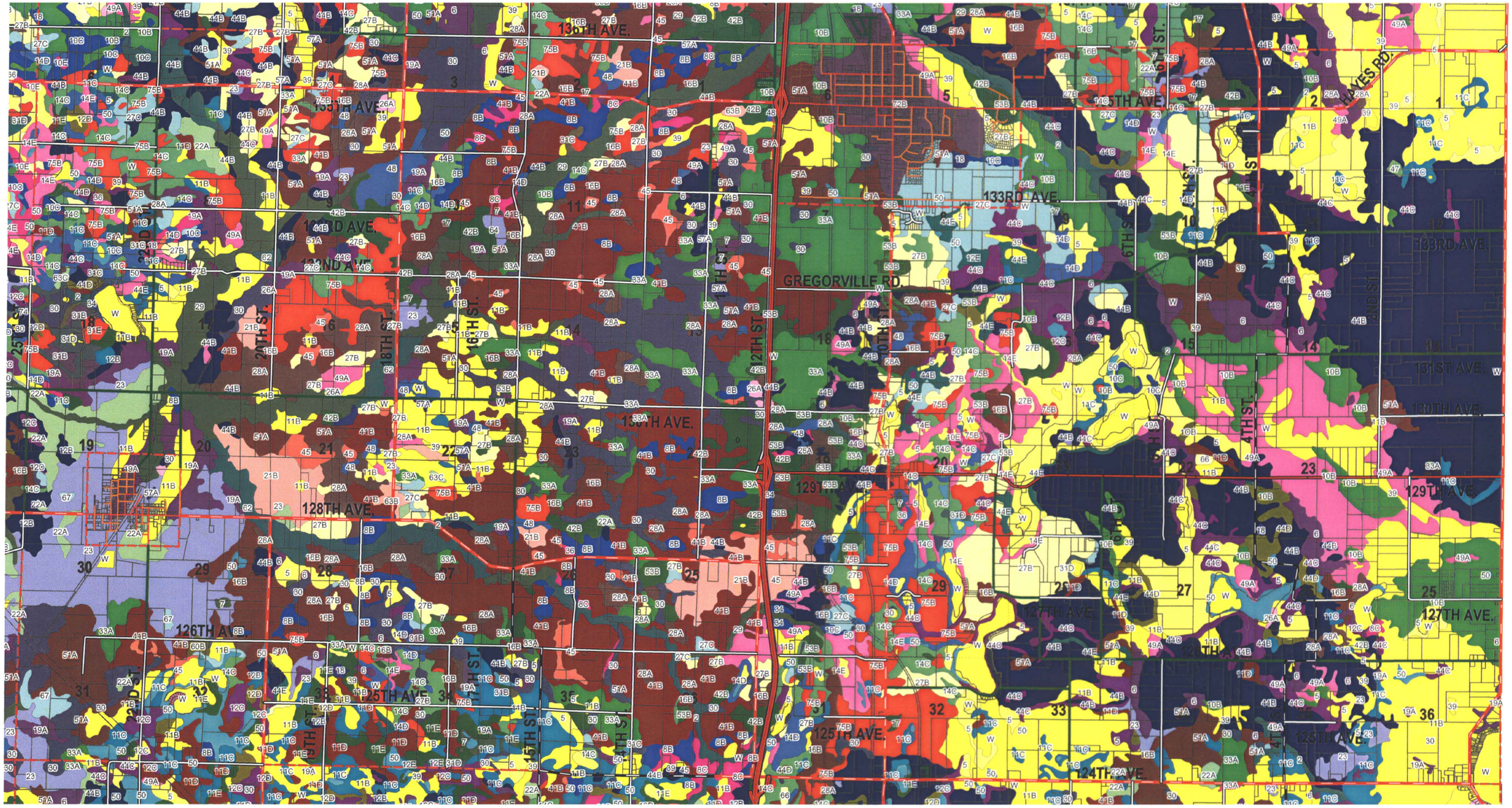
FUTURE SERVICE AREA

HOPKINS and WAYLAND TOWNSHIPS
ALLEGAN COUNTY

STUDY AREA
INITIAL & FUTURE SERVICE AREAS
FIGURE 1

2002 14052

FLEIS & VANDENBRINK ENGINEERING, INC.

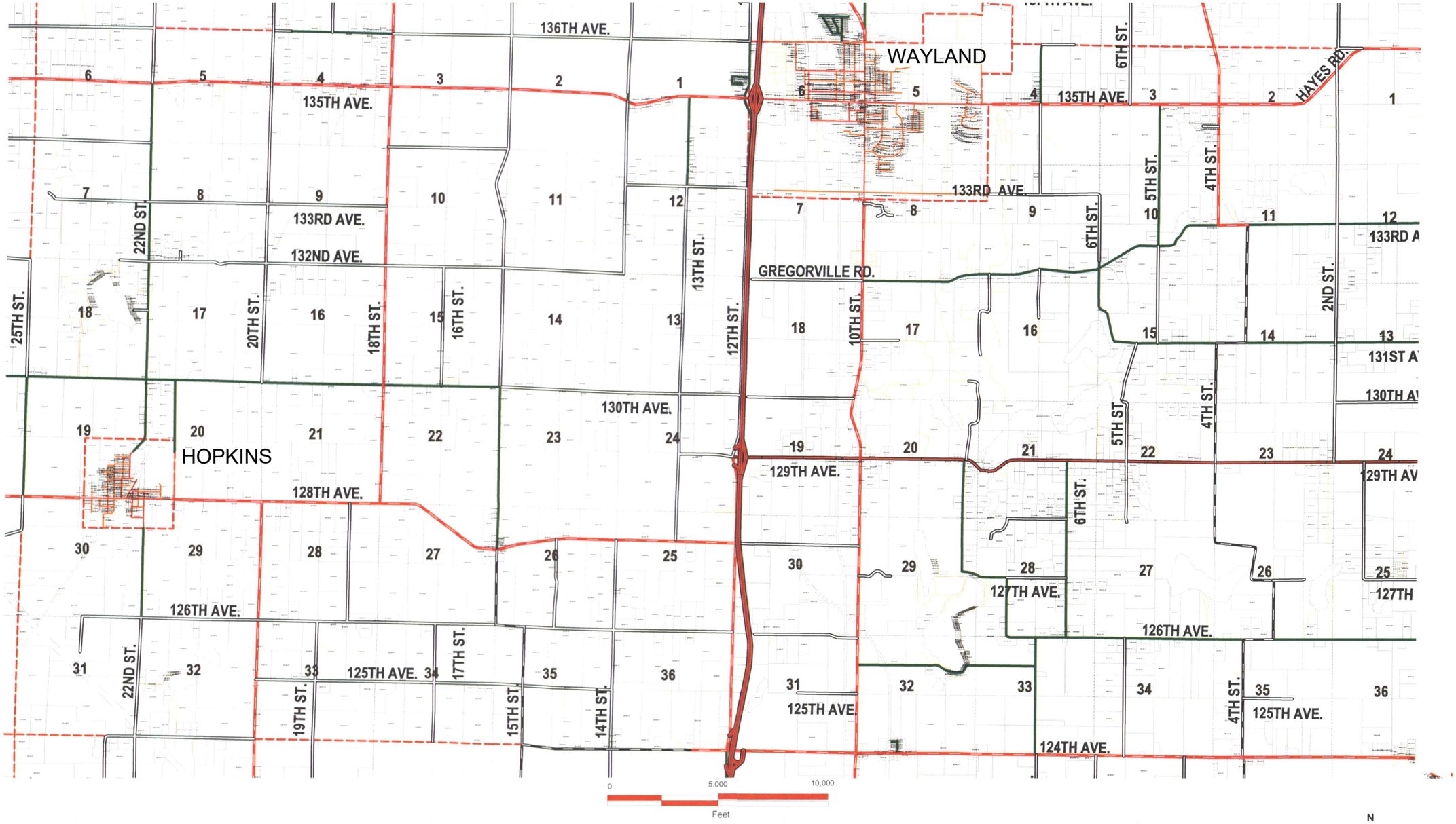


HOPKINS and WAYLAND TOWNSHIPS
ALLEGAN COUNTY

SOILS MAP
FIGURE 2

2002 14052

FLEIS & VANDENBRINK ENGINEERING, INC.

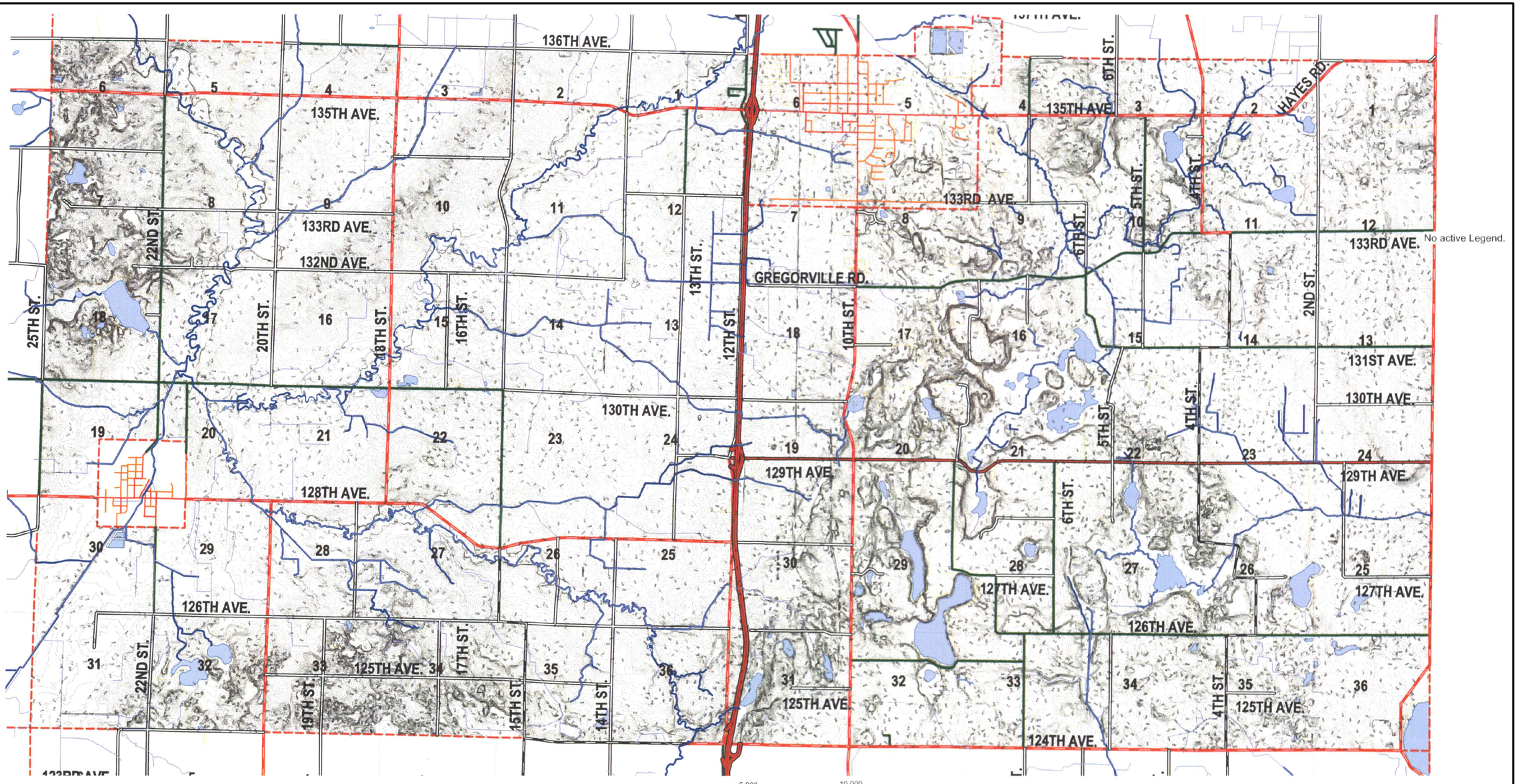


HOPKINS and WAYLAND TOWNSHIPS
ALLEGAN COUNTY

PARCELS
FIGURE 3

2002 14052

FLEIS & VANDENBRINK ENGINEERING, INC.



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HOPKINS and WAYLAND TOWNSHIPS
ALLEGAN COUNTY

2 FOOT CONTOURS MAP
FIGURE 4

2002 14052

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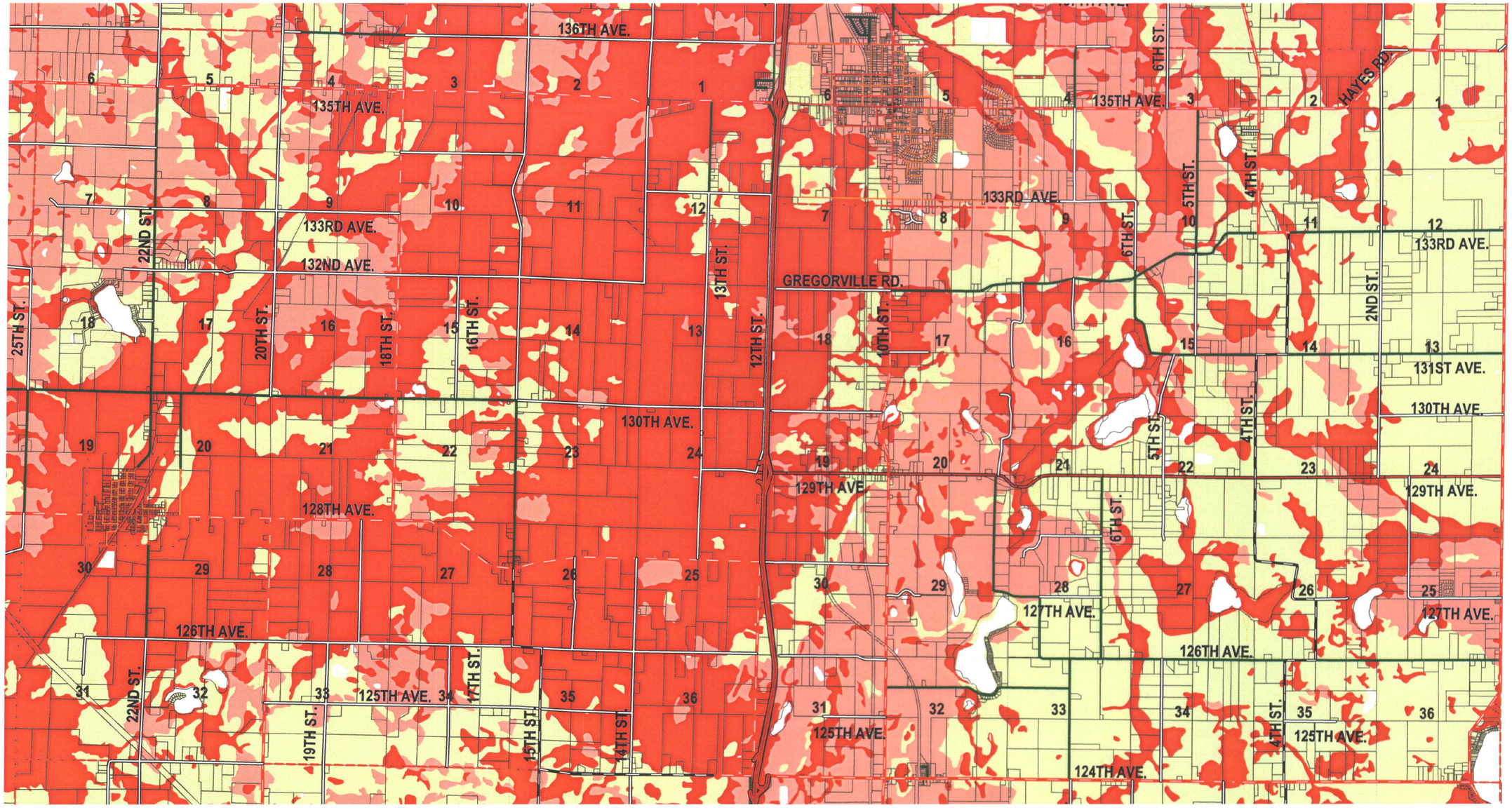

