# Board of Commissioners

Tim Barnes
Blake Mulder
Terrance Augustine
Brandon Haskell
Jeanne Pearl-Wright
Trevor "TJ" Youngquist
Mark Mudry
Joseph C. Brehler
Brian Droscha
Jacob Toomey
Scott Hansen
Brian Lautzenheiser
Jim Mott – Chair
Frank Holmes
Barbara A. Rogers – Vice Chair


**EATON COUNTY BOARD OF COMMISSIONERS/PUBLIC WORKS AND PLANNING COMMITTEE**

**WEDNESDAY, MARCH 13, 2024**
**9:00 A.M.**

BOARD OF COMMISSIONERS' ROOM, COUNTY COURTHOUSE, CHARLOTTE

## AGENDA

1. Call to Order.
2. Pledge of Allegiance.
3. Agenda Additions and Changes.
4. Approval of February 14, 2024 Minutes.
5. Limited Public Comment.
6. Road Commission Semi-Annual Report – Matt Hannahs.
7. Construction Code/Planning and Zoning Report.
    - DCA-3-24-1 Zoning Ordinance Amendment
    - DCA-3-24-2 Zoning Ordinance Amendment
    - Finance Report
8. DIA Update.
    - Solid Waste Ordinance Hearing for Lebron
    - Materials Management Plan Update
    - Finance Report
9. Parks Report.
    - Finance Report
10. PACE Program Updates.
11. Miscellaneous.
12. Limited Public Comment.
13. Adjournment.

***A quorum of the Board of Commissioners may be present at this meeting.***

**PUBLIC WORKS & PLANNING COMMITTEE**

**WEDNESDAY, FEBRUARY 14 2024**
**9:00 A.M.**

**MINUTES**

---

| | |
|---|---|
| **MEMBERS PRESENT:** | Commissioners Barbara Rogers, Blake Mulder, Joe Brehler, Terrrance Augustine, and Scott Hansen. |
| **ABSENT:** | Commissioners Brian Lautzenheiser, Trevor Youngquist, and Scott Hanson |
| **ALSO PRESENT:** | Commissioner Jim Mott, Connie Sobie, Claudine Williams, Chris Garrison, Travis Keeton, Brandy Miller, Deb Penfield, Jarod Bogdanov-Hanna, Brad Funkhouser, and Mike Serafini |

The February 14, 2024 regular meeting of the Public Works and Planning Committee was called to order at 9:00 a.m. by Chairperson Rogers.

The Pledge of Allegiance was given by all.

Commissioner Augustine moved to approve the agenda with the addition of Housing Focus Group Funding to Miscellaneous. Commissioner Mulder seconded. Motion carried unanimously.

Commissioner Brehler moved to approve the January 10, 2024 meeting minutes. Commissioner Augustine seconded. Motion carried unanimously.

Limited Public Comment. None.

Brad Funkhouser, Executive Director of EATRAN, presented their semi-annual report.

Mike Serafini from Strata Environmental Services presented the Landfill Semi-Annual Report.

Construction Code & Planning and Zoning Director, Chris Garrison, presented the department's monthly report. It was noted the 2022 and 2023 Annual Reports of the Planning Commission were included in the meeting materials. The Department has received training for the new BS&A online permitting system which they hope to go live with on March 1, 2024. The Master Plan Public hearing will be April 23, 2024. Discussion was held. Director Garrison reported Windsor Charter Township will be taking over the permitting authority for their township building and trade permits. A specific date has not been identified as they are awaiting final approval from the State of Michigan

Resource Recovery Program Assistant, Debbie Penfield, introduced the new Environmental Sustainability Director, Jarod Bogdanov-Hanna. It was also reported the new Sunfield Recycling

Center Operator is working out very well. Discussion was held in reference to the Materials Management Plan regarding collaboration between the counties. It was also noted there will be a hearing next month to address a solid waste operator not in compliance with the SWOL and SWOR filings.

Parks Director, Travis Keeton, presented the department's monthly report. Maleah Rakestraw and Toby Hayes from Williams and Works were introduced and addressed the Committee in reference to their future work on the new Parks Strategic Plan. Director Keeton reported the Work Group met and finalized the second round of the Community Grant Program. Commissioner Mulder moved to approve the 2023/2024 Community Grant Program for up to $400,000 per the timeline provided. Commissioner Augustine seconded. Motion carried unanimously.

Miscellaneous: Commissioner Brehler reported on the progress of the State of Michigan Housing Plan and noted his participation in a subcommittee that is planning a focus group in Eaton County. Commissioner Brehler requested a contribution from the county for up to $5,000 to fund this focus group which will concentrate on the barriers preventing people from meeting their housing needs. Controller Sobie confirmed there are unrestricted housing funds that can be used for this purpose. Commissioner Augustine moved to recommend approval of a budget amendment for up to $5,000 for subcommittee use, for the State of Michigan Housing Plan to the Ways and Means Committee for approval. Commissioner Mulder seconded. Discussion was held. The motion carried unanimously.

Limited Public Comment. None.

Chairperson Rogers adjourned the meeting at 10:50 a.m.

The next regularly scheduled meeting of the Public Works and Planning Committee will be held on Wednesday, March 13 at 9:00 a.m. in the Board of Commissioner Room of the Courthouse located at 1045 Independence Blvd, Charlotte, MI 48813.

_____

Barbara Rogers, Chairperson

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*Eaton County*
Road Commission

# 2022-2023
# Supplemental Annual Report

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1112 Reynolds Road | Charlotte, MI 48813 | 517-543-1630

www.eatoncountyroad.com

Eaton County Road Commission

SUPPLEMENTAL ANNUAL REPORT

OCTOBER 1, 2022 – SEPTEMBER 30, 2023

## *Board of Eaton County Road Commissioners*



Duane A. Eldred
CHAIR
*Term expires:*
*12-31-25*



Keith A. Barber
VICE CHAIR
*Term expires:12-31-28*

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Timothy J. Lamoreaux
MEMBER
*Term expires:*
*12-31-28*



Benjamin S. Lyons
MEMBER
*Term expires: 12-31-26*



Lauren K. Aitch-Guerrant
MEMBER
*Term expires:*
*12-31-25*

**M**ATHEW **M. H**ANNAHS, **P.E.,** ***ENGINEER-MANAGER***
**P**ATRICIA **M**. **L**OOSEMORE**,** ***FINANCE DIRECTOR***

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# INTRODUCTION

The Eaton County Road Commission is responsible for the maintenance of 1,174 miles of road, of which about 392 miles are designated as Primary Roads and 782 miles designated as Local Roads. The local road system includes approximately 502 miles of gravel surfaced roads and 125 miles of subdivision streets.

The county road system is maintained out of three garages located in Vermontville Township, Delta Township, and the main office in the City of Charlotte. In general, the southeast and southwest areas of the County operate out of the main garage in Charlotte, the northwest quarter of the County is served by the crew based in Vermontville, and the northeast area is covered by workers from our garage in Delta Township.

The Road Commission utilizes state Asset Management principles to keep existing good roads in good condition, rather than deferring timely maintenance on those roads to pay for the improvement and/or construction of new paved roads. To help with these principals, the Road Commission prepared and submitted a Transportation Asset Management Plan that fulfills the requirements of Michigan Public Act 325 of 2018. The Asset Management Plan includes a list of planned projects for 2024-2026, which represents the best estimate of future projects. However, changes in design, funding, and permitting may require the planned project list to be altered.

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Recognizing the need for long range planning for improvements on the county road system, the Road Commission participates in the Tri-County Regional Planning Commission planning process, and actively seeks and competes for Federal and State grant funds.

The Road Commission welcomes comments, suggestions, and discussion on both programs and specific projects at any time.

PROJECT SUMMARY

On Primary Roads in 2023, the Road Commission used road commission funds to resurface 10.5 miles as well as apply a sealcoat to 67 miles to extend the life of the existing pavement surfaces. The Road Commission used Federal funds to widen, crush, shape, and resurface 0.5 miles of Five Point Highway from Whittum Road to the Eaton Rapids City limits and repair curb and gutter, mill, and overlay 1.1 miles of Marketplace Boulevard from St. Joe Highway to M-43.

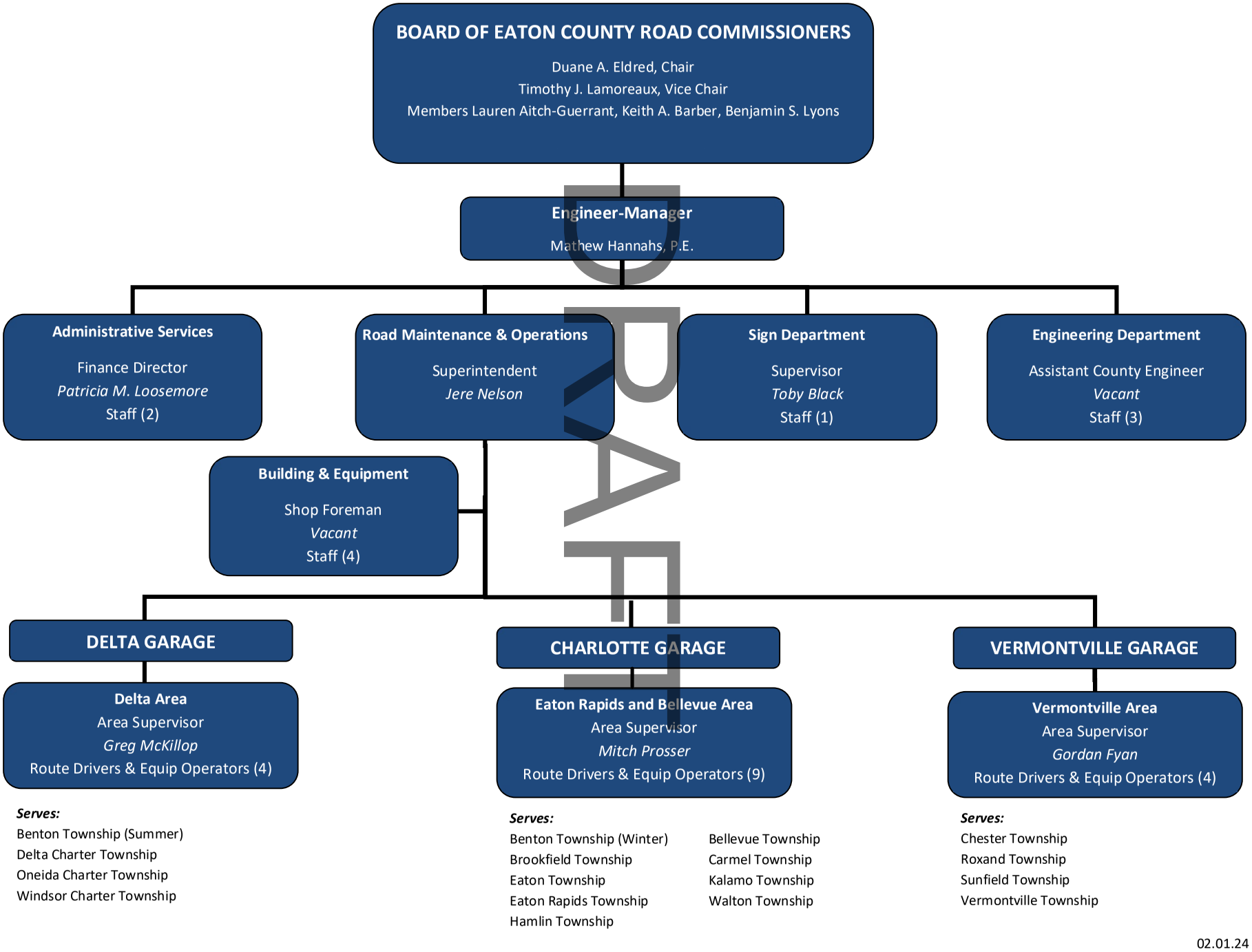
On Local Roads, 2023 marked the 9th year of the 12-year road rehabilitation program funded by the county-wide road millage. As part of the millage program, the Road Commission repaired and

resurfaced 19.2 miles of paved Local roads, with 4.8 miles of those roads being pulverized prior to paving. The Road Commission also graded and spread new gravel on 74 miles of existing gravel surfaced roads. The Road Commission has supplemented the millage program with road commission funds to assure a successful program. While the completed millage program projects are noted in the following pages, a supplemental multi-year millage report is available separately.

The Road Commission did not receive any State or Federal bridge program funds in 2023 to maintain or make improvements to bridges.

The Road Commission replaced about 39 crossroad culverts of various sizes on Primary and Local Roads in preparation for upcoming projects.

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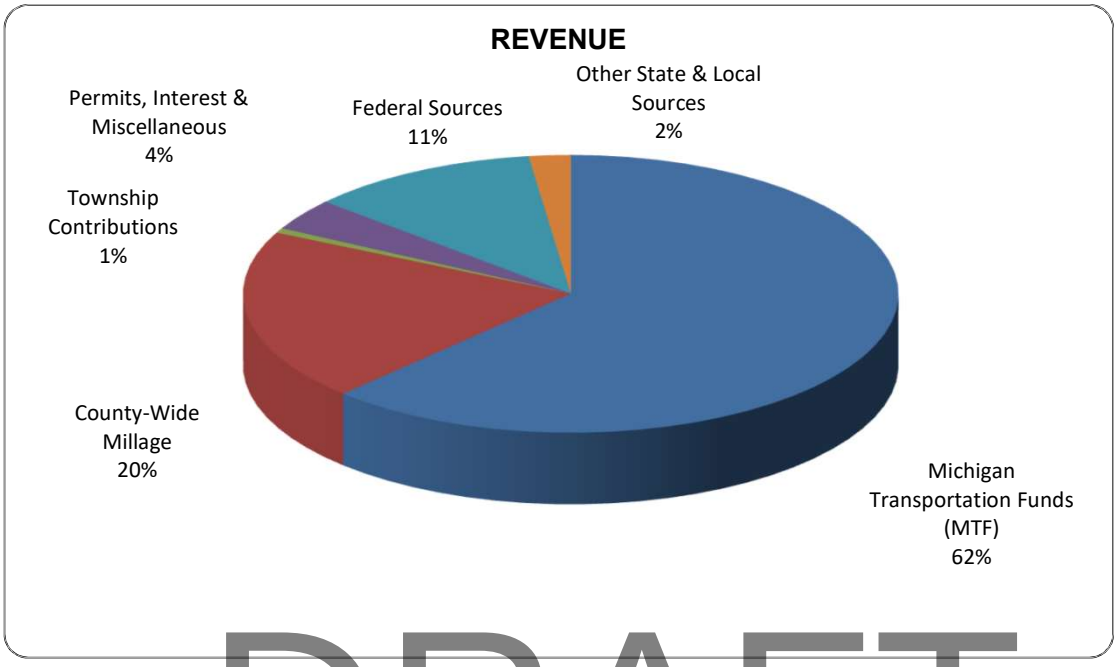
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# FINANCIAL SUMMARY

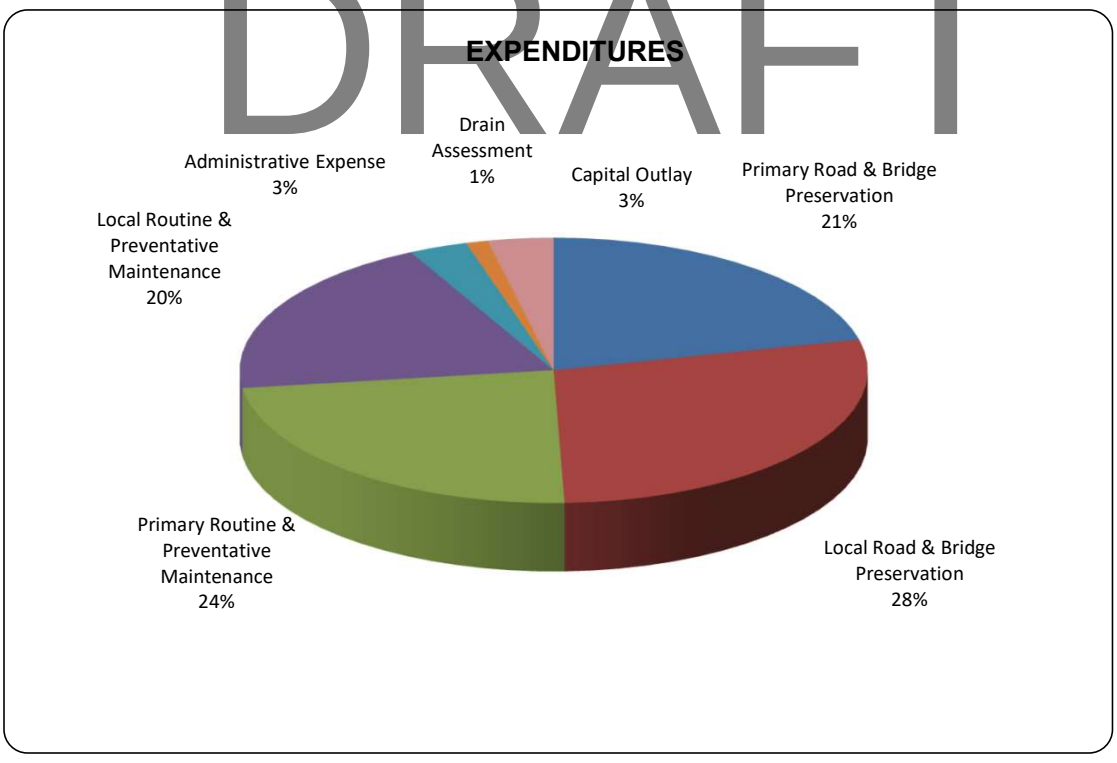
| | 2019-2020 ACTUAL | 2020-2021 ACTUAL | 2021-2022 ACTUAL | 2022-2023 ACTUAL | 2023-2024 BUDGET |
|---|---|---|---|---|---|
| **REVENUES** | | | | | |
| County-Wide Millage | $ 4,408,110 | $ 4,554,261 | $ 4,658,308 | $ 4,912,442 | $ 5,245,043 |
| Permit Revenue | 95,365 | 82,500 | 108,485 | $ 127,180 | $ 100,000 |
| Intergovernmental: | | | | | |
| Federal Sources | 1,676,552 | 3,002,892 | 585,277 | $ 2,797,537 | $ 848,046 |
| Michigan Transportation Funds | 13,298,859 | 14,411,240 | 14,888,654 | $ 15,493,400 | $ 15,529,448 |
| Other State Sources | 135,817 | 410,605 | 1,338,181 | $ 506,691 | $ 460,000 |
| Township Contributions | 151,142 | 359,499 | 147,248 | $ 138,208 | $ 1,129,750 |
| Other Local Sources | 32,459 | 48,500 | 18,599 | $ - | |
| Charges for Services | 281 | 2,260 | 7,231 | $ 1,404 | |
| Interest and Rentals | 71,584 | 945 | 40,942 | $ 701,508 | $ 660,000 |
| Other Revenue | 96,890 | 53,358 | 403,032 | $ 80,474 | $ 100,000 |
| Total Revenues | **19,967,059** | **$ 22,926,060** | **$ 22,195,957** | **$ 24,758,844** | **$ 24,072,287** |
| **EXPENDITURES** | | | | | |
| Primary Roads and Bridges: | | | | | |
| Construction/Capacity Improvements | | $ - | $ - | $ - | $ - |
| Preservation/Structural Improvements | $ 6,597,945 | 7,710,071 | 4,580,680 | 4,772,651 | 8,546,527 |
| Routine Maintenance | 1,703,984 | 1,917,870 | 2,168,632 | 2,609,148 | 3,992,500 |
| Preventative Maintenance | 1,334,187 | 1,964,833 | 1,230,880 | 2,638,571 | |
| Local Roads and Bridges: | | | | | |
| Construction/Capacity Improvements | - | - | - | - | |
| Preservation/Structural Improvements | 5,160,120 | 5,116,267 | 7,191,340 | 6,319,088 | 14,267,450 |
| Routine Maintenance | 2,946,197 | 3,386,131 | 3,793,861 | 4,399,523 | 4,544,000 |
| Preventative Maintenance | - | - | 91,241 | 3,353 | |
| Equipment Expense (net) | 37,464 | (829,003) | (249,915) | (205,329) | 100,000 |
| Administration (net) | 799,076 | 747,943 | 742,534 | 677,592 | 810,000 |
| Maintenance Service for Other Units | 73,970 | 58,992 | 47,383 | 29,194 | 100,000 |
| Non-Road Projects | 17,950 | - | - | - | |
| Capital Outlay (net) | 129,676 | 231,505 | (157,163) | 757,394 | 1,791,000 |
| Debt Service | - | - | - | - | |
| Drain Assessment | 218,789 | 246,618 | 255,984 | 253,092 | 300,000 |
| Total Expenditures | **$ 19,019,359** | **$ 20,551,227** | **$ 19,695,457** | **$ 22,254,278** | **$ 34,451,477** |
| Net Revenues (Expenditures) | 947,700 | 2,374,832 | 2,500,500 | 2,504,566 | (10,379,190) |
| Fund Balance at Beginning of Year | 7,906,689 | 8,854,389 | 11,229,221 | 13,766,486 | 16,271,052 |
| Fund Balance at End of Year | **$ 8,854,389** | **$ 11,229,221** | **$ 13,729,722** | **$ 16,271,052** | **$ 5,891,862** |

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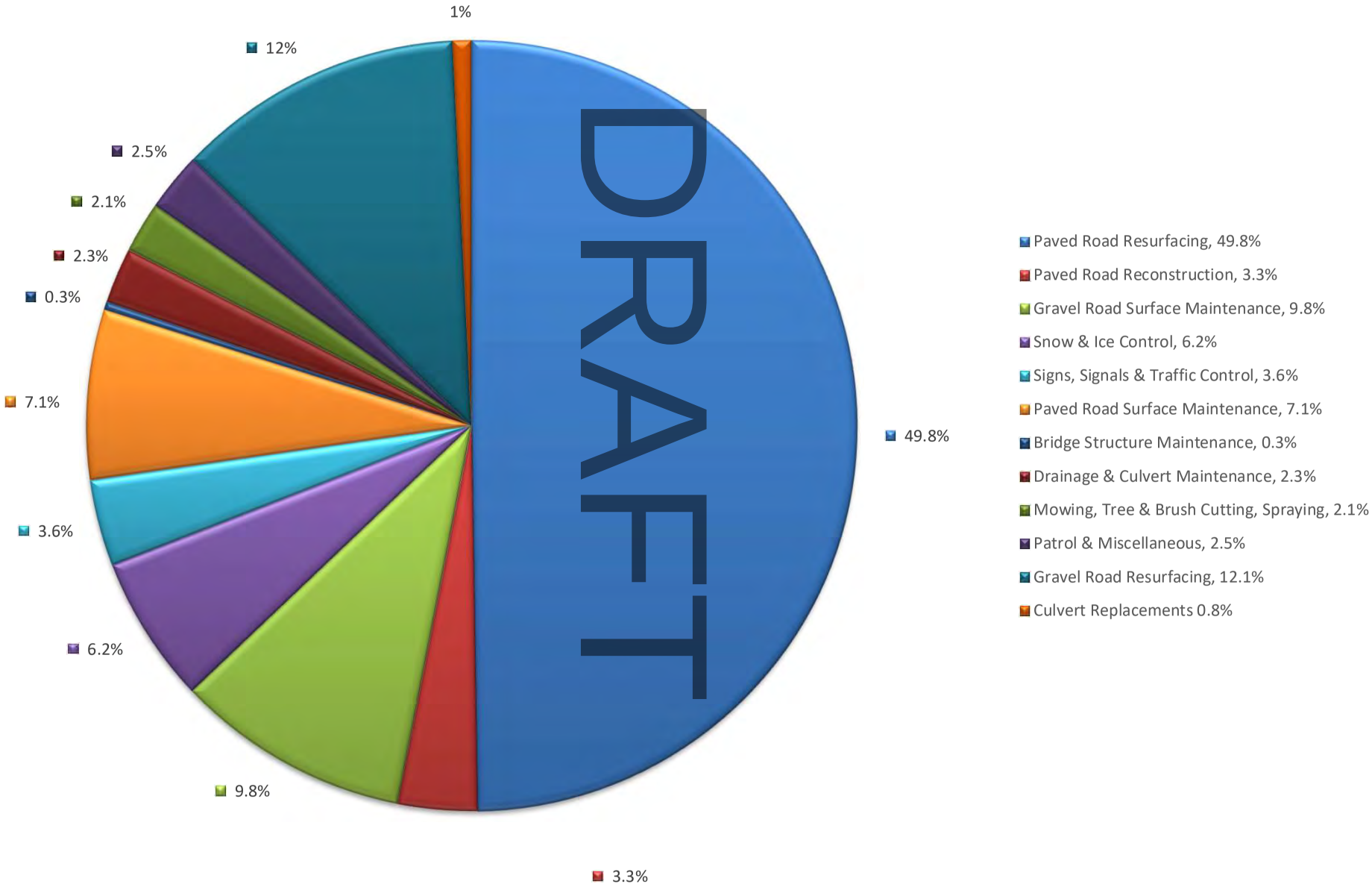

REVENUE
Other State & Local Sources 2%
Permits, Interest & Miscellaneous 4%
Federal Sources 11%
Township Contributions 1%
County-Wide Millage 20%
Michigan Transportation Funds (MTF) 62%

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EXPENDITURES
Drain Assessment 1%
Administrative Expense 3%
Capital Outlay 3%
Primary Road & Bridge Preservation 21%
Local Routine & Preventative Maintenance 20%
Primary Routine & Preventative Maintenance 24%
Local Road & Bridge Preservation 28%

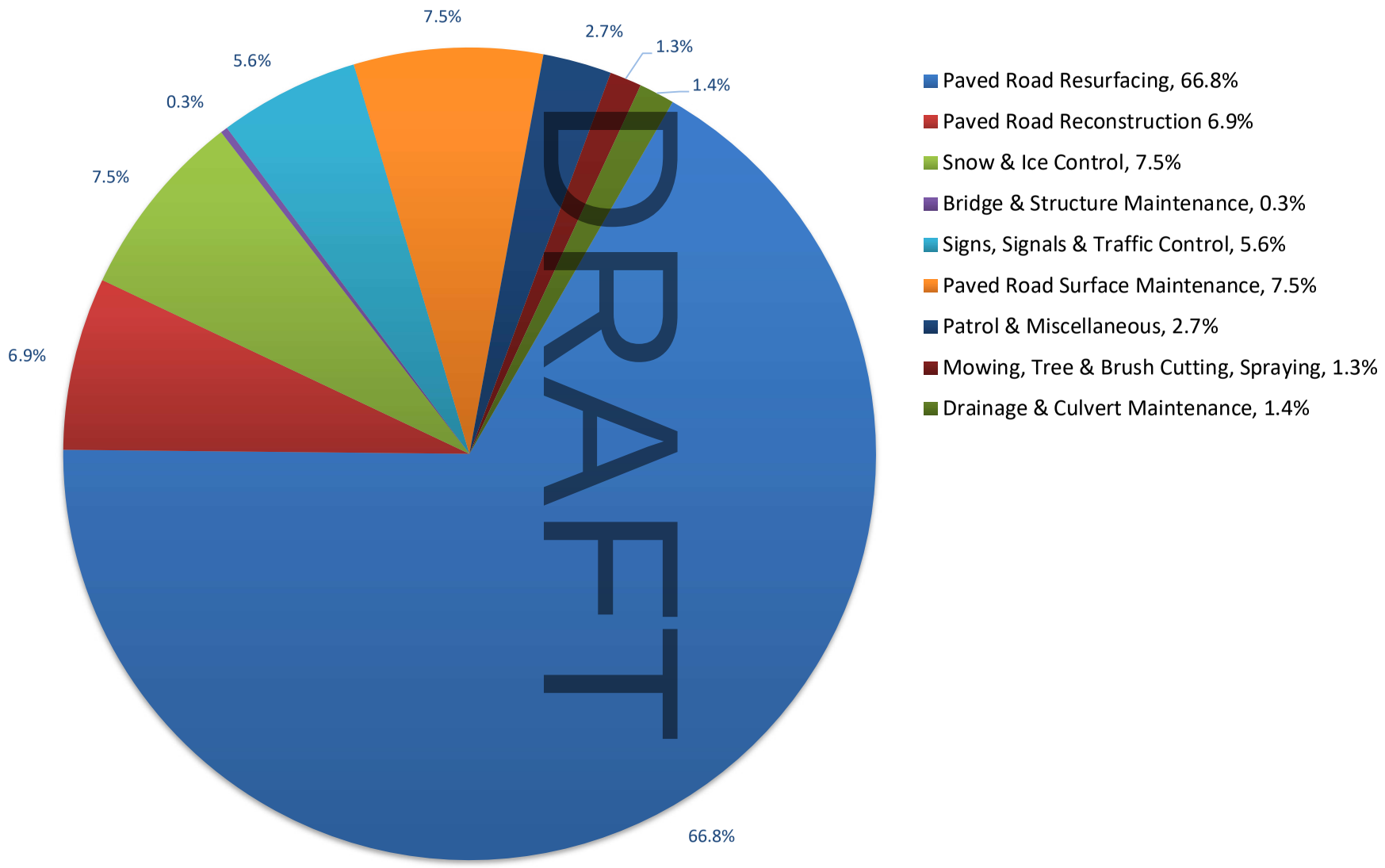
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# OVERALL PRIMARY AND LOCAL ROAD AND BRIDGE EXPENDITURES

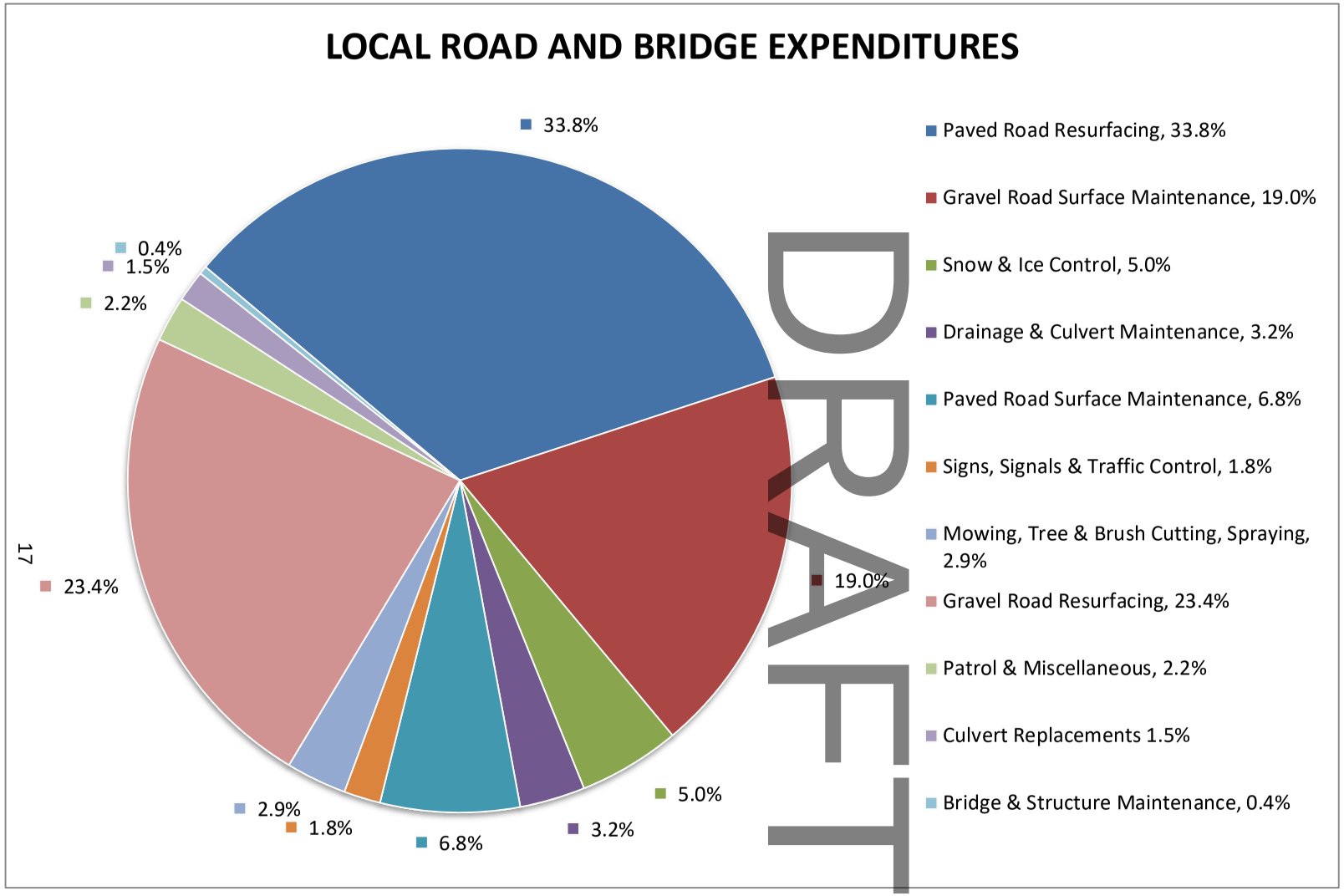



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# PRIMARY ROAD AND BRIDGE EXPENDITURES




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LOCAL ROAD AND BRIDGE EXPENDITURES
33.8%
19.0%
5.0%
3.2%
6.8%
1.8%
2.9%
23.4%
2.2%
1.5%
0.4%
Paved Road Resurfacing, 33.8%
Gravel Road Surface Maintenance, 19.0%
Snow & Ice Control, 5.0%
Drainage & Culvert Maintenance, 3.2%
Paved Road Surface Maintenance, 6.8%
Signs, Signals & Traffic Control, 1.8%
Mowing, Tree & Brush Cutting, Spraying, 2.9%
Gravel Road Resurfacing, 23.4%
Patrol & Miscellaneous, 2.2%
Culvert Replacements 1.5%
Bridge & Structure Maintenance, 0.4%
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# 2022-2023
# PRIMARY AND LOCAL ROAD IMPROVEMENTS

## SUMMARY

Primary Roads:

| | |
|---|---|
| Total Construction/Capacity Improvement Projects | - |
| Total Preservation/Structural Improvement Projects | 4,772,651 |
| Total Preventative Maintenance Projects | 2,638,571 |
| **Total Primary Road and Bridge Projects** | **7,411,223** |

Local Roads:

| | |
|---|---|
| Total Construction/Capacity Improvement Projects | - |
| Total Preservation/Structural Improvement Projects | 6,319,088 |
| Total Preventative Maintenance Projects | 3,353 |
| **Total Local Road and Bridge Projects** | **6,322,442** |

| | |
|---|---|
| **Grand Total** | **13,733,665** |

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# 2022-2023

# PRIMARY AND LOCAL ROAD IMPROVEMENTS

## BELLEVUE TOWNSHIP

***Primary Roads:***

| | | |
|---|---|---|
| *Resurface:* | | |
| Battle Creek Hwy, Village Limit to Bradley Rd | 1.88 mi | 1,853,781 |
| *Sealcoat w/ Fog Seal:* | | |
| Ionia Rd, Love Hwy to Five Point Hwy | 4.15 mi | 124,067 |

***Local Roads:***

| | | |
|---|---|---|
| *Local Road Millage Regravel:* | | |
| Link Hwy, Curtis Rd to Hill Rd | 1.02 mi | 30,072 |
| Love Hwy, County Line to Pease Rd | 2.02 mi | 63,215 |
| Reynolds Rd, Battle Creek Hwy to Love Hwy | 0.50 mi | 16,679 |
| Young Rd, Stony Point Hwy to Five Point Hwy | 2.00 mi | 63,891 |
| *Sealcoat w/ Fog Seal:* | | |
| Cronk Hwy, Ionia Rd to Young Rd | 1.26 mi | 16,564 |

| | |
|---|---|
| **Bellevue Township Total** | 2,168,269 |
| **Bellevue Township Contributions** | - |

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## BENTON TOWNSHIP

***Primary Roads:***

| | | |
|---|---|---|
| *Crush, Shape, and Asphalt Overlay 4":* | | |
| Cochran Rd, Bellevue Hwy to Nye Hwy | 5.22 mi | 7,144 |
| Cochran Rd, Clinton Trail to Needmore Hwy | 2.00 mi | 154,365 |
| *Sealcoat w/ Fog Seal:* | | |
| Windsor Hwy, Hartel Rd to Royston Rd | 0.98 mi | 37,196 |
| *Final Expenditures for Prior Year Projects* | | 2,312 |
| *Initial Expenditures for future projects* | | 10,306 |

***Local Roads:***

| | | |
|---|---|---|
| *Local Road Millage Regravel:* | | |
| Benton Rd, Kinsel Hwy to Santee Hwy | 5.00 mi | 170,058 |
| Benton Rd, Santee Hwy to Township Line | 0.94 mi | 26,142 |
| Stewart Rd, Lansing Rd to End of Pavement | 0.16 mi | 180,169 |

| | |
|---|---|
| **Benton Township Total** | 587,691 |
| **Benton Township Contributions** | - |

# 2022-2023

# PRIMARY AND LOCAL ROAD IMPROVEMENTS

## BROOKFIELD TOWNSHIP

***Primary Roads:***

| | | | |
|---|---|---|---|
| *Sealcoat w/ Fog Seal:* | | | |
| Narrow Lake Rd, Baseline Hwy to Bellevue Hwy | 2.07 | mi | 62,758 |

***Local Roads:***

| | | | |
|---|---|---|---|
| *Local Road Millage Regravel:* | | | |
| Boody Hwy, Wilcox Rd to Spicerville Hwy | 1.24 | mi | 32,951 |
| Butterfield Hwy, Cochran Rd to Brookfield Rd | 2.01 | mi | 60,172 |
| Holmes Hwy, Thuma Hwy to Royston Rd | 1.00 | mi | 29,945 |
| Hooper Rd, Baseline Hwy to Butterfield Hwy | 1.39 | mi | 40,345 |
| Perkey Rd, Spicerville Hwy to Five Point Hwy | 1.05 | mi | 31,948 |
| Sherman Rd, Butterfield Hwy to Bellevue Hwy | 1.00 | mi | 31,000 |
| Wilcox Rd, Nye Hwy to Spicerville Hwy | 1.00 | mi | 34,196 |
| *Sealcoat w/ Fog Seal:* | | | |
| Brookfield Rd, Bellevue Hwy to Mahan Hwy | 1.00 | mi | 30,291 |
| *Final Expenditures for Prior Year Projects* | | | 94,125 |
| **Brookfield Township Total** | | | 447,730 |
| **Brookfield Township Contributions** | | | - |

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## CARMEL TOWNSHIP

***Primary Roads:***

| | | | |
|---|---|---|---|
| *Wedge and Overlay 2":* | | | |
| Wheaton Rd, Lawrence Hwy to Kinsel Hwy | 2.13 | mi | 227,273 |
| *Sealcoat w/ Fog Seal:* | | | |
| Battle Creek Rd, Carlisle Hwy to Five Point Hwy | 4.04 | mi | 158,190 |
| Five Point Hwy, Bradley Rd to Battle Creek Rd | 2.38 | mi | 95,632 |
| *Final Expenditures for Prior Year Projects* | | | 166 |

***Local Roads:***

| | | | |
|---|---|---|---|
| *Local Road Millage Regravel:* | | | |
| Carlisle Hwy, Bradley Rd to Stine Rd | 3.00 | mi | 103,530 |
| Millerburg Rd, Lawrence Hwy to Kinsel Hwy | 2.00 | mi | 67,035 |
| Stine Rd, Valley Hwy to Kinsel Hwy | 1.00 | mi | 33,295 |
| *Sealcoat w/ Fog Seal:* | | | |
| Ainger Rd, Lawrence Hwy to Valley Hwy | 1.01 | mi | 29,890 |
| *Final Expenditures for Prior Year Projects* | | | 2,491 |
| **Carmel Township Total** | | | 717,503 |
| **Carmel Township Contributions** | | | - |

# 2022-2023

# PRIMARY AND LOCAL ROAD IMPROVEMENTS

## CHESTER TOWNSHIP

***Primary Roads:***

| | | |
|---|---|---|
| *Wedge and Overlay 2":* | | |
| Mulliken Rd, Vermontville Hwy to Clinton Trail | 1.50 mi | 219,524 |
| *Initial Expenditures for Future Year Projects* | | 9,277 |

***Local Roads:***

| | | |
|---|---|---|
| *Local Road Millage Regravel:* | | |
| Ainger Rd, Vermontville Hwy to Bursley Hwy | 3.17 mi | 110,619 |
| Santee Hwy, Moyer Rd to Cochran Rd | 2.49 mi | 83,924 |
| *Final Expenditures for Prior Year Projects* | | 2,126 |
| **Chester Township Total** | | 425,470 |
| **Chester Township Contributions** | | - |

## DELTA TOWNSHIP

***Primary Roads:***

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| | | |
|---|---|---|
| *Mill & Overlay 3":* | | |
| Millet Hwy, Canal Rd to Creyts Rd | 1.00 mi | 89,250 |
| Marketplace Blvd, St. Joe Hwy to Saginaw Hwy | 1.08 mi | 1,105,437 |
| *Sealcoat w/ Fog Seal:* | | |
| Old Lansing Rd, Lansing Rd to Waverly Rd | 2.60 mi | 107,383 |
| *Initial Expenditures for Future Year Projects* | | 386 |
| *Final Expenditures for Prior Year Projects* | | 76,290 |

# 2022-2023

# PRIMARY AND LOCAL ROAD IMPROVEMENTS

## DELTA TOWNSHIP cont.

***Local Roads:***

| | | | |
|---|---|---|---|
| *Local Road Millage Paved Road Resurface:* | | | |
| Adare Cir, Ireland Dr to Dead End or Start | 0.07 | mi | 22,125 |
| Ashford Ln, Knockaderry Dr to Dead End or Start | 0.03 | mi | 5,441 |
| Chellmar Dr, Creekside Dr to Medallion Dr | 0.20 | mi | 23,521 |
| Coneflower Court, Crayton Dr to Dead End or Start | 0.26 | mi | 80,198 |
| Creekside Dr, Canal Rd to Glen Terra Dr | 0.21 | mi | 44,018 |
| Dumond Ct, Snow Rd to Dead End or Start | 0.11 | mi | 50,672 |
| Eastcircle Dr, Westhaven Blvd to Westhaven Blvd | 0.05 | mi | 2,815 |
| Eastwind Cir, Westhaven Blvd to Dead End or Start | 0.05 | mi | 43,886 |
| Franklynn Dr, Frank N Dot Ct to Dead End or Start | 0.11 | mi | 23,288 |
| Frank N Dot Ct, Creyts Rd to Dead End or Start | 0.13 | mi | 29,854 |
| Glen Terra Dr, Forest Glenn Dr to Creekside Dr | 0.20 | mi | 32,354 |
| Gold Fields Dr, Coneflower Court to Upton Rd | 0.32 | mi | 88,082 |
| Hibiscus Lane, Coneflower Court to Gold Fields Dr | 0.22 | mi | 57,591 |
| Ireland Dr, St. Joe Hwy to Mallow Ln | 0.20 | mi | 78,766 |
| Knockaderry Dr, Mallow Ln to St. Joe Hwy | 0.20 | mi | 75,314 |
| Mallow Ln, Knockaderry Dr to Dead End or Start | 0.13 | mi | 37,635 |
| Marcy Ave, Mt. Hope Hwy to Dead End or Start | 0.50 | mi | 79,541 |
| Medallion Dr, Chellmar Dr to Dead End or Start | 0.16 | mi | 18,512 |
| Murel Dr, Old Lansing Rd to Dead End or Start | 0.05 | mi | 10,007 |
| Pecos Dr, Westhaven Blvd to Southwick Cir | 0.08 | mi | 5,521 |
| Snow Rd, Old Lansing Rd to Westhill Dr | 0.17 | mi | 18,496 |
| Southwick Cir, Snow Rd to Dead End or Start | 0.11 | mi | 10,318 |
| Westbridge Cir, Westhaven Blvd to End | 0.04 | mi | 6,957 |
| Westhaven Blvd, Pecos Dr to St. Joe Hwy | 0.33 | mi | 41,497 |
| Westover Cir, Westhaven Blvd to Dead End or Start | 0.07 | mi | 31,944 |
| Westvale Cir, Westhaven Blvd to Dead End or Start | 0.03 | mi | 7,912 |
| *Initial Expenditures for Future Year Projects* | | | 453 |
| *Final Expenditures for Prior Year Projects* | | | 309,375 |
| | | | - |
| **Delta Township Total** | | | 2,614,839 |
| **Delta Township Contributions** | | | 7,027 |

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# 2022-2023

# PRIMARY AND LOCAL ROAD IMPROVEMENTS

## EATON TOWNSHIP

***Primary Roads:***

| | | |
|---|---|---|
| *Sealcoat w/ Fog Seal:* | | |
| Otto Rd, Packard Hwy to Lansing Rd | 0.43 mi | 17,480 |
| Packard Hwy, Lansing Rd to Stewart Rd | 2.00 mi | 67,433 |
| Stewart Rd, Clinton Trail to Packard Hwy | 2.16 mi | 78,005 |
| Cochran Rd, Marshall Rd to I-69 Ramp | 0.23 mi | 8,057 |
| *Final Expenditures for Prior Year Projects* | | 5,699 |
| *Initial Expenditures for Future Year Projects* | | 182 |

***Local Roads:***

| | | |
|---|---|---|
| Sealcoat w/ Fog Seal: | | |
| Gidner Rd, Packard Hwy to Kinsel Hwy | 1.02 mi | 30,697 |
| *Local Road Millage Paved Road Resurface:* | | |
| Flanders Rd, Clinton Trail to Island Hwy | 1.05 mi | 120,212 |
| Narcisse Ln, Packard Hwy to Dead End or Start | 0.22 mi | 59,506 |
| Nicholas Ln, Narcisse Ln to Dead End or Start | 0.50 mi | 125,785 |
| Jenks Hwy, Mills Hwy to Perkey Rd | 0.62 mi | 21,297 |
| Mills Hwy, Perkey Rd to Royston Rd | 2.01 mi | 61,882 |
| *Final Expenditures for Prior Year Projects* | | 1,555 |
| **Eaton Township Total** | | 597,790 |
| **Eaton Township Contributions** | | - |

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## EATON RAPIDS TOWNSHIP

***Primary Roads:***

| | | |
|---|---|---|
| *Reconstruct:* | | |
| Five Point Hwy, Whittum Rd to City Limits | 0.50 mi | 603,928 |
| *Sealcoat w/ Fog Seal:* | | |
| Canal Rd, City Limits to Wilbur Hwy | 5.24 mi | 162,727 |
| *Initial Expenditures for Future Year Projects* | | 13,693 |

***Local Roads:***

| | | |
|---|---|---|
| *Local Road Millage Regravel:* | | |
| Bostedor Rd, Township Line to Mills Hwy | 1.01 mi | 35,998 |
| Canfield Rd, Township Line to Mills Hwy | 1.02 mi | 53,070 |
| Canfield Rd, Island Hwy to Dead End | 1.82 mi | 45,323 |
| Columbia Hwy, Canfield Rd to Gunnell Rd | 1.00 mi | 30,469 |
| Mills Hwy, Royston Rd to Canfield Rd | 0.98 mi | 29,742 |
| Scout Rd, Columbia Hwy to Township Line | 1.03 mi | 21,411 |
| *Sealcoat w/ Fog Seal:* | | |
| Columbia Hwy, Canal Rd to Smith Rd | 1.00 mi | 33,140 |
| *Final Expenditures for Prior Year Projects* | | 10,888 |
| **Eaton Rapids Township Total** | | 1,040,390 |
| **Eaton Rapids Township Contributions** | | - |

# 2022-2023

# PRIMARY AND LOCAL ROAD IMPROVEMENTS

## HAMLIN TOWNSHIP

***Primary Roads:***

| | | |
|---|---|---|
| *Wedge and Overlay 2"* | | |
| Kinneville Rd, Waverly Rd to City Limits | 3.14 mi | 132,900 |
| *Sealcoat w/ Fog Seal:* | | |
| Royston Rd, Bellevue Hwy to Five Point Hwy | 3.80 mi | 118,726 |
| *Final Expenditures for Prior Year Projects* | | 1,999 |
| *Initial Expenditures for Future Year Projects* | | 1,462 |

***Local Roads:***

| | | |
|---|---|---|
| *Local Road Millage Crush, and Shape:* | | |
| Waverly Rd, Ballard Hwy to Bellevue Hwy | 0.99 mi | 257,267 |
| *Local Road Millage Regravel:* | | |
| Halsey Rd, Springport Rd to Royston Rd | 1.32 mi | 39,709 |
| Peck Rd, Bellevue Hwy to Holmes Hwy | 1.01 mi | 29,503 |
| *Sealcoat w/ Fog Seal:* | | |
| Durfee Rd, Spicerville Hwy to Clinton Trail | 0.90 mi | 29,817 |
| Freeman Rd, Spicerville Hwy to Five Point Hwy | 0.85 mi | 25,010 |
| Houston Rd, VFW Hwy to Kinneville Hwy | 0.76 mi | 24,992 |
| Royston Rd, Bellevue Hwy to Westgate Hwy | 0.23 mi | 2,612 |
| Westgate Hwy, Royston Rd to Bellevue Hwy | 0.33 mi | 5,876 |
| *Final Expenditures for Prior Year Projects* | | 27,562 |
| *Initial Expenditures for Future Year Projects* | | 6,274 |
| **Hamlin Township Total** | | 703,710 |
| **Hamlin Township Contributions** | | 31,650 |

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## KALAMO TOWNSHIP

***Primary Roads:***

| | | |
|---|---|---|
| *Sealcoat w/ Fog Seal:* | | |
| Ionia Rd, Five Point Hwy to Kalamo Hwy | 2.01 mi | 71,856 |
| Five Point Hwy, Curtis Rd to Bradley Rd | 6.01 mi | 194,063 |

***Local Roads:***

| | | |
|---|---|---|
| *Local Road Millage Regravel:* | | |
| Lacey Lake Rd, Five Point Hwy to End of Gravel | 1.14 mi | 37,283 |
| Pease Rd, Five Point Hwy to Kalamo Hwy | 2.23 mi | 74,045 |
| Perry Rd, Carlisle Hwy to Lawrence Hwy | 0.99 mi | 32,861 |
| Shaytown Rd, Lawrence Hwy to Kinsel Hwy | 2.04 mi | 68,643 |
| Wildt Hwy, Pease Rd to Dead End or Start | 0.58 mi | 20,001 |
| *Sealcoat w/ Fog Seal:* | | |
| Mason Rd, Kalamo Hwy to Lawrency Hwy | 2.00 mi | 53,788 |
| **Kalamo Township Total** | | 552,540 |
| **Kalamo Township Contributions** | | 20,324 |

# 2022-2023

# PRIMARY AND LOCAL ROAD IMPROVEMENTS

## ONEIDA TOWNSHIP

***Primary Roads:***

| | | |
|---|---|---|
| *Sealcoat w/ Fog Seal:* | | |
| Mt. Hope Hwy, Cochran Rd to Hartel Rd | 4.97 mi | 140,705 |
| *Final Expenditures for Prior Year Projects:* | | 8,632 |
| ***Local Roads:*** | | |
| *Local Road Millage Crush and Shape:* | | |
| Benton Rd, Mt. Hope Hwy to St. Joe Hwy | 1.00 mi | 179,931 |
| *Local Road Millage Regravel:* | | |
| Kenyon Rd, St. Joe Hwy to Grand Ledge Hwy | 2.01 mi | 56,742 |
| *Local Road Millage Paved Road Resurface:* | | |
| Oneida Woods Tr, Willow Hwy to Dead End | 0.41 mi | 43,206 |
| River Bend Cir, Oneida Woods Tr to Dead End | 0.11 mi | 8,581 |
| *Sealcoat w/ Fog Seal:* | | |
| Saginaw Hwy, Oneida Rd to Grand Ledge Hwy | 1.23 mi | 35,416 |
| *Initial Expenditures for Future Year Projects:* | | 1,573 |
| **Oneida Township Total** | | 474,786 |
| **Oneida Township Contributions** | | - |

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## ROXAND TOWNSHIP

***Primary Roads:***

| | | |
|---|---|---|
| *Sealcoat w/ Fog Seal:* | | |
| Mt. Hope Hwy, Dow Rd to Cochran Rd | 6.05 mi | 160,614 |
| Needmore Hwy, Clinton Trail to Cochran Rd | 5.50 mi | 17,707 |
| *Final Expenditures for Prior Year Projects:* | | 14,039 |
| ***Local Roads:*** | | |
| *Local Road Millage Regravel:* | | |
| Boyer Rd, Grand Ledge Hwy to Eaton Hwy | 1.03 mi | 37,841 |
| Cutler Rd, Strange Hwy to Dead End or Start | 0.32 mi | 10,944 |
| Eaton Hwy, Village Limits to Cochran Rd | 2.50 mi | 87,222 |
| Parker Rd, Strange Hwy to Dead End or Start | 0.23 mi | 7,673 |
| Strange Hwy, Dow Rd to Boyer Rd | 4.04 mi | 147,306 |
| Wheaton Rd, C&O Railroad to Eaton Hwy | 0.53 mi | 43,000 |
| *Sealcoat w/ Fog Seal:* | | |
| Boyer Rd, Mt. Hope Hwy to St. Joe Hwy | 1.00 mi | 27,091 |
| *Final Expenditures for Prior Year Projects:* | | 1,555 |
| **Roxand Township Total** | | 554,992 |
| **Roxand Township Contributions** | | - |

# 2022-2023

# PRIMARY AND LOCAL ROAD IMPROVEMENTS

## SUNFIELD TOWNSHIP

***Primary Roads:***

| | | |
|---|---|---|
| *Overlay 2":* | | |
| Sunfield Rd, Clinton Trail to Village Limits | 2.39 mi | 372,714 |
| | | - |
| *Sealcoat w/ Fog Seal:* | | |
| Bismark Hwy, Brown Rd to Moore Rd | 0.50 mi | 19,553 |
| Brown Rd, Kelly Hwy to Bismarck Hwy | 1.00 mi | 26,456 |
| Moore Rd, Bismark Hwy to Clinton Trail | 0.95 mi | 24,755 |
| Mt. Hope Hwy, Clinton Trail to Dow Rd | 1.55 mi | 45,999 |

***Local Roads:***

| | | |
|---|---|---|
| *Local Road Millage Paved Road Resurface:* | | |
| Saubee Rd, Grand Ledge Hwy to Eaton Hwy | 1.01 mi | 188,148 |
| *Sealcoat w/ Fog Seal:* | | |
| Bismark Hwy, Ionia Rd to Round Lake Rd | 1.00 mi | 26,342 |
| *Final Expenditures for Prior Year Projects* | | 19,939 |
| **Sunfield Township Total** | | 723,906 |
| **Sunfield Township Contributions** | | - |

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## VERMONTVILLE TOWNSHIP

***Primary Roads:***

| | | |
|---|---|---|
| *Sealcoat w/ Fog Seal:* | | |
| Allegan Rd, Village Limits to Brown Rd | 1.12 mi | 36,837 |
| Brown Rd, Allegan Rd to Kelly Hwy | 3.00 mi | 69,354 |
| Nashville Hwy, Curtis Rd to Ionia Rd | 2.62 mi | 84,099 |
| *Final Expenditures for Prior Year Projects* | | 1,478 |

***Local Roads:***

| | | |
|---|---|---|
| *Local Road Millage Regravel:* | | |
| Irish Rd, Vermontville Hwy to Kelly Hwy | 3.07 mi | 112,799 |
| Lake Hwy, Round Lake Rd to Dead end | 0.20 mi | 5,943 |
| Lake Hwy, Ionia Rd to Dead end | 0.76 mi | 25,706 |
| Round Lake Rd, Village Limits to Lake Hwy | 2.50 mi | 95,511 |
| *Sealcoat w/ Fog Seal:* | | |
| Mason Rd, Kinsel Hwy to Nashville Hwy | 1.00 mi | 30,378 |
| *Final Expenditures for Prior Year Projects* | | 3,632 |
| *Initial Expenditures for Future Year Projects* | | 1,894 |
| **Vermontville Township Total** | | 467,632 |
| **VermontvilleTownship Contributions** | | 2,275 |

# 2022-2023

# PRIMARY AND LOCAL ROAD IMPROVEMENTS

## WALTON TOWNSHIP

***Primary Roads:***

| | | | |
|---|---|---|---|
| *Sealcoat w/ Fog Seal:* | | | |
| Battle Creek Rd, Five Point Hwy to Township Line | 3.38 | mi | 136,317 |
| Marshall Rd, Bellevue Hwy to Cochran Rd | 5.71 | mi | 204,206 |

***Local Roads:***

| | | | |
|---|---|---|---|
| *Local Road Millage Paved Road Resurface:* | | | |
| McDonald Rd, Marshall Rd to Dead End | 1.01 | mi | 19,452 |
| Baker Hwy, McDonald Rd to Bridge | 0.62 | mi | 31,639 |
| Nye Hwy, Marshall Rd to Matthews Rd | 1.01 | mi | 24,529 |
| Weeks Rd, Butterfield Hwy to Bellevue Hwy | 1.00 | mi | 32,428 |
| Willis Rd, Weeks Rd to Bellevue Hwy | 1.00 | mi | 33,780 |
| Oxby Rd, Baseline Hwy to Butterfield Hwy | 1.01 | mi | 28,030 |
| *Culvert Replacement:* | | | |
| Butterfield Hwy Culvert, between Matthews Rd and Cochran Rd | | | 163,571 |
| *Final Expenditures for Prior Year Projects* | | | 1,245 |
| **Walton Township Total** | | | 675,198 |
| **Walton Township Contributions** | | | 56,717 |

## WINDSOR TOWNSHIP

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***Primary Roads:***

| | | | |
|---|---|---|---|
| *Sealcoat w/ Fog Seal:* | | | |
| Canal Rd, Vermontville Hwy to Lansing Rd | 3.03 | mi | 173,335 |
| Windsor Hwy, Royston Rd to Lansing Rd | 1.98 | mi | 13,776 |
| *Final Expenditures for Prior Year Projects* | | | 7,951 |
| Initial Expenditures for Future Projects | | | 1,462 |

***Local Roads:***

| | | | |
|---|---|---|---|
| *Local Road Millage Regravel:* | | | |
| Pares Rd, Vermontville Hwy to Bridge Hwy | 1.00 | mi | 35,002 |
| Scout Rd, Township Line to Rossman Hwy | 1.24 | mi | 41,628 |
| *Local Road Millage Paved Road Resurface:* | | | |
| Amber Cove, Highland Ct to Dead End or Start | 0.06 | mi | 28,552 |
| Brooks Landing, Brooks River Dr to Dead End or Start | 0.05 | mi | 21,457 |
| Brooks River Dr, Creyts Rd to Dead End or Start | 0.21 | mi | 58,549 |
| Ellistone Cir, Mattrada Dr to Dead End or Start | 0.06 | mi | 26,564 |
| Gunnel Rd, Windsor Hwy to Vermontville Hwy | 2.00 | mi | 149,053 |
| Highland Ct, Bailey Rd to Isaac Ln | 0.19 | mi | 45,259 |
| Jacaranda Dr, Canal Rd to Mattrada Dr | 0.41 | mi | 116,057 |
| Justonian Way, Mattrada Dr to Macadam Way | 0.26 | mi | 68,113 |
| Macadam Way, Mattrada Dr to Jacaranda Dr | 0.19 | mi | 46,822 |
| Mattrada Dr, Canal Rd to Dead End or Start | 0.31 | mi | 103,775 |
| *Sealcoat w/ Fog Seal:* | | | |
| Bridge St, Canal Rd to End | 0.61 | mi | 17,547 |
| Walnut St, Canal Rd to End | 0.57 | mi | 16,904 |
| *Final Expenditures for Prior Year Projects* | | | 7,951 |
| *Initial Expenditures for Future Projects* | | | 1,462 |
| **Windsor Township Total** | | | 981,218 |
| **Windsor Township Contributions** | | | - |

# 2022-2023
# PRIMARY ROAD ROUTINE MAINTENANCE

## SUMMARY BY TOWNSHIP

| TOWNSHIP | ROAD COMMISSION COST | MILES | AVERAGE COST PER MILE |
|---|---|---|---|
| Bellevue | $ 117,149 | 18.40 | $ 6,367 |
| Benton | 191,741 | 28.13 | 6,816 |
| Brookfield | 64,929 | 18.33 | 3,542 |
| Carmel | 101,824 | 23.36 | 4,359 |
| Chester | 112,764 | 13.70 | 8,231 |
| Delta | 459,072 | 55.85 | 8,220 |
| Eaton | 172,758 | 25.99 | 6,647 |
| Eaton Rapids | 122,228 | 24.09 | 5,074 |
| Hamlin | 92,105 | 26.30 | 3,502 |
| Kalamo | 154,452 | 18.30 | 8,440 |
| Oneida | 168,950 | 23.51 | 7,186 |
| Roxand | 127,288 | 20.72 | 6,143 |
| Sunfield | 148,167 | 22.80 | 6,499 |
| Vermontville | 143,130 | 17.51 | 8,174 |
| Walton | 209,499 | 23.09 | 9,073 |
| Windsor | 223,087 | 31.54 | 7,073 |
| Total Primary Maintenance | **$ 2,609,145** | **391.62** | **$ 6,662** |

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# 2022-2023
# LOCAL ROAD ROUTINE MAINTENANCE

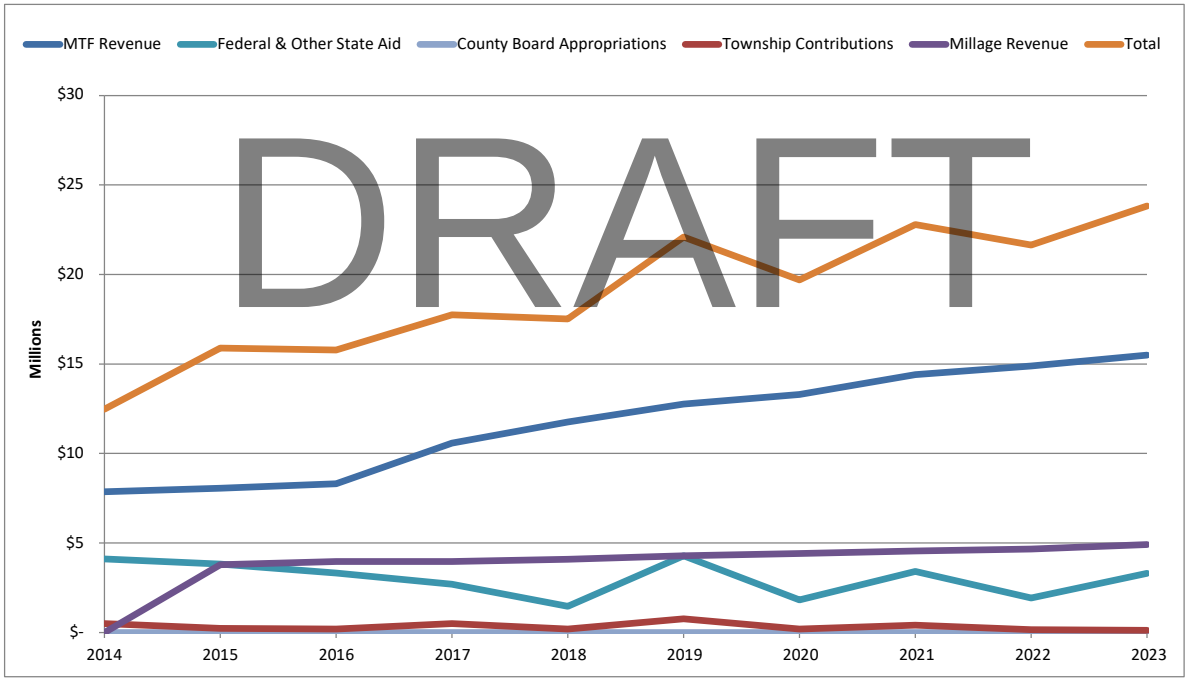
## SUMMARY BY TOWNSHIP

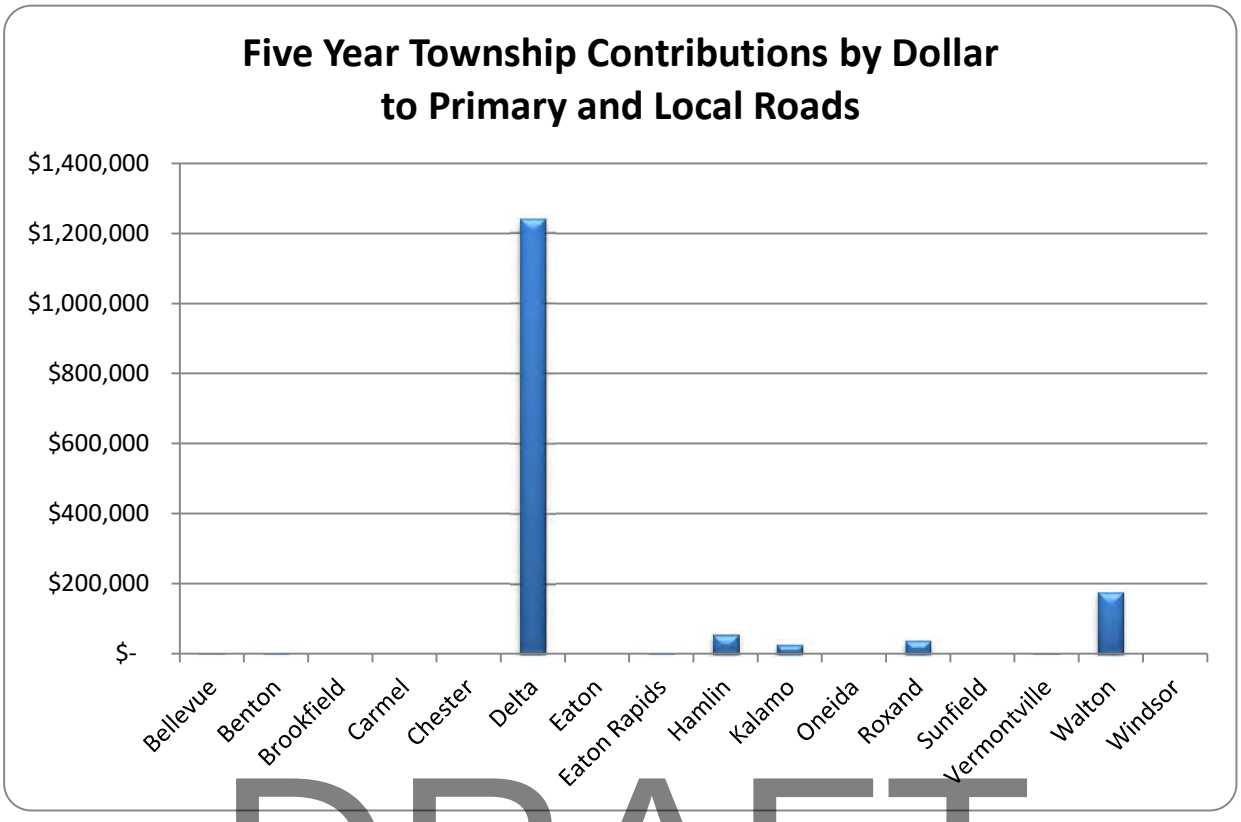
| TOWNSHIP | ROAD COMMISSION COST | MILES | AVERAGE COST PER MILE |
|---|---|---|---|
| Bellevue | $ 216,218 | 48.67 | $ 4,443 |
| Benton | 253,985 | 33.62 | 7,555 |
| Brookfield | 245,927 | 53.97 | 4,557 |
| Carmel | 262,020 | 42.25 | 6,202 |
| Chester | 298,890 | 48.62 | 6,147 |
| Delta | 419,115 | 113.07 | 3,707 |
| Eaton | 236,514 | 41.98 | 5,634 |
| Eaton Rapids | 372,462 | 43.29 | 8,604 |
| Hamlin | 272,491 | 44.82 | 6,080 |
| Kalamo | 260,965 | 47.62 | 5,480 |
| Oneida | 224,141 | 40.35 | 5,555 |
| Roxand | 212,980 | 44.59 | 4,776 |
| Sunfield | 191,721 | 37.41 | 5,125 |
| Vermontville | 346,305 | 42.13 | 8,220 |
| Walton | 290,671 | 47.43 | 6,128 |
| Windsor | 295,120 | 53.10 | 5,558 |
| Total Local Maintenance | **$ 4,399,523** | **782.92** | **$ 5,619** |

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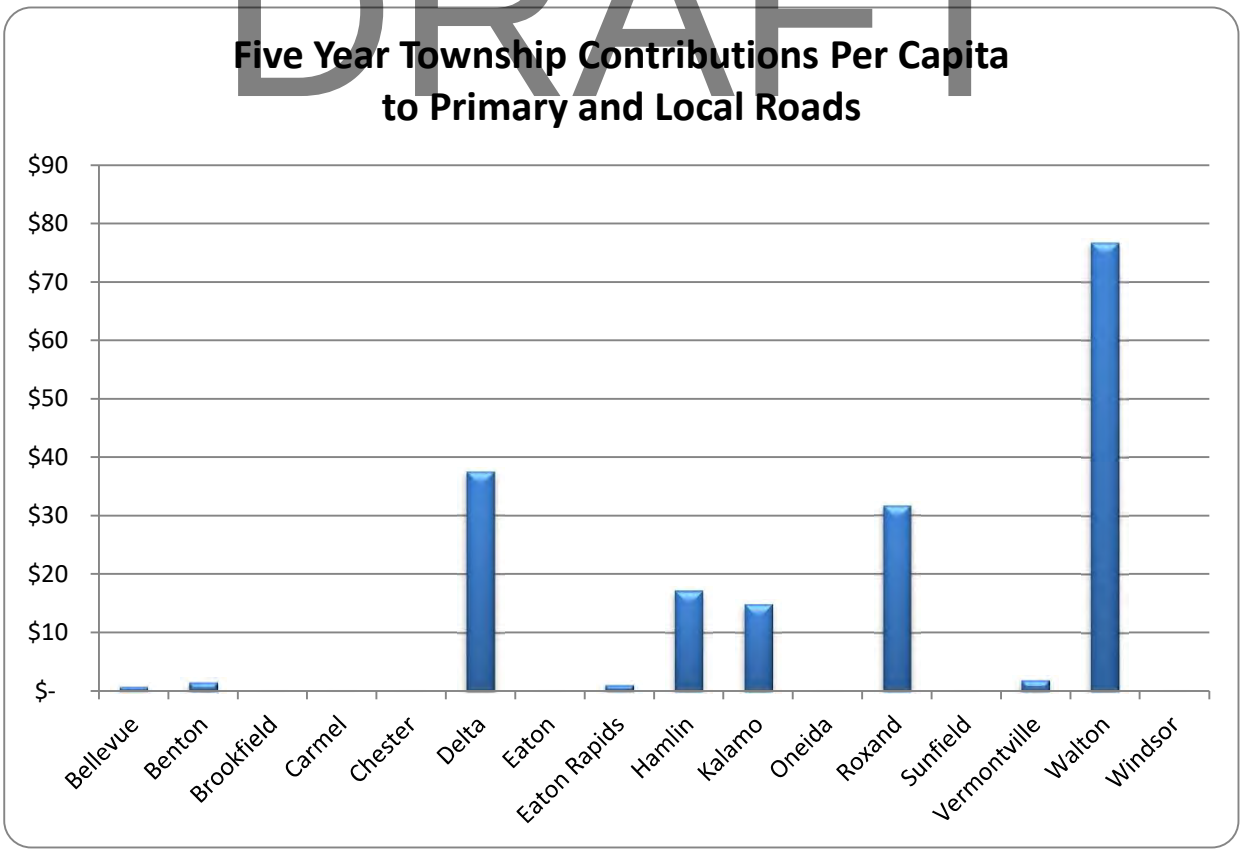
# TEN YEAR HISTORY
# MTF REVENUE, TOWNSHIP CONTRIBUTIONS, COUNTY BOARD APPROPRIATIONS AND MILLAGE REVENUE