HOPKINS and WAYLAND TOWNSHIPS
ALLEGAN COUNTY

FLOODPLAINS MAP
FIGURE 5

2002 14052

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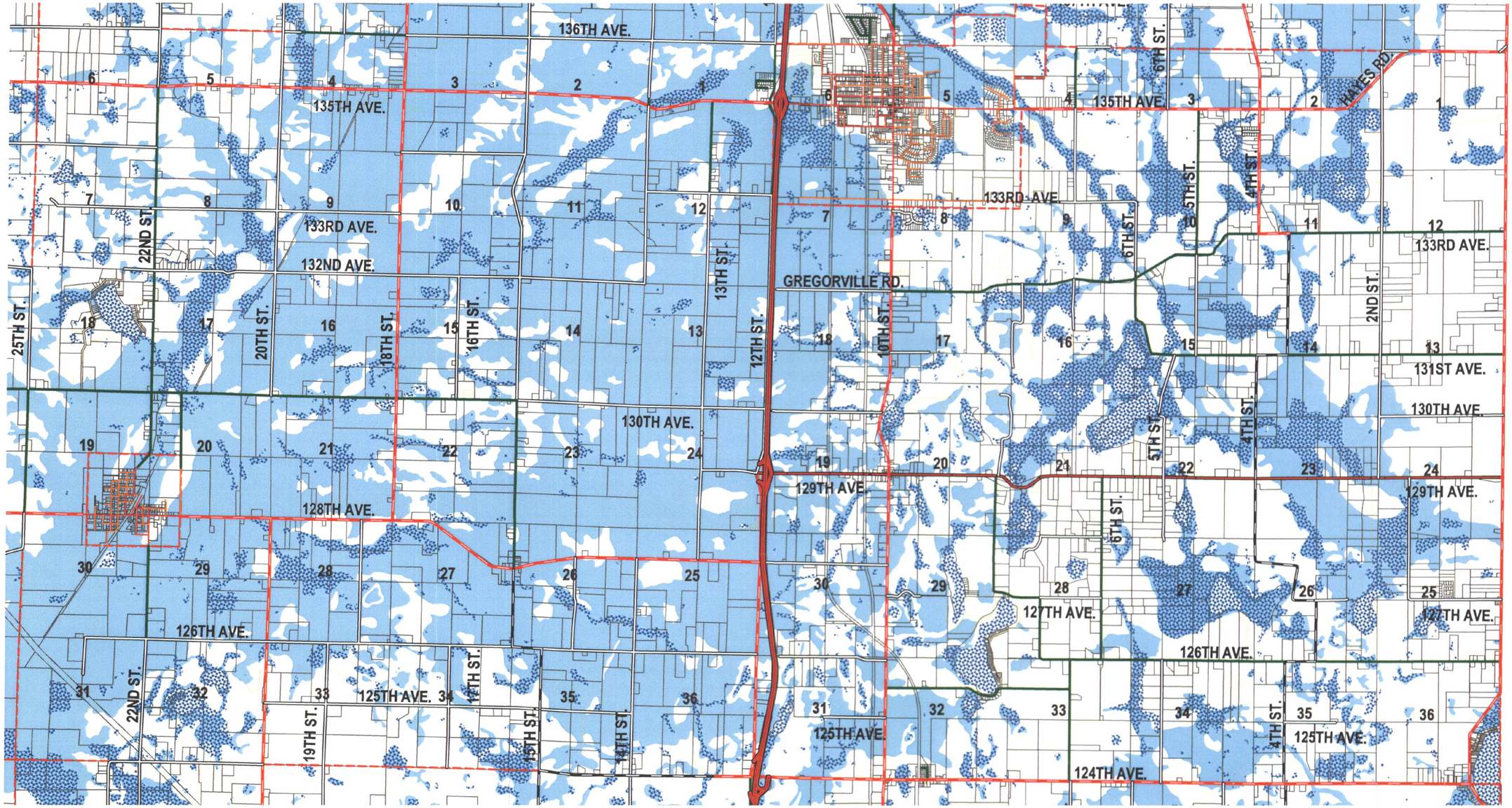

HOPKINS and WAYLAND TOWNSHIPS
ALLEGAN COUNTY

HYDRIC SOILS and WETLANDS MAP
FIGURE 6

2002 14052

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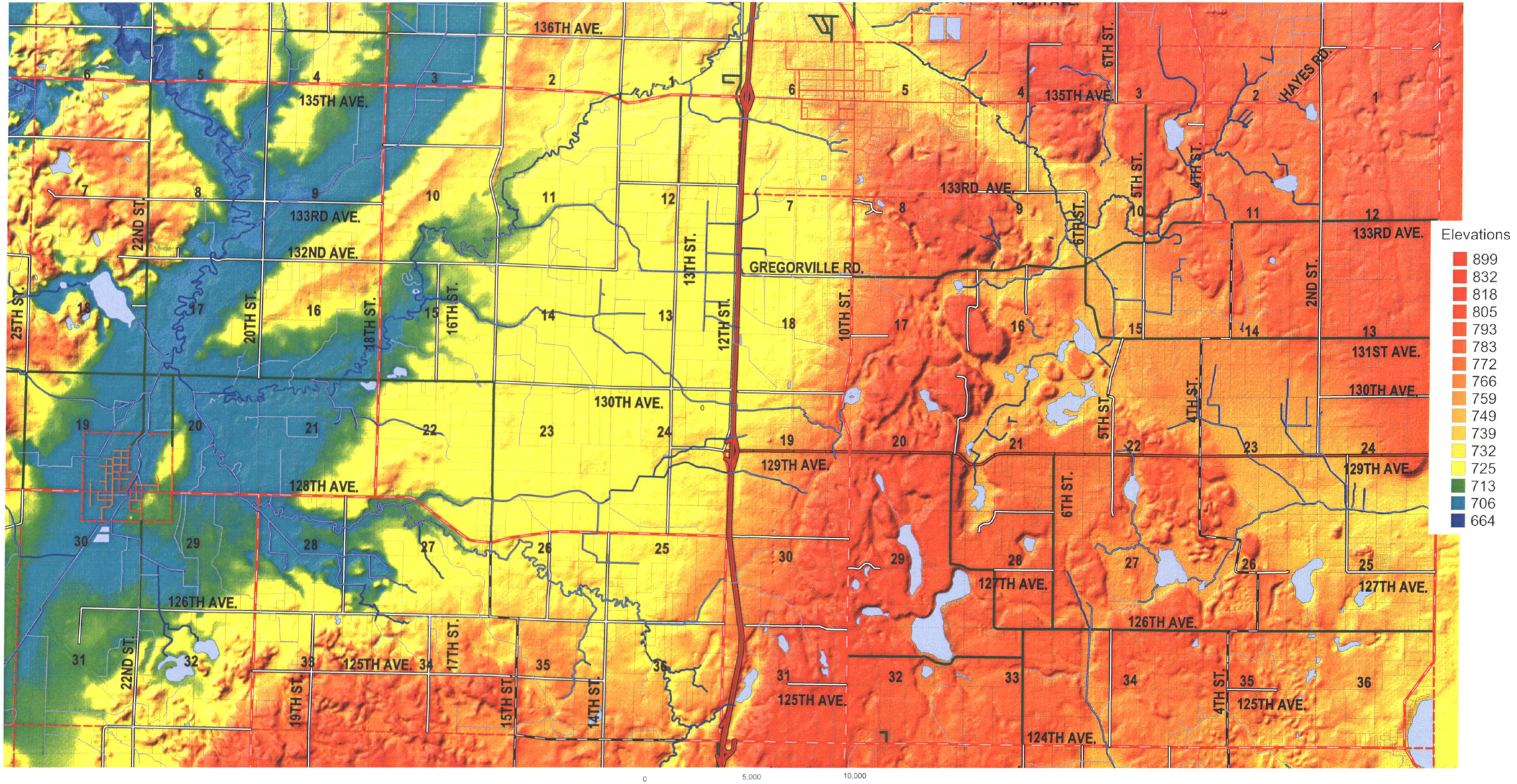
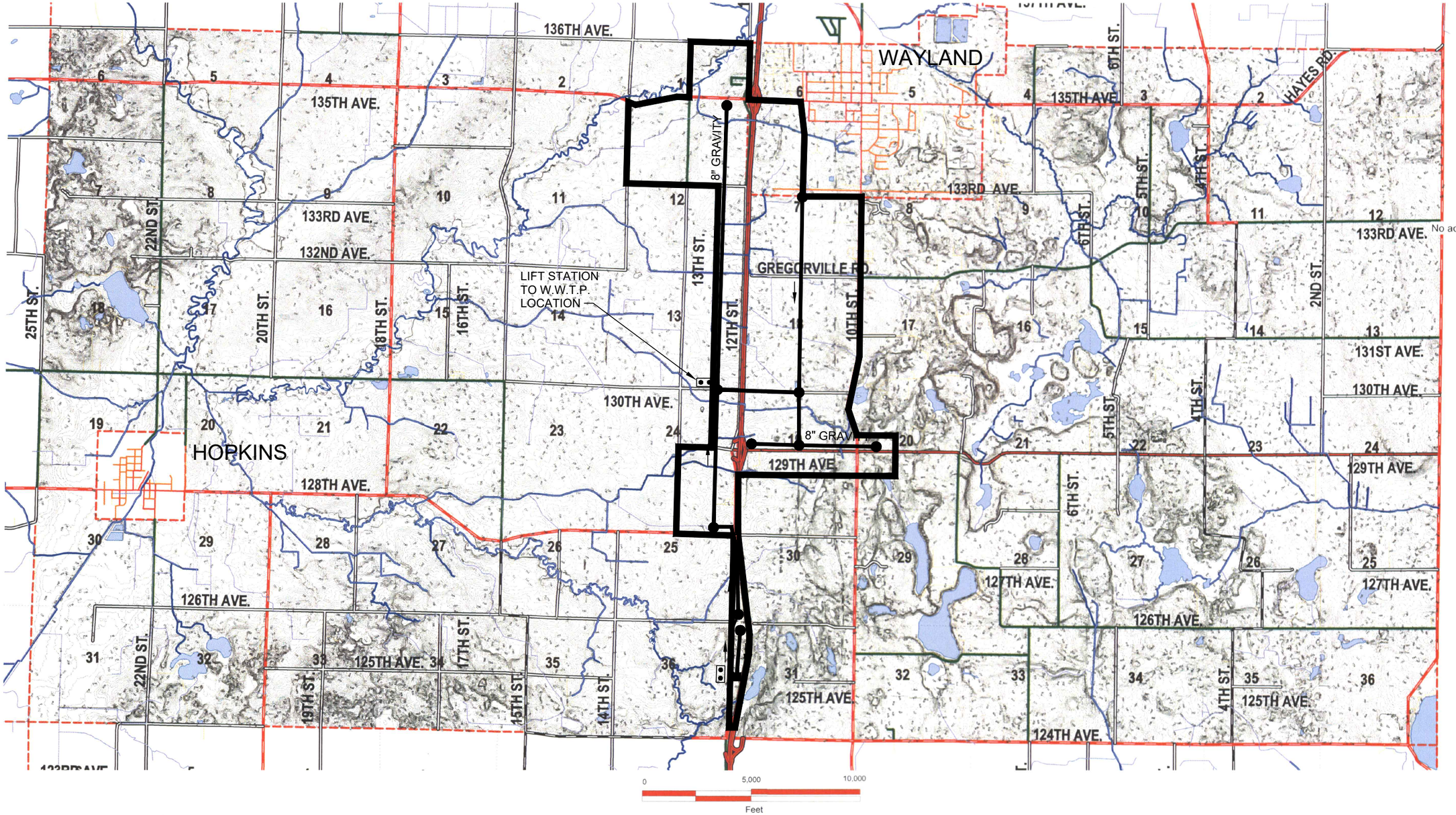


HOPKINS and WAYLAND TOWNSHIPS
ALLEGAN COUNTY

GEOGRAPHIC RELIEF MAP
FIGURE 7

2002 14052

FLEIS & VANDENBRINK ENGINEERING, INC.



No active Legend.

LEGEND

= LIFT STATION
= FORCEMAIN
= GRAVITY SEWER

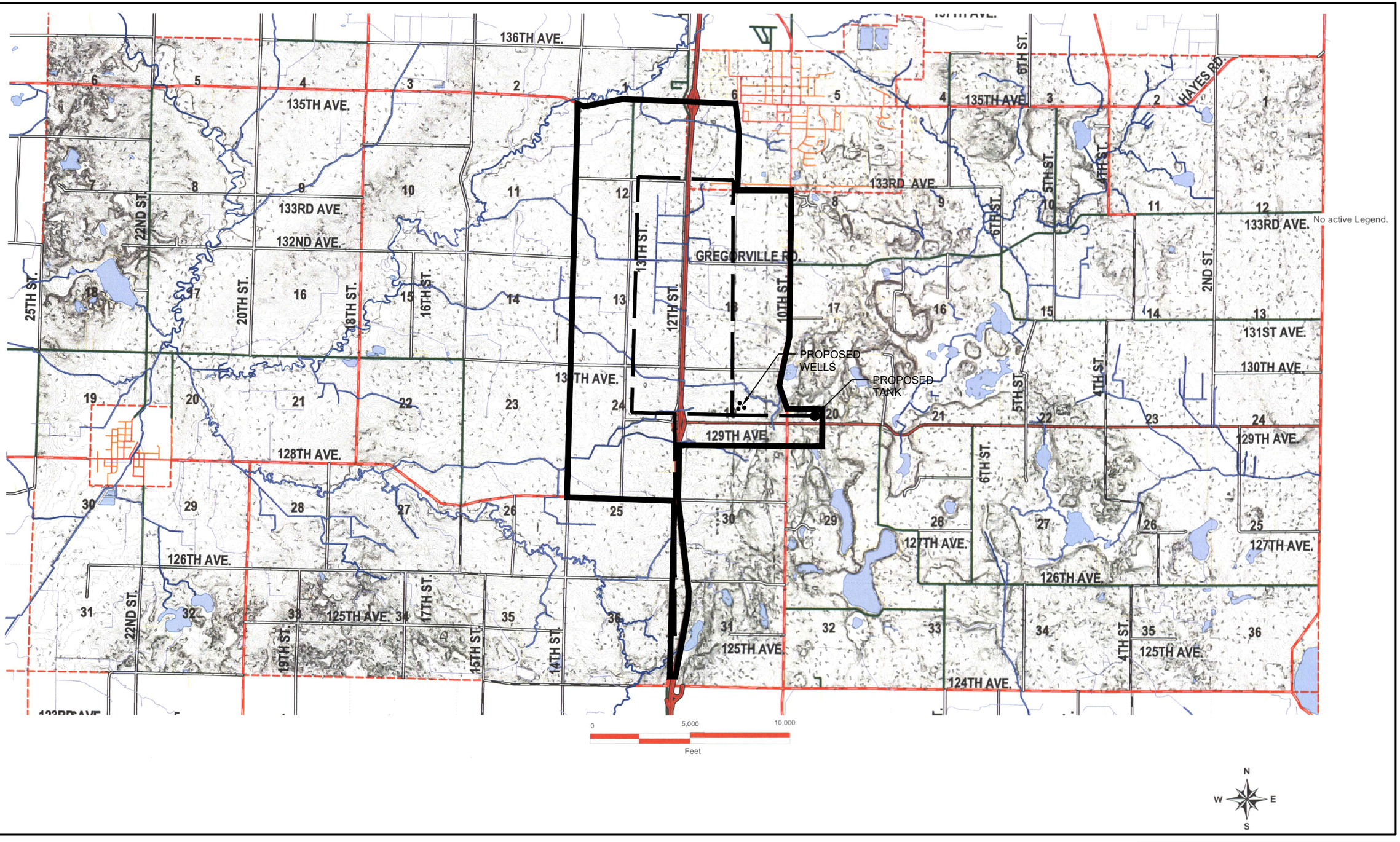
N
W E
S

HOPKINS and WAYLAND TOWNSHIPS
ALLEGAN COUNTY

INTIAL SERVICE AREA SEWER SYSTEM
CONVENTIONAL GRAVITY
FIGURE 8

2002 14052

FLEIS & VANDENBRINK ENGINEERING, INC.



HOPKINS and WAYLAND TOWNSHIPS
ALLEGAN COUNTY

INTIAL SERVICE AREA WATER SYSTEM
FIGURE 9

2002 14052

FLEIS & VANDENBRINK ENGINEERING, INC.

FLEIS&VANDENBRINK
DESIGN. BUILD. OPERATE.

June 12, 2020

Mark Evans, Supervisor
Hopkins Township
128 South Franklin Street
Hopkins, Michigan 49348

RE: Feasibility & Cost Analysis – US 131 Corridor Sanitary Sewer

Dear Mark:

Fleis & VandenBrink Engineering (F&V) has evaluated alternatives to provide sanitary sewer service to Township property owners along the US 131 corridor. This corridor generally includes those properties in a 2.5 mile stretch, along 12th Street from 135th Avenue to 130th Avenue and shown as the service area in Figure 1 attached.

Future land use of the service area is comprised of existing homes, industrial, commercial, and residential. 50% of the land currently zoned for agriculture was identified for commercial in future use and the other 50% for future residential. Existing land zoned for industrial and residential was assumed to remained zoned the same. Assumptions for average day flow generated by each type of land use is shown below in Table 1. Evaluation of initial, 100% built out, and build out conditions in 5-year increments can be seen in the Basis of Design attached.

Table 1. Average Day Wastewater Flow Assumptions.

Land Use	Avg Day Flow
Commercial (gpd/ac)	2,000
Industrial (gpd/ac)	1,500
Residential (gpd/ac)	750
Existing Home (gpd/ea)	250

COLLECTION SYSTEM

Sanitary sewer collection systems were evaluated to carry the wastewater from the service area to the proposed treatment plant. Two collection system options were evaluated, one option flows north to a wastewater treatment plant at the northern end of the service area and another option flows south to a wastewater treatment plant at the southern end of the service area.

A collection system to carry the wastewater to a treatment plant at the northern end of the service area would be comprised of a series of gravity sewers, pump stations, and forcemain. In general, the existing ground slopes towards the middle of the service area along 12th Street. For this reason, gravity sewer would flow from both ends of the service area to a pump station that would then pump to the north end where gravity sewer can continue to flow north. A second pump station would be required south of 135th Avenue to continue the wastewater to the treatment plant. This option is depicted in Figure 2.

2960 Lucerne Drive SE
Grand Rapids, MI 49546
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A second collection system was evaluated to carry the wastewater to a treatment plant at the southern end of the service area. This collection system was comprised of a series of gravity sewers, pump station, and forcemain. As stated above because the existing ground slopes towards the middle of the service area along 12th Street the gravity sewer would flow from both directions to a pump station. This pump station would then pump south to the treatment plant. A second pump station would be required to transport wastewater at the north end of the service area to a location where it can then flow by gravity. This option is depicted in Figure 3.

Gravity sewer sizes are based on full build out conditions, as gravity sewer has an estimated useful life of 75 years. The pump stations and forcemain was sized for 20 year build out conditions. At this point the pumps and forcemain could be sized larger, if necessary, to accommodate additional flow.

WASTEWATER TREATMENT FACILITY

There are many variables and development scenarios affecting the design of the Wastewater Treatment Facility (WWTF). Alternatives for the treatment facility were reviewed using the projected five-year that will allow for expansion to the projected 20-year flow in the future. In five years, it is assumed that 20% of the industrial/commercial development that is being projected for the built out has occurred. This flow also includes the current domestic flow plus a 10% utilization of estimated available residential capacity. Under this scenario, the wastewater treatment system will need to be able to treat an estimated 125,000 gpd. For the projected twenty-year flows, it is assumed that 50% of the industrial/commercial development that is being projected build out has occurred. This flow also includes the current domestic flow plus a 40% utilization of estimated available residential capacity. Under this design scenario, the WWTF would need to be expanded to be able to treat 320,000 gpd.

Two types of treatment facilities were considered for this size project, including mechanical treatment and lagoon treatment. We recommend a mechanical treatment system be utilized, because such systems have proven to be cost-effective to meet the anticipated treatment requirements for the range of flow rates identified in the 5-year to 20-year design, have smaller site size requirements, and allow for expansion to meet the projected future flow rates as the area is developed.

Two alternatives for discharge of treated water (effluent) from the treatment facility were considered: surface water discharge and groundwater discharge. Effluent parameters for both discharge options will be achievable with a mechanical treatment facility. Anticipated effluent limits are shown in Table 2 below.

With a surface water discharge, the treated effluent from any wastewater treatment process will discharge through a pipe into the Rabbit River (either directly to the river or via the Buskirk Creek). As a basis for the cost estimate, the discharge limit parameters similar to the existing treatment facilities in the area were assumed.

Discharges to groundwater are regulated under Act 451 of the Public of 1994, Part 22. Two options for groundwater discharges include: applying the treated effluent to the surface of rapid infiltration beds (RIBs) and allowing the effluent to percolate into the soil; or irrigating the treated effluent on agricultural crops and again letting the effluent percolate into the soil. Discharge using RIBs was used as a basis for the cost estimate because irrigation would require storage of treated effluent during the winter months which would be cost prohibitive at a mechanical treatment facility. However, RIBs require permeable soil to allow the effluent to percolate. Hopkins Township has limited areas of highly permeable soils, which will require the use of larger infiltration beds to be constructed. While a groundwater discharge requires the construction of an additional unit process, it allows for additional polishing of the treated effluent (specifically nitrogen and phosphorus) for nutrient control and has more favorable effluent limits compared to a surface water discharge.

*Table 2. Anticipated Effluent Limits**

Surface Water Discharge (Summer Months)	
30-Day Avg cBOD5	<4 mg/L
30-Day Avg Ammonia Nitrogen	<0.5 mg/L
30-Day Avg Total Phosphorus	<0.1 mg/L
Total Suspended Solids	<20 mg/L
Groundwater Discharge	
30-Day Avg $cBOD_5$	<10 mg/L
30-Day Avg Total Inorganic Nitrogen	<5.0 mg/L
30-Day Avg Total Phosphorus	<1.0 mg/L

*Actual discharge limits are subject to change until the groundwater discharge permit is finalized during design

Other considerations include industrial wastewater treatment needs, residuals management and facility growth capacity/reliability. For the purposes of this cost estimate, the following is assumed:

1. Any industrial wastewater discharged to the sanitary sewer system would be pretreated and the average wastewater received at the facility would be normal municipal strength.
2. Solids treatment would be aerobically stabilized and disposed of on a semi-annual basis by land applying the biosolids on farm fields. Alternatively, the solids could be dried and disposed of in a landfill.
3. Each of the alternatives would provide for growth as the service area is developed over 20 years. As the service area is developed beyond 20 years, additional capital expenditures will be required to expand the treatment capacity of the facility.

PROPERTY RIGHTS

Property rights will need to be obtained for various components of the sewer system. The piping in 12th Street and adjoining streets will be in public rights-of-way (ROW) and therefore already have the rights needed. The two pump stations for either option have the potential to be in the ROW if there is adequate space. Adequate space will be determined by ROW width, existing utilities, and pump station configuration. If there is not adequate space for the pump stations, property rights can be obtained by easements. The WWTF will need the acquisition of approximately 40 acres through property ownership.

If a groundwater discharge for the WWTF is selected, a hydrogeologic study should be completed prior to purchasing property to confirm the site is suitable for a groundwater discharge.

COST ESTIMATES

The preliminary opinion of probable cost to provide sanitary sewer to the service area is shown in Table 3 below. The total cost includes non-construction project costs such as land purchase, design and construction engineering, permitting, legal and bond counsel. Annual operating costs for the sanitary sewer system are not included in this estimate. This estimate represents conceptual estimates in 2021 dollars to be used for planning purposes. Further definition of the scope of the project through preliminary and final design will provide details necessary to improve the accuracy of conceptual estimates. Detailed cost estimates are attached.

Table 3. Project Cost Estimate

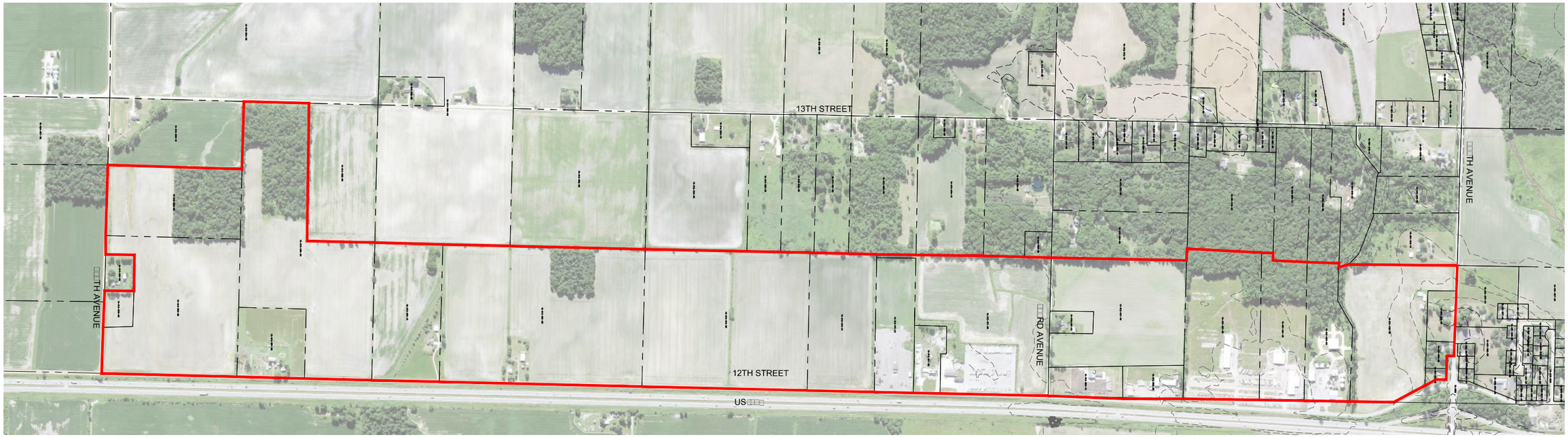
Description	Amount
Collection System and WWTF (North) with surface water discharge	$14,600,000
Collection System and WWTF (South) with surface water discharge	$15,300,000
Collection System and WWTF (North) with groundwater discharge	$14,000,000

Sincerely,

FLEIS & VANDENBRINK

Steven M. Bishop, PE
Project Manager

Attachments: Figures 1-3, Basis of Design, Cost Estimate



NORTH

LEGEND

SERVICE AREA

HOPKINS TOWNSHIP

ALLEGAN COUNTY

SEWER SERVICE AREA

FIGURE 1

F&V PROJECT NO. 844150

F&V

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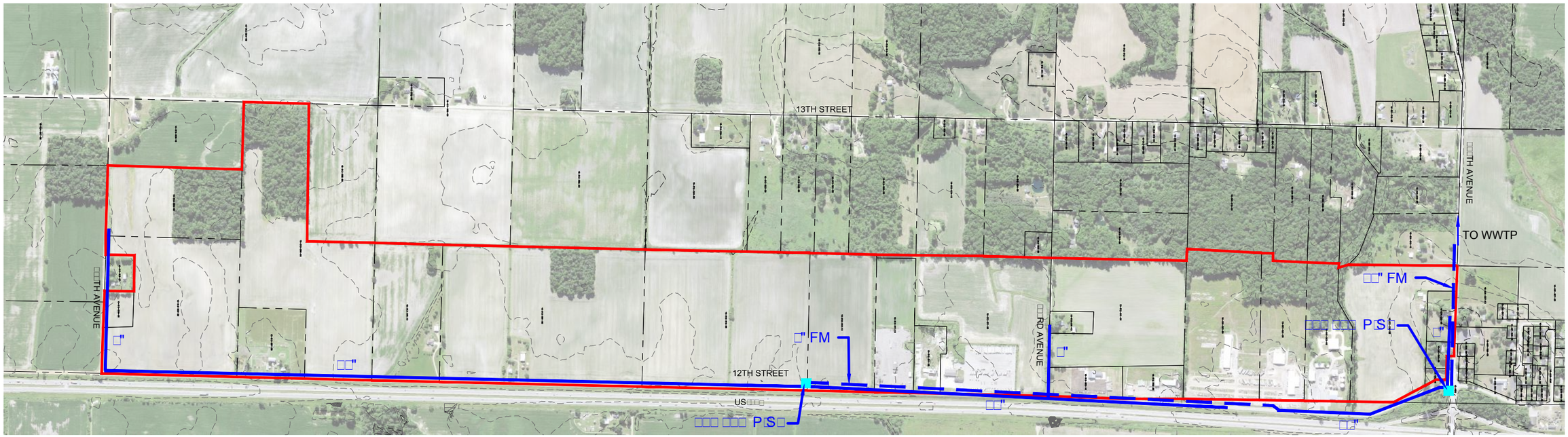


NORTH
□□□□□□□

LEGEND

- SERVICE AREA
- GRAVITY SEWER
- FORCEMAIN
- PUMP STATION

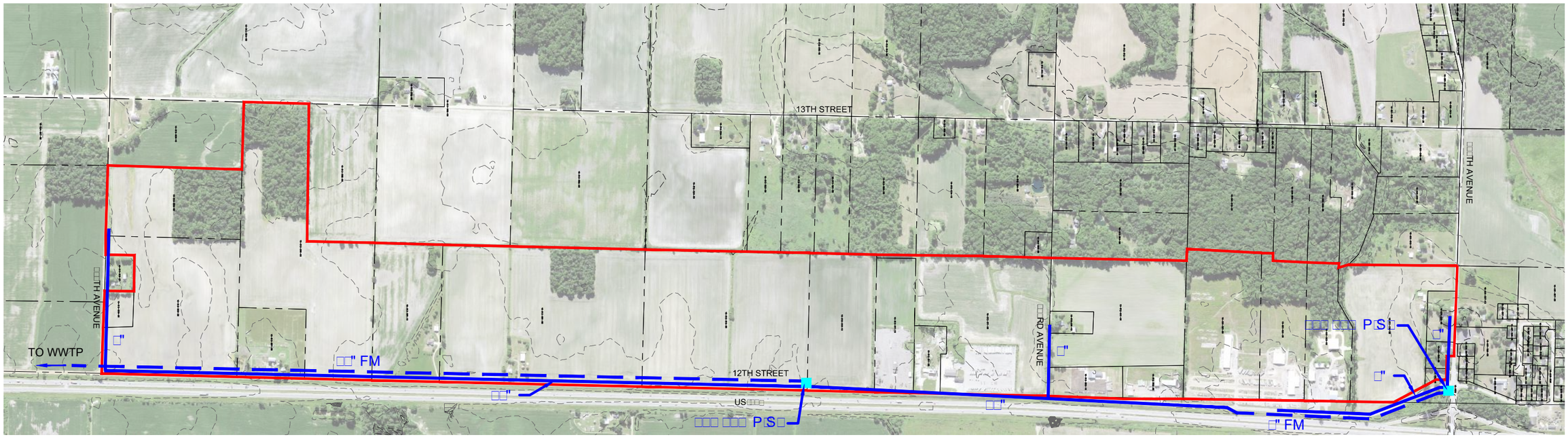
HOPKINS TOWNSHIP
ALLEGAN COUNTY
SEWER LAYOUT- WWTP NORTH

FIGURE 2

F&V PROJECT NO. 844150

F&V

danells/M:\Proj\843001-845000\844150 Hopkins Sewer Feasability Study 2020\Cad\Plns\844150_Figures.dwg



NORTH
□□□□□□□

LEGEND

- SERVICE AREA
- GRAVITY SEWER
- FORCEMAIN
- PUMP STATION

HOPKINS TOWNSHIP
ALLEGAN COUNTY
SEWER LAYOUT- WWTP SOUTH

FIGURE 3

F&V PROJECT NO. 844150

F&V

Hopkins Township

Basis of Design

Project No. 844150
Engineer: DKS
Date: 06/10/2020

FUTURE LAND USE	INITIAL SIZE (ACRES)	INITIAL WASTEWATER (GPD)	FUTURE SIZE (ACRES)	BUILT- OUT WASTEWATER (GPD)	FUTURE PERCENT DEVELOPMENT (IN YEARS); BASE YEAR 2021					FUTURE FLOW (GPD) (IN YEARS); BASE YEAR 2021				
					0-5	6-10	11-15	16-20	21-25	0-5	6-10	11-15	16-20	21-25
Residential	0	0	138	103,500	10%	20%	30%	40%	50%	10,350	20,700	31,050	41,400	51,750
Existing Home	18	1,250	18	1,250	100%	100%	100%	100%	100%	1,250	1,250	1,250	1,250	1,250
Commercial	4	8,000	188	376,000	20%	30%	40%	50%	60%	75,200	112,800	150,400	188,000	225,600
Stoddard*	12	8,000	12	20,000	40%	50%	100%	100%	100%	8,000	10,000	20,000	20,000	20,000
Industrial	43	64,500	90	135,000	20%	30%	40%	50%	60%	27,000	40,500	54,000	67,500	81,000
Total Average Daily Flow (gpd)		**81,750**		**635,750**						**121,800**	**185,250**	**256,700**	**318,150**	**379,600**
Peak Daily Flow; 2.8 peaking factor (gpd)		**228,900**		**1,780,100**						**341,040**	**518,700**	**718,760**	**890,820**	**1,062,880**

* The Stoddard property has been listed seperately because of its high flow relative to the property footprint due to the oil recyling industry located here. This basis of design assumes the wastewater will be pretreated and discharged to the collection system.

Hopkins Township

US 131 Corridor Sanitary Sewer Feasibility Study

WWTF North

Project Cost Estimate

FLEIS&VANDENBRINK engineering

Job: 844150
By: DKS
Date: 6/12/2020

Description[1]	Size	Unit	Qty.	Unit Price[2]	Amount
Wastewater Treatment Facility	125,000 gpd	LS	1	$4,700,000	$4,700,000
Gravity Sewer	8"	Ft	2,850	$170	$484,500
	10"	Ft	4,100	$200	$820,000
	12"	Ft	6,850	$230	$1,575,500
	18"	Ft	1,750	$280	$490,000
Forcemain	8"	Ft	5,000	$115	$575,000
	10"	Ft	3,000	$126	$378,000
Pump Station	500 gpm	Each	1	$575,000	$575,000
	650 gpm	Each	1	$630,000	$630,000
				Subtotal (Rounded)	**$10,200,000**
Contingency (20%)					$2,040,000
				Subtotal (Rounded)	**$12,200,000**
Engineering (15%)					$1,830,000
Bonding					$36,600
Legal					$40,000
Property Acquisition					$500,000
				Total (Rounded)	**$14,600,000**

[1] Unit price includes grass restoration only. Surface restoration including paving and road reconstruction are not included or anticipated

[2] All costs are 2021 dollars.

Hopkins Township

US 131 Corridor Sanitary Sewer Feasibility Study

WWTF South

Project Cost Estimate

FLEIS&VANDENBRINK engineering

Job: 844150
By: DKS
Date: 6/12/2020

Description[1]	Size	Unit	Qty.	Unit Price[2]	Amount
Wastewater Treatment Facility	125,000 gpd	LS	1	$4,700,000	$4,700,000
Gravity Sewer	8"	Ft	4,600	$170	$782,000
	12"	Ft	10,950	$230	$2,518,500
Forcemain	4"	Ft	2,200	$70	$154,000
	10"	Ft	10,650	$126	$1,341,900
Pump Station	150 gpm	Each	1	$575,000	$575,000
	650 gpm	Each	1	$630,000	$630,000
				Subtotal (Rounded)	**$10,700,000**
Contingency (20%)					$2,140,000
				Subtotal (Rounded)	**$12,800,000**
Engineering (15%)					$1,920,000
Bonding					$25,000
Legal					$40,000
Property Acquisition					$500,000
				Total (Rounded)	**$15,300,000**

[1] Unit price includes grass restoration only. Surface restoration including paving and road reconstruction are not included or anticipated

[2] All costs are 2021 dollars.

Hopkins Township

US 131 Corridor Sanitary Sewer Feasibility Study

WWTF - Groundwater Discharge

Project Cost Estimate

FLEIS&VANDENBRINK engineering

Job: 844150
By: DKS
Date: 6/12/2020

Description[1]	Size	Unit	Qty.	Unit Price[2]	Amount
Wastewater Treatment Facility	125,000 gpd	LS	1	$4,400,000	$4,400,000
Gravity Sewer	8"	Ft	2,850	$170	$484,500
	10"	Ft	4,100	$200	$820,000
	12"	Ft	6,850	$230	$1,575,500
	18"	Ft	1,750	$280	$490,000
Forcemain	8"	Ft	5,000	$115	$575,000
	10"	Ft	6,500	$126	$819,000
Pump Station	500 gpm	Each	1	$575,000	$575,000
	650 gpm	Each	1	$630,000	$630,000
				Subtotal (Rounded)	**$10,400,000**
Contingency (20%)					$2,080,000
				Subtotal (Rounded)	**$12,500,000**
Engineering (15%)					$1,875,000
Hydrogeologic Study					$75,000
Bonding					$25,000
Legal					$40,000
Property Acquisition					$500,000
				Total (Rounded)	**$15,000,000**

[1] Unit price includes grass restoration only. Surface restoration including paving and road reconstruction are not included or anticipated

[2] All costs are 2021 dollars.

FLEIS&VANDENBRINK
DESIGN. BUILD. OPERATE.