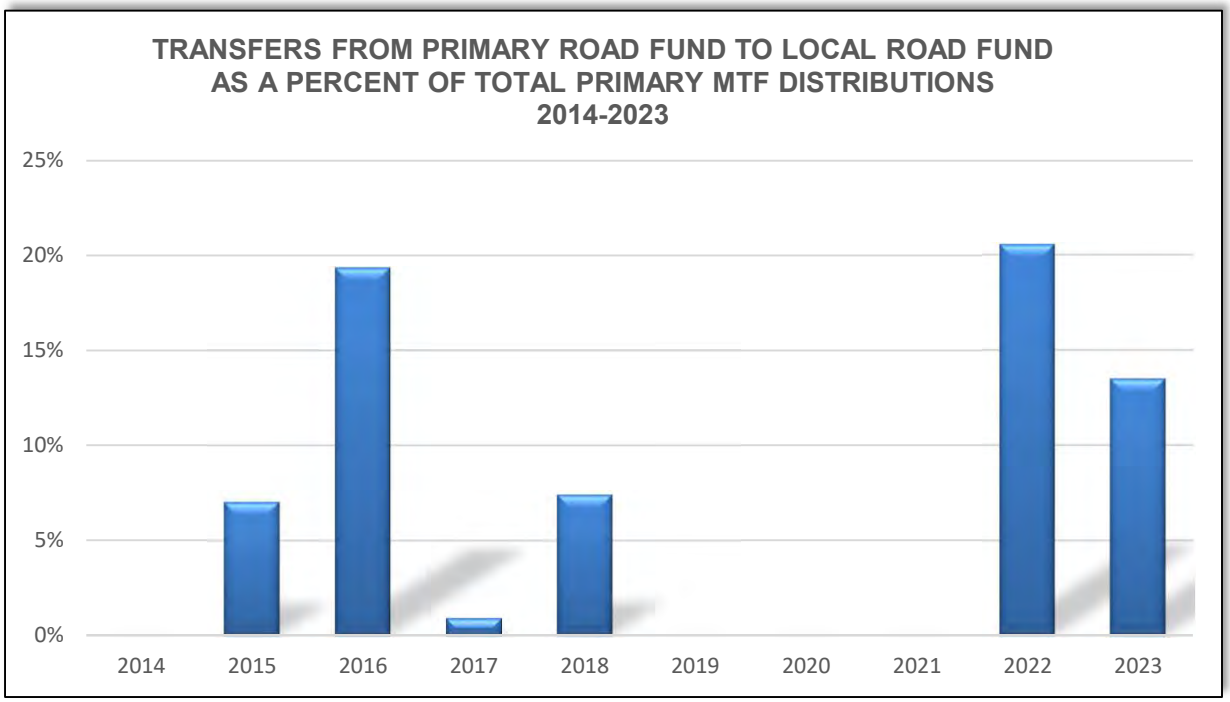
| YEAR | EATON COUNTY SHARE OF MTF | FEDERAL & OTHER STATE AID | COUNTY BOARD APPROP. | TOWNSHIP CONTR. | MILLAGE PROCEEDS | TOTAL | TOWNSHIP CONTR. AS % OF MTF |
|---|---|---|---|---|---|---|---|
| 2014 | 7,871,876 | 4,112,744 | - | 500,127 | - | 12,484,747 | 6.4% |
| 2015 | 8,057,044 | 3,821,769 | - | 228,788 | 3,790,275 | 15,897,876 | 2.8% |
| 2016 | 8,315,167 | 3,310,134 | - | 190,786 | 3,964,993 | 15,781,080 | 2.3% |
| 2017 | 10,578,775 | 2,696,950 | - | 501,944 | 3,964,117 | 17,741,786 | 4.7% |
| 2018 | 11,766,271 | 1,468,021 | - | 196,958 | 4,088,338 | 17,519,588 | 1.7% |
| 2019 | 12,757,872 | 4,279,633 | - | 772,746 | 4,289,816 | 22,100,067 | 6.1% |
| 2020 | 13,298,859 | 1,812,368 | - | 183,601 | 4,408,110 | 19,702,939 | 1.4% |
| 2021 | 14,411,240 | 3,413,496 | - | 407,999 | 4,554,261 | 22,786,997 | 2.8% |
| 2022 | 14,888,654 | 1,923,458 | - | 165,847 | 4,658,308 | 21,636,267 | 1.1% |
| 2023 | 15,493,400 | 3,304,228 | - | 117,993 | 4,912,442 | 23,828,063 | 0.8% |



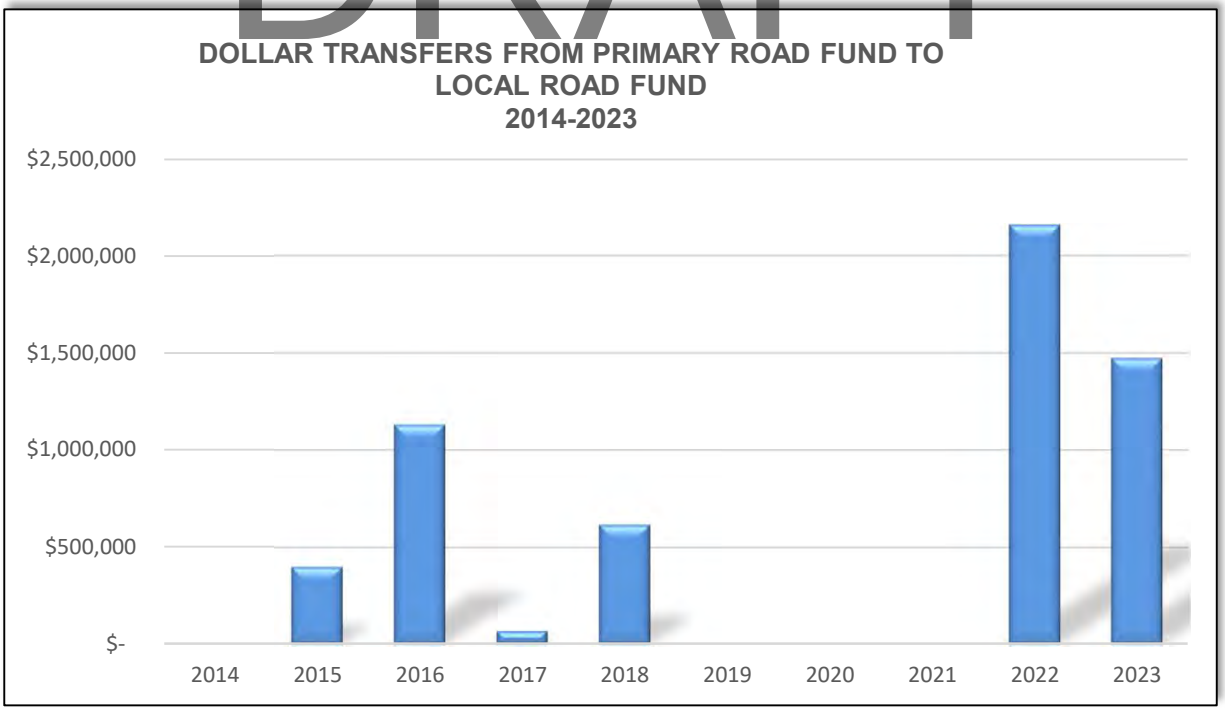

Five Year Township Contributions by Dollar
to Primary and Local Roads
$1,400,000
$1,200,000
$1,000,000
$800,000
$600,000
$400,000
$200,000
$-
Bellevue
Benton
Brookfield
Carmel
Chester
Delta
Eaton
Eaton Rapids
Hamlin
Kalamo
Oneida
Roxand
Sunfield
Vermontville
Walton
Windsor

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Five Year Township Contributions Per Capita
to Primary and Local Roads
$90
$80
$70
$60
$50
$40
$30
$20
$10
$-
Bellevue
Benton
Brookfield
Carmel
Chester
Delta
Eaton
Eaton Rapids
Hamlin
Kalamo
Oneida
Roxand
Sunfield
Vermontville
Walton
Windsor


TRANSFERS FROM PRIMARY ROAD FUND TO LOCAL ROAD FUND
AS A PERCENT OF TOTAL PRIMARY MTF DISTRIBUTIONS
2014-2023
25%
20%
15%
10%
5%
0%
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

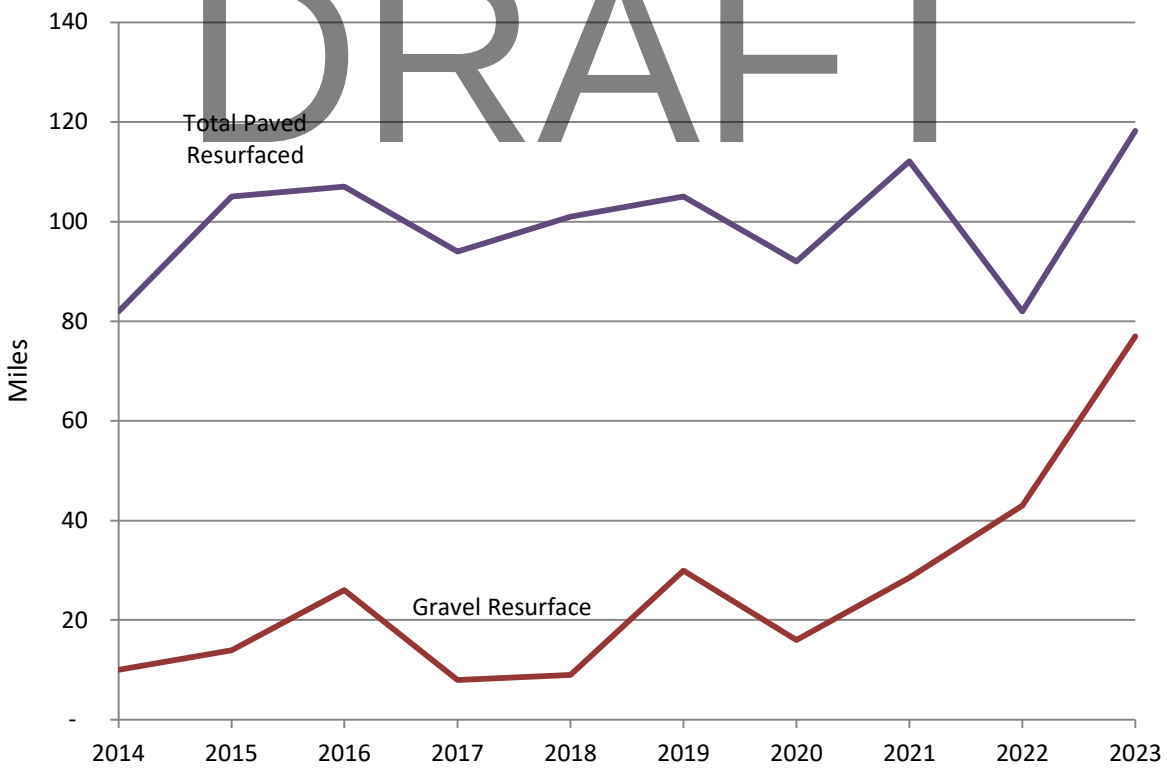
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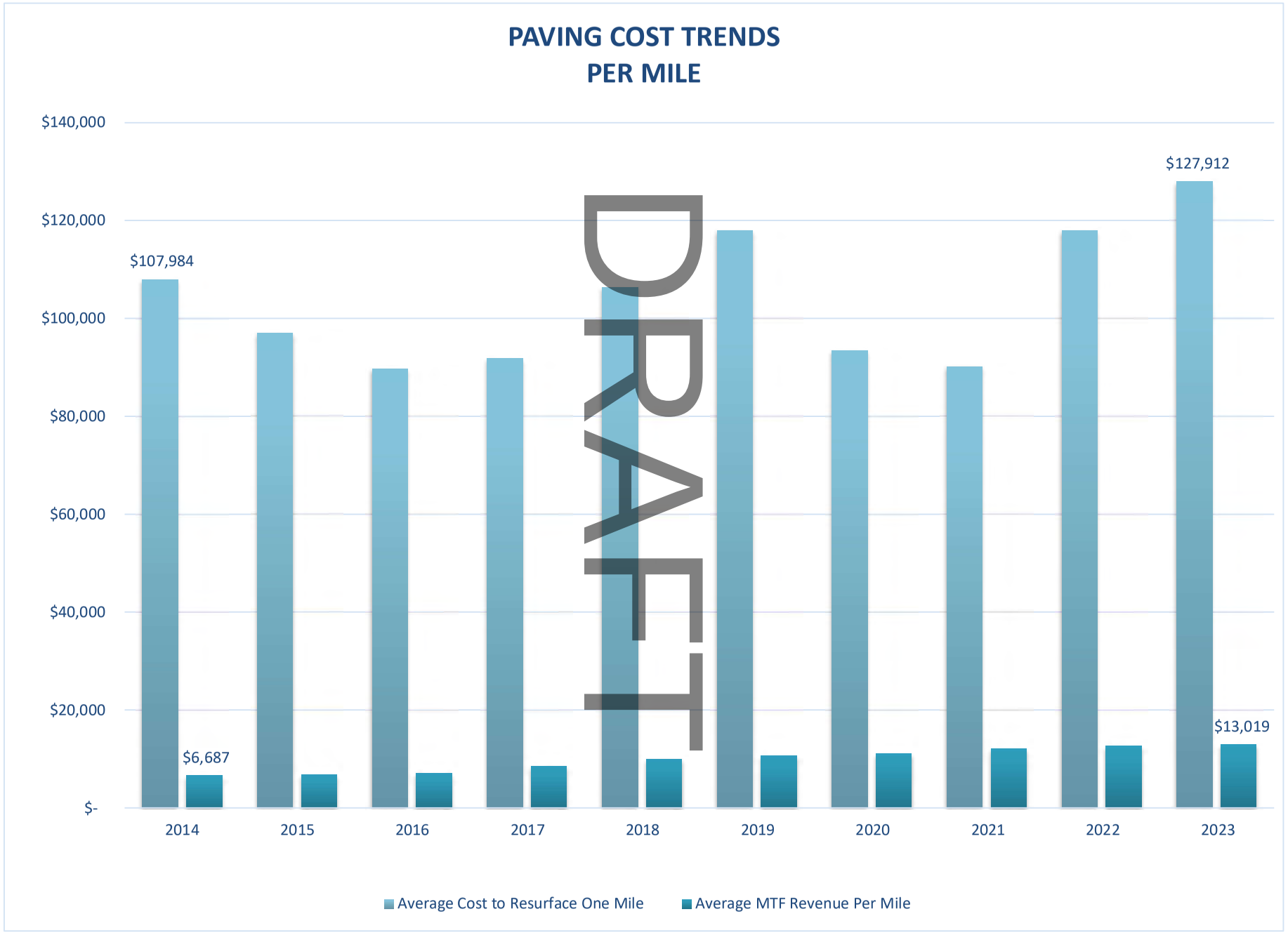

DOLLAR TRANSFERS FROM PRIMARY ROAD FUND TO
LOCAL ROAD FUND
2014-2023
$2,500,000
$2,000,000
$1,500,000
$1,000,000
$500,000
$-
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

# TEN YEAR HISTORY
# ROAD RESURFACING

| YEAR | PRIMARY PAVED MILES RESURFACED | LOCAL PAVED MILES RESURFACED | TOTAL PAVED MILES RESURFACED | LOCAL MILES GRAVELED |
|---|---|---|---|---|
| 2014 | 76 | 6 | 82 | 10 |
| 2015 | 77 | 28 | 105 | 14 |
| 2016 | 77 | 30 | 107 | 26 |
| 2017 | 62 | 32 | 94 | 8 |
| 2018 | 69 | 32 | 101 | 9 |
| 2019 | 81 | 24 | 105 | 30 |
| 2020 | 66 | 26 | 92 | 16 |
| 2021 | 82 | 30 | 112 | 29 |
| 2022 | 58 | 24 | 82 | 43 |
| 2023 | 90 | 28 | 118 | 77 |

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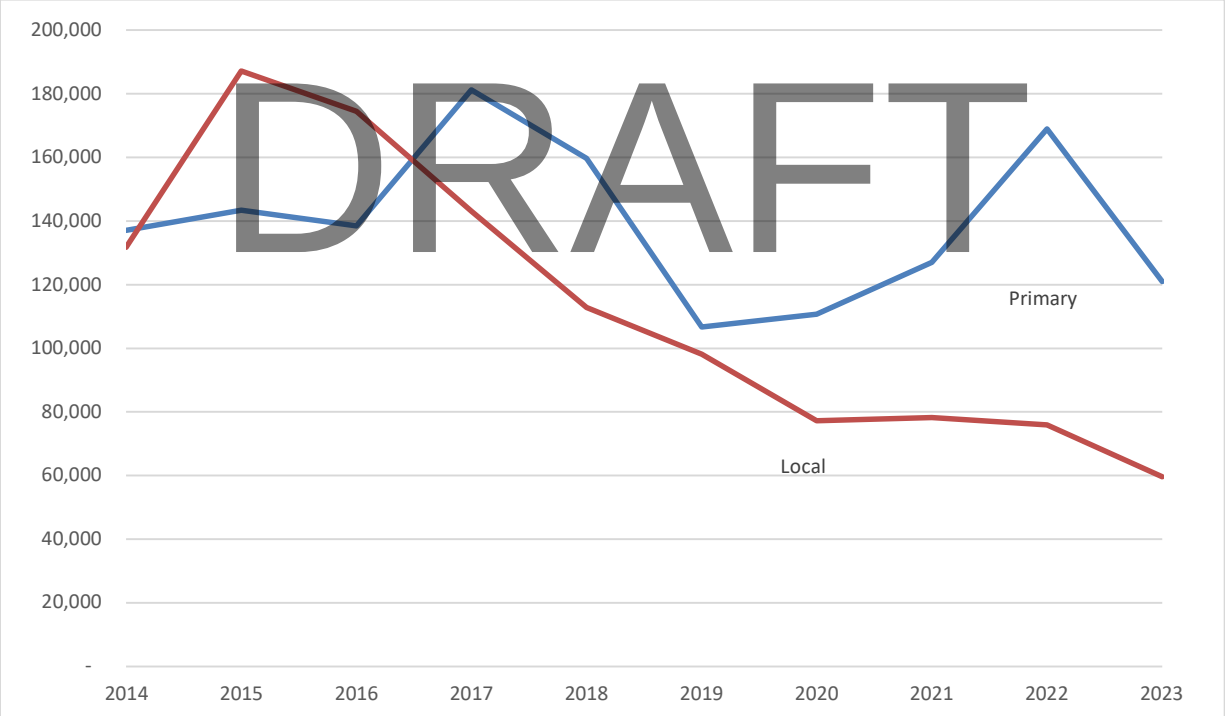



PAVING COST TRENDS
PER MILE
$140,000
$120,000
$100,000
$80,000
$60,000
$40,000
$20,000
$-
$107,984
$6,687
$127,912
$13,019
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
Average Cost to Resurface One Mile
Average MTF Revenue Per Mile

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# ANNUAL POTHOLE PATCHING COSTS

| YEAR | PRIMARY TONS | LOCAL TONS | TOTAL TONS | PRIMARY COST | LOCAL COST | TOTAL COST | AVG COST/MILE OF PRIMARY | AVG COST/MILE OF LOCAL | AVG COST/TON OF COLD PATCH |
|---|---|---|---|---|---|---|---|---|---|
| 2014 | 228 | 243 | 471 | 137,026 | 131,731 | 268,757 | 350 | 468 | 571 |
| 2015 | 246 | 341 | 587 | 143,466 | 187,172 | 330,638 | 366 | 665 | 563 |
| 2016 | 244 | 331 | 575 | 138,506 | 174,466 | 312,972 | 354 | 620 | 544 |
| 2017 | 327 | 276 | 603 | 181,248 | 143,124 | 324,372 | 463 | 504 | 538 |
| 2018 | 227 | 130 | 357 | 159,691 | 112,874 | 272,565 | 408 | 398 | 763 |
| 2019 | 167 | 135 | 302 | 106,651 | 98,076 | 204,727 | 272 | 348 | 677 |
| 2020 | 168 | 150 | 318 | 110,675 | 77,146 | 187,821 | 282 | 274 | 591 |
| 2021 | 203 | 103 | 306 | 126,984 | 78,142 | 205,126 | 324 | 277 | 671 |
| 2022 | 289 | 109 | 398 | 169,002 | 75,939 | 244,941 | 432 | 270 | 616 |
| 2023 | 221 | 99 | 321 | 121,026 | 59,616 | 180,642 | 309 | 212 | 563 |



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# SUMMARY OF
# PERMIT DEPARTMENT OPERATIONS

| Permit Type | Number Issued | Amount Collected |
|---|---|---|
| Seasonal/Annual Permits/Cab Cards | 593 | |
| Single Move Permits | 431 | |
| Driveway Permits | 136 | |
| Utility Permits | 101 | |
| Building Move Permits | 91 | |
| Tap In Permits | 1 | |
| Road Bore | 26 | |
| | | $ 113,980 |
| Graves/Bituminous Road Cuts | 27 | $ 13,200 |
| Accident/Sign Damages Recovered | 0 | |
| Miscellaneous (no charge) | 28 | - |
| **Total Permit Fees Collected** | | **$ 127,180** |

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# 2022-2023
# CAPITAL OUTLAY

## EQUIPMENT AND BUILDING PURCHASES

| | | | |
|---|---|---|---|
| **Buildings and Yard & Storage** | | | |
| | Charlotte Roof Repair | $ | 18,720 |
| | Vermontville Brine Well | | 12,288 |
| | Miscelleanous Building Repairs | | 18,428 |
| Total Building and Yard & Storage | | $ | 49,435 |
| | | | |
| **Road Equipment** | | | |
| 4 | GMC Sierra 1500 4wd Dbl Cab | $ | 158,516 |
| 1 | GMC Sierra 2500 4wd Dbl Cab | | 37,019 |
| 1 | GMC Sierra 3500 4wd w/Dump body | | 30,384 |
| 1 | Ford F450 C XL 4x2 w/Dump body | | 85,190 |
| 2 | Freightliner Tandem Plows | | 532,147 |
| 1 | John Deere Wheel Loader | | 260,612 |
| 1 | CAT Wheeled Excavator | | 254,978 |
| 1 | Versalift Dakota Platform | | 88,352 |
| 1 | Tilt Rotator & Quick Coupler | | 49,650 |
| 1 | Vanair UDAC Rotary Air Compressor | | 20,000 |
| 1 | Cat Fork Truck (1994) | | 2,500 |
| 1 | Miscellaneous Road Equipment | | 124,862 |
| Total Road Equipment | | $ | 1,644,210 |
| | | | |
| **Engineering Equipment** | | | |
| 1 | Leica Equipment | | 21,995 |
| 1 | Server | | 3,985 |
| 5 | Traffic Data Recorders | $ | 7,770 |
| Total Engineering Equipment | | $ | 11,755 |
| | | | |
| **Total 2022-2023 Capital Outlay** | | **$** | **1,705,400** |

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# STATUS OF ROAD MILEAGE
# JANUARY 1, 2024

| TOWNSHIP | PRIMARY ROADS | | TOTAL MILES PRIMARY | LOCAL ROADS | | PLATTED STREETS | | TOTAL MILES LOCAL | TOTAL MILES IN TWP | TOTAL MILES PAVED | TOTAL PERCENT PAVED | TOTAL MILES GRAVEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PAVED | GRAVEL | | PAVED | GRAVEL | PAVED | GRAVEL | | | | | |
| Bellevue | 18.40 | - | 18.40 | 3.55 | 44.89 | 0.23 | - | 48.67 | 67.07 | 22.18 | 33.07% | 44.89 |
| Benton | 28.13 | - | 28.13 | 7.02 | 26.60 | - | - | 33.62 | 61.75 | 35.15 | 56.92% | 26.60 |
| Brookfield | 18.33 | - | 18.33 | 9.19 | 44.78 | - | - | 53.97 | 72.30 | 27.52 | 38.06% | 44.78 |
| Carmel | 23.36 | - | 23.36 | 8.05 | 33.87 | 0.33 | - | 42.25 | 65.61 | 31.74 | 48.38% | 33.87 |
| Chester | 13.70 | - | 13.70 | 4.52 | 43.97 | - | 0.13 | 48.62 | 62.32 | 18.22 | 29.24% | 44.10 |
| Delta | 55.85 | - | 55.85 | 6.63 | 6.94 | 98.57 | 0.93 | 113.07 | 168.92 | 161.05 | 95.34% | 7.87 |
| Eaton | 25.99 | - | 25.99 | 19.22 | 18.54 | 4.22 | - | 41.98 | 67.97 | 49.43 | 72.72% | 18.54 |
| Eaton Rapids | 24.09 | - | 24.09 | 7.59 | 35.70 | - | - | 43.29 | 67.38 | 31.68 | 47.02% | 35.70 |
| Hamlin | 26.30 | - | 26.30 | 13.00 | 31.72 | - | 0.10 | 44.82 | 71.12 | 39.30 | 55.26% | 31.82 |
| Kalamo | 18.30 | - | 18.30 | 8.28 | 39.08 | 0.26 | - | 47.62 | 65.92 | 26.84 | 40.72% | 39.08 |
| Oneida | 23.51 | - | 23.51 | 16.01 | 14.55 | 9.60 | 0.19 | 40.35 | 63.86 | 49.12 | 76.92% | 14.74 |
| Roxand | 20.72 | - | 20.72 | 10.07 | 34.52 | - | - | 44.59 | 65.31 | 30.79 | 47.14% | 34.52 |
| Sunfield | 22.80 | - | 22.80 | 12.95 | 23.74 | 0.72 | - | 37.41 | 60.21 | 36.47 | 60.57% | 23.74 |
| Vermontville | 17.51 | - | 17.51 | 3.56 | 38.57 | - | - | 42.13 | 59.64 | 21.07 | 35.33% | 38.57 |
| Walton | 23.09 | - | 23.09 | 11.82 | 35.61 | - | - | 47.43 | 70.52 | 34.91 | 49.50% | 35.61 |
| Windsor | 31.54 | - | 31.54 | 14.82 | 27.17 | 10.81 | 0.30 | 53.10 | 84.64 | 57.17 | 67.54% | 27.47 |
| **TOTAL** | **391.62** | **-** | **391.62** | **156.28** | **500.25** | **124.74** | **1.65** | **782.92** | **1,174.54** | **672.64** | **57.27%** | **501.90** |

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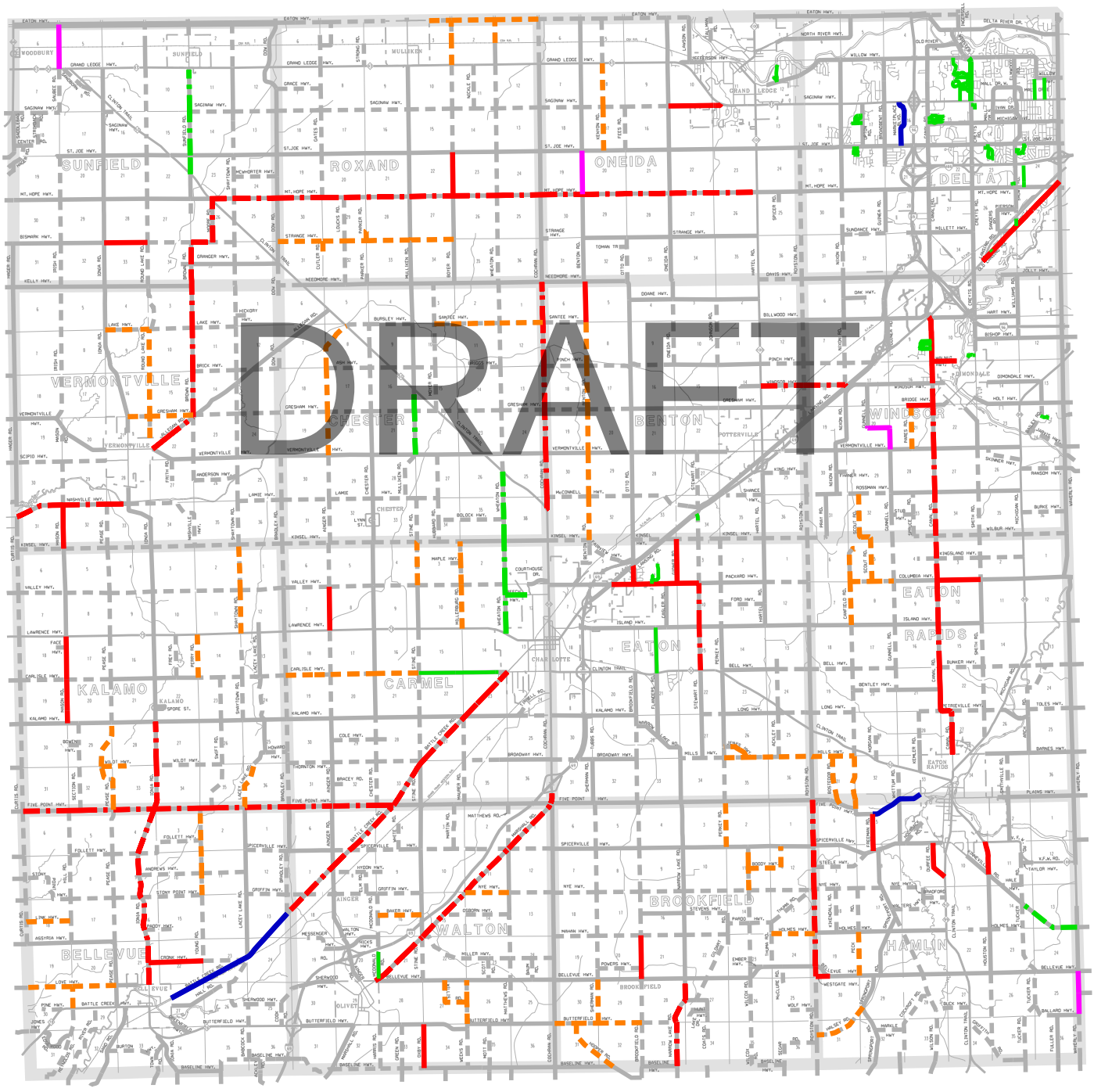
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# EATON COUNTY ROAD COMMISSION

## CALENDAR YEAR 2023 COMPLETED PROJECTS

REV: 03-04-24 MJT

- ASPHALT OVERLAY - PRIMARY (10.0 miles)
- ASPHALT OVERLAY - MILLAGE / LOCAL OVERLAY (14.4 miles)
- ASPHALT OVERLAY - CRUSH & SHAPE - MILLAGE / LOCAL (4.8 miles)
- FEDERAL AID (5.0 miles)
- REGRAVEL - MILLAGE / LOCAL (73.9 miles)
- PRIMARY SINGLE SEAL AND FOG (80.2 miles)
- LOCAL SINGLE SEAL AND FOG (18.7 miles)

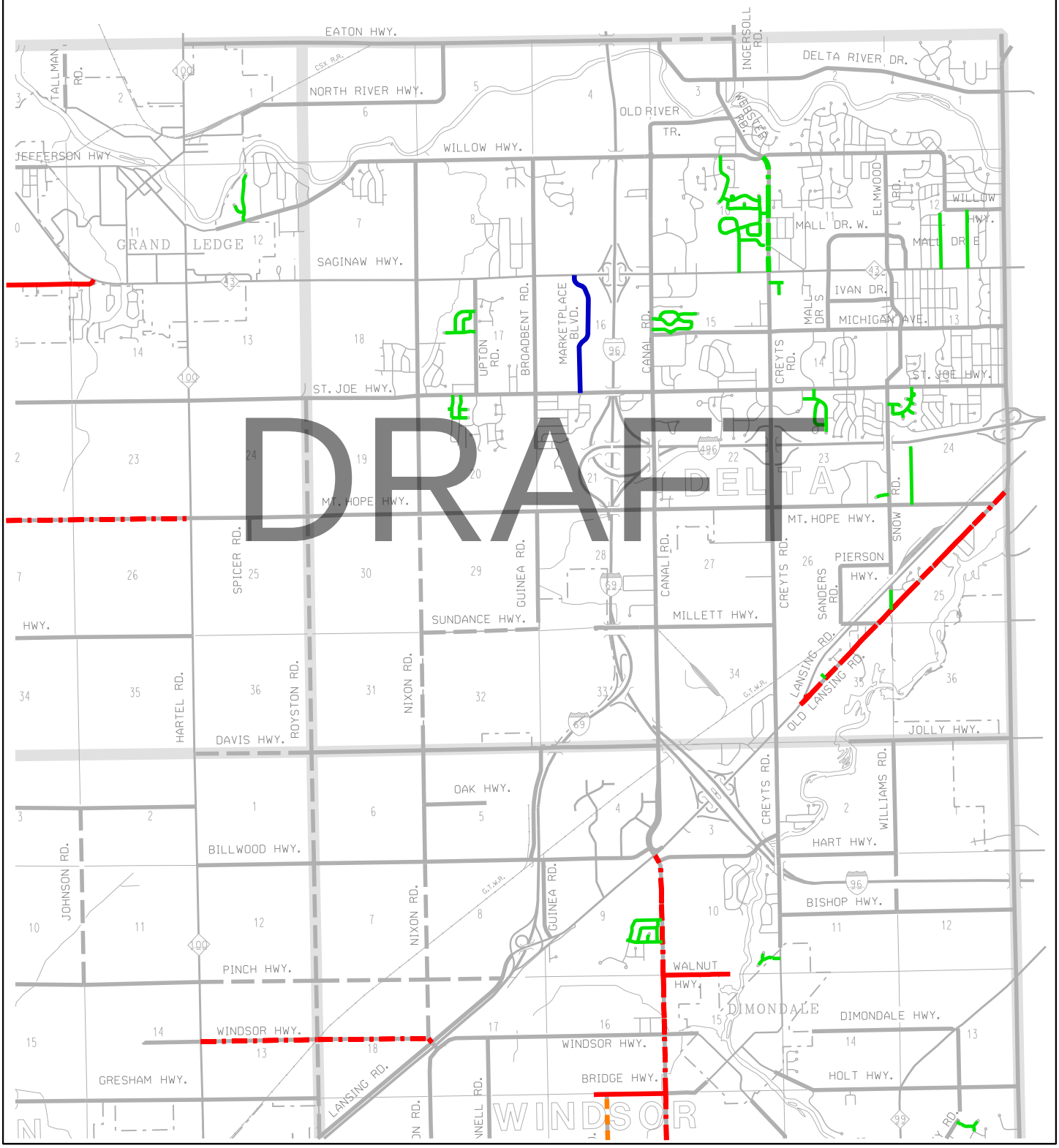


# EATON COUNTY ROAD COMMISSION

## CALENDAR YEAR 2023 COMPLETED PROJECTS - URBAN AREA

REV: 03-04-24 MJT

- ASPHALT OVERLAY - PRIMARY
- ASPHALT OVERLAY - MILLAGE / LOCAL
- ASPHALT OVERLAY - CRUSH AND SHAPE - LOCAL
- SINGLE SEAL AND FOG
- REGRAVEL - MILLAGE/LOCAL
- FEDERAL AID



# Eaton County Road Commission

*Your Local Road Professionals*




# LOCAL ROAD MILLAGE PROGRAM

# 2023

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1112 Reynolds Road | Charlotte, MI 48813 | 517-543-1630
www.eatoncountyroad.com

Eaton County Road Commission

# 2023
# LOCAL ROAD MILLAGE PROGRAM REPORT

## AS OF DECEMBER 31, 2023

### *Board of Eaton County Road Commissioners*

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| Duane A. Eldred | Timothy J. Lamoreaux | Keith A. Barber | Benjamin S. Lyons | Lauren K. Aitch-Guerrant |
|---|---|---|---|---|
| CHAIR | VICE CHAIR | MEMBER | MEMBER | MEMBER |
| *Term expires: 12-31-2025* | *Term expires: 12-31-2028* | *Term expires: 12-31-2028* | *Term expires: 12-31-2026* | *Term expires: 12-31-2025* |

**MATHEW M. HANNAHS, P.E., *ENGINEER-MANAGER***

**PATRICIA M. LOOSEMORE, *FINANCE DIRECTOR***

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- Eaton Rapids 28
- Hamlin 30
- Kalamo 32
- Oneida 34
- Roxand 36
- Sunfield 38
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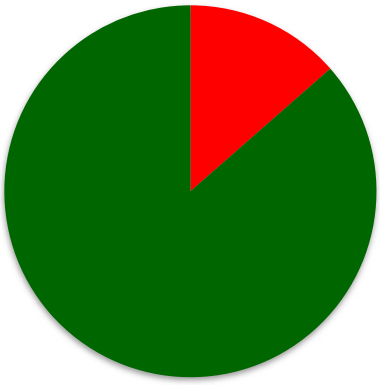
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# LOCAL ROAD MILLAGE PROGRAM DASHBOARD

*As of 12-31-23*

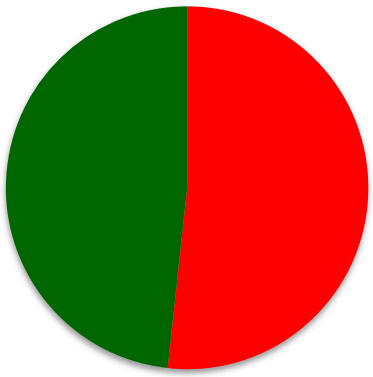
## Paved Local Roads

**Total Miles in Program**




## Gravel Local Roads

**Total Miles in Program**




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| | Total Miles in Millage Program | | Millage Projects Complete as of 12/31/23 | | Percent of Total Miles Complete | |
|---|---|---|---|---|---|---|
| Township | Asphalt | Gravel | Asphalt | Gravel | Asphalt | Gravel |
| Bellevue Twp | 3.88 | 44.78 | 3.88 | 30.02 | 100.0% | 67.0% |
| Benton Twp | 6.98 | 26.60 | 6.98 | 13.69 | 100.0% | 51.5% |
| Brookfield Twp | 9.12 | 44.83 | 9.12 | 20.73 | 100.0% | 46.2% |
| Carmel Twp | 8.48 | 33.66 | 8.48 | 14.41 | 100.0% | 42.8% |
| Chester Twp | 4.46 | 44.10 | 4.46 | 29.67 | 100.0% | 67.3% |
| Delta Twp | 92.03 | 8.01 | 70.35 | - | 76.4% | 0.0% |
| Eaton Rapids Twp | 7.64 | 35.70 | 7.64 | 14.77 | 100.0% | 41.4% |
| Eaton Twp | 21.93 | 18.61 | 16.87 | 11.96 | 76.9% | 64.3% |
| Hamlin Twp | 12.90 | 31.76 | 11.87 | 8.97 | 92.0% | 28.2% |
| Kalamo Twp | 8.38 | 39.10 | 8.38 | 20.14 | 100.0% | 51.5% |
| Oneida Twp | 24.89 | 14.74 | 21.56 | 9.03 | 86.6% | 61.3% |
| Roxand Twp | 9.99 | 34.52 | 9.49 | 14.31 | 95.0% | 41.5% |
| Sunfield Twp | 13.59 | 23.74 | 13.10 | 6.40 | 96.4% | 27.0% |
| Vermontville Twp | 3.54 | 38.57 | 3.54 | 25.54 | 100.0% | 66.2% |
| Walton Twp | 11.84 | 35.42 | 11.84 | 8.88 | 100.0% | 25.1% |
| Windsor Twp | 24.36 | 26.10 | 20.65 | 12.97 | 84.8% | 49.7% |
| | **264.01** | **500.24** | **228.21** | **241.49** | **86.4%** | **48.3%** |

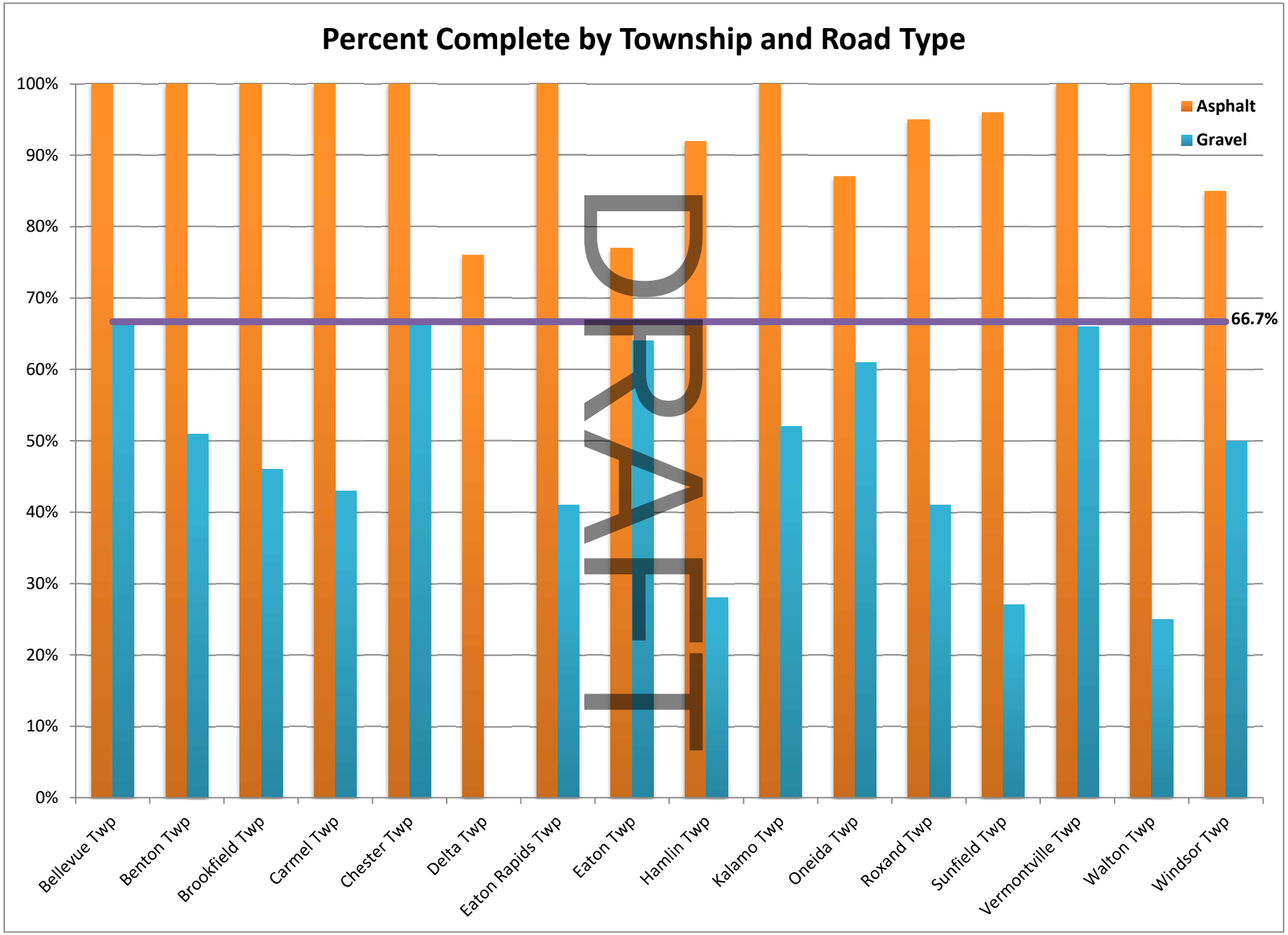
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# FINANCIAL SUMMARY

| | 2018 ACTUAL | 2019 ACTUAL | 2020 ACTUAL | 2021 ACTUAL | 2022 ACTUAL | 2023 ACTUAL | PROGRAM TO DATE | 2024 BUDGET |
|---|---|---|---|---|---|---|---|---|
| Paved Road Resurfacing | $ 5,391,764 | 3,670,891 | 5,128,716 | $ 3,475,563 | $ 4,222,953 | $ 4,386,696 | $ 37,316,067 | $ 5,800,000 |
| Gravel Road Resurfacing | 346,047 | 430,337 | 321,396 | 616,151 | 1,394,145 | 2,165,492 | $ 6,135,028 | 500,000 |
| County-Wide Dust Control | 469,304 | 479,137 | 469,734 | 477,114 | 519,718 | 519,717 | $ 4,190,460 | 500,000 |
| **Total Expenditures** | **$ 6,207,115** | **$ 4,580,365** | **$ 5,919,846** | **$ 4,568,828** | **$ 6,136,816** | **$ 7,071,905** | **$ 47,641,555** | **$ 6,800,000** |
| Property Taxes Collected | 4,088,246 | 4,289,816 | 4,408,110 | 4,554,261 | 4,658,308 | 4,912,442 | 33,718,126 | 5,245,043 |
| **Net Revenues (Expenditures)** | **$ (2,118,869)** | **$ (290,549)** | **$ (1,511,736)** | **$ (14,567)** | **$ (1,478,508)** | **$ (2,159,463)** | **$ (13,923,429)** | **$ (1,554,957)** |
| ***Average Cost Per Mile:*** | | | | | | | | |
| Paved Road Resurfacing: | $ 200,892 | $ 156,408 | $ 193,536 | $ 162,106 | $ 210,074 | $ 228,474 | | |
| Gravel Road Resurfacing | $ 20,727 | $ 23,789 | $ 18,066 | $ 24,402 | $ 38,129 | $ 29,263 | | |
| County-Wide Dust Control | $ 938 | $ 958 | 939 | $ 966 | $ 1,057 | $ 1,039 | | |

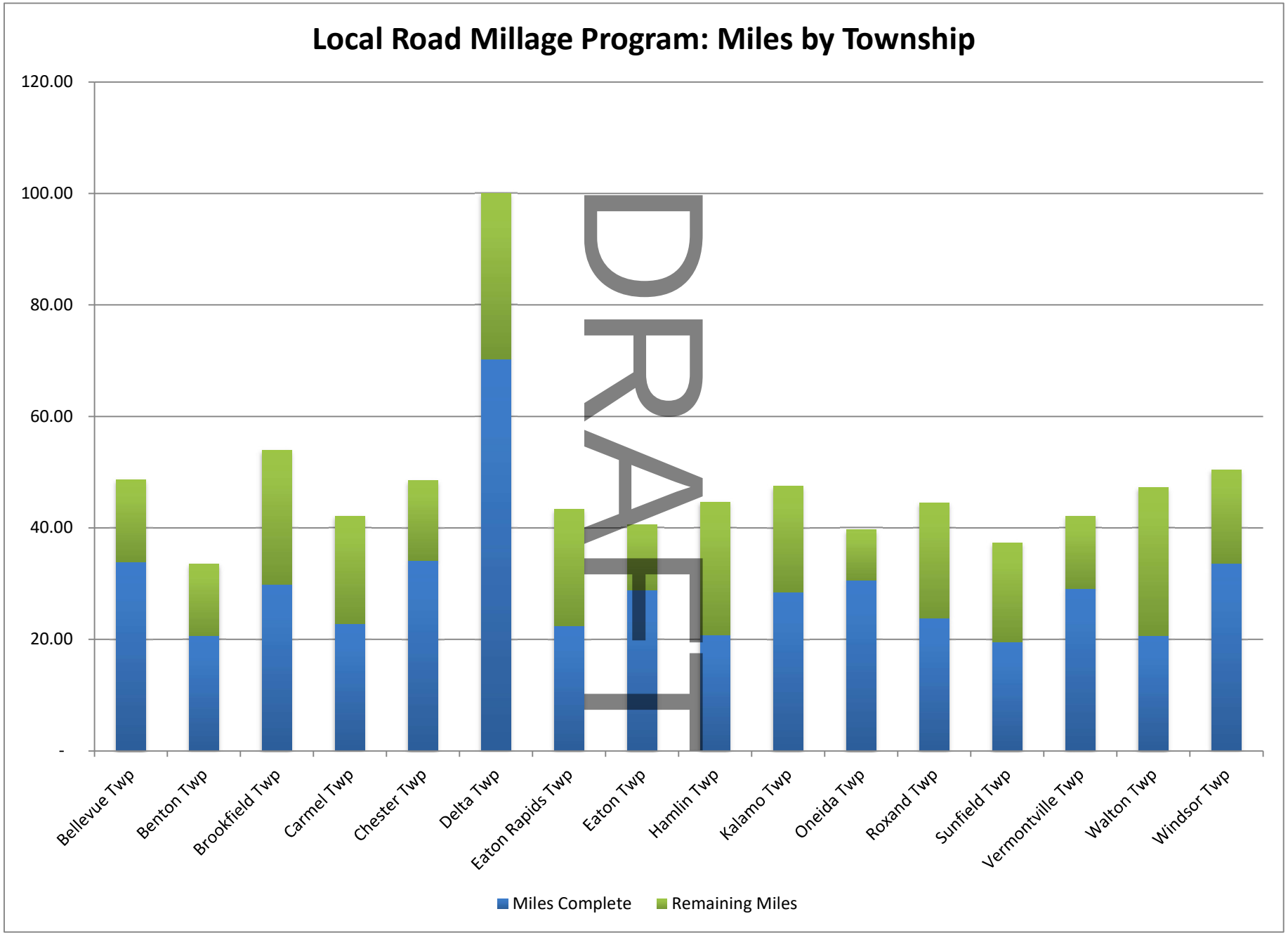
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Percent Complete by Township and Road Type
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Asphalt
Gravel
66.7%
Bellevue Twp
Benton Twp
Brookfield Twp
Carmel Twp
Chester Twp
Delta Twp
Eaton Rapids Twp
Eaton Twp
Hamlin Twp
Kalamo Twp
Oneida Twp
Roxand Twp
Sunfield Twp
Vermontville Twp
Walton Twp
Windsor Twp

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Local Road Millage Program: Miles by Township
120.00
100.00
80.00
60.00
40.00
20.00
-
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Bellevue Twp
Benton Twp
Brookfield Twp
Carmel Twp
Chester Twp
Delta Twp
Eaton Rapids Twp
Eaton Twp
Hamlin Twp
Kalamo Twp
Oneida Twp
Roxand Twp
Sunfield Twp
Vermontville Twp
Walton Twp
Windsor Twp
Miles Complete
Remaining Miles

# 2023 LOCAL ROAD MILLAGE PROGRAM

## BELLEVUE TOWNSHIP

***Gravel Road Resurfacing:***

| | | | | |
|---|---|---|---|---|
| Link Hwy, Curtis Rd to Hill Rd | 1.02 | mi | $ | 30,072 |
| Love Hwy, County Line to Pease Rd | 2.02 | mi | $ | 63,214 |
| Reynolds Rd, Battle Creek Hwy to Love Hwy | 0.50 | mi | $ | 16,679 |
| Young Rd, Stony Point Hwy to Five Point Hwy | 2.00 | mi | $ | 63,890 |
| *Total gravel miles resurfaced* | 5.54 | | | |

| | | | | |
|---|---|---|---|---|
| ***County-Wide Dust Control:*** | 44.88 | mi | $ | 44,323 |

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# MILLAGE PROGRAM STATUS - ENDING 12/31/2023

# BELLEVUE TOWNSHIP

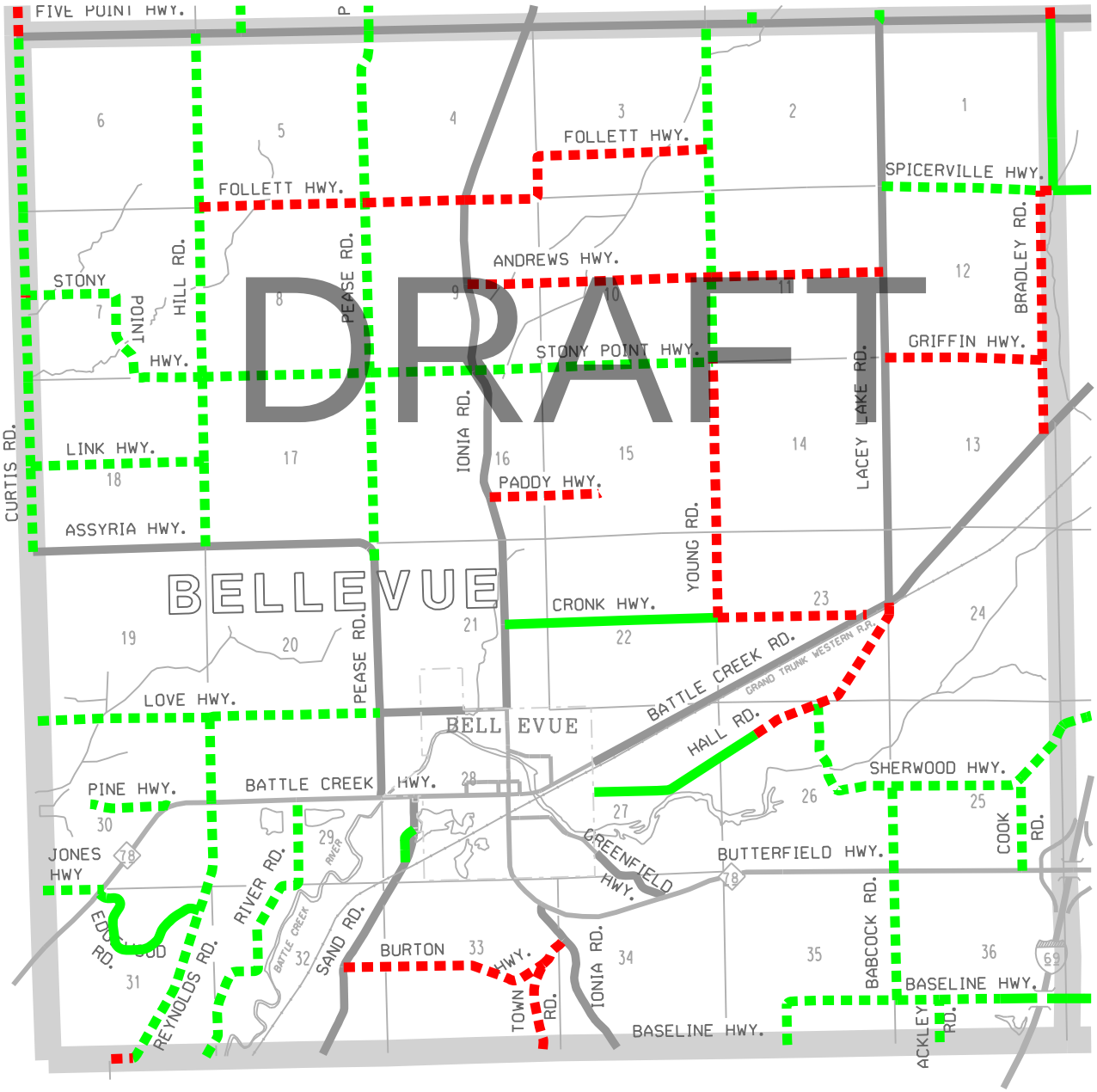
PAVED ROADS TO BE COMPLETED

PAVED ROADS COMPLETED

GRAVEL ROAD TO BE COMPLETED

GRAVEL ROAD COMPLETED

REVISION DATE: 02-21-2024



# 2023 LOCAL ROAD MILLAGE PROGRAM

## BENTON TOWNSHIP

***Gravel Road Resurfacing:***

| | | | | |
|---|---|---|---|---|
| Benton Rd, Kinsel Hwy to Santee Hwy | 5.00 | mi | $ | 168,749 |
| Stewart Rd, Lansing Rd to End of Pavement | 0.16 | mi | $ | 180,544 |
| *Total gravel miles resurfaced* | 5.16 | | | |

| | | | | |
|---|---|---|---|---|
| ***County-Wide Dust Control:*** | 26.64 | mi | $ | 29,557 |

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# MILLAGE PROGRAM STATUS - ENDING 12/31/2023

# BENTON TOWNSHIP

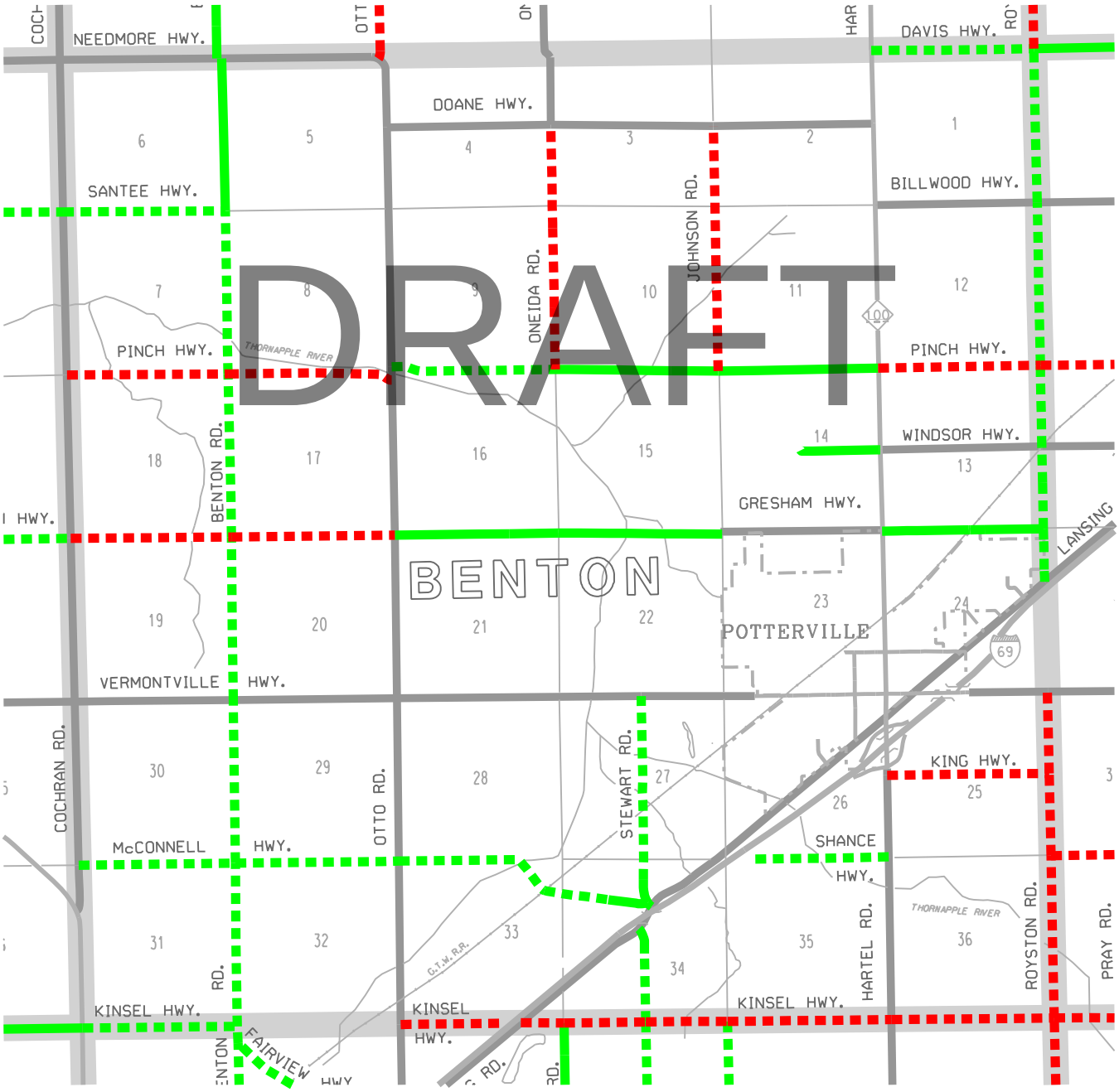
PAVED ROADS TO BE COMPLETED

PAVED ROADS COMPLETED

GRAVEL ROAD TO BE COMPLETED

GRAVEL ROAD COMPLETED

REVISON DATE: 02-21-2024



# 2023 LOCAL ROAD MILLAGE PROGRAM

## BROOKFIELD TOWNSHIP

***Gravel Road Resurfacing:***

| | | | | |
|---|---|---|---|---|
| Boody Hwy, Wilcox Rd to Spicerville Hwy | 1.24 | mi | $ | 32,951 |
| Butterfield Hwy, Cochran Rd to Brookfield Rd | 2.01 | mi | $ | 60,172 |
| Holmes Hwy, Thuma Hwy to Royston Rd | 1.00 | mi | $ | 29,945 |
| Hooper Rd, Baseline Hwy to Butterfield Hwy | 1.39 | mi | $ | 40,345 |
| Perkey Rd, Spicerville Hwy to Five Point Hwy | 1.05 | mi | $ | 31,948 |
| Sherman Rd, Butterfield Hwy to Bellevue Hwy | 1.00 | mi | $ | 31,000 |
| Wilcox Rd, Nye Hwy to Spicerville Hwy | 1.00 | mi | $ | 34,196 |
| *Total gravel miles resurfaced* | 8.69 | | | |

| | | | | |
|---|---|---|---|---|
| ***County-Wide Dust Control:*** | 43.81 | mi | $ | 47,793 |

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# MILLAGE PROGRAM STATUS - ENDING 12/31/2023
# BROOKFIELD TOWNSHIP

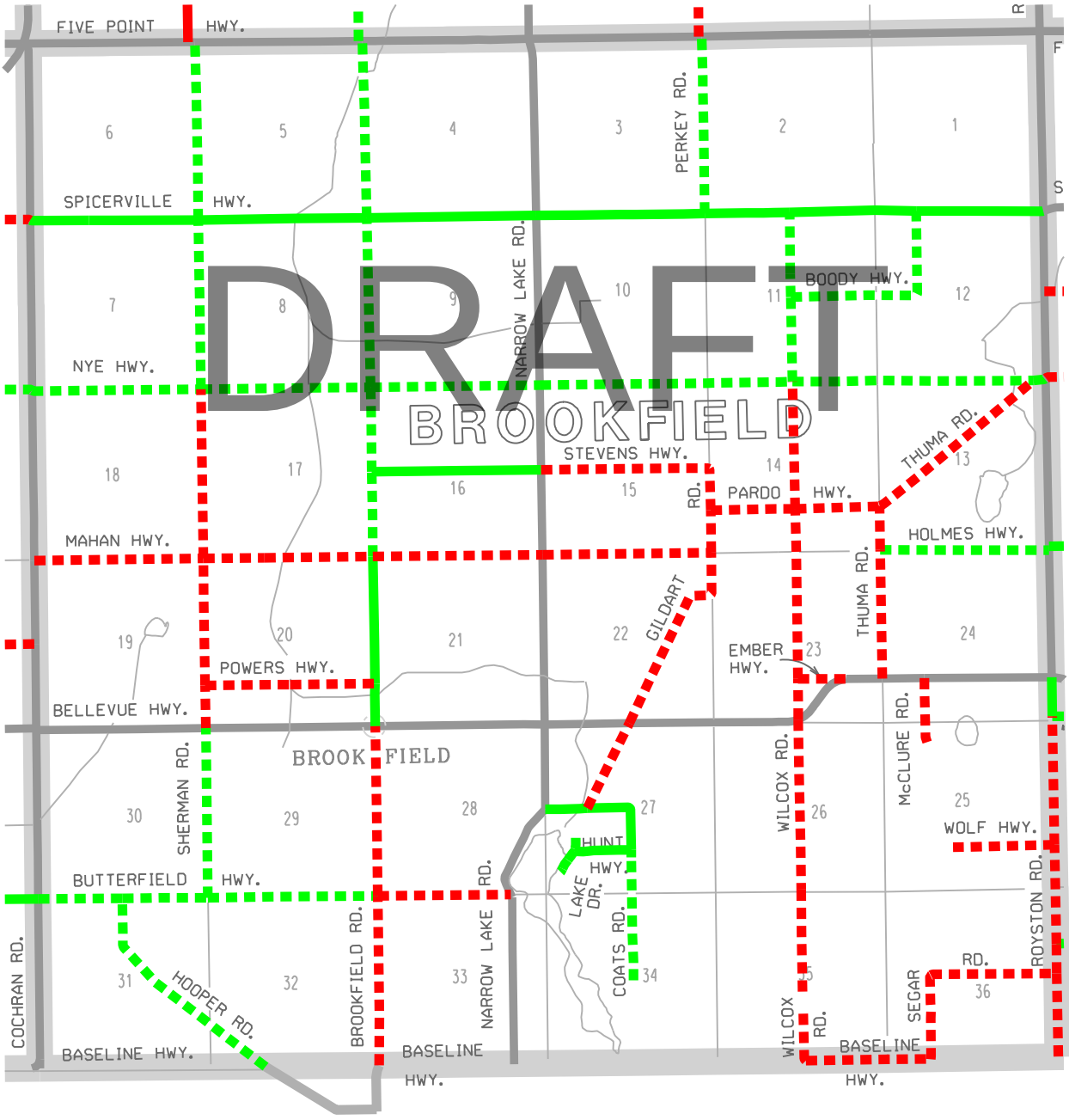
PAVED ROADS TO BE COMPLETED

PAVED ROADS COMPLETED

GRAVEL ROAD TO BE COMPLETED

GRAVEL ROAD COMPLETED

REVISION DATE: 02-21-2024



# 2023 LOCAL ROAD MILLAGE PROGRAM

## CARMEL TOWNSHIP

***Gravel Road Resurfacing:***

| | | | | |
|---|---|---|---|---|
| Carlisle Hwy, Bradley Rd to Stine Rd | 3.00 | | $ | 103,530 |
| Millerburg Rd, Lawrence Hwy to Kinsel Hwy | 2.00 | | $ | 67,035 |
| Stine Rd, Valley Hwy to Kinsel Hwy | 1.00 | mi | $ | 33,295 |
| *Total gravel miles resurfaced* | 6.00 | | | |

| | | | | |
|---|---|---|---|---|
| ***County-Wide Dust Control:*** | 32.97 | mi | $ | 34,746 |

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# MILLAGE PROGRAM STATUS - ENDING 12/31/2023

# CARMEL TOWNSHIP

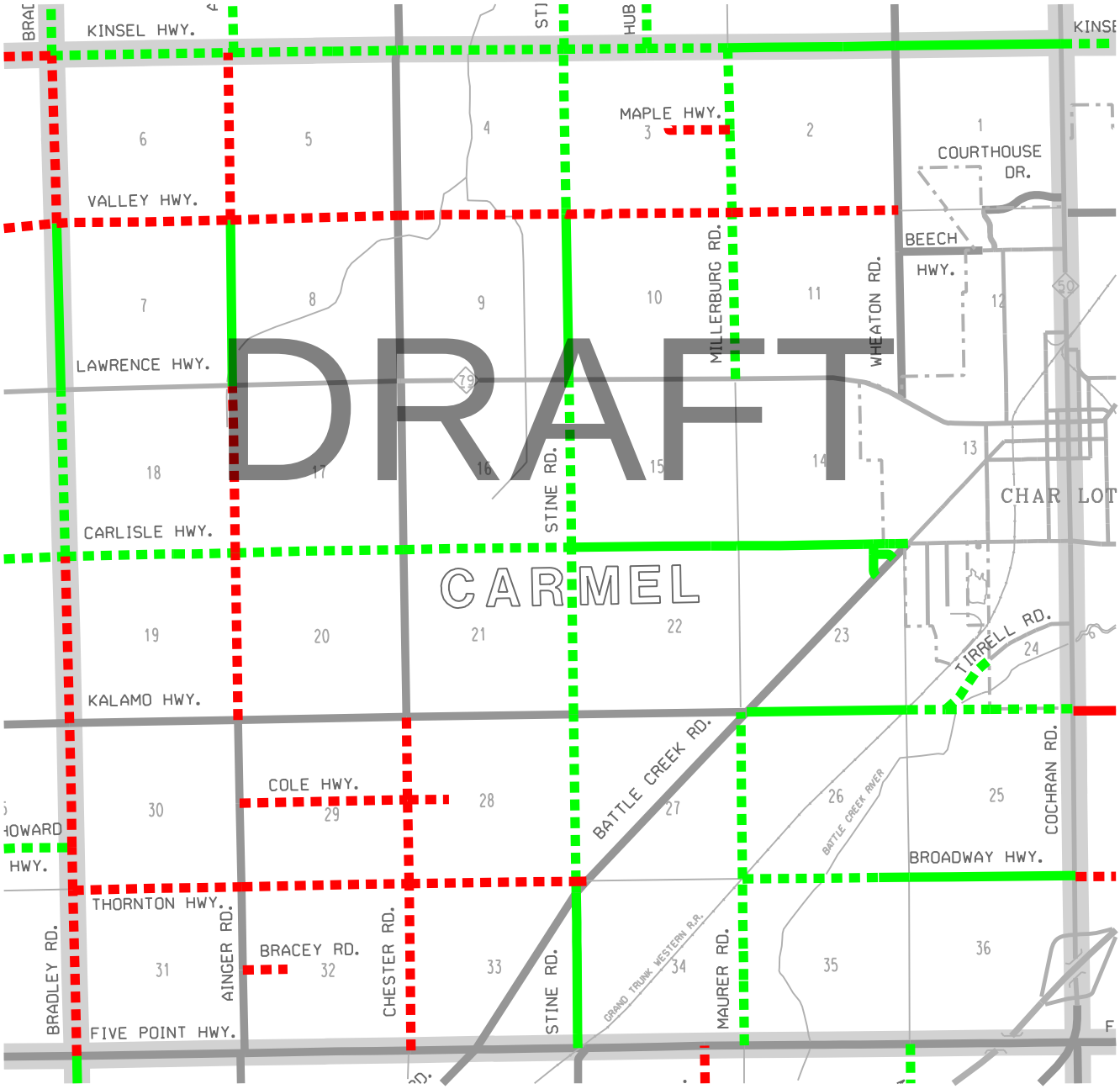
PAVED ROADS TO BE COMPLETED

PAVED ROADS COMPLETED

GRAVEL ROAD TO BE COMPLETED

GRAVEL ROAD COMPLETED

REVISION DATE: 02-21-2024



# 2023 LOCAL ROAD MILLAGE PROGRAM

## CHESTER TOWNSHIP

***Gravel Road Resurfacing:***

| | | | | |
|---|---|---|---|---|
| Ainger Rd, Vermontville Hwy to Bursley Hwy | 3.17 | mi | $ | 110,620 |
| Santee Hwy, Moyer Rd to Cochran Rd | 2.49 | mi | $ | 83,924 |
| *Total gravel miles resurfaced* | 5.66 | | | |

| | | | | |
|---|---|---|---|---|
| ***County-Wide Dust Control:*** | 43.50 | mi | $ | 45,315 |