June 15, 2020

Mark Evans, Supervisor
Hopkins Township
142 W. Main Street
Hopkins, Michigan 49328

Re: USDA Rural Development Application – Wastewater Collection & Treatment System

Dear Mark:

Fleis & VandenBrink (F&V) is pleased to present this proposal to assist Hopkins Township (Township) with a USDA Rural Development (RD) funding application. As you know, F&V has recently evaluated serving the properties west of and adjacent to US-131 culminating in a report dated June 12, 2020. As discussed during our recent Zoom meeting, this proposal includes work to apply for Federal Assistance to fund the project through RD.

WORK PLAN

USDA RURAL DEVELOPMENT APPLICATION

The below list of items was developed by RD and required for their application process:

1. Prepare form SF-424 application for Federal Assistance, including project narrative, map, and preliminary project budget.
2. Prepare State and Regional Clearinghouse letters.
3. Assist the Township with the certification regarding commercial credit.
4. Include the Township's most recent audit in the application package.
5. Assist the Township in publishing a Public Notice stating that the Township intends to apply for funding through the USDA. The notice must be published in the local newspaper. Costs for publishing are not included in our fee presented below.
6. Compile the required Customer information and user rate schedule with Township assistance.
7. Document the Median Household Income.
8. Assist with documentation of other potential sources of funding.
9. Assist the Township in providing documentation that the proposed sewer system is consistent with area comprehensive development plan(s).
10. Prepare a Preliminary Engineering Report (PER) consistent with USDA-RD's guideline for PER's.
11. Environmental Report:
    - Assist the Michigan Rural Community Assistance Partnership (RCAP) in their preparation of the Environmental Report. We understand that RCAP is preparing this report and our involvement with its preparation will be limited to its coordination.
12. Prepare the draft engineering agreement on USDA-RD's standard form of agreement.
13. Prepare or coordinate the preparation of the draft legal services agreement.
14. Assist the Township in the obtaining or recertifying their DUNS number.

2960 Lucerne Dr. SE, Suite 100
Grand Rapids, MI 49546
P: 616.977.1000
www.fveng.com

BUDGET

F&V proposes to complete the Rural Development Application for a **Lump Sum Fee of $20,000.**

We understand the requirements and processes of the USDA program and the nuances of completing an application and administering a project successfully. We have a solid track record of managing USDA projects and completing the heavy lifting of project administration so that your staff is not burdened with large amounts of extra work. We strive to serve in our role administering the USDA project as an extension of your staff.

F&V appreciates the opportunity to be of service to Hopkins Township. If you need any additional information, please do not hesitate to contact us.

Sincerely,

FLEIS & VANDENBRINK

Steven M. Bishop, P.E.
Project Manager

Don DeVries, P.E.
Group Manager

WORK AUTHORIZATION

Fleis & VandenBrink is approved to proceed with the Scope of Services presented in this proposal as an additional service under the professional services agreement signed May 5, 2020.

HOPKINS TOWNSHIP

_____ _____

Mark Evans, Township Supervisor Date

Hopkins Township DDA Talking Points

Year	TV Captured	Millage Rate	Foregone Taxes
2021	121,082	4.5125	$ 546.38
2022	244,586	4.5125	$ 1,103.69
2023	370,560	4.5125	$ 1,672.15
2024	499,053	4.5125	$ 2,251.98
2025	630,116	4.5125	$ 2,843.40

Page 6: The duration of the DDA is "until the DDA Board or Township dissolves it"

$20,610,000 project. Projected to capture at least 40 yrs worth of incremental increase

Incremental TV increases do not need to be attributable to the DDA projects.

Composition of DDA District:

860 acres Agricultural
160 acres Commercial
93 acres Residential

S T A T E O F M I C H I G A N

BOARD OF COMMISSIONERS OF THE COUNTY OF ALLEGAN

RESOLUTION ESTABLISHING A POLICY ON TAX SHARING AGREEMENTS

WHEREAS, state law now gives counties the option of deciding whether or not to allow the capture of county property tax revenues within new or expanded development districts under the Local Development Finance Authority act (LDFA) and the Downtown Development Authority Act (DDA); and

WHEREAS, the Allegan County Board of Commissioners has considered the advantages and disadvantages of allowing such captures in the future.

THEREFORE BE IT RESOLVED, that the Allegan County Board of Commissioners adopts the following policy with respect to the capture of county property tax revenues within new or expanded development districts under the Local Development Finance Authority Act (LDFA) and the Downtown Development Authority Act DDA):

1) The County will not permit the capture of county property tax revenues in any new or amended development districts unless the Allegan County Board of Commissioners has approved a tax sharing agreement with the affected Downtown Development Authority and/or Local Development Finance Authority and the affected municipality.

2) The County will only consider the approval of a tax sharing agreement which meets the following conditions:
   a) The DDA or LDFA must have an approved plan document which specifically outlines the project. This plan document should include, at a minimum, the type of

project, estimated costs for the project, timeline for the project, estimated payback for any debt incurred, and revenue sources that will be used to fund the project. Revenue sources should be broken down to identify any local contributions including special assessments to be levied and any DDA millage levied.

b) The agreement must be only for specifically defined infrastructure projects which are directly related to economic growth within the district.

c) Specifically defined infrastructure projects must be for specific items of work, each of which is limited to a specific maximum dollar amount, to be completed within a specified time period.

d) The affected jurisdiction must allow the capture of its property tax revenues for the period of time for which County property revenues are captured.

e) Any captured county property tax revenues collected in excess of the amounts required for the projects defined within the agreement must be returned to the County on an annual basis.

f) The tax sharing agreement shall provide that it will terminate at the later of 10 years from its date or at the final maturity of any bonds, notes or other obligations payable from tax increment revenues subject to the agreement.

g) The agreement shall specify the maximum amount of captured county property tax revenues which may be collected.

h) If tax revenue is generated faster than anticipated due to growth within the district exceeding initial projections, the additional revenues may be used to defease or call any bonds or other debt obligations related to the projects approved by the tax sharing agreement in proportion with funds from other taxing jurisdictions.

3) A copy of any approved agreement shall be given to the

County Treasurer, who shall take the necessary steps to

assure that any captured property tax revenues collected in excess of the amounts permitted by the agreement are returned to the County on an annual basis.

4) The Board of Commissioners may also consider other relevant issues, including the following:

a) Possible environmental impact of the projects envisioned with such proposed tax sharing agreements.

b) Consideration of whether such project plan is consistent with the Allegan County Growth Management Plan as adopted.

BE IT FURTHER RESOLVED, that upon receipt of a request for the capture of county property tax revenues, a resolution responding to the request as provided by this policy shall be placed on the Board of Commissioner agendas for consideration for final action by the Board of Commissioners within the 60 day statutory deadline.

BE IT FURTHER RESOLVED, that a copy of any request for the capture of county property tax revenues shall be forwarded to the County Economic Development Corporation.

BE IT FURTHER RESOLVED, that an initial rejection by the Board of Commissioners of such a request may be rescinded if and when a tax sharing agreement is reached which meets the conditions of this policy.

Moved by Commissioner Campbell, seconded by Commissioner Spreitzer to adopt the resolution as presented.

Moved by Commissioner Thiele, seconded by Commissioner Black to amend the resolution. Motion failed by roll call vote: Yeas – 3 votes. Nays – 8 votes. Absent – 0 votes

N	TERRY BURNS	Y	DON BLACK
N	STEVE McNEAL	N	TOM JESSUP
N	PAUL VanECK	Y	FRITZ SPREITZER
N	MARK DeYOUNG	N	JON CAMPBELL
N	DEAN KAPENGA	N	LARRY JONES
Y	MAX THIELE		

Moved by Commissioner Burns, seconded by Commissioner Kapenga to amend the resolution to provide wording that would be more positive. Motion failed by roll call vote: Yeas 2 votes. Nays – 0 votes. Absent – 0 votes.

Y	TERRY BURNS	N	DON BLACK
Y	STEVE McNEAL	N	TOM JESSUP
N	PAUL VanECK	Y	FRITZ SPREITZER
N	MARK DeYOUNG	N	JON CAMPBELL
N	DEAN KAPENGA	N	LARRY JONES
N	MAX THIELE		

The original motion passed by roll call vote: Yeas – 9 votes. Nays – 2 votes. Absent – 0 votes.

N	TERRY BURNS	Y	DON BLACK
Y	STEVE McNEAL	Y	TOM JESSUP
Y	PAUL VanECK	Y	FRITZ SPREITZER
Y	MARK DeYOUNG	Y	JON CAMPBELL
Y	DEAN KAPENGA	Y	LARRY JONES
N	MAX THIELE		

ATTEST, A TRUE COPY

Joyce A. Watts, Clerk-Register

APPROVED: June 28, 2007

cc: Admin. – Finance - Human Resources – All Allegan County Townships and Municipalities

Commissioner and Stakeholder
Off-Road Vehicle (ORV) Question and Answer Document
(including proposed additions or changes)

Commissioner Questions 5/7/2021

1. Q: What are the age specifications and the requirements for ORV operation?

A: If a person is under 18 and does not have a license they need to complete the ORV safety education course before operating an ORV. A person under 18 without a license would also need to be under the direct supervision of a parent or guardian and have their ORV safety certificate in their immediate possession while operating an ORV. MCL 324.81131(13)

Anyone under 16 has to complete an ORV safety education course approved by the DNR before operating an ORV. The course may include a written exam and a driving test. Upon successful completion of this safety education course a person shall receive an ORV safety certificate. MCL 324.81130(1)

If a child is under 16 then they cannot operate an ORV unless they are under the direct visual supervision of an adult and they have an ORV safety certificate in their possession. It is the ORV owner's responsibility to know the age of the operator. MCL 324.81129

A parent or legal guardian of a child under 16 cannot permit the child to operate an ORV unless they are under the direct visual supervision of an adult and they have their ORV safety certificate in their possession. MCL 324.81129

A child age 12 or older, but under 16 (12-15 years of age) may cross a street, county road, or highway to operate an ORV pursuant to MCL 324.81131(9) if they have their ORV safety certificate in their possession. MCL 324.81131(9) states that under a local ordinance a person may operate an ORV with the flow of traffic on the far right of the maintained portion of the street or county road covered by the ordinance.

2. Q: Are there concerns about a minimum ORV operating age of 12 years old?

A: According to the Michigan DNR OVR Handbook, "[m]inimum ages for ORV operation are the result of an extensive review by the Michigan Legislature. The hearing process caused everyone to focus on the alarming statistics regarding young riders. According to U.S. Consumer Product Safety Commission, of the 3,353 reported ATV-related fatalities of children younger than 16 years of age (from 1982 through 2018), 1,465 (44%) were younger than 12 years of age. . . Most of the accidents involving young riders could be traced to a number of factors such as lack of supervision, machine design characteristics, and lack of training. Some parents appeared to be unaware of many of these hazards."

3. Q: Are there concerns about anyone without a license driving any vehicle or ORV on a county road?

A: According to the Michigan DNR OVR Handbook, "[r]ecognizing that there are potential safety hazards in ORV riding, the Michigan Legislature has enacted regulations that directly affect:

Operation of ORVs by children under 16 years of age
Safety equipment that is required of all ORV operators and passengers
Strict controls on the use and possession of alcohol while operating ORVs
Unlawful operation on roads open to regular vehicle traffic."

4. Q: Is there any Allegan County liability for allowing children without a license to operate ORVs on county roads?

A: Subject to section 5 of 1964 PA 170, MCL 691.1405, this state, a board of county road commissioners, a county board of commissioners, and a local unit of government are immune from tort liability for injuries or damages sustained by any person arising in any way out of the operation or use, on the maintained portion or unmaintained portion of a highway, road, or street, of an ORV that is not registered under the code (Michigan vehicle code) or that is registered under the code (Michigan vehicle code) but is operated as authorized pursuant to subsection (2), (3), (5), or (6), (Section 2 is the provision that authorizes a county ordinance.) The immunity provided by this subsection does not apply to actions of an employee of this state, an employee of a board of county road commissioners, an employee of a county board of commissioners, or an employee of a local unit of government that constitute gross negligence. As used in this subsection, "gross negligence" means conduct so reckless as to demonstrate a substantial lack of concern for whether an injury results. MCL 324.81131(15)

MCL 691.1405 states, "[g]overnmental agencies shall be liable for bodily injury and property damage resulting from the negligent operation by any officer, agent, or employee of the governmental agency, of a motor vehicle of which the governmental agency is owner, as defined in Act No. 300 of the Public Acts of 1949, as amended, being sections 257.1 to 257.923 of the Compiled Laws of 1948."

Each person who participates in the sport of ORV riding accepts the risks associated with that sport insofar as the dangers are inherent. Those risks include, but are not limited to, injuries to persons or property that can result from variations in terrain; defects in traffic lanes; surface or subsurface snow or ice conditions; bare spots; rocks, trees, and other forms of natural growth or debris; and collisions with fill material, decks, bridges, signs, fences, trail maintenance equipment, or other ORVs. Those risks do not include injuries to persons or property that result from the use of an ORV by another person in a careless or negligent manner likely to endanger person or property. When an ORV is operated in the vicinity of a railroad right-of-way, each person who participates in the sport of ORV

riding additionally assumes risks including, but not limited to, entanglement with railroad tracks, switches, and ties and collisions with trains and train-related equipment and facilities. MCL 324.81133(3)

5. Q: Should Allegan County only allow children 12-15 years old operate ORVs on private land? If Allegan County adopts a County-wide ORV ordinance, should the ordinance prohibit operators under 16 years old or operators without a license?

A: According to the Michigan DNR OVR Handbook, "[m]inimum ages for ORV operation are the result of an extensive review by the Michigan Legislature. The hearing process caused everyone to focus on the alarming statistics regarding young riders. According to U.S. Consumer Product Safety Commission, of the 3,353 reported ATV-related fatalities of children younger than 16 years of age (from 1982 through 2018), 1,465 (44%) were younger than 12 years of age. . . Most of the accidents involving young riders could be traced to a number of factors such as lack of supervision, machine design characteristics, and lack of training. Some parents appeared to be unaware of many of these hazards."

If a person is under 18 and does not have a license they need to complete the ORV safety education course before operating an ORV. A person under 18 without a license would also need to be under the direct supervision of a parent or guardian and have their ORV safety certificate in their immediate possession while operating an ORV. MCL 324.81131(13)

Anyone under 16 has to complete an ORV safety education course approved by the DNR before operating an ORV. The course may include a written exam and a driving test. Upon successful completion of this safety education course a person shall receive an ORV safety certificate. MCL 324.81130(1)

If a child is under 16 then they cannot operate an ORV unless they are under the direct visual supervision of an adult and they have an ORV safety certificate in their possession. It is the ORV owner's responsibility to know the age of the operator. MCL 324.81129

A parent or legal guardian of a child under 16 cannot permit the child to operate an ORV unless they are under the direct visual supervision of an adult and they have their ORV safety certificate in their possession. MCL 324.81129

A child age 12 or older, but under 16 (12-15 years of age) may cross a street, county road, or highway to operate an ORV pursuant to MCL 324.81131(9) if they have their ORV safety certificate in their possession. MCL 324.81131(9) states that under a local ordinance a person may operate an ORV with the flow of traffic on the far right of the maintained portion of the street or county road covered by the ordinance.

A parent or legal guardian of a child under 16 cannot permit the child to operate a 3-wheeled ATV. MCL 324.81129(3)

The owner or person in charge of a 3-wheeled ATV cannot permit a child under 16 to operate the 3-wheeled ATV. A child under 16 cannot operate a 3-wheeled ATV. MCL 324.81129

6. Q: Is there a DNR sticker required or some other custom registration for an ORV?

A: The owner of an ORV shall file an application for a license with the DNR or a dealer on forms provided by the DNR. If an ORV is sold by a dealer, the application for a license shall be submitted to the DNR by the dealer in the name of the owner. The application shall include a certification. The owner of the vehicle shall sign the application or, if the application is filed electronically, provide information requested by the DNR to verify the owner's identity. The application shall be accompanied by a fee as provided. A person shall not file an application for a license that contains false information. Upon receipt of the application in approved form and upon payment of the appropriate fee, the DNR or dealer shall issue to the applicant a license.

A license shall be issued and is valid for the 12-month period beginning April 1 and ending March 31 each year.

The fee for a license is as follows:

> Except as provided in subdivision (c), if the license does not authorize operation of the ORV on state ORV trails, $26.25.
>
> Except as provided in subdivision (c), if the license authorizes operation of the ORV on state ORV trails, $36.25.

For a license valid for a 12-month period beginning April 1, 2024 or a subsequent April 1, no fee. MCL 324.81116

Before a vehicle requiring an ORV license is operated, the owner shall ensure that a license is permanently attached to the vehicle in the manner prescribed and in the location designated by the department. MCL 324.81116(4)

A person shall not operate an ORV on a street, county road, or highway, except if the vehicle is registered under the code (Michigan vehicle code). MCL 324.81115(1)(c)

7. Q: Does Allegan County have to create a separate registration process at the county level?

A: No

8. Q: Would Allegan County need to conduct, operate, or offer a training program of any kind for ORV operators?

A: The DNR shall implement a comprehensive program for the training of ORV operators and the preparation and dissemination of ORV information and safety advice to the public. The program will provide training to youthful operators and issue the ORV safety certificates. MCL 324.81129(8)

Anyone under 16 has to complete an ORV safety education course approved by the DNR before operating an ORV. The course may include a written exam and a driving test. Upon successful completion of this safety education course a person shall receive an ORV safety certificate. MCL 324.81130(1)

If a person is under 18 and does not have a license they need to complete the ORV safety education course before operating an ORV. A person under 18 without a license would also need to be under the direct supervision of a parent or guardian and have their ORV safety certificate in their immediate possession while operating an ORV. MCL 324.81131(13)

A safety education course can be conducted by a college or university, an intermediate school district, a local school district, a law enforcement agency, or another governmental agency located in this state or by a department approved nonprofit service organization. MCL 324.81130(2)

Except for a course conducted by a private business enterprise, an applicant for a safety education course shall pay not more than a $25.00 course fee or in the case of a university or community college a fee not more than the cost of 1 credit hour of instruction. The course fees shall only be used for funding the administration and implementation of the course. MCL 324.81130(3)

An ORV safety education course approved by the DNR may be conducted by a private business enterprise. A private business enterprise may charge a course fee not to exceed the cost of conducting the course. MCL 324.81130(4)

The DNR website directs that "riders 16 years old and younger riding on public or private land in Michigan must:

1. take an approved ORV education course,
2. carry an ORV safety certificate and,

3. have direct visual supervision by an adult at all times."