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# MILLAGE PROGRAM STATUS - ENDING 12/31/2023

# CHESTER TOWNSHIP

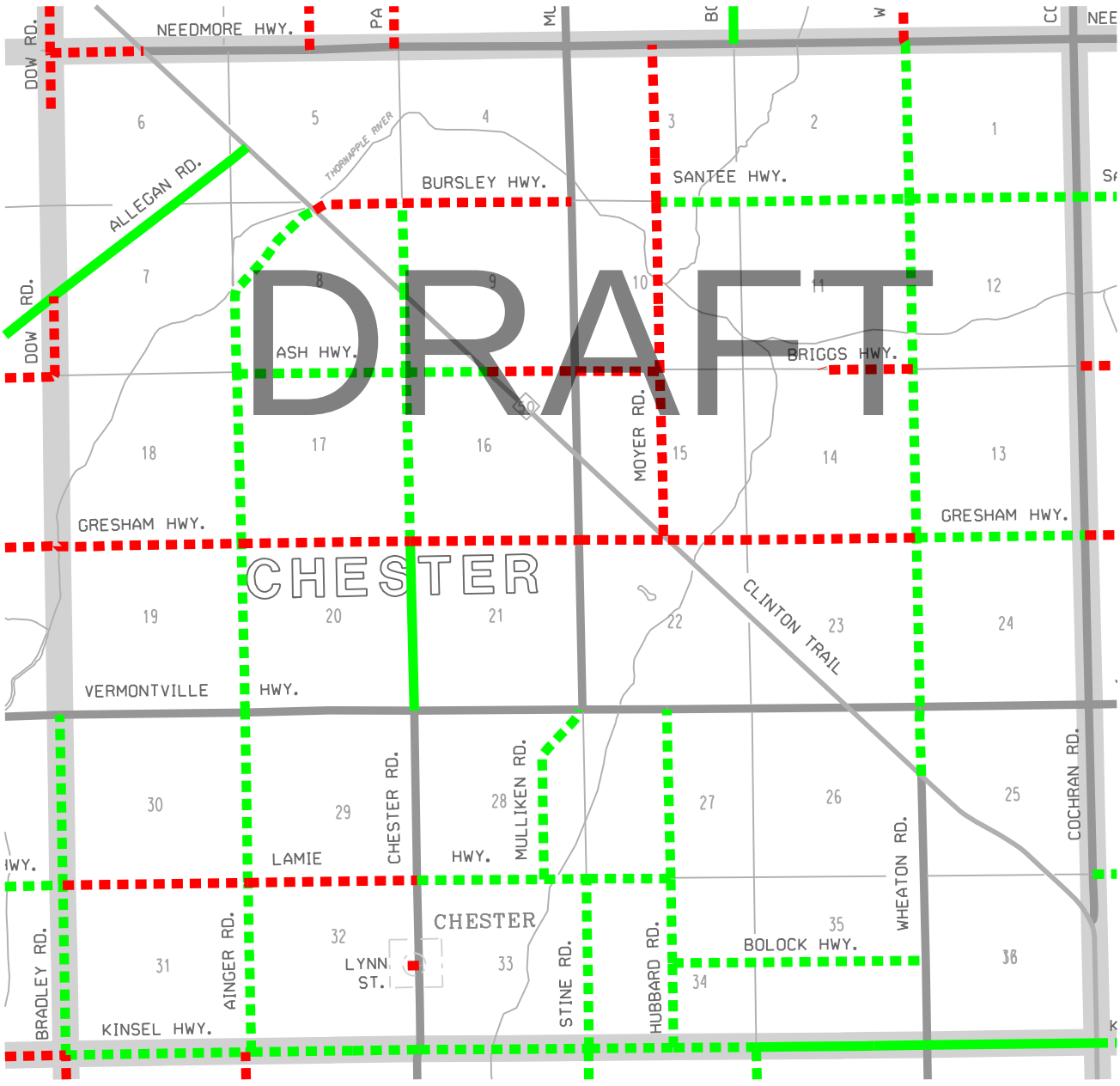
PAVED ROADS TO BE COMPLETED

PAVED ROADS COMPLETED

GRAVEL ROAD TO BE COMPLETED

GRAVEL ROAD COMPLETED

REVISION DATE: 02-21-2024



# 2023 LOCAL ROAD MILLAGE PROGRAM

## DELTA TOWNSHIP

***Paved Road Resurfacing:***

| | | | | |
|---|---|---|---|---|
| Adare Cir, Ireland Dr to Dead End or Start | 0.07 | mi | $ | 22,125 |
| Ashford Ln, Knockaderry Dr to Dead End or Start | 0.03 | mi | $ | 5,441 |
| Brookside Dr, Saginaw Hwy to Rolling Green Ln | 0.57 | mi | $ | 146,990 |
| Chellmar Dr, Creekside Dr to Medallion Dr | 0.20 | mi | $ | 65,808 |
| Clark Rd, Clark Rd to Willow Hwy | 0.50 | mi | $ | 115,092 |
| Coneflower Court, Crayton Dr to Dead End or Start | 0.26 | mi | $ | 80,198 |
| Conestoga Dr, Wolf Run Dr to Sleighside Dr | 0.27 | mi | $ | 19,628 |
| Creekside Dr, Canal Rd to Glen Terra Dr | 0.21 | mi | $ | 112,649 |
| Dumond Ct, Snow Rd to Dead End or Start | 0.11 | mi | $ | 50,672 |
| Earlington Ln, Brookside Dr to Worthmore Ave | 0.27 | mi | $ | 63,558 |
| Eastcircle Dr, Westhaven Blvd to Westhaven Blvd | 0.05 | mi | $ | 12,286 |
| Eastwind Cir, Westhaven Blvd to Dead End or Start | 0.05 | mi | $ | 58,862 |
| Franklynn Dr, Frank N Dot Ct to Dead End or Start | 0.11 | mi | $ | 23,288 |
| Frank N Dot Ct, Creyts Rd to Dead End or Start | 0.13 | mi | $ | 29,854 |
| French Creek Cir, French Creek Dr to French Creek Dr | 0.08 | mi | $ | 8,577 |
| French Creek Dr, Lindy Dr to Wolf Run Dr | 0.34 | mi | $ | 38,017 |
| Glen Terra Dr, Forest Glenn Dr to Creekside Dr | 0.20 | mi | $ | 100,503 |
| Gold Fields Dr, Coneflower Court to Upton Rd | 0.32 | mi | $ | 88,082 |
| Hibiscus Lane, Coneflower Court to Gold Fields Dr | 0.22 | mi | $ | 57,591 |
| Ireland Dr, St. Joe Hwy to Mallow Ln | 0.20 | mi | $ | 78,766 |
| Knockaderry Dr, Mallow Ln to St. Joe Hwy | 0.20 | mi | $ | 75,314 |
| Lindy Dr, Ruby Glass Rd to Dead End or Start | 0.15 | mi | $ | 48,115 |
| Mallow Ln, Knockaderry Dr to Dead End or Start | 0.13 | mi | $ | 37,635 |
| Marcy Rd, Mt. Hope Hwy to Dead End or Start | 0.50 | mi | $ | 81,840 |
| Medallion Dr, Chellmar Dr to Dead End or Start | 0.16 | mi | $ | 53,935 |
| Murel Dr, Old Lansing Rd to Dead End or Start | 0.05 | mi | $ | 10,007 |
| Pecos Dr, Westhaven Blvd to Southwick Cir | 0.08 | mi | $ | 24,327 |
| Robins Rd, Saginaw Hwy to Arden Rd | 0.48 | mi | $ | 268,587 |
| Salt Fork Cir, Conestoga Dr to Dead End or Start | 0.05 | mi | $ | 8,234 |
| Sleighside Dr, Conestoga Dr to French Creek Dr | 0.07 | mi | $ | 7,792 |
| Snow Rd, Old Lansing Rd to Westhill Dr | 0.17 | mi | $ | 19,764 |
| Southwick Cir, Snow Rd to Dead End or Start | 0.11 | mi | $ | 43,225 |
| Springtree Ln, Rolling Green Ln to Wolf Run Dr | 0.46 | mi | $ | 39,842 |
| Westbridge Cir, Westhaven Blvd to End | 0.04 | mi | $ | 23,324 |
| Westhaven Blvd, Pecos Dr to St Joe Hwy | 0.33 | mi | $ | 115,404 |
| Westover Cir, Westhaven Blvd to Dead End or Start | 0.07 | mi | $ | 31,944 |
| Westvale Cir, Westhaven Blvd to Dead End or Start | 0.03 | mi | $ | 21,621 |
| Windsong Way, Springtree Ln to Wolf Run Dr | 0.17 | mi | $ | 15,431 |
| Wolf Run Dr, Windsong Way to Dead End or Start | 0.34 | mi | $ | 35,569 |
| Woodstream Dr, Wolf Run Dr to Creyts Rd | 0.07 | mi | $ | 5,009 |
| *Total paved miles resurfaced* | 8.15 | | | |

***County-Wide Dust Control:*** 8.01 mi $ 7,903

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# MILLAGE PROGRAM STATUS - ENDING 12/31/2023
# DELTA TOWNSHIP

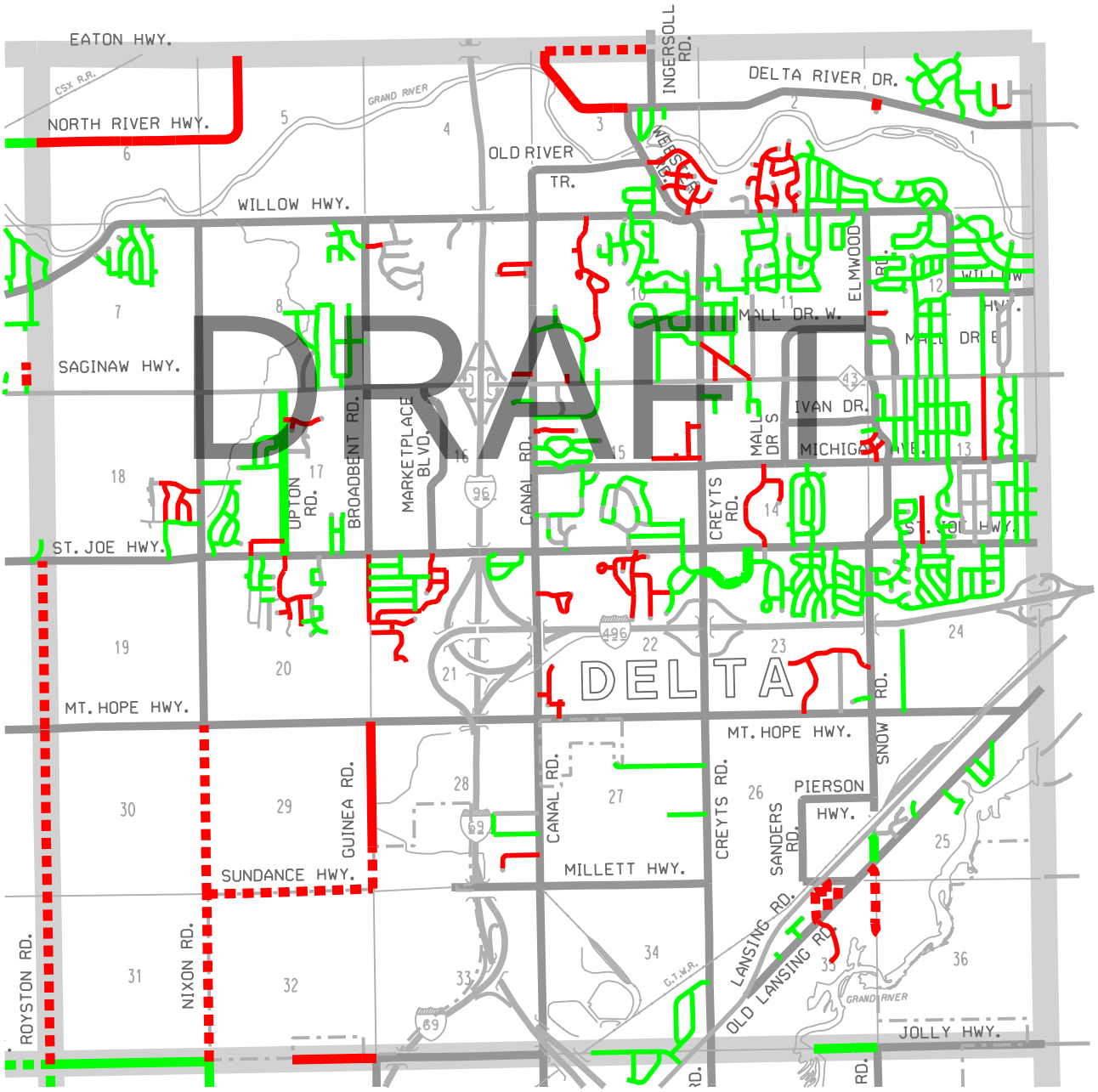
PAVED ROADS TO BE COMPLETED

PAVED ROADS COMPLETED

GRAVEL ROAD TO BE COMPLETED

GRAVEL ROAD COMPLETED

REVISION DATE: 02-21-2024



# 2023 LOCAL ROAD MILLAGE PROGRAM

## EATON TOWNSHIP

***Paved Road Resurfacing:***

| | | | | |
|---|---|---|---|---|
| Flanders Rd, Clinton Trail to Island Hwy | 1.05 | mi | $ | 120,587 |
| Narcisse Ln, Packard Hwy to Dead End or Start | 0.22 | mi | $ | 59,506 |
| Nicholas Ln, Narcisse Ln to Dead End or Start | 0.50 | mi | $ | 125,785 |
| 011 | 0.62 | mi | $ | 21,297 |
| Mills Hwy, Perkey Rd to Royston Rd | 2.01 | mi | $ | 61,882 |
| *Total paved miles resurfaced* | 4.40 | | | |

| | | | | |
|---|---|---|---|---|
| ***County-Wide Dust Control:*** | 18.10 | mi | $ | 19,470 |

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# MILLAGE PROGRAM STATUS - ENDING 12/31/2023

# EATON TOWNSHIP

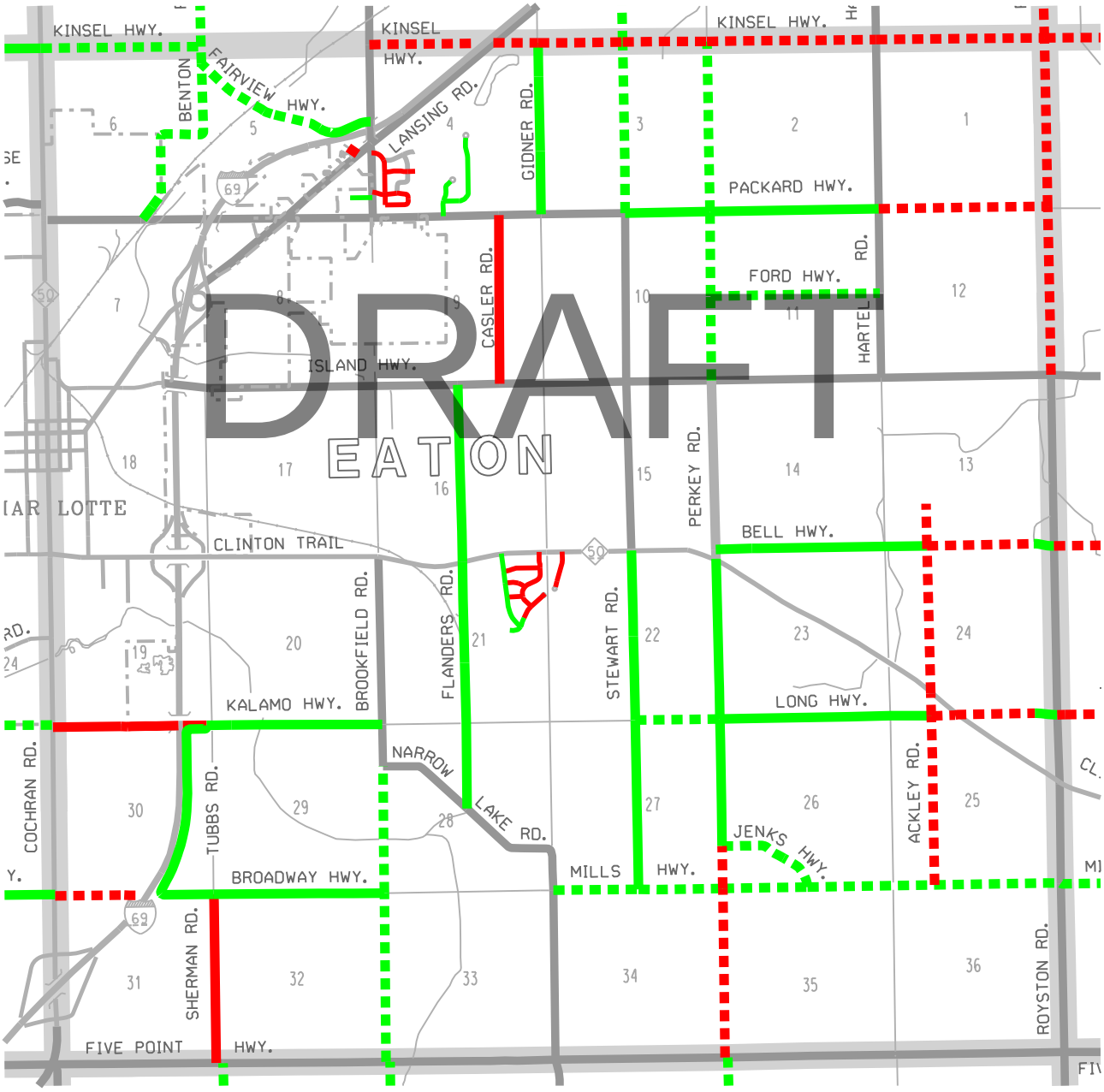
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GRAVEL ROAD TO BE COMPLETED

GRAVEL ROAD COMPLETED

REVISION DATE: 02-21-2024



# 2023 LOCAL ROAD MILLAGE PROGRAM

## EATON RAPIDS TOWNSHIP

***Gravel Road Resurfacing:***

| | | | | |
|---|---|---|---|---|
| Bostedor Rd, Township Line to Mills Hwy | 1.01 | mi | $ | 35,998 |
| Canfield Rd, Township Line to Mills Hwy | 1.02 | mi | $ | 53,070 |
| Canfield Rd, Island Hwy to Dead End | 1.82 | mi | $ | 45,323 |
| Columbia Hwy, Canfield Rd to Gunnell Rd | 1.00 | mi | $ | 30,468 |
| Mills Hwy, Royston Rd to Canfield Rd | 0.98 | mi | $ | 29,742 |
| Scout Rd, Columbia Hwy to Township Line | 1.03 | mi | $ | 21,411 |
| *Total gravel miles resurfaced* | 6.86 | | | |

| | | | | |
|---|---|---|---|---|
| ***County-Wide Dust Control:*** | 33.75 | mi | $ | 37,295 |

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# MILLAGE PROGRAM STATUS - ENDING 12/31/2023
# EATON RAPIDS TOWNSHIP

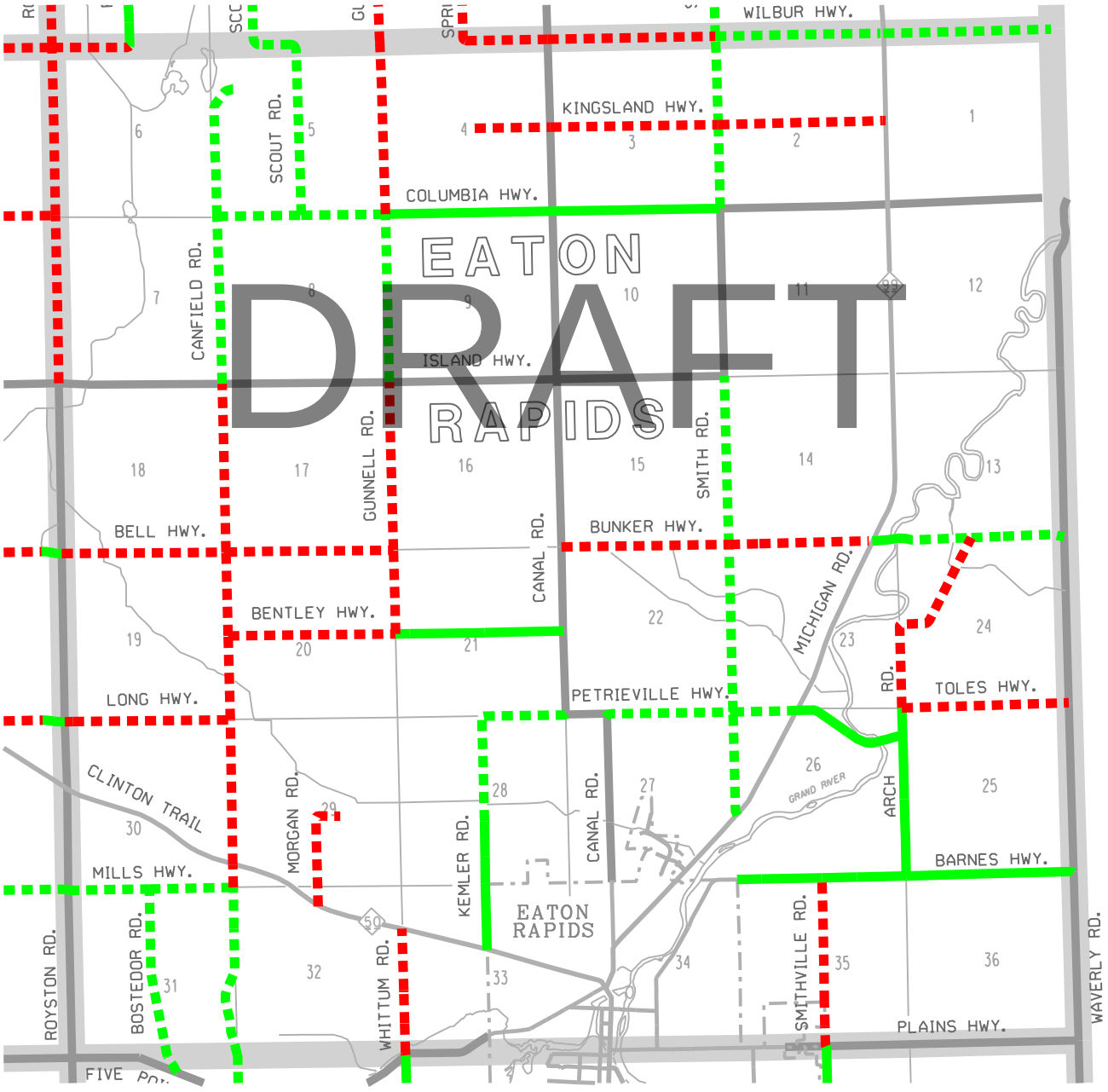
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GRAVEL ROAD TO BE COMPLETED

GRAVEL ROAD COMPLETED

REVISION DATE: 02-21-2024



# 2023 LOCAL ROAD MILLAGE PROGRAM

## HAMLIN TOWNSHIP

***Crush and Shape:***

| | | | | |
|---|---|---|---|---|
| Waverly Rd, Ballard Hwy to Bellevue Hwy | 0.99 | mi | $ | 261,467 |
| *Total crush and shape miles* | 0.99 | | | |

***Gravel Road Resurfacing:***

| | | | | |
|---|---|---|---|---|
| Bostedor Rd, Township Line to Five Point Hwy | 0.11 | mi | $ | 556 |
| Canfield Rd, Township Line to Five Point Hwy | 0.20 | mi | $ | 187 |
| Halsey Rd, Springport Rd to Royston Rd | 1.32 | mi | $ | 39,709 |
| Peck Rd, Bellevue Hwy to Holmes Hwy | 1.01 | mi | $ | 29,503 |
| *Total gravel miles resurfaced* | 2.64 | | | |

| | | | | |
|---|---|---|---|---|
| ***County-Wide Dust Control:*** | 34.08 | mi | $ | 33,027 |

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# MILLAGE PROGRAM STATUS - ENDING 12/31/2023
# HAMLIN TOWNSHIP

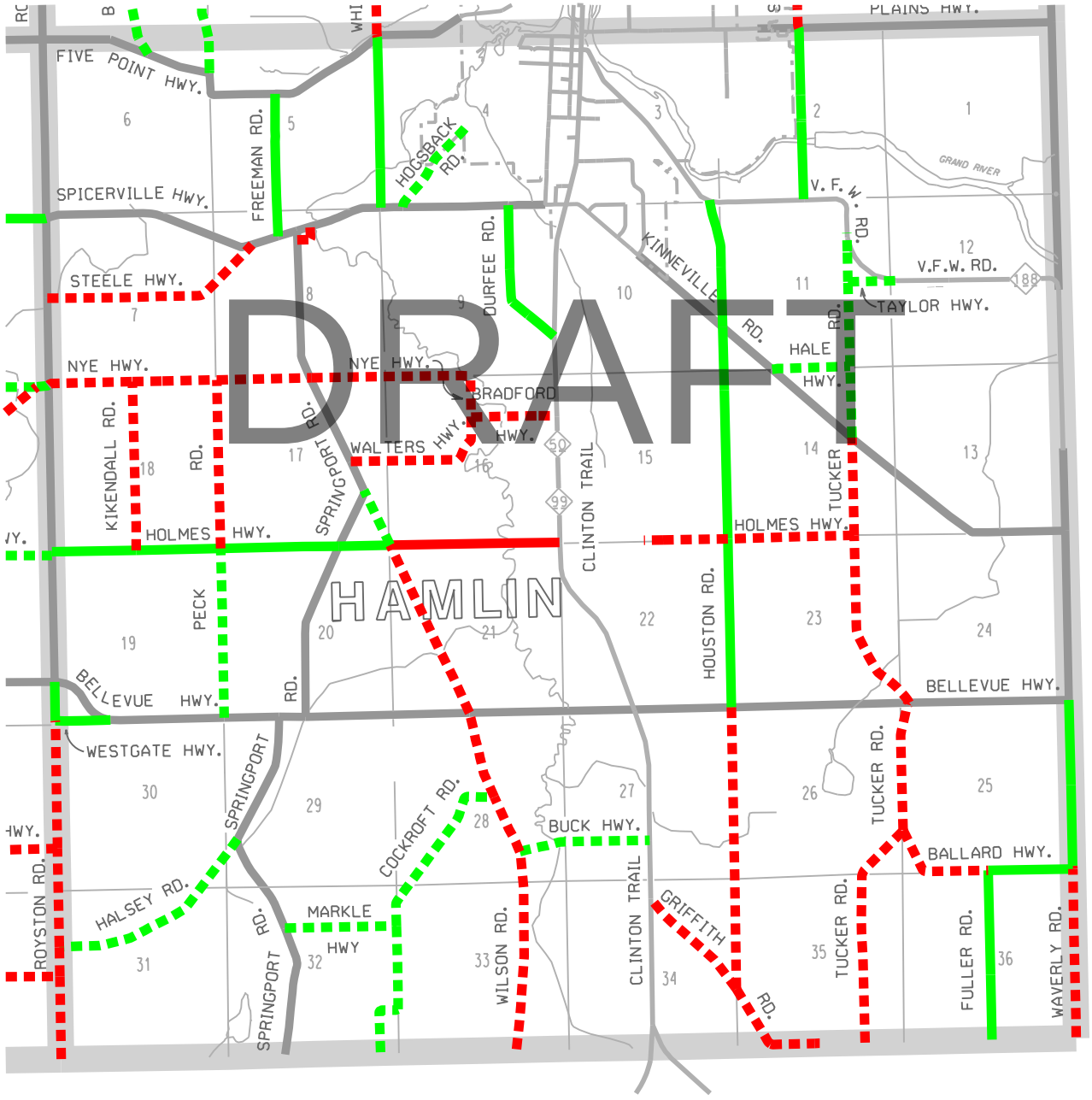
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GRAVEL ROAD TO BE COMPLETED

GRAVEL ROAD COMPLETED

REVISION DATE: 02-21-2024



# 2023 LOCAL ROAD MILLAGE PROGRAM

## KALAMO TOWNSHIP

***Gravel Road Resurfacing:***

| | | | | |
|---|---|---|---|---|
| Lacey Lake Rd, Five Point Hwy to End of Gravel | 1.14 | mi | $ | 37,283 |
| Pease Rd, Five Point Hwy to Kalamo Hwy | 2.23 | mi | $ | 74,045 |
| Perry Rd, Carlisle Hwy to Lawrence Hwy | 0.99 | mi | $ | 32,861 |
| Shaytown Rd, Lawrence Hwy to Kinsel Hwy | 2.04 | mi | $ | 68,643 |
| Wildt Hwy, Pease Rd to Dead End or Start | 0.58 | mi | $ | 20,001 |
| *Total gravel miles resurfaced* | 6.98 | | | |

| | | | | |
|---|---|---|---|---|
| ***County-Wide Dust Control:*** | 38.67 | mi | $ | 41,356 |

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# MILLAGE PROGRAM STATUS - ENDING 12/31/2023

# KALAMO TOWNSHIP

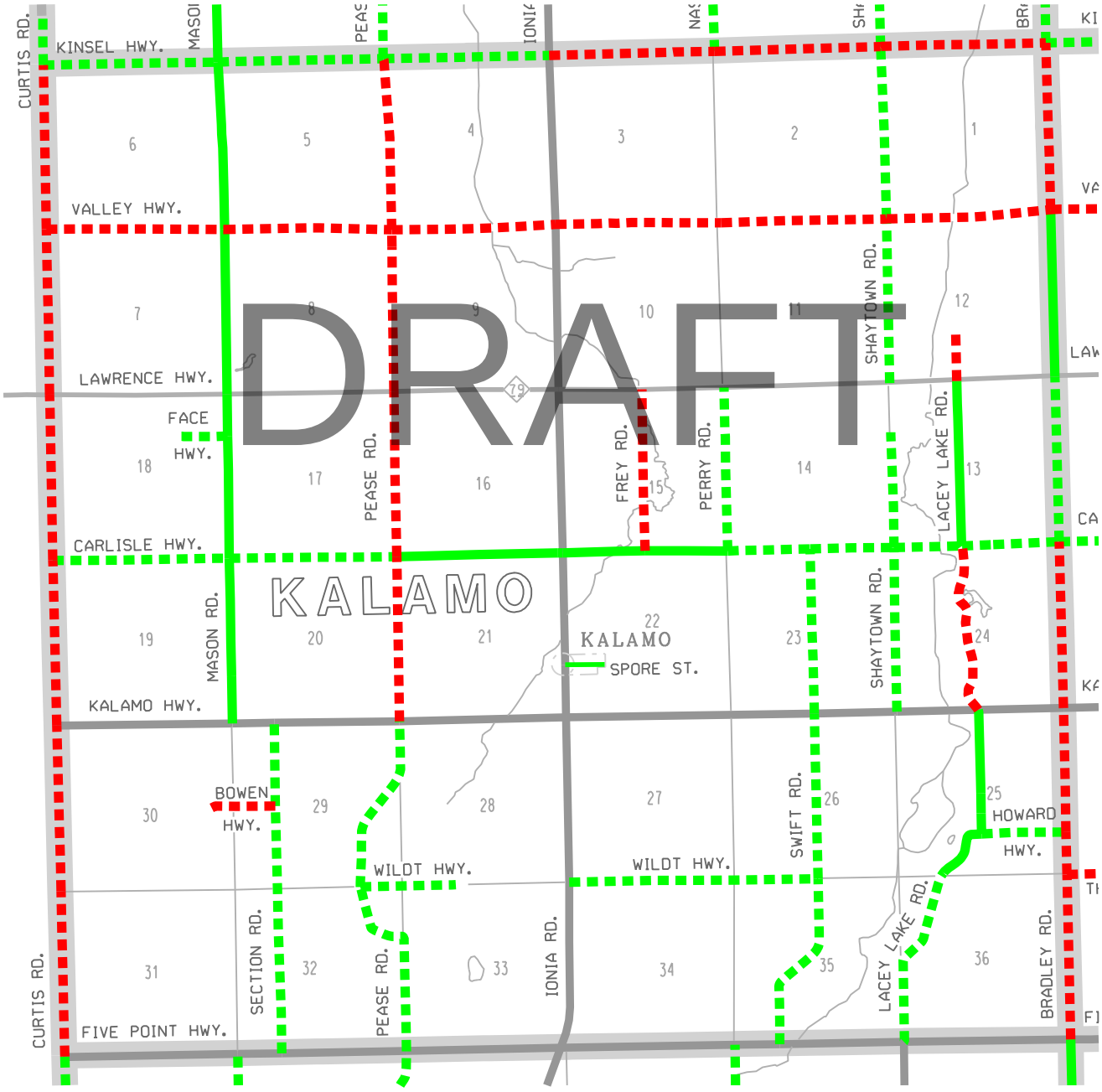
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GRAVEL ROAD COMPLETED

REVISION DATE: 02-21-2024



# 2023 LOCAL ROAD MILLAGE PROGRAM

## ONEIDA TOWNSHIP

***Crush and Shape:***

| | | | | |
|---|---|---|---|---|
| Benton Rd, Mt. Hope Hwy to St. Joe Hwy | 1.00 | mi | $ | 196,034 |
| *Total crush and shape miles* | 1.00 | | | |

***Paved Road Resurfacing:***

| | | | | |
|---|---|---|---|---|
| Oneida Woods Tr, Willow Hwy to Dead End | 0.41 | mi | $ | 121,372 |
| River Bend Cir, Oneida Woods Tr to Dead End | 0.11 | mi | $ | 53,438 |
| *Total paved miles resurfaced* | 0.52 | | | |

***Gravel Road Resurfacing:***

| | | | | |
|---|---|---|---|---|
| Kenyon Rd, St. Joe Hwy to Grand Ledge Hwy | 2.01 | mi | $ | 56,742 |
| *Total gravel miles resurfaced* | 2.01 | | | |

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| | | | | |
|---|---|---|---|---|
| ***County-Wide Dust Control:*** | 14.66 | mi | $ | 15,869 |

# MILLAGE PROGRAM STATUS - ENDING 12/31/2023
# ONEIDA TOWNSHIP

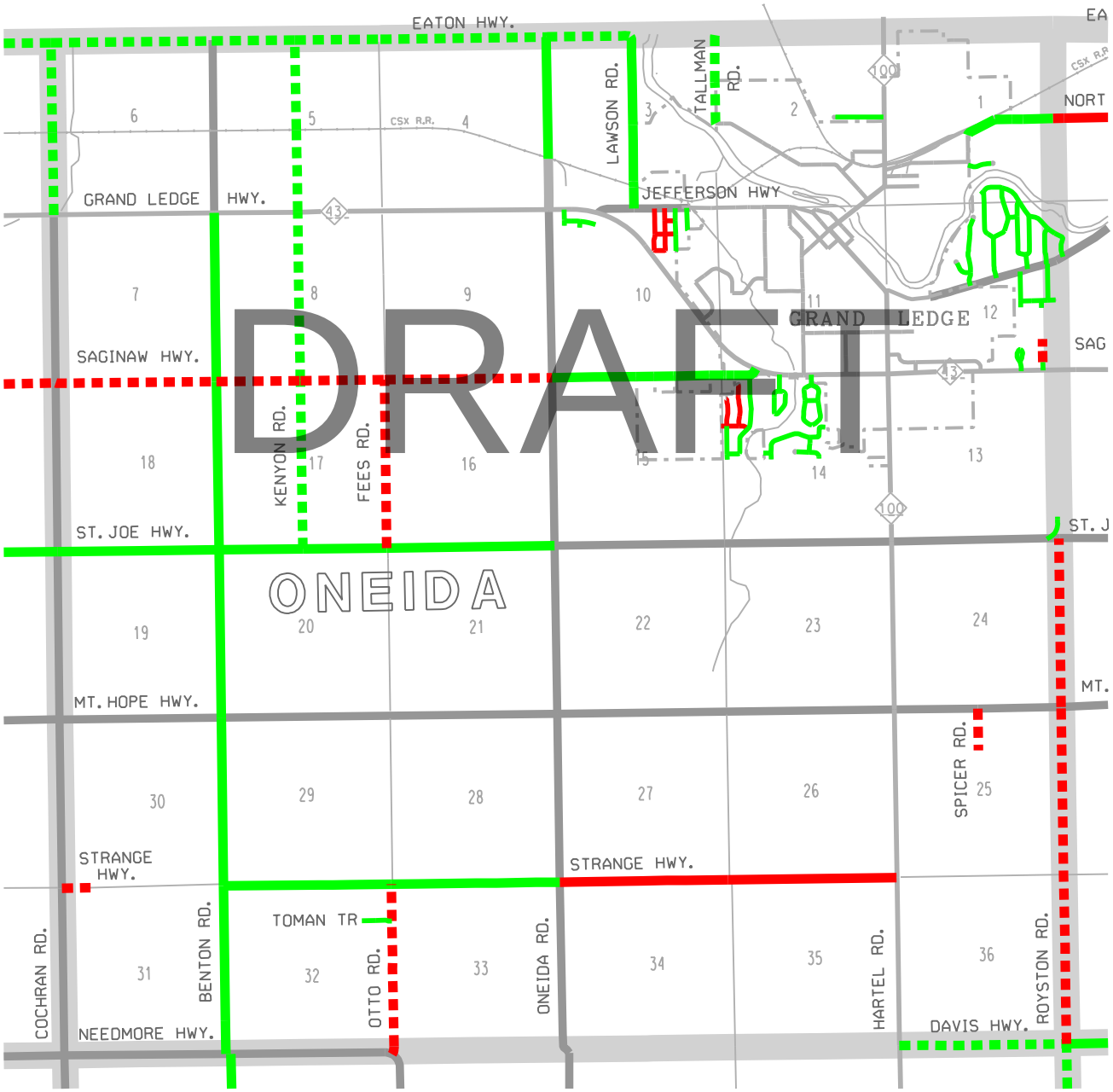
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GRAVEL ROAD COMPLETED

REVISION DATE: 02-21-2024



# 2023 LOCAL ROAD MILLAGE PROGRAM

## ROXAND TOWNSHIP

***Gravel Road Resurfacing:***

| | | | | |
|---|---|---|---|---|
| Boyer Rd, Grand Ledge Hwy to Eaton Hwy | 1.03 | mi | $ | 37,841 |
| Cutler Rd, Strange Hwy to Dead End or Start | 0.32 | mi | $ | 10,944 |
| Eaton Hwy, Village Limits to Cochran Rd | 2.50 | mi | $ | 135,937 |
| Parker Rd, Strange Hwy to Dead End or Start | 0.23 | mi | $ | 7,673 |
| Strange Hwy, Dow Rd to Boyer Rd | 4.04 | mi | $ | 147,306 |
| Wheaton Rd, C&O Railroad to Eaton Hwy | 0.53 | mi | $ | 43,000 |
| *Total gravel miles resurfaced* | 8.65 | | | |

| | | | | |
|---|---|---|---|---|
| ***County-Wide Dust Control:*** | 33.50 | mi | $ | 34,874 |

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# MILLAGE PROGRAM STATUS - ENDING 12/31/2023
# ROXAND TOWNSHIP

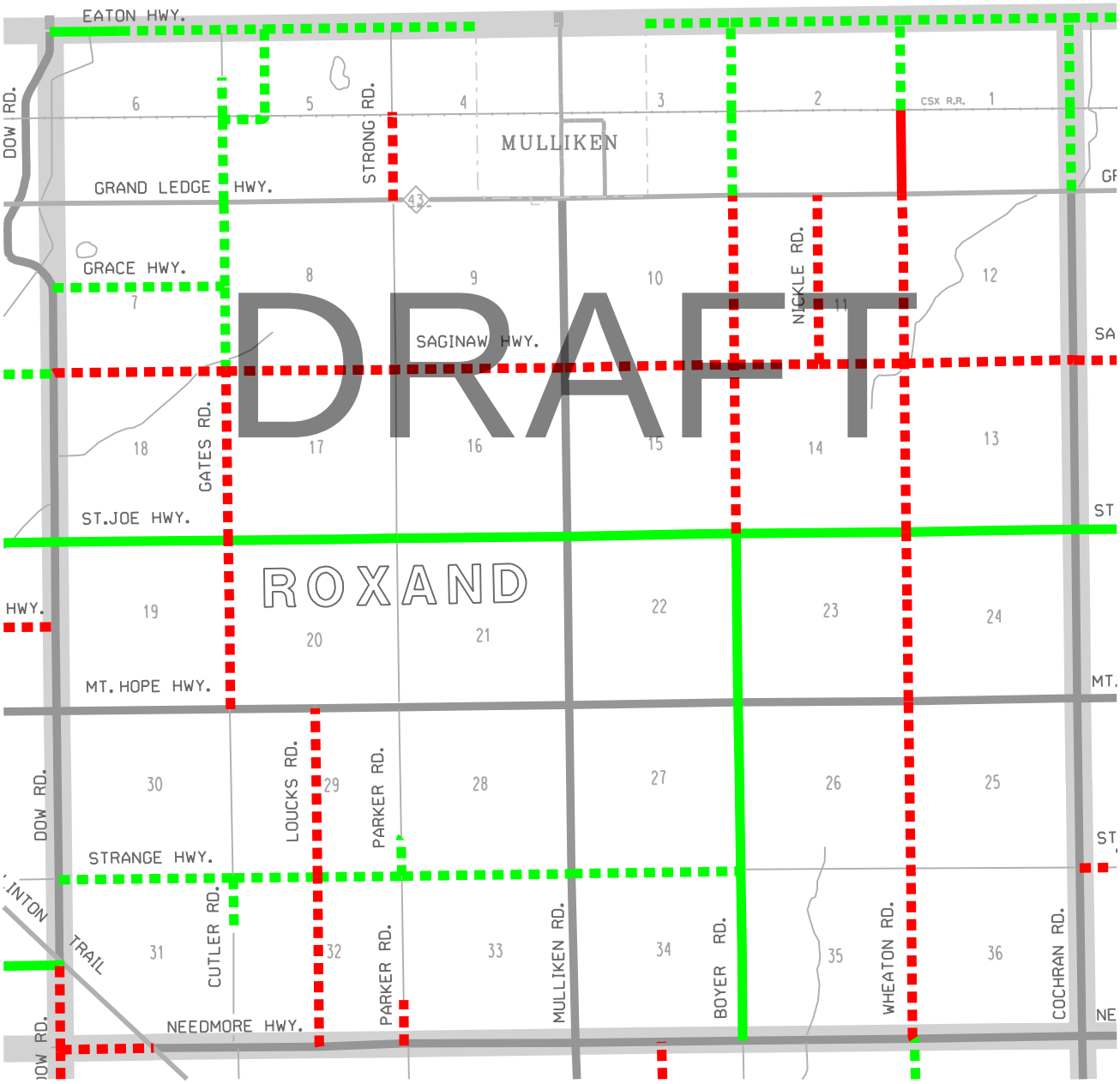
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GRAVEL ROAD COMPLETED

REVISION DATE: 02-21-2024



# 2023 LOCAL ROAD MILLAGE PROGRAM

## SUNFIELD TOWNSHIP

***Paved Road Resurfacing:***

| | | | | |
|---|---|---|---|---|
| Saubee Rd, Grand Ledge Hwy to Eaton Hwy | 1.01 | mi | $ | 341,355 |
| *Total paved miles resurfaced* | 1.01 | | | |

| | | | | |
|---|---|---|---|---|
| ***County-Wide Dust Control:*** | 23.47 | mi | $ | 23,784 |

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# MILLAGE PROGRAM STATUS - ENDING 12/31/2023

# SUNFIELD TOWNSHIP

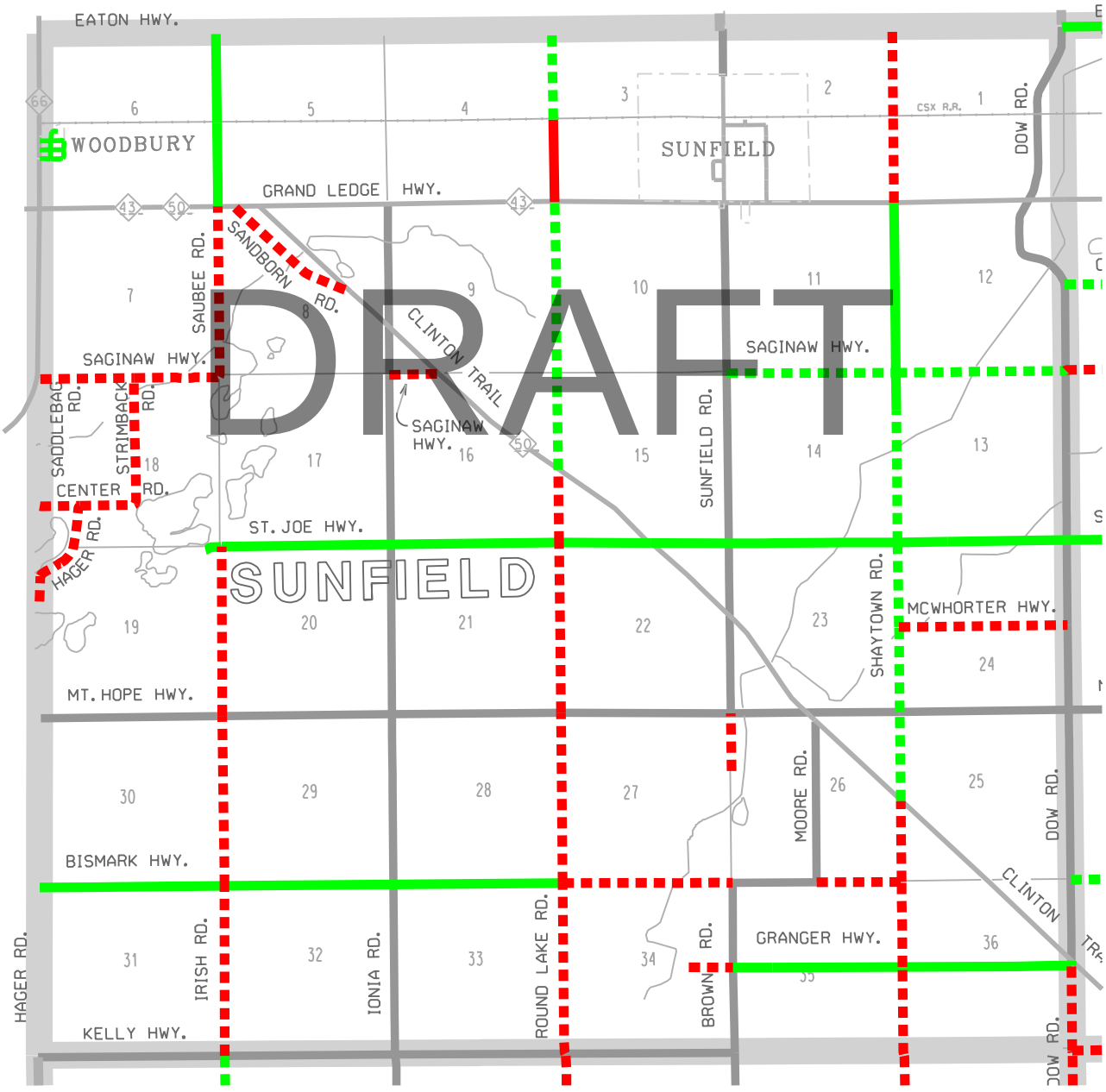
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REVISION DATE: 02-21-2024



# 2023 LOCAL ROAD MILLAGE PROGRAM

## VERMONTVILLE TOWNSHIP

***Gravel Road Resurfacing:***

| | | | | |
|---|---|---|---|---|
| Gresham Hwy, Ionia Rd to Brown Rd | 1.50 | mi | $ | 1,894 |
| Lake Hwy, Round Lake Rd to Dead end | 0.20 | mi | $ | 5,943 |
| Lake Hwy, Ionia Rd to Dead end | 0.76 | mi | $ | 25,706 |
| Round Lake Rd, Village Limits to Lake Hwy | 2.50 | mi | $ | 95,511 |
| *Total gravel miles resurfaced* | 4.96 | | | |

| | | | | |
|---|---|---|---|---|
| ***County-Wide Dust Control:*** | 37.75 | mi | $ | 40,144 |

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# MILLAGE PROGRAM STATUS - ENDING 12/31/2023

# VERMONTVILLE TOWNSHIP

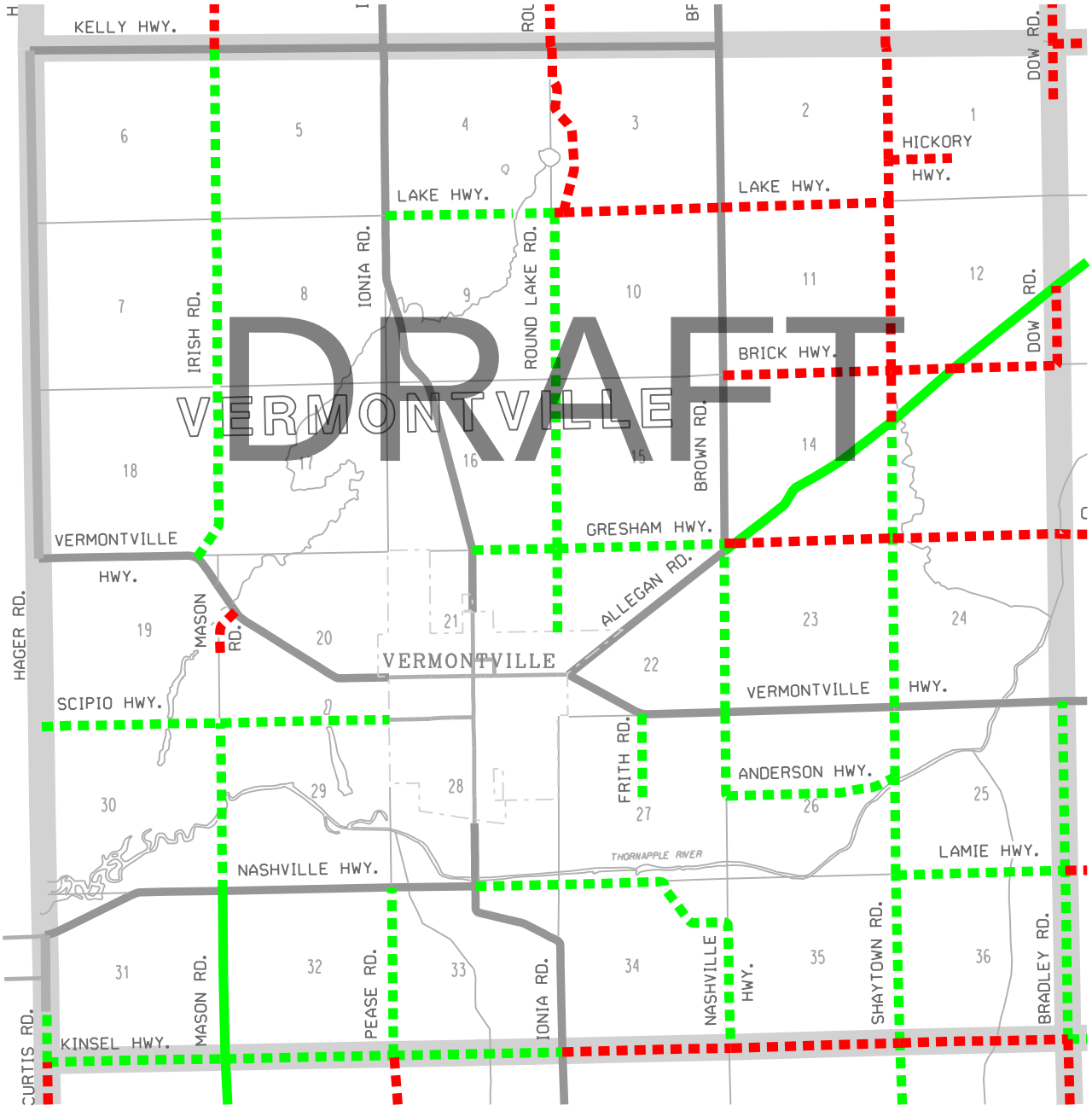
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GRAVEL ROAD COMPLETED

REVISION DATE: 02-21-2024



# 2023 LOCAL ROAD MILLAGE PROGRAM

## WALTON TOWNSHIP

***Paved Road Resurfacing:***

| | | | | |
|---|---|---|---|---|
| McDonald Rd, Marshall Rd to Dead End | 1.01 | mi | $ | 19,827 |
| Baker Hwy, McDonald Rd to Bridge | 0.62 | mi | $ | 31,638 |
| Nye Hwy, Marshall Rd to Matthews Rd | 1.01 | mi | $ | 24,529 |
| Weeks Rd, Butterfield Hwy to Bellevue Hwy | 1.00 | mi | $ | 32,428 |
| Willis Rd, Weeks Hwy to Bellevue Hwy | 1.01 | mi | $ | 33,780 |
| *Total paved miles resurfaced* | 4.65 | | | |

| | | | | |
|---|---|---|---|---|
| ***County-Wide Dust Control:*** | 34.12 | mi | $ | 33,696 |

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# MILLAGE PROGRAM STATUS - ENDING 12/31/2023

# WALTON TOWNSHIP

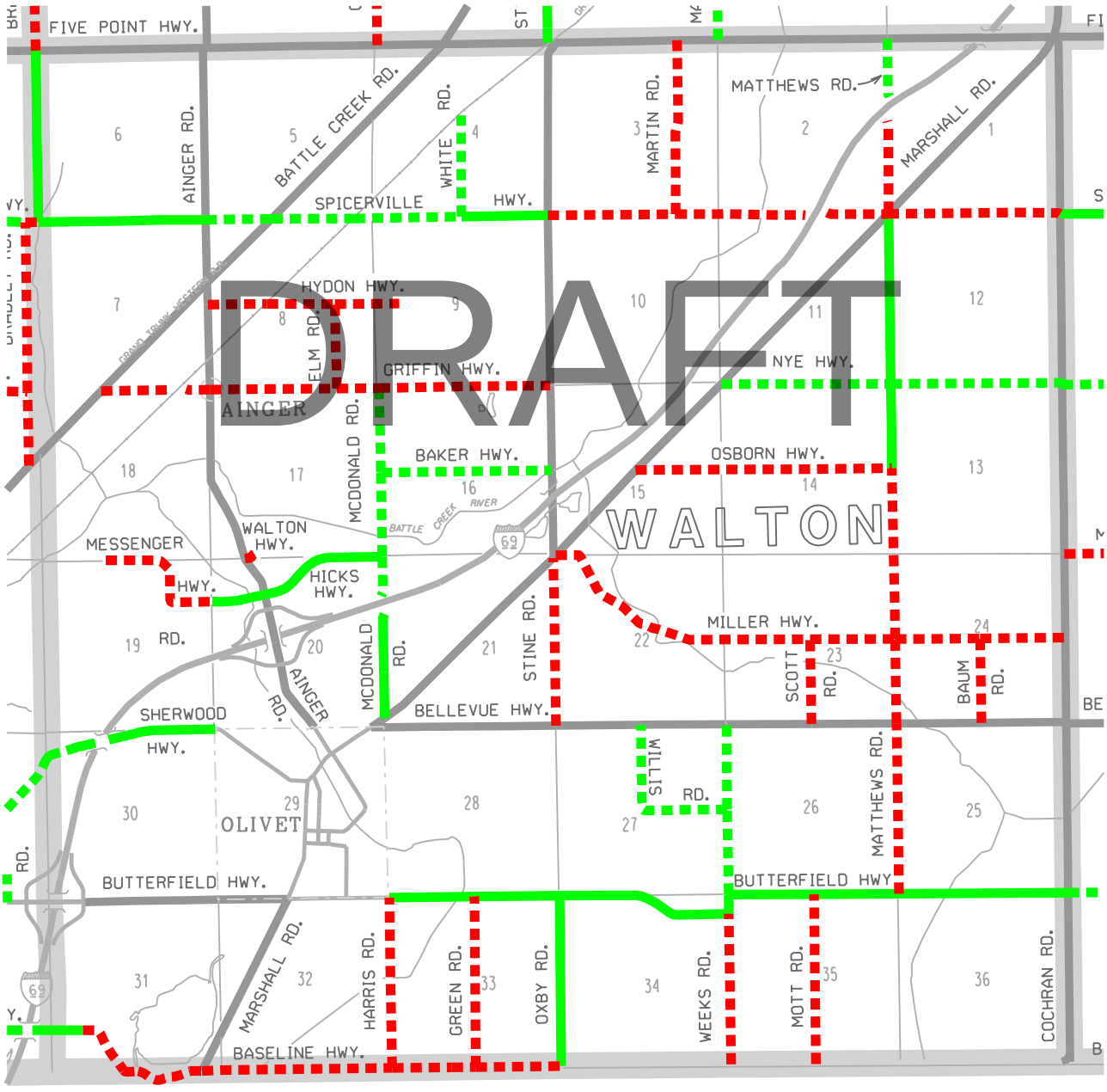
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GRAVEL ROAD TO BE COMPLETED

GRAVEL ROAD COMPLETED

REVISION DATE: 02-21-2024



# 2023 LOCAL ROAD MILLAGE PROGRAM

## WINDSOR TOWNSHIP

***Paved Road Resurfacing:***

| | | | | |
|---|---|---|---|---|
| Amber Cove, Highland Ct to Dead End or Start | 0.06 | mi | $ | 28,552 |
| Brooks Landing, Brooks River Dr to Dead End or Start | 0.05 | mi | $ | 21,457 |
| Brooks River Dr, Creyts Rd to Dead End or Start | 0.21 | mi | $ | 58,549 |
| Ellistone Cir, Mattrada Dr to Dead End or Start | 0.06 | mi | $ | 26,564 |
| Gunnell Rd, Vermontville Hwy to W. Canal Rd | | mi | $ | 163,696 |
| Highland Ct, Bailey Rd to Isaac Ln | 0.19 | mi | $ | 46,568 |
| Jacaranda Dr, Canal Rd to Mattrada Dr | 0.41 | mi | $ | 116,057 |
| Justonian Way, Mattrada Dr to Macadam Way | 0.26 | mi | $ | 68,113 |
| Macadam Way, Mattrada Dr to Jacaranda Dr | 0.19 | mi | $ | 46,822 |
| Mattrada Dr, Canal Rd to Dead End or Start | 0.31 | mi | $ | 103,745 |
| *Total paved road resurfacing miles* | 1.74 | | | |

***Gravel Road Resurfacing:***

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| | | | | |
|---|---|---|---|---|
| Pares Rd, Vermontville Hwy to Bridge Hwy | 1.00 | mi | $ | 35,002 |
| Scout Rd, Township Line to Rossman Hwy | 1.24 | mi | $ | 41,628 |
| *Total gravel miles resurfaced* | 2.24 | | | |

| | | | | |
|---|---|---|---|---|
| ***County-Wide Dust Control:*** | 25.94 | mi | $ | 30,566 |

# MILLAGE PROGRAM STATUS - ENDING 12/31/2023
# WINDSOR TOWNSHIP

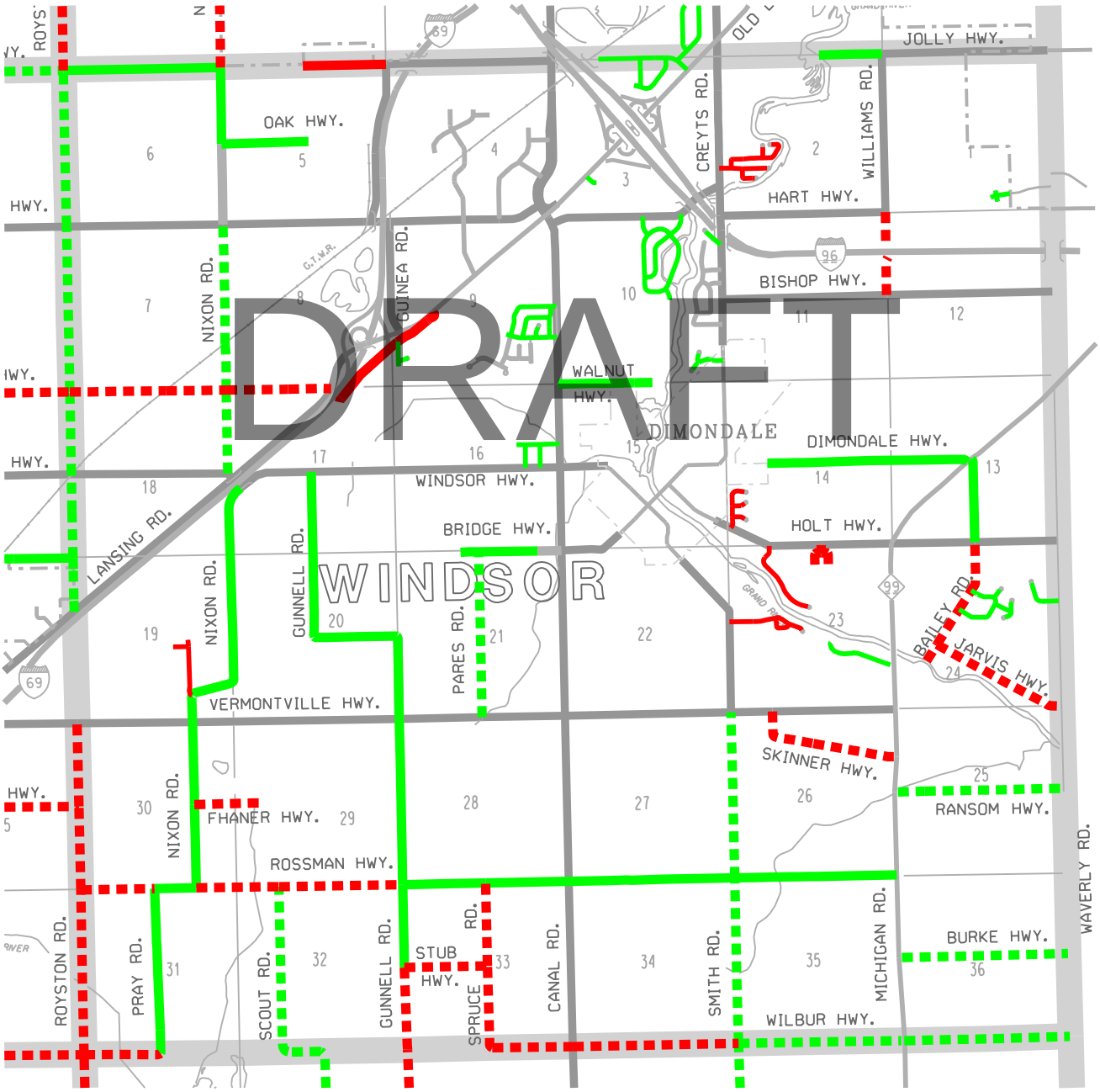
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REVISION DATE: 02-21-2024



# EATON COUNTY ROAD COMMISSION

## POLICY NO. 2014-01: LOCAL ROAD MILLAGE PROGRAM PROJECT SELECTION GUIDELINES

The citizens of Eaton County approved the following ballot proposal at the general election held November 14, 2014:

*For the sole purpose of funding the rehabilitation, restoration, and resurfacing of existing paved and gravel surfaced county local roads within the townships and municipal streets in Eaton County, and including two (2) applications of dust control each year on all gravel surfaced county local roads within the townships in Eaton County, shall the Constitutional limitation upon the total amount of taxes which may be assessed in one (1) year upon all property within the County of Eaton, Michigan be increased, and shall the County be authorized to levy, up to 1.5000 of a mill ($1.5000 on each $1,000 dollars of taxable value) for a period of twelve (12) years, 2014 to 2025, inclusive?*

The Board of Road Commissioners hereby establishes the Local Road Millage Program and adopts the following policy regarding the planning and project selection process using all funds from the millage levied annually by the Board of Eaton County Commissioners as authorized by the ballot proposal.

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**Project Eligibility**

Consistent with the conditions in the ballot language, all restoration, rehabilitation and resurfacing projects to be included in the Millage Program shall be chosen from those paved local roads identified as being in poor or fair condition on the 2014 local paved road condition inventory as published, or shall be an existing gravel surfaced local road. Millage funds shall not be expended for any purpose on county Primary roads or state highways.

The scope of all projects shall be limited to the restoration, rehabilitation and resurfacing of existing roads. Millage funds shall not be used to construct new roads or to reconstruct and/or place new pavement on existing gravel roads. Millage funds shall not be used for minor or routine maintenance activities including but not limited to snow removal, brush cutting, pothole patching, mowing, etc.

Road restoration, rehabilitation and resurfacing projects in the Millage Program may include incidental repairs or replacements of cross road culverts, catch basins and minor drainage structures as may be necessary to facilitate the road work. Millage funds shall not be used to reconstruct, widen or replace bridges or large drainage structures or culverts originally built to convey drainage that does not originate on the road project.

**Project Planning Process**

Each year's Millage Program will be designed to accomplish approximately 1/12th of the overall program in each township. Adjustments in the extent of each year's program shall be made as necessary to meet budget requirements.

Projects that are proposed to be included in the annual program will be reviewed and approved as a preliminary list by the Board of Eaton County Road Commissioners during the month of December each year.

A tabulation and description of those projects on the preliminary list in each township will be provided to each township board by January 1st each year for review and comment and will be posted on the Road Commission's web site and provided to the County Board of Commissioners and the public.

The Road Commission Board will review and consider comments and information received regarding the projects on the preliminary list until February 15th each year, and may add, delete or modify projects in the annual program as they determine appropriate. The Road Commission Board will approve a final list of projects included in the annual program before March 1st each year, and will post the final list on the Road Commission's web site and provide the list to the County Board of Commissioners and the public.

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**Project Selection Guidelines**

A. Paved local roads

Road segments included in the program each year will initially be prioritized by lowest PASER rating on local roads in each township separately, and within that listing further prioritized by the following criteria:

1. PASER Road segments considered for projects shall be shortened, lengthened, or combined as necessary to be made continuous from intersection to intersection, and may include shorter segments with a higher PASER rating when necessary to achieve continuity.

2. Projects on road segments using similar type work will be grouped together as much as possible in combination with other criteria.

3. Road segments in a recognizable neighborhood, subdivision, or locale should be grouped or combined and completed at the same time. Grouped segments may include shorter segments with a higher PASER rating when this is necessary to complete an entire neighborhood or subdivision, or as may be needed to avoid creating short or isolated road segments with different pavement condition ratings.

4. Projects may be advanced in timing or delayed to subsequent years as needed to:

    a. Coordinate with planned utility or other construction work affecting those segments by other agencies such as the Drain Commission, Township or city sewer and water departments and other public utilities, significant private development, and construction on adjacent Primary roads or state highways.

    b. Meet annual budgetary constraints.

B. Gravel surfaced local roads

Projects will initially be prioritized by the age of the existing surface material on each road segment in each township separately, and within that listing then further prioritized by the following criteria:

1. Safety

2. Road segments with higher existing or expected traffic volumes will be given a higher priority.

3. Road segments with low traffic volumes and/or dead end segments will be given lower priority.

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4. Road segments considered for projects shall be shortened, lengthened, or combined as necessary to be made continuous from intersection to intersection.

5. Road segments that are a continuation of prior year's projects and/or that will complete a continuous route between paved cross roads will be given higher priority.

6. Projects may be advanced in timing or delayed to subsequent years as needed to:

    a. Coordinate with planned utility or other construction work affecting those segments by other agencies such as the Drain Commission, Township or city sewer and water departments and other public utilities, planned major private development, and construction on adjacent Primary roads or state highways.

    b. Meet annual budgetary constraints.

**Chloride Dust Control**

The Road Commission will place two applications of chloride dust control on all gravel surfaced local roads each year during the millage period. Dust control application shall be made continuous from intersection to intersection and not applied as a spot treatment. Application will be made as weather permits in the late spring and in mid to late summer.

**Reporting**

Each year the Road Commission will prepare and publish a year-end report on the activity and progress of the Local Road Millage Program separate from other reports by the Road Commission. The report will contain both annual and cumulative financial information over the duration of the millage levy.

*Adopted by the Board of Eaton County Road Commissioners on **December 23, 2014.***

*Revisions adopted by the Board of Eaton County Road Commissioners on **September 12, 2017.***

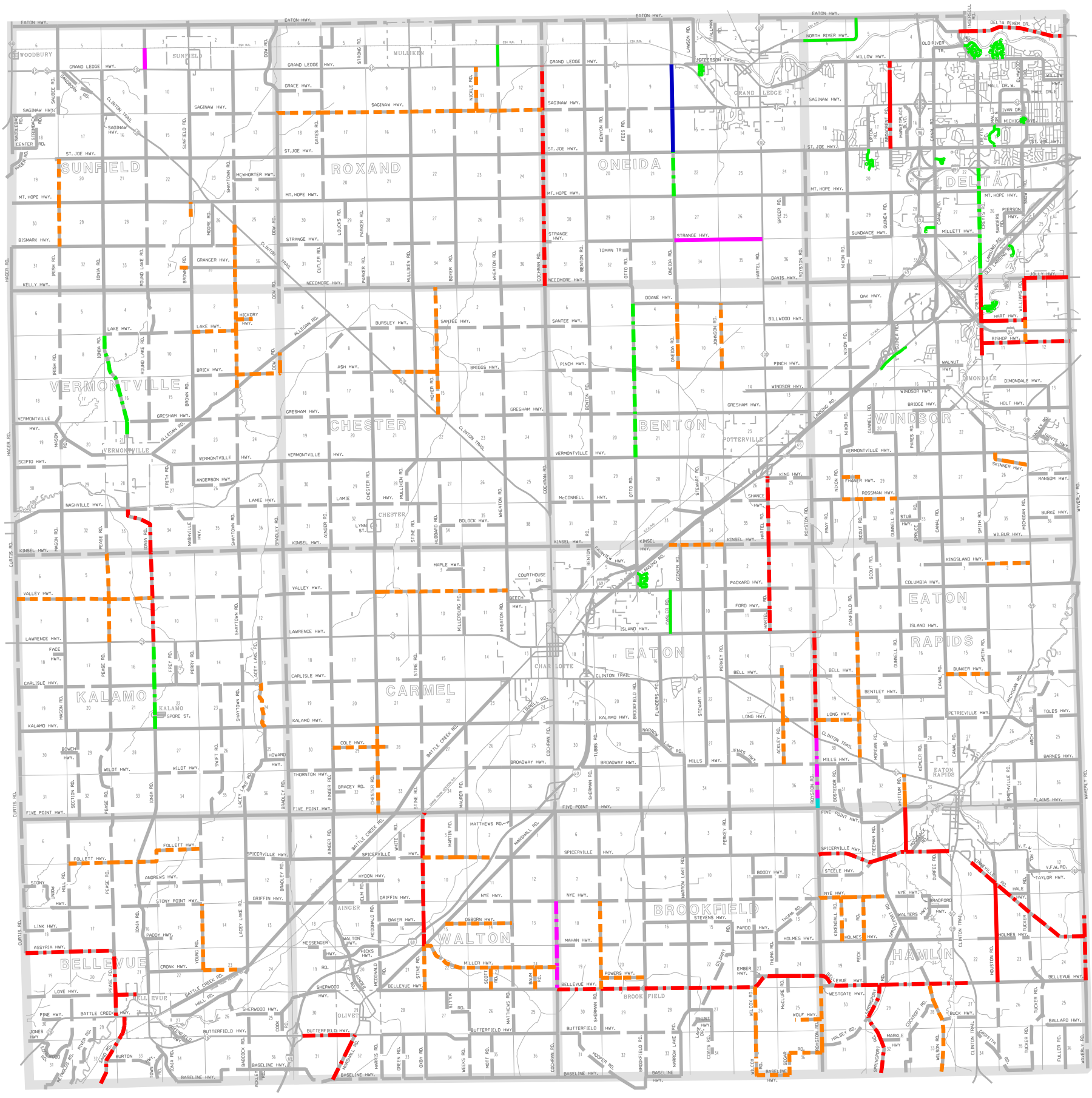
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# EATON COUNTY ROAD COMMISSION

## 2024 PROJECTS - PRELIMINARY

REV: 03-04-24 MJT

- ASPHALT OVERLAY - PRIMARY (10.9 miles)
- ASPHALT OVERLAY - MILLAGE / LOCAL OVERLAY (13.8 miles)
- ASPHALT OVERLAY - CRUSH & SHAPE - PRIMARY (1.3 miles)
- ASPHALT OVERLAY - CRUSH & SHAPE - MILLAGE/LOCAL (2.5 miles)
- PRIMARY TOTAL RECONSTRUCT (0.3 miles)
- FEDERAL AID (2.0 miles)
- REGRAVEL - MILLAGE / LOCAL (77.4 miles)
- PRIMARY OVERBAND CRACK FILL (??.?? miles)
- LOCAL OVERBAND CRACK FILL (??.?? miles)
- PRIMARY SINGLE SEAL AND FOG (56.5 miles)
- LOCAL SINGLE SEAL AND FOG (3.3 miles)



2024 Millage Program
Proposed Gravel Resurfacing

Final List Approved: 02/27/2024

**Revised:** 2/27/2024

CYD/Mile = 1200.00 Cost/Mile = $ 32,400

Est. per CYD = 27.00

| Road Name | From | To | Length | Twp Total Mileage | Cost Estimate |
|---|---|---|---|---|---|
| **Bellevue Twp** | | | | | |
| Cronk Hwy | Young Rd | Battle Creek Hwy | 0.88 | | |
| Young Rd | Cronk Hwy | Stony Point Hwy | 1.51 | | |
| Follett Hwy | Hill Rd | Young Rd | 3.25 | | |
| | | **Bellevue Township Total =** | | 5.64 | $ 182,736 |
| **Benton Twp** | | | | | |
| Oneida Rd | Pinch Hwy | Doane Hwy | 1.50 | | |
| Johnson Rd | Pinch Hwy | Doane Hwy | 1.50 | | |
| E Kinsel Hwy | Lansing Rd | S Perkey Rd | 1.27 | | |
| | | **Benton Township Total =** | | 4.27 | $ 138,348 |
| **Brookfield Twp** | | | | | |
| E Baseline Dr | Wilcox Rd | Segar Rd | 0.74 | | |
| Powers Hwy | Sherman Rd | Closed bridge | 0.50 | | |
| Powers Hwy | Closed bridge | Brookfield Rd | 0.50 | | |
| Segar Rd | Baseline Hwy | Royston Rd | 1.25 | | |
| Sherman Rd | E Bellevue Hwy | E Nye Hwy | 2.00 | | |
| Wilcox Rd | E Baseline Dr | Dead End | 0.31 | | |
| Wilcox Rd | E Bellevue Hwy | Dead End | 1.63 | | |
| Wolf Hwy | S Royston Rd | Dead End | 0.60 | | |
| | | **Brookfield Township Total =** | | 7.53 | $ 243,972 |
| **Carmel Twp** | | | | | |
| N Chester Rd | W Five Point Hwy | W Kalamo Hwy | 2.02 | | |
| Cole Hwy | S Ainger Rd | N Chester Rd | 1.00 | | |
| Valley Hwy | N Chester Rd | Wheaton Rd | 3.03 | | |
| | | **Carmel Township Total =** | | 6.05 | $ 196,020 |
| **Chester Twp** | | | | | |
| Ash Hwy | N Clinton Trl | Moyer Rd | 1.02 | | |
| Moyer Rd | N Clinton Trl | W Needmore Hwy | 2.91 | | |
| Dow Rd | Brick Hwy | Allegan Rd | 0.47 | | |
| | | **Chester Township Total =** | | 4.40 | $ 142,560 |
| **Delta Twp** | | | | | |
| | | **Delta Township Total =** | | 0.00 | $ - |
| **Eaton Twp** | | | | | |
| Ackley Rd | Mills Hwy | Dead End | 2.26 | | |
| Long Hwy | Ackley Rd | E Clinton Trl | 0.14 | | |
| | | **Eaton Township Total =** | | 2.40 | $ 77,760 |

Final List Approved: 02/27/2024

| | | | | | | |
|---|---|---|---|---|---|---|
| **Eaton Rapids Twp** | | | | | | |
| Bunker Hwy | S Canal Rd | N Smith Rd | 1.00 | | | |
| Kingsland Hwy | N Smith Rd | N Michigan Rd | 0.98 | | | |
| Whittum Rd | Five Point Hwy | E Clinton Trl | 0.73 | | | |
| S Canfield Rd | E Clinton Trl | Island Hwy | 2.87 | | | |
| Long Hwy | S Royston Rd | S Canfield Rd | 0.99 | | | |
| | | **Eaton Rapids Township Total =** | | 6.57 | $ | 212,868 |
| **Hamlin Twp** | | | | | | |
| Kikendall Rd | Holmes Hwy | E Nye Hwy | 1.00 | | | |
| E Nye Hwy | S Royston Rd | Springport Rd | 1.56 | | | |
| S Royston Rd | Segar Rd | Westgate Hwy | 1.52 | | | |
| Peck Rd | Holmes Hwy | E Nye Hwy | 1.00 | | | |
| Wilson Rd | County Line | E Bellevue Hwy | 2.06 | | | |
| | | **Hamlin Township Total =** | | 7.14 | $ | 231,336 |
| **Kalamo Twp** | | | | | | |
| S Pease Rd | W Lawrence Hwy | Kinsel Hwy | 2.02 | | | |
| S Lacey Lake Rd | W Kalamo Hwy | Carlisle Hwy | 1.05 | | | |
| Valley Hwy | Curtis Rd | S Ionia Rd | 3.09 | | | |
| | | **Kalamo Township Total =** | | 6.16 | $ | 199,584 |
| **Oneida Twp** | | | | | | |
| | | **Oneida Township Total =** | | 0.00 | $ | - |
| **Roxand Twp** | | | | | | |
| Nickle Rd | W Saginaw Hwy | W Grand Ledge Hwy | 1.00 | | | |
| W Saginaw Hwy | Dow Rd | Cochran Rd | 6.04 | | | |
| | | **Roxand Township Total =** | | 7.04 | $ | 228,096 |
| **Sunfield Twp** | | | | | | |
| N Shaytown Rd | South Twp Line | Clinton Trl | 1.49 | | | |
| Irish Rd | Bismark Hwy | St. Joe Hwy | 2.00 | | | |
| Sunfield Hwy | Dead End | Mount Hope Hwy | 0.34 | | | |
| Granger Hwy | Dead End | Brown Rd | 0.26 | | | |
| | | **Sunfield Township Total =** | | 4.09 | $ | - |
| **Vemontville Twp** | | | | | | |
| N Shaytown Rd | Allegan Rd | North Twp Line | 2.23 | | | |
| Hickory Hwy | N Shaytown Rd | Dead End | 0.38 | | | |
| Brick Hwy | N Shaytown Rd | Dow Rd | 0.99 | | | |
| Lake Hwy | Brown Rd | N Shaytown Rd | 1.00 | | | |
| | | **Vermontville Township Total =** | | 4.60 | $ | 149,040 |

Final List Approved: 02/27/2024

| | | | | | | |
|---|---|---|---|---|---|---|
| **Walton Twp** | | | | | | |
| Scott Rd | Bellevue Hwy | Miller Hwy | 0.50 | | | |
| Miller Hwy | Battle Creek Rd | Matthews Rd | 2.23 | | | |
| Baum Rd | W Bellevue Hwy | Miller Hwy | 0.50 | | | |
| Miller Hwy | Matthews Rd | Cochran Rd | 1.00 | | | |
| Osborn Hwy | Marshall Rd | Matthews Rd | 1.52 | | | |
| W Spicerville Hwy | Stine Rd. | Dead End | 1.52 | | | |
| S Stine Rd | W Bellevue Hwy | Marshall Rd | 0.99 | | | |
| | | | **Walton Township Total =** | 8.26 | $ | 267,624 |
| **Windsor Twp** | | | | | | |
| Rossman Hwy | Nixon Rd | N Gunnell Rd | 1.25 | | | |
| Skinner Hwy | E Vermontville Hwy | N Michigan Rd | 0.89 | | | |
| Fhaner Hwy | Nixon Rd | Dead End | 0.42 | | | |
| Williams Rd | Bishop Hwy | Dead End | 0.23 | | | |
| Williams Rd | Hart Hwy | Dead End | 0.21 | | | |
| | | | **Windsor Township Total =** | 3.00 | $ | 97,200 |
| | | | **Total Gravel =** | 77.15 | $ | 2,367,144 |

2024 Millage Program
Proposed Rural Paved Cross Section

Final List Approved: 02/27/24

**Revised:** 2/27/2024

Estimate width = 22 ft
Tons/mile = 1450
Cost per ton = $ 85.00

Cost/Mile = $ 147,000

| Road Name | From | To | Length | Twp Total Mileage | Cost Estimate |
|---|---|---|---|---|---|
| **Bellevue Twp - Complete** | | | | | |
| | | | **Bellevue Township Total =** | 0.00 | $ - |
| **Benton Twp - Complete** | | | | | |
| | | | **Benton Township Total =** | 0.00 | $ - |
| **Brookfield Twp - Complete** | | | | | |
| | | | **Brookfield Township Total =** | 0.00 | $ - |
| **Carmel Twp - Complete** | | | | | |
| | | | **Carmel Township Total =** | 0.00 | $ - |
| **Chester Twp - Complete** | | | | | |
| | | | **Chester Township Total =** | 0.00 | $ - |
| **Delta Twp** | | | | | |
| N River Hwy | City/Twp Line | Eaton Hwy | 1.672 | | |
| | | | **Delta Township Total =** | 1.67 | $ 245,784 |
| **Eaton Twp** | | | | | |
| Casler Rd | Island Hwy | Packard Hwy | 1.002 | | |
| | | | **Eaton Township Total =** | 1.00 | $ 147,294 |
| **Eaton Rapids Twp - Complete** | | | | | |
| | | | **Eaton Rapids Township Total =** | 0.00 | $ - |
| **Hamlin Twp** | | | | | |
| | | | **Hamlin Township Total =** | 0.00 | $ - |
| **Kalamo Twp - Complete** | | | | | |
| | | | **Kalamo Township Total =** | 0.00 | $ - |
| **Oneida Twp** | | | | | |
| E Strange Hwy | Oneida Rd | Hartel Rd | 2.005 | | |
| | | | **Oneida Township Total =** | 2.01 | $ 294,735 |
| **Roxand Twp** | | | | | |
| N Wheaton Rd | Grand Ledge Hwy | C&O Railroad | 0.497 | | |
| | | | **Roxand Township Total =** | 0.50 | $ 146,118 |
| **Sunfield Twp** | | | | | |
| Round Lake Rd | Grand Ledge Hwy | CSX RR | 0.486 | | |
| | | | **Sunfield Township Total =** | 0.49 | $ 71,442 |
| **Vermontville Twp - Complete** | | | | | |
| | | | **Vermontville Township Total =** | 0.00 | $ - |
| **Walton Twp - Complete** | | | | | |
| | | | **Walton Township Total =** | 0.00 | $ - |
| **Windsor Twp** | | | | | |
| Strobel Rd | Lansing Rd | Dead End or Start | 0.809 | | |
| | | | **Windsor Township Total =** | 0.81 | $ 118,923 |
| | | | **Total Rural =** | 6.47 | $ 1,024,296 |

2024 Millage Program
Proposed Urban Paved Cross Section

Final List Approved: 02/27/24

**Revised:** 02/27/2024

Estimate width = 27 ft
Tons/mile = 1770
Cost per ton = $ 85.00

Cost/Mile = $ 231,000

| SortName | FromDesc | ToDesc | CtrLength | Twp Total Mileage | Cost Estimate |
|---|---|---|---|---|---|
| **Delta Twp** | | | | | |
| Attenborough Ct | River Ridge Dr | Dead end | 0.088 | | |
| Briar Hill Dr | Willow Bend Dr | Old River Trl | 0.202 | | |
| Briar Hill Dr | Willow Bend Dr | Piney Point Dr | 0.142 | | |
| Castlebury Cir | Cheltingham Blvd | Dead end | 0.051 | | |
| Cawdor Ct | Walters Way | N Dead end | 0.096 | | |
| Cawdor Ct | Walters Way | S Dead end | 0.041 | | |
| Cheltingham Blvd | Willow Hwy | River Ridge Dr | 0.362 | | |
| Cherbourg Dr | St Joe Hwy | Michigan Ave | 0.588 | | |
| Claremont Ct | Walmar Dr | Dead end | 0.099 | | |
| Corkery Ln | Denmark Ave | Denmark Ave | 0.175 | | |
| Cortina Trl | Cherbourg Dr | Dead end | 0.222 | | |
| Deanna Dr | Maria Dr | E Dead end | 0.068 | | |
| Deanna Dr | Maria Dr | W Dead end | 0.057 | | |
| Geraldine Dr | Maria Dr | E Dead end | 0.075 | | |
| Geraldine Dr | Maria Dr | W Dead end | 0.083 | | |
| LaRocque Cir | Piney Point Dr | Dead end | 0.142 | | |
| Lonsdale Cir | Dead End or Start | Saddlebrook Dr | 0.063 | | |
| Maria Dr | Michigan Ave | Deanna Dr | 0.135 | | |
| E Millsborough Cir | Briar Hill Dr | Dead end | 0.078 | | |
| W Millsborough Cir | Briar Hill Dr | Dead end | 0.092 | | |
| Northport Dr | Canal Rd | Dead end | 0.287 | | |
| Old Oak Ct | Walmar Dr | Dead end | 0.046 | | |
| Old River Trl | Webster Rd | Dead end | 0.52 | | |
| Piney Point Dr | Webster Rd | Dead end | 0.192 | | |
| Players Club Dr | Canal Rd | Red Cliffe Dr | 0.205 | | |
| Point West Blvd | Countryside Dr | Upton Rd | 0.451 | | |
| Portman Pl | Red Cliffe Dr | Players Club Dr | 0.117 | | |
| Red Cliffe Dr | Portman Pl | Players Club Dr | 0.114 | | |
| River Cove Dr | Old Lansing Rd | Dead end | 0.313 | | |
| River Ridge Dr | Walmar Dr | Cheltingham Blvd | 0.194 | | |
| Saddlebrook Dr | Point West Blvd | Attribute Change | 0.117 | | |
| Sugartree Trl | Whitehaven Dr | River Ridge Dr | 0.085 | | |
| Walmar Dr | Willow Hwy | Dead end | 0.442 | | |
| Walters Way | Walmar Dr | Cawdor Ct | 0.119 | | |
| Whitehaven Dr | Cheltingham Blvd | Sugartree Trl | 0.152 | | |
| Willow Bend Dr | Webster Rd | Dead end | 0.152 | | |
| | | | **Delta Township Total =** | 6.365 | $ 1,470,315 |

Final List Approved: 02/27/24

| SortName | FromDesc | ToDesc | CtrLength | Twp Total Mileage | Cost Estimate |
|---|---|---|---|---|---|
| **Eaton Twp** | | | | | |
| Brunswick Dr | Brentwood Dr | Holly Dr | 0.16 | | |
| Brentwood Dr | Brunswick Dr | Otto Rd | 0.357 | | |
| Holly Dr | Otto Rd | Brunswick Dr | 0.238 | | |
| Candlewood Dr | Brentwood Dr | Attribute Change | 0.181 | | |
| | | **Eaton Township Total =** | | 0.936 | $ 216,216 |
| **Oneida Twp** | | | | | |
| Georgia Ave | 4th St | Jefferson St | 0.251 | | |
| Oneida Ave | Jefferson Hwy | 4th St | 0.25 | | |
| Third St | Oneida Ave | Partlow St | 0.123 | | |
| Second St | Georgia Ave | Partlow St | 0.063 | | |
| Fourth St | Oneida Ave | Georgia Ave | 0.064 | | |
| | | **Oneida Township Total =** | | 0.751 | $ 173,481 |
| **Windsor Twp** | | | | | |
| Burgandy Blvd | Creyts Rd | Dead end | 0.29 | | |
| Dupre Ave | Burgandy Blvd | Lafayette Ln | 0.052 | | |
| Saratoga Way | Baron Blvd | Burgandy Blvd | 0.056 | | |
| Baron Blvd | Saratoga Way | Dead end | 0.071 | | |
| Lafayette Ln | Dupre Ave | Dead end | 0.377 | | |
| Noel Ave | Lafayette Ln | Attribute Change | 0.065 | | |
| | | **Windsor Township Total =** | | 0.911 | $ 210,441 |
| | | **Total Urban =** | | 8.96 | $ 2,070,453 |

# 2024 MILLAGE PROGRAM

## 2023 PAVEMENT RATINGS

POOR CONDITION
- PASER 1
- PASER 2
- PASER 3
- PASER 4

FAIR CONDITION
- PASER 5
- PASER 6
- PASER 7

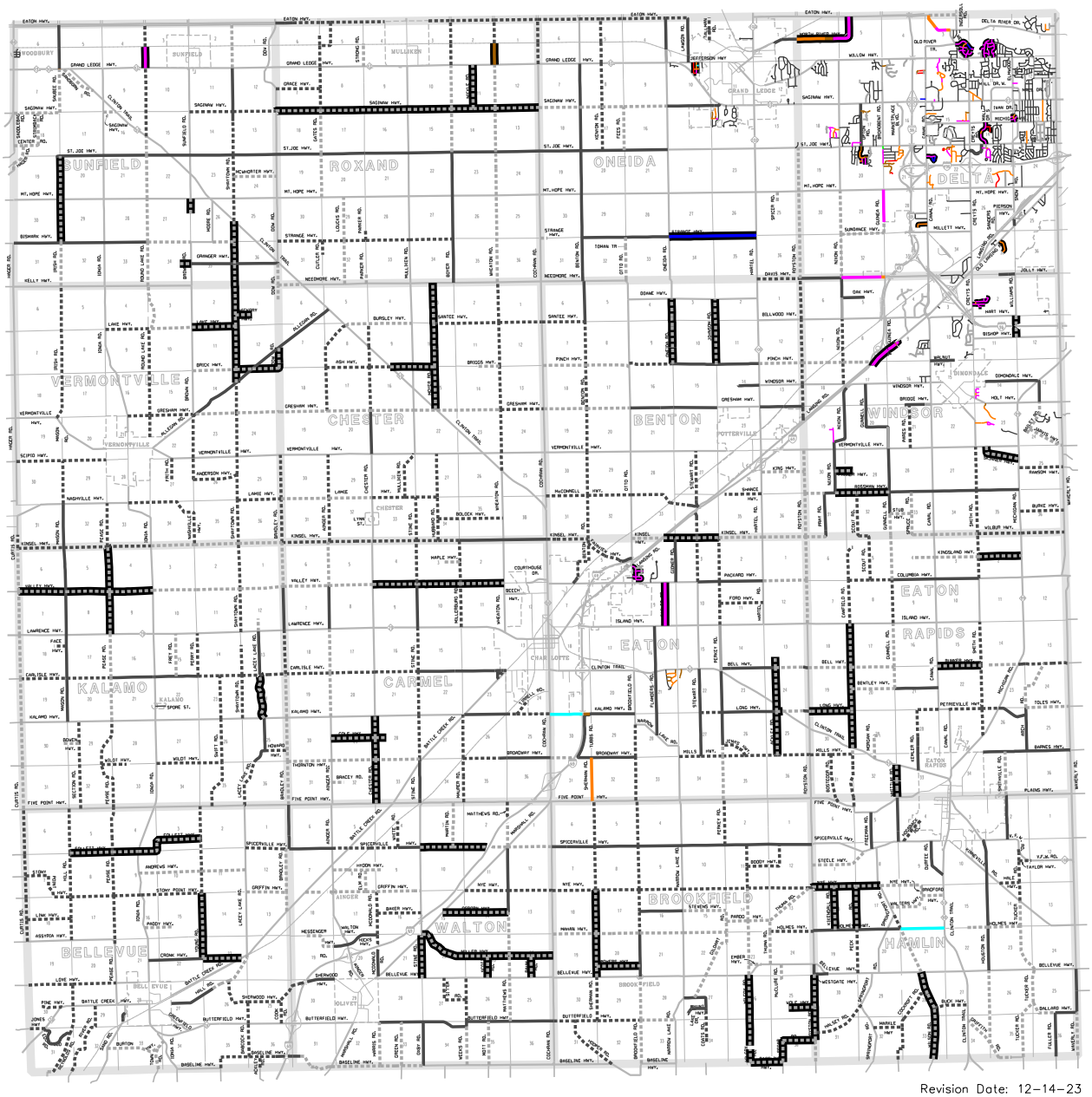
GRAVEL ROADS TO BE COMPLETED
GRAVEL ROADS COMPLETED
PAVED ROADS COMPLETED

## 2024 PROJECTS

PAVED ROADS
CENTER COLOR BY 2023 PAVEMENT RATINGS

GRAVEL ROADS

PRELIMINARY LIST SELECTION DATE: 11/28/2023
FINAL LIST APPROVAL DATE: 02/27/2024




Revision Date: 12-14-23

# 2024 MILLAGE PROGRAM

# BELLEVUE TOWNSHIP

## 2023 PAVEMENT RATINGS

POOR CONDITION
- PASER 1
- PASER 2
- PASER 3
- PASER 4

FAIR CONDITION
- PASER 5
- PASER 6
- PASER 7

GRAVEL ROADS TO BE COMPLETED

GRAVEL ROADS COMPLETED

PAVED ROADS COMPLETED

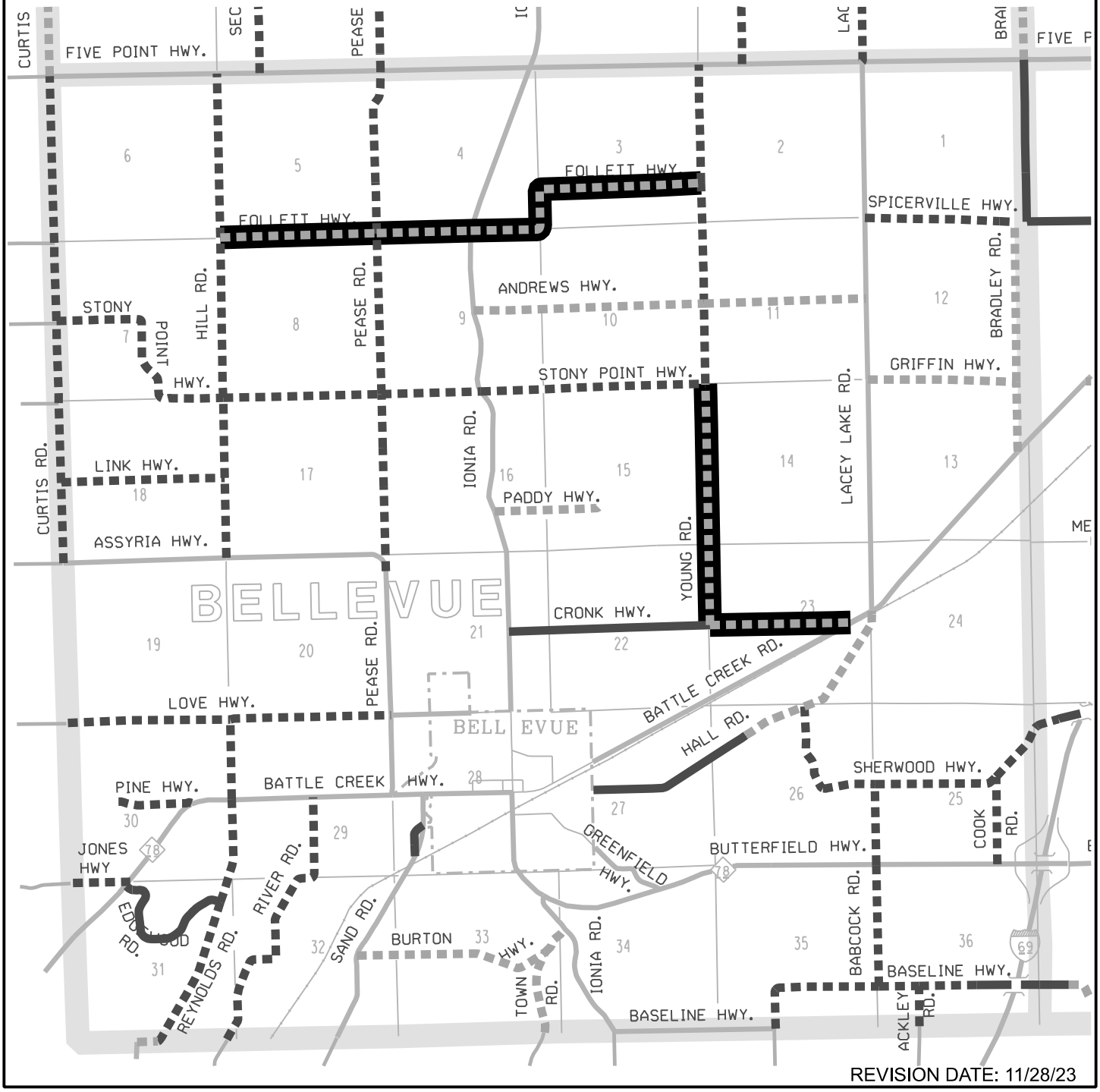
## 2024 PROJECTS

PAVED ROADS
CENTER COLOR BY 2023 PAVEMENT RATINGS

GRAVEL ROADS

PRELIMINARY LIST SELECTION DATE: 11/28/2023

FINAL LIST APPROVAL DATE: 02/27/2024




REVISION DATE: 11/28/23

# 2024 MILLAGE PROGRAM

# BENTON TOWNSHIP

## 2023 PAVEMENT RATINGS

POOR CONDITION
- PASER 1
- PASER 2
- PASER 3
- PASER 4

FAIR CONDITION
- PASER 5
- PASER 6
- PASER 7

GRAVEL ROADS TO BE COMPLETED

GRAVEL ROADS COMPLETED

PAVED ROADS COMPLETED

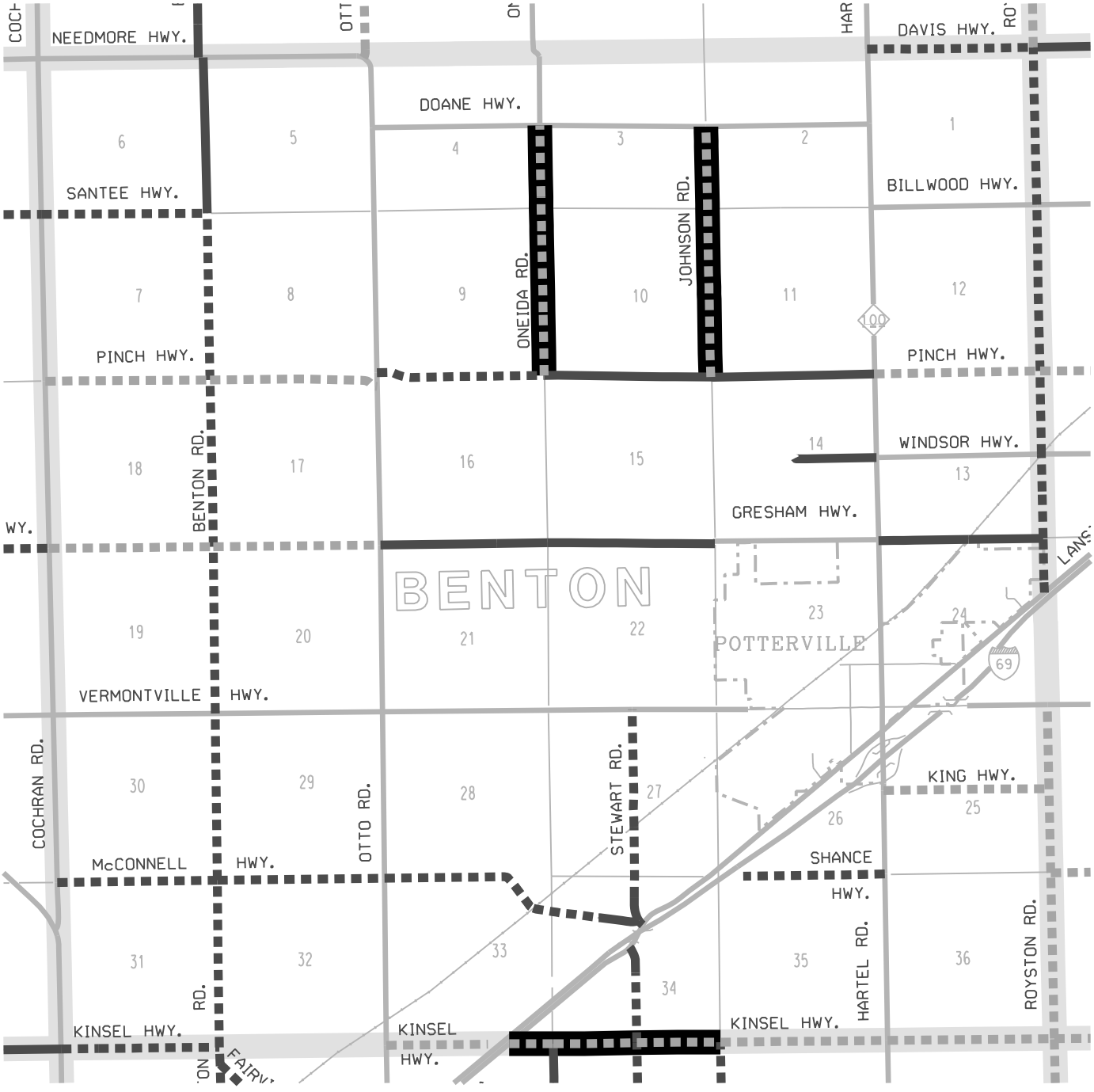
## 2024 PROJECTS

PAVED ROADS
CENTER COLOR BY 2023 PAVEMENT RATINGS

GRAVEL ROADS

PRELIMINARY LIST SELECTION DATE: 11/28/2023

FINAL LIST APPROVAL DATE: 02/27/2024




REVISION DATE: 11/28/23

# 2024 MILLAGE PROGRAM
# BROOKFIELD TOWNSHIP

## 2023 PAVEMENT RATINGS

POOR CONDITION
- PASER 1
- PASER 2
- PASER 3
- PASER 4

FAIR CONDITION
- PASER 5
- PASER 6
- PASER 7

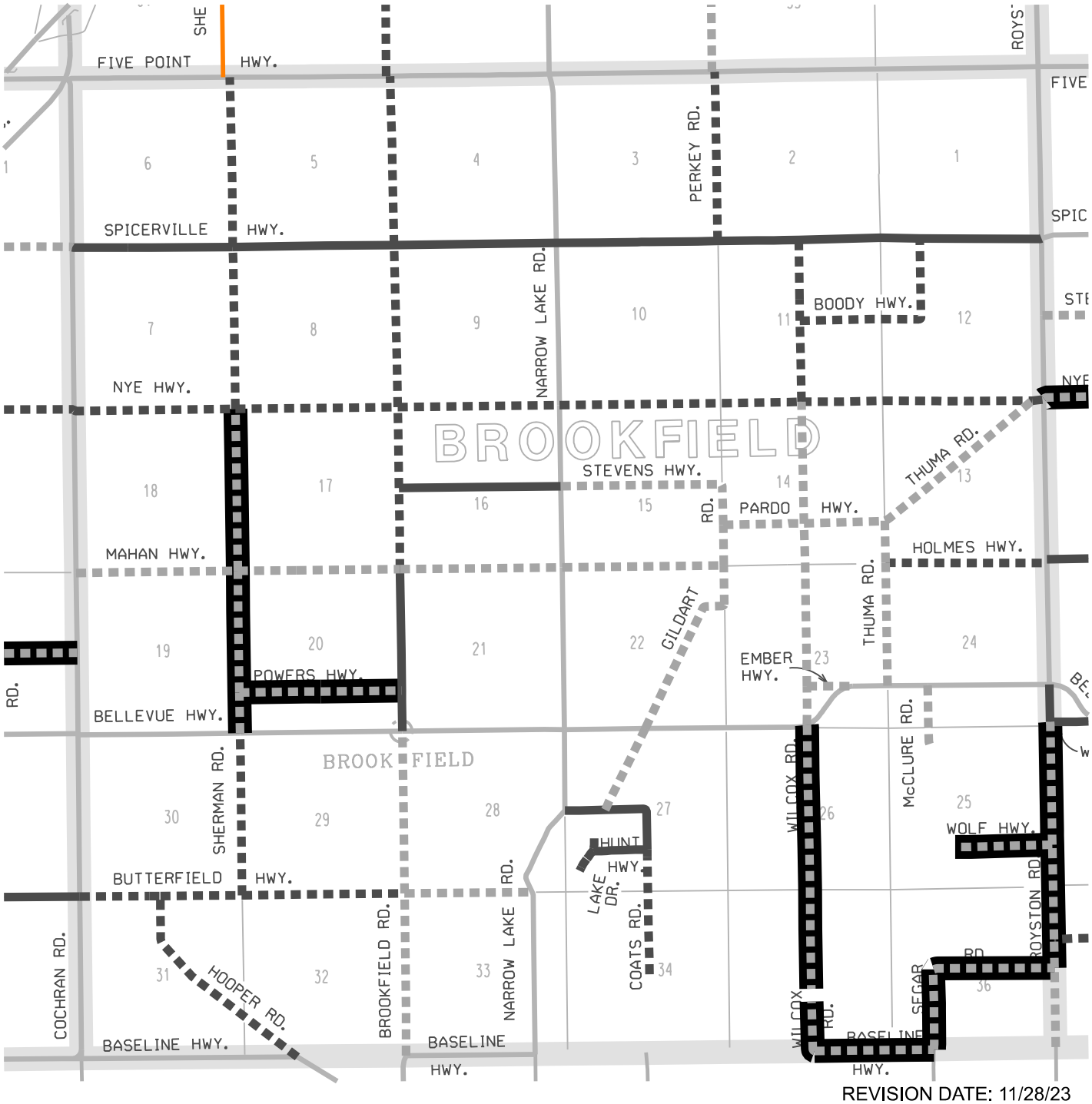
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PAVED ROADS COMPLETED

## 2024 PROJECTS

PAVED ROADS
CENTER COLOR BY 2023 PAVEMENT RATINGS

GRAVEL ROADS

PRELIMINARY LIST SELECTION DATE: 11/28/2023
FINAL LIST APPROVAL DATE: 02/27/2024




REVISION DATE: 11/28/23

# 2024 MILLAGE PROGRAM
# CARMEL TOWNSHIP

## 2023 PAVEMENT RATINGS

POOR CONDITION
- PASER 1
- PASER 2
- PASER 3
- PASER 4

FAIR CONDITION
- PASER 5
- PASER 6
- PASER 7

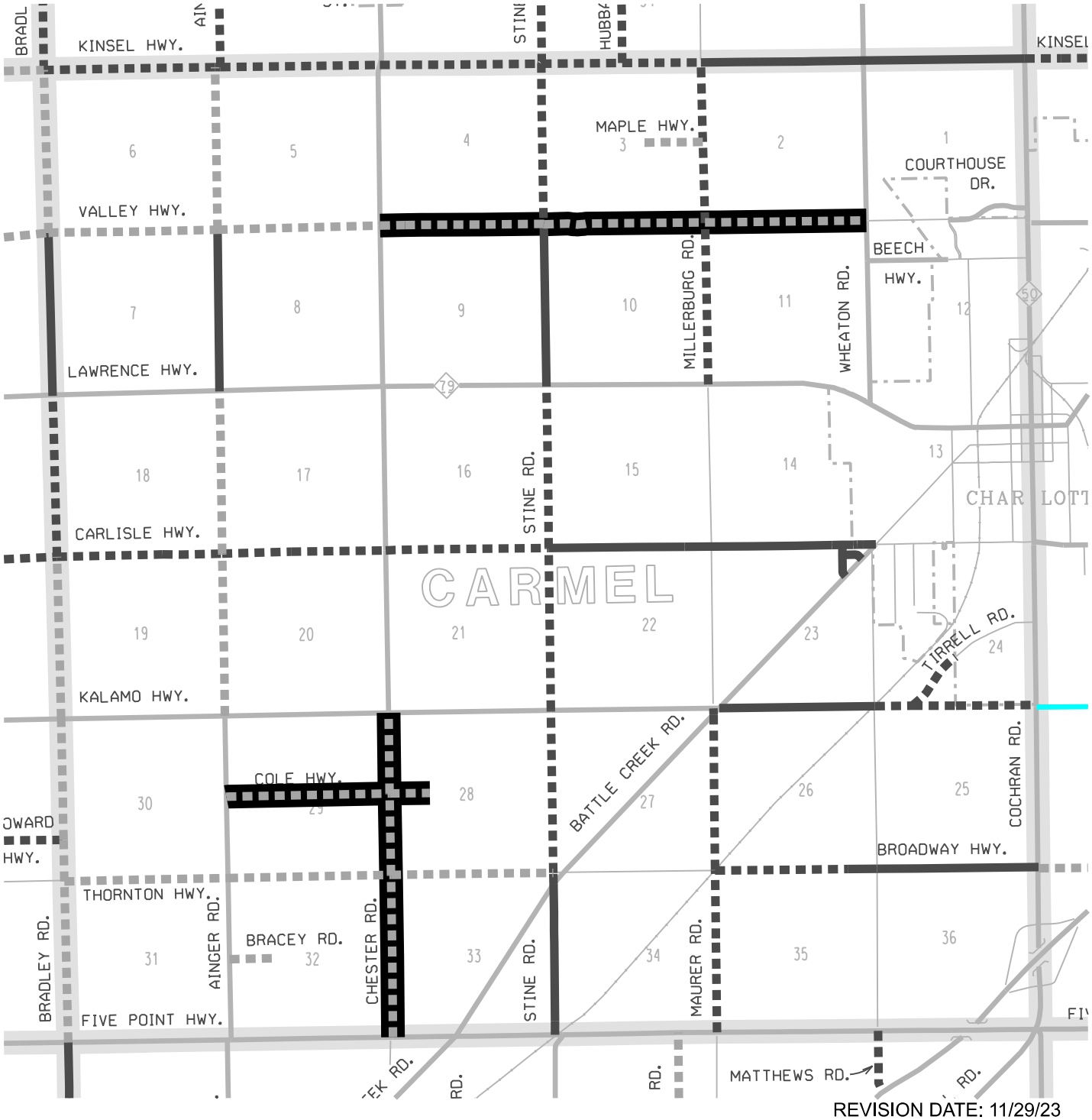
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GRAVEL ROADS COMPLETED
PAVED ROADS COMPLETED

## 2024 PROJECTS

PAVED ROADS
CENTER COLOR BY 2023 PAVEMENT RATINGS

GRAVEL ROADS

PRELIMINARY LIST SELECTION DATE: 11/28/2023
FINAL LIST APPROVAL DATE: 02/27/2024




REVISION DATE: 11/29/23

# 2024 MILLAGE PROGRAM
# CHESTER TOWNSHIP

## 2023 PAVEMENT RATINGS

POOR CONDITION
- PASER 1
- PASER 2
- PASER 3
- PASER 4

FAIR CONDITION
- PASER 5
- PASER 6
- PASER 7

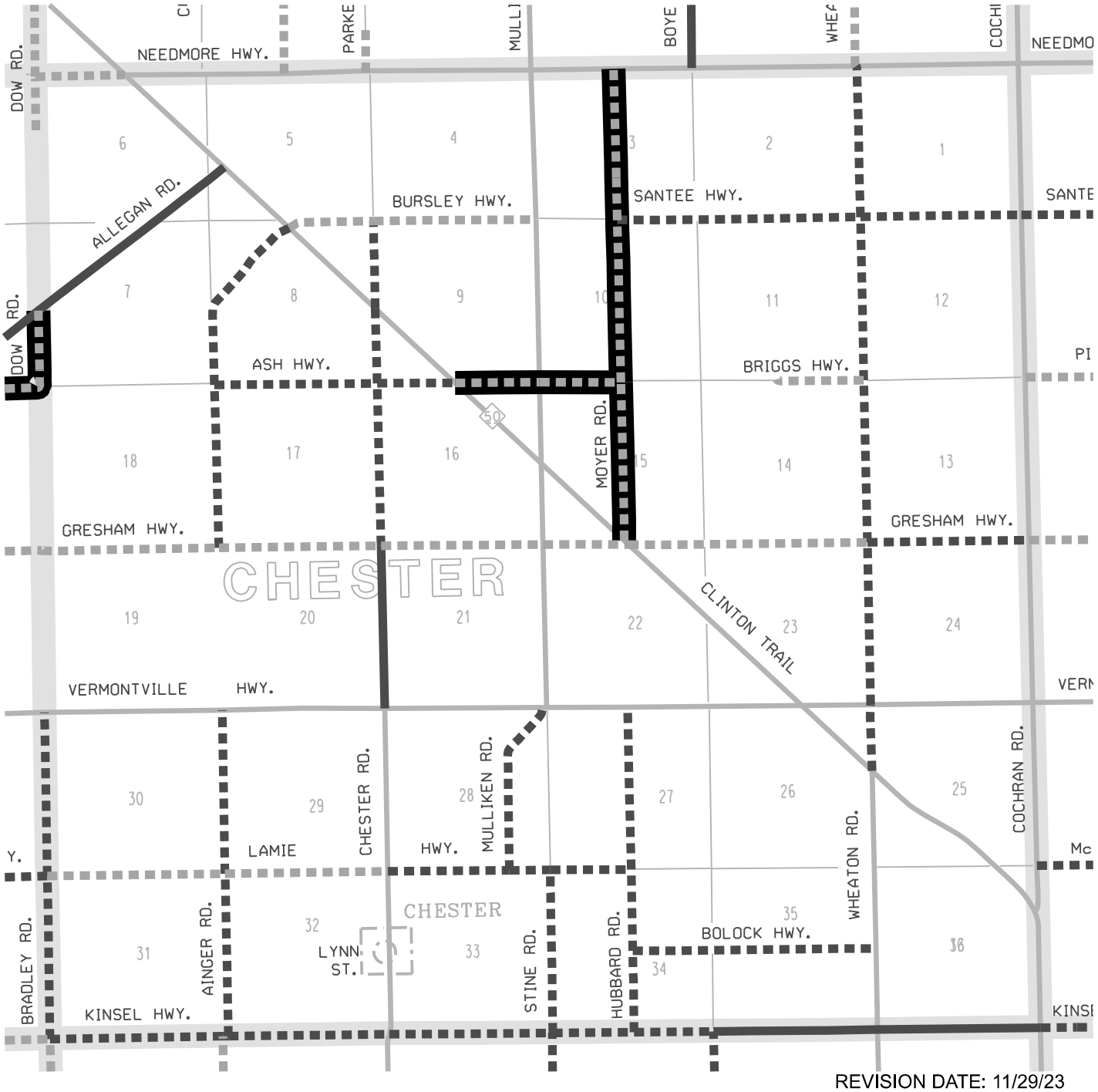
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- GRAVEL ROADS COMPLETED
- PAVED ROADS COMPLETED

## 2024 PROJECTS

PAVED ROADS
CENTER COLOR BY 2023 PAVEMENT RATINGS

GRAVEL ROADS

PRELIMINARY LIST SELECTION DATE: 11/28/2023
FINAL LIST APPROVAL DATE: 02/27/2024




REVISION DATE: 11/29/23

# 2024 MILLAGE PROGRAM
# DELTA TOWNSHIP

## 2023 PAVEMENT RATINGS

POOR CONDITION
- PASER 1
- PASER 2
- PASER 3
- PASER 4

FAIR CONDITION
- PASER 5
- PASER 6
- PASER 7

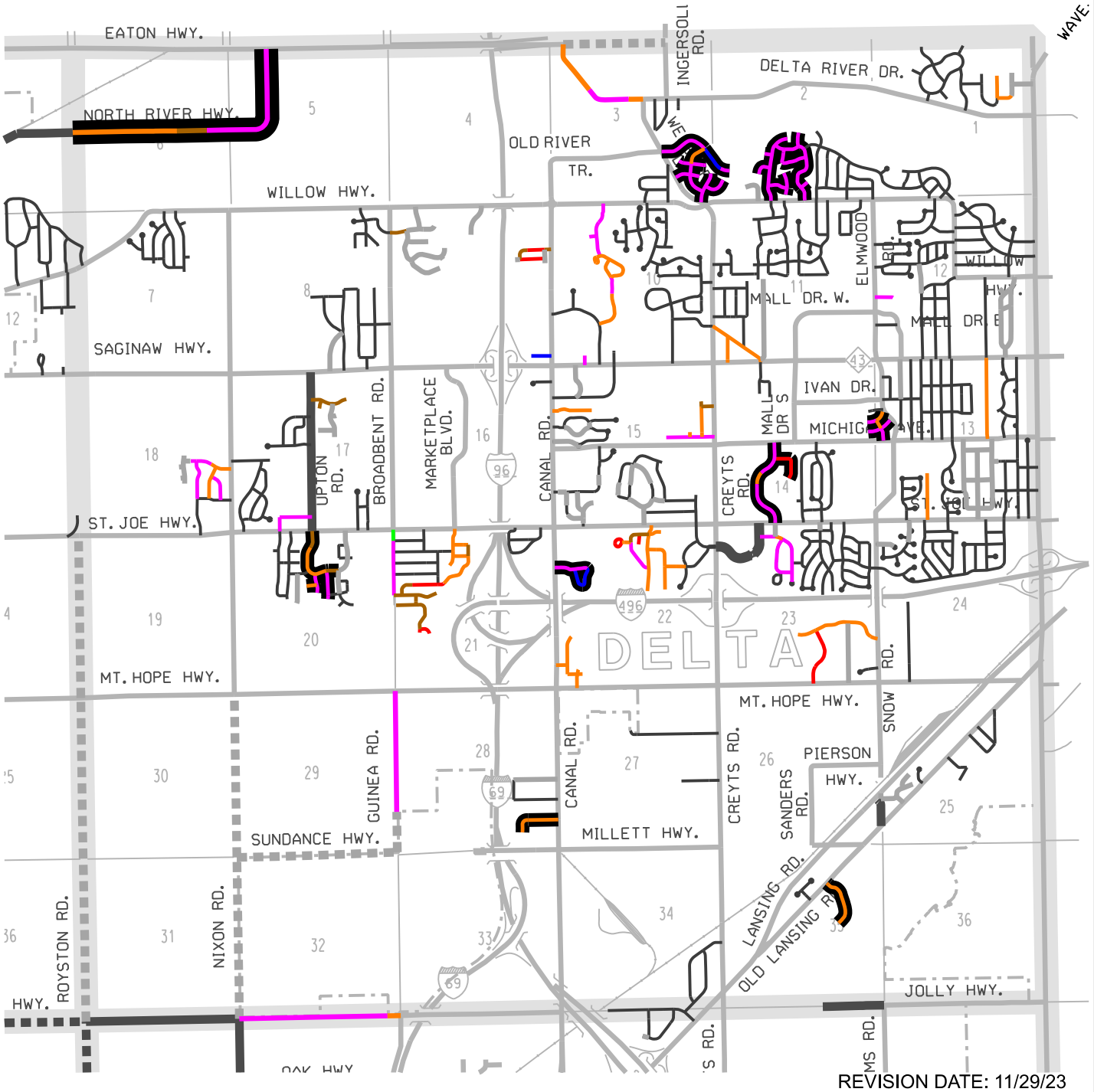
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GRAVEL ROADS COMPLETED
PAVED ROADS COMPLETED

## 2024 PROJECTS

PAVED ROADS
CENTER COLOR BY 2023 PAVEMENT RATINGS

GRAVEL ROADS

PRELIMINARY LIST SELECTION DATE: 11/28/2023
FINAL LIST APPROVAL DATE: 02/27/2024




REVISION DATE: 11/29/23

# 2024 MILLAGE PROGRAM
# EATON RAPIDS TOWNSHIP

## 2023 PAVEMENT RATINGS

POOR CONDITION
- PASER 1
- PASER 2
- PASER 3
- PASER 4

FAIR CONDITION
- PASER 5
- PASER 6
- PASER 7

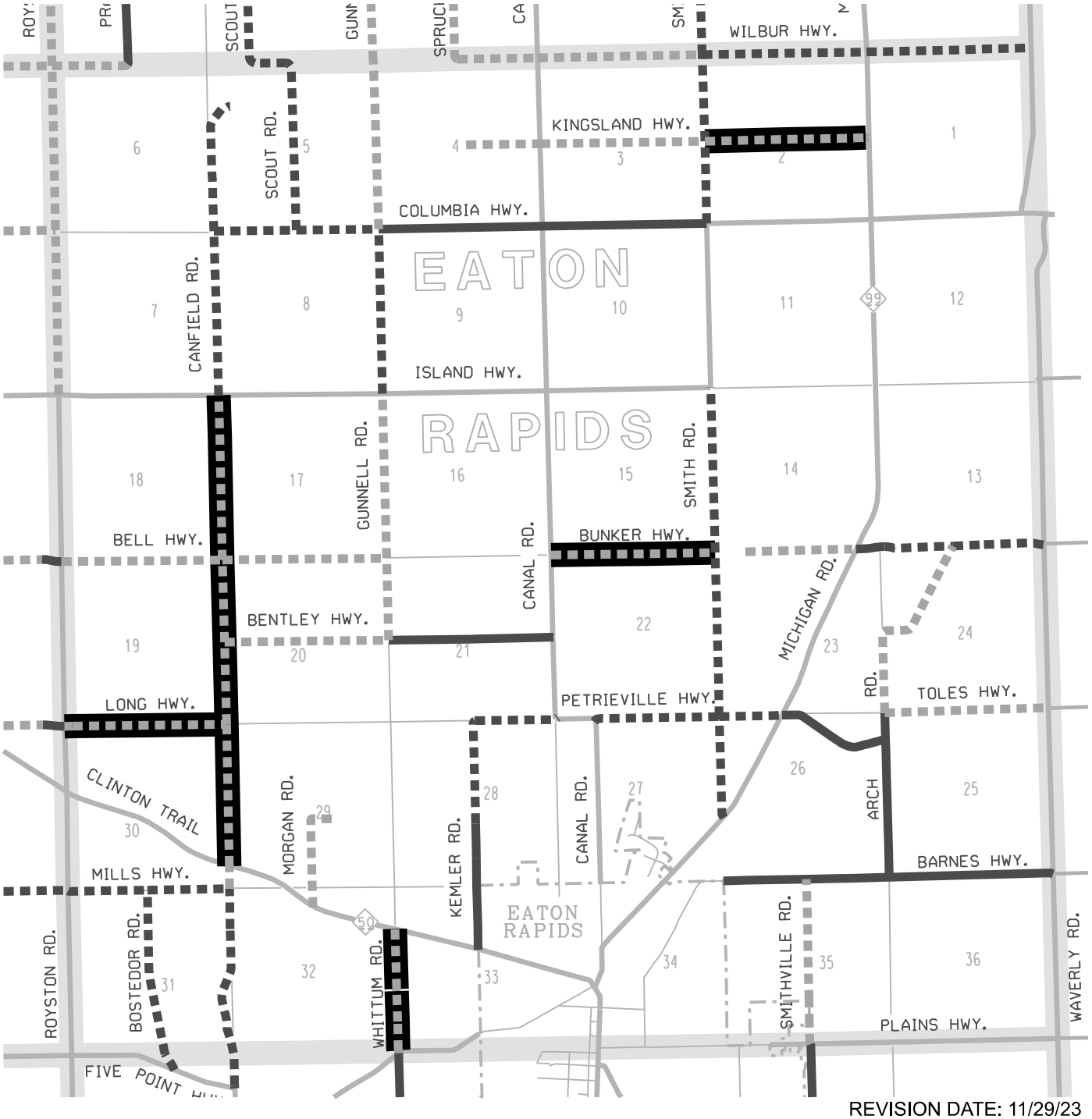
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GRAVEL ROADS COMPLETED
PAVED ROADS COMPLETED

## 2024 PROJECTS

PAVED ROADS
CENTER COLOR BY 2023 PAVEMENT RATINGS

GRAVEL ROADS

PRELIMINARY LIST SELECTION DATE: 11/28/2023
FINAL LIST APPROVAL DATE: 02/27/2024




REVISION DATE: 11/29/23

# 2024 MILLAGE PROGRAM
# EATON TOWNSHIP

## 2023 PAVEMENT RATINGS

POOR CONDITION
- PASER 1
- PASER 2
- PASER 3
- PASER 4

FAIR CONDITION
- PASER 5
- PASER 6
- PASER 7

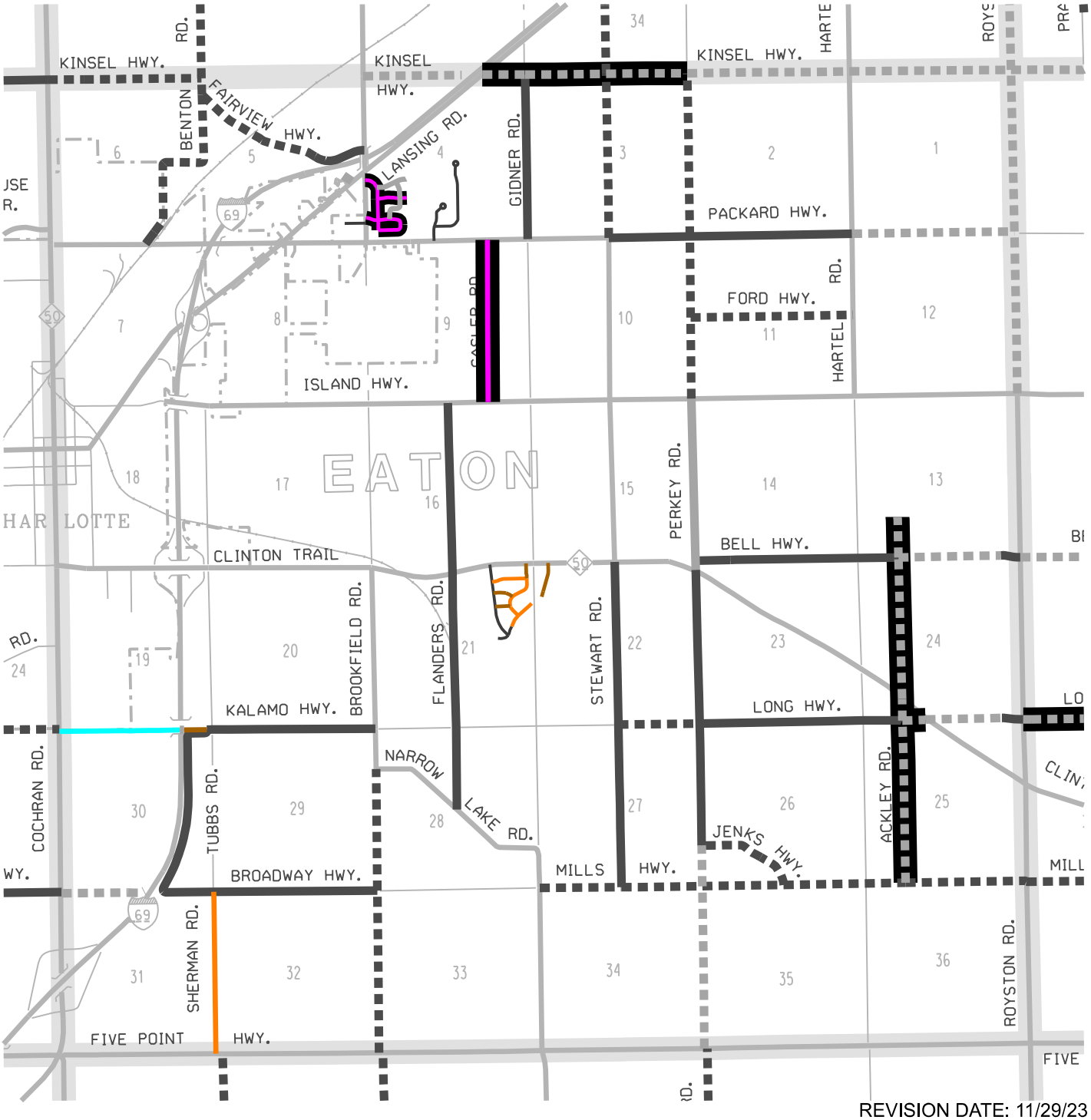
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GRAVEL ROADS COMPLETED
PAVED ROADS COMPLETED

## 2024 PROJECTS

PAVED ROADS
CENTER COLOR BY 2023 PAVEMENT RATINGS

GRAVEL ROADS

PRELIMINARY LIST SELECTION DATE: 11/28/2023
FINAL LIST APPROVAL DATE: 02/27/2024




REVISION DATE: 11/29/23

# 2024 MILLAGE PROGRAM
# HAMLIN TOWNSHIP

## 2023 PAVEMENT RATINGS

POOR CONDITION
- PASER 1
- PASER 2
- PASER 3
- PASER 4

FAIR CONDITION
- PASER 5
- PASER 6
- PASER 7

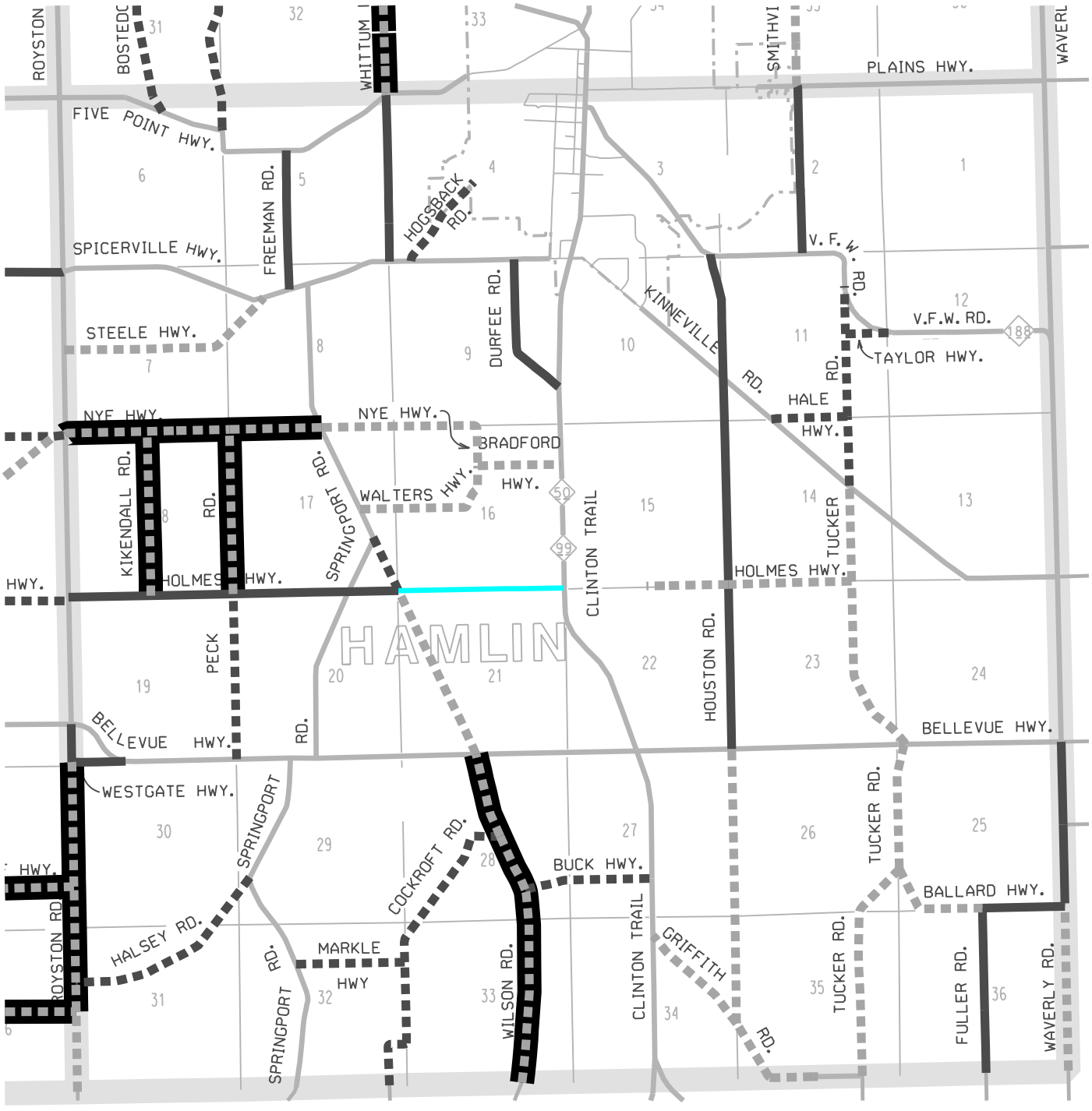
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GRAVEL ROADS COMPLETED
PAVED ROADS COMPLETED

## 2024 PROJECTS

PAVED ROADS
CENTER COLOR BY 2023 PAVEMENT RATINGS

GRAVEL ROADS

PRELIMINARY LIST SELECTION DATE: 11/28/2023
FINAL LIST APPROVAL DATE: 02/27/2024




REVISION DATE: 11/29/23

# 2024 MILLAGE PROGRAM
# KALAMO TOWNSHIP

## 2023 PAVEMENT RATINGS

POOR CONDITION
- PASER 1
- PASER 2
- PASER 3
- PASER 4

FAIR CONDITION
- PASER 5
- PASER 6
- PASER 7

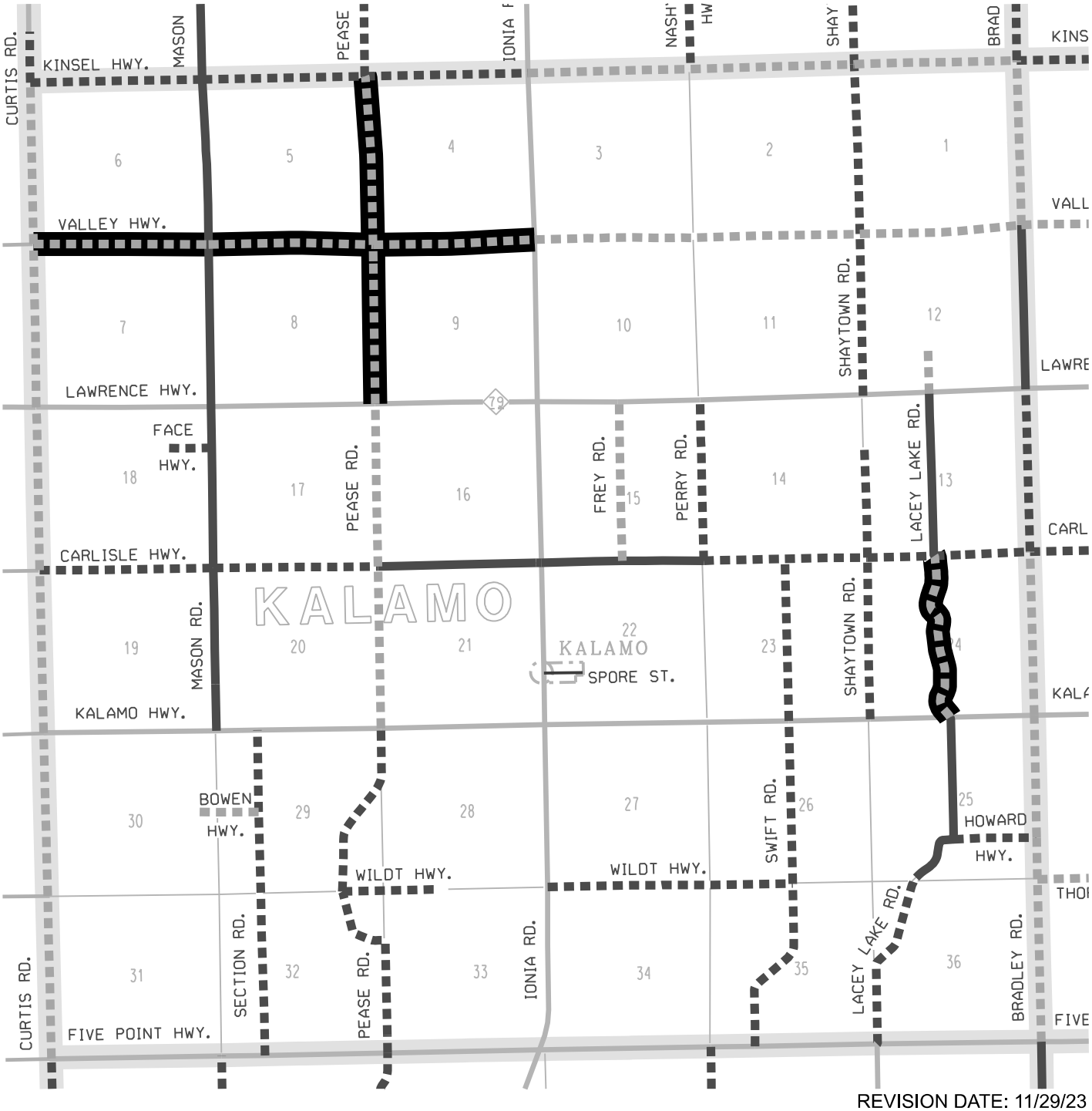
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GRAVEL ROADS COMPLETED
PAVED ROADS COMPLETED

## 2024 PROJECTS

PAVED ROADS
CENTER COLOR BY 2023 PAVEMENT RATINGS

GRAVEL ROADS

PRELIMINARY LIST SELECTION DATE: 11/28/2023
FINAL LIST APPROVAL DATE: 02/27/2024




REVISION DATE: 11/29/23

# 2024 MILLAGE PROGRAM
# ONEIDA TOWNSHIP

## 2023 PAVEMENT RATINGS

POOR CONDITION
- PASER 1
- PASER 2
- PASER 3
- PASER 4

FAIR CONDITION
- PASER 5
- PASER 6
- PASER 7

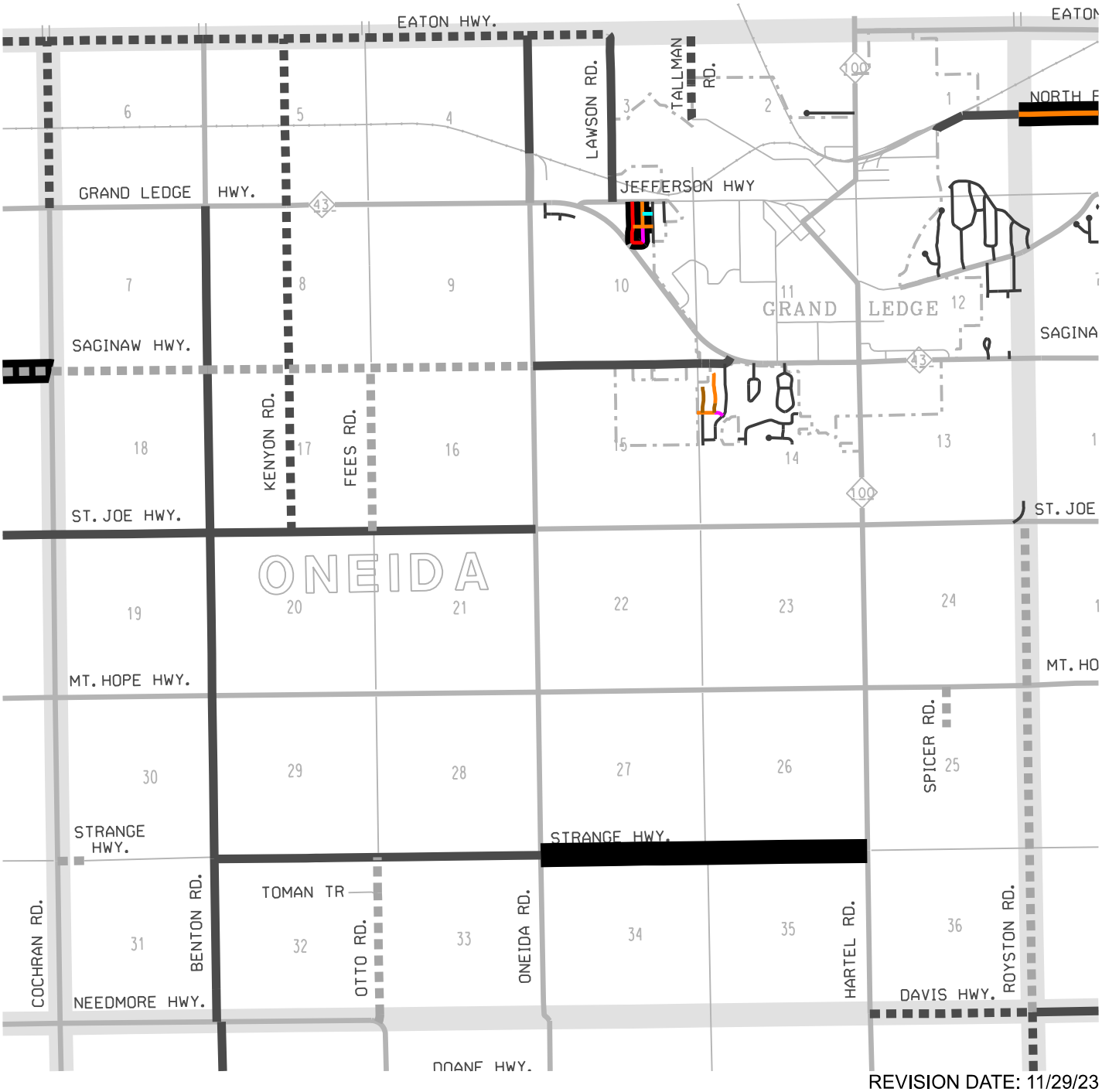
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GRAVEL ROADS COMPLETED
PAVED ROADS COMPLETED