On the DNR website the online ORV safety education course is $34.95.
The safety course is also offered in a few counties including: Charlevoix, Cheboygan, Clare, Eaton, and Kalkaska.

9. Q: How would Allegan County meet the requirements of a required training program for ORV operators?

A: The DNR shall implement a comprehensive program for the training of ORV operators and the preparation and dissemination of ORV information and safety advice to the public. The program will provide training to youthful operators and issue the ORV safety certificates. MCL 324.81129(8)

Anyone under 16 has to complete an ORV safety education course approved by the DNR before operating an ORV. The course may include a written exam and a driving test. Upon successful completion of this safety education course a person shall receive an ORV safety certificate. MCL 324.81130(1)

If a person is under 18 and does not have a license they need to complete the ORV safety education course before operating an ORV. A person under 18 without a license would also need to be under the direct supervision of a parent or guardian and have their ORV safety certificate in their immediate possession while operating an ORV. MCL 324.81131(13)

A safety education course can be conducted by a college or university, an intermediate school district, a local school district, a law enforcement agency, or another governmental agency located in this state or by a department approved nonprofit service organization. MCL 324.81130(2)

Except for a course conducted by a private business enterprise, an applicant for a safety education course shall pay not more than a $25.00 course fee or in the case of a university or community college a fee not more than the cost of 1 credit hour of instruction. The course fees shall only be used for funding the administration and implementation of the course. MCL 324.81130(3)

An ORV safety education course approved by the DNR may be conducted by a private business enterprise. A private business enterprise may charge a course fee not to exceed the cost of conducting the course. MCL 324.81130(4)

The DNR website directs that "riders 16 years old and younger riding on public or private land in Michigan must:

1. take an approved ORV education course,

2. carry an ORV safety certificate and,
3. have direct visual supervision by an adult at all times."

On the DNR website the online ORV safety education course is $34.95.
The safety course is also offered in a few counties including: Charlevoix, Cheboygan, Clare, Eaton, and Kalkaska.

10. Q: Who handles distribution of ORV safety certificates?

A: The DNR shall implement a comprehensive program for the training of ORV operators and the preparation and dissemination of ORV information and safety advice to the public. The program will provide training to youthful operators and issue the ORV safety certificates. MCL 324.81129(8)

Anyone under 16 has to complete an ORV safety education course approved by the DNR before operating an ORV. The course may include a written exam and a driving test. Upon successful completion of this safety education course a person shall receive an ORV safety certificate. MCL 324.81130(1)

11. Q: Are there any legal requirements for Allegan County or are they met by another agency for ORV safety certificates?

A: The DNR shall implement a comprehensive program for the training of ORV operators and the preparation and dissemination of ORV information and safety advice to the public. The program will provide training to youthful operators and issue the ORV safety certificates. MCL 324.81129(8)

Anyone under 16 has to complete an ORV safety education course approved by the DNR before operating an ORV. The course may include a written exam and a driving test. Upon successful completion of this safety education course a person shall receive an ORV safety certificate. MCL 324.81130(1)

If a person is under 18 and does not have a license they need to complete the ORV safety education course before operating an ORV. A person under 18 without a license would also need to be under the direct supervision of a parent or guardian and have their ORV safety certificate in their immediate possession while operating an ORV. MCL 324.81131(13)

A safety education course can be conducted by a college or university, an intermediate school district, a local school district, a law enforcement agency, or another governmental agency located in this state or by a department approved nonprofit service organization. MCL 324.81130(2)

Except for a course conducted by a private business enterprise, an applicant for a safety education course shall pay not more than a $25.00 course fee or in the case of a university or community college a fee not more than the cost of 1 credit hour of instruction. The course fees shall only be used for funding the administration and implementation of the course. MCL 324.81130(3)

An ORV safety education course approved by the DNR may be conducted by a private business enterprise. A private business enterprise may charge a course fee not to exceed the cost of conducting the course. MCL 324.81130(4)

The DNR website directs that "riders 16 years old and younger riding on public or private land in Michigan must:

1. take an approved ORV education course,
2. carry an ORV safety certificate and,
3. have direct visual supervision by an adult at all times."

On the DNR website the online ORV safety education course is $34.95.
The safety course is also offered in a few counties including: Charlevoix, Cheboygan, Clare, Eaton, and Kalkaska.

12. Q: Would the board of commissioners need to make any kind of up-front appropriation to handle training or enforcement for an ORV ordinance?

A: Not for an ORV safety education course. See questions 9 and 11 above.

13. Q: Are helmets required or optional for ORV operation?

A: An individual who is operating or is a passenger on an ORV shall wear a crash helmet and protective eyewear that are approved by the United States Department of Transportation. This does not apply if an individual is wearing a properly adjusted and fastened safety belt if the ORV is equipped with a roof that meets or exceeds United States Department of Transportation standards for a crash helmet. MCL 324.81133(2)

14. Q: Can a township "opt-out" of a County-wide ORV ordinance? Can a city "opt-out" of a County-wide ORV ordinance?

A: The legislative body of a township or municipality (city or village) may adopt an ordinance authorizing the operation of ORVs on 1 or more county roads located within the township or municipality, respectively. MCL 324.81131(3)

The legislative body of a township or municipality (city or village) may adopt an ordinance to close a county road located in the township or municipality to the operation of ORVs

otherwise authorized pursuant to subsection (2) (section 2 provides authority for a county ordinance). MCL 324.81131(4)

*To highlight the distinction, these provisions speak specifically to county roads located within the township, city, or village. Municipal streets are not affected by either of these provisions.

15. Q: Can a city create their own ORV ordinance?

A: A municipality (city or village) can adopt their own ORV ordinance under MCL 324.81131(3)

The legislative body of a township or municipality (city or village) may adopt an ordinance authorizing the operation of ORVs on 1 or more county roads located within the township or municipality, respectively. MCL 324.81131(3)

The legislative body of a municipality (city or village) may adopt an ordinance authorizing the operation of ORVs on 1 or more streets within the municipality. MCL 324.81131(5)

* A city may authorize operation of ORVs on county roads within the city under section 81131(3) and may authorize operation of ORVs on municipal streets under section 81131(5).

16. Q: What is the appropriate timeline for notice and for approving a County-wide ordinance and the timeline for implementing, both from a legal perspective and from a practical measure? (i.e. even if the County could implement an ordinance by June 1, 2021, is that practical?)

A: Not less than 45 days before a public hearing on the ordinance, the county clerk shall send notice of the public hearing, by certified mail, to:

a. The county road commission.
b. The legislative body of each township and municipality (city or village) located within the county.
c. The state transportation department if the road intersects a highway.
d. If state forestland is located within the county, to the DNR.

MCL 324.81131(2)

17. Q: If Allegan County implements a County-wide ORV ordinance is there any way to keep it uniform?

A: MCL 324.81131 provides authority for a county board of commissioners, and the legislative body of a township or municipality (city or village) to adopt an ordinance

authorizing the operation of ORVs on 1 or more county roads located within the jurisdiction.

Additionally, MCL 324.81131 provides authority for the board of county road commissioners to close county roads to the operation of ORVs otherwise authorized pursuant to a county, township, or municipality ordinance.

18. Q: If a city chooses to do nothing and Allegan County implements a County-wide ORV ordinance, what does that mean? Can a city "opt-out" and if so, how? What if the city does nothing and what if the city does not want to allow ORV operation?

A: A county board of commissioners may adopt an ordinance authorizing the operation of ORVs on 1 or more county roads located within the county. MCL 324.81131(2)

If the county adopts an ordinance that authorizes operation of ORVs on a county road that is within a city, then the city would need to take action as it relates to a county road within the city.

*To highlight the distinction, this relates specifically to county roads located within the city. Municipal streets are not included.

The legislative body of a township or municipality (city or village) may adopt an ordinance authorizing the operation of ORVs on 1 or more county roads located within the township or municipality, respectively. MCL 324.81131(3)

The legislative body of a township or municipality (city or village) may adopt an ordinance to close a county road located in the township or municipality to the operation of ORVs otherwise authorized pursuant to subsection (2) (section 2 provides authority for a County ordinance). MCL 324.81131(4)

The legislative body of a municipality (city or village) may adopt an ordinance authorizing the operation of ORVs on 1 or more streets within the municipality. MCL 324.81131(5)

19. Q: Is there any benefit to a County-wide ordinance versus a township or city ordinance? Is there any legal purpose of why Allegan County should focus on a County-wide ordinance rather than let the townships or cities handle it?

A: A violation of an ordinance described in this section is a municipal civil infraction. The ordinance may provide for a fine of not more than $500.00 for a violation of the ordinance. MCL 324.81131(17)

The treasurer of the local unit of government (with a County-wide ordinance, the County treasurer) shall deposit fines collected by that local unit of government, and damages collected into a fund to be designated as the "ORV fund". The legislative body (the county board of commissioners) of the local unit of government shall appropriate revenue in the ORV fund as follows:

a. Fifty percent to the county sheriff or police department responsible for law enforcement in the local unit of government for ORV enforcement and training.

b. Fifty percent to the board of county road commissioners or, in the case of a city or village, to the department responsible for street maintenance in the city or village. Revenue appropriated under this subdivision shall be used for repairing damage to streets, county roads, or highways and the environment that may have been caused by ORVs and for posting signs indicating ORV speed limits or indicating whether streets, county roads, or highways are open or closed to the operation of ORVs under this section.
MCL 324.81131(18)

20. Q: Can a township authorize on which roads it can allow ORV operation?

A: The legislative body of a township or municipality (city or village) may adopt an ordinance authorizing the operation of ORVs on 1 or more county roads located within the township or municipality, respectively. MCL 324.81131(3)

The legislative body of a township or municipality (city or village) may adopt an ordinance to close a county road located in the township or municipality to the operation of ORVs otherwise authorized pursuant to subsection (2) (section 2 provides authority for a County ordinance). MCL 324.81131(4)

21. Q: Can the townships review a County-wide ORV ordinance before the board of commissioners' vote?

A: The draft ordinance should be available for review on or about May 13, 2021.

22. Q: If an ORV operator does damage to a park by operating an ORV are the fines large enough to act as a deterrent and is there restitution payable?

A: A violation of an adopted ordinance is a municipal civil infraction. The ordinance may provide for a fine of not more than $500.00 for a violation of the ordinance. In addition, the court shall order the defendant to pay the cost of repairing any damage to the environment, a street, county road, or highway, or public property as a result of the violation. MCL 324.81131(17)

23. Q: Will the ORV ordinance keep ORVs off of bike paths or bike lanes that are on the road right-of-way meant only for bikes?

A: The authority and regulation for operation of bicycles upon highways or streets can be found in the Michigan vehicle code.

Under MCL 257.660a "[a] person operating a bicycle upon a highway or street at less than the existing speed of traffic shall ride as close as practicable to the right-hand curb or edge of the roadway except as follows: . . . (c) When conditions make the right-hand edge of the roadway unsafe or reasonably unusable by bicycles, including, but not limited to, surface hazards, an uneven roadway surface, drain openings, debris, parked or moving vehicles or bicycles, pedestrians, animals, or other obstacles, or if the lane is too narrow to permit a vehicle to safely overtake and pass a bicycle. . ."

Additionally, under MCL 257.660(3) "[w]here a usable and designated path for bicycles is provided adjacent to a highway or street, a person operating an electric personal assistive mobility device or electric skateboard may, by local ordinance, be required to use that path."

Subject to any closure of county roads under proper authority, if a local unit of government adopts an ordinance, a person may operate an ORV with the flow of traffic on the far right of the maintained portion of the street or county road covered by the ordinance. MCL 324.81131(9)

"Maintained portion" means the roadway and any shoulder of a street, county road, or highway. MCL 324.81101 amended Definitions effective March 24, 2021.

*This answer could depend on if the bike path is included as part of a county road. The proposed draft ORV ordinance would not authorize ORV operation on any municipal streets.

24. Q: Should the master map be maintained by the county and if so, shouldn't it be more clearly labeled and viewable?

A: The current proposed Allegan County ORV draft ordinance provides for ORV operation on all county roads in Allegan County and that the road commission, a township or municipality has the authority to close roads. County roads are defined in the proposed Allegan County ORV draft ordinance as "a county primary road or a county local road… under the jurisdiction of the Allegan County Road Commission". Additionally, the road commission and the sheriff's department could receive revenue from fines and damages for violations of an adopted ordinance. By allowing ORV operation on all county roads in the county, any restrictions would come from the road commission or a township or

municipality and the road commission could be the clearing house for a master map or list of roads and publish them accordingly.

Subject to any closure of county roads under proper authority, a county board of commissioners may adopt an ordinance authorizing the operation of ORVs on 1 or more county roads located within the county. MCL 324.81131(2)

The legislative body of a township or municipality (city or village) may adopt an ordinance to close a county road located in the township or municipality to the operation of ORVs otherwise authorized pursuant to subsection (2) (section 2 provides authority for a County ordinance). MCL 324.81131(4)

The board of county road commissioners may close a county road to the operation of ORVs otherwise authorized. A county road commission shall not close more than 30% of the linear miles of county roads located within the county to the operation of ORVs otherwise authorized. A county road may be closed to the operation of ORVs under this subsection only to protect the environment or if the operation of ORVs poses a particular and demonstrable threat to public safety. MCL 324.81131(4)

*Answers to questions 25 through 31 were prepared including information provided by Sheriff Frank Baker on April 26, 2021, and Prosecutor Myrene Koch on April 23, 2021 and May 3, 3021.

25. Q: Do we have enough Sheriff's Deputies to handle enforcement of a County-wide ORV ordinance?

A: The Allegan County sheriff's department currently feels that they do not have enough patrol deputies to adequately provide the existing services; however, much like that, they will respond and enforce to the extent possible.

26. Q: Will a County-wide ORV ordinance actually be enforced?

A: The Allegan County sheriff's department currently enforces ORV issues now to the extent possible. They will continue to provide enforcement.

27. Q: Who handles enforcement of ORV laws now?

A: Any law enforcement agency in the county.

28. Q: Who will handle enforcement of "closed roads"?

A: The Allegan County sheriff's department cannot speak for other agencies as to their enforcement; however, the sheriff's department will likely be the primary enforcement agency of a County-wide ORV ordinance.

29. Q: Does the Sheriff's department have the ability to enforce a County-wide ORV ordinance with existing staff?

A: The Allegan County sheriff's department will provide enforcement to the extent possible.

30. Q: Would Allegan County need to conduct, operate, or offer a training program of any kind for Sheriff's deputies for enforcement of an ORV ordinance?

A: The Allegan County sheriff's department will provide in-house legal updates on whatever is included in the final adopted ordinance that Allegan County may choose to pass.

31. Q: How will enforcement and prosecution of a County-wide ordinance be handled?

A: The Allegan County sheriff's department deferred to the Allegan County Prosecutor's office for information related to enforcement and prosecution.

The Allegan County Prosecutor states "To alleviate confusion between townships and allow for a consistent County-wide ordinance, I agree to handle the prosecution."

The legislative body of a township or municipality (city or village) may adopt an ordinance to close a county road located in the township or municipality to the operation of ORVs otherwise authorized pursuant to subsection (2) (section 2 provides authority for a County ordinance). MCL 324.81131(4)

*If the township adopts an ordinance closing a county road or roads this would be prosecuted at the local level.

Commissioner Questions 5/25/2021

32. Q: Is an unregistered snowmobile and/or a mud runner (a 4x4 pickup, Jeep, or something similarly larger than a "typical" ORV), a dune buggy, or Sherman tank a legitimate ORV lawfully operating on Allegan County roads under this ordinance?

A: Generally, no, the listed vehicles would not be considered ORVs lawfully operating under this ordinance. Here are some specifics broken down.

"Snowmobile" means any motor-driven vehicle designed for travel primarily on snow or ice of a type that utilizes sled-type runners or skis, an endless belt tread, or any combination of these or other similar means of contact with the surface upon which it is operated, but is not a vehicle that must be registered under the Michigan vehicle code, 1949 PA 300, MCL 257.1 to 257.923.

A snowmobile shall not be operated unless the owner first obtains a certificate of registration, registration decal and a trail permit sticker. The certificate of registration must accompany the snowmobile and be made available for inspection upon demand by a peace officer.

A snowmobile is required to be registered, so an unregistered snowmobile cannot operate legally/lawfully whether it could be considered an ORV or not.

The mud runner, 4 x 4 pickup, Jeep, dune buggy, and Sherman tank would need to meet all of the qualifications set out under the definition of ORV, or including ATV, and would need to comply with the lighting, braking, throttle, noise, and licensing requirements set forth in the ORV statute sections.

Also, if the vehicle is registered under the Michigan vehicle code and is more than 65 inches wide or has 3 wheels it cannot be operated pursuant to MCL 324.81131(11), which states, "[u]nless the person possesses a license as defined in section 25 of the Michigan vehicle code, 1949 PA 300, MCL 257.25, a person shall not operate an ORV as authorized pursuant to subsection (2), (3), (5), or (6) if the ORV is registered as a motor vehicle under chapter II of the Michigan vehicle code, 1949 PA 300, MCL 257.201 to 257.259, and either is more than 65 inches wide or has 3 wheels."

From the Michigan Secretary of State website:
Titling ORVs or ATVs
In Michigan, when you buy an ORV or ATV, you are issued an "off-road title." A title verifies you own the vehicle. An off-road title means the vehicle can't be operated on public streets because it was built exclusively for off-road use and lacks the necessary safety equipment for on-road use. (Michigan law does make an exception for ORVs or ATVs that are legally modified and retitled for on-road use as an assembled vehicle.)