## 2024 PROJECTS

PAVED ROADS
CENTER COLOR BY 2023 PAVEMENT RATINGS

GRAVEL ROADS

PRELIMINARY LIST SELECTION DATE: 11/28/2023
FINAL LIST APPROVAL DATE: 02/27/2024




REVISION DATE: 11/29/23

# 2024 MILLAGE PROGRAM
# ROXAND TOWNSHIP

## 2023 PAVEMENT RATINGS

POOR CONDITION
- PASER 1
- PASER 2
- PASER 3
- PASER 4

FAIR CONDITION
- PASER 5
- PASER 6
- PASER 7

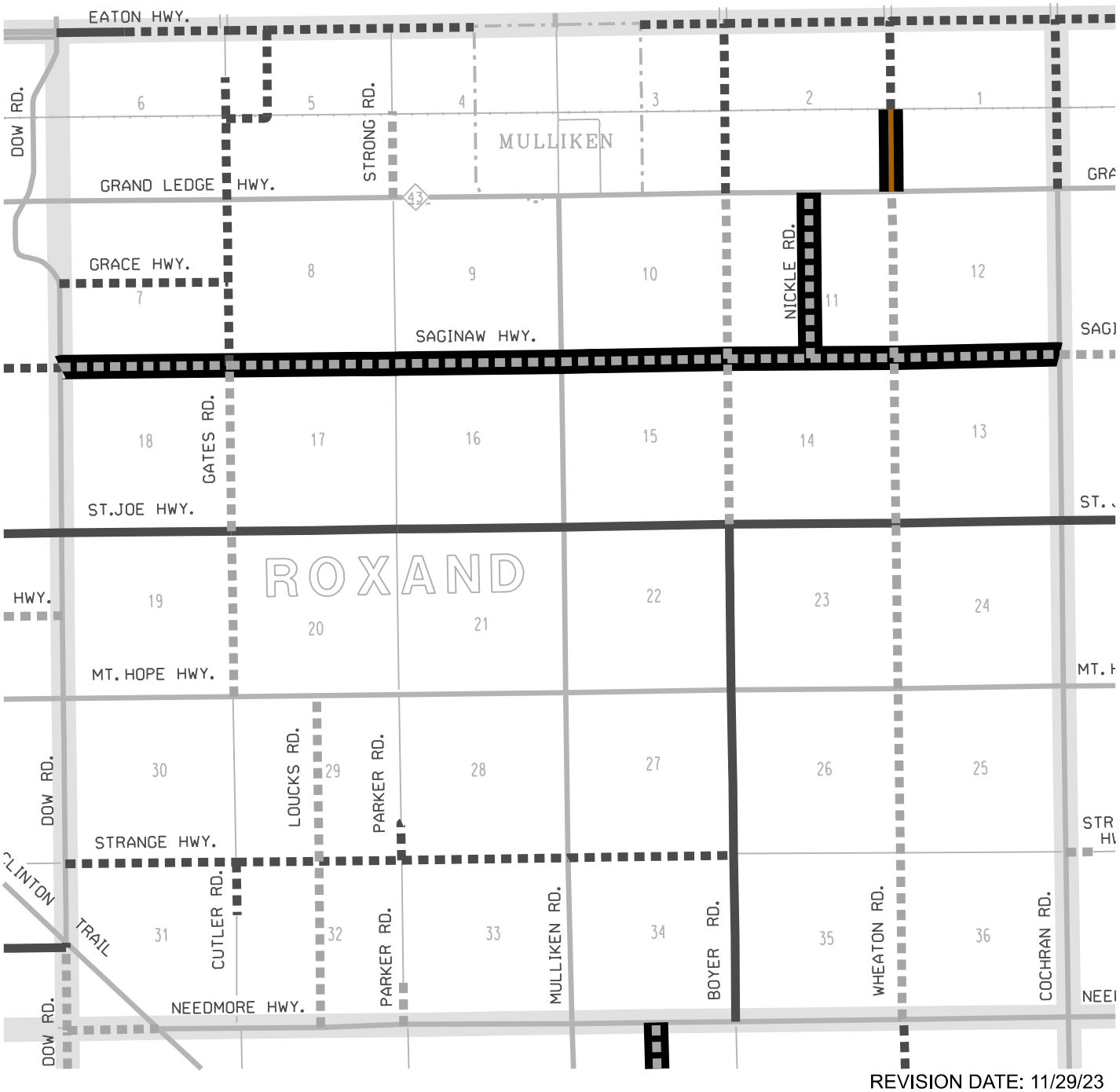
- GRAVEL ROADS TO BE COMPLETED
- GRAVEL ROADS COMPLETED
- PAVED ROADS COMPLETED

## 2024 PROJECTS

PAVED ROADS
CENTER COLOR BY 2023 PAVEMENT RATINGS

GRAVEL ROADS

PRELIMINARY LIST SELECTION DATE: 11/28/2023
FINAL LIST APPROVAL DATE: 02/27/2024




REVISION DATE: 11/29/23

# 2024 MILLAGE PROGRAM
# SUNFIELD TOWNSHIP

## 2023 PAVEMENT RATINGS

POOR CONDITION
- PASER 1
- PASER 2
- PASER 3
- PASER 4

FAIR CONDITION
- PASER 5
- PASER 6
- PASER 7

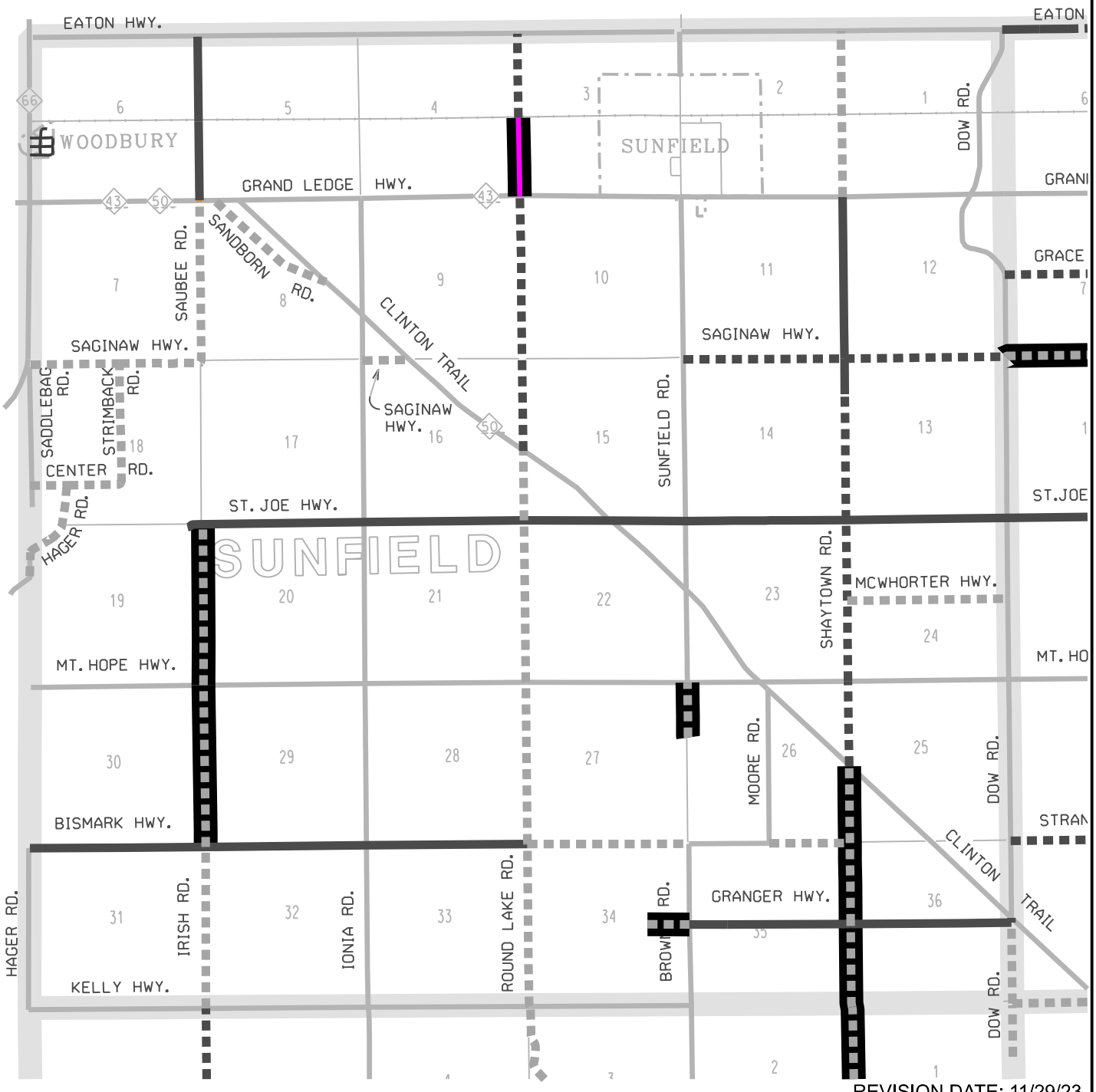
GRAVEL ROADS TO BE COMPLETED
GRAVEL ROADS COMPLETED
PAVED ROADS COMPLETED

## 2024 PROJECTS

PAVED ROADS
CENTER COLOR BY 2023 PAVEMENT RATINGS

GRAVEL ROADS

PRELIMINARY LIST SELECTION DATE: 11/28/2023
FINAL LIST APPROVAL DATE: 02/27/2024




REVISION DATE: 11/29/23

# 2024 MILLAGE PROGRAM
# VERMONTVILLE TOWNSHIP

## 2023 PAVEMENT RATINGS

POOR CONDITION
- PASER 1
- PASER 2
- PASER 3
- PASER 4

FAIR CONDITION
- PASER 5
- PASER 6
- PASER 7

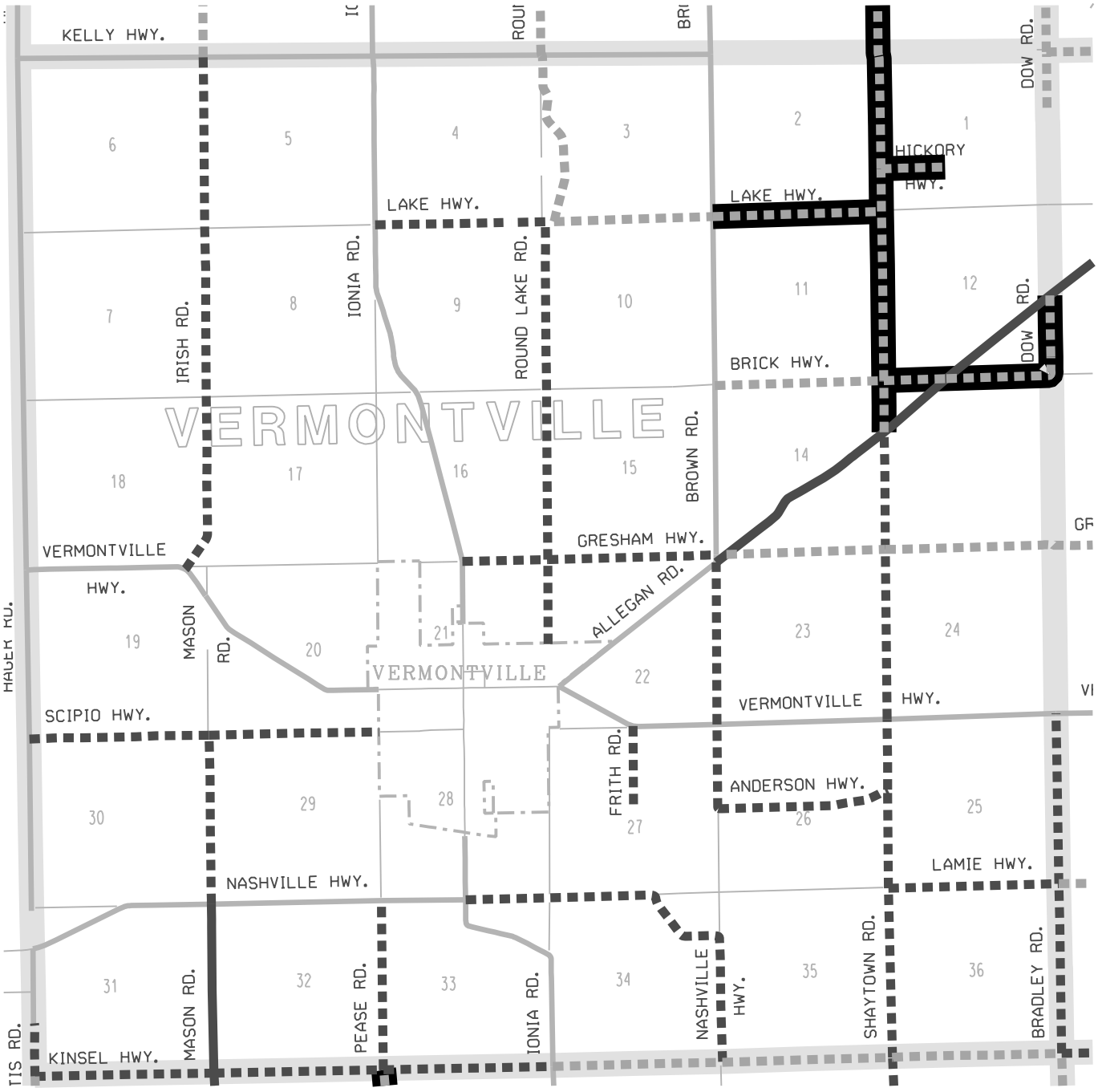
GRAVEL ROADS TO BE COMPLETED
GRAVEL ROADS COMPLETED
PAVED ROADS COMPLETED

## 2024 PROJECTS

PAVED ROADS
CENTER COLOR BY 2023 PAVEMENT RATINGS

GRAVEL ROADS

PRELIMINARY LIST SELECTION DATE: 11/28/2023
FINAL LIST APPROVAL DATE: 02/27/2024




REVISION DATE: 11/29/23

# 2024 MILLAGE PROGRAM
# WALTON TOWNSHIP

## 2023 PAVEMENT RATINGS

POOR CONDITION
- PASER 1
- PASER 2
- PASER 3
- PASER 4

FAIR CONDITION
- PASER 5
- PASER 6
- PASER 7

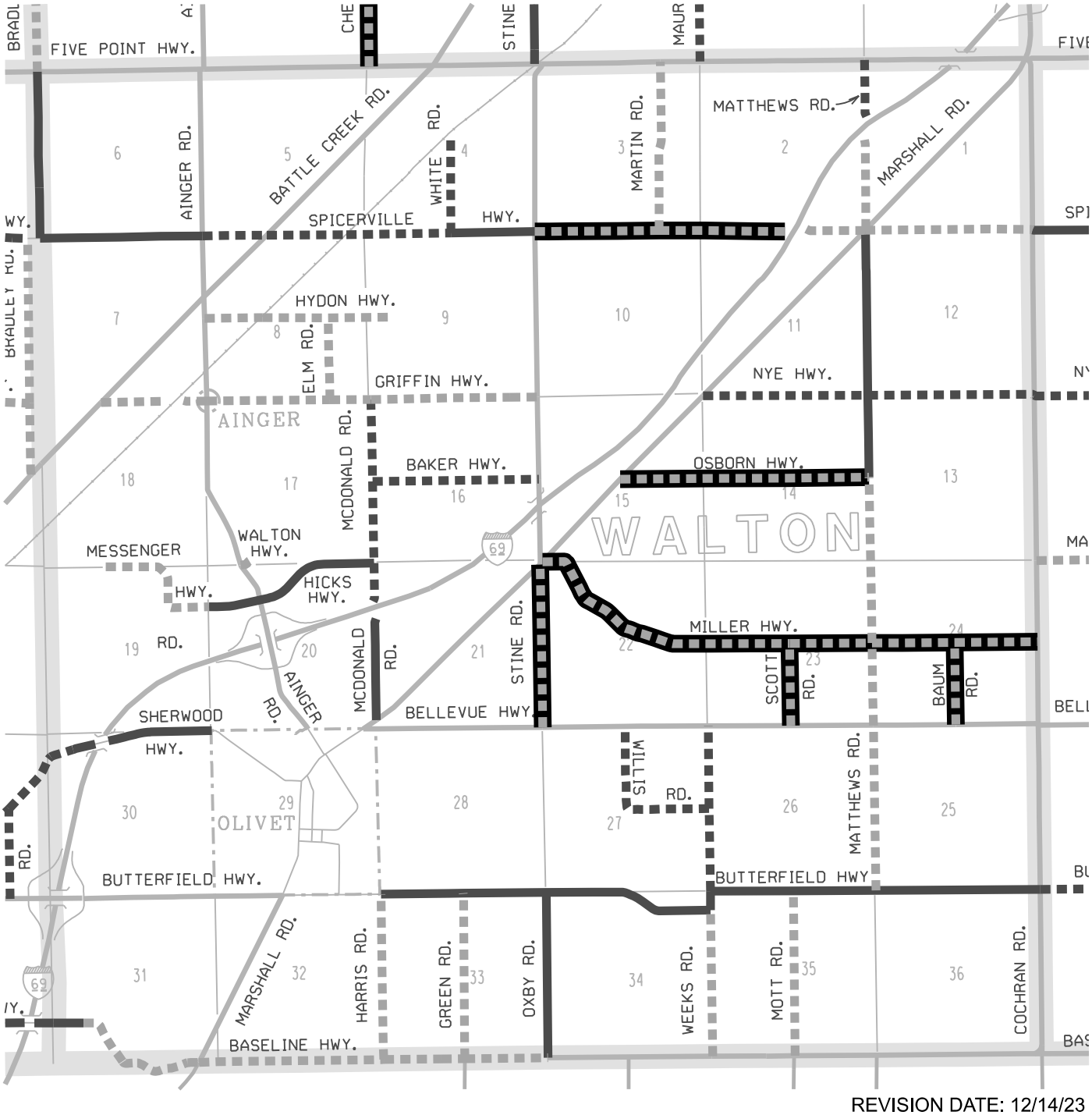
GRAVEL ROADS TO BE COMPLETED
GRAVEL ROADS COMPLETED
PAVED ROADS COMPLETED

## 2024 PROJECTS

PAVED ROADS
CENTER COLOR BY 2023 PAVEMENT RATINGS

GRAVEL ROADS

PRELIMINARY LIST SELECTION DATE: 11/28/2023
FINAL LIST APPROVAL DATE: 02/27/2024




REVISION DATE: 12/14/23

# 2024 MILLAGE PROGRAM
# WINDSOR TOWNSHIP

## 2023 PAVEMENT RATINGS

POOR CONDITION
- PASER 1
- PASER 2
- PASER 3
- PASER 4

FAIR CONDITION
- PASER 5
- PASER 6
- PASER 7

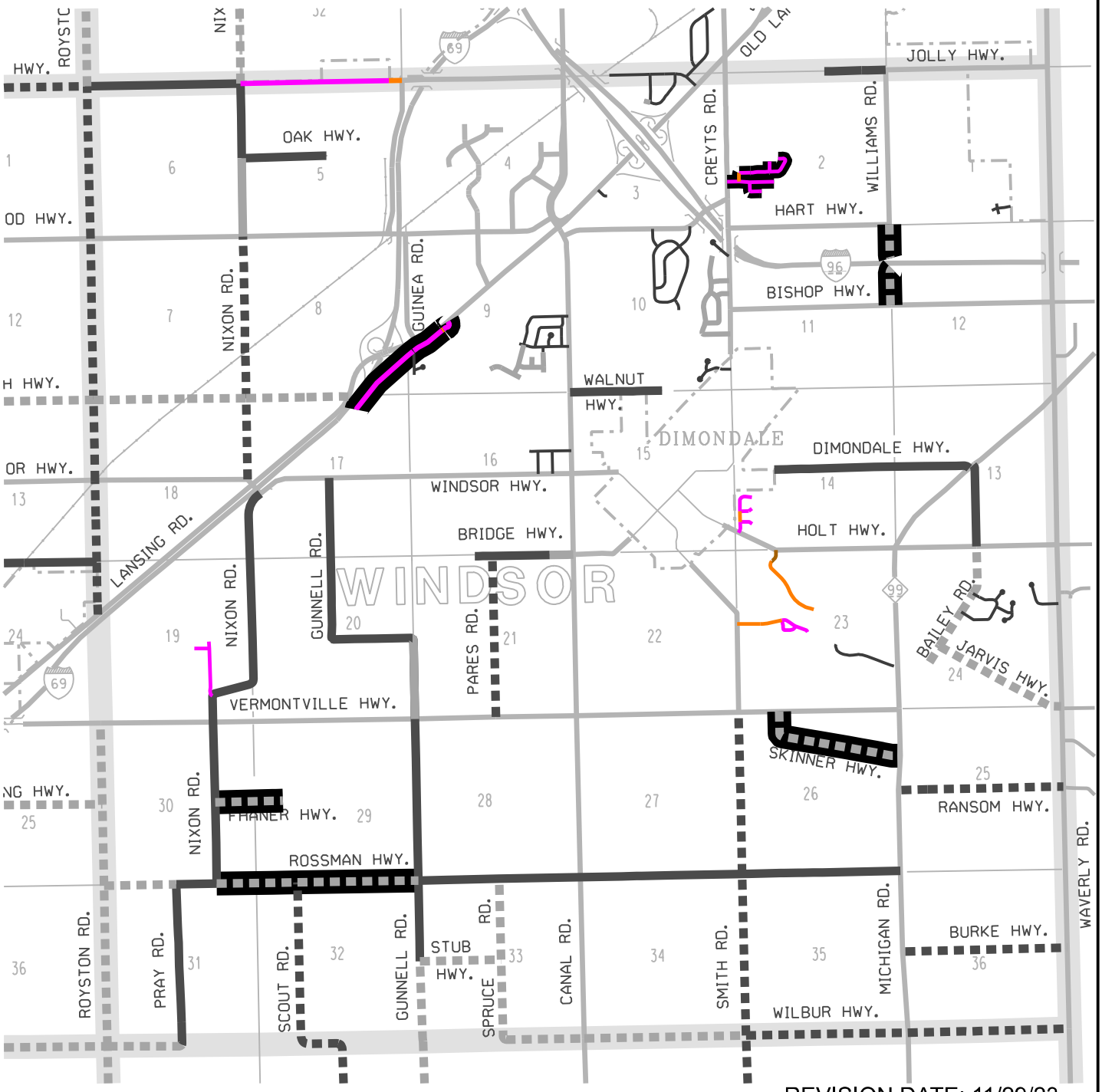
GRAVEL ROADS TO BE COMPLETED
GRAVEL ROADS COMPLETED
PAVED ROADS COMPLETED

## 2024 PROJECTS

PAVED ROADS
CENTER COLOR BY 2023 PAVEMENT RATINGS

GRAVEL ROADS

PRELIMINARY LIST SELECTION DATE: 11/28/2023
FINAL LIST APPROVAL DATE: 02/27/2024




REVISION DATE: 11/29/23

# EATON COUNTY ROAD COMMISSION

## FISCAL 2023-2024
## LOCAL ROAD HEAVY MAINTENANCE PROGRAM

**PAVED LOCAL ROAD RESURFACING**

During Fiscal 2023-2024, the Eaton County Road Commission will match Township Funds on a 50-50 basis on any project to resurface, restore, or preserve existing paved Local Roads up to the dollar limit shown below.

Participation requirements for this program include:

- Limited to resurfacing of existing paved Local Roads.
- Participation in this program by a Township requires participation by that Township in a 50-50 cost share agreement on critical bridge replacement projects on Local Roads in that Township.
- The resurfacing method used on each project must be the least expensive method, which can reasonably be expected to last 5 years without patching.
- The 50-50 match ratio will apply to all actual costs to the Road Commission to complete a project, including engineering, testing, inspection and overhead.

**GRAVEL OR UNIMPROVED LOCAL ROAD REGRAVELING**

During Fiscal 2023-2024, the Eaton County Road Commission will match Township funds on a 50-50 basis on any project to regravel Local Roads up to the Allocated Amount shown in the table below.

Projects to be included in the regraveling program are subject to the following requirements:

- A project must be a logical segment, continuous from intersection to intersection, and not spot locations.
- Projects will be limited to placing gravel at the rate of 1200 CYD loose measure per mile, which will provide a travel width of 20' and an average gravel depth of 3", and placing or replacing cross road culverts 48" diameter and smaller.
- The 50-50 match ratio on graveling will apply to all actual costs to the Road Commission for this work, including any engineering, testing, inspection, and overhead, except for the following to be performed as part of the Road Commission routine maintenance budget at no cost to the Township:
    - the light grading and light deberming necessary to prepare the road for gravel application
    - repairing, extending, or installing cross road culverts 48" diameter and smaller as needed
- Each regraveling project will include 1 application of mineral well brine to help stabilize the new gravel surface as part of the 50-50 cost share.
- Major clearing and grubbing, extensive tree removal or brush cutting, sand fill or subbase, replacing or installing driveway culverts or cross road culverts over 48" diameter, installing or replacing guardrail, and ditching or deberming where the soil must be hauled away are not included in the cost share program. When this work is required in order to place the minimum 20' width of gravel on a road chosen by the Township, the costs will be 100% Township.
- Participation in this program by a Township requires participation by that Township in a 50-50 cost share agreement on critical bridge replacement projects on Local Roads in that Township.
- While it is anticipated that most, if not all of the road regraveling work will be performed by a private contractor selected by competitive bidding, the Road Commission reserves the right to perform this work with its own forces in the case where it can be demonstrated that this would cost less than the contractor's bid price.

## LOCAL ROAD SMALL BRIDGE AND CULVERT PROGRAM

During 2023-2024, the Road Commission will provide 50% of the funds necessary to repair or replace any structurally deficient bridge or large culvert selected by a Township up to the dollar limit shown below. Bridge or culvert replacements must be by the least costly structure that will meet EGLE and/or Drain Commissioner drainage capacity requirements, be wide enough to carry 2 lanes of traffic with shoulders, and carry legal loads without restriction. The 50% cost share with a Township will apply to all actual costs to the Road Commission to complete the repair or replacement, including any necessary approach road work, and the cost of all engineering, plans, permits, testing, inspection and overhead. Participation in this program by a Township requires participation by that Township in a 50-50 cost share agreement on critical bridge replacement projects on local roads in that Township.

## LOCAL ROAD HEAVY MAINTENANCE ALLOCATIONS

During Fiscal 2023-2024, the Eaton County Road Commission will make available a total of $720,000 County wide for the Local Road Resurfacing and Regraveling Program. The $720,000 for this program will be allocated to each Township using the same statutory formula the State uses to distribute funds for Local Roads to the Eaton County Road Commission. Allocations for Townships which have not committed to specific projects by May 30, 2024 will be withdrawn and the remaining funds returned to the general road budget, and/or reallocated to participating Townships. Following is a tabulation by Township of the formula used, and the amount allocated to each Township:

| TOWNSHIP | POPULATION IN TOWNSHIP | 35% POPULATION FACTOR | LOCAL MILES IN TWP | 65% LOCAL FACTOR | COMBINED FACTOR | ALLOCATED AMOUNT |
|---|---|---|---|---|---|---|
| BELLEVUE | 1,892 | 2.59% | 48.67 | 6.22% | 4.95% | $ 35,640.00 |
| BENTON | 2,788 | 3.81% | 33.62 | 4.29% | 4.12% | $ 29,664.00 |
| BROOKFIELD | 1,467 | 2.01% | 53.97 | 6.89% | 5.18% | $ 37,296.00 |
| CARMEL | 2,839 | 3.88% | 42.25 | 5.40% | 4.87% | $ 35,064.00 |
| CHESTER | 1,769 | 2.42% | 48.62 | 6.21% | 4.88% | $ 35,136.00 |
| DELTA | 33,140 | 45.34% | 113.09 | 14.45% | 25.26% | $ 181,872.00 |
| EATON | 3,998 | 5.47% | 41.98 | 5.36% | 5.40% | $ 38,880.00 |
| EATON RAPIDS | 3,986 | 5.45% | 43.29 | 5.53% | 5.50% | $ 39,600.00 |
| HAMLIN | 3,204 | 4.38% | 44.82 | 5.72% | 5.25% | $ 37,800.00 |
| KALAMO | 1,765 | 2.41% | 47.62 | 6.08% | 4.80% | $ 34,560.00 |
| ONEIDA | 3,979 | 5.44% | 40.35 | 5.15% | 5.25% | $ 37,800.00 |
| ROXAND | 1,223 | 1.67% | 44.59 | 5.70% | 4.29% | $ 30,888.00 |
| SUNFIELD | 1,532 | 2.10% | 37.41 | 4.78% | 3.84% | $ 27,648.00 |
| VERMONTVILLE | 1,231 | 1.68% | 42.13 | 5.38% | 4.09% | $ 29,448.00 |
| WALTON | 2,293 | 3.14% | 47.43 | 6.06% | 5.04% | $ 36,288.00 |
| WINDSOR | 6,006 | 8.21% | 53.1 | 6.78% | 7.28% | $ 52,416.00 |
| COUNTY WIDE | 72,280 | 100.0% | 782.94 | 100.0% | 100.0% | $ 720,000.00 |

## LOCAL ROAD RECONSTRUCTION AND PAVING PROGRAM

During 2023-2024, the Road Commission may provide cost sharing funds to Townships for Local Road reconstruction and paving, in an amount equal to **10 years of MTF Revenue** to the Road Commission for each mile of road reconstructed and paved by a Township. During 2023-2024, cost sharing on reconstruction will be limited to 3 miles total across the county, and not more than 1 mile in any Township. Ten years of revenue for one mile of Local Road in Eaton County is currently $58,800.

## PRELIMINARY AND DESIGN ENGINEERING

The Eaton County Road Commission does not have sufficient funds or staff to provide preliminary surveying, design engineering, plans, permits, and bid documents on all the Local Road construction projects that may be requested by Townships. Therefore all preliminary and design engineering, surveys, etc. will be at 100% Township cost up to the time construction begins. On those Local Road construction projects that actually go to construction and are completed, the Road Commission may share at 50% with the Township the actual design engineering cost, and reimburse the Township for 50% of the cost of surveys and design engineering that the Township has paid in preparing the project for construction. This cost share is in addition to the cost share funds provided above and subject to available funds.

## CONSTRUCTION ENGINEERING

While the Road Commission does not have adequate staff to perform all construction engineering, administration, inspection, and testing required on road and bridge construction projects, and continues to use consultants to perform much of this work, the Road Commission may share at 50% with a Township all actual costs of construction engineering, testing, and inspection on Local Road construction projects. This cost share is in addition to the cost share funds provided above and subject to available funds.

## SPECIAL ASSESSMENT DISTRICT PROGRAM

During fiscal 2023-2024 the Road Commission may provide cost sharing funds to any special assessment district established by petition of the residents to pave a subdivision street or residential road. The Road Commission will match dollar for dollar all Township at large contributions to the assessment district up to a maximum of 25% of the total project cost if funds are available. Townships may pay their at large contribution at the time of construction, or may spread payments over the term of the assessment district.

## CRITICAL BRIDGE PROJECTS

The Road Commission will provide 50% of the local costs necessary to perform preventative maintenance, rehabilitate, or replace any Local Road bridge that is selected for State and Federal funding through the MDOT Local Bridge Program. State and Federal funds typically pay 95% of the construction costs on those bridges selected for funding, with the remaining 5% and all engineering and administration considered local costs. Funding applications for work on those bridges will not be submitted to MDOT without a prior agreement with the Township to share 50% of the local costs.

REV 01.09.2024

# Eaton County Road Commission

# 2023 Transportation Asset Management Plan

A plan describing the Eaton County Road Commission's transportation assets and condition

*Prepared by:*
Mathew Hannahs, P.E.
Engineer-Manager
(517) 543-1630

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# EXECUTIVE SUMMARY

As conduits for commerce and connections to vital services, roads and bridges are some of the most important assets in any community, and other assets like culverts, traffic signs, traffic signals, and utilities support and affect roads and bridges. The Eaton County Road Commission's (ECRC) roads, bridges, and support systems are also some of the most valuable and extensive public assets, all of which are paid for with taxes collected from ordinary citizens and businesses. The cost of building and maintaining these assets, their importance to society, and the investment made by taxpayers all place a high level of responsibility on local agencies to plan, build, and maintain roads, bridges, and support assets in an efficient and effective manner. This asset management plan is intended to report on how ECRC is meeting its obligations to maintain the public assets for which it is responsible.

This plan identifies ECRC's assets and condition and how ECRC maintains and plans to improve the overall condition of those assets. An asset management plan is required by Michigan Public Act 325 of 2018, and this document represents fulfillment of some of ECRC's obligations towards meeting these requirements. However, this plan and its supporting documents are intended to be much more than a fulfillment of required reporting. This asset management plan helps to demonstrate ECRC's responsible use of public funds by providing elected and appointed officials as well as the general public with the inventory and condition information of ECRC's assets, and it gives taxpayers the information they need to make informed decisions about investing in ECRC's essential transportation infrastructure.

# INTRODUCTION

Asset management is defined by Public Act 325 of 2018 as “an ongoing process of maintaining, preserving, upgrading, and operating physical assets cost effectively, based on a continuous physical inventory and condition assessment and investment to achieve established performance goals”. In other words, asset management is a process that uses data to manage and track assets, like roads and bridges, in a cost-effective manner using a combination of engineering and business principles. This process is endorsed by leaders in municipal planning and transportation infrastructure, including the Michigan Municipal League, County Road Association of Michigan, the Michigan Department of Transportation (MDOT), and the Federal Highway Administration (FHWA). The Eaton County Road Commission is supported in its use of asset management principles and processes by the Michigan Transportation Asset Management Council (TAMC), formed by the State of Michigan.

Asset management, in the context of this plan, ensures that public funds are spent as effectively as possible to maximize the condition of the road and bridge network. Asset management also provides a transparent decision-making process that allows the public to understand the technical and financial challenges of managing transportation infrastructure with a limited budget.

The Eaton County Road Commission (ECRC) has adopted an “asset management” business process to overcome the challenges presented by having limited financial, staffing, and other resources while needing to meet road users’ expectations. ECRC is responsible for maintaining and operating over about 1,175 miles miles of roads and 95 bridge structures. It is also responsible for many culverts and 24 signals.

This 2023 plan identifies ECRC’s transportation assets and their condition as well as the strategy that ECRC uses to maintain and upgrade particular assets given ECRC’s condition goals, priorities of network’s road users, and resources. An updated plan is to be released approximately every «cpfreq» years both to comply with Public Act 325 and to reflect changes in road conditions, finances, and priorities.

Questions regarding the use or content of this plan should be directed to Mathew Hannahs, P.E. at 1112 Reynolds Road, Charlotte, MI  48813or at (517) 543-1630 and/or Mhannahs@EatonCountyRoad.com.

# 1. PAVEMENT ASSETS



ECRC is responsible for about 1,175 miles of public county roads. This county road network is divided into two classes as recognized by the State of Michigan. Those classes are the Primary Road network, which is prioritized for state-level funding, and Local Road network.

Of ECRC's about 1,175 miles of road, about 392 miles are classified as primary and about 783 miles are classified as local (Figure 1 identifies these roads: Primary roads are shown as green, yellow, and red with the colors being determined based on the road segment's condition). ECRC has no miles that are part of the National Highway System (NHS); the NHS is subject to special rules and regulations and has its own performance metrics dictated by the FHWA. The ECRC maintains about 500 miles of unpaved roads, with all of those being classified as Local Roads. All Primary Roads maintained by the ECRC are hard surfaced roads.

More detail about these road assets can be found in ECRC's Roadsoft database or by contacting ECRC.

# Inventory of Assets

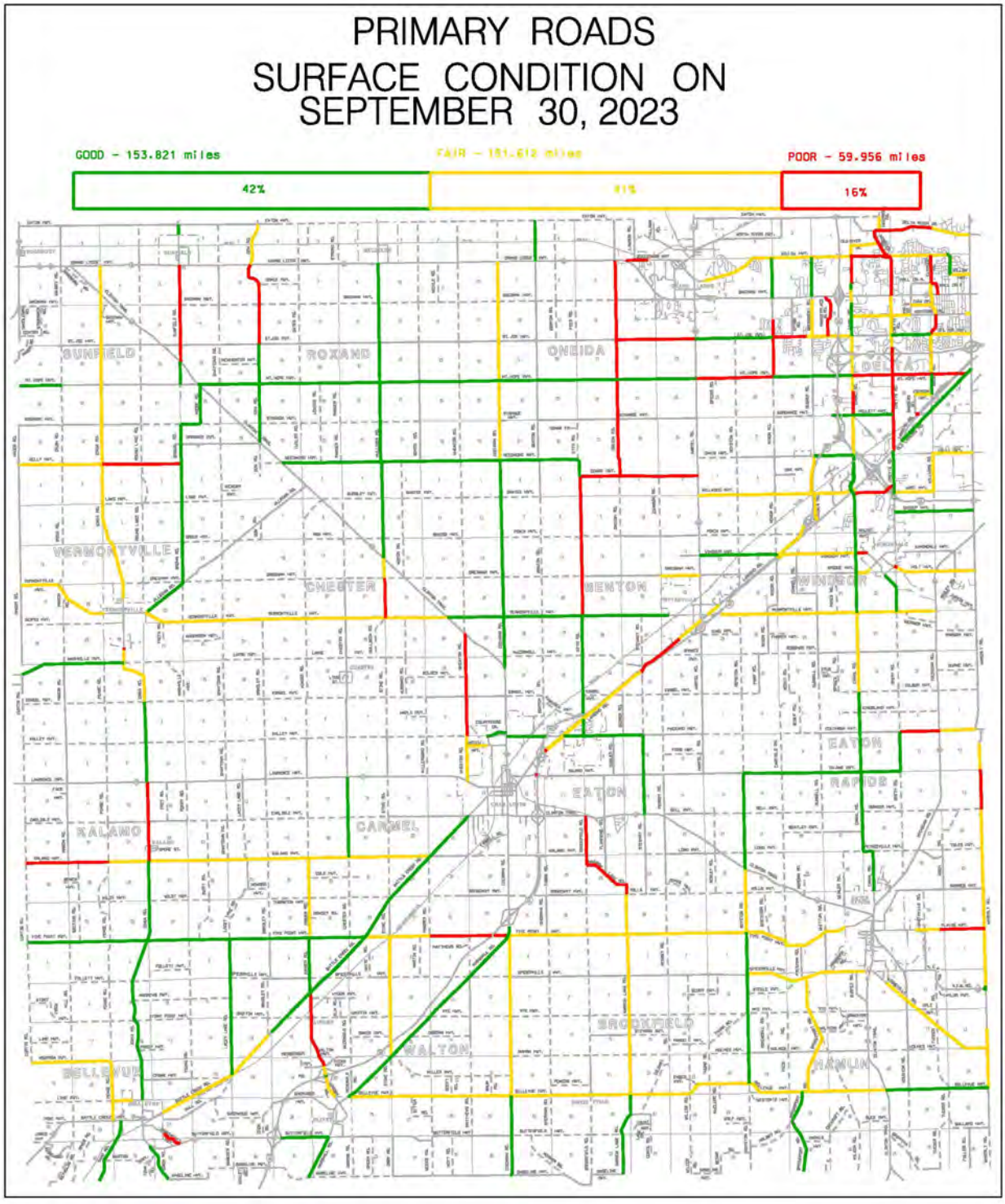



Figure 1: Current ECRC Primary paved road condition in good (PASER 10, 9, 8) shown in green, fair (PASER 7, 6, 5) shown in yellow, and poor (PASER 4, 3, 2, 1) shown in red.

### *Types*

ECRC has mostly two types of pavements in its jurisdiction: asphalt and gravel. Composite pavements, which are asphalt over concrete pavements, are shown under asphalt. Figure 2 shows a breakdown of these pavement types for ECRC's road assets.

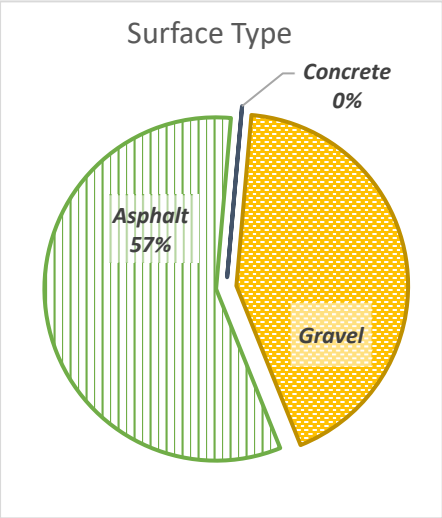



Figure 2: Pavement type by percentage maintained by ECRC.

## Condition, Goals, and Trend

### *Paved Roads*

Paved roads in Michigan are rated using the Pavement Surface Evaluation and Rating (PASER) system, which is a 1 to 10 scale with 10 being a newly constructed surface and 1 being a completely failed surface. PASER scores are grouped into TAMC definition categories of good (8-10), fair (5-7), and poor (1-4) categories. ECRC collects PASER data every two years on 100 percent of those portions of its roads that are eligible for federal funding.

On September 30, 2023, the primary network had 42% of its roads in good condition, 42% in fair condition, and 16% in poor condition (Fig. 3). ECRC's long-range goal for the primary network is to maintain or improve road conditions network-wide at 2022 levels. Figure 3 illustrates the historical and current condition (solid bars) of ECRC's primary and local networks, respectively; they also illustrate the projected trend (shaded bars), the overall trend in condition (trendlines), and ECRC's goal (final solid bar).

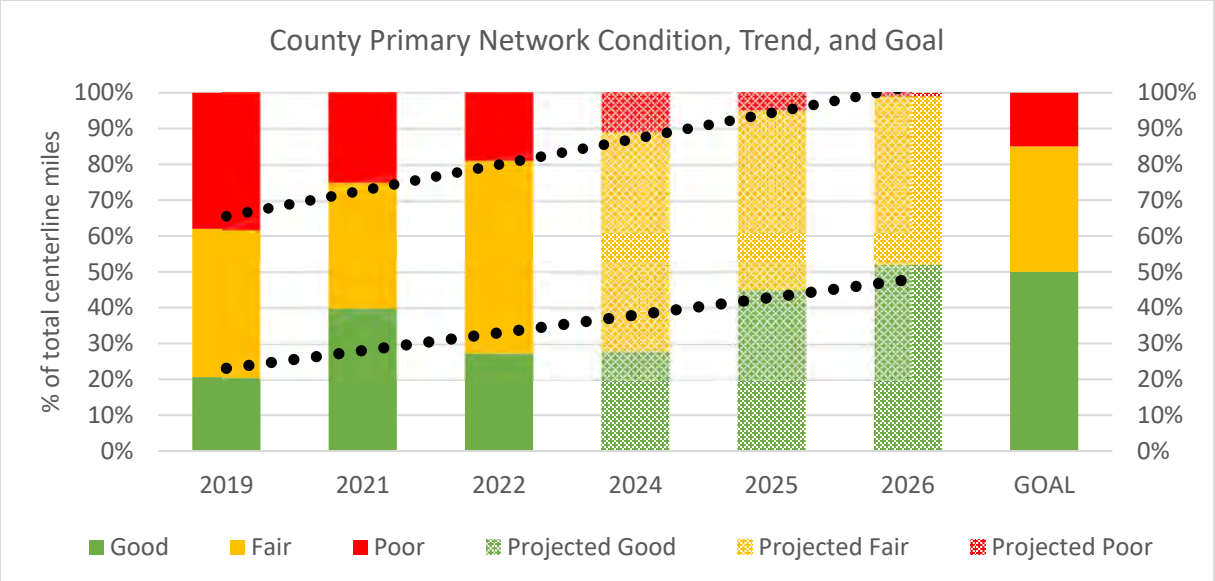



Figure 3: primary network condition, goals, and trend

### *Modelled Trends & Gap Analysis*

The Roadsoft network analysis of ECRC's planned projects for the primary and local networks from ECRC's currently-available budget of $5,000,000 does not allow ECRC to reach its pavement condition goals given the projects planned for the next three years.

Results from Roadsoft for the primary network condition models indicate that the necessary additional work needed to meet the agency condition goal would cost an additional $500,000 per year.

**Table 1: Roadsoft Modelled Trends, Planned Projects, and Gap Analysis for ECRC's Primary Road Assets**

**Network 1 (390 miles)**

| Treatment | Annual Miles of Treatment | Years of Life | Trigger-Reset | Pavement Condition Forecast | | Additional Work Necessary to Overcome Deficit | |
|---|---|---|---|---|---|---|---|
| | | | | Annual Miles of Treatment | Trigger-Reset | Annual Miles of Treatment | Trigger-Reset |
| Crush, Shape, Overlay - 4" | 2 | 17 | 1-4, 10 | 2 | 1-4, 10 | 0 | 7–7 |
| Overlay 2" | 5 | 12 | 2-5, 9 | 9 | 3-4, 9 | 4 | 5, 6-8 |
| Crack Seal | 20 | 1 | 6-8, 6-8 | 20 | 6-8, 6-8 | 0 | 3, 4-9 |
| Sealcoat + Fog | 58 | 4 | 5-8, 8 | 58 | 5-7, 8 | 0 | 1, 2, 3-10 |
| Skin Patch & Seal | 4 | 8 | 4-5, 8 | 4 | 4-5, 8 | 0 | |
| Slurry Seal | 5 | 4 | 4-7, 8 | 5 | 4-7, 8 | 0 | |

### *Planned Projects*

ECRC has projects planned for the next three years. These projects are identified in Figure 4.

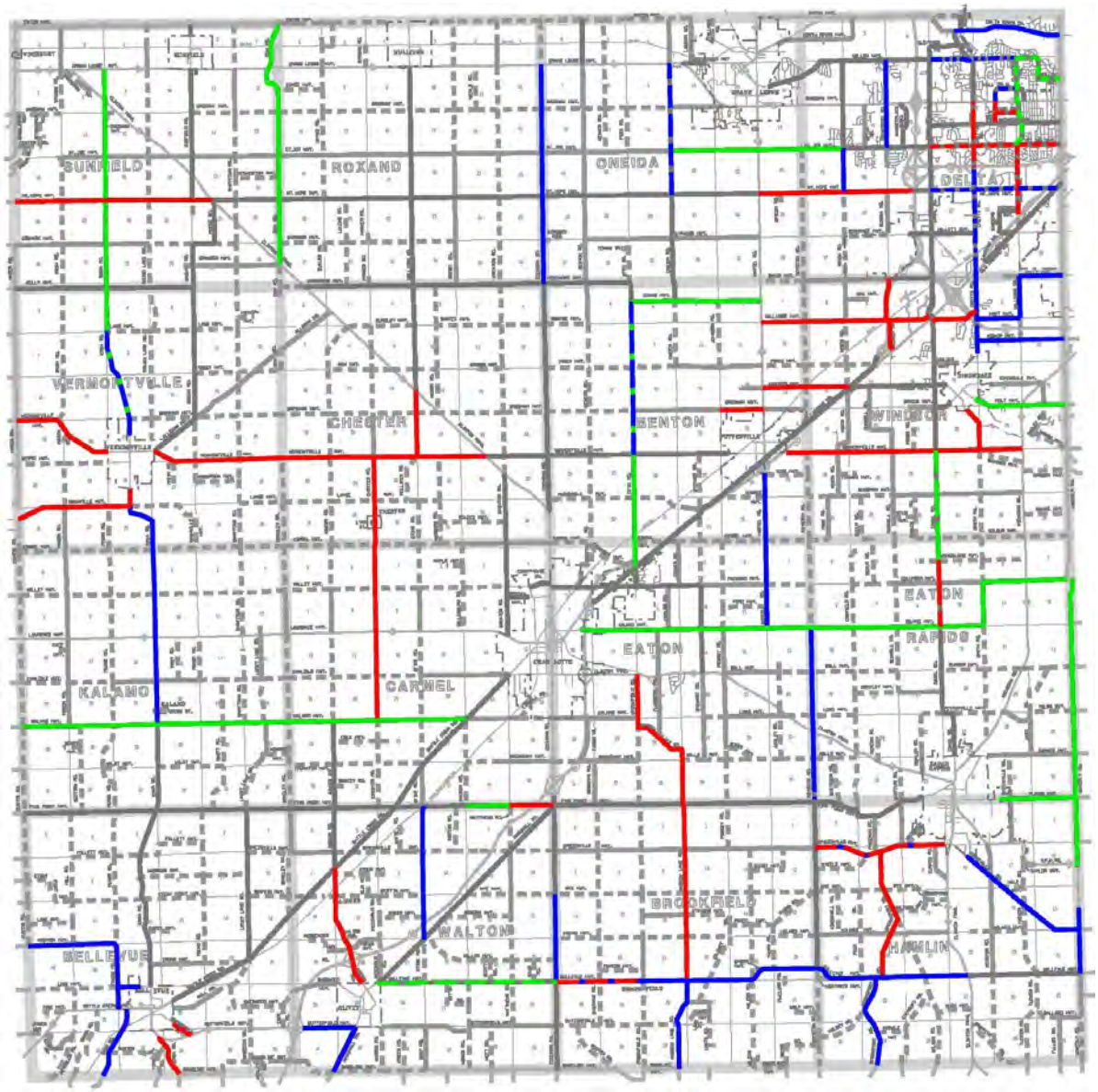



Figure 4 : Map illustrating planned projects for pavement assets

The total cost of the projects illustrated in Figure 4 is approximately $21,000,000.

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# 2. BRIDGE ASSETS



ECRC is responsible for 95 bridges that provide safe service to road users across the agency network. ECRC seeks to implement a cost-effective program of preventive maintenance to maximize the useful service life and safety of the local bridges under its jurisdiction.

These bridges connect various points of the road network as illustrated in Figure 5. These bridge structures are summarized by type, size, and condition as Table 2. More information about each of these structures can be found in ECRC's MiBRIDGE database or by contacting ECRC.

# Inventory of Assets

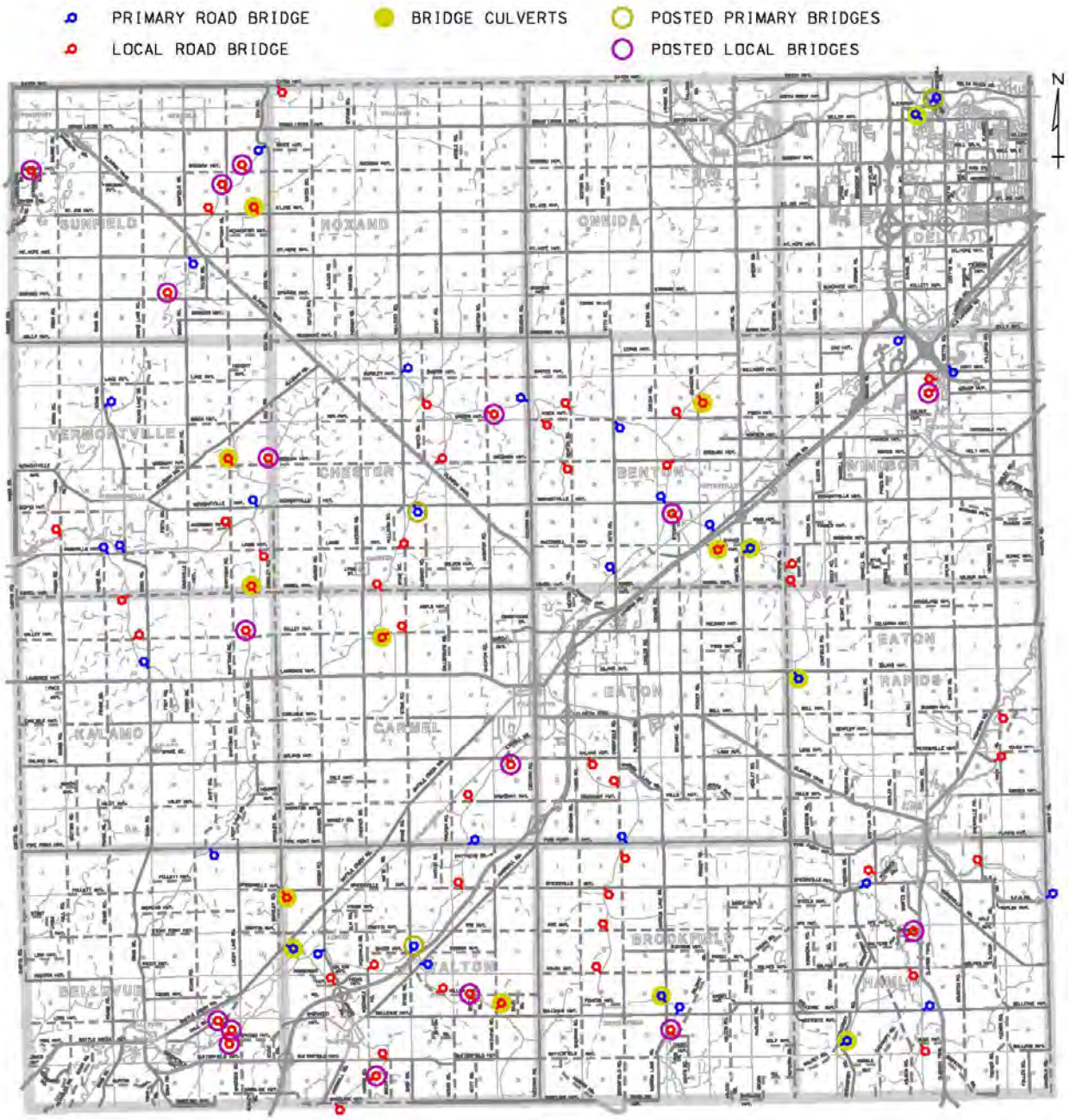



Figure 5: Map illustrating locations of ECRC's bridge assets

| Table 2: Bridge Assets by Type: Inventory, Size, and Condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Total Number of Bridges | Total Deck Area (sq ft) | Condition: Structurally Deficient, Posted, Closed | | | 2022 Condition | | |
| Bridge Type | | | Struct. Defic | Posted | Closed | Poor | Fair | Good |
| Aluminum – Culvert | 1 | 1,450 | 0 | 0 | 0 | 0 | 0 | 1 |
| Concrete – Box beam/girders - multiple | 1 | 2,451 | 0 | 0 | 0 | 0 | 1 | 0 |
| Concrete – Culvert | 5 | 9,048 | 0 | 0 | 0 | 0 | 0 | 5 |
| Concrete – Slab | 1 | 672 | 0 | 0 | 0 | 0 | 0 | 1 |
| Concrete – Tee beam | 1 | 807 | 0 | 0 | 0 | 0 | 1 | 0 |
| Prestressed concrete – Box beam/girders - multiple | 40 | 107,002 | 2 | 2 | 0 | 2 | 11 | 27 |
| Prestressed concrete – Box beam/girders - single/spread | 2 | 3,922 | 0 | 0 | 0 | 0 | 0 | 2 |
| Prestressed concrete – Multistringer | 1 | 4,088 | 0 | 0 | 0 | 0 | 0 | 1 |
| Prestressed concrete continuous – Box beam/girders – multiple | 1 | 3,487 | 0 | 0 | 0 | 0 | 0 | 1 |
| Steel – Box beam/girders - single/spread | 2 | 3,547 | 0 | 0 | 0 | 0 | 0 | 2 |
| Steel – Culvert | 8 | 5,924 | 0 | 0 | 0 | 0 | 4 | 4 |
| Steel – Multistringer | 10 | 15,860 | 5 | 6 | 0 | 5 | 4 | 1 |
| Steel continuous – Multistringer | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Timber – Multistringer | 1 | 1,199 | 1 | 0 | 1 | 1 | 0 | 0 |
| Timber – Other | 2 | 1,949 | 1 | 2 | 0 | 1 | 1 | 0 |
| Timber – Slab | 18 | 19,885 | 0 | 9 | 0 | 0 | 13 | 5 |
| **Total SD/Posted/Closed** | | | **9** | **19** | **1** | | | |
| **Total** | **95** | **181,291** | | | | **9** | **35** | **51** |
| **Percentage (%)** | | | **9%** | **20%** | **1%** | **9%** | **37%** | **54%** |

# Condition, Goals, and Trend

Bridges in Michigan are given a good, fair, or poor rating based on the National Bridge Inspection Standards (NBIS) rating scale, which was created by the Federal Highway Administration to evaluate a bridge's deficiencies and to ensure the safety of road users. The current condition of ECRC's bridge network based on the NBIS is 51 structures rated good, 35 structures rated fair, and 9 structures rated poor (Table 2).

Bridges are designed to carry legal loads in terms of vehicles and traffic. Due to a decline in condition, a bridge may be "posted" with a restriction for what would be considered safe loads passing over the bridge. On occasion, posting a bridge may also restrict other load-capacity-related elements like speed and number of vehicles on the bridge, but this type of posting

designates the bridge differently. ECRC has 19 structures that are posted for load restriction (Table 2). Designating a bridge as “posted” has no influence on its condition rating. A “closed” bridge is one that is closed to all traffic. Closing a bridge is contingent upon its ability to carry a set minimum live load. On September 30, 2023, ECRC had one structure that was closed.

The goal of the program is the preservation and safety of ECRC’s bridge network.

Figure 6 illustrates the baseline condition, projected trend, and goal that ECRC has for its good/fair and its structurally deficient bridges.

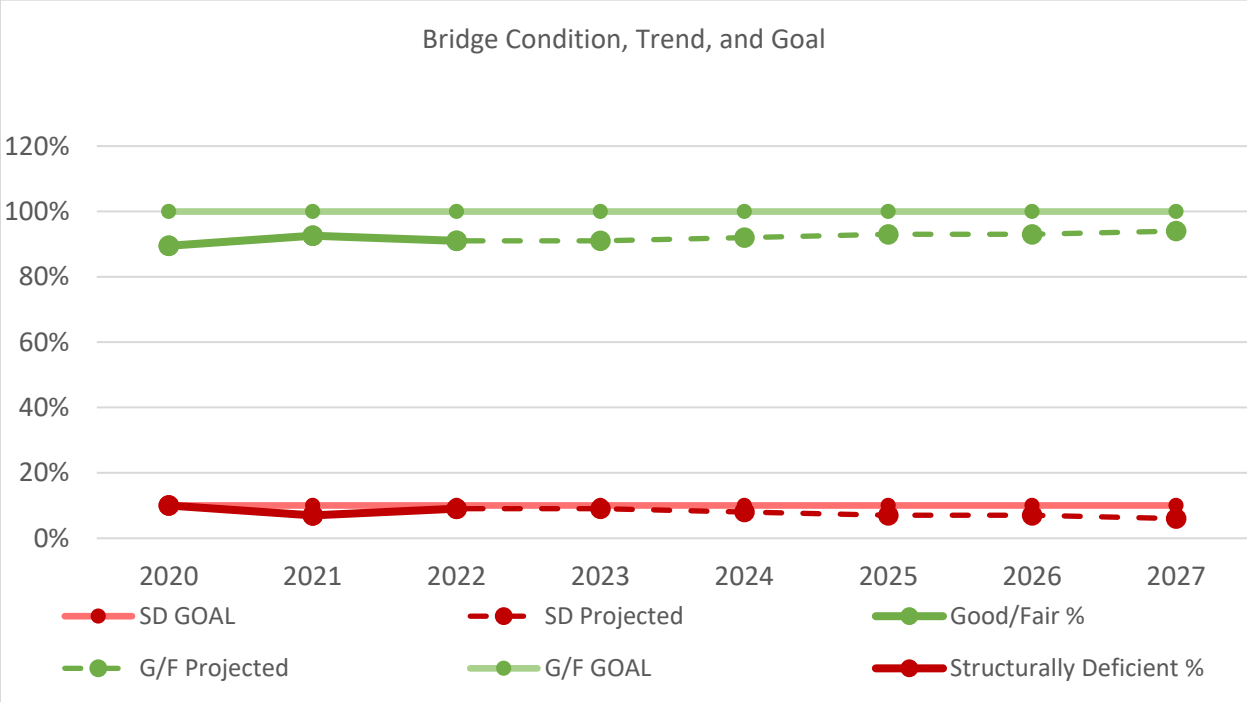



Figure 6: Condition, projected trend, and goal for ECRC’s good/fair and structurally deficient bridges

## Programmed/Funded Projects, Gap Analysis, and Planned Projects

ECRC will receive about $5,810,000 of MDOT Local Bridge funding between the years 202-2026. Of that funding, the ECRC plans to spend about $1,230,000 for preventive maintenance of bridges and about $4,580,000 to rehabilitate the Webster Road bridge. No full replacements are scheduled during this time. After performing the aforementioned preventive maintenance and rehabilitation of bridge structures, ECRC will not have met its overall bridge network condition goals.

By performing preventive maintenance and replacement of bridge structures, ECRC will achieve its goal of keeping its overall bridge network at the same condition.

Table 3 illustrates the programmed/funded projects that will be undertaken to achieve ECRC's goal. These programmed/funded projects are juxtaposed with priority projects that remain unfunded.

**Table 3: Planned Projects and Gap Analysis**

| Strategy | 2024 | 2025 | 2026 |
|---|---|---|---|
| **Replacement** | | | |
| 2432 | | | $2,227,000 |
| 2345 | | | $1,712,000 |
| **Subtotal** | **$0** | **$0** | **$3,939,000** |
| **Rehabilitation** | | | |
| 2362 | $4,828,000 | | |
| **Subtotal** | **$4,828,000** | **$0** | **$0** |
| **Preventive Maintenance** | | | |
| 2403 | $347,000 | | |
| 2352 | | $235,000 | |
| 2353 | | $211,000 | |
| 2361 | | $216,000 | |
| 2397 | | $281,000 | |
| 2364 | | | $623,000 |
| **Subtotal** | **$347,000** | **$943,000** | **$623,000** |

# 3. CULVERT ASSETS



ECRC exercises awareness of its culvert assets and makes repairs as necessary.

## Inventory of Assets

At present, ECRC is gathering inventory data of its culvert assets only. ECRC has inventoried about 1,000 culverts, which is estimated to be about half of the culverts under Eaton County roads.

More detail about these culvert assets can be found in ECRC's Roadsoft database or by contacting ECRC.

## Goals

The goal of ECRC's asset management program is the preservation of its culvert network. ECRC is responsible for maintaining culverts that underlie its entire road network.

## Planned Projects

ECRC's policy is to replace or repair culvert assets concurrent with projects affecting road segments carried by the particular culverts. ECRC also includes culvert assets in scheduled maintenance projects affecting road segments carried by the particular culverts.

# 4. SIGNAL ASSETS



ECRC exercises awareness of its traffic sign and signal assets.

## Inventory of Assets

At present, ECRC tracks only inventory data for traffic signals. ECRC has inventoried all 24 traffic signals under the jurisdiction of the ECRC.

More detail about these traffic signal assets can be obtained by contacting ECRC.

## Goals

The goal of ECRC's asset management program is the preservation of its traffic signals. ECRC is responsible for preserving 24 traffic signals and contracts with the Lansing Board of Water and Light to perform that maintenance.

## Planned Projects

ECRC's policy is to evaluate traffic signal assets based on condition assessment for replacement or repair during any reconstruction, rehabilitation, preventive maintenance, of schedule maintenance activities on the roadway affected by the particular signal. It also conducts replacements or repairs for those traffic signal assets reported as non-functional or as performing with reduced function. ECRC adheres to regular maintenance and servicing policies outlined in the *Michigan Manual of Uniform Traffic Control Devices*.

# 5. FINANCIAL RESOURCES

Public entities must balance the quality and extent of services they can provide with the tax resources provided by citizens and businesses, all while maximizing how efficiently funds are used. Therefore, ECRC will overview its general expenditures and financial resources currently devoted to transportation infrastructure maintenance. This financial information is not intended to be a full financial disclosure or a formal report. Full details of ECRC's financial status can be found https://eatoncountyroad.com/finance/.

## Anticipated Revenues & Expenses

ECRC receives funding from the following sources:

- **State funds** – ECRC's principal source of transportation funding is received from the Michigan Transportation Fund (MTF). This fund is supported by vehicle registration fees and the state's per-gallon gas tax. Allocations from the MTF are distributed to state and local governmental units based on a legislated formula, which includes factors such as population, miles of certified roads, and vehicle registration fees for vehicles registered in the agency's jurisdiction. Examples of state grants also include local bridge grants, economic development funds, and metro funds.
- **Federal and state grants for individual projects** – These are typically competitive funding applications that are targeted at a specific project type to accomplish a specific purpose. These may include safety enhancement projects, economic development projects, or other targeted funding. Examples of federal funds include Surface Transportation Program (STP) funds, bridge funds, and earmarks.
- **Local government entities or private developer contributions to construction projects for specific improvements** – This category includes funding received to mitigate the impact of commercial developments as a condition of construction of a specific development project, and can also include funding from a special assessment district levied by another governmental unit. Examples of contributions from local units include city, village, and township contributions to the county; special assessments; county appropriations; bond and note proceeds; contributions from counties to cities and villages; city general fund transfers; city municipal street funds; capital improvement funds; and tax millages (see below).
- **Local tax millages** – Many local agencies in Michigan use local tax millages to supplement their road-funding budget. These taxes can provide for additional construction and maintenance for new or existing roads that are also funded using MTF

or MDOT funds. ECRC has a local tax millages in its road-funding budget that will resurface and rehabilitate all County Local Roads under its jurisdiction. The 12 year millage will be completed in 2026.

- **Interest** – Interest from invested funds.
- **Permit fees** – Generally, permit fees cover the cost of a permit application review.
- **Other** – Other revenues can be gained through salvage sales, property rentals, land and building sales, sundry refunds, equipment disposition or installation, private sources, and financing.
- **Charges for services** – Funds from partner agencies who contract with ECRC to construct or maintain its roads, or roads under joint or neighboring jurisdictions, including state trunkline maintenance and non-maintenance services and preservation.

ECRC is required to report transportation fund expenditures to the State of Michigan using a prescribed format with predefined expenditure categories. The definitions of these categories according to Public Act 51 of 1951 may differ from common pavement management nomenclature and practice. For the purposes of reporting under PA 51, the expenditure categories are:

- **Construction/Capacity Improvement Funds** – According to PA 51 of 1951, this financial classification of projects includes, "new construction of highways, roads, streets, or bridges, a project that increases the capacity of a highway facility to accommodate that part of traffic having neither an origin nor destination within the local area, widening of a lane width or more, or adding turn lanes of more than 1/2 mile in length."[1]
- **Preservation and Structural Improvement Funds** – Preservation and structural improvements are "activit[ies] undertaken to preserve the integrity of the existing roadway system."[2] Preservation includes items such as a reconstruction of an existing road or bridge or adding structure to an existing road.
- **Routine and Preventive Maintenance Funds** – Routine maintenance activities are "actions performed on a regular or controllable basis or in response to uncontrollable events upon a highway, road, street, or bridge".[3] Preventive maintenance activities are "planned strategy[ies] of cost-effective treatments to an existing roadway system and its appurtenances that preserve assets by retarding deterioration and maintaining functional condition without significantly increasing structural capacity".[4]
- **Winter Maintenance Funds** – Expenditures for snow and ice control.

[1] Public Act 51 of 1951, 247.660c Definitions
[2] Public Act 51 of 1951, 247.660c Definitions
[3] Public Act 51 of 1951, 247.660c Definitions
[4] Public Act 51 of 1951, 247.660c Definitions

- **Administrative Funds** – There are specific items that can and cannot be included in administrative expenditures as specified in PA 51 of 1951. The law also states that the amount of MTF revenues that are spent on administrative expenditures is limited to 10 percent of the annual MTF funds that are received.
- **Other Funds** – Expenditures for equipment, capital outlay, debt principal payment, interest expense, contributions to adjacent governmental units, principal, interest and bank fees, and miscellaneous for cities and villages.

Table 4 details the revenues and expenditures for ECRC.

**Table 4: Average Annual Fiscal-Year Revenues & Expenditures from 2020-2022**

| **REVENUES** | | | **EXPENDITURES** | | |
|---|---|---|---|---|---|
| **Item** | **Estimated $** | **Percent of Total** | **Item** | **Estimated $** | **Percent of Total** |
| State funds | $14,827,785 | 68.3 | Construction & capacity improvement (CCI) | $0 | 0.0 |
| Federal funds | $1,754,906 | 8.1 | Preservation & structural improvement (PSI) | $12,149,221 | 61.5 |
| Contributions for local units | $4,792,708 | 22.1 | Routine maintenance | $5,528,391 | 28.0 |
| Interest, rents, and other | $320,957 | 1.5 | Winter maintenance | $1,287,133 | 6.5 |
| Charges for services | $0 | 0.0 | Trunkline maintenance | $0 | 0.0 |
| | | | Administrative | $763,184 | 3.9 |
| | | | Other | $27,416 | 0.1 |
| TOTAL | 21,696,356 | 100 | TOTAL | 19,755,345 | 0 |

*Verify the information in this table. You can find your agency's information in the TAMC dashboard at https://www.mcgi.state.mi.us/mitrp/tamcDashboards.*

# 6. RISK OF FAILURE ANALYSIS

Transportation infrastructure is designed to be resilient. The system of interconnecting roads and bridges maintained by ECRC provides road users with multiple alternate options in the event of an unplanned disruption of one part of the system. There are, however, key links in the transportation system that may cause significant inconvenience to users if they are unexpectedly closed to traffic. Key transportation links include:

- **Geographic divides:** Areas where a geographic feature (river, lake, hilly terrain, or limited access road) limits crossing points of the feature; bridge failures, in particular, can create loss of access to entire regions of the state
- **Emergency alternate routes for high-volume roads and bridges:** Roads and bridges that are routinely used as alternate routes for high-volume assets are included in an emergency response plan
- **Limited access areas:** Roads and bridges that serve remote or limited access areas that result in long detours if closed
- **Main access to key commercial districts:** Areas with a large concentration of businesses or where large-size business will be significantly impacted if a road is unavailable

Our road and bridge network includes the following critical assets: Any bridge on the primary system is considered a critical asset. Figure 7 illustrates the key transportation links in ECRC's road and bridge network.