Titling ORVs or ATVs for on-road use
Under Michigan law, certain side-by-side off-road utility vehicles may be retitled as an assembled vehicle for on-road use. Vehicles fitting this description include the John Deere "Gator" and Polaris "Ranger." You must follow the secretary of state's standard assembled vehicle title procedure. The vehicle must be retro-fitted with high- and low-beam headlights, brake lights, taillights, turn signals, horn, windshield, windshield wipers and washers, independent parking brake, street-legal tires and all other on-road equipment required by the Michigan Vehicle Code. It will be retitled as an "assembled vehicle" and issued a new vehicle identification number.

Two-wheeled ORVs (motorcycles known as "dirt bikes" or "trail bikes") also can be retitled for on-road use. A vehicle inspection is required to verify that the motorcycle has the required safety equipment.

33. Q: Is the information about an ORV roof needing to comply with DOT standards for a crash helmet valid information? ("I sincerely and adamantly question the validity of the roof safety standards vis-à-vis the standards for a crash helmet. It is like transferring the front end crash standards of a Corvette to a horse.")

A: The statute MCL 324.81133(2) states that a helmet is the standard and then lists exceptions. A seat belt and roof are an exception. See below for statutory language.

MCL 324.81133(2): An individual who is operating or is a passenger on an ORV shall wear a crash helmet and protective eyewear that are approved by the United States Department of Transportation. This subsection does not apply to any of the following:

(a) An individual who owns the property on which the ORV is operating, is a family member of the owner and resides at that property, or is an invited guest of an individual who owns the property. An exception under this subdivision does not apply to any of the following:

(*i*) An individual less than 16 years of age.

(*ii*) An individual 16 or 17 years of age, unless the individual has consent from his or her parent or guardian to ride without a crash helmet.

(*iii*) An individual participating in an organized ORV riding or racing event if an individual who owns the property receives consideration for use of the property for operating ORVs.

(b) An individual wearing a properly adjusted and fastened safety belt if the ORV is equipped with a roof that meets or exceeds United States Department of Transportation standards for a crash helmet.

(c) An ORV operated on a state-licensed game bird hunting preserve at a speed of not greater than 10 miles per hour.

(d) An ORV operated for the purpose of towing a fishing shanty or supply shed over the frozen surface of public waters at the minimum speed required to maintain controlled forward movement of the vehicle or while traveling to and from a fishing shanty at a speed of not greater than 10 miles per hour. An owner of private property is not liable for personal injuries, including death, to an individual who operates an ORV as described in this subdivision without wearing a helmet while traveling on the owner's property.

The Department of Transportation (DOT) standard for a motorcycle helmet states that to be certified it has to conform to a few minimum requirements and be able to pass a series of impact tests. The helmet will have a DOT symbol on the outside back, this means it meets the Federal Motor Vehicle Safety Standard No. 218. 49 CFR § 571.218 Standard No. 218; Motorcycle helmets.

34. Q: If operating outside the noted hours in Section 301(j) are the braking system, and brake light not required?

Section 301: j. The ORV is equipped with a braking system that may be operated by hand or foot, capable of producing deceleration at 14 feet per second on level ground at a speed of 20 miles per hour; a brake light, brighter than the taillight, visible from behind

the vehicle when the brake is activated, if the vehicle is operated during the hours of 1/2 hour after sunset and 1/2 hour before sunrise"

A: MCL 324.81133(1) An individual shall not operate an ORV:
(c) Unless the vehicle is equipped with a braking system that may be operated by hand or foot, capable of producing deceleration at 14 feet per second on level ground at a speed of 20 miles per hour; a brake light, brighter than the taillight, visible from behind the vehicle when the brake is activated, if the vehicle is operated during the hours of 1/2 hour after sunset and 1/2 hour before sunrise; and a throttle so designed that when the pressure used to advance the throttle is removed, the engine speed will immediately and automatically return to idle.

The semicolon between the different sentence parts in the statute adds the phrase "Unless the vehicle is equipped with" to the beginning of each sentence part, so the braking system is a separate requirement with no operating time constraints. The brake light is required during the specified operating times. A headlight and taillight are a separate requirement set forth in MCL 324.81131(12), "A person shall not operate an ORV as authorized pursuant to this section without displaying a lighted headlight and lighted taillight."

35. Q: Are the noise emission standards enforceable?

A: A proposed change to Section 301(k) was to add the noise emission standards defined, instead of stating as "defined by law".
MCL 324.81131(1)(f) sets forth the following: Exhaust noise emission shall not exceed 86 Db(A) or 82 Db(A) on a vehicle manufactured after January 1, 1986, when the vehicle is under full throttle, traveling in second gear, and measured 50 feet at right angles from the vehicle path with a sound level meter that meets the requirement of ANSI S1.4 1983, using procedure and ancillary equipment therein described; or 99 Db(A) or 94 Db(A) on a vehicle manufactured after January 1, 1986, or that level comparable to the current sound level as provided for by the United States Environmental Protection Agency when tested according to the provisions of the current SAE J1287, June 86 test procedure for exhaust levels of stationary motorcycles, using sound level meters and ancillary equipment therein described. A vehicle subject to this part, manufactured or assembled after December 31, 1972 and used, sold, or offered for sale in this state, shall conform to the noise emission levels established by the United States Environmental Protection Agency under the noise control act of 1972, 42 USC 4901 to 4918.

There are decibel reading or decibel level apps available to add to your cell phone which will tell you a decibel reading or decibel level at any given point in time.

36. Q: In Section 501 does "registered" mean registered under the Michigan motor vehicle code? Does this make the ORV subject to the standards of the ORV ordinance?

A: In Section 501, which was suggested to be deleted in its entirety, the language was taken directly from MCL 324.81131(16) which states: In a court action in this state, if competent evidence demonstrates that a vehicle that is permitted to operate on a road, street, or highway pursuant to the code was in a collision on a roadway with an ORV that is not registered under the code, the operator of the ORV shall be considered prima facie negligent. In MCL 324.81101 code was a provided definition as follows: "Code" means the Michigan vehicle code, 1949 PA 300, MCL 257.1 to 257.923.

Yes. "Registered" means registered under the Michigan vehicle code.

Any ORV that is registered under the Michigan vehicle code is lawfully permitted to operate on a road, street, or highway without the authorization provided by any ordinance.

37. Q: In Section 501 is "on the roadway" determinative of where an ORV should be operating?

A: In Section 501, which was suggested to be deleted in its entirety, an ORV should be operating on the maintained portion of the roadway which includes the shoulder of the road. The roadway only, does not include the shoulder.

The relevant provisions and definitions are as follows:

Section 301. ORV Operation. Subject to Section 402, a person may operate an ORV with the flow of traffic on the far right of the maintained portion of all county roads within Allegan County. . .

f. "Maintained portion" means the roadway and any shoulder of a street, county road, or highway.

l. "Roadway" means the portion of a street, county road, or highway improved, designed, or ordinarily used for travel by vehicles registered under the Michigan vehicle code. Roadway does not include the shoulder.

38. Q: Why would an operator of an ORV in the circumstance presented in Section 501 not be considered prima facie negligent?

A: Even if Section 501 is deleted in its entirety, MCL 324.81131(16) is still a relevant provision of law.

39. Q: Under Section 502, should there be a fine schedule?

A: There is nothing in the statute that prohibits a fine schedule. The statute only explicitly states under MCL 324.81131(17) that a violation is a municipal civil infraction and the civil fine shall not be more than $500.00.

40. Q: Can the County levy a municipal civil infraction fine of more than $500?

A: Possibly under other authority; however Part 811 of the Natural Resources and Environmental Protection Act, specifically MCL 324.81131(17) states that: A violation of an ordinance described in this section is a municipal civil infraction. The ordinance may provide for a fine of not more than $500.00 for a violation of the ordinance. In addition, the court shall order the defendant to pay the cost of repairing any damage to the environment, a street, county road, or highway, or public property as a result of the violation.

The term "may" provide for a fine of not more than $500.00 determines it does not have to be $500.00, but cannot be more than $500.00.

In *Huron Township v City Disposal Systems, Inc. Huron Township v Inland Waters Pollution Control, Inc.,* 448 Mich 362 (1995), "[t]he amount or limitation of a penalty imposed by or under an ordinance must comply with a specific governing provision of law. Where the penalty is fixed by statute, the penalty imposed by the ordinance cannot exceed the limit prescribed."

41. Q: Who is going to be authorized to issue tickets?

A: Under MCL 600.8701(a) "Authorized local official" means a police officer or other personnel of a county, city, village, township, or regional parks and recreation commission created under section 2 of 1965 PA 261, MCL 46.352, legally authorized to issue municipal civil infraction citations.

MCL 600.8703(1) A municipal civil infraction action is commenced upon the issuance of a citation as provided in section 8707. The plaintiff in a municipal civil infraction action is the political subdivision whose ordinance has been violated.

MCL 600.8707(1) An authorized local official who witnesses a person violate an ordinance a violation of which is a municipal civil infraction shall prepare and subscribe, as soon as possible and as completely as possible, an original and 3 copies of a citation, except as provided in subsection (6). Subsection 6 speaks about an established municipal ordinance violations bureau.

42. Q: Does the county have an exhaustive description, meeting multiple standards of the municipal civil infraction design and operation? If not, should this be developed at the same time as this ordinance?

A: The law regarding Municipal Civil Infractions is set forth in the Revised Judicature Act of 1961, PA 236 of 1961 and specifically Chapter 87, MCL 600.8701 – MCL 600.8735. Otherwise, this may require additional legal research.

43. Q: Can a person, 18 years or older, without a license, but with a safety certificate, operate an ORV under this proposed ordinance?

A: Section 301. ORV Operation states: "Subject to Section 402, a person may operate an ORV with the flow of traffic on the far right of the maintained portion of all county roads within Allegan County; provided that:
b. A person possesses a license as defined in Section 25 of the Michigan Vehicle Code, MCL 257.25."

Under the draft ordinance this requires a person to possess a license with two limited exceptions stated in in items "e." and "f." for persons under 18 and persons under 12.

MCL 324.81131(13) states: A person under 18 years of age shall not operate an ORV as authorized pursuant to this section unless the person is in possession of a valid driver license or under the direct supervision of a parent or guardian and the person has in his or her immediate possession an ORV safety certificate issued pursuant to this part or a comparable ORV safety certificate issued under the authority of another state or a province of Canada. A person under 12 years of age shall not operate an ORV as authorized pursuant to this section. The requirements of this subsection are in addition to any applicable requirements of section 81129. Section 81129 sets out requirements for child ORV operators.

44. Q: Are there concerns about anyone without a license driving an ORV on a county road?

A: Generally, yes, which is why the legislature does not allow ORV's which are not registered under the Michigan vehicle code to operate on streets, county roads, or highways, except as provided for and authorized by an adopted ordinance. MCL 324.81122(1).

45. Q: Are both an ORV license and an ORV permit required to operate under this ordinance?

A: The Michigan DNR website sets forth specific information about licensing and permit requirements. Additionally, the DNR website has a chart of requirements based on type of vehicle and designated trails or routes and what is necessary.

- An **ORV license** is required to ride eligible county roads, frozen surface of public waters, state forest roads (that are open to ORV use) and eligible national forest roads. A license is not required to operate on private lands. The cost is $26.25. *Both the ORV license and trail permit are valid for one year, which begins April 1 and ends March 31 of the following year.*
- An **ORV trail permit** is required when operating on designated **ORV Trail / Routes and special ORV-use areas**. A trail permit is not required to operate on private lands. The cost is $10 (plus $26.25 for the ORV license) for a total of $36.25. *Both the ORV license and trail permit are valid for one year, which begins April 1 and ends March 31 of the following year.* ORV trail permits are not valid as a stand-alone license; an ORV license must also be purchased.

Under the ordinance a county road is defined term. Under MCL 324.81123 the DNR was required by October 1, 1991, to develop a comprehensive plan for the management of ORV use of areas, routes, and trails maintained by or under the jurisdiction of the department (DNR) or local unit of government pursuant to section 81131.

Additionally, under MCL 324.81115(1)(c) Subject to subsection (2), a person shall not operate an ORV under any of the following conditions unless the ORV is licensed with the department or a dealer as provided under this part:
(c) On a street, county road, or highway, except if the vehicle is registered under the code.

An ORV needs an ORV license to operate on a county road.

46. Q: Is the County under any obligation to provide an ORV safety course? Does the County intend to provide an ORV safety course?

A: MCL 324.81130 sets forth the requirements for an ORV safety education course. The course needs to be approved by the department (DNR). They can be conducted by a college or university, an intermediate school district, a local school district, a law enforcement agency, or another governmental agency located in Michigan.

There is no obligation for the County to provide an ORV safety course.

Additionally, the Sheriff has indicated that they would not be offering an ORV safety course, at least initially.

47. Q: Original question 19 was not answered. Original Q19 was: Is there any benefit to a County-wide ordinance versus a township or city ordinance? Is there any legal purpose of why Allegan County should focus on a County-wide ordinance rather than let the townships or cities handle it?

A: There are no legal benefits or legal purposes why Allegan County should focus on a County-wide ordinance.

48. Q: Under original Q31, what is the local level?

A: Local level is either a township, city or village.

49. Q: Under the outline provided, what are subsections (2) and (3) of the statute?

A: MCL 324.81131: (2) Subject to subsection (4), a county board of commissioners may adopt an ordinance authorizing the operation of ORVs on 1 or more county roads located within the county. Not less than 45 days before a public hearing on the ordinance, the county clerk shall send notice of the public hearing, by certified mail, to the county road commission, to the legislative body of each township and municipality located within the county, to the state transportation department if the road intersects a highway, and, if state forestland is located within the county, to the department. If the county is a southern county, before adopting an ordinance under this subsection, the county board of commissioners shall consult with the board of county road commissioners.

(3) Subject to subsection (4), the legislative body of a township or municipality may adopt an ordinance authorizing the operation of ORVs on 1 or more county roads located within the township or municipality, respectively. Not less than 28 days before a public hearing on the ordinance, the clerk of the township or municipality shall send notice of the public hearing, by certified mail, to the county road commission, to the county board of commissioners, to the legislative body of every other township and municipality located within the county, to the state transportation department if the road intersects a highway, and, if state forestland is located within the township or municipality, to the department. If the township or municipality is located in a southern county, before adopting an ordinance under this subsection, the legislative body of the township or municipality shall consult with the board of county road commissioners. This subsection does not apply to a township or municipality until 1 year after the effective date of the amendatory act that first authorized the county in which that township or municipality is located to adopt an ordinance under subsection (2).

50. Q: In the outline under I. C. 4. is the "reason for closure" a strict and specific limitation upon townships and municipalities to be able to "opt out" in whole or in part from a county-wide ORV ordinance? Also, is that same "reason for closure" a strict and specific limitation upon the Board of County Road Commissioners in its designations of "county roads closed to ORV use"?

A: The "reason for closure" section comes from MCL 324.81131(4), which states:
The board of county road commissioners may close a county road to the operation of ORVs otherwise authorized pursuant to subsection (2) or (3). A county road commission shall not under this subsection close more than 30% of the linear miles of county roads located within the county to the operation of ORVs otherwise authorized pursuant to subsection (2) or (3). The legislative body of a township or municipality may adopt an

ordinance to close a county road located in the township or municipality to the operation of ORVs otherwise authorized pursuant to subsection (2). The legislative body of a village may adopt an ordinance to close a county road located in the village to the operation of ORVs otherwise authorized by the township pursuant to subsection (3). A county road may be closed to the operation of ORVs under this subsection only to protect the environment or if the operation of ORVs poses a particular and demonstrable threat to public.

Generally, yes, the restriction of closing a county road to "protect the environment or if the operation of ORVs poses a particular and demonstrable threat to public" does apply to the closure of county roads set forth in the statute subsection.

51. Q: What is an ARGO and similar amphibious vehicle? Is it use that defines?

A: Wikipedia definition of amphibious machine is a vehicle that is a means of transport, viable on land as well as on (or under) water. They can include bicycles, ATVs cars, buses, trucks, combat vehicles, boats, and hovercraft.

ARGO was named after the Argonaut of Greek mythology for its stamina on land and water. It started in 1962 as a subsidiary of Ontario Drive & Gear Limited. In 1967 ODG decided to introduce its own 6-wheel amphibious vehicle.

Under Article II's definitions, an ORV includes an amphibious machine.
j. "ORV" or, unless the context implies a different meaning, "vehicle" means a motor-driven off-road recreation vehicle capable of cross-county travel without benefit of a road or trail, on or immediately over land, snow, ice, marsh, swampland, or other natural terrain. A multitrack or multiwheel drive vehicle, a motorcycle or related 2-wheel vehicle, a vehicle with 3 or more wheels, an amphibious machine, a ground effect air cushion vehicle, or other means of transportation may be an ORV. An ATV is an ORV. ORV or vehicle does not include a registered snowmobile, a farm vehicle being used for farming, a vehicle used for military, fire, emergency, or law enforcement purposes, a vehicle owned and operated by a utility company or an oil or gas company when performing maintenance on its facilities or on property over which it has an easement, a construction or logging vehicle used in performance of its common function, or a registered aircraft.

52. Q: Does the County, in fact, have the authority to construct an ordinance more restrictive than state law?

A: From the Michigan Municipal League Handbook, Section 2: Roles and Responsibilities, Chapter 7: Local ordinances,
Consistency with State and Federal Laws and Local Charters
The provisions of an ordinance must be consistent with state law; the ordinance may not conflict with or be preempted by a state law. The same holds true for federal law. A

direct conflict exists if an ordinance permits what a state statute prohibits or prohibits what a state statute permits. Some areas of potential local regulation may be preempted by a state (or federal) statute, either expressly or because the statutory scheme occupies the field of regulation. In that case, the local regulation cannot be upheld, even though there is no direct conflict. An ordinance may not conflict with the provisions of a local charter.