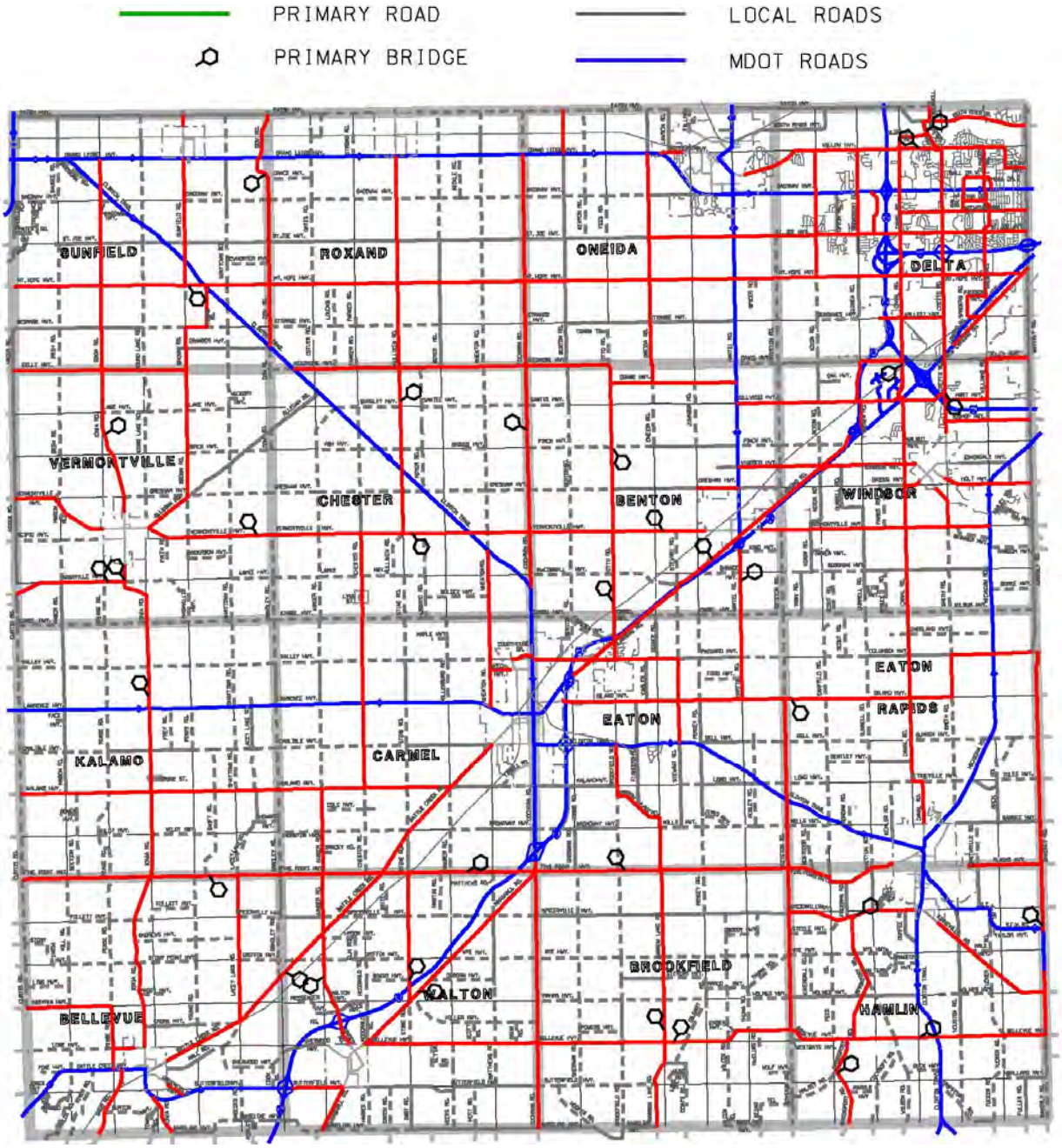



Figure 7: Key transportation links in ECRC's road and bridge network

# 7. COORDINATION WITH OTHER ENTITIES

An asset management plan provides significant value for infrastructure owners because it serves as a platform to engage other infrastructure owners using the same shared right of way space. ECRC communicates with both public and private infrastructure owners to coordinate work in the following ways:

ECRC coordinates with local municipalities on projects that span through different jurisdictions as well as non-motorized funding grants.

ECRC has acted as the Act 51 grant recipient for non-motorized path constructions by Thornapple Trail Association and Delta Charter Township. Acting as a pass-through grant recipient has provided these organizations and agencies funding opportunities to construct non-motorized segments that would not otherwise be eligible for Federal Transportation Funds.

ECRC also coordinates with several utility companies in all townships. Infrastructure owners are sent project locations in advance of construction to provide time for them to be relocated if necessary. When a utility has planned projects that will disrupt transportation services or cause damage to existing pavements, mitigation measures are proposed to minimize the impacts. The ECRC also does not allow utilities to open cut a roadway while asphalt plants are closed, to minimize disruptions and damages to traveled ways.

## ANNUAL TRAFFIC SUMMIT

Annually, MDOT convenes an infrastructure planning summit in the first quarter of the year. Representatives from all of the major public infrastructure agencies that have assets in the road

right of way are provided notice for the meeting and are invited to attend. An attempt is made to coordinate the schedule of the event to allow the majority of infrastructure owners to attend.

ECRC provides all attendees of the infrastructure planning summit with a list of all planned road projects for the next three years that include new pavement structure. Infrastructure owners are encouraged to discuss planned projects that would disrupt transportation services or cause damage to pavements. Projects which may cause damage to pavements in good or fair condition are discussed and mitigation measures are proposed to minimize the impact to pavements. Mitigation measures could include rescheduling and coordinating projects to maximize value and minimize disruptions and cost to the public.

# 8. PROOF OF ACCEPTANCE

**PUBLIC ACT 325**

**CERTIFICATION OF TRANSPORTATION ASSET MANAGEMENT PLAN**

Certification Year: 2023

Local Road-owning Agency Name: Eaton County Road Commission

Beginning October 2019 and on a three-year cycle thereafter, certification must be made for compliance to Public Act 325. A local road-owning agency with 100 certified miles or more must certify that it has developed an asset management plan for the road, bridge, culvert, and traffic signal assets. Signing this form certifies that the hitherto referred agency meets with minimum requirements as outlined by Public Act 325 and agency-defined goals and objectives.

This form must be signed by the chairperson of the local road-owning agency or the county executive and chief financial officer of the local road-owning agency.

| | | | |
|---|---|---|---|
| Signature | | Signature | |
| Printed Name | Mathew Hannahs | Printed Name | Patricia Loosemore |
| Title | Date | Title | Date |
| Engineer-Manager | 2/29/24 | Finance Director | 2/28/24 |

Due every three years based on agency submission schedule

Submittal Date: 3/1/24

See attached council meeting minutes and/or resolution.

Eaton County Road Commission

Duane A. Eldred
***Chair***

Timothy J. Lamoreaux
***Vice Chair***

Lauren K. Aitch-Guerrant
***Member***

Keith A. Barber
***Member***

Benjamin S. Lyons
***Member***

Mathew M. Hannahs, P.E.
***Engineer-Manager***

Patricia M. Loosemore
***Director of Finance***

February 27, 2024

The following resolution was taken from the minutes of the regular meeting of the Board of County Road Commissioners of the County of Eaton, Michigan, held on February 13, 2024, in a motion made by Commissioner Benjamin S. Lyons, and seconded by Commissioner Lauren K. Aitch-Guerrant:

Whereas, the asset management and compliance plan required by Michigan Public Act 325 of 2018 has been completed for 2023 for roads under the jurisdiction of the Eaton County Road Commission.

Now therefore be it resolved, that the Board of Eaton County Road Commissioners certifies the Compliance Plan and authorized the Engineer/Manager and Finance Director to sign the Proof of Acceptance.

Motion carried.

1112 Reynolds Road
Charlotte, MI 48813

Telephone
517-543-1630
Toll-Free
877-883-2866

Fax
517-543-2608

Email
ecrc@eatoncountyroad.com

I hereby certify that the above resolution is a true copy taken from the minutes of the regular meeting of the Board of County Road Commissioners, Eaton County, Michigan held on February 13, 2024.

Patricia M. Loosemore

Patricia M. Loosemore, Clerk to the Board

# A. PAVEMENT ASSET MANAGEMENT PLAN

An attached pavement asset management plan follows.

# Eaton County Road Commission

# 2023 Pavement Asset Management Plan

A plan describing the Eaton County Road Commission's roadway assets and condition

*Prepared by:*
Mathew Hannahs
Engineer-Manager
MHannahs@EatonCountyRoad.com

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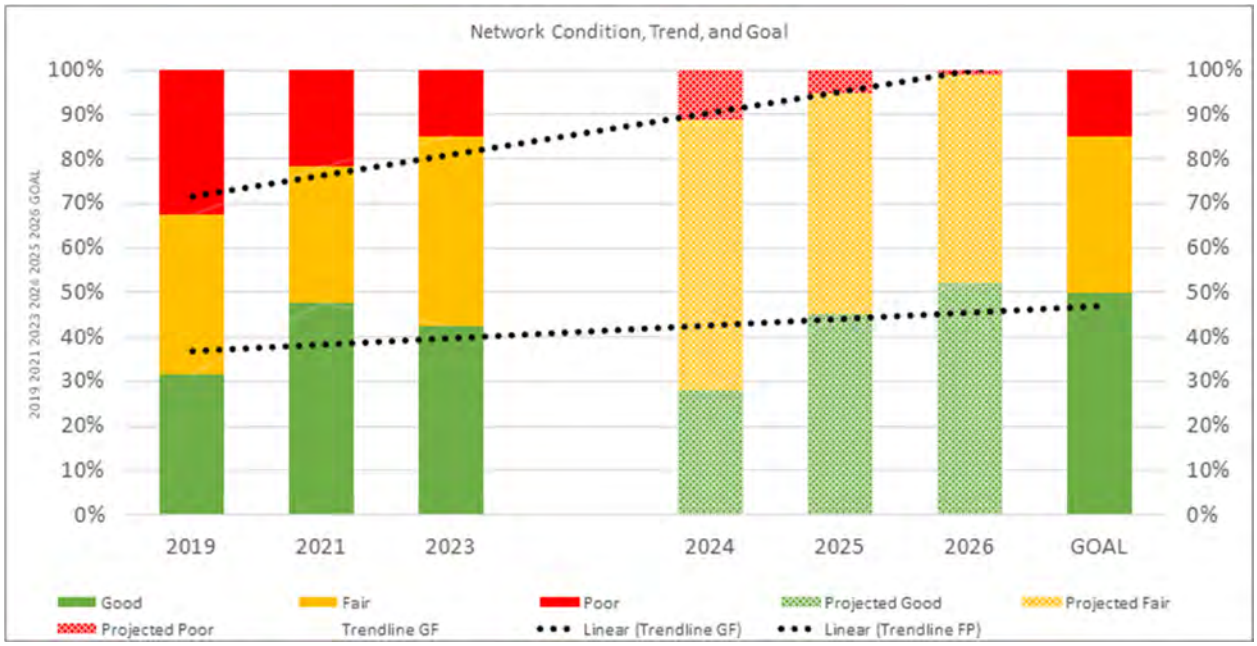
# EXECUTIVE SUMMARY

As conduits for commerce and connections to vital services, roads are among the most important assets in any community along with other assets like bridges, culverts, traffic signs, traffic signals, and utilities that support and affect roads. The Eaton County Road Commission's (ECRC) roads, other transportation assets, and support systems are also some of the most valuable and extensive public assets, all of which are paid for with taxes collected from ordinary citizens and businesses. The cost of building and maintaining roads, their importance to society, and the investment made by taxpayers all place a high level of responsibility on local agencies to plan, build, and maintain the road network in an efficient and effective manner. This asset management plan is intended to report on how ECRC is meeting its obligations to maintain the public assets for which it is responsible.

This plan overviews ECRC's road assets and condition and explains how ECRC works to maintain and improve the overall condition of those assets. These explanations can help answer the following questions:

- What kinds of road assets ECRC has in its jurisdiction and the different options for maintaining these assets.
- What tools and processes ECRC uses to track and manage road assets and funds.
- What condition ECRC's road assets are in compared to statewide averages.
- Why some road assets are in better condition than others and the path to maintaining and improving road asset conditions through proper planning and maintenance.
- How agency transportation assets are funded and where those funds come from.
- How funds are used, and the costs incurred during ECRC's road assets' normal life cycle.
- What condition ECRC can expect its road assets if those assets continue to be funded at the current funding levels
- How changes in funding levels can affect the overall condition of all of ECRC's road assets.

ECRC maintains about 1167 centerline miles of roads according to the data available in Roadsoft. This road network can be divided into about 391 miles of County Primary roads and 776 miles of County Local roads. This asset management plan will focus on the County Primary network. There are no unpaved County Primary roads under the jurisdiction of the ECRC. A summary of ECRC historical and current network conditions, projected trends, and goals for the County Primary network can be seen in the figure below:




An asset management plan is required by Michigan Public Act 325 of 2018, and this document represents fulfillment of some of ECRC's obligations towards meeting these requirements. This asset management plan also helps demonstrate ECRC's responsible use of public funds by providing elected and appointed officials as well as the general public with inventory and condition information of ECRC's road assets, and gives taxpayers the information they need to make informed decisions about investing in its essential transportation infrastructure.

# INTRODUCTION

Asset management is defined by Public Act 325 of 2018 as “an ongoing process of maintaining, preserving, upgrading, and operating physical assets cost effectively, based on a continuous physical inventory and condition assessment and investment to achieve established performance goals”. In other words, asset management is a process that uses data to manage and track assets, like roads and bridges, in a cost-effective manner using a combination of engineering and business principles. This process is endorsed by leaders in municipal planning and transportation infrastructure, including the Michigan Municipal League, County Road Association of Michigan, the Michigan Department of Transportation (MDOT), and the Federal Highway Administration (FHWA). ECRC is supported in its use of asset management principles and processes by the Michigan Transportation Asset Management Council (TAMC), formed by the State of Michigan.

Asset management, in the context of this plan, ensures that public funds are spent as effectively as possible to maximize the condition of the road network. Asset management also provides a transparent decision-making process that allows the public to understand the technical and financial challenges of managing road infrastructure with a limited budget.

The Eaton County Road Commission (ECRC) has adopted an “asset management” business process to overcome the challenges presented by having limited financial, staffing, and other resources while needing to meet road users’ expectations. ECRC is responsible for maintaining and operating approximately 1167 centerline of roads.

This plan outlines how ECRC determines its strategy to maintain and upgrade road asset condition given agency goals, priorities of its road users, and resources provided. An updated plan is to be released approximately every three years to reflect changes in road conditions, finances, and priorities.

Questions regarding the use or content of this plan should be directed to Mathew Hannahs P.E., Engineer-Manager, at 1112 Reynolds Road, Charlotte, MI 48813, by phone at (517) 543-1630, or by email at Mhannahs@EatonCountyRoad.com. Key terms used in this plan are defined in ECRC’s comprehensive transportation asset management plan (also known as the “compliance plan”) used for compliance with PA 325 or 2018.

Knowing the basic features of the asset classes themselves is a crucial starting point to understanding the rationale behind an asset management approach. The following primer provides an introduction to pavements.

## Pavement Primer

Roads come in two basic forms—paved and unpaved. Paved roads have hard surfaces. These hard surfaces can be constructed from asphalt, concrete, composite (asphalt and concrete),

sealcoat, and brick and block materials. On the other hand, unpaved roads have no hard surfaces. Examples of these surfaces are gravel and unimproved earth.

The decision to pave with a particular material as well as the decision to leave a road unpaved allows road-owning agencies to tailor a road to a particular purpose, environment, and budget. Thus, selecting a pavement type or leaving a road unpaved depends upon purpose, materials available, and budget. Each choice represents a trade-off between budget and costs for construction and maintenance.

Maintenance enables the road to fulfill its particular purpose. To achieve the maximum service for a pavement or an unpaved road, continual monitoring of a road's pavement condition is essential for choosing the right time to apply the right fix in the right place.

Here is a brief overview of the different types of pavements, how condition is assessed, and treatment options that can lengthen a road's service life.

## Surfacing

Pavement type is influenced by several different factors, such as cost of construction, cost of maintenance, frequency of maintenance, and type of maintenance. These factors can have benefits affecting asset life and road user experience.

### *Paved Surfacing*

Typical benefits and tradeoffs for hard surface types include:

- **Concrete pavement:** Concrete pavement, which is sometimes called a rigid pavement, is durable and lasts a long time when properly constructed and maintained. Concrete pavement can have longer service periods between maintenance activities, which can help reduce maintenance-related traffic disruptions. However, concrete pavements have a high initial cost and can be challenging to rehabilitate and maintain at the end of their service life. A typical concrete pavement design life will provide service for 30 years before major rehabilitation is necessary.
- **Hot-mix asphalt pavement (HMA):** HMA pavement, sometimes known as asphalt or flexible pavement, is currently less expensive to construct than concrete pavement (this is, in some part, due to the closer link between HMA material costs and oil prices that HMA pavements have in comparison with other pavement types). However, they require frequent maintenance activities to maximize their service life. A typical HMA pavement design life will provide service for 18 years before major rehabilitation is necessary. The vast majority of local-agency-owned pavements are HMA pavements.
- **Composite pavements:** Composite pavement is a combination of concrete and asphalt layers. Typically, composite pavements are old concrete pavements exhibiting ride-related issues that were overlaid by several inches of HMA in order to gain more service life from the pavement before it would need reconstruction. Converting a concrete

pavement to a composite pavement is typically used as a “holding pattern” treatment to maintain the road in usable condition until reconstruction funds become available.

- **Sealcoat pavement:** Sealcoat pavement is a gravel road that have been sealed with a thin asphalt binder coating that has stone chips spread on top (not to be confused with a chip seal treatment over HMA pavement). This type of pavement relies on the gravel layer to provide structure to support traffic, and the asphalt binder coating and stone chips shed water and eliminate the need for maintenance grading. Nonetheless, sealcoat pavement does require additional maintenance steps that asphalt and gravel do not require and does not last as long as HMA pavement, but it provides a low-cost alternative for lightly-trafficked areas and competes with asphalt for ride quality when properly constructed and maintained. Sealcoat pavement can provide service for ten or more years before the surface layer deteriorates and needs to be replaced.

### *Unpaved Surfacing*

Typical benefits and tradeoffs for non-hard surfacing include:

- **Gravel:** Gravel is a low-cost, easy-to-maintain road surface made from layers of soil and aggregate (gravel). However, there are several potential drawbacks such as dust, mud, and ride smoothness when maintenance is delayed or traffic volume exceeds design expectations. Gravel roads require frequent low-cost maintenance activities. Gravel can be very cost effective for lower-volume, lower-speed roads. In the right conditions, a properly constructed and maintained gravel road can provide a service life comparable to an HMA pavement and can be significantly less expensive than the other pavement types.

## Pavement Condition

Besides traffic congestion, pavement condition is what road users typically notice most about the quality of the roads that they regularly use—the better the pavement condition, the more satisfied users are with the service provided by the roadwork performed by road-owning agencies. Pavement condition is also a major factor in determining the most cost-effective treatment—that is, routine maintenance, capital preventive maintenance, or structural improvement—for a given section of pavement. As pavements age, they transition between “windows” of opportunity when a specific type of treatment can be applied to gain an increase in quality and extension of service life. Routine maintenance is day-to-day, regularly scheduled, low-cost activity applied to “good” roads to prevent water or debris intrusion. Capital preventive maintenance (CPM) is a planned set of cost-effective treatments for “fair” roads that corrects pavement defects, slows further deterioration, and maintains the functional condition without increasing structural capacity. ECRC uses pavement condition and age to anticipate when a specific section of pavement will be a potential candidate for preventive maintenance. More detail on this topic is included in the *Pavement Treatment* section of this primer.

Pavement condition data is also important because it allows road owners to evaluate the benefits of preventive maintenance projects. This data helps road owners to identify the most

cost-effective use of road construction and maintenance dollars. Further, historic pavement condition data can enable road owners to predict future road conditions based on budget constraints and to determine if a road network's condition will improve, stay the same, or degrade at the current or planned investment level. This analysis can help determine how much additional funding is necessary to meet a network's condition improvement goals.

### *Paved Road Condition Rating System*

ECRC is committed to monitoring the condition of its road network and using pavement condition data to drive cost-effective decision-making and preservation of valuable road assets. ECRC uses the Pavement Surface Evaluation and Rating (PASER) system to assess its paved roads. PASER was developed by the University of Wisconsin Transportation Information Center to provide a simple, efficient, and consistent method for evaluating road condition through visual inspection. The widely used PASER system has specific criteria for assessing asphalt, concrete, sealcoat, and brick and block pavements. Information regarding the PASER system and PASER manuals may be found on the TAMC website at: https://www.michigan.gov/mic/tamc/training/paser.

The TAMC has adopted the PASER system for measuring statewide pavement conditions in Michigan for asphalt, concrete, composite, sealcoat, and brick-and-block paved roads. Broad use of the PASER system means that data collected at ECRC is consistent with data collected statewide. PASER data is collected using trained inspectors in a slow-moving vehicle using GPS-enabled data collection software provided to road-owning agencies at no cost to them. The method does not require extensive training or specialized equipment, and data can be collected rapidly, which minimizes the expense for collecting and maintaining this data.

The PASER system rates surface condition using a 1-10 scale where 10 is a brand new road with no defects that can be treated with routine maintenance, 5 is a road with distresses but is structurally sound that can be treated with preventive maintenance, and 1 is a road with extensive surface and structural distresses that is in need of total reconstruction.

Roads with lower PASER scores generally require costlier treatments to restore their quality than roads with higher PASER scores. The cost effectiveness of treatments generally decreases the as the PASER number decreases. In other words, as a road deteriorates, it costs more dollars per mile to fix it, and the dollars spent are less efficient in increasing the road's service life. Nationwide experience and asset management principles tell us that a road that has deteriorated to a PASER 4 or less will cost more to improve and the dollars spent are less efficient. Understanding this cost principle helps to draw meaning from the current PASER condition assessment.

The TAMC has developed statewide definitions of road condition by creating three simplified condition categories — “good”, “fair”, and “poor” — that represent bin ranges of PASER scores having similar contexts with regard to maintenance and/or reconstruction. The definitions of these rating conditions are:

- “Good” roads, according to the TAMC, have PASER scores of 8, 9, or 10. Roads in this category have very few, if any, defects and only require minimal maintenance; they may be kept in this category longer using PPM. These roads may include those that have been recently seal coated or newly constructed. Figure 1 illustrates an example of a road in this category.
- “Fair” roads, according to the TAMC, have PASER scores of 5, 6, or 7. Roads in this category still show good structural support, but their surface is starting to deteriorate. Figure 1 illustrates two road examples in this category. CPM can be cost effective for maintaining the road’s “fair” condition or even raising it to “good” condition before the structural integrity of the pavement has been severely impacted. CPM treatments can be likened to shingles on a roof of a house: while the shingles add no structural value, they protect the house from structural damage by maintaining the protective function of a roof covering.
- “Poor” roads, according to the TAMC, have PASER scores of 1, 2, 3, or 4. These roads exhibit evidence that the underlying structure is failing, such as alligator cracking and rutting. These roads must be rehabilitated with treatments like a heavy overlay, crush and shape, or total reconstruction. Figure 1 illustrates a road in this category.



Figure 1: *Top image, right*– PASER 8 road that is considered “good” by the TAMC exhibit only minor defects. *Second image, right*– PASER 5 road that is considered “fair” by the TAMC. Exhibiting structural soundness but could benefit from CPM. *Third image, right*– PASER 6 road that is considered “fair” by the TAMC. *Bottom image, right*– PASER 2 road that is considered “poor” by the TAMC exhibiting significant structural distress.

The TAMC's good, fair, and poor categories are based solely on the definitions, above. Therefore, caution should be exercised when comparing other condition assessments with these categories because other condition assessments may have "good", "fair", or "poor" designations similar to the TAMC condition categories but may not share the same definition. Often, other condition assessment systems define the "good", "fair", and "poor" categories differently, thus rendering the data of little use for cross-system comparison. The TAMC's definitions provide a statewide standard for all of Michigan's road-maintaining agencies to use for comparison purposes.

PASER data is collected 100 percent every two years on all federal-aid-eligible roads in Michigan. The TAMC dictates and funds the required training and the format for this collection, and it shares the data regionally and statewide.

## Pavement Treatments

Selection of repair treatments for roads aims to balance costs, benefits, and road life expectancy. All pavements are damaged by water, traffic weight, freeze/thaw cycles, and sunlight. Each of the following treatments and strategies—reconstruction, structural improvements, capital preventive maintenance, and others used by ECRC—counters at least one of these pavement-damaging forces.

### *Reconstruction*

Pavement reconstruction treats failing or failed pavements by completely removing the old pavement and base and constructing an entirely new road (Figure 2). Every pavement has to eventually be reconstructed and it is usually done as a last resort after more cost-effective treatments are done, or if the road requires significant changes to road geometry, base, or buried utilities. Compared to the other treatments, which are all improvements of the existing road, reconstruction is the most extensive rehabilitation of the roadway and therefore, also the most expensive per mile and most disruptive to regular traffic patterns. Reconstructed pavement will subsequently require one or more of the previous maintenance treatments to maximize service life and performance. A reconstructed road lasts approximately 20 years and costs $1,000,000 per lane mile.




Figure 2: Examples of reconstruction treatments—(left) reconstructing a road and (right) road prepared for full-depth repair.

### *Full-depth Concrete Repair*

A full-depth concrete repair removes sections of damaged concrete pavement and replaces it with new concrete of the same dimensions (Figure 2). It is usually performed on isolated deteriorated joint locations or entire slabs that are much further deteriorated than adjacent slabs. The purpose is to restore the riding surface, delay water infiltration, restore load transfer from one slab to the next, and eliminate the need to perform costly temporary patching. This repair lasts approximately twelve years and typically costs $200,000 per mile.

### *Structural Improvement*

Roads requiring structural improvements exhibit alligator cracking and rutting and rated poor in the TAMC scale. Road rutting is evidence that the underlying structure is beginning to fail and it must be either rehabilitated with a structural treatment. Examples of structural improvement treatments include HMA overlay with or without milling, and crush and shape (Figure 3). The following descriptions outline the main structural improvement treatments used by ECRC.




Figure 3: Examples of structural improvement treatments—(from left) HMA overlay on an unmilled pavement, milling asphalt pavement, and pulverization of a road during a crush-and-shape project.

### *Hot-mix Asphalt (HMA) Overlay with/without Milling*

An HMA overlay is a layer of new asphalt (liquid asphalt and stones) placed on an existing pavement (Figure 3). Depending on the overlay thickness, this treatment can add significant structural strength. This treatment also creates a new wearing surface for traffic and seals the pavement from water, debris, and sunlight damage. An HMA overlay lasts approximately five to ten years and costs $60,000 to $80,000 per lane mile. The top layer of severely damaged pavement can be removed by the milling, a technique that helps prevent structural problems from being quickly reflected up to the new surface. Milling is also done to keep roads at the same height of curb and gutter that is not being raised or reinstalled in the project. Milling adds $10,000 per lane mile to the HMA overlay cost.

### *Crush and Shape*

During a crush and shape treatment, the existing pavement and base are pulverized and then the road surface is reshaped to correct imperfections in the road's profile (Figure 3). An additional layer of gravel is often added along with a new wearing surface such as an asphalt overlay or chip seal. Additional gravel and an asphalt overlay increases the pavement's structural capacity. This treatment is usually done on rural roads with severe structural distress; Adding gravel and a wearing surface makes it more prohibitive for urban roads if the curb and

gutter is not raised up. Crush and shape treatments last approximately 14 years and cost $250,000 per lane mile.

## Maintenance

Maintenance is the most cost-effective strategy for managing road infrastructure and prevents good and fair roads from reaching the poor category, which require costly rehabilitation and reconstruction treatments to create a year of service life. It is most effective to spend money on routine maintenance and CPM treatments, first; then, when all maintenance project candidates are treated, reconstruction and rehabilitation can be performed as money is available. This strategy is called a “mix-of-fixes” approach to managing pavements.

## Capital Preventive Maintenance

Capital preventive maintenance (CPM) addresses pavement problems of fair-rated roads before the structural integrity of the pavement has been severely impacted. CPM is a planned set of cost-effective treatments applied to an existing roadway that slows further deterioration and that maintains or improves the functional condition of the system without significantly increasing the structural capacity. Examples of such treatments include crack seal, fog seal, chip seal, slurry seal, and microsurface (Figure 4). The purpose of the following CPM treatments is to protect the pavement structure, slow the rate of deterioration, and/or correct pavement surface deficiencies. The following descriptions outline the main CPM treatments used by ECRC.




Figure 4: Examples of capital preventive maintenance treatments—(from left) crack seal, fog seal, chip seal, and slurry seal/microsurface.

### *Ditching*

Water needs to drain away from any roadway to delay softening of the pavement structure, and proper drainage is critical. To improve drainage, new ditches are dug or old ones are cleaned out.

### *Crack Seal*

Water that infiltrates the pavement surface softens the pavement structure and allows traffic loads to cause more damage to the pavement than in normal dry conditions. Crack sealing helps prevent water infiltration by sealing cracks in the pavement with asphalt sealant (Figure 4). ECRC seals pavement cracks early in the life of the pavement to keep it functioning as strong as it can and for as long as it can. Crack sealing lasts approximately two years and costs $4,000 per lane mile. Even though it does not last very long compared to other treatments, it

does not cost very much compared to other treatments. This makes it a very cost effective treatment when ECRC looks at what crack filling costs per year of the treatment's life.

### *Fog Seal*

Fog sealing sprays a liquid asphalt coating onto the entire pavement surface to fill hairline cracks and prevent damage from sunlight (Figure 4). Fog seals are best for good to very good pavements and last approximately two years at a cost of $3,000 per lane mile.

### *Chip Seal*

A chip seal, also known as a sealcoat, is a two-part treatment that starts with liquid asphalt sprayed onto the old pavement surface followed by a single layer of small stone chips spread onto the wet liquid asphalt layer (Figure 4). The liquid asphalt seals the pavement from water and debris and holds the stone chips in place, providing a new wearing surface for traffic that can correct friction problems and help to prevent further surface deterioration. Chip seals are best applied to pavements that are not exhibiting problems with strength, and their purpose is to help preserve that strength. These treatments last approximately five years and cost $12,000 per lane mile.

### *Slurry Seal/Microsurface*

A slurry seal or microsurface's purpose is to protect existing pavement from being damaged by water and sunlight. The primary ingredients are liquid asphalt (slurry seal) or modified liquid asphalt (microsurface), small stones, water and portland cement applied in a very thin (less than a half an inch) layer (Figure 4). The main difference between a slurry seal and a microsurface is the modified liquid asphalt used in microsurfacing provides different curing and durability properties, which allows microsurfacing to be used for filling pavement ruts. Since the application is very thin, these treatments do not add any strength to the pavement and only serve to protect the pavement's existing strength by sealing the pavement from sunlight and water damage. These treatments work best when applied before cracks are too wide and too numerous. A slurry seal treatment lasts approximately four years and costs $20,000 per lane mile, while a microsurface treatment tends to last for seven years and costs $25,000 per lane mile.

# 1. PAVEMENT ASSETS

Building a mile of new road can cost over $2 million due to the large volume of materials and equipment that are necessary. The high cost of constructing road assets underlines the critical nature of properly managing and maintaining the investments made in this vital infrastructure. The specific needs of every mile of road within an agency's overall road network is a complex assessment, especially when considering rapidly changing conditions and the varying requisites of road users; understanding each road-mile's needs is an essential duty of the road-owning agency.

In Michigan, many different governmental units (or agencies) own and maintain roads, so it can be difficult for the public to understand who is responsible for items such as planning and funding construction projects, [patching] repairs, traffic control, safety, and winter maintenance for any given road. MDOT is responsible for state trunkline roads, which are typically named with "M", "I", or "US" designations regardless of their geographic location in Michigan. Cities and villages are typically responsible for all public roads within their geographic boundary with the exception of the previously mentioned state trunkline roads managed by MDOT. County road commissions (or departments) are typically responsible for all public roads within the county's geographic boundary, with the exception of those managed by cities, villages, and MDOT.

In cases where non-trunkline roads fall along jurisdictional borders, local and intergovernmental agreements dictate ownership and maintenance responsibility. Quite frequently, roads owned by one agency may be maintained by another agency because of geographic features that make it more cost effective for a neighboring agency to maintain the road instead of the actual road owner. Other times, road-owning agencies may mutually agree to coordinate maintenance activities in order to create economies of scale and take advantage of those efficiencies.

The ECRC is responsible for about 1167 centerline miles of public roads, with about 391 centerline miles of County Primary Road and about 500 centerline miles of unpaved roads. Figure 5 provides a map illustrating the geographic location of roads managed by the ECRC.

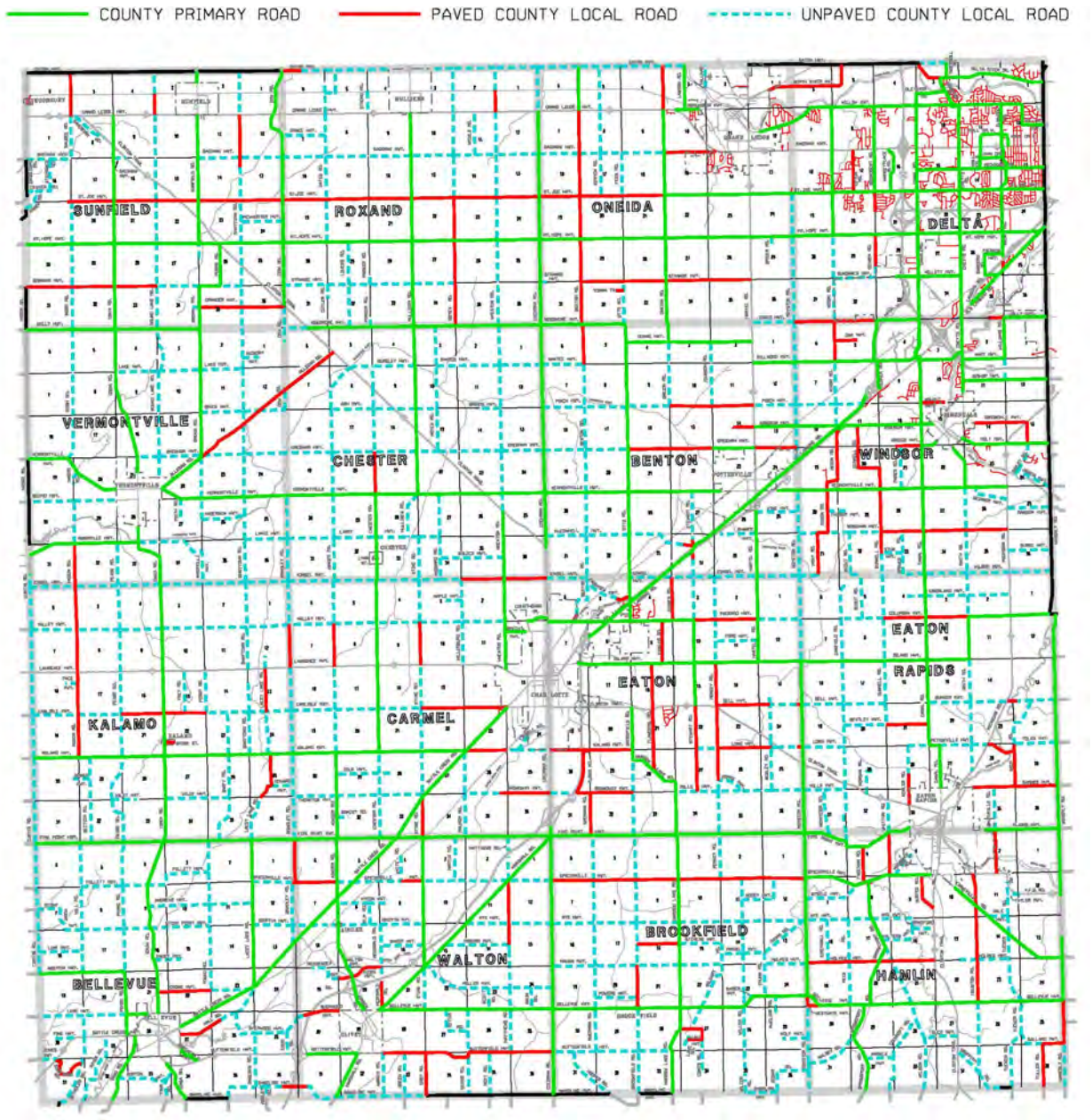



Figure 5: Map showing location of roads managed by ECRC

# Inventory

Michigan Public Act 51 of 1951 (PA 51), which defines how funds from the Michigan Transportation Fund (MTF) are distributed to and spent by public road agencies, classifies roads maintained by ECRC as either County Primary or County Local roads. State statute prioritizes expenditures on the County Primary road network.

Of the 1167 miles of public roads managed by ECRC, approximately 82% of all County Primary roads are classified as federal aid eligible, which allows them to receive federal funding for their

maintenance and construction. There are no County Local roads managed by ECRC that are federal aid eligible, which means only state and local funds can be used to manage these roads.

Figure 6 illustrates the percentage of roads maintained by ECRC that are classified as County Primary and County Local roads. Figure 7 illustrates this breakdown of these road networks by township boundary within ECRC's jurisdiction.

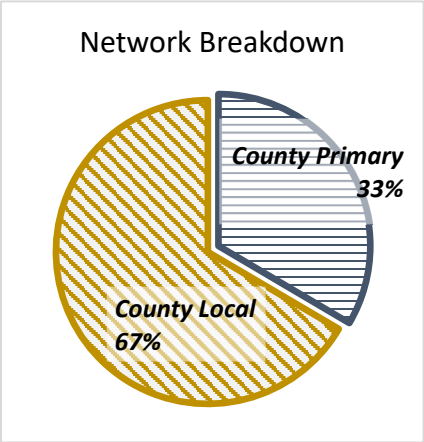



Figure 6: Percentage of County Primary and County Local roads for ECRC.

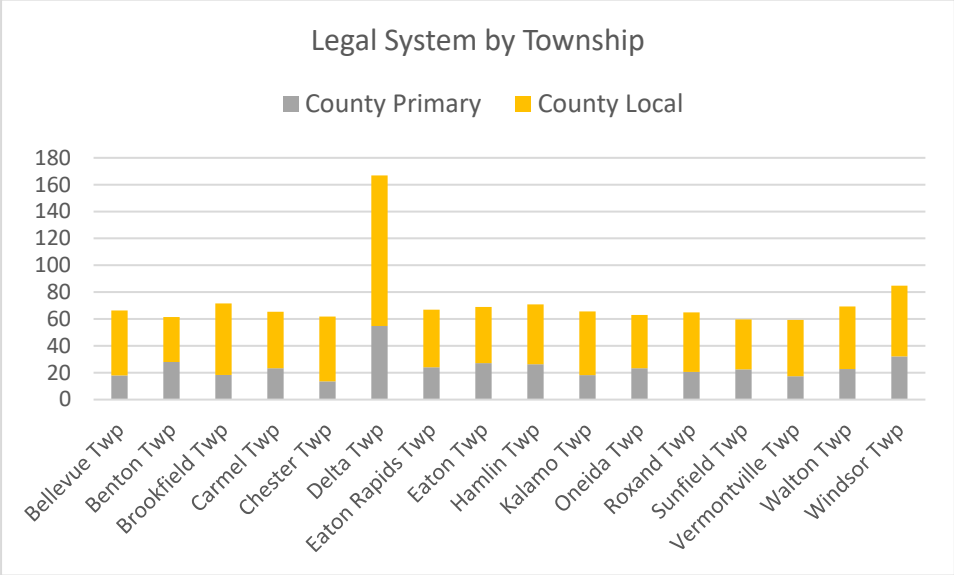



Figure 7: County Primary and County Local roads by township for ECRC's jurisdiction.

ECRC manages 0 miles of roads that are part of the National Highway System (NHS).

## Types

ECRC has multiple types of pavements in its jurisdiction, including: asphalt, concrete; it also has unpaved roads (i.e., gravel and/or earth). Factors influencing pavement type include cost of construction, cost of maintenance, frequency of maintenance, type of maintenance, asset life, and road user experience. More information on pavement types is available in the Introduction's Pavement Primer.

Figure 8 illustrates the percentage of various pavement types that ECRC has in its network. Figure 9 shows the pavement type by Township boundary for ECRC's jurisdiction.

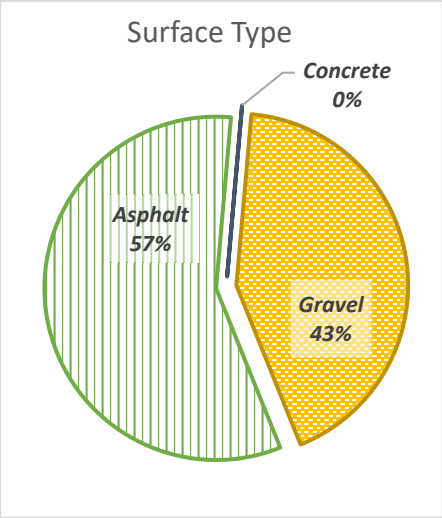



Figure 8: Pavement type by percentage maintained by ECRC Undefined pavements have not been inventoried in ECRC's asset management system to date but will be included as data becomes available.

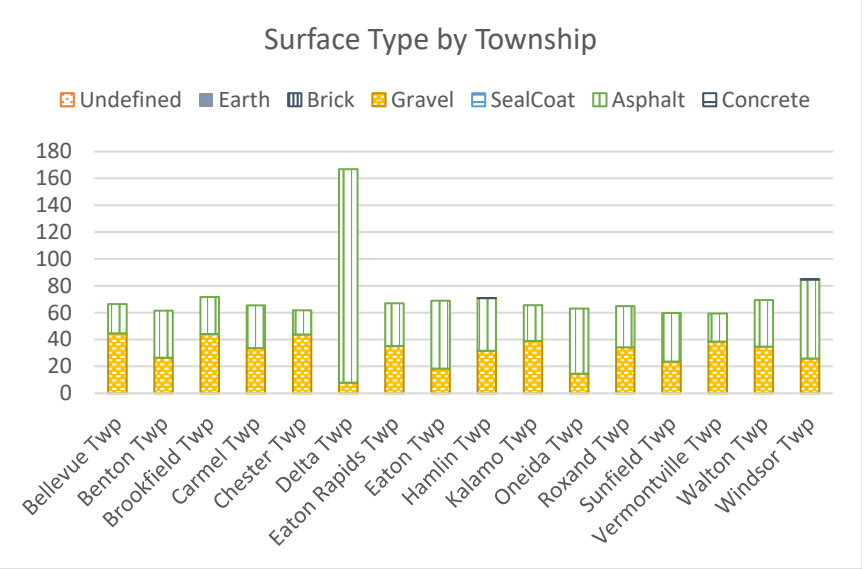



Figure 9: Pavement type by township within ECRC's jurisdiction. Undefined pavements have not been inventoried in ECRC's asset management system to date but will be included as data becomes available.

## Condition

The road characteristic that road users most readily notice is pavement condition. Pavement condition is a major factor in determining the most cost-effective treatment—that is, routine maintenance, capital preventive maintenance, or structural improvement—for a given section of pavement. ECRC uses pavement condition and age to anticipate when a specific section of pavement will be a potential candidate for preventive maintenance. Pavement condition data enables ECRC to evaluate the benefits of preventive maintenance projects and to identify the most cost-effective use of road construction and maintenance dollars. Historic pavement condition data can be used to predict future road conditions based on budget constraints and to determine if a road network's condition will improve, stay the same, or degrade at the current or planned investment level. This analysis helps to determine how much additional funding is necessary to meet a network's condition improvement goals. More detail on this topic is included in the Introduction's *Pavement Primer*.

### *Paved Roads*

ECRC is committed to monitoring the condition of its road network and using pavement condition data to drive cost-effective decision-making and preservation of valuable road assets. ECRC uses the Pavement Surface Evaluation and Rating (PASER) system, which has been adopted by the TAMC for measuring statewide pavement conditions, to assess its paved roads. The PASER system provides a simple, efficient, and consistent method for evaluating road condition through visual inspection. More information regarding the PASER system can be found in the Introduction's Pavement Primer.

ECRC collects 100 percent of its PASER data every two years on all federal-aid-eligible roads in Michigan.

ECRC's 2022 paved County Primary road network has 46 percent of roads in the TAMC good condition category, 39 percent in fair, and 15 percent in poor (Figure 10).

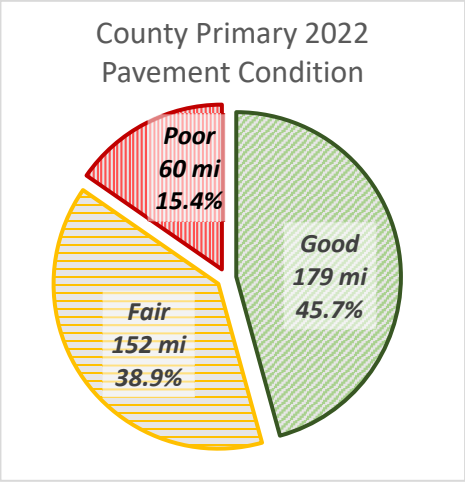



Figure 10: ECRC paved County Primary road network conditions by percentage of good, fair, or poor

In comparison, the statewide paved County Primary road network has 26 percent of roads in the TAMC good condition category, 41 percent in fair, and 33 percent in poor (Figure 11). Comparing Figure 10 and Figure 11 shows that ECRC's paved County Primary road network is better than similarly-classified roads in the rest of the state. Other road condition graphs can be viewed on the TAMC pavement condition dashboard at: http://www.mcgi.state.mi.us/mitrp/Data/PaserDashboard.aspx.

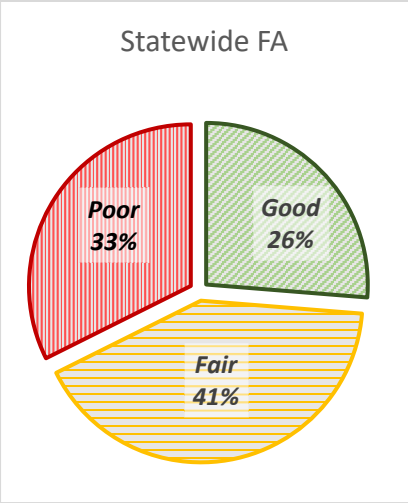



Figure 11: Statewide paved County Primary road network conditions by percentage of good, fair, or poor

Figure 12 and Figure 13 show the number of miles of ECRC's County Primary roads with PASER scores expressed in TAMC definition categories. ECRC considers road miles on the transition line between good and fair (PASER 8) and the transition line between fair and poor (PASER 5) as representing parts of the road network where there is a risk of losing the opportunity to apply less expensive treatments that gain significant improvements in service life.

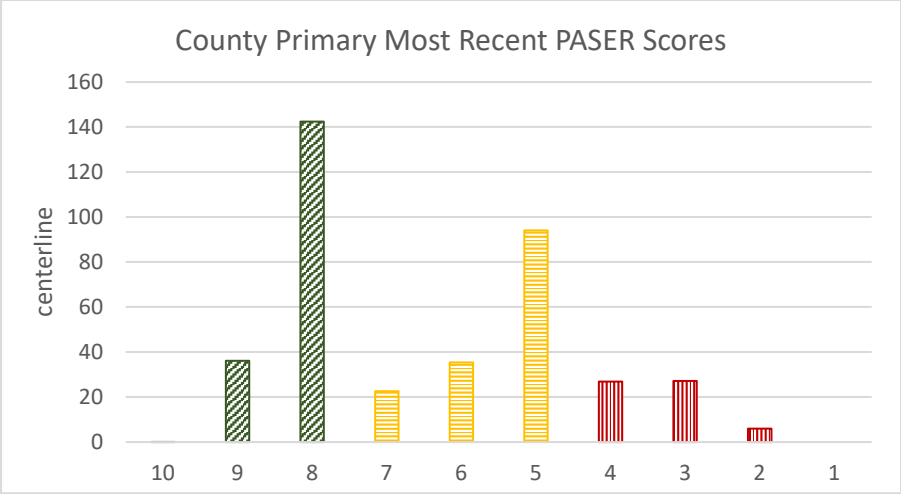



Figure 12: ECRC paved County Primary road network conditions. Bar graph colors correspond to good/fair/poor TAMC designations.

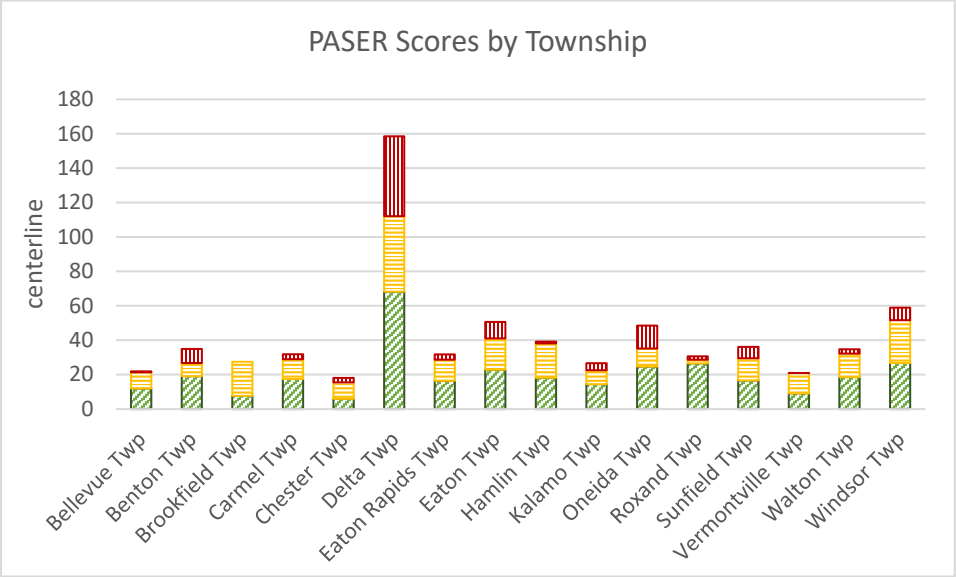



Figure 13: Number of miles of paved road in each township divided in categories of good (PASER 10, 9, 8), fair (PASER 7, 6, 5), and poor (PASER 4, 3, 2, 1).

Figure 14 provides a map illustrating the geographic location of paved roads and their respective PASER condition. An online version of the most recent PASER data is located at https://www.mcgi.state.mi.us/tamcMap/.

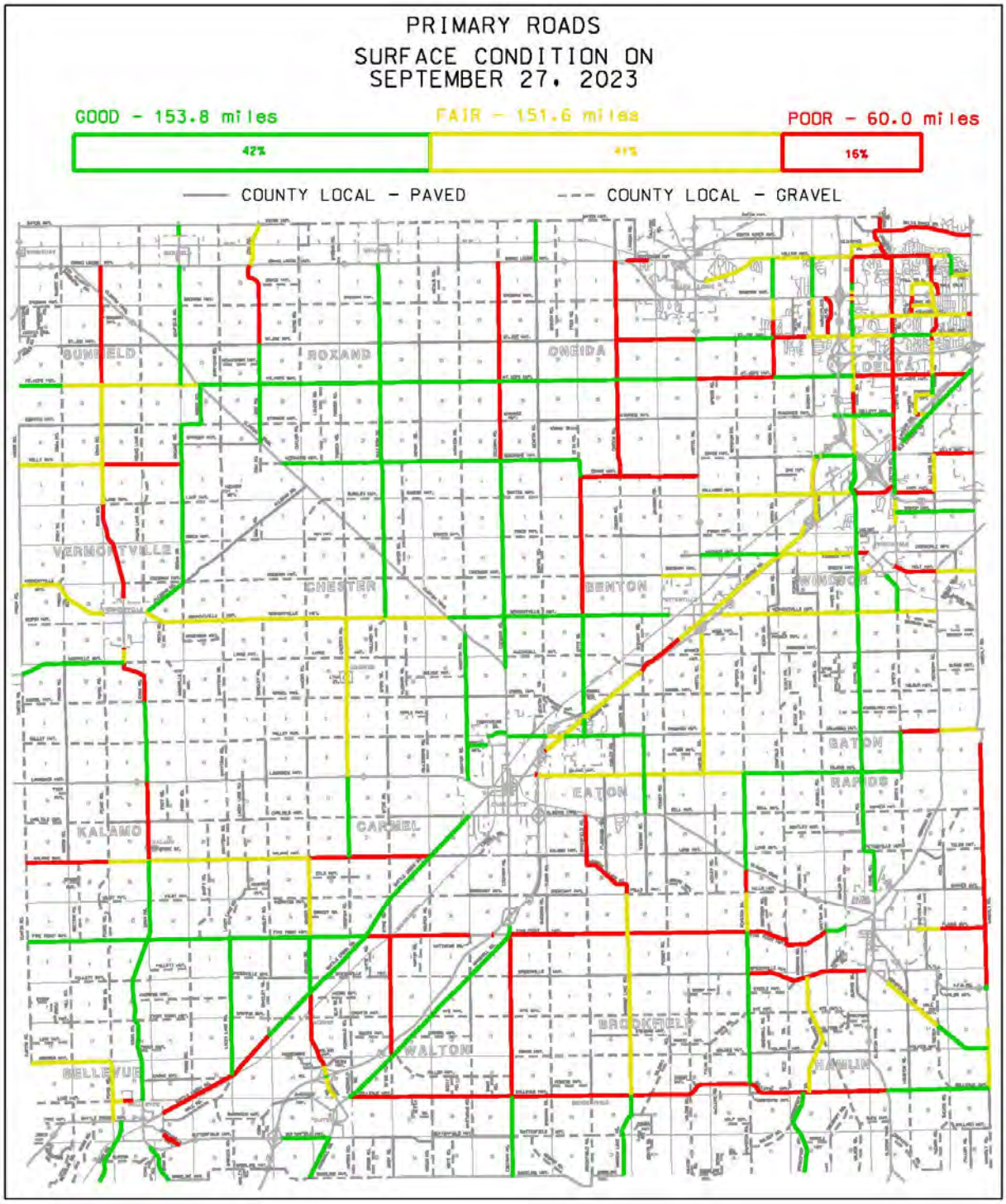



Figure 14: Map of the current paved road condition in good (PASER 10, 9, 8) shown in green, fair (PASER 7, 6, 5) shown in yellow, and poor (PASER 4, 3, 2, 1) shown in red. Only Primary Roads maintained by ECRC are shown.

Historically, the overall quality of ECRC's paved County Primary roads have been increasing, as can be observed in Figure 15.

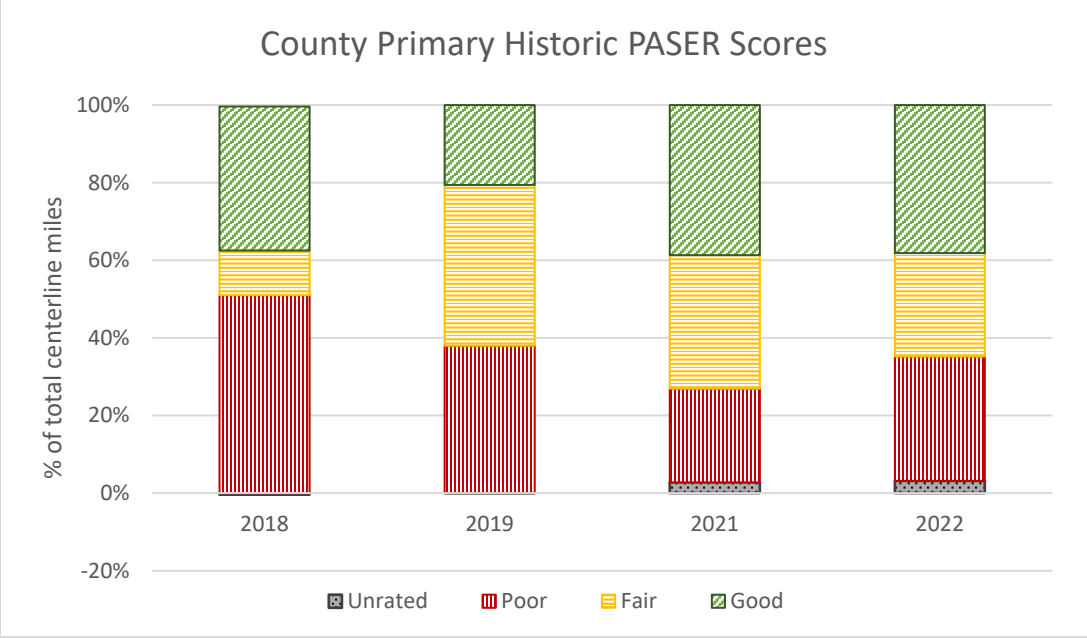



Figure 15: Historical ECRC paved County Primary road network condition trend

# Goals

Goals help set expectations for changes in future pavement conditions. Pavement condition changes are influenced by water infiltration, soil conditions, sunlight exposure, traffic loading, and repair work performed. ECRC is not able to control any of these factors fully due to seasonal weather changes, traffic pattern changes, and its limited budget. In spite of the uncontrollable variables, it is still important to set realistic network condition goals that efficiently use budget resources to build and maintain roads meeting taxpayer expectations. An assessment of the progress toward these goals is provided in the *1. Pavement Assets*: *Gap Analysis* section of this plan.

## Goals for Paved County Primary Roads

The overall goal for ECRC's paved County Primary road network is to maintain or improve road conditions network-wide at 2022 levels. The baseline condition for this goal is illustrated in Figure 16.

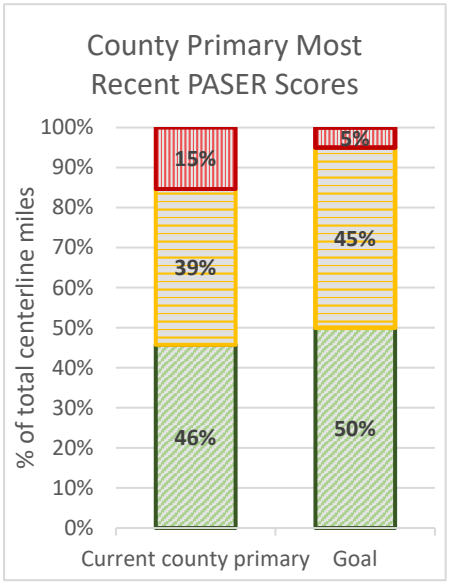



Figure 16: ECRC's 2022 County Primary road network condition by percentage of good/fair/poor

ECRC's network-level pavement condition strategy for paved County Primary roads is:

1. Prevent its good and fair (PASER 10 - 5) County Primary from becoming poor (PASER 4 - 1).
2. Move 10 percent of paved County Primary roads out of the poor category.

# Modelled Trends

Roads age and deteriorate just like any other asset. All pavements are damaged by water, traffic weight, freeze/thaw cycles, sunlight, and traffic weight. To offset natural deterioration and normal wear-and-tear on the road, ECRC must complete treatment projects that either protect and/or add life to its pavements. The year-end condition of the whole network depends upon changes or preservation of individual road section condition that preservation treatments have affected.

ECRC uses many types of repair treatments for its roads, each selected to balance costs, benefits, and road life expectancy. When agency trends are modelled, any gap between goals and accomplishable work becomes evident. Financial resources influence how much work can be accomplished across the network within agency budget and what treatments and strategies can be afforded; a full discussion of ECRC's financial resources can be found in the *5. Financial Resources* section.

Treatments and strategies that counter pavement-damaging forces include reconstruction, structural improvement, capital preventive maintenance, innovative treatments, and maintenance. For a complete discussion on the pavement treatment tools, refer to the *1. Introduction*'s *Pavement Primer*.

Correlating with each PASER score are specific types of treatments best performed either to protect the pavement (CPM) or to add strength back into the pavement (structural improvement) (Table 1). MDOT provides guidance regarding when a specific pavement may be a candidate for a particular treatment. These identified PASER scores "trigger" the timing of projects appropriately to direct the right pavement fix at the right time, thereby providing the best chance for a successful project. The information provided in Table 1 is a guide for identifying potential projects; however, this table should not be the sole criteria for pavement treatment selection. Other information such as future development, traffic volume, utility projects, and budget play a role in project selection. This table should not be a substitute for engineering judgement.

**Table 1: Service Life Extension (in Years) for Pavement Types Gained by Fix Type[1]**

| Fix Type | Life Extension (in years)* | | | PASER |
|---|---|---|---|---|
| | Flexible | Composite | Rigid | |
| HMA crack treatment | 1-3 | 1-3 | N/A | 6-7 |
| Overband crack filling | 1-2 | 1-2 | N/A | 6-7 |
| One course non-structural HMA overlay | 5-7 | 4-7 | N/A | 4-5**** |
| Mill and one course non-structural HMA overlay | 5-7 | 4-7 | N/A | 3-5 |
| Single course chip seal | 3-6 | N/A | N/A | 5-7† |
| Double chip seal | 4-7 | 3-6 | N/A | 5-7† |
| Single course microsurface | 3-5 | ** | N/A | 5-6 |
| Multiple course microsurface | 4-6 | ** | N/A | 4-6**** |
| Ultra-thin HMA overlay | 3-6 | 3-6 | N/A | 4-6**** |
| Paver placed surface seal | 4-6 | ** | N/A | 5-7 |
| Longitudinal HMA wedge/scratch coat with surface treatment | 3-7 | N/A | N/A | 3-5**** |
| Flexible patching | ** | ** | N/A | N/A |
| Cape seal | 4-7 | 4-7 | N/A | 4-7 |
| Fog seal | ** | ** | N/A | 7-10 |
| Mastic surface treatment | ** | ** | N/A | 7-10 |
| Scrub seal | ** | ** | N/A | 4-8 |

* The time range is the expected life extending benefit given to the pavement, not the anticipated longevity of the treatment.

** Data is not available to quantify the life extension.

**** Can be used on a pavement with a PASER equal to 3 when the sole reason for rating is rutting or severe raveling of the surface asphalt layer.

† For PASER 4 or less providing structural soundness exists and that additional pre-treatment will be required for example, wedging, bar seals, spot double chip seals, injection spray patching or other pre-treatments.

[1] Part of Appendix D-1 from *MDOT Local Agency Programs Guidelines for Geometrics on Local Agency Projects* 2017 Edition Approved Preventive Maintenance Treatments

### *Roadsoft Pavement Condition Forecast to Forecast Future Trends*

ECRC uses Roadsoft, an asset management software suite, to manage road- and bridge-related infrastructure. Roadsoft is developed by Michigan Technological University and is available for Michigan local agencies at no cost to them. Roadsoft uses pavement condition data to drive network-level deterioration models that forecast future road conditions based on planned construction and maintenance work. A screenshot of Roadsoft's pavement condition model and the associated output is shown in Figure 17.

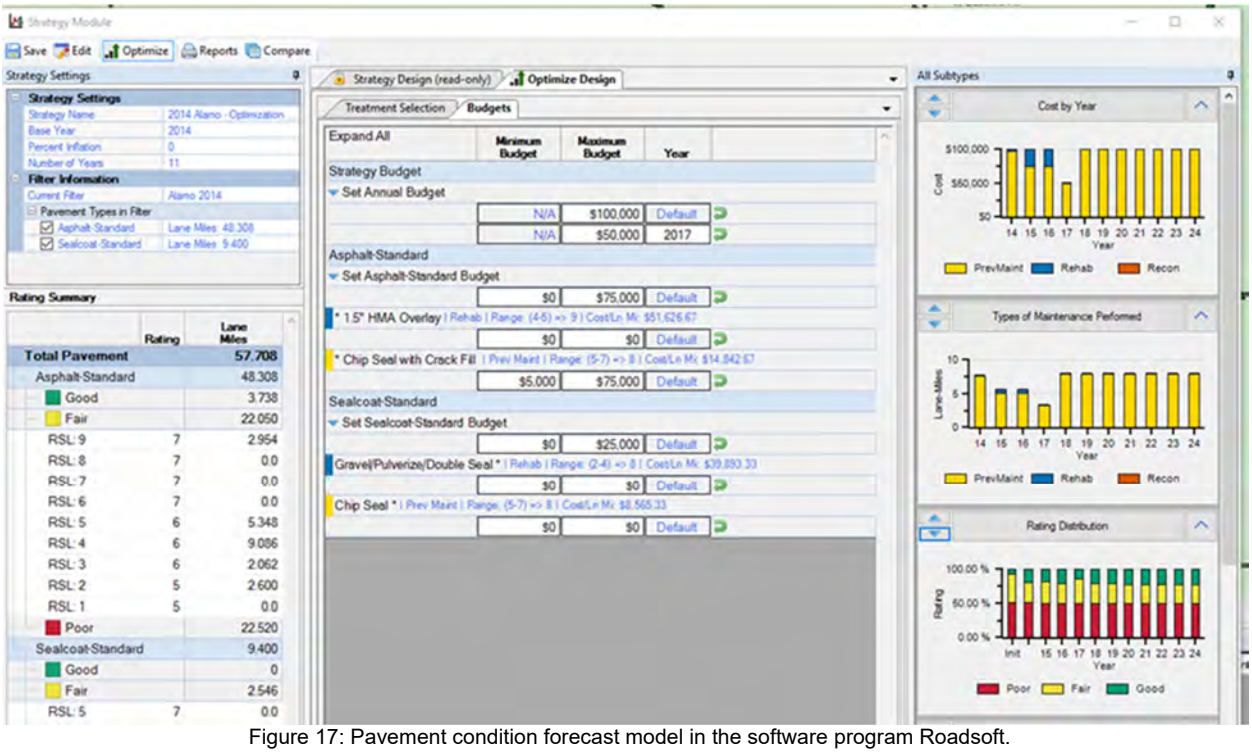


Figure 17: Pavement condition forecast model in the software program Roadsoft.

### *Paved County Primary Roads*

Table 2 illustrates the network-level model inputs for Roadsoft on the paved County Primary road network. Other pavement types in this network were neglected due to their small numbers relative to HMA pavements. The treatments outlined in Table 2 are the average treatment volume of planned projects scheduled to be completed in 2024-2026. See Appendix A of this plan for details on planned projects.

**Table 2: Roadsoft Modelled Trends, Planned Projects, and Gap Analysis for ECRC's Road Assets—Modelled Trends: Roadsoft Annual Work Program for the Paved County Primary Road Network Forecast**

| Treatment Name | Annual Miles of Treatment | Years of Life | Trigger-Reset |
|---|---|---|---|
| Crush, Shape, Overlay - 4" | 2 | 17 | 1-4, 10 |
| Overlay 2" | 5 | 12 | 2-5, 9 |
| Crack Seal | 20 | 1 | 6-8, 6-8 |
| Sealcoat + Fog | 58 | 4 | 5-8, 8 |
| Skin Patch & Seal | 4 | 8 | 4-5, 8 |
| Slurry Seal | 5 | 4 | 4-7, 8 |

Results from the Roadsoft network condition model for the County Primary roads are shown in Figure 18. The Roadsoft network analysis of ECRC’s planned projects from its currently

available budget does allow ECRC to reach its pavement condition goals given the projects planned for the next three years.

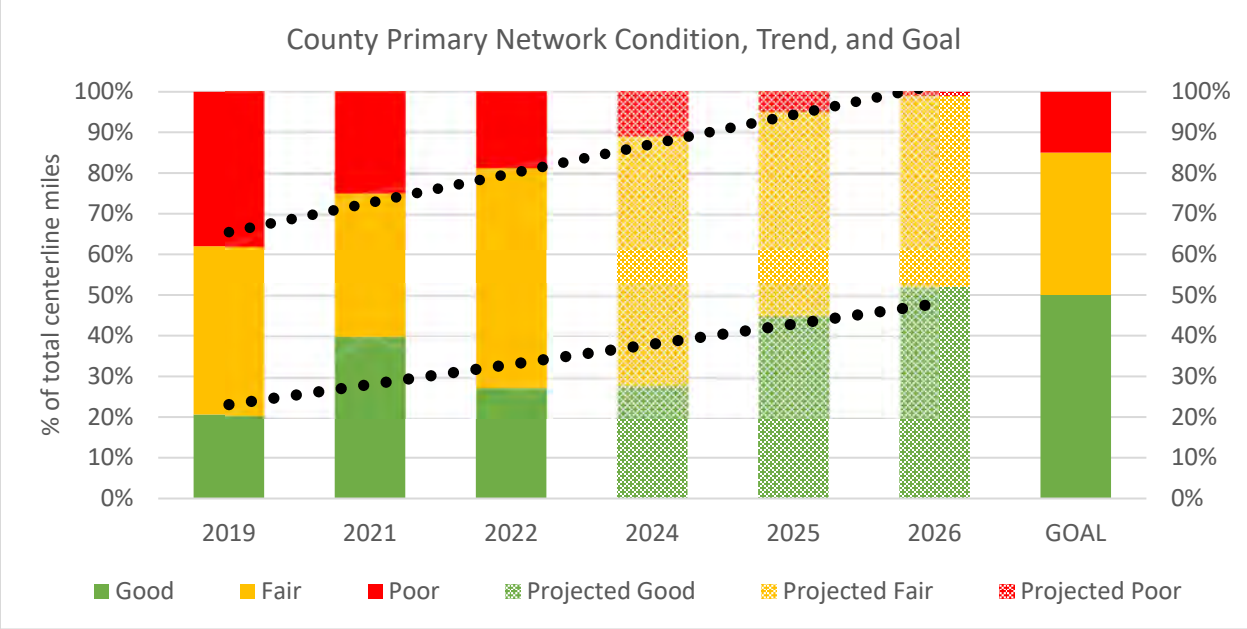



Figure 18: Forecast good/fair/poor changes to ECRC network condition from planned projects on the County Primary road network.

## Planned Projects 2024-2026

ECRC plans construction and maintenance projects several years in advance. A multi-year planning threshold is required due to the time necessary to plan, design, and finance construction and maintenance projects on the paved County Primary road network. This includes planning and programming requirements from state and federal agencies that must be met prior to starting a project and can include studies on environmental and archeological impacts, review of construction and design documents and plans, documentation of rights-of-way ownership, planning and permitting for storm water discharges, and other regulatory and administrative requirements.

Per PA 499 of 2002 (later amended by PA 199 of 2007), road projects for the upcoming three years are required to be reported annually to the TAMC. Planned projects represent the best estimate of future activity; however, changes in design, funding, and permitting may require ECRC to alter initial plans. Project planning information is used to predict the future condition of the road networks that ECRC maintains. The *1. Pavement Assets*: *Modelled Trends* section of this plan provides a detailed analysis of the impact of the proposed projects on their respective road networks.

For 2024-2026, ECRC plans to do the following projects:

### *Paved County Primary Projects*

ECRC is currently planning the construction and maintenance projects listed in Appendix A for the paved County Primary road network. The locations of these projects are shown in Figure 20. The total cost of these projects is approximately $18,000,000.

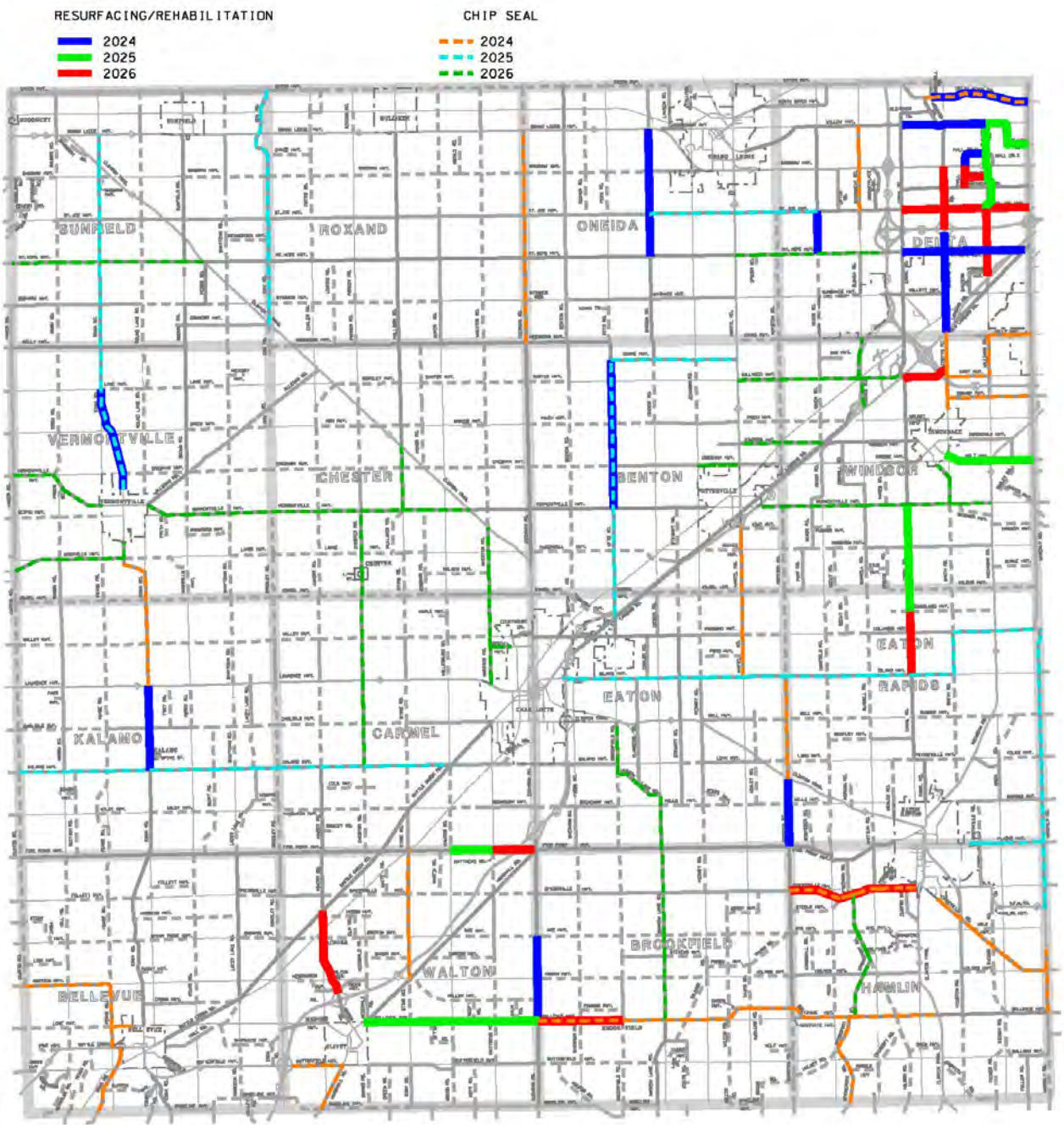



Figure 20: Map showing Primary Road projects planned for 2024-2026.

# Gap Analysis

The current funding levels that ECRC receives appear to be sufficient to meet the short term goals for the paved County Primary road network. However, with inflation and vehicle fuel efficiency improvements, it is expected this will not be the case in the long term.

### *Roadsoft Pavement Condition Forecast for the Paved County Primary*

ECRC used Roadsoft to forecast the necessary construction and maintenance work for meeting agency goals on the paved County Primary road network. Table 3 illustrates the network-level model inputs used for this simulation. Full model inputs and outputs are included in Appendix D.

**Table 3: Roadsoft Modelled Trends, Planned Projects, and Gap Analysis for ECRC's Road Assets—Pavement Condition Forecast and Gap Analysis: Roadsoft Annual Work Program for Paved County Primary Road Network Forecast**

| Pavement Condition Forecast | | | |
|---|---|---|---|
| **Treatment Name** | **Annual Miles of Treatment** | **Years of Life** | **Trigger-Reset** |
| Crush, Shape, Overlay - 4" | 2 | 17 | 1-4, 10 |
| Overlay 2" | 5 | 12 | 3-4, 9 |
| Crack Seal | 20 | 1 | 6-8, 6-8 |
| Sealcoat + Fog | 58 | 4 | 5-7, 8 |
| Skin Patch & Seal | 4 | 8 | 4-5, 8 |
| Slurry Seal | 5 | 4 | 4-7, 8 |
| **Additional Work Necessary to Overcome Deficit** | | | |
| **Treatment** | **Annual Miles of Treatment** | **Years of Life** | **Trigger-Reset** |
| Crush, Shape, Overlay - 4" | 0 | 17 | 7–7 |
| Overlay 2" | 4 | 12 | 5, 6-8 |
| Crack Seal | 0 | 1 | 3, 4-9 |
| Sealcoat + Fog | 0 | 4 | 1, 2, 3-10 |
| Skin Patch & Seal | 0 | 8 | |
| Slurry Seal | 0 | 4 | |

# 2. FINANCIAL RESOURCES

Public entities must balance the quality and extent of services they can provide with the tax resources provided by citizens and businesses, all while maximizing how efficiently funds are used. ECRC will overview its general expenditures and financial resources currently devoted to pavement maintenance and construction. This financial information is not intended to be a full financial disclosure or a formal report. Michigan agencies are required to submit an Act 51 Report to the Michigan Department of Transportation each year; this is a full financial report that outlines revenues and expenditures. This report can be obtained on our website at https://eatoncountyroad.com/finance/ or by request submitted to our agency contact (listed in this plan).

## County Primary Network

ECRC has historically spent $2,000,000 - $6,000,000 annually on pavement-related projects. Over the next three years, ECRC plans to spend $18,000,000 on County Primary-network projects consisting of, but not limited to, reconstruction, overlay, culvert replacement, and preventive maintenance. Spending on projects depends on revenue from Michigan Transportation Fund (MTF), and federal/state programs.

# 3. RISK OF FAILURE ANALYSIS

Transportation infrastructure is designed to be resilient. The system of interconnecting roads and bridges maintained by ECRC provides road users with multiple alternate options in the event of an unplanned disruption of one part of the system. There are, however, key links in the transportation system that may cause significant inconvenience to users if they are unexpectedly closed to traffic. Figure 21 illustrates the key transportation links in ECRC's road network, including those that meet the following types of situations:

- **Geographic divides:** Areas where a geographic feature (river, lake, mountain or limited access road) limits crossing points of the feature
- **Emergency alternate routes for high-volume roads:** Roads which are routinely used as alternate routes for high volume roads or roads that are included in an emergency response plan

- **Limited access areas:** Roads that serve remote or limited access areas that result in long detours if closed
- **Main access to key commercial districts:** Areas where large number or large size business will be significantly impacted if a road is unavailable.

Our road network includes the following critical assets: All Primary roads and bridges (see Figure 21).

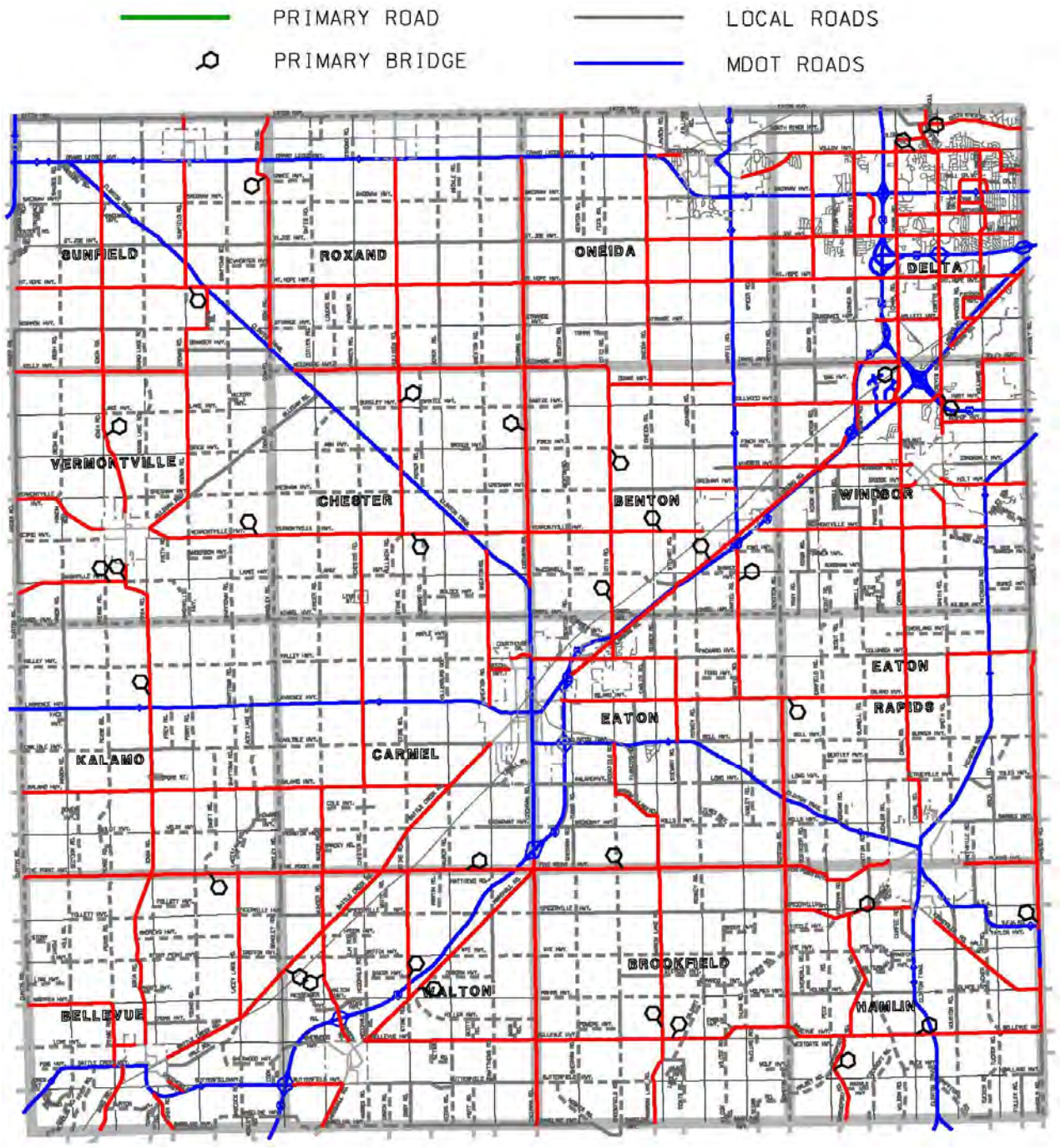



Figure 21: Key transportation links in ECRC's road network

# 4. COORDINATION WITH OTHER ENTITIES

An asset management plan provides significant value for infrastructure owners because it serves as a platform to engage other infrastructure owners using the same shared right of way space. ECRC communicates with both public and private infrastructure owners to coordinate work in the following ways:

ECRC coordinates with local municipalities on projects that span through different jurisdictions as well as non-motorized funding grants.

ECRC has acted as the Act 51 grant recipient for non-motorized path constructions by Thornapple Trail Association and Delta Charter Township. Acting as a pass-through grant recipient has provided these organizations and agencies funding opportunities to construct non-motorized segments that would not otherwise be eligible for Federal Transportation Funds.

ECRC also coordinates with several utility companies in all townships. Infrastructure owners are sent project locations in advance of construction to provide time for them to be relocated if necessary. When a utility has planned projects that will disrupt transportation services or cause damage to existing pavements, mitigation measures are proposed to minimize the impacts. The ECRC also does not allow utilities to open cut a roadway while asphalt plants are closed, to minimize disruptions and damages to traveled ways.

# APPENDIX A: 2023-2026 PAVED COUNTY PRIMARY ROAD PLANNED PROJECTS

Eaton County Road Commission

2024 - 2026 Planned Primary Road Projects

| Year | Road | From | To | Miles | Township | Treatment |
|---|---|---|---|---|---|---|
| 2024 | Cochran Rd | Bellevue Hwy | Nye Hwy | 2.00 | Brookfield | Crush, Shape, Overlay - 3" |
| 2024 | Nixon Rd | Mt. Hope Hwy | St. Joe Hwy | 1.01 | Delta | Crush, Shape, Overlay - 3" |
| 2024 | Royston Rd | Five Point Hwy | Clinton Trl | 1.59 | Eaton Rapids | Crush, Shape, Overlay - 3" |
| 2024 | Creyts Rd | Lansing Rd | I-496 RAMP | 2.27 | Delta | Mill & Overlay - 2" |
| 2024 | Otto Rd | Vermontville Hwy | Doane Hwy | 3.42 | Benton | Overlay 2" w/ Wedge |
| 2024 | Ionia Rd | Kalamo Hwy | Lawrence Hwy | 1.99 | Kalamo | Overlay 2" w/ Wedge |
| 2024 | Oneida Rd | Mt. Hope Hwy | St. Joe Hwy | 1.00 | Oneida | Overlay 2" w/ Wedge |
| 2024 | Oneida Rd | St. Joe Hwy | Grand Ledge Hwy | 2.00 | Oneida | Overlay 2" w/ Wedge |
| 2024 | Ionia Rd | City/Twp Line | Lake Hwy | 2.46 | Vermontville | Overlay 2" w/ Wedge |
| 2024 | Assyria Hwy | Curtis Rd | Assyria/Pease Cutoff | 1.93 | Bellevue | Sealcoat + Fog |
| 2024 | Assyria Hwy curve | Pease Rd | Assyria Hwy | 0.15 | Bellevue | Sealcoat + Fog |
| 2024 | Love Hwy | Pease Rd | Attribute Change | 0.50 | Bellevue | Sealcoat + Fog |
| 2024 | Pease Rd | Battle Creek Hwy | Assyria/Pease Cutoff | 1.40 | Bellevue | Sealcoat + Fog |
| 2024 | Sand Rd | County Line | Battle Creek Rd | 1.66 | Bellevue | Sealcoat + Fog |
| 2024 | Hartel Rd | Kinsel Hwy | King Hwy | 1.50 | Benton | Sealcoat + Fog |
| 2024 | Bellevue Hwy | Cochran Rd | Royston Rd | 6.10 | Brookfield | Sealcoat + Fog |
| 2024 | Broadbent Rd | St. Joe Hwy | Willow Hwy | 2.00 | Delta | Sealcoat + Fog |
| 2024 | Delta River Dr | Webster Rd | Waverly Rd | 2.46 | Delta | Sealcoat + Fog |
| 2024 | Hartel Rd | King Hwy | Hartel/I69 | 0.04 | Eaton | Sealcoat + Fog |
| 2024 | Hartel Rd | Island Hwy | Kinsel Hwy | 2.01 | Eaton | Sealcoat + Fog |
| 2024 | Royston Rd | Clinton Trl | Island Hwy | 2.43 | Eaton Rapids | Sealcoat + Fog |
| 2024 | Bellevue Hwy | Royston Rd | Clinton Trl | 3.54 | Hamlin | Sealcoat + Fog |
| 2024 | Kinneville Rd | Waverly Rd | City/Twp Line | 2.89 | Hamlin | Sealcoat + Fog |
| 2024 | Spicerville Hwy | Royston Rd | West St | 3.05 | Hamlin | Sealcoat + Fog |
| 2024 | Springport Rd | County Line | Bellevue Hwy | 2.16 | Hamlin | Sealcoat + Fog |
| 2024 | Waverly Rd | Bellevue Rd | VFHwy | 1.50 | Hamlin | Sealcoat + Fog |
| 2024 | Ionia Rd | Lawrence Hwy | Kinsel Hwy | 2.03 | Kalamo | Sealcoat + Fog |
| 2024 | Cochran Rd | Needmore Hwy | Grand Ledge Hwy | 5.01 | Oneida | Sealcoat + Fog |
| 2024 | Ionia Rd | Kinsel Hwy | Nashville Hwy | 1.34 | Vermontville | Sealcoat + Fog |
| 2024 | Butterfield Hwy | M78/I69 | Marshall Rd | 1.20 | Walton | Sealcoat + Fog |
| 2024 | Marshall Rd | Old U27 N | Main St | 1.14 | Walton | Sealcoat + Fog |
| 2024 | Stine Rd | Marshall Rd | Five Point Hwy | 3.06 | Walton | Sealcoat + Fog |
| 2024 | Bishop Hwy | Creyts Rd | Waverly Rd | 2.00 | Windsor | Sealcoat + Fog |
| 2024 | Creyts Rd | City/Twp Line | Lansing Rd | 1.74 | Windsor | Sealcoat + Fog |
| 2024 | Doyle Rd | Hart Hwy | Dead End or Start | 0.12 | Windsor | Sealcoat + Fog |
| 2024 | Hart Hwy | Creyts Rd | Williams Rd | 1.00 | Windsor | Sealcoat + Fog |
| 2024 | Jolly Rd | Williams Rd | Waverly Rd | 1.00 | Windsor | Sealcoat + Fog |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2024 | Williams Rd | Jolly Rd | Hart Hwy | 0.96 | Windsor | Sealcoat + Fog |
| 2025 | Holt Hwy | City/Twp Line | Waverly Rd | 2.06 | Windsor | Crush, Shape, Overlay - 3" |
| 2025 | Bellevue Hwy | Marshall Rd | Matthews Rd | 3.00 | Walton | Overlay 2" w/ Wedge |
| 2025 | Canal Rd | Kingsland Hwy | Vermontville Hwy | 2.52 | Windsor | Overlay 2" w/ Wedge |
| 2025 | Doane Hwy | Otto Rd | Hartel Rd | 2.98 | Benton | Sealcoat + Fog |
| 2025 | Otto Rd | Lansing Rd | Doane Hwy | 6.04 | Benton | Sealcoat + Fog |
| 2025 | Kalamo Hwy | Bradley Rd | Maurer Rd | 4.06 | Carmel | Sealcoat + Fog |
| 2025 | St Joe Hwy | Oneida Rd | Hartel Rd | 2.00 | Delta | Sealcoat + Fog |
| 2025 | Island Hwy | City/Twp Line | Royston Rd | 5.23 | Eaton | Sealcoat + Fog |
| 2025 | Columbia Hwy | Smith Rd | Waverly Rd | 1.90 | Eaton Rapids | Sealcoat + Fog |
| 2025 | Island Hwy | Royston Rd | Smith Rd | 3.97 | Eaton Rapids | Sealcoat + Fog |
| 2025 | Plains Rd | City/Twp Line | Waverly Rd | 1.74 | Eaton Rapids | Sealcoat + Fog |
| 2025 | Smith Rd | Island Hwy | Columbia Hwy | 1.00 | Eaton Rapids | Sealcoat + Fog |
| 2025 | Waverly Rd | Plains Rd | Columbia Rd | 5.02 | Eaton Rapids | Sealcoat + Fog |
| 2025 | Vfw Hwy | Vfw Hwy | Waverly Rd | 0.06 | Hamlin | Sealcoat + Fog |
| 2025 | Waverly Rd | Vfw Hwy | Plains Rd | 1.53 | Hamlin | Sealcoat + Fog |
| 2025 | Kalamo Hwy | Curtis Rd | Bradley Rd | 6.10 | Kalamo | Sealcoat + Fog |
| 2025 | Dow Rd | Clinton Trl | Eaton Hwy | 5.70 | Roxand | Sealcoat + Fog |
| 2025 | Ionia Rd | Lake Hwy | Grand Ledge Hwy | 6.00 | Vermontville | Sealcoat + Fog |
| 2026 | Ainger Rd | City/Twp Line | Battle Creek Hwy | 2.78 | Walton | Crush, Shape, Overlay - 3" |
| 2026 | Billwood Hwy | Canal Rd | Creyts Rd | 1.09 | Windsor | Crush, Shape, Overlay - 5" |
| 2026 | Bellevue Hwy | Bellevue Hwy | Brookfield Rd | 2.00 | Brookfield | Overlay 2" w/ Wedge |
| 2026 | Canal Rd | Island Hwy | Kingsland Hwy | 1.50 | Eaton Rapids | Overlay 2" w/ Wedge |
| 2026 | Spicerville Hwy | Royston Rd | West St | 3.05 | Hamlin | Overlay 2" w/ Wedge |
| 2026 | Greenfield Hwy | City/Twp Line | Butterfield Hwy | 0.51 | Bellevue | Sealcoat + Fog |
| 2026 | Ionia Rd | Baseline Dr | Butterfield Hwy | 1.00 | Bellevue | Sealcoat + Fog |
| 2026 | Billwood Hwy | Hartel Rd | Royston Rd | 1.00 | Benton | Sealcoat + Fog |
| 2026 | Gresham Hwy | Hartel Rd | 1 Mile West | 0.91 | Benton | Sealcoat + Fog |
| 2026 | Vermontville Hwy | City/Twp Line | Royston Rd | 0.48 | Benton | Sealcoat + Fog |
| 2026 | Windsor Hwy | Hartel Rd | CN RR | 0.98 | Benton | Sealcoat + Fog |
| 2026 | Narrow Lake Rd | Bellevue Hwy | Five Point Hwy | 4.06 | Brookfield | Sealcoat + Fog |
| 2026 | Chester Rd | Kalamo Hwy | Kinsel Hwy | 3.97 | Carmel | Sealcoat + Fog |
| 2026 | Chester Rd | Kinsel Hwy | Vermontville Hwy | 2.01 | Chester | Sealcoat + Fog |
| 2026 | Mulliken Rd | Vermontville Hwy | Clinton Trl | 1.50 | Chester | Sealcoat + Fog |
| 2026 | Vermontville Hwy | Bradley Rd | Clinton Trl | 4.64 | Chester | Sealcoat + Fog |
| 2026 | Mt Hope Hwy | Royston Rd | Bridge Approach | 2.54 | Delta | Sealcoat + Fog |
| 2026 | Brookfield Rd | Narrow Lake Rd | Clinton Trl | 1.25 | Eaton | Sealcoat + Fog |
| 2026 | Narrow Lake Rd | Five Point Hwy | Brookfield Rd | 2.44 | Eaton | Sealcoat + Fog |
| 2026 | Springport Rd | Bellevue Hwy | Eaton St | 3.00 | Hamlin | Sealcoat + Fog |
| 2026 | Mt Hope Hwy | Hartel Rd | Royston Rd | 1.00 | Oneida | Sealcoat + Fog |
| 2026 | Mt Hope Hwy | County Line | Clinton Trl | 4.51 | Sunfield | Sealcoat + Fog |
| 2026 | Ionia Rd | Nashville Hwy | Orchard Rd | 0.41 | Vermontville | Sealcoat + Fog |
| 2026 | Nashville Hwy | Curtis Rd | Ionia Rd | 2.62 | Vermontville | Sealcoat + Fog |
| 2026 | Vermontville Hwy | Hager Rd | Bradley Rd | 5.37 | Vermontville | Sealcoat + Fog |
| 2026 | Ainger Rd | City/Twp Line | Battle Creek Hwy | 2.78 | Walton | Sealcoat + Fog |
| 2026 | Billwood Hwy | Royston Rd | Canal Rd | 2.88 | Windsor | Sealcoat + Fog |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2026 | Guinea Rd | Lansing Rd | Billwood Hwy | 0.68 | Windsor | Sealcoat + Fog |
| 2026 | Guinea Rd | Billwood Hwy | Davis Hwy | 0.96 | Windsor | Sealcoat + Fog |
| 2026 | Smith Rd | Vermontville Hwy | City/Twp Line | 1.03 | Windsor | Sealcoat + Fog |
| 2026 | Vermontville Hwy | Royston Rd | Michigan Rd | 4.92 | Windsor | Sealcoat + Fog |
| 2026 | Windsor Hwy | Royston | Lansing Rd | 0.95 | Windsor | Sealcoat + Fog |

# APPENDIX B

# A Quick Check of Your Highway Network Health

*By Larry Galehouse, Director, National Center for Pavement Preservation*
*and*
*Jim Sorenson, Team Leader, FHWA Office of Asset Management*

Historically, many highway agency managers and administrators have tended to view their highway systems as simply a collection of projects. By viewing the network in this manner, there is a certain comfort derived from the ability to match pavement actions with their physical/functional needs. However, by only focusing on projects, opportunities for strategically managing entire road networks and asset needs are overlooked. While the "bottom up" approach is analytically possible, managing networks this way can be a daunting prospect. Instead, road agency administrators have tackled the network problem from the "top down" by allocating budgets and resources based on historical estimates of need. Implicit in this approach, is a belief that the allocated resources will be wisely used and prove adequate to achieve desirable network service levels.

Using a quick checkup tool, road agency managers and administrators can assess the needs of their network and other highway assets and determine the adequacy of their resource allocation effort. A quick checkup is readily available and can be usefully applied with minimum calculations.

It is essential to know whether present and planned program actions (reconstruction, rehabilitation, and preservation) will produce a net improvement in the condition of the network. However, before the effects of any planned actions on the highway network can be analyzed, some basic concepts should be considered.

Assume every lane-mile segment of road in the network was rated by the number of years remaining until the end of life (terminal condition). Remember that terminal condition does not mean a failed road. Rather, it is the level of deterioration that management has set as a minimum operating condition for that road or network. Consider the rated result of the current network condition as shown in Figure 1.

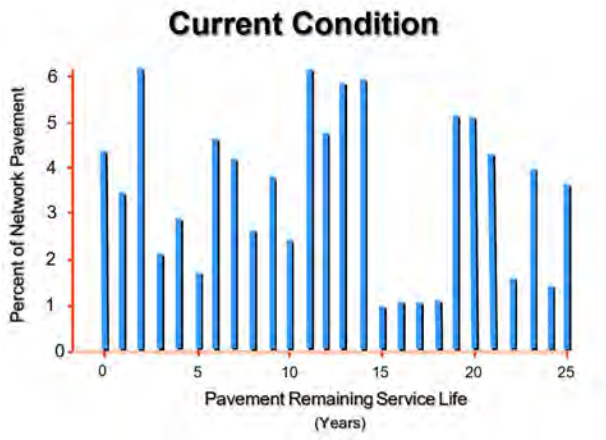



Figure 1 – Current Condition

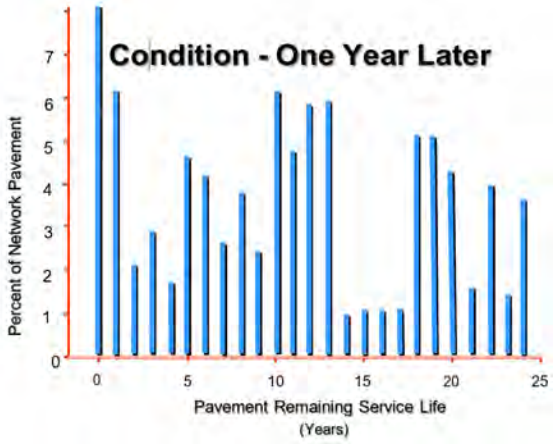



Figure 2 – Condition 1-Year Later

If no improvements are made for one year, then the number of years remaining until the end of life will decrease by one year for each road segment, except for those stacked at zero. The zero- stack will increase significantly because it maintains its previous balance and also becomes the recipient of those roads having previously been stacked with one year remaining. Thus, the entire network will age one year to the condition shown in Figure 2, with the net lane-miles in the zero stack raised from 4% to 8% of the network.

Some highway agencies still subscribe to the old practice of assigning their highest priorities to the reconstruction or rehabilitation of the worst roads. This practice of "worst first", i.e., continually addressing only those roads in the zero-stack, is a proven death spiral strategy because reconstruction and rehabilitation are the most expensive ways to maintain or restore serviceability. Rarely does sufficient funding exist to sustain such a strategy.

The measurable loss of pavement life can be thought of as the network's total lane-miles multiplied by 1 year, i.e., lane-mile-years. Consider the following quantitative illustration. Suppose your agency's highway network consisted of 4,356 lane-miles. Figure 3 shows that without intervention, it will lose 4,356 lane-mile-years per year.

**Agency Highway Network = 4,356 lane miles**

*Each year the network will lose*

**4,356 lane-mile-years**

Figure 3 – Network Lane Miles

To offset this amount of deterioration over the entire network, the agency would need to annually perform a quantity of work equal to the total number of lane-mile-years lost just to maintain the status quo. Performing work which produces fewer than 4,356 lane-mile-years would lessen the natural decline of the overall network, but still fall short of maintaining the

status quo. However, if the agency produces more than 4,356 lane-mile-years, it will improve the network.

In the following example, an agency can easily identify the effect of an annual program consisting of reconstruction, rehabilitation, and preservation projects on its network. This assessment involves knowing the only two components for reconstruction and rehabilitation projects: lane-miles and design life of each project fix. Figure 4 displays the agency's programmed activities for reconstruction and Figure 5 displays it for rehabilitation.

**Reconstruction Evaluation**

Projects this Year = 2

| Project | Design Life | Lane Miles | Lane Mile Years | Lane Mile Cost | Total Cost |
|---|---|---|---|---|---|
| No. 1 | 25 yrs | 22 | 550 | $463,425 | $10,195,350 |
| No. 2 | 30 yrs | 18 | 540 | $556,110 | $10,009,980 |
| | **Total** | = | **1,090** | | $20,205,330 |

Figure 4 - Reconstruction

**Rehabilitation Evaluation**

Projects this Year = 3

| Project | Design Life | Lane Miles | Lane Mile Years | Lane Mile Cost | Total Cost |
|---|---|---|---|---|---|
| No. 10 | 18 yrs | 22 | 396 | $263,268 | $5,791,896 |
| No. 11 | 15 yrs | 28 | 420 | $219,390 | $6,142,920 |
| No. 12 | 12 yrs | 32 | 384 | $115,848 | $3,707,136 |
| | **Total** | = | **1,200** | | $15,641,952 |

Figure 5 – Rehabilitation

When evaluating pavement preservation treatments in this analysis, it is appropriate to think in terms of "extended life" rather than design life. The term design life, as used in the reconstruction and rehabilitation tables, relates better to the new pavement's structural adequacy to handle repetitive loadings and environmental factors. This is not the goal of pavement preservation. Each type of treatment/repair has unique benefits that should be targeted to the specific mode of pavement deterioration. This means that life extension depends on factors such as type and severity of distress, traffic volume, environment, etc. Figure 6 exhibits the agency's programmed activities for preservation.

**Preservation Evaluation**

| Project | Life Extension | Lane Miles | Lane Mile Years | Lane Mile Cost | Total Cost |
|---|---|---|---|---|---|
| No. 101 | 2 yrs | 12 | 24 | $2,562 | $30,744 |
| No. 102 | 3 yrs | 22 | 66 | $7,743 | $170,346 |
| No. 103 | 5 yrs | 26 | 130 | $13,980 | $363,480 |
| No. 104 | 7 yrs | 16 | 112 | $29,750 | $476,000 |
| No. 105 | 10 yrs | 8 | 80 | $54,410 | $435,280 |
| **Total** | | = | **412** | | $1,475,850 |

Figure 6 – Preservation

To satisfy the needs of its highway network, the agency must accomplish 4,356 lane-mile-years of work per year. The agency's program will derive 1,090 lane-mile-years from reconstruction, 1,200 lane-mile-years from rehabilitation, and 412 lane-mile-years from pavement preservation, for a total of 2,702 lane-mile-years. Thus, these programmed activities fall short of the minimum required to maintain the status quo, and hence would contribute to a net loss in network pavement condition of 1,653 lane-mile-years. The agency's programmed tally is shown in Figure 7.

**Network Trend**

| Programmed Activity | Lane-Mile-Years | Total Cost |
|---|---|---|
| Reconstruction | 1,090 | $20,205,330 |
| Rehabilitation | 1,200 | $15,641,952 |
| Preservation | 412 | $1,475,850 |
| **Total** | **2,702** | **$37,323,132** |
| Network Needs (Loss) | ( - ) 4,356 | |
| **Deficit =** | **- 1,654** | |

Figure 7 – Programmed Tally

This exercise can be performed for any pavement network to benchmark its current trend. Using this approach, it is possible to see how various long-term strategies could be devised and evaluated against a policy objective related to total-network condition.

Once the pavement network is benchmarked, an opportunity exists to correct any shortcomings in the programmed tally. A decision must first be made whether to improve the

network condition or just to maintain the status quo. This is a management decision and system goal.

Continuing with the previous example, a strategy will be proposed to prevent further network deterioration until additional funding is secured.

The first step is to modify the reconstruction and rehabilitation (R&R) programs. An agonizing decision must be made about which projects to defer, eliminate, or phase differently with multi- year activity. In Figure 8, reductions are made in the R&R programs to recover funds for less costly treatments in the pavement preservation program. The result of this decision recovered slightly over $6 million.

**Program Modification**

| Programmed Activity | Lane-Mile-Years | Cost Savings |
|---|---|---|
| **Reconstruction** ***31 lane miles*** ~~( 40 lane-miles )~~ | ***820*** ~~( 1,090 )~~ | **$5,004,990** |
| **Rehabilitation** ***77 lane miles*** ~~( 82 lane-miles )~~ | ***1,125*** ~~( 1,200 )~~ | **$1,096,950** |
| **Pavement Preservation** ( 84 lane-miles ) | ( 412 ) | **0** |
| **Total =** | ***2,357*** **( 2,702 )** | **$6,101,940** |

Figure 8 – Revised R & R Programs

Modifying the reconstruction and rehabilitation programs has reduced the number of lane-mile- years added to the network from 2,702 to 2,357 lane-mile-years. However, using less costly treatments elsewhere in the network to address roads in better condition will increase the number of lane-mile-years added to the network. A palette of pavement preservation treatments, or mix of fixes, is available to address the network needs at a much lower cost than traditional methods.

Preservation treatments are only suitable if the right treatment is used on the right road at the right time. In Figure 9, the added treatments used include concrete joint resealing, thin hot-mix asphalt (HMA) overlay (≤ 1.5”), microsurfacing, chip seal, and crack seal. By knowing the cost per lane-mile and the treatment life-extension, it is possible to create a new strategy (costing $36,781,144) that satisfies the network need. In this example, the agency saved in excess of $500,000 from traditional methods (costing $37,323,132), while erasing the 1,653 lane-mile-year deficit produced by the initial program tally. Network Strategy

| Programmed Activity | | Lane Mile Years | Total Cost |
|---|---|---|---|
| Reconstruction | ( 31 lane-miles ) | 820 | $15,200,340 |
| Rehabilitation | ( 77 lane-miles ) | 1,125 | $14,545,002 |
| Pavement Preservation | (84 lane-miles) | 412 | $1,475,850 |
| Concrete Resealing | (4 years x 31 lane-miles) | 124 | $979,600 |
| Thin HMA Overlay | (10 years x 16 lane-miles) | 160 | $870,560 |
| Microsurfacing | (7 years x 44 lane-miles) | 308 | $1,309,000 |
| Chip Seal | (5 years x 79 lane-miles) | 395 | $1,104,420 |
| Crack Seal | (2 years x 506 lane-miles) | 1,012 | $1,296,372 |
| | Total = | 4,356 | $36,781,144 |

Figure 9 – New Program Tally

In a real-world situation, the highway agency would program its budget to achieve the greatest impact on its network condition. Funds allocated for reconstruction and rehabilitation projects must be viewed as investments in the infrastructure. Conversely, funds directed for preservation projects must be regarded as protecting and preserving past infrastructure investments.

Integrating reconstruction, rehabilitation, and preservation in the proper proportions will substantially improve network conditions for the taxpayer while safeguarding the highway investment.

# APPENDIX C: MEETING MINUTES VERIFYING PLAN ACCEPTANCE BY GOVERNING BODY

# B. BRIDGE ASSET MANAGEMENT PLAN

An attached bridge asset management plan follows.

# Eaton County Road Commission 2023 Bridge Asset Management Plan

A plan describing the Eaton County Road Commission's transportation assets and conditions

*Prepared by:*
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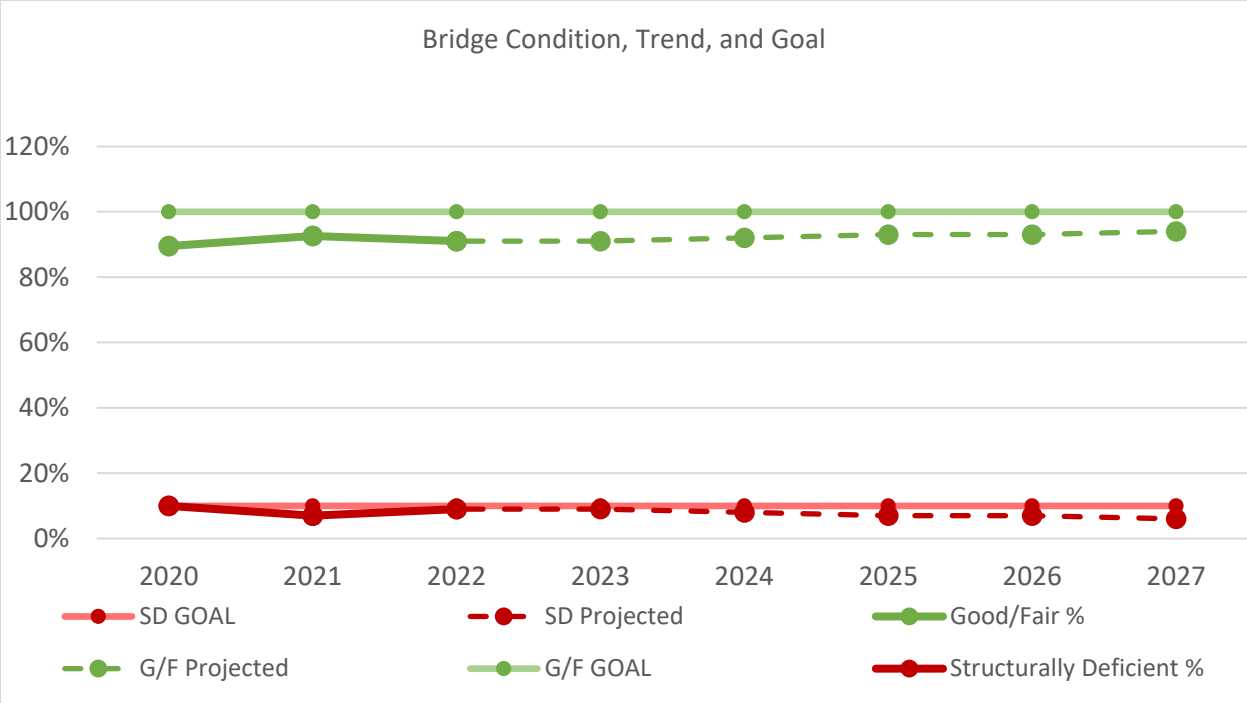
# EXECUTIVE SUMMARY

As conduits for commerce and connections to vital services, bridges are among the most important assets in any community along with other assets like roads, culverts, traffic signs, traffic signals, and utilities that support and affect the road network. The bridges maintained by the Eaton County Road Commission (ECRC), other road-related assets, and support systems are some of the most valuable and extensive public assets, all of which are publicly funded with taxes collected from ordinary citizens and businesses. The cost of building and maintaining bridges, their importance to society, and the investment made by taxpayers all place a high level of responsibility on local agencies to plan, build, and maintain the road and bridge network in an efficient and effective manner. This asset management plan is intended to report on how ECRC is meeting its obligations to maintain the bridges for which it is responsible.

This plan overviews ECRC's bridge assets and conditions and explains how ECRC works to maintain and improve the overall condition of those assets. These explanations can help answer:

- What kinds of bridge assets ECRC has in its jurisdiction and the different options for maintaining these assets.
- What tools and processes ECRC uses to track and manage bridge assets and funds.
- What condition ECRC's bridge assets are in compared to statewide averages.
- Why some bridge assets are in better condition than others and the path to maintaining and improving bridge asset conditions through proper planning and maintenance.
- How agency bridge assets are funded and where those funds come from.
- How funds are used, and the costs incurred during a bridge's normal life cycle.
- What condition ECRC can expect of its bridge assets if those assets continue to be funded at the current funding levels
- How changes in funding levels can affect the overall condition of all ECRC's bridge assets.

ECRC manages 95 bridges. A summary of its historical and current bridge conditions, projected trends, and goals can be seen in the figure, below:




An asset management plan is required by Michigan Public Act 325 of 2018, and this document represents fulfillment of some of ECRC's obligations towards meeting these requirements. This asset management plan also helps demonstrate ECRC's responsible use of public funds by providing elected and appointed officials as well as the general public with inventory and condition information of ECRC's bridge assets, and gives taxpayers the information they need to make informed decisions about investing in essential transportation infrastructure.

# INTRODUCTION

Asset management is defined by Public Act 325 of 2018 as "an ongoing process of maintaining, preserving, upgrading, and operating physical assets cost effectively, based on a continuous physical inventory and condition assessment and investment to achieve established performance goals". In other words, asset management is a process that uses data to manage and track assets, like roads and bridges, in a cost-effective manner using a combination of engineering and business principles. This process is endorsed by leaders in municipal planning and transportation infrastructure, including the Michigan Municipal League, County Road Association of Michigan, the Michigan Department of Transportation (MDOT), and the Federal Highway Administration (FHWA). The Eaton County Road Commission is supported in its use of asset management principles and processes by the Michigan Transportation Asset Management Council (TAMC), formed by the State of Michigan.

Asset management, in the context of this plan, ensures that public funds are spent as effectively as possible to maximize the condition of the bridges in the Eaton County Road Commission's road network. Asset management also provides a transparent decision-making process that allows the public to understand the technical and financial challenges of managing infrastructure with a limited budget.

The Eaton County Road Commission (ECRC) has adopted an "asset management" business process to overcome the challenges presented by having limited financial, staffing, and other resources while needing to meet safety standards and bridge users' expectations. ECRC is responsible for maintaining and operating 95 bridges.

This 2023 plan outlines how ECRC determines its strategy to maintain and upgrade bridge asset condition given agency goals, priorities of its bridge users, and resources provided. An updated plan is to be released approximately every three years to reflect changes in bridge conditions, finances, and priorities.

Questions regarding the use or content of this plan should be directed to Mathew Hannahs, P.E. at 1112 Reynolds Road, Charlotte, MI  48813or at (517) 543-1630 and/or Mhannahs@EatonCountyRoad.com. A copy of this plan can be accessed on the ECRC website at https://eatoncountyroad.com/about/.

Key terms used in this plan are defined in ECRC's comprehensive transportation asset management plan (also known as the "compliance plan") used for compliance with PA 325 or 2018.

Knowing the basic features of an asset class is a crucial starting point to understanding the rationale behind an asset management approach. The following primer provides an introduction to bridges.

# Bridge Primer

## *Bridge Types*

Bridges are structures that are used to carry a road, path, railroad, etc. over an obstacle such as a freeway or river. However, FHWA only recognizes bridges that span 20 feet or more as a bridge, so only those bridges are listed on the National Bridge Inventory (NBI), are eligible for State and Federal funding, and are included in this Asset Management Plan. Bridges with a span of less than 20 feet do not meet that criterion, so they are not on the NBI and are not included in this plan.



Figure 1: Girder bridge

Culverts can also meet the FHWA criteria for a bridge if those culverts are placed side by side and the outside edges of the farthest culverts are at least 20 feet apart. For example, three 6-foot culverts with one-foot between each culvert would be 20 feet outside to outside, so those 3 culverts would be defined as 1 bridge and would be tracked by the FHWA and be eligible for State and Federal funding. (Note: The Compliance Plan Appendix C contains a primer on culverts not defined as bridges.)

Bridge types are classified based on two features: design and material.

The most common bridge design is the **girder system** (Figure 1). With this design, the bridge deck transfers vehicle loads to girders (or beams) that, in turn, transfer the load to the piers or abutments (see Figure 6).



Figure 2: Slab bridge

A similar design that lacks girders (or beams) is a **slab bridge** (Figure 2 and see Figure 6). A slab bridge transfers the vehicle load directly to the abutments and, if necessary, piers.

**Truss bridges** consist of a support structure that is created when structural members are connected at joints to form interconnected triangles (Figure 4). Structural members normally consist of steel tubes or angles connected at joints with gusset plates. Although once quite common, the other bridge types are constructed far more often these days.



Figure 3: Truss bridge

Bridges are also constructed using three-sided pre-cast boxes or arch bridge (Figure 4) and other unique bridge designs.

Adding another layer of complexity to bridge typing is the primary construction materials used (Figure 5). Bridges are generally constructed from concrete, steel, pre-stressed concrete, or timber. Some historical bridges or bridge components in Michigan may have been constructed from stone or masonry.



Figure 4: Three-sided box bridge



Figure 5: Examples of common bridge construction materials used in Michigan

Bridge Condition

Michigan inspectors rate bridge condition on a 0-9 scale known as the NBI rating scale (see Table 1 for a summary of the NBI Rating scale). Elements of the bridge's superstructure, deck, and substructure receive a 9 if they are in excellent condition down to a 0 if they are in failed condition. A complete guide for Michigan bridge condition rating according to the NBI can be found in the MDOT Bridge Field Services' *Bridge Safety Inspection NBI Rating Guidelines* (https://www.michigan.gov/documents/mdot/BIR_Ratings_Guide_Combined_2017-10-30_606610_7.pdf).

| Table 1: Summary of the NBI Rating Scale | |
|---|---|
| **NBI Rating** | **General Condition** |
| 9-7 | Like new/good |
| 6-5 | Fair |
| 4-3 | Poor/serious |
| 2-0 | Critical/failed |

## *Bridge Treatments*

### *Replacement*

Replacement work is typically performed when a bridge is in poor condition (NBI rating of 4 or less) and will improve the bridge to good condition (NBI rating of 7 or more). The Local Bridge Program, a part of MDOT's Local Agency Program, defines bridge replacement as full replacement, which removes the entire bridge (superstructure, deck, and substructure-Figure 6) before re-building a bridge at the same location. The decision to perform a total replacement instead of rehabilitating the existing bridge components should be made based on a life-cycle cost analysis. Generally, replacement is selected if rehabilitation costs more than two-thirds of the cost of replacement. Replacement is generally the most expensive of the treatment options.

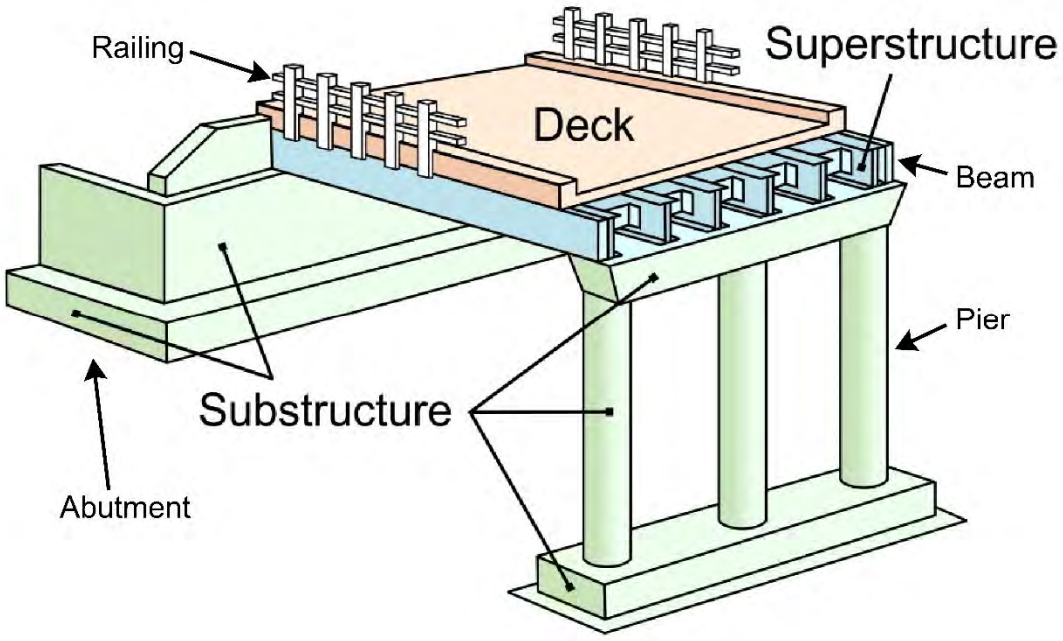



Figure 6: Diagram of basic elements of a bridge

Rehabilitation

Rehabilitation involves repairs that improve the existing condition and extend the service life of the structure and the riding surface. Most often, rehabilitation options are associated with bridges that have degraded beyond what can be fixed with preventive maintenance. Rehabilitation is typically performed on poor-rated elements (NBI rating of 4 or less) to improve them to fair or good condition (NBI rating of 5 or more). Rehabilitation can include superstructure replacement (removal and replacement of beams and deck) or deck replacement. While typically more expensive than general maintenance, rehabilitation treatments may be more cost-effective than replacing the entire structure when the substructure is in good or fair condition and scouring of the bridge footings has not occurred.

### *Preventive Maintenance*

The FHWA *Bridge Preservation Guide (2018)* defines preventive maintenance as "a strategy of extending service life by applying cost-effective treatments to bridge elements "[that] retard future deterioration and avoid large expenses in bridge rehabilitation or replacements."

Preventive maintenance work is typically done on bridges rated fair (NBI rating of 5 or 6) in order to slow the rate of deterioration and keep them from falling into poor condition.

- **Concrete deck overlay:** A concrete deck overlay involves removing and replacing the driving surface. Typically, this is done when the deck surface is poor (NBI rating is less than 5) and the underneath portion of the deck is at least fair (NBI rating greater than 4). A shallow or deep concrete overlay may be performed depending on the condition of the bottom of the deck. The MDOT *Bridge Deck Preservation* matrices provide more detail on concrete deck overlays (see https://www.michigan.gov/mdot/0,4616,7-151-9625_24768_24773---,00.html).

- **Deck repairs:** Deck repairs include three common techniques: HMA overlay with or without waterproof membranes, concrete patching, deck sealing, crack sealing, and joint repair/replacement. An HMA overlay with an underlying waterproof membrane can be placed on bridge decks with a surface rating of fair or lower (NBI of 5 or less) and with deficiencies that cover between 15 and 30 percent of the deck surface and deck bottom. An HMA overlay without a waterproof membrane should be used on a bridge deck with a deck surface and deck bottom rating of serious condition or lower (NBI rating of 3 or less) and with deficiencies that cover greater than 30 percent of the deck surface and bottom; this is considered a temporary holdover to improve ride quality when a bridge deck is scheduled to undergo major rehabilitation within five years. All HMA overlays need to be accompanied by an updated load rating. Patching of the concrete on a bridge deck is done in response to an inspector's work recommendation or when the deck surface is in good, satisfactory, or fair condition (NBI rating of 7, 6, or 5) with minor delamination and spalling.

  Deck sealers can be used to maintain a bridge deck in good or fair condition. Deck sealing should only be done when the bridge deck has surface rating of fair or better (NBI of 5 or more). Concrete sealers should only be used when the top and bottom surfaces of the deck are free from major deficiencies, cracks, and spalling. An epoxy overlay may be used when between 2 and 5 percent of the deck surface has delamination and spalls, but these deficiencies must be repaired prior to the overlay. Concrete crack sealing is an option to maintain concrete in otherwise good condition that has visible cracks with the potential of reaching the steel reinforcement. Crack sealing may be performed on concrete with a surface rating of good, satisfactory, or fair (NBIS rating of 7, 6, or 5) with minor surface spalling and delamination; it may also be performed in response to a work recommendation by an inspector who has determined that the frequency and size of the cracks require sealing.

- **Steel bearing repair/replacement:** Rather than sitting directly on the piers, a bridge superstructure is separated from the piers by bearings. Bearings allow for a certain degree of movement due to temperature changes or other forces. Repairing or replacing the bearings is considered preventive maintenance. Bridges with girders and the deck in at least fair condition (NBI of 5 or higher), but the bearings are in poor condition (NBI rating of 4 or less), are candidates for this maintenance activity.

- **Painting:** Re-painting a bridge structure can either be done in totality or in part. Total re-painting is done in response to an inspector's work recommendation or when the paint condition is in serious condition (NBI rating of 3 or less). Partial re-painting can either consist of zone re-painting, which is a preventive maintenance technique, or spot re-painting, which is scheduled maintenance (see below). Zone re-painting is used if less than 15 percent of the paint in a smaller area, or zone, has failed while the rest of the bridge is in good or fair condition.

- **Channel improvements:** Occasionally, it is necessary to make improvements to the waterway that flows underneath the bridge. Such channel improvements are driven by an inspector's work recommendation based on a hydraulic analysis or to remove vegetation, debris, or sediment from the channel and banks.

- **Scour countermeasures:** An inspection of the bridge footings and/or a hydraulic analysis may require a bridge to be categorized as scour critical and return a recommendation for scour countermeasures (see the *Risk Management* section of this plan for more information on scour).
- **Approach repaving:** A bridge approach is the transition area between the roadway and the bridge deck on each end of the bridge. Repaving the approach may be done in response to an inspector rates the approach pavement surface in poor condition (NBI rating of 4 or less), or when the bridge deck is replaced or rehabilitated.
- **Guardrail repair/replacement:** Guardrail is a safety feature designed to minimize the effects of lane departures. Repair or replacement of bridge guardrail should be done when a guardrail is missing or damaged, or it does not meet current safety guidelines.

### *Scheduled Maintenance*

Scheduled maintenance activities are those activities or treatments that are regularly scheduled and intended to maintain serviceability while reducing the rate of deterioration.

- **Superstructure washing:** Washing the superstructure or substructure may occur in response to an inspector's work recommendation or when salt-contaminated dirt and debris collected on the superstructure is causing corrosion or deterioration by trapping moisture.
- **Drainage system cleanout/repair:** Keeping a bridge's drainage system clean and in good working order allows the bridge to shed water effectively. An inspector's work recommendation may indicate drainage system cleanout/repair.
- **Spot painting:** Spot painting is a form of partial bridge painting. This scheduled maintenance technique involves painting a small portion of a bridge. Generally, this is done in response to an inspector's work recommendation.
- **Slope repair/reinforcement:** The ground on either side of the bridge that slopes down toward the channel is called the slope. There may be times when slope repair is needed, such as if the slope has eroded, if the slope has significant areas of distress or failure, if the slope has settled, or if the slope is in fair or poor condition (NBI rating of 5 or less). Reinforcing the slope is one repair option, such as installing riprap, which are large rocks or boulders placed along the slopes. Riprap protects the stability of slopes and channel banks when erosion threatens the surface.
- **Vegetation control and debris removal:** Keeping the area around a bridge structure free of vegetation and debris safeguards the bridge structure from these potentially damaging forces. Vegetation control should be done in response to an inspector's work recommendation, when vegetation traps moisture on structural elements, or when vegetation is growing from bridge joints or cracks. Debris in the water channel can also cause damage to the structure, so it should be removed in response to an inspector's work recommendation, or when vegetation, debris, or sediment accumulates on the structure or channel.

# 1. BRIDGE ASSETS

ECRC seeks to implement an asset management program for its bridge structures. This program balances the decision to perform reconstruction, rehabilitation, preventive maintenance, scheduled maintenance, or new construction, with ECRC's bridge funding to maximize the useful service life and to ensure the safety of the local bridges under its jurisdiction. In other words, ECRC's bridge asset management program aims to preserve and/or improve the condition of its local bridge network within the means of its financial resources.

ECRC recognizes that limited funds are available for improving the bridge network. Since preservation strategies like preventive maintenance are generally a more effective use of these funds than costly alternative management strategies like major rehabilitation or replacement, ECRC seeks to identify those bridges that will benefit from a planned maintenance program while addressing those bridges that pose usability and/or safety concerns.

The ECRC's goals for its asset management program is the preservation and safety of its bridge network, extending its bridge assets' useful service life by maintaining bridges in good and fair condition, and reducing future maintenance costs. ECRC's goal is to have 92% or more of the agency's local bridges in fair to good condition and to have less than 10% classify as structurally deficient over its three-year plan.

Thus, ECRC's asset management plan objectives are:

- To establish the current condition of the county's bridges
- To develop a "mix of fixes" that will:
    - Program scheduled maintenance to slow deterioration of bridges in good condition
    - Implement selective corrective repairs or rehabilitation for degraded bridge elements to restore functionality
    - Identify and program those eligible bridges in need of replacement
- To identify available funding sources, such as:
    - Dedicated county resources
    - Township matching contributions
    - County funding through Michigan's Local Bridge Program
    - Opportunities to obtain other funding
- To prioritize the programmed actions within available funding limitations
- To preserve bridges currently rated fair (5) or higher in their current condition in order to extend their useful service life.

## Inventory

ECRC is responsible for 95 local bridges. Of those 95, 8 are concrete bridges, 21 are steel bridges, 44 are pre-stressed concrete bridges, and 21 are timber bridges. Table 2 summarizes ECRC's bridge assets by type, sizes by bridge type, and condition by bridge type. Additional inventory data, condition ratings, and proposed preventive maintenance actions for each bridge are contained in the tables in Appendixes 3, 4,

and 5. The 2022 condition data and maintenance actions are taken from the inspector's summary report (see Appendix 2).

### *Locations and Sizes*

Figure 7 illustrates the locations of bridge assets maintained by ECRC. Details about the locations and sizes of each individual asset can be found in ECRC's MiBRIDGE database. For more information, please refer to the agency contact listed in the *Introduction* of this bridge asset management plan.

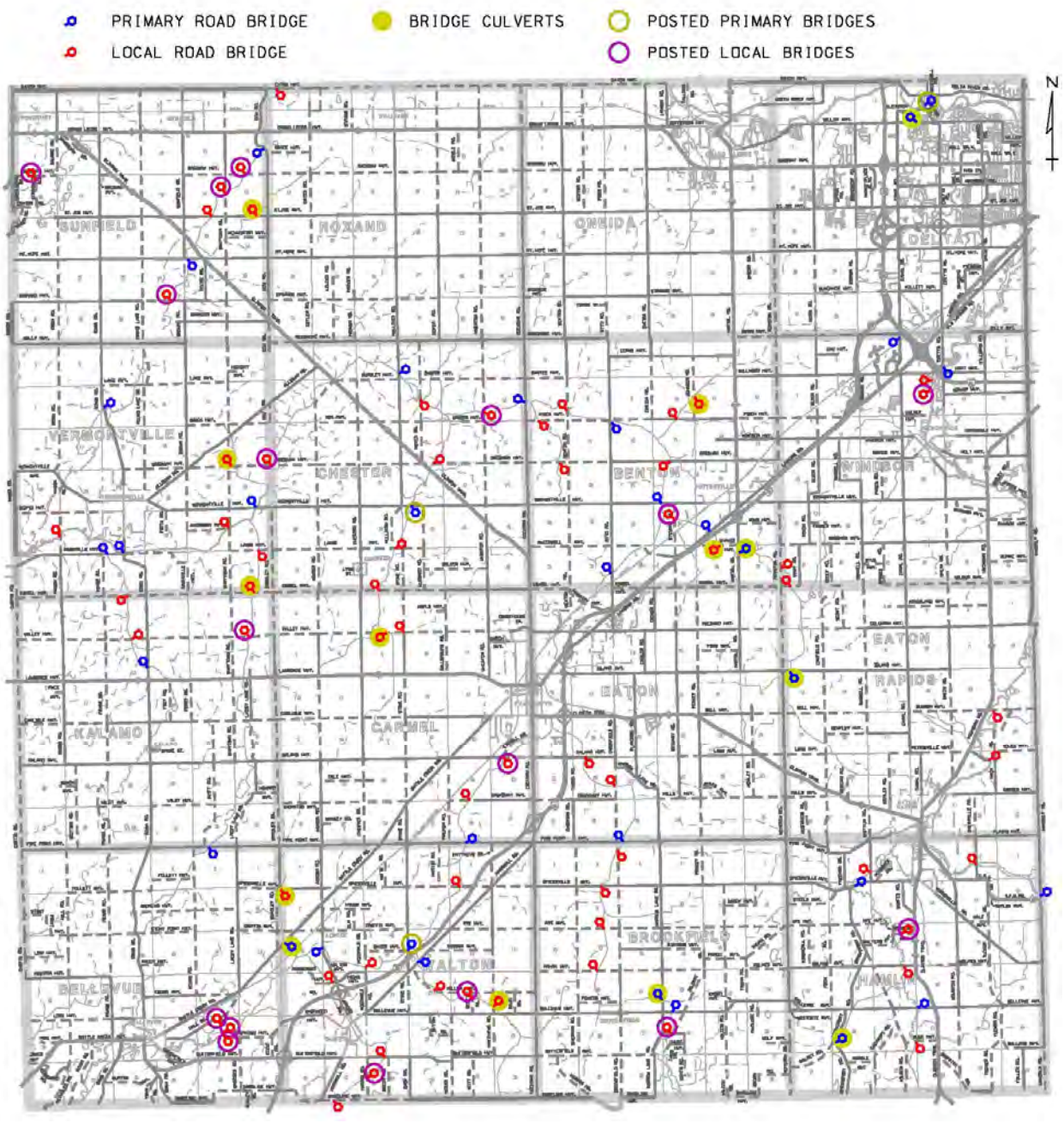



Figure 7: Map illustrating locations ECRC's of bridge assets

### *Condition*

ECRC evaluates its bridges according to the National Bridge Inspection Standards rating scale, with a rating of 9 to 7 being like new to good condition, a rating of 6 and 5 being fair condition, and a rating of 4 or lower being poor or serious/critical condition. The current condition of ECRC's bridge network is 51 (54%) are good, 35 (37%) are fair, and 9 (9%) are poor or lower.

Another layer of classification of ECRC's bridge inventory classifies 9 (9%) bridges as structurally deficient, 19 (20%) bridges as posted, and 1 (1%) bridges as closed. Structurally deficient bridges are those with a deck, superstructure, substructure, and/or culvert rated as "poor" according to the NBI rating scale, with a load-carrying capacity significantly below design standards, or with a waterway that regularly overtops the bridge during floods. Posted bridges are those that have declined in condition to a point where a restriction is necessary for what would be considered a safe vehicular or traffic load passing over the bridge; designating a bridge as "posted" has no influence on its condition rating. Closed bridges are those that are closed to all traffic due to its ability to carry a set minimum live load.

**Table 2: Bridge Assets by Type: Inventory, Size, and Condition**

| Bridge Type | Total Number of Bridges | Total Deck Area (sq ft) | Condition: Structurally Deficient, Posted, Closed | | | 2022 Condition | | |
|---|---|---|---|---|---|---|---|---|
| | | | Struct. Defic | Posted | Closed | Poor | Fair | Good |
| Aluminum – Culvert | 1 | 1,450 | 0 | 0 | 0 | 0 | 0 | 1 |
| Concrete – Box beam/girders - multiple | 1 | 2,451 | 0 | 0 | 0 | 0 | 1 | 0 |
| Concrete – Culvert | 5 | 9,048 | 0 | 0 | 0 | 0 | 0 | 5 |
| Concrete – Slab | 1 | 672 | 0 | 0 | 0 | 0 | 0 | 1 |
| Concrete – Tee beam | 1 | 807 | 0 | 0 | 0 | 0 | 1 | 0 |
| Prestressed concrete – Box beam/girders - multiple | 40 | 107,002 | 2 | 2 | 0 | 2 | 11 | 27 |
| Prestressed concrete – Box beam/girders - single/spread | 2 | 3,922 | 0 | 0 | 0 | 0 | 0 | 2 |
| Prestressed concrete – Multistringer | 1 | 4,088 | 0 | 0 | 0 | 0 | 0 | 1 |
| Prestressed concrete continuous – Box beam/girders – multiple | 1 | 3,487 | 0 | 0 | 0 | 0 | 0 | 1 |
| Steel – Box beam/girders - single/spread | 2 | 3,547 | 0 | 0 | 0 | 0 | 0 | 2 |
| Steel – Culvert | 8 | 5,924 | 0 | 0 | 0 | 0 | 4 | 4 |
| Steel – Multistringer | 10 | 15,860 | 5 | 6 | 0 | 5 | 4 | 1 |
| Steel continuous – Multistringer | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Timber – Multistringer | 1 | 1,199 | 1 | 0 | 1 | 1 | 0 | 0 |
| Timber – Other | 2 | 1,949 | 1 | 2 | 0 | 1 | 1 | 0 |
| Timber – Slab | 18 | 19,885 | 0 | 9 | 0 | 0 | 13 | 5 |
| **Total SD/Posted/Closed** | | | **9** | **19** | **1** | | | |
| **Total** | **95** | **181,291** | | | | **9** | **35** | **51** |
| **Percentage (%)** | | | **9%** | **20%** | **1%** | **9%** | **37%** | **54%** |

Statewide, MDOT's statistics for local agency bridges show that 14% are poor and 86% are good/fair, indicating that the ECRC has a lesser percentage of poor bridges compared to the statewide average for local agencies. Correspondingly, ECRC has 91% of its bridges in fair/good condition versus the statewide average of 86% for local agency bridges. Statewide, 97% of local agency bridge deck area classifies as structurally deficient compared to 9% of ECRC's bridge deck area.

## Goals

The goal of ECRC's asset management program is the preservation and safety of its bridge network; it also aims to extend the period that bridges remain in good and fair condition, thereby increasing their useful service life and reducing future maintenance costs.

Specifically, this goal translates into long-range goals of having 100% of its bridges rated fair/good and having less than 10% classify as structurally deficient within 15 years. These goals are juxtaposed with the historic and current condition and the projected trend in Figure 8.

Several metrics will be used to assess the effectiveness of this asset management program. ECRC will monitor and report the annual change in the number of its bridges rated fair/good (5 or higher) and the annual change in the number of its bridges classified as structurally deficient.

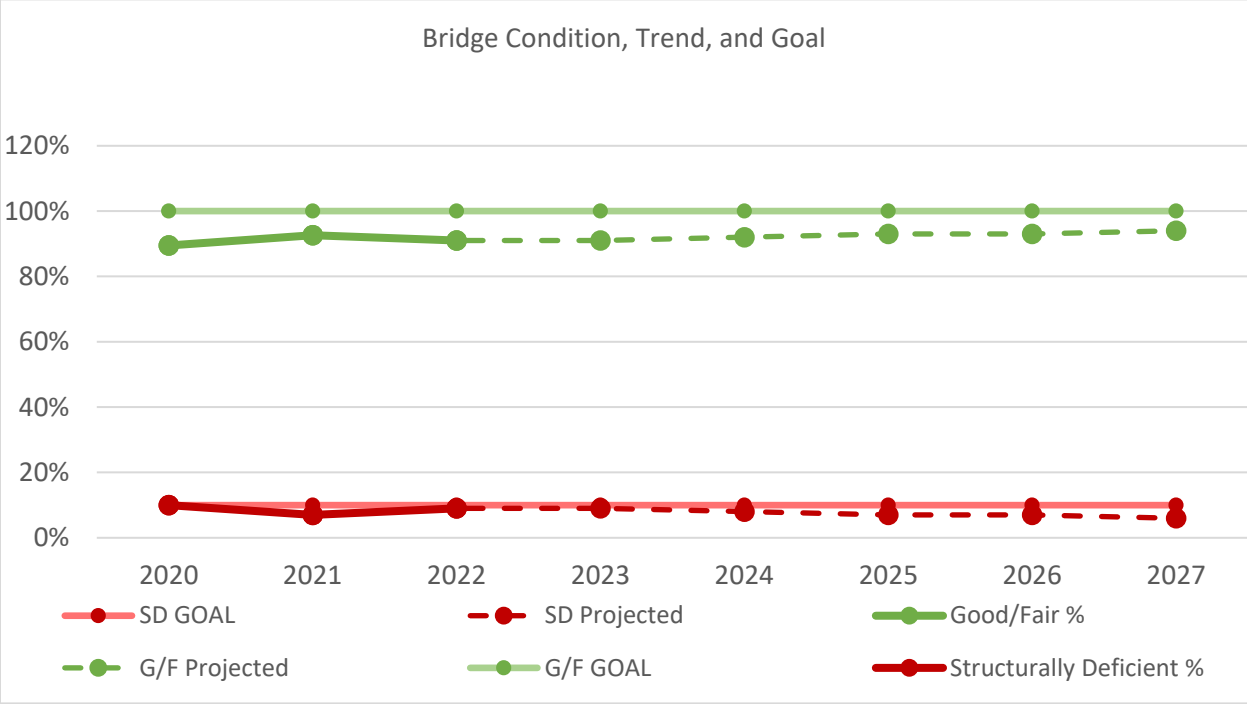



Figure 8: Progress tracking graph indicating ECRC's historic and current bridge conditions, projected trends, and goals.

Based on past inspection records and condition ratings, ECRC will establish a baseline of past performance by determining the average period of time that a bridge remains in good or fair condition. The performance measure will be the increased average amount of time a bridge is in the good or fair

condition status after implementation of the asset management strategy when compared to the baseline time before implementation.

# Prioritization, Programmed/Funded Projects, and Planned Projects

## *Prioritization*

ECRC's asset management program aims to address the structures of critical concern by targeting elements rated as being in poor condition and to improve and maintain the overall condition of the bridge network to good or fair condition through a "mix of fixes" strategy. Therefore, ECRC prioritizes bridges for projects by evaluating and weighting five factors as follows: condition –25%, load capacity –25%, traffic –15%, safety –20%, and detour –15%. There are several components within each factor that are used to arrive at its score. Each project under consideration is scored, and its total score is then compared with other proposed project to establish a priority order.

ECRC annually reviews the current condition of each of its bridges using the NBIS inspection data contained in the *MDOT Bridge Safety Inspection Report* and the inspector's work recommendations contained in MDOT's *Bridge Inspection Report*. The inspection inventory and condition data are consolidated in spreadsheet format for ECRC's bridges in Appendix 3. ECRC then determines management and preservation needs and corresponding actions for each bridge (Appendix 4) as well as inspection follow-up actions (Appendix 5). The management and preservation actions are selected in accordance with criteria contained in the *Summary of Preservation Criteria* table (below) and adapted to ECRC's specific bridge network.