From the MSU Extension Article – County Government Powers are Very Limited
County ordinance making authority is from four categories:

> Must be related to "county affairs" (e.g., internal operations of the county such as ordinances about county-owned land, buildings, facilities).
> Cannot contravene (conflict with) state law.
> Cannot interfere in local affairs (e.g., what city, village or township ordinances may require).
> Lack of general police power. This limitation is not found above, but, rather, is the absence of state statute that delegated such authority to county government. No statute specifically gives county commissions a general grant of authority to regulate or pass ordinances to protect the "health, safety, and welfare" of its population. Such statutes do exist for cities, villages, and townships.

The Powers of the county board of commissioners law Public Act 156 of 1851, MCL 46.11(j) states: By majority vote of the members of the county board of commissioners elected and serving, pass ordinances that relate to county affairs and do not contravene the general laws of this state or interfere with the local affairs of a township, city, or village within the limits of the county, and pursuant to section 10b provide suitable sanctions for the violation of those ordinances. The board may change the limits of a city, village, or school district within the county as provided by law. If there is not a general law governing the subject, or if a change cannot be made pursuant to a general law, the board may change the limits of the village upon petition of at least 10% of the resident taxpayers. An ordinance or act of incorporation provided in this subdivision takes effect when notice of the adoption is published in a newspaper of general circulation in the county. The clerk of the county board of commissioners shall engross each ordinance or act, and it shall be signed by the chairperson of the county board of commissioners and certified by the clerk of the county board of commissioners. If, within 50 days after the county board of commissioners adopts an ordinance or act, a petition signed by not less than 20% of the electors residing in the district to be affected by the ordinance or act is filed with the county clerk asking that the ordinance or act be submitted to electors of the district to be affected by the ordinance or act for approval or rejection, then the ordinance or act does not take effect until it is approved by a majority of the electors of the district affected voting on that issue at a regular or special election called for that purpose. The county board of commissioners shall provide the manner of submitting the ordinance or act to the electors for their approval and of determining the result of the election.

Commissioner Proposed Additions or Changes 5/25/2021

Draft Ordinance ARTICLE II – Definitions

Proposed ADD: "ATV" (all-terrain vehicle) means a vehicle with 3 or more wheels that is designed for off-road use, has low-pressure tires, has a seat designed to be straddled by the rider, and is powered by a 50cc to 1,000cc gasoline engine or an engine of comparable size using other fuels. MCL 324.81101(b)
Original: No definition of "ATV" included.
***No objections to including this definition.*

Proposed CHANGE: "Maintained portion" means the roadway and shoulders of a county road.
Original: "Maintained portion" means the roadway and any shoulder of a street, county road, or highway. MCL 324.81101(o)

Proposed CHANGE: "Operate" means to ride in or on and be in actual physical control of an ORV.
Original: "Operate" means to ride in or on, and be in actual physical control of, the operation of an ORV. MCL 324.81101(s)

Proposed CHANGE: "Operator" means an individual who is in actual physical control of the ORV.
Original: "Operator" means an individual who operates or is in actual physical control of the operation of an ORV. MCL 324.81101(t)

Proposed CHANGE: "ORV" (Off-road vehicle) means a motor-driven off-road recreation vehicle capable of cross-county travel without benefit of a road or trail, on or immediately over land, snow, ice, marsh, swampland, or other natural terrain. A multitrack or multiwheel drive vehicle, a motorcycle or related 2-wheel vehicle, a vehicle with 3 or more wheels, an amphibious machine, a ground effect air cushion vehicle, or other means of transportation. An ATV is an ORV. A registered snowmobile, a farm vehicle being used for farming, a vehicle used for military, fire, emergency, or law enforcement purposes, a vehicle owned and operated by a utility company or an oil or gas company when performing maintenance on its facilities or on property over which it has an easement, a construction or logging vehicle used in performance of its common function, or a registered aircraft is not an ORV.
Original: "ORV" or, unless the context implies a different meaning, "vehicle" means a motor-driven off-road recreation vehicle capable of cross-county travel without benefit of a road or trail, on or immediately over land, snow, ice, marsh, swampland, or other natural terrain. A multitrack or multiwheel drive vehicle, a motorcycle or related 2-wheel vehicle, a vehicle with 3 or more wheels, an amphibious machine, a ground effect air cushion vehicle, or other means of transportation may be an ORV. An ATV is an ORV. ORV or vehicle does not include a registered snowmobile, a farm vehicle being used for farming, a vehicle used for military, fire, emergency, or law enforcement purposes, a vehicle owned and operated by a utility company or

an oil or gas company when performing maintenance on its facilities or on property over which it has an easement, a construction or logging vehicle used in performance of its common function, or a registered aircraft. MCL 324.81101(u)

Proposed CHANGE: "ORV safety certificate" means a written document issued under the Act or a comparable authority of another state or Canadian province proving that an individual has successfully/satisfactorily completed all components of an approved ORV safety course.
Original: "ORV safety certificate" means an ORV safety certificate issued under the Act or a comparable safety certificate issued under the authority of another state or province of Canada.
Statute: "ORV safety certificate" means an ORV safety certificate issued under section 81130 or, except as used in section 81130, a comparable safety certificate issued under the authority of another state or province of Canada. MCL 324.81101(v)
***Recommendation to keep the original definition as written.*

Proposed ADD: the term "Vehicle" to the list of definitions, but no requested definition provided.
Statute: "Vehicle" means every device in, upon, or by which any person or property is or may be transported or drawn upon a highway, except devices exclusively moved by human power or used exclusively upon stationary rails or tracks and except, only for the purpose of titling and registration under this act, a mobile home as defined in section 2 of the mobile home commission act, Act No. 96 of the Public Acts of 1987, being section 125.2302 of the Michigan Compiled Laws. MCL 257.79
*** No recommendation to include this definition.*

Proposed CHANGE: "Visual supervision" means the direct observation of the operator with the unaided or normally corrected eye by an observer who is able to come to the immediate, physical aid of the operator by being co-located/contiguous/in/on/next to the operator.
Original: "Visual supervision" means the direct observation of the operator with the unaided or normally corrected eye by an observer who is able to come to the immediate aid of the operator. MCL 324.81101(k)
*** If the proposed change to visual supervision is added, it is recommended to include the following provision for clarity (under Article III ORV Operation). MCL 324.81133(1) "An individual shall not operate an ORV:. . . (s) While transporting any passenger in or upon an ORV unless the manufacturing standards for the vehicle make provisions for transporting passengers." MCL 324.81133(1)(s)*

Draft Ordinance ARTICLE III – ORV Operation, Section 301

Proposed CHANGE: b. A person possesses a license as defined in Section 25 of the Michigan Vehicle Code, MCL 257.25, with the exception presented by "e" below.
Original: b. A person possesses a license as defined in Section 25 of the Michigan Vehicle Code, MCL 257.25.

Proposed CHANGE: d. A person shall not operate an ORV without displaying a lighted headlight, lighted taillight, and a flag on whip standard not less than six (6) feet long attached to the ORV.
Original: d. A person shall not operate an ORV without displaying a lighted headlight and lighted taillight. MCL 324.81131(12)
*** Some criteria for a "flag" included in a relevant section of the statute. MCL 324.81122(1)(c) "An operator of an ORV under this subdivision shall have attached to the ORV a flag made of reflective material. The flag shall extend not less than 8 feet from the surface of the street, county road, or highway and not less than 4 feet above the top of the ORV. The flag shall be not less than 12 inches high by 18 inches long and not measure less than 100 square inches."*

Proposed CHANGE: e. No person 12 - 18 (at least twelve and less than 18) years of age may operate an ORV unless the person is in possession of a valid license or under the direct supervision of a parent or guardian and the person has in his or her immediate possession an ORV safety certificate.
Original: e. No person under 18 years of age may operate an ORV unless the person is in possession of a valid license or under the direct supervision of a parent or guardian and the person has in his or her immediate possession an ORV safety certificate. MCL 324.81131(13)
*** Recommendation to include the written words, rather than the hyphen, if the proposed change is adopted, for clarity.*

Proposed CHANGE: j. The ORV, if operated during the hours of 1/2 hour after sunset and 1/2 hour before sunrise, is equipped with a braking system that may be operated by hand or foot, capable of producing deceleration at 14 feet per second on level ground at a speed of 20 miles per hour and a brake light, brighter than the taillight, visible from behind the vehicle when the brake is activated.
Original: j. The ORV is equipped with a braking system that may be operated by hand or foot, capable of producing deceleration at 14 feet per second on level ground at a speed of 20 miles per hour; a brake light, brighter than the taillight, visible from behind the vehicle when the brake is activated, if the vehicle is operated during the hours of 1/2 hour after sunset and 1/2 hour before sunrise. MCL 324.81133(1)(c)

Proposed CHANGE: k. Add the noise emission standards defined.
Original: k. The ORV is operated pursuant to noise emission standards defined by law. MCL 324.81133(1)(f)
Statute: MCL 324.81131(1)(f) sets forth the following: Exhaust noise emission shall not exceed 86 Db(A) or 82 Db(A) on a vehicle manufactured after January 1, 1986, when the vehicle is under full throttle, traveling in second gear, and measured 50 feet at right angles from the vehicle path with a sound level meter that meets the requirement of ANSI S1.4 1983, using procedure and ancillary equipment therein described; or 99 Db(A) or 94 Db(A) on a vehicle manufactured after January 1, 1986, or that level comparable to the current sound level as provided for by the United States Environmental Protection Agency when tested according to the provisions of the current SAE J1287, June 86 test procedure for exhaust levels of stationary motorcycles, using sound level meters and ancillary equipment therein described. A vehicle subject to this part,

manufactured or assembled after December 31, 1972 and used, sold, or offered for sale in this state, shall conform to the noise emission levels established by the United States Environmental Protection Agency under the noise control act of 1972, 42 USC 4901 to 4918.

Proposed CHANGE: l. The ORV may not be operated on the road surface, roadway, shoulder or right-of-way of any State or Federal highway unless crossing the highway at right angles.
Original: l. The ORV may not be operated on the road surface, roadway, shoulder or right-of-way of any State or Federal highway. MCL 324.81122(1)
Statute: MCL 324.81122(1)(a) The operator of a vehicle may cross a street, county road, or highway, other than a limited access highway, at right angles, for the purpose of getting from 1 area to another, if the operation can be done in safety. The operator shall bring the vehicle to a complete stop before proceeding across a street, county road, or highway, and shall yield the right-of-way to oncoming traffic.
***Whether included or not, MCL 324.81122(1)(a) is still a relevant provision of law.*

Stakeholder Questions 5/25/2021

16. Q: First line of Section 301 says "on the far right of the maintained portion of the county road", does that "maintained portion" include the shoulder (either paved or not paved) to the right of the white line (where present)? In the definition section the roadway is defined as NOT including the shoulder. Has the road commission determined which, if any county roads they would exempt from this ordinance? ***Submitted via email on May 20, 2021 by Jim Connell***

A: Thank you for your correspondence. You are correct that the "roadway" does not include the shoulder of the road. The "maintained portion" is also a defined term in the draft ordinance and that does include the shoulder. See Article II - Definitions; f. "Maintained portion" means the roadway and any shoulder of a street, county road, or highway.

As of now, the County has not received any information from the board of the road commission about which roads it would close to operation of ORVs if a County-wide ordinance is implemented. *Response provided via email on May 24, 2021*

CITY OF ALLEGAN
RESOLUTION NO. 21.12

A RESOLUTION TO SUPPORT ALLEGAN COUNTY-WIDE ORV ORDINANCE.

The following preamble and resolution were offered by Member Perrigo and supported by Member McKenzie.

WHEREAS, On July 23, 2020, at the request of the interested citizens, the Allegan County Board of Commissioners (County Board) discussed the concept of a county-wide, Off-Road Vehicle (ORV) Ordinance

WHEREAS, A county-wide ORV Ordinance was considered in 2014 resulting in the decision of the County Board to take no action regarding the development of an ordinance to allow ORV's to travel on the county roads.

WHEREAS, The County Board believes an ORV Ordinance remains best considered at the local level considering the geographical, roadways and philosophical difference that may exit across the County.

WHEREAS, Creating a patchwork of interconnection local ORV ordinance presents challenges with consistency and uniformity of enforcement

WHEREAS, the County has indicated that Allegan County Road Commission, Sheriff and Prosecutor's office are offering assistance to any local unit or group of local units that may consider developing an ORV ordinance.

WHEREAS, historically local units bear the burden of enforcing, ticketing and prosecuting the local units ordinance

WHEREAS, questions remain as to who the County Board, the Sheriff and Prosecutor's office intends to write tickets, prosecute ordinance violators, and divide ticket revenue.

WHEREAS, According to the County Board's own approved communique of August 13, 2020, During the July 23 Meeting, the County Board reaffirmed the 2014 decision **largely due to the absence of a united position being represented by all, or even the majority of local units in the County**

THEREFORE, BE IT RESOLVED, that the Board of the Allegan City Council, expresses its support of an Allegan County-wide ORV Ordinance.

BE IT FURTHER RESOLVED THAT, that the creation of a County-wide ORV ordinance in the best way to ensure that there is consistency from local unit to local unit and uniform enforcement.

PRESENT: Redding, Hanse, Bird, Mayor Andrus, Mayor Pro Tem Galloway, Perrigo and McKenzie:

NAYS: N/A:

ABSENT:N/A:

RESOLUTION DECLARED ADOPTED.

Christopher Tapper
Christopher Tapper, City Clerk

CERTIFICATION

I, Christopher Tapper, duly appointed City Clerk of the City of Allegan, do hereby certify that the above is a true and correct copy of a resolution adopted by the City Council of the City of Allegan, Michigan, on this 24th day of May, 2021.

Christopher Tapper
Christopher Tapper, City Clerk

Becky Blaine

From: Jim Connell <drjim1@icloud.com>
Sent: Thursday, May 20, 2021 9:50 AM
To: ADMINISTRATION; Steve Schultz
Subject: ORV Input

First line of 301 says " on the far right of the maintained portion of the county road"
Does that "maintained portion" include the shoulder (either paved or I paved) to the right of the white line (where present)?
In the definition section the roadway is defined as NOT including the shoulder.
Has the road commission determined which , if any county roads they would exempt from this ordinance?
Jim Connell DVM
Allegan Township Trustee
drjim1@icloud.com

Sent from my iPhone

Becky Blaine

From: Robert Sarro
Sent: Tuesday, May 25, 2021 5:34 PM
To: Becky Blaine
Subject: FW: draft ORV ordinance

From: Albert Meshkin [mailto:Al@laketowntwp.org]
Sent: Thursday, May 13, 2021 8:53 AM
To: Jim Storey <JStorey@ALLEGANCOUNTY.ORG>; Dean Kapenga <dkapenga@gmail.com>; Robert Sarro <RSarro@ALLEGANCOUNTY.ORG>
Cc: Gary Dewey (deweygary@gmail.com) <deweygary@gmail.com>; Gary Dewey <Gary@laketowntwp.org>; James Delaney <JamesD@laketowntwp.org>; Jim Johnson <Jim@laketowntwp.org>; Jim Johnson (jim.johnson@grangerconstruction.com) <jim.johnson@grangerconstruction.com>; Linda Howell <Linda@laketowntwp.org>; Michelle Sall <michelle@laketowntwp.org>
Subject: draft ORV ordinance

Chairman Storey and Commissioners,
The Laketown Township Board discussed the draft ORV ordinance at their regular May meeting last night. The Board is concerned about the ordinance and does not feel it is a good fit for a more urban township like Laketown. They are also concerned that the way the ordinance is currently worded Laketown would be forced into it and would need to go through the expense of drafting our own ordinance to "opt out". Further, MCL 324.81131(4) would require the township to demonstrate our reasoning for opting out. This opens the door for being challenged if/when someone is prosecuted under our ordinance.
The Laketown Board voted unanimously to request the County Board of Commissioners amend Section 301 of the draft ORV ordinance to include the following words after Allegan County: ", except within the following local units of government: Laketown Township, …" (and then poll other local units of government to see who else would like to be opted out).
The Laketown Board also feels the penalties for violating the county ordinance are not sufficient and should have an increased financial penalty and possibly include confiscation of a vehicle.
Thank you in advance for considering the concerns of Laketown Township.
Al Meshkin
Manager

Good Evening,
As you can see by tonight's turnout, your constituents and our community are showing a great deal of support for the county board of commissioners to schedule a public hearing and subsequently pass this ordinance into law.

This only tells part of the story however, I want to share some numbers and information that paint a picture of an entirely different magnitude.

As you all know, social media plays a very big part in communication in our world today. As such, this event was shared on Facebook to encourage attendance tonight.

On one page it was shared 28 times.
On another page it was shared 86 times.

As you are also aware each time a "post" is shared is an opportunity for positive or depending on your view of social media, more likely, negative interaction.

As of 8:30, last night, April 21, the analytical tool embedded into Facebook indicated that over 13,000 people had seen that post, 2000 people had actually clicked on it.

There were zero, I repeat ZERO negative, what Facebook calls, reactions in all of the shared posts that I had permissions to view.

I conclude today by simply imploring you to respect the will of the people who have appeared here today and invested their time to demonstrate a sample of the desire of the constituency of Allegan county to enact a countywide ordinance allowing ORV usage.

Sincerely,
Joshua Driscoll
3081 53rd St.
Hamilton, MI 49419

Allegan county residents for a county wide ORV ordinance

The undersigned residents are in support of a county wide ordinance and request the Allegan County Board of Commissioners to move forward with said ordinance and expedite it's implementation. We have also nominated 4 spokesmen for the group, they are Scott Beltman, Dan Caywood, Jon Myers, and Josh Discroll. Thank you

Name	Signature	Township
Jay Nayl s		Salem
Kyle Pattock		Dorr
Sam & Jeanette Sochas		Salem
Mark Waanders		Allegan
Bridget Waanders	Bridget Waanders	Allegan
Donna Westhouse	Donna Westhouse	Dorr
David Westhouse		Dorr
Zachary VanDerKamp		Hopkins
Dustin VanDerHulst	Dustin VanDerHulst	Allegan
Tracy Bolgman		Allegan
Randy Bilderback		Hamilton
Steve Berens		Dorr
Lisa Lodenstein		Watson
Tom Salmon		Watson
Mark Myers		Watson
Jamie List		Allegan
Steve Nelson		Lee
Matt Warners		Monterey
Dan Caywood		Salem
Josh Driscoll		Manlius
Donna Beltman	Donna Beltman	monterey
Matt S. Campbell		Allegan
Donald L. Sunderson		Allegan
Scott Beltman		Monterey
Caleb Kramm		monterey
Joseph Hoffman		Hopkins
Taylor Arispe		Salem

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Name	Signature	Township
John Scholten		Manlius
Regina Coffey		Monterey
Olivia Coffey		Monterey
Darren Coffey		Monterey
CHERIE OYKSTER		DORR
[illegible]		Dorr
Adam Coffey		Monterey
Alex Coffey		Monterey
Jerome Gueffen		LEE
Brian Kerber		Hopkins
Joe Jablonski		Hopkins
Thomas Icick		Allegan-Watson
Madalyn Kioski		Clyde
Scott Kioski		Clyde
David Gray		Monterey
Wendy Gray		Monterey
Brandon Thompson		Manlius
Christina Weber		monterey
Dorian Weber		monterey
Bruce Weber		Salem
Kendi Kamps		Trowbridge
Justin Kimmel		Trowbridge
Jan Vander Bosch		Heath
BRETT WUSTMAN		DORR
Jerry VanWagner		Salem
Jeanne VanWagner		Salem
Don VanWagner		Salem
Steve Rill		Dorr
MaryEllen Dandrow		Hopkins
JON HUIZINGA		DORR
Eric VanWagner		Dorr

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Name	Signature	Township
Grace Y. Engel	Grace Y. Engel	Watson
Timothy Engel	Timothy Engel	Watson
Paul VanWagner		Dorr
DON PATTOCK		Dorr
ERIC MAYS		Monterey
Tim Batchelor		Valley
Sarah Bennett		Monterey
Matt Bennett		Monterey
Levi Morse		Clyde
Riley Kinkenbers		Salem
William Dirkse		Monterey
Luke Dirkse		Monterey
Owen Eckwitten		Salem
Danielle Berens		Dorr
ROD LOOZENSTEIN		WATSON
Norma Salmon		Watson
Jessica List		Allegan
Kristin Driscoll		Manlius
Pat Driscoll		Manlius
Dustin Driscoll		Laketown
Kelly Caywood		Salem
Mike Mulder		Heath

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Name	Signature	Township
Karen Middendorp	Karen Middendorp	Dorr
Joel Rodenhisler	Joel Rodenhisler	Salem
Sherri Rodenhisler	Sherri Rodenhisler	Salem
ALLAN RONE	Allan Rone	DoRR
Heather Middendorp	Heather Middendorp	Dorr
Carly Kraima	Carly Kraima	Dorr
Robert Middendorp	Robert Middendorp	Dorr
Cody Lampen	Cody Lampen	Hamilton
Rick Lampen	Rick Lampen	Overisel
Toby Filkins	Toby Filkins	LEE
Steven Filkins	Steven Filkins	Bloomingdale
Donald Compagner	Donald Compagner	Monterey
Gina Compagner	Gina Compagner	Monterey
HARLEY Compagner	Harley Compagner	Monterey
MIKE TAYLOR	Mike Taylor	Dorr
Cody Taylor	Cody Taylor	Dorr
Greg VanValkinburg	Greg VanValkinburg	Watson
Coral VanValkinburg	Coral VanValkinburg	Watson
Casey Kamps	Casey Kamps	Trowbridge
Diane Kamps	Diane Kamps	Heath
Ken Kamps	Ken Kamps	Heath
MATTHEW C GILBERT	Matthew C Gilbert	Wayland
JAN L GILBERT	Jan L. Gilbert	Wayland
Scot VanDam	Scot	Salem
Don Wolve	Don	Heath
Mike Gooderman	Mike Gooderman	Manlius
James Gooderman	James Gooderman	Manlius
Carlene Cooke	Carlene Cooke	Dorr
Tom Cooke	Tom Cooke	Dorr
Amy Brink	Amy Brink	Byron
Curt Brink	Curt Brink	Byron

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Name	Signature	Township
Kevin D. Brenner	K D B	Monterey
Marcia Beltman		Monterey
Robin Beltman	Robin Beltman	Monterey
Amy Bishop-Funk	Amy Bishop-Funk	Salem
Whitney Smith	Whitney Smith	Salem
Jerry Funk		Salem
Rod Smith	Rod Smith	Salem
Galen Huggens	Galen Huggens	Lee
Pat Huggens	Pat Huggens	Lee
Tony Arndt		Monterey
Rick Locatis		Allegan
Christy Locatis	Christy Locatis	Allegan
Tom Driscoll	Tom Driscoll	Manlius
Jamison Burchfield	Jamison Burchfield	Manlius
Marcus Heller	Marcus Heller	Fillmore
Angelica Pena-Smith		Manlius
Paulo Pena		Clyde
Diana Kerber	Diana Kerber	Hopkins
Gary Kerber	Gary Kerber	Hopkins
Steve Tyler	Steve Tyler	Allegan
Janine Myers	Janine Myers	Salem
Shawn Moltenbelt		Wayland

Becky Blaine

Subject: FW: ORV's need restrictions.

From: Gami Rae [mailto:gamirae@gmail.com]
Sent: Tuesday, April 20, 2021 9:47 AM
To: PARKS <PARKS@ALLEGANCOUNTY.ORG>
Subject: ORV's need restrictions.

Good morning,
I hope I am connecting to the proper department fir this issue. As a citizen of Allegan County I am concerned about the recent movement by local ORT enthusiasts and their action to legalize ORV on our streets and trails. This bothers me as I feel that is allowed it will bring noise, trash and rowdy crowds with them. I fear it will make out streets less safe because of vehicle accidents and that minors will be wheeling around our quiet streets and trails.

If you allow this at all please make sure it is limited to a small area where this action can be participated in. I would hate to see out quiet county streets become a speed way for these vehicles.

I also feel it would have a deleterious effect on out county's wildlife, floura and fauna.

Thank you,
Paula Madura

Allegan County Administrator
Robert J. Sarro

County Services Building
3283 – 122nd Avenue
Allegan, MI 49010
269.673.0203

M E M O R A N D U M

May 27, 2021

TO: Board of Commissioners

RE: Water Study Group

On March 25, 2021, the Board of Commissioners (Board) adopted the following: "Based on the Health Officers review of the report and suggestions for next steps, the County Administrator recommends a work group be convened to review the data and form recommendations for next steps. Public Health is able to bring a recommendation for the construct of such a workgroup (e.g. local unit representatives, Commissioners, well professionals, etc.) back to the board within 45 days. The group would be considered "ad hoc advisory" and all output from the group subject to consideration by the Board. Based on the groups' final findings and recommendations, the need for a project based group or ongoing group could considered if deemed necessary." Motion carried by roll call vote. Yeas: 7 votes. Nays: 0 votes.

On May 13, 2021, the Board reviewed the Public Health's recommendation for the construct of a workgroup. The Board accepted the report, scheduled a follow-up discussion for May 27, 2021, and based on individual feedback, requested additional information regarding the expected tasks and deliverables from the workgroup, further specifics relative to member requirements and an option for reduction in work group size. Please see the additional information below provided in consultation with Public Health:

Workgroup Tasks and Deliverables:

1. Review the final Allegan County Groundwater Study, conducted by Hydrosimulatics, Inc. and submitted to the Board on March 25, 2021.

2. Provide regular updates to the Board and a final written summary of observations and recommendations of the workgroup, within one-year of the appointment of its members, relative to the study content (and any other aspects of Allegan County's current and future state relative to water quality, including recommendations for how the County (as a geographic area) should proceed with next steps (if any) and provide particular focus on Hydrosimulatics, Inc. recommendation to pursue an interactive Decision Support System. All recommendations must be specific as to the management/oversight model, funding, root need/issue to be addressed and expected results of any next steps to be considered.

3. The Allegan County Health Department will participate in the discussions of the work group and will provide administrative support, guidance and expertise.

4. As an ad-hoc workgroup, the work of the group will be considered complete upon the delivery of item number 2 above.

Workgroup Appointments:

It is recommended that the work group positions be posted for application to provide opportunity for new stakeholder participation utilizing the County's Boards and Commissions applications. Qualifications of applicants may be providing utilizing the County's standard application which includes, "Please state any specific qualifications you possess which would be beneficial to the appointment you desire, such as special skills, interests, education, experience, or membership in specific groups. Please attach additional sheets if necessary." Some positions could be left to the recommendation of a corresponding group if applicable (e.g. Conservation District, Tribe, etc.)

Revised Workgroup Composition (Based on the Public Health submitted presentation provided for the May 13, 2021 meeting):

Position:	**Description/Role**	**# of Seats (13 Total)**
County Commissioners	Represent the citizenry of Allegan County and have direct links to the Boards of the Local Units of Government (LUG)	2
Manager or Supervisor of a Local Unit of Government.	Represent the LUG perspective. Many LUGs use ground water for their municipal water supply. The local units may directly use the study, possibly for direction of their master plans.	1
Municipal Water Supply Supervisor or Technician	Represent technical expertise relative to Municipal Water Supplies.	1
Academia (Not directly related to the development of the groundwater study)	Provide perspective not only scholastically, but also the latest in technology and how the study can be best utilized.	1
Agricultural Businesses: Growers & Livestock	Agricultural businesses are some of the biggest users of the ground water in the county, not only for irrigation purposes but for watering of animals. Their businesses are directly affected by the availability and quality of ground water. Some farmers, in the dry times of the year, can use several thousands of gallons of water/day.	1
Allegan County Conservation District (ACCD)	ACCD work with many Allegan County agricultural businesses and are committed, as evidenced by their vision, to help sustain the natural resources for future generations. ACCD is familiar with the mechanisms of the Allegan County agricultural businesses as well as the hydro-lithology of Allegan County.	1
Real Estate: Builder, Developer, and Realtor-	According to the survey by the Health Department, 7% of developers are planning on developing in Allegan County using individual wells. Allegan County utilizes ground water or on-site wells for their potable water source.	1
Industrial	Some businesses in Allegan County rely on ground not only for potable water supply, but also for industrial processes. Some of these	1

	businesses can use up to one million gallons of water/day.	
Well Driller	Provide insight, experience and knowledge. Any policy or water management planning can directly or indirectly impact this sector.	1
Restaurant Owner	Several restaurant owners have on-site wells for their water supply. Restaurants have a vested interest. If their water supplies were to become tainted it would put their businesses in jeopardy.	1
Community Member (owner of a private water supply)	Represent the perspective of private water supplies in Allegan County which is very large.	1
Tribal Member	The tribe uses groundwater and represents a portion of the constituency of Allegan County. They have a direct interest into the success and protection of the ground water of Allegan County.	1

ALLEGAN COUNTY
POLICY

TITLE: Volunteers
POLICY/PROCEDURE NUMBER: N/A

APPROVED BY: Board of Commissioners

EFFECTIVE DATE: _____

1. **GENERAL:** Volunteers are recognized as a valued component of Allegan County Government operations.

2. **VOLUNTEER DEFINITION:** A volunteer is anyone who without compensation or expectation of compensation, beyond allowable reimbursement of direct expenses, performs a task at the direction of and on behalf of Allegan County (County). A volunteer must apply to, and be officially approved by, the County prior to performance of tasks. Volunteers shall not be considered "employees".

3. **EMPLOYEES AS VOLUNTEERS:** The County accepts the services of staff/employees as volunteers. This service is accepted provided that the volunteer service is provided totally without any coercive nature, involves work which is outside the scope of normal staff duties, and is provided outside of usual working hours. Family members of staff are allowed to volunteer with the County. When family members are enrolled as volunteers, to the degree practicable, they will not be placed under the direct supervision of the family member who is an employee.

4. **SERVICE AT THE DISCRETION OF COUNTY**: The County accepts the service of all volunteers at the sole discretion of the County. The County may at any time, for whatever reason, decide to terminate the volunteer's relationship with the County. The volunteer may at any time, for whatever reason, decide to sever the volunteer's relationship with the County. Notice of such a decision should be communicated as soon as possible to the volunteer's supervisor.

5. **VOLUNTEER RIGHTS AND RESPONSIBILITIES**: Volunteers shall be given meaningful assignments, treated with equality, provided effective supervision, and be recognized for work performed. Volunteers shall actively perform their duties to the best of their abilities, consistent with the goals and procedures of the County.

6. **POSITION DESCRIPTIONS:** Prior to any volunteer assignment or recruitment effort, a clear, complete, and current position description outlining the duties and responsibilities must be developed. The position description will be given to each accepted volunteer and utilized in subsequent management and evaluation efforts. Position descriptions should be reviewed and updated at least every two years, or whenever the work involved in the position changes substantially. Human Resources shall assist staff in the development of volunteer jobs and position descriptions.

7. **SUPERVISION:** Each volunteer who is accepted to a position with the County must have a clearly identified employee who is responsible for direct supervision and shall be available to the volunteer for consultation and assistance.

8. **MAINTENANCE OF RECORDS:** Volunteer records shall be confidentially stored in the Human Resources Department. At a minimum, records shall include volunteer application and background check authorization with the corresponding results.

9. **CONFIDENTIALITY:** Volunteers are responsible for maintaining the confidentiality of all non-public information (examples of such information include, but are not limited to, information related to the Health Insurance Portability and Accountability Act, Law Enforcement Information Network, and Protected Personal Information) whether this information involves a single staff, volunteer, client or other person, or involves overall County business.

10. **DRESS CODE:** As a representative of the County, volunteers are responsible for presenting a good image to the community. Volunteers shall dress appropriately for the conditions and performance of their duties. Dress code will be established by the Volunteer's supervisor. County Volunteers may be provided with a shirt (or other necessary articles of identification which may include badge, uniform, or ID card) for the purpose of identification when providing services. Such articles shall clearly display "Allegan County", "Volunteer" and the County logo (and/or sheriff or court logo, if responsibilities fall within the jurisdiction of law enforcement or justice). Articles must be purchased consistent with County policy including but not limited to the Purchasing Policy and Budget Policy.

11. **SERVICE LOGS:** Each department, with the assistance of the volunteer, shall keep a service log for each volunteer providing services. This log shall include:

    11.1 Date of service
    11.2 Start / Stop Time of service
    11.3 Service activity performed

12. **LIABILITY:** All person(s) acting as a volunteer are neither employees nor agents of the County, and provide such services at their own risk. As volunteers are not employees, they are not entitled to any compensation or benefits from the County, including but not limited to worker's compensation, medical insurance, or unemployment compensation unless otherwise provided through law or County policy. The County shall not defend or indemnify the volunteers against liability for the following:

    12.1 Intentional, grossly negligent or unlawful acts or allegations thereof,
    12.2 Providing false and/or inaccurate information on the County Application for Volunteer Services form.

13. **RECRUITMENT:** Volunteers shall be recruited by the County on a proactive basis, with the intent of expanding the volunteer involvement of the community. Volunteers shall be recruited without regard to gender, handicap, age, race or other condition. The sole qualification shall be the ability to perform tasks on behalf of the County consistent with the applicable position description.

14. **APPLICATION PROCESS & BACKGROUND/HEALTH SCREENING**: Volunteers shall complete a Volunteer Application and agree to a criminal background check. Volunteers who do not agree may be refused assignment. In cases where volunteers will be working with clients with health difficulties, a health screening may be required prior to volunteer assignment. In addition, if there are physical requirements necessary for performance of a volunteer task, a screening or testing procedure may be required to ascertain the ability of the volunteer to safely perform the task.

15. **VOLUNTEER CONFERENCE:** While volunteers may participate in operational meetings as necessary, it is recognized that the time and availability of volunteers may be limited. In an effort to manage an effective volunteer program, it is necessary for the County to provide information and training to volunteers and receive input from them. As such, the County may conduct a volunteer conference once per year either collectively for all County volunteers or by group of related function

and may provide modest meal accommodations for attendance. Total meal expenditures (venue, services, food, gratuity, etc.) provided by the County shall not exceed the amount allowable for meal reimbursement for an employee as outlined in the Budget policy. Example: 100 volunteers and employees attending a dinner volunteer conference shall not exceed $1900 – 100 times the current dinner rate of $19.

15.1 The County may plan a single combined event by extending invitation to all County volunteers.

15.2 If it is determined to conduct individual events, trainings etc. for specific workgroups, the County will strive for consistency in areas such as recognition certificates, awards, food, etc.

16. **RECOGNITION OF VOLUNTEERS:** A simple "thank you" means so much. A thank you says, "We appreciate you." The County also may administer, and supply all materials for volunteer recognition certificates for specific achievements or general participation in conjunction with or separate from the volunteer conference. Recognition may come in different forms and the related expenses of such likely exceeds the County's ability to expend public funds. As such, in accordance with the County's donation section of the Budget Policy, a program is authorized to receive donations and permit the expenditure or distribution of such donations to extent they assist the County in providing reasonable, non-monetary recognition of volunteers. (Examples include, covering expenses for a guest of a volunteer at a volunteer conference, plaques, awards, modest give-a-ways/prizes pertaining to team building during or outside the volunteer conference.) In general, the program shall be administered consistent with the standards of the County's Employee Engagement program and employee recognition program.

17. **ENGAGEMENT OF VOLUNTEERS:** The most meaningful forms of engagement should:

17.1 Include volunteers in planning, especially in the development of goals.

17.2 Enable volunteers to work side-by-side with staff and receive ongoing direction.

17.3 Show appreciation toward the achievements of volunteers when contributing to the successful completion of tasks that support the plan and specific goals.