**Table 3: Summary of Preservation Criteria**

| Preservation Action | Bridge Selection Criteria | Expected Service Life |
|---|---|---|
| **Replacement** | | |
| Total Replacement | • NBI rating of 3 or less [1] [2]<br>• *OR* Cost of rehabilitation exceeds cost of replacement [1]<br>• *OR* Bridge is scour critical with no counter-measures available [1] | 70 years |
| **Rehabilitation** | | |
| Superstructure Replacement | • NBI rating of 4 or less for the superstructure [1] [2]<br>• *OR* Cost of superstructure and deck rehabilitation exceeds cost of replacement [1] | 40 years [1] |
| Deck Replacement<br>Epoxy Coated Steel<br>Black Steel | • Use guidelines in MDOT's Bridge Deck Preservation Matrix [3] [4]<br>• NBI rating of 4 or less for the deck surface and deck bottom [1] [2]<br>• Deck bottom has more than 25% total area with deficiencies [1]<br>• *OR* Replacement cost of deck is competitive with rehabilitation [1] | 60+ years [3] [4] |
| Substructure Replacement<br>(Full or Partial) | • NBI rating of 4 or less for abutments, piers, or pier cap [1] [2]<br>• Has open vertical cracks, signs of differential settlement, or active movement [1]<br>• Pontis rating of 3 or 5 for more than 30 percent of the substructure [1] [5]<br>• *OR* Bridge is scour critical with no counter-measures available | 40 years [1*] |

| Table 3: Summary of Preservation Criteria | | |
|---|---|---|
| **Preservation Action** | **Bridge Selection Criteria** | **Expected Service Life** |
| Steel Beam Repair | • More than 25% section loss in an area of the beam that affects load carrying capacity [1]<br>• *OR* To correct impact damage that impairs beam strength [1] | 40 years [1*] |
| Prestressed Concrete Beam Repair | • More than 5% spalling at ends of prestressed I-beams [1]<br>• *OR* Impact damage that impairs beam strength or exposes prestressing strands [1] | 40 years [1*] |
| Substructure Concrete Patching and Repair | • NBI rating of 5 or 4 for abutments or piers, and surface has less than 30% area spalled and delaminated [1] [2]<br>• *OR* Pontis rating of 3 or 4 for the column or pile extension, pier wall, and/or abutment wall and surface has between 2% and 30% area with deficiencies [1] [5]<br>• *OR* In response to inspector's work recommendation for substructure patching [1] | |
| Abutment Repair/Replacement | • NBI rating of 4 or less for the abutment [1] [2]<br>• *OR* Has open vertical cracks, signs of differential settlement, or active movement | |
| Railing/Barrier Replacement | • NBI rating greater than 5 for the deck [1] [2]<br>• NBI rating less than 5 for the railing with more than 30% total area having deficiencies [1] [2]<br>• *OR* Pontis rating is 4 for railing [1] [5]<br>• *OR* Safety improvement is needed [1] | |
| Culvert Repair/Replacement | • NBI rating of 4 or less for culvert or drainage outlet structure<br>• *OR* Has open vertical cracks, signs of deformation, movement, or differential settlement | |
| **Preventive Maintenance** | | |
| Shallow Concrete Deck Overlay | • NBI rating is 5 or less for deck surface, and deck surface has more than 15% area with deficiencies [1] [2]<br>• NBI rating of 4 or 5 for deck bottom, and deck bottom has between 5% and 30% area with deficiencies [1] [2]<br>• *OR* In response to inspector's work recommendation [1] | 12 years |
| Deep Concrete Deck Overlay | • NBI rating of 5 or less for deck surface, and deck surface has more than 15% area with deficiencies [1] [2]<br>• NBI deck bottom rating is 5 or 6, and deck bottom has less than 10% area with deficiencies [1] [2]<br>• *OR* In response to inspector's work recommendation [1] | 25 years |
| HMA Overlay with Waterproofing Membrane | • NBI rating of 5 or less for deck surface, and both deck surface and bottom have between 15% and 30% area with deficiencies [1] [2]<br>• *OR* Bridge is in poor condition and will be replaced in the near future and the most cost-effective fix is HMA overlay [1] | |
| HMA Overlay Cap without Membrane | • Note: All HMA caps should have membranes unless scheduled for replacement within five years.<br>• NBI rating of 3 or less for deck surface and deck bottom, and deck surface and deck bottom have more than 30% area with deficiencies. Temporary holdover to improve ride quality for a bridge in the five-year plan for rehab/replacement. [1] [2] | 3 years |

| Table 3: Summary of Preservation Criteria | | |
|---|---|---|
| **Preservation Action** | **Bridge Selection Criteria** | **Expected Service Life** |
| Concrete Deck Patching | • NBI rating of 5, 6, or 7 for deck surface, and deck surface has between 2% and 5% area with delamination and spalling [1] [2]<br>• *OR* In response to inspector's work recommendation [1] | 5 years |
| Steel Bearing Repair/Replacement | • NBI rating of 5 or more for superstructure and deck, and NBI rating 4 or less for bearing [2] | |
| Deck Joint Replacement | • Always include when doing deep or shallow concrete overlays [1]<br>• NBI rating of 4 or less for joints [1] [2]<br>• *OR* Joint leaking heavily [1]<br>• *OR* In response to inspector's work recommendation for replacement [1] | |
| Pin and Hanger Replacement | • NBI rating of 4 or less for superstructure for pins and hangers [1] [2]<br>• Pontis rating of 1, 2, or 3 for a frozen or deformed pin and hanger [1] [5]<br>• *OR* Presence of excessive section loss, severe pack rust, or out-of-plane distortion [1] | 15 years |
| Zone Repainting | • NBI rating of 5 or 4 for paint condition, and paint has 3% to 15% total area failing [1] [2]<br>• *OR* During routine maintenance on beam ends or pins and hangers [1]<br>• *OR* less than 15% of existing paint area has failed and remainder of paint system is in good or fair condition [1] | 10 years |
| Complete Repainting | • NBI rating of 3 or less for paint condition [1] [2]<br>• *OR* Painted steel beams that have greater than 15% of the existing paint area failing [1] | |
| Partial Repainting | • See Zone or Spot Painting | |
| Channel Improvements | • Removal of vegetation, debris, or sediment from channel and banks to improve channel flow<br>• *OR* in response to inspector's work recommendation | |
| Scour Countermeasures | • Pontis scour rating of 2 or 3 and is not scheduled for replacement [1] [5]<br>• OR NBI comments in abutment and pier ratings indicate presence of scour holes [1] [2] | |
| Approach Repaving | • Approach pavement relief joints should be included in all projects that contain a significant amount of concrete roadway (in excess of 1000' adjacent to the structure). The purpose is to alleviate the effects of pavement growth that may cause distress to the structure. Signs of pavement growth include:<br>o Abutment spalling under bearings [1]<br>o Beam end contact [1]<br>o Closed expansion joints and/or pin and hangers [1]<br>o Damaged railing and deck fascia at joints [1]<br>o Cracking in deck at reference line (45 degree angle) [1] | |
| Guard Rail Repair/Replacement | • Guard rail missing or damaged [2*]<br>• *OR* Safety improvement is needed [2*] | |

| Table 3: Summary of Preservation Criteria | | |
|---|---|---|
| **Preservation Action** | **Bridge Selection Criteria** | **Expected Service Life** |
| **Scheduled Maintenance** | | |
| Superstructure Washing | • When salt contaminated dirt and debris collected on superstructure is causing corrosion or deterioration by trapping moisture [1]<br>• *OR* Expansion or construction joints are to be replaced and the steel is not to be repainted [1]<br>• *OR* Prior to a detailed replacement [1]<br>• *OR* In response to inspector's work recommendation [1] | 2 years |
| Drainage System Clean-Out/Repair | • When drainage system is clogged with debris [1]<br>• *OR* Drainage elements are broken, deteriorated, or damaged [1]<br>• *OR* NBI rating comments for drainage system indicate need for cleaning or repair [1] [2] | 2 years |
| Spot Repainting | • For zinc-based paint systems only. Do not spot paint with lead-based paints.<br>• Less than 5% of paint area has failed in isolated areas [1]<br>• *OR* In response to inspector's work recommendation [1] | 5 years |
| Slope Paving Repair | • NBI rating is 5 or less for slope protection [1] [2]<br>• *OR* Slope is degraded or sloughed<br>• *OR* Slope paving has significant areas of distress, failure, or has settled [1] | |
| Riprap Installation | • To protect surface when erosion threatens the stability of side slopes of channel banks | |
| Vegetation Control | • When vegetation traps moisture on structural elements [1]<br>• *OR* Vegetation is growing from joints or cracks [1]<br>• *OR* In response to inspector's work recommendation for brush cut [1] | 1 year |
| Debris Removal | • When vegetation, debris, or sediment accumulates on the structure or in the channel<br>• *OR* In response to inspectors work recommendation | 1 year |
| Deck Joint Repair | • Do not repair compression joint seals, assembly joint seals, steel armor expansions joints, and block out expansion joints; these should always be replaced. [1]<br>• NBI rating is 5 for joint [1] [2]<br>• *OR* In response to inspector's work recommendation for repair [1] | |
| Concrete Sealing | • Top surface of pier or abutments are below deck joints and, when contaminated with salt, salt can collect on the surface [1]<br>• *OR* Surface of the concrete has heavy salt exposure. Horizontal surfaces of substructure elements are directly below expansion joints [1] | |
| Concrete Crack Sealing | • Concrete is in good or fair condition, and cracks extend to the depth of the steel reinforcement [1]<br>• *OR* NBI rating of 5, 6, or 7 for deck surface, and deck surface has between 2% and 5% area with deficiencies [1] [2]<br>• *OR* Unsealed cracks exist that are narrow and/or less than 1/8" wide and spaced more than 8' apart [1]<br>• *OR* In response to inspector's work recommendation [1] | 5 years |
| Minor Concrete Patching | • Repair minor delaminations and spalling that cover less than 30% of the concrete substructure [1] | |

| Table 3: Summary of Preservation Criteria | | |
|---|---|---|
| **Preservation Action** | **Bridge Selection Criteria** | **Expected Service Life** |
| | • *OR* NBI rating of 5 or 4 for abutments or piers, and comments indicate that their surface has less than 30% spalling or delamination [1] [2]<br>• *OR* Pontis rating of 3 or 4 for the column or pile extension, pier wall and/or abutment wall, and surface has between 2% and 30% area with deficiencies [1] [5]<br>• *OR* In response to inspector's work recommendation [1] | |
| HMA Surface Repair/Replacement | • HMA surface is in poor condition<br>• *OR* In response to inspector's work recommendation | |
| Seal HMA Cracks/Joints | • HMA surface is in good or fair condition, and cracks extend to the surface of the underlying slab or sub course<br>• *OR* In response to inspector's work recommendation | |
| Timber Repair | • NBI rating of 4 or less for substructure for timber members<br>• *OR* To repair extensive rot, checking, or insect infestation | |
| Miscellaneous Repair | • Uncategorized repairs in response to inspector's work recommendation | |

This table was produced by TransSystems and includes information from the following sources:

[1] MDOT, *Project Scoping Manual*, MDOT, 2019.

[2] MDOT, *MDOT NBI Rating Guidelines*, MDOT, 2017.

[3] MDOT, *Bridge Deck Preservation Matrix - Decks with Uncoated "Black" Rebar*, MDOT, 2017.

[4] MDOT, *Bridge Deck Preservation Matrix - Decks with Epoxy Coated Rebar*, 2017.

[5] MDOT, *Pontis Bridge Inspection Manual*, MDOT, 2009.

* From source with interpretation added.

In terms of management and preservation actions, ECRC's asset management program uses a "mix of fixes" strategy that is made up of scheduled maintenance.

**Replacement** involves substantial changes to the existing structure, such as bridge deck replacement, superstructure replacement, or complete structure replacement, and is intended to improve critical or closed bridges to a good condition rating.

**Rehabilitation** is undertaken to extend the service life of existing bridges. The work will restore deficient bridges to a condition of structural or functional adequacy and may include upgrading geometric features. Rehabilitation actions are intended to improve the poor or fair condition bridges to fair or good condition.

**Preventive maintenance** work will improve and extend the service life of fair bridges and will be performed with the understanding that future rehabilitation or replacement projects will contain appropriate safety and geometric enhancements. Preventive maintenance projects are directed at limited bridge elements that are rated in fair condition with the intent of improving these elements to a good rating. Most preventive maintenance projects will be one-time actions in response to a condition state need. Routine preventive work will be performed by the agency's in-house maintenance crews while larger, more complex work will be contracted.

ECRC's **scheduled maintenance** program is an integral part of the preservation plan and is intended to extend the service life of fair and good structures by preserving the bridges in their current condition for a longer period of time. Scheduled maintenance is proactive and not necessarily condition driven. In-house maintenance crews will perform much of this work.

Certain of the severely degraded and structurally deficient bridges require replacement or major rehabilitation. Several of the remaining bridges require one-time preventive maintenance actions to repair defects and restore the structure to a higher condition rating. Most bridges are included in a scheduled maintenance plan with appropriate maintenance actions programmed for groups of bridges of similar material and type, bundled by location.

The replacement, rehabilitation, and preventive maintenance projects are generally eligible for funding under the local bridge program, and any requests for funding will be submitted with Eaton County Road Commission's annual applications.

To achieve its goals, a primary objective of ECRC's asset management program is improvement of two bridges rated poor (4 or lower) to a rating of fair (5) or higher within a three-year time period through management and/or preservation activities. The primary work activities that will be used to meet this improvement objective include rehabilitation.The work has been prioritized by considering each individual bridge's needs, its importance, the present costs of improvements, and the impact of deferral (i.e., cost increase due to increased degradation). Additionally, ECRC's asset management program incorporates preservation of bridges currently rated fair (5) or higher in their current condition in order to extend their useful service life. The primary work activities used to meet this preservation objective include scheduled maintenance. A bridge-by-bridge preservation—or maintenance—plan is presented in Appendix 4.

### *Programmed/Funded Projects*

To work toward its goals, the ECRC will receive about $5,810,000 of MDOT Local Bridge funding between the years 2023-2025. Of that funding, the ECRC plans to spend about $1,230,000 for preventive maintenance of bridges and about $4,580,000 to rehabilitate the Webster Road bridge. No full replacements are scheduled during this time. After performing the aforementioned preventive maintenance and rehabilitation of bridge structures, ECRC will not have met its overall bridge network condition goals.

ECRC computes the estimated cost of each typical management and/or preservation action using unit prices in the latest *Bridge Repair Cost Estimate* spreadsheet provided by MDOT's *Local Bridge Program Call for Projects*. The cost of items of varying complexity, such as maintenance of traffic, staged construction, scour countermeasures, and so forth, are computed on a bridge-by-bridge basis. The cost estimates are reviewed and updated annually. A summary of the programmed/funded projects and investments can be found in Table 4, the Cost Projection table, below.

### *Planned Projects*

ECRC identifies additional priority projects that remain unfunded. These are identified according to high, medium, and low priority in Table 4.

**Table 4: Cost Projection Table**

| Strategy | 2024 | 2025 | 2026 | GAP |
|---|---|---|---|---|
| **Replacement** | | | | |
| **Subtotal** | **$0** | **$0** | **$0** | **$13,500,000** |
| **Rehabilitation** | | | | |
| 2362 | | $4,828,000 | | |
| **Subtotal** | **$0** | **$4,828,000** | **$0** | **$5,000,000** |
| **Preventive Maintenance** | | | | |
| 2403 | $347,000 | | | |
| 2352 | | $235,000 | | |
| 2353 | | $211,000 | | |
| 2361 | | $216,000 | | |
| 2397 | | $281,000 | | |
| 2364 | | | | |
| **Subtotal** | **$347,000** | **$943,000** | **$0** | **$3,500,000** |

# Gap Analysis

When ECRC compares its funding and its programmed/funded projects with its prioritized projects as shown in Table 4, ECRC believes it should be able to achieve some of its asset management goals for the period of this plan. For projects that it is unable to complete, ECRC will continue to monitor those bridge assets and take any necessary steps within its budget to prevent or mitigate a condition decline or a need to post or close the structure.

# 2. FINANCIAL RESOURCES

## Anticipated Revenues

ECRChas programmed project and/or has been granted  MDOT local-aid funding. This funding is for the purpose(s) of preventive maintenance and other, for the following bridge(s):  2352, 2353, 2361, 2362, 2397, and 2403. This funding is intended for use in the year(s) 2024 and 2025.

ECRC applied for MDOT local-aid funding in 2023 to replace and perform preventive maintenance on for the following bridge(s):  2345, 2364, and 2432. This funding was not awarded, and these bridges will be resubmitted for funding in 2024 for construction in 2027.

Any projects submitted to the local aid program that are not selected for funding will be added to the agency's program.

## Anticipated Expenses

Scheduled maintenance activities and minor repairs that are not affiliated with any applications, grants, or other funded projects will be performed by the agency's in-house maintenance forces and funded through the agency's annual operating budget.

# 3. RISK MANAGEMENT

ECRC recognizes that the potential risks associated with bridges generally fall into several categories:

- Personal injury and property damage resulting from a bridge collapse or partial failure;
- Loss of access to a region or individual properties resulting from bridge closures, restricted load postings, or extended outages for rehabilitation and repair activities; and
- Delays, congestion, and inconvenience due to serviceability issues, such as poor-quality riding surface, loose expansion joints, or missing expansion joints.

ECRC addresses these risks by implementing regular bridge inspections and a preservation strategy consisting of preventive maintenance.

ECRC administers the biennial inspection of its bridges in accordance with NBIS and MDOT requirements. The inspection reports document the condition of ECRC's bridges and evaluates them to identify new defects and monitor advancing deterioration. The summary inspection report in Appendix 1 identifies items needing follow-up, special inspection actions, and recommended bridge-by-bridge maintenance activities.

Scour is the depletion of sediment from around the foundation elements of a bridge commonly caused by fast-moving water. According to MDOT's *Michigan Structure Inventory and Appraisal Coding Guide*, a scour critical bridge is one that has unstable abutment(s) and/or pier(s) due to observed or potential (based on an evaluation study) scour. Bridges receiving a scour rating of 3 or less, or bridges with unknown footing designs, are rated scour critical. ECRC has scour critical bridges, which are listed in Table 5.

**Table 5: Bridges Rated Scour Critical**

| Bridge Structure Number | Scour Critical Rating | Bridge Structure Number | Scour Critical Rating |
|---|---|---|---|
| 2336 | U | 2399 | U |
| 2345 | 3 | 2403 | 3 |
| 2354 | 3 | 2409 | U |
| 2362 | 3 | 2413 | U |
| 2363 | U | 2416 | 3 |
| 2364 | 3 | 2424 | U |
| 2365 | U | 2425 | U |
| 2366 | U | 2426 | U |
| 2367 | U | 2431 | U |
| 2376 | 3 | 2432 | U |
| 2382 | U | 2433 | U |
| 2384 | U | 2436 | U |
| 2389 | U | 2437 | U |
| 2395 | 3 | | |

ECRC has posted or closed bridges that are critical to accessing entire areas or individual properties within its jurisdiction. These bridges are listed in Table 6.

**Table 6: Posted or Close Bridges that are Critical Links**

| Posted/Closed Bridges that are Critical Links | |
|---|---|
| **Bridge Structure Number** | **P/K** |
| 2345 | P |
| 2362 | P |
| 2384 | P |
| 2432 | P |

The preservation strategy identifies actions in the operations and maintenance plan that are preventive or are responsive to specific bridge conditions. The actions are prioritized to correct critical structural safety and traffic issues first, and then to address other needs based on the operational importance of each bridge and the long-term preservation of the network. The inspection results serve as a basis for modifying and updating the operations and maintenance plan annually.

# Appendix 1

### *Eaton County Road Commission 2023 Bridge Inspection Report Summary of Additional Inspection Recommendations*

| Structure Number | Facility Carried | Features Intersected | Insp. Freq. |
|---|---|---|---|
| 2416 | SHAYTOWN ROAD | SEBEWA CREEK | 6 |
| 2382 | COATS ROAD | BATTLE CREEK RIVER | 6 |
| 2364 | OLD US-27 | BIG CREEK | 12 |
| 2413 | SAGINAW HWY | SEBEWA CREEK | 12 |
| 2409 | BISMARK HWY | SEBEWA CREEK | 12 |
| 2424 | BUTTERFIELD ROAD | INDIAN CREEK | 12 |
| 2430 | HARRIS ROAD | INDIAN CREEK | 12 |
| 2389 | GRESHAM HWY | THORNAPPLE RIVER | 12 |
| 2362 | WEBSTER ROAD | GRAND RIVER | 12 |
| 2345 | VERMONTVILLE HWY | LITTLE THORNAPPLE RIVER | 12 |
| 2340 | FIVE POINT HWY | BATTLE CREEK RIVER | 18 |

# Appendix 2

## *Eaton County Road Commission 2021 and 2022 Bridge Inspection Report Executive Summary*

ARCHITECTS. ENGINEERS. PLANNERS.

OHM Advancing Communities

memorandum

**Date:** April 1, 2022

**To:** Mr. Matt Hannahs
Assistant Engineer

**cc:** File 1059-21-0010

**From:** Alan Halbeisen, PE (phone number 616-780-5353)

**Re:** Eaton County Road Commission 2021 Bridge Inspections

We have completed the inspections of the 100 bridges for the Eaton County Road Commission, including 2 bridges for the Village of Bellevue, 2 bridges for the Village of Olivet and one bridge for the Village of Dimondale. The inspections were completed in April, May, June, August, October and November of 2021. The inspections have all been submitted to the Michigan Department of Transportation electronically through the Michigan Bridge Inspection System.

In 2021 plan information and load ratings needed to be uploaded to MiBridge. New load ratings for several bridges were modeled using AASHTO BrR software and were analized, reviewed and uploaded to MiBridge prior to the October 31 deadline. Many of the load ratings that were completed in 2012 were developed using spreadsheets. Copies of these ratings were uploaded to MiBridge, but may need to be updated in the future using the BrR software. Copies of The Load Rating Assumption and Summary forms are included with the printed inspection reports.

For these inspections, I served as the Qualified Team Leader and input the reports. QC review of my 2021 bridge inspection reports was conducted by Adam Rychwalski in December 2021 in accordance with OHM QC Program requirements. Copies of our QC Program, inspector qualifications, QC tracking log and marked up QC reports are provided with this memo.

There are four bridges that are rated serious/critical based on the MiBridge rating. These are:

- **Five Point Highway over the Battle Creek River (SN 2340) –** Concrete box beams have longitudinal cracks that have extended to mid span of some beams. **Five Point Highway is scheduled for superstructure replacement in June 2022 under the Bridge Bundle pilot program.**
- **Coats Road over Battle Creek River (SN 2382) –** The concrete abutments are deteriorating and have large vertical cracks at the corners. The bridge is a single lane wide. Based on the poor condition of the abutments the weight limit for this bridge has been reduced to 3 tons. Inspection frequency has been reduced to 6 months.
- **Gresham Highway over Thornapple River (SN 2389) –** The deck surface is in very poor condition allowing moisture through to the timber beams below. Recommend replacement of the HMA surfacing and add waterproof membrane to protect the timber deck and beams.

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- **Shaytown Road over Sebewa Creek (SN 2416) –** The steel beams are deteriorating and the south abutment is tilted and prone to scouring. Replacement of this bridge is recommended. Riprap should be placed at the south abutment for scour protection.

There are three NBI bridges that are rated poor based on the MiBridge evaluations. These are;

- **Webster Road over the Grand River (SN 2362)** The bridge had an HMA overlay added in 2015. Leakage through the old bituminous surface had already resulted in deterioration of strands in the concrete box beams and the substructures, with shallow plain reinforcement, are also showing areas of spalling and delamination. At the time of the bridge inspection a hole in the top of a box beam was discovered along the curb line, adjacent to a deck drain. The hole was barricaded and then covered with a plate. The bridge is posted for weight limits due to deterioration of the box beams. An application for Superstructure replacement should be submitted annually until selected for funding. Due to it's size and cost, the bridge falls under the Large Bridge category and will likely need Region support with additional local funding to increase it's viability as a candidate.
- **Marshall Road (Old US-27) over Big Creek (SN 2364) –** The tops of the tall concrete abutments have cracking and exposed steel reinforcement under the beam bearings. The Road Commission has been submitting applications for funding for rehabilitation to paint steel beams and repair the concrete abutments.
- **Bismark Highway over Sebewa Creek (SN 2409)** – The fascia beam on south side at the east abutment has a large hole through the web. Barricades have been placed on each side of the bridge to keep traffic away from poor railings and weak fascias. Erosion in the southeast quad at the outlet for a farm drive culvert is lowering the ditch and undermining the side slope. The bridge should be considered for replacement.

The following bridges are in good or fair condition and are good candidates for preventive maintenance, repairs or rehabilitation to improve or maintain their condition.

- **Vermontville Highway over the Little Thornapple River (SN 2345) –** The steel beams are deteriorating and concrete fascias and railing posts are severely spalled. Painting and railing replacement are recommended.
- **Smithville Road over the Grand River (SN 2403) –** The joints at the piers are failing and result in leaking that is affecting the concrete box beams. Replacement of the expansion joints is recommended.
- **Ainger Road over the Battle Creek River (SN 2352) –** The bridge deck surface is increasingly cracking and allowing moisture to leak through the box beams below. We recommend preventive maintenance to patch spalls in the deck and to apply a thin epoxy overlay.
- **Mulliken Road over the Thornapple River (SN 2353) –** The bridge deck surface has longitudinal and some transvers cracking. We recommend preventive maintenance to apply a thin epoxy overlay
- **Waverly Road over the Grand River (SN 2361) –** The bridge deck surface has longitudinal cracking and there is map cracking in the concrete parapet railings. We recommend preventive maintenance to clean joints, patch railings and to apply a thin epoxy overlay.
- **Bunker Highway over the Grand River (SN 2397) –** The bridge deck surface has longitudinal cracking and there is map cracking in the concrete parapet railings. We recommend preventive maintenance to clean joints, patch railings and to apply a thin epoxy overlay.

An application for funding for multiple bridge PM was submitted for Ainger, Mulliken, Waverly and Bunker was submitted in 2019 but was not selected. That application should be considered again.

Attached to this memo is a summary of all of the recommendations for the bridges. Included in the recommendations are general maintenance items (such as cleaning decks and shoulders, sealing cracks, painting), new or upgraded railings, resurfacing and waterproofing, and erosion and scour protection.

**Individual Bridge and General Files**

A general file with correspondence, bridge advisories and the summary report for each inspection cycle should be kept by the Road Commission. The bridge inspection reports, SIA form and Load Rating forms are provided to the Road Commission in a binder for this year's inspections, should be kept in an individual file for each bridge. Photographs are provided in digital format on a thumb drive, separated by structure number.

ARCHITECTS. ENGINEERS. PLANNERS.

OHM Advancing Communities

# memorandum

**Date:** November 8, 2022

**To:** Mr. Matt Hannahs
Assistant Engineer

**cc:** File 1059-22-0010

**From:** Alan Halbeisen, PE (phone number 616-780-5353)

**Re:** Eaton County Road Commission 2022 Bridge Inspections

We have completed the annual inspections of 9 bridges for the Eaton County Road Commission. The inspections were completed in April, August, and October 2022. The inspections have all been submitted to the Michigan Department of Transportation electronically through the Michigan Bridge Inspection System.

For these inspections, I served as the Qualified Team Leader and input the reports. QC review of my 2022 bridge inspection reports will be conducted in accordance with OHM QC Program requirements. Copies of our QC Program, inspector qualifications, QC tracking log and marked up QC reports will be provided at a later date.

There are three bridges that are rated serious/critical based on the MiBridge rating. These are:

- **Coats Road over Battle Creek River (SN 2382) –** The concrete abutments are deteriorating and have large vertical cracks at the corners. Due to the deteriorating condition of the abutments and steel beams (encased in concrete deck) and the reports that the posted 3 ton weight limit is not being obeyed by local trucks, we recommend considering closing this bridge within the next 2 years.

- **Gresham Highway over Thornapple River (SN 2389) –** The deck surface is in very poor condition allowing moisture through to the timber beams below. Recommend replacement of the HMA surfacing and adding waterproof membrane to protect the timber deck and beams.

- **Shaytown Road over Sebewa Creek (SN 2416) –** The steel beams are deteriorating and the south abutment is tilted and prone to scouring. Replacement of this bridge is recommended.

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There are four bridges that are rated poor based on the MiBridge evaluations. These are;

- **Marshall Road (Old US-27) over Big Creek (SN 2364) –** The tops of the tall concrete abutments have cracking and exposed steel reinforcement under the beam bearings. The Road Commission has been submitting applications for funding for rehabilitation to paint steel beams and repair the concrete abutments. Due to the spread footings the bridge is scour critical and would need scour protection added.

- **Bismark Highway over Sebewa Creek (SN 2409)** – The fascia beam on south side at the east abutment has a large hole through the web. Barricades have been placed on each side of the bridge to keep traffic away from poor railings and weak fascias. Erosion in the southeast quad at the outlet for a farm drive culvert is lowering the ditch and undermining the side slope. The bridge should be considered for replacement.

- **Harris Road over Indian Creek (SN 2430)** – The bridge has a timber deck that is transverse to the timber beams. Portions of the deck have been replaced due to breaking timbers, but additional areas have failed and the bridge is currently reduced to a single lane of traffic. The timber backwalls and piles for the abutments also have some deterioration. The bridge should be considered for replacement or for deck replacement.

- **Vermontville Highway over the Little Thornapple River (SN 2345) –** The steel fascia beams are deteriorating and concrete fascias and railing posts are severely spalled. Fascia beam and deck repairs and painting and railing replacement are recommended. Due to the spread footings the bridge is scour critical and would need scour protection added.

The remaining annual inspection bridges are;

- **Saginaw Highway over Sebewa Creek (SN 2413) –** The bridge was added to the annual inspections due a low weight limit based on updated load ratings in 2021, but it is in fair condition and is on a low volume road. The bridge has a concrete deck on steel beams. Previous work on the bridge has replaced the railings.

- **Five Point Highway over the Battle Creek River (SN 2340)** has been replaced by MDOT's Bridge Bundling Program. OHM conducted a quick inspection in April to verify posting was in place to stay in compliance with MDOT/FHWA requirements. A post construction inspection has been performed by R,S & H, the construction managers. An 18 month inspection frequency was input by R, S & H putting the bridge into the inspection cycle for April 2024. We recommend inspecting the bridge in 2023 to put it back in the biennial inspection cycle, along with other nearby structures.

**Individual Bridge and General Files**

A general file with correspondence, bridge advisories and the summary report for each inspection cycle should be kept by the Road Commission. The bridge inspection reports are available on MiBridge. Hard copies may be kept in an individual file for each bridge at the Road Commissions preference. Photographs are provided in digital format on a thumb drive, separated by structure number.

Appendix A-3

| Inventory Data | | | | | | | | | | | | | Inspection Findings | | | | | | | | | | | Appraisal | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bridge Type | Structure Number | Bridge ID | Facility Carried | Features Intersected | Primary or Secondary Route | Structure Type Main Span (Item 43A - Material) | Structure Type Main Span (Item 43B) | Number of Main Span (Item 45) | Total Str Length (Item 49) | Year Built (Item 27) | Year Reconstr (Item 106) | ADT | Year of ADT | Inspection Date | Operational Status (Item 41) | Deck Rating (Item 58) | Deck Bottom Rating (Item XX) | SuperStr Rating (Item 59) | Substr Rating (Item 60) | Channel Rating (Item 61) | Culvert Rating (Item 62) | Surface Rating (Item 58A) | Paint Rtg | Exp Joint Rating (Item XX) | Other Joints | Structure Evaluation | Structurally Deficient | Sufficiency Rating | Section Loss | Scour Critical (Item 113) |
| Steel – Multistringer | **2216** | 23223812000B010 | LANSING RD | THORNAPPLE RIVER | Primary | 3 | 2 | 1 | 35 | 1957 | 2008 | 6274 | 2007 | 05/18/2023 | A | 7 | 7 | 7 | 7 | 7 | N | 7 | 8 | N | 5 | G | | | 3 | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2335** | 232000030008010 | BELLEVUE HWY | BATTLE CREEK RIVER | Primary | 5 | 5 | 1 | 40 | 1977 | | 881 | 2014 | 04/26/2023 | A | 7 | N | 7 | 8 | 7 | N | 7 | | N | 6 | G | | | | 8 |
| Concrete – Tee beam | **2336** | 232000030008020 | BELLEVUE HWY | SPRING BROOK | Primary | 1 | 4 | 1 | 30.8 | 1910 | | 1130 | 2014 | 04/26/2023 | A | 5 | 5 | 5 | 7 | 5 | N | 6 | | N | N | F | Funct Obs | | | U |
| Prestressed concrete – Box beam/girders—multiple | **2337** | 232000050008010 | SPICERVILLE HWY | SPRING BROOK | Primary | 5 | 5 | 1 | 54.8 | 1994 | | 1943 | 2004 | 06/19/2023 | A | 7 | N | 7 | 7 | 7 | N | 7 | | N | 7 | G | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2338** | 232000070008010 | FIVE POINT HWY | GAYTON & POWERS EXTN DRN | Primary | 5 | 5 | 1 | 26.9 | 1983 | | 642 | 2012 | 04/13/2023 | A | 5 | N | 5 | 7 | 7 | N | 8 | N | N | N | F | | | 2 | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2339** | 232000080008010 | FIVE POINT HWY | BATTLE CREEK RIVER | Primary | 5 | 5 | 2 | 84 | 1958 | | 694 | 2010 | 04/13/2023 | A | 7 | N | 7 | 6 | 7 | N | 6 | N | N | 5 | F | | | N | 4 |
| Steel – Box beam/girders—single/spread | **2340** | 232000090008010 | FIVE POINT HWY | BATTLE CREEK RIVER | Primary | 3 | 6 | 1 | 68.1 | 1959 | 2022 | 481 | 2020 | 10/20/2022 | A | 9 | 9 | 9 | 7 | 8 | N | 9 | 9 | 8 | 9 | G | | 99.8 | 3 | 8 |
| Steel – Culvert | **2342** | 232000120008010 | ISLAND HWY | THORNAPPLE RIVER | Primary | 3 | 19 | 1 | 25.9 | 2001 | | 2045 | 2012 | 05/18/2023 | A | N | | N | N | 7 | 8 | | | | | G | Funct Obs | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2343** | 232000150008010 | NASHVILLE HWY | SHANTY BROOK | Primary | 5 | 5 | 1 | 51.8 | 1986 | | 1878 | 2011 | 05/03/2023 | A | 7 | N | 7 | 8 | 7 | N | 7 | | N | 5 | G | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2344** | 232000170008010 | VERMONTVILLE HWY | THORNAPPLE RIVER | Primary | 5 | 5 | 1 | 110 | 1995 | | 2156 | 2021 | 04/13/2023 | A | 7 | N | 6 | 7 | 7 | N | 9 | N | N | N | F | Funct Obs | | N | 8 |
| Steel – Multistringer | **2345** | 232000170008020 | VERMONTVILLE HWY | LITTLE THORNAPPLE RIVER | Primary | 3 | 2 | 1 | 34.8 | 1942 | | 2581 | 2011 | 07/31/2023 | P | 4 | 5 | 4 | 6 | 5 | N | 7 | 2 | N | N | P | Struct Def | | | 3 |
| Prestressed concrete – Box beam/girders—single/sprea | **2346** | 232000180008010 | VERMONTVILLE HWY | THORNAPPLE RIVER | Primary | 5 | 6 | 1 | 54 | 2021 | | 2654 | 2020 | 05/18/2023 | A | 8 | 8 | 8 | 8 | 8 | N | 8 | | 8 | 8 | G | | | | 5 |
| Steel – Box beam/girders—single/spread | **2347** | 232000270008010 | MT HOPE | SEBEWA CREEK | Primary | 3 | 6 | 1 | 38 | 2020 | | 464 | 2019 | 04/20/2023 | A | 8 | 8 | 8 | 8 | 8 | N | 9 | 8 | N | 8 | G | | | N | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2348** | 232000370008010 | IONIA ROAD | SHANTY BROOK | Primary | 5 | 5 | 1 | 36.7 | 1987 | | 938 | 2016 | 05/03/2023 | A | 8 | N | 8 | 7 | 7 | N | 8 | | N | N | G | | | | 8 |
| Steel continuous – Multistringer | **2349** | 232000370008020 | IONIA ROAD | THORNAPPLE RIVER | Primary | 4 | 2 | 3 | 112 | 1957 | | 2700 | 2018 | 05/03/2023 | A | 7 | 7 | 7 | 7 | 6 | N | 8 | 8 | N | 6 | G | Funct Obs | | N | 4 |
| Concrete – Slab | **2350** | 232000380008010 | IONIA ROAD | SCIPIO CREEK | Primary | 1 | 1 | 1 | 23 | 1957 | | 681 | 2011 | 04/20/2023 | A | 7 | 7 | 7 | 7 | 7 | N | 7 | N | N | 6 | G | | | N | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2351** | 232000420008010 | DOW ROAD | SEBEWA CREEK | Primary | 5 | 5 | 1 | 53 | 2003 | | 721 | 2012 | 04/20/2023 | A | 7 | N | 7 | 7 | 8 | N | 6 | N | N | 6 | G | | | N | 8 |
| Concrete – Box beam/girders—multiple | **2352** | 232000430008010 | AINGER ROAD | BATTLE CREEK RIVER | Primary | 1 | 5 | 1 | 65 | 1992 | | 1042 | 2010 | 06/07/2023 | A | 6 | N | 6 | 7 | 7 | N | 4 | | N | 4 | F | | | | 8 |
| Prestressed concrete continuous – Box beam/girders—m | **2353** | 232000450008010 | MULLIKEN ROAD | THORNAPPLE RIVER | Primary | 6 | 5 | 2 | 95.8 | 1991 | | 808 | 2011 | 05/10/2023 | A | 8 | 7 | 8 | 8 | 7 | N | 6 | | N | 6 | G | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2354** | 232000470008010 | COCHRAN ROAD | THORNAPPLE RIVER | Primary | 5 | 5 | 1 | 49.9 | 1960 | | 1150 | 2011 | 05/10/2023 | A | 7 | N | 7 | 6 | 6 | N | 7 | | N | 6 | F | | | | 3 |
| Steel – Culvert | **2355** | 232000490008010 | NARROW LAKE ROAD | BATTLE CREEK RIVER | Primary | 3 | 19 | 1 | 21 | 1966 | | 953 | 2009 | 04/26/2023 | A | N | | N | N | 7 | 6 | | | | | F | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2356** | 232000500008010 | OTTO ROAD | CLAFLIN DRAIN | Primary | 5 | 5 | 1 | 34.8 | 1987 | | 1221 | 2010 | 05/18/2023 | A | 7 | N | 7 | 8 | 6 | N | 8 | | N | N | G | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2357** | 232000500008020 | OTTO ROAD | THORNAPPLE RIVER | Primary | 5 | 5 | 1 | 65 | 1986 | | 630 | 2012 | 05/10/2023 | A | 7 | N | 7 | 7 | 7 | N | 7 | N | N | 6 | G | | | | 8 |
| Concrete – Culvert | **2358** | 232000530008010 | HARTEL ROAD | THORNAPPLE RIVER | Primary | 1 | 19 | 1 | 25.9 | 1994 | | 2526 | 2013 | 05/18/2023 | A | N | | N | N | 8 | 7 | | | | | G | | | | 8 |
| Steel – Culvert | **2359** | 232000540008010 | SPRINGPORT ROAD | PEACOCK EXTN DRAIN | Primary | 3 | 19 | 1 | 20 | 1987 | | 426 | 2014 | 06/19/2023 | A | N | | N | N | 7 | 7 | | | | | G | | | | 8 |
| Steel – Multistringer | **2360** | 232000580008010 | CREYTS ROAD | GRAND RIVER | Primary | 3 | 2 | 4 | 220 | 1962 | | 6440 | 2012 | 07/31/2023 | A | 7 | 6 | 6 | 7 | 7 | N | 7 | 8 | 7 | 6 | F | | | 2 | 4 |
| Prestressed concrete – Box beam/girders—multiple | **2361** | 232000630008010 | WAVERLY ROAD | GRAND RIVER | Primary | 5 | 5 | 2 | 215.3 | 2006 | | 731 | 2009 | 07/18/2023 | A | 7 | N | 7 | 7 | 8 | N | 6 | N | 7 | 6 | G | | | N | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2362** | 232000640008010 | WEBSTER ROAD | GRAND RIVER | Primary | 5 | 5 | 4 | 281.8 | 1966 | | 5860 | 2010 | 07/18/2023 | P | 4 | N | 5 | 6 | 6 | N | 5 | N | 4 | 5 | P | Struct Def | | 2 | 3 |
| Concrete – Culvert | **2363** | 232230110008030 | OLD M-78 | BR OF BATTLE CREEK RIVER | Primary | 1 | 19 | 1 | 33.8 | 1922 | 1931 | 1307 | 2012 | 06/07/2023 | A | N | | N | N | 6 | 7 | | | | | G | | | | U |
| Steel – Multistringer | **2364** | 232230310008020 | OLD US-27 | BIG CREEK | Primary | 3 | 2 | 1 | 40 | 1936 | 1975 | 2466 | 2010 | 04/13/2023 | A | 7 | 6 | 6 | 4 | 6 | N | 7 | 4 | N | 6 | P | Struct Def | | 2 | 3 |
| Timber – Slab | **2365** | 23301H000068010 | SHERWOOD HWY | BATTLE CREEK | Secondary | 7 | 1 | 1 | 22 | 1969 | | 231 | 2010 | 06/12/2023 | P | 7 | 7 | 7 | 7 | 7 | N | 5 | | N | N | G | | | | U |
| Timber – Slab | **2366** | 23301H000068020 | SHERWOOD HWY | BATTLE CREEK RIVER | Secondary | 7 | 1 | 2 | 47.9 | 1981 | | 231 | 1997 | 06/12/2023 | P | 6 | 6 | 6 | 6 | 6 | N | 5 | | N | N | F | | | | U |
| Timber – Slab | **2367** | 23301H000068030 | SHERWOOD HWY | BATTLE CREEK RIVER | Secondary | 7 | 1 | 1 | 31.8 | 1981 | | 231 | 2010 | 06/12/2023 | P | 6 | 6 | 6 | 6 | 6 | N | 5 | | N | N | F | | | | U |
| Concrete – Culvert | **2368** | SHERWOOD HWY | BATTLE CREEK RIVER | BIG THORNAPPLE DRAIN | Secondary | 1 | 19 | 1 | 24 | 1990 | | 203 | 2011 | 05/18/2023 | A | N | | N | N | 7 | 7 | | | | | G | | | | 8 |
| Timber – Slab | **2370** | 23302H000068020 | GRESHAM HWY | THORNAPPLE RIVER | Secondary | 7 | 1 | 2 | 40 | 1993 | | 473 | 2012 | 05/10/2023 | A | 7 | 7 | 7 | 7 | 7 | N | 6 | | N | 7 | G | | | | 8 |
| Timber – Slab | **2372** | 23302H000088010 | PINCH HIGHWAY | THORNAPPLE DRAIN | Secondary | 7 | 1 | 1 | 20 | 1992 | | 353 | 2012 | 05/10/2023 | A | 7 | 7 | 7 | 7 | 7 | N | 8 | | | | G | | | | 5 |
| Timber – Slab | **2373** | 23302H000118010 | BENTON ROAD | THORNAPPLE RIVER | Secondary | 7 | 1 | 2 | 45 | 1967 | | 123 | 2011 | 05/10/2023 | A | 6 | 6 | 6 | 6 | 5 | N | 5 | | N | N | F | | | | 5 |
| Timber – Other | **2374** | 23302H000138010 | STEWART ROAD | BIG THORNAPPLE DRAIN | Secondary | 7 | | 1 | 32.8 | 1968 | | 182 | 2011 | 05/18/2023 | P | 5 | 6 | 6 | 5 | 6 | N | 5 | | N | N | F | | | | 5 |
| Aluminum – Culvert | **2375** | 23302H000148010 | JOHNSON ROAD | THORNAPPLE DRAIN | Secondary | 9 | 19 | 1 | 32.5 | 1996 | | 49 | 2012 | 05/10/2023 | A | N | | N | N | 8 | 8 | | | | | G | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2376** | 23302H000158010 | ROYSTON | BIG THORNAPPLE DRAIN | Secondary | 5 | 5 | 1 | 43 | 1952 | | 78 | 2011 | 05/18/2023 | A | 6 | N | 6 | 6 | 6 | N | 5 | N | N | N | F | | | N | 3 |
| Prestressed concrete – Box beam/girders—multiple | **2378** | 23303H000088010 | MAHAN HWY | BATTLE CREEK RIVER | Secondary | 5 | 5 | 1 | 60 | 1994 | | 101 | 2021 | 04/26/2023 | A | 7 | N | 7 | 7 | 7 | N | 9 | | N | N | G | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2379** | 23303H000128010 | NYE HWY | BATTLE CREEK RIVER | Secondary | 5 | 5 | 1 | 44.9 | 1987 | | 34 | 2014 | 04/26/2023 | A | 7 | N | 7 | 7 | 7 | N | 6 | | N | 5 | G | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2380** | 23303H000148010 | SPICERVILLE HWY | BATTLE CREEK RIVER | Secondary | 5 | 5 | 1 | 46 | 1991 | | 332 | 2021 | 04/26/2023 | A | 7 | N | 7 | 8 | 7 | N | 9 | | N | N | G | | | | 8 |
| Timber – Slab | **2381** | 23303H000178030 | BROOKFIELD ROAD | BATTLE CREEK RIVER | Secondary | 7 | 1 | 2 | 35.8 | 1979 | | 137 | 2014 | 04/26/2023 | A | 6 | 6 | 6 | 6 | 6 | N | 3 | | N | 4 | F | | | | 5 |
| Steel – Multistringer | **2382** | 23303H000198010 | COATS ROAD | BATTLE CREEK RIVER | Secondary | 3 | 2 | 1 | 26.9 | 1923 | | 177 | 2014 | 04/26/2023 | P | 4 | 4 | 3 | 2 | 5 | N | 4 | | N | 6 | P | Struct Def | | 1 | U |
| Prestressed concrete – Box beam/girders—multiple | **2383** | 23304H000038010 | BROADWAY HWY | BATTLE CREEK RIVER | Secondary | 5 | 5 | 1 | 65 | 1985 | | 148 | 2005 | 06/07/2023 | A | 7 | N | 7 | 7 | 7 | N | 5 | | N | N | G | | | | 8 |
| Timber – Slab | **2384** | 23304H000058010 | KALAMO HWY | BATTLE CREEK RIVER | Secondary | 7 | 1 | 2 | 52.8 | 1969 | | 323 | 2004 | 06/07/2023 | P | 6 | 6 | 6 | 6 | 6 | N | 4 | | N | 4 | F | | | | U |
| Timber – Slab | **2385** | 23304H000098010 | VALLEY HWY | FISH CREEK | Secondary | 7 | 1 | 1 | 31.8 | 1994 | | 98 | 2010 | 05/03/2023 | A | 7 | 7 | 7 | 7 | 7 | N | 6 | | N | N | G | | | | 8 |
| Steel – Culvert | **2386** | 23304H000098020 | VALLEY HIGHWAY | FISH CREEK | Secondary | 3 | 19 | 2 | 29.9 | 1986 | | 98 | 2010 | 05/03/2023 | A | N | | N | N | 6 | 6 | | | | | F | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2387** | 23304H000118010 | KINSEL HWY | LITTLE THORNAPPLE RIVER | Secondary | 5 | 5 | 1 | 37.7 | 1987 | | 127 | 2010 | 05/03/2023 | A | 8 | N | 8 | 8 | 8 | N | 6 | | N | 5 | G | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2388** | 23305H000028010 | LAMIE HIGHWAY | LITTLE THORNAPPLE RIVER | Secondary | 5 | 5 | 1 | 60 | 1994 | | 120 | 2021 | 05/03/2023 | A | 7 | N | 7 | 8 | 7 | N | 8 | | N | N | G | | | | 8 |
| Timber – Other | **2389** | 23305H000038010 | GRESHAM HWY | THORNAPPLE RIVER | Secondary | 7 | | 1 | 52.8 | 1953 | | 77 | 2011 | 07/11/2023 | P | 3 | 5 | 5 | 4 | 4 | N | 2 | N | N | N | P | Struct Def | | N | U |
| Timber – Slab | **2390** | 23305H000038030 | GRESHAM HWY | LITTLE THORNAPPLE RIVER | Secondary | 7 | 1 | 2 | 47.9 | 1979 | | 74 | 2011 | 05/10/2023 | A | 5 | 5 | 5 | 6 | 3 | N | 3 | | N | 4 | F | | | | 5 |
| Prestressed concrete – Box beam/girders—multiple | **2391** | 23305H000188010 | MOYER ROAD | THORNAPPLE RIVER | Secondary | 5 | 5 | 1 | 65 | 1984 | | 51 | 2011 | 05/10/2023 | A | 7 | N | 8 | 8 | 8 | N | 5 | | N | N | G | | | | 8 |
| Timber – Slab | **2392** | 23305H000198010 | WHEATON ROAD | THORNAPPLE RIVER | Secondary | 7 | 1 | 2 | 59.7 | 1983 | | 78 | 2011 | 05/10/2023 | P | 6 | 6 | 6 | 7 | 7 | N | 3 | | N | 5 | F | | | | 5 |
| Prestressed concrete – Box beam/girders—multiple | **2393** | 23307H000058010 | KALAMO HWY | BATTLE CREEK RIVER | Secondary | 5 | 5 | 1 | 59 | 2012 | | 406 | 2006 | 04/26/2023 | A | 8 | N | 8 | 8 | 7 | N | 7 | | 7 | 4 | G | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2394** | 23307H000148010 | BROOKFIELD ROAD | BATTLE CREEK RIVER | Secondary | 5 | 5 | 1 | 54 | 2015 | | 368 | 2015 | 04/26/2023 | A | 8 | N | 8 | 8 | 7 | N | 8 | | 7 | 8 | G | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2395** | 23308H000048010 | PETRIEVILLE ROAD | GRAND RIVER | Secondary | 5 | 5 | 3 | 135.8 | 1986 | | 950 | 2014 | 07/31/2023 | A | 6 | N | 6 | 7 | 7 | N | 6 | N | 4 | 5 | F | | | N | 3 |
| Prestressed concrete – Box beam/girders—multiple | **2397** | 23308H000088010 | BUNKER HIGHWAY | GRAND RIVER | Secondary | 5 | 5 | 3 | 159.8 | 1994 | | 246 | 2014 | 07/13/2023 | A | 6 | N | 7 | 7 | 6 | N | 6 | N | 6 | 5 | F | | | N | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2398** | 23309H000048010 | BUCK HIGHWAY | SPRING BROOK DRAIN | Secondary | 5 | 5 | 1 | 61 | 1995 | | 73 | 2014 | 06/19/2023 | A | 8 | N | 7 | 7 | 7 | N | 7 | | N | N | G | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2399** | 23309H000058010 | HOLMES HWY | SPRING BROOK | Secondary | 5 | 5 | 1 | 36.7 | 1960 | | 466 | 2014 | 06/19/2023 | A | 7 | N | 7 | 6 | 6 | N | 7 | | N | N | F | | | | U |
| Prestressed concrete – Box beam/girders—multiple | **2400** | 23309H000088010 | BRADFORD HWY | SPRING BROOK | Secondary | 5 | 5 | 1 | 50.9 | 1976 | | 91 | 2004 | 06/19/2023 | P | 7 | N | 7 | 7 | 7 | N | 6 | N | N | N | G | | | | 8 |
| Prestressed concrete – Box beam/girders—single/sprea | **2402** | 23309H000218010 | WHITTUM ROAD | SPRING BROOK | Secondary | 5 | 6 | 1 | 51 | 2017 | | 607 | 2016 | 06/19/2023 | A | 8 | 8 | 8 | 8 | 8 | N | 8 | | N | 7 | G | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2403** | 23309H000278010 | SMITHVILLE ROAD | GRAND RIVER | Secondary | 5 | 5 | 3 | 178.8 | 1980 | | 711 | 2014 | 07/31/2023 | A | 6 | N | 5 | 7 | 6 | N | 4 | N | 1 | 2 | F | | | 2 | 3 |
| Timber – Slab | **2404** | 23310H000068010 | VALLEY HWY | SHANTY BROOK | Secondary | 7 | 1 | 1 | 24 | 1984 | | 72 | 2010 | 05/03/2023 | A | 6 | 6 | 6 | 7 | 5 | N | 6 | | N | N | F | | | | 5 |
| Timber – Slab | **2405** | 23310H000068020 | VALLEY HWY | LACEY CREEK | Secondary | 7 | 1 | 1 | 25.9 | 1975 | | 83 | 2010 | 04/13/2023 | P | 7 | 6 | 6 | 5 | 6 | N | 5 | N | N | N | F | | | N | 5 |
| Timber – Slab | **2406** | 23310H000078010 | KINSEL HWY | SHANTY BROOK | Secondary | 7 | 1 | 2 | 40 | 1983 | | 104 | 2011 | 05/03/2023 | A | 7 | 7 | 7 | 7 | 6 | N | 6 | | N | N | G | | | | 5 |
| Concrete – Culvert | **2407** | 23310H000078020 | KINSEL HWY | LACEY CREEK | Secondary | 1 | 19 | 1 | 24 | 2000 | | 137 | 2011 | 04/13/2023 | A | N | | N | N | 8 | 8 | | | | | G | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2408** | 23312H000058010 | EATON HWY | SABEWA CREEK | Secondary | 5 | 5 | 1 | 49.9 | 1993 | | 120 | 2011 | 04/20/2023 | A | 7 | N | 7 | 8 | 8 | N | 7 | N | N | 8 | G | | | N | 8 |
| Steel – Multistringer | **2409** | 23313H000038010 | BISMARK HWY | SEBEWA CREEK | Secondary | 3 | 2 | 1 | 30.8 | 1921 | | 72 | 2010 | 04/20/2023 | P | 6 | 6 | 4 | 5 | 6 | N | 5 | | N | N | P | Struct Def | | | U |
| Prestressed concrete – Box beam/girders—multiple | **2410** | 23313H000078010 | ST JOE HWY | SEBEWA CREEK | Secondary | 5 | 5 | 1 | 44 | 2016 | | 502 | 2015 | 04/27/2023 | A | 8 | N | 8 | 8 | 8 | N | 8 | 8 | 8 | 8 | G | | | N | 8 |
| Steel – Culvert | **2411** | 23313H000078020 | ST JOE HWY | WINCHELL & UNION DRAIN | Secondary | 3 | 19 | 1 | 23 | 1989 | | 299 | 2010 | 04/20/2023 | A | N | | N | N | 8 | 7 | | | | | G | | | | 8 |
| Steel – Multistringer | **2413** | 23313H000118010 | SAGINAW HWY | SEBEWA CREEK | Secondary | 3 | 2 | 1 | 27.9 | 1928 | | 53 | 2010 | 04/20/2023 | P | 5 | 6 | 5 | 5 | 5 | N | 6 | 3 | N | N | F | | | 1 | U |
| Timber – Slab | **2415** | 23313H000138010 | STRIMBACK ROAD | MUD CREEK | Secondary | 7 | 1 | 1 | 25.9 | 1992 | | 58 | 2010 | 04/20/2023 | P | 7 | 7 | 7 | 6 | 7 | N | 6 | N | N | N | F | | | N | 5 |
| Steel – Multistringer | **2416** | 23313H000188010 | SHAYTOWN ROAD | SEBEWA CREEK | Secondary | 3 | 2 | 1 | 27.9 | 1910 | | 91 | 2010 | 04/20/2023 | P | 5 | 5 | 4 | 3 | 5 | N | 5 | 2 | N | N | P | Struct Def | | | 3 |
| Prestressed concrete – Box beam/girders—multiple | **2417** | 23314H000028010 | LAMIE HWY | LACEY CREEK(POWERS DRN) | Secondary | 5 | 5 | 1 | 65 | 2004 | | 25 | 2011 | 04/13/2023 | A | 8 | N | 8 | 8 | 7 | N | 6 | N | N | 5 | G | | | N | 8 |
| Steel – Culvert | **2419** | 23314H000058010 | GRESHAM HWY | THORNAPPLE CREEK | Secondary | 3 | 19 | 2 | 25.9 | 1986 | | 77 | 2011 | 04/13/2023 | A | N | | N | N | 5 | 6 | | | | | F | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2420** | 23314H000118010 | MASON ROAD | THORNAPPLE CREEK | Secondary | 5 | 5 | 2 | 90 | 1989 | | 200 | 2021 | 05/03/2023 | A | 6 | N | 7 | 7 | 7 | N | 8 | | 7 | N | F | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2421** | 23314H000188010 | SHAYTOWN ROAD | THORNAPPLE RIVER | Secondary | 5 | 5 | 1 | 126 | 1997 | | 143 | 2011 | 04/13/2023 | A | 7 | N | 7 | 8 | 8 | N | 5 | N | N | 5 | G | | | N | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2423** | 23315H000018010 | BASE LINE HWY | INDIAN CREEK | Secondary | 5 | 5 | 1 | 54.8 | 1996 | | 72 | 2010 | 06/12/2023 | A | 7 | N | 7 | 8 | 7 | N | 6 | | N | 6 | G | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2424** | 23315H000028010 | BUTTERFIELD ROAD | INDIAN CREEK | Secondary | 5 | 5 | 1 | 30.8 | 1958 | | 519 | 1995 | 06/12/2023 | A | 6 | N | 6 | 4 | 5 | N | 8 | | N | N | P | Struct Def | | | U |
| Prestressed concrete – Multistringer | **2425** | 23315H000048010 | MESSENGER HWY | INDIAN CREEK | Secondary | 5 | 2 | 3 | 99.7 | 1972 | | 50 | 2010 | 06/07/2023 | A | 7 | 7 | 8 | 7 | 8 | N | 6 | | 6 | 7 | G | | | | U |
| Timber – Slab | **2426** | 23315H000068010 | MILLER HWY | BIG CREEK | Secondary | 7 | 1 | 1 | 24 | 1972 | | 102 | 2005 | 06/12/2023 | A | 6 | 6 | 6 | 5 | 5 | N | 6 | | N | N | F | | | | U |
| Steel – Culvert | **2428** | 23315H000128020 | SPICERVILLE HWY | TOWNLINE BROOK DRAIN | Secondary | 3 | 19 | 2 | 20 | 1989 | | 90 | 2005 | 06/07/2023 | A | N | | N | N | 5 | 6 | | | | | F | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2429** | 23315H000128010 | SPICERVILLE HWY | BATTLE CREEK RIVER | Secondary | 5 | 5 | 1 | 65 | 2003 | | 21 | 2005 | 06/07/2023 | A | 7 | N | 8 | 7 | 7 | N | 6 | | N | 5 | G | | | | 8 |
| Timber – Multistringer | **2430** | 23315H000148010 | HARRIS ROAD | INDIAN CREEK | Secondary | 7 | 2 | 1 | 37.7 | 1982 | | 90 | 2010 | 06/20/2023 | K | 2 | 2 | 6 | 4 | 6 | N | 2 | N | N | N | P | Struct Def | | N | 5 |
| Prestressed concrete – Box beam/girders—multiple | **2431** | 23315H000158010 | MCDONALD ROAD | BATTLE CREEK RIVER | Secondary | 5 | 5 | 1 | 48.9 | 1972 | | 97 | 2010 | 06/07/2023 | A | 7 | N | 8 | 5 | 7 | N | 6 | N | N | N | F | | | | U |
| Timber – Slab | **2432** | 23315H000198010 | STINE ROAD | BATTLE CREEK RIVER | Secondary | 7 | 1 | 2 | 52.8 | 1973 | | 602 | 2004 | 06/07/2023 | P | 7 | 7 | 7 | 6 | 6 | N | 6 | | N | 5 | F | | | | U |
| Timber – Slab | **2433** | 23315H000248010 | SCOTT ROAD | BIG CREEK | Secondary | 7 | 1 | 1 | 29.9 | 1978 | | 56 | 2005 | 06/12/2023 | P | 6 | 6 | 6 | 6 | 7 | N | 6 | | N | N | F | | | | U |
| Steel – Culvert | **2434** | 23315H000258010 | MATTHEWS ROAD | BIG CREEK | Secondary | 3 | 19 | 2 | 28.9 | 1985 | | 45 | 2005 | 06/12/2023 | A | N | | N | N | 7 | 7 | | | | | G | | | | 8 |
| Prestressed concrete – Box beam/girders—multiple | **2435** | 23316H000018010 | KINSEL HWY | THORNAPPLE DRAIN | Secondary | 5 | 5 | 1 | 47 | 2004 | | 110 | 2013 | 05/18/2023 | A | 8 | N | 8 | 7 | 8 | N | 7 | | N | 6 | G | | | | 8 |
| Steel – Multistringer | **2436** | 23316H001008010 | EAST GALWAY CL | BOAT CHANNEL | Secondary | 3 | 2 | 1 | 29.9 | 1962 | | 100 | 1997 | 06/14/2023 | A | 7 | 7 | 7 | 6 | 6 | N | 6 | 5 | N | N | F | | | 2 | U |
| Steel – Multistringer | **2437** | 23316H001008020 | EAST GALWAY CL | BOAT CHANNEL | Secondary | 3 | 2 | 1 | 28.9 | 1962 | | 100 | 1997 | 06/14/2023 | P | 6 | 6 | 7 | 7 | 6 | N | 6 | 5 | N | N | F | | | 2 | U |
| Prestressed concrete – Box beam/girders—multiple | **13118** | 232000560008010 | CANAL ROAD | CANADIAN NATIONAL RR | Primary | 5 | 5 | 1 | 98.5 | 2004 | | 7624 | 2013 | 06/14/2023 | A | 7 | N | 8 | 7 | N | N | 6 | | N | N | G | | | | 8 |
| Concrete – Culvert | **13404** | 232000330000C010 | WILLOW HWY | CARRIER CREEK | Primary | 1 | 19 | 1 | 26 | 2004 | | 5817 | 2010 | 06/14/2023 | A | N | | N | N | 8 | 8 | | | | | G | | | | 8 |

# Appendix A-4

| APPENDIX A-2 | | |

# Appendix A-5

**APPENDIX A-3**

| Inventory Data | | | | | | | | | | | Inspection Items | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bridge Type | Structure Number | Bridge ID | Facility Carried | Features Intersected | Structure Type Main Span (Item 43A - Material) | Structure Type Main Span (Item 43B) | Number of Main Span (Item 45) | Total Str Length (Item 49) | Total Str Width (Item 52) | Total Str (sq ft) | Initial Inspection | In Depth Steel Inspection | Pin and Hanger Inspection | Diving Inspection | Provide Monitoring | Review Scour Criticality | Load Rating | Update SIA |
| Steel – Multistringer | **2216** | 23223812000B010 | LANSING RD | THORNAPPLE RIVER | 3 | 2 | 1 | 35 | 60.1 | 2104 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2335** | 23200003000B010 | BELLEVUE HWY | BATTLE CREEK RIVER | 5 | 5 | 1 | 40 | 30.2 | 1208 | | | | | | | | |
| Concrete – Tee beam | **2336** | 23200003000B020 | BELLEVUE HWY | SPRING BROOK | 1 | 4 | 1 | 30.8 | 26.2 | 807 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2337** | 23200005000B010 | SPICERVILLE HWY | SPRING BROOK | 5 | 5 | 1 | 54.8 | 43.3 | 2373 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2338** | 23200007000B010 | FIVE POINT HWY | GAYTON & POWERS EXTN DRN | 5 | 5 | 1 | 26.9 | 37.7 | 1014 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2339** | 23200008000B010 | FIVE POINT HWY | BATTLE CREEK RIVER | 5 | 5 | 2 | 84 | 30.8 | 2587 | | | | | | | | |
| Steel – Box beam/girders—single/spread | **2340** | 23200009000B010 | FIVE POINT HWY | BATTLE CREEK RIVER | 3 | 6 | 1 | 68.1 | 32.4 | 2206 | | | | | | | | |
| Steel – Culvert | **2342** | 23200012000B010 | ISLAND HWY | THORNAPPLE RIVER | 3 | 19 | 1 | 25.9 | 22 | 570 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2343** | 23200015000B010 | NASHVILLE HWY | SHANTY BROOK | 5 | 5 | 1 | 51.8 | 37.4 | 1937 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2344** | 23200017000B010 | VERMONTVILLE HWY | THORNAPPLE RIVER | 5 | 5 | 1 | 110 | 43.6 | 4796 | | | | | | | | |
| Steel – Multistringer | **2345** | 23200017000B020 | VERMONTVILLE HWY | LITTLE THORNAPPLE RIVER | 3 | 2 | 1 | 34.8 | 35.4 | 1232 | | | | | | | | |
| Prestressed concrete – Box beam/girders—single/sprea | **2346** | 23200018000B010 | VERMONTVILLE HWY | THORNAPPLE RIVER | 5 | 6 | 1 | 54 | 37.4 | 2020 | | | | | | | | |
| Steel – Box beam/girders—single/spread | **2347** | 23200027000B010 | MT HOPE | SEBEWA CREEK | 3 | 6 | 1 | 38 | 35.3 | 1341 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2348** | 23200037000B010 | IONIA ROAD | SHANTY BROOK | 5 | 5 | 1 | 36.7 | 37.4 | 1373 | | | | | | | | |
| Steel continuous – Multistringer | **2349** | 23200037000B020 | IONIA ROAD | THORNAPPLE RIVER | 4 | 2 | 3 | 112 | 29 | 3248 | | | | | | | | |
| Concrete – Slab | **2350** | 23200038000B010 | IONIA ROAD | SCIPIO CREEK | 1 | 1 | 1 | 23 | 29.2 | 672 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2351** | 23200042000B010 | DOW ROAD | SEBEWA CREEK | 5 | 5 | 1 | 53 | 37.3 | 1977 | | | | | | | | |
| Concrete – Box beam/girders—multiple | **2352** | 23200043000B010 | AINGER ROAD | BATTLE CREEK RIVER | 1 | 5 | 1 | 65 | 37.7 | 2451 | | | | | | | | |
| Prestressed concrete continuous – Box beam/girders— | **2353** | 23200045000B010 | MULLIKEN ROAD | THORNAPPLE RIVER | 6 | 5 | 2 | 95.8 | 36.4 | 3487 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2354** | 23200047000B010 | COCHRAN ROAD | THORNAPPLE RIVER | 5 | 5 | 1 | 49.9 | 26.9 | 1342 | | | | | | | | |
| Steel – Culvert | **2355** | 23200049000B010 | NARROW LAKE ROAD | BATTLE CREEK RIVER | 3 | 19 | 1 | 21 | 44 | 924 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2356** | 23200050000B010 | OTTO ROAD | CLAFLIN DRAIN | 5 | 5 | 1 | 34.8 | 43.3 | 1507 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2357** | 23200050000B020 | OTTO ROAD | THORNAPPLE RIVER | 5 | 5 | 1 | 65 | 34.4 | 2236 | | | | | | | | |
| Concrete – Culvert | **2358** | 23200053000B010 | HARTEL ROAD | THORNAPPLE RIVER | 1 | 19 | 1 | 25.9 | 44 | 1140 | | | | | | | | |
| Steel – Culvert | **2359** | 23200054000B010 | SPRINGPORT ROAD | PEACOCK EXTN DRAIN | 3 | 19 | 1 | 20 | 44 | 880 | | | | | | | | |
| Steel – Multistringer | **2360** | 23200058000B010 | CREYTS ROAD | GRAND RIVER | 3 | 2 | 4 | 220 | 32.5 | 7150 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2361** | 23200063000B010 | WAVERLY ROAD | GRAND RIVER | 5 | 5 | 2 | 215.3 | 34.5 | 7428 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2362** | 23200064000B010 | WEBSTER ROAD | GRAND RIVER | 5 | 5 | 4 | 281.8 | 43 | 12117 | | | | | | | | |
| Concrete – Culvert | **2363** | 23223011000B030 | OLD M-78 | BR OF BATTLE CREEK RIVER | 1 | 19 | 1 | 33.8 | 77 | 2603 | | | | | | | | |
| Steel – Multistringer | **2364** | 23223031000B020 | OLD US-27 | BIG CREEK | 3 | 2 | 1 | 40 | 38.4 | 1536 | | | | | | | | |
| Timber – Slab | **2365** | 23301H00006B010 | SHERWOOD HWY | BATTLE CREEK | 7 | 1 | 1 | 22 | 26.2 | 576 | | | | | | | | |
| Timber – Slab | **2366** | 23301H00006B020 | SHERWOOD HWY | BATTLE CREEK RIVER | 7 | 1 | 2 | 47.9 | 31.8 | 1523 | | | | | | | | |
| Timber – Slab | **2367** | 23301H00006B030 | SHERWOOD HWY | BATTLE CREEK RIVER | 7 | 1 | 1 | 31.8 | 31.8 | 1011 | | | | | | | | |
| Concrete – Culvert | **2368** | SHERWOOD HWY | BATTLE CREEK RIVER | BIG THORNAPPLE DRAIN | 1 | 19 | 1 | 24 | 36.7 | 881 | | | | | | | | |
| Timber – Slab | **2370** | 23302H00006B020 | GRESHAM HWY | THORNAPPLE RIVER | 7 | 1 | 2 | 40 | 31.8 | 1272 | | | | | | | | |
| Timber – Slab | **2372** | 23302H00008B010 | PINCH HIGHWAY | THORNAPPLE DRAIN | 7 | 1 | 1 | 20 | 35.8 | 716 | | | | | | | | |
| Timber – Slab | **2373** | 23302H00011B010 | BENTON ROAD | THORNAPPLE RIVER | 7 | 1 | 2 | 45 | 31.5 | 1418 | | | | | | | | |
| Timber – Other | **2374** | 23302H00013B010 | STEWART ROAD | BIG THORNAPPLE DRAIN | 7 | | 1 | 32.8 | 24 | 787 | | | | | | | | |
| Aluminum – Culvert | **2375** | 23302H00014B010 | JOHNSON ROAD | THORNAPPLE DRAIN | 9 | 19 | 1 | 32.5 | 44.6 | 1450 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2376** | 23302H00015B010 | ROYSTON | BIG THORNAPPLE DRAIN | 5 | 5 | 1 | 43 | 24.3 | 1045 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2378** | 23303H00008B010 | MAHAN HWY | BATTLE CREEK RIVER | 5 | 5 | 1 | 60 | 32.9 | 1974 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2379** | 23303H00012B010 | NYE HWY | BATTLE CREEK RIVER | 5 | 5 | 1 | 44.9 | 31.2 | 1401 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2380** | 23303H00014B010 | SPICERVILLE HWY | BATTLE CREEK RIVER | 5 | 5 | 1 | 46 | 31.3 | 1440 | | | | | | | | |
| Timber – Slab | **2381** | 23303H00017B030 | BROOKFIELD ROAD | BATTLE CREEK RIVER | 7 | 1 | 2 | 35.8 | 26.2 | 938 | | | | | | | | |
| Steel – Multistringer | **2382** | 23303H00019B010 | COATS ROAD | BATTLE CREEK RIVER | 3 | 2 | 1 | 26.9 | 16.4 | 441 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2383** | 23304H00003B010 | BROADWAY HWY | BATTLE CREEK RIVER | 5 | 5 | 1 | 65 | 30 | 1950 | | | | | | | | |
| Timber – Slab | **2384** | 23304H00005B010 | KALAMO HWY | BATTLE CREEK RIVER | 7 | 1 | 2 | 52.8 | 32.2 | 1700 | | | | | | | | |
| Timber – Slab | **2385** | 23304H00009B010 | VALLEY HWY | FISH CREEK | 7 | 1 | 1 | 31.8 | 31.8 | 1011 | | | | | | | | |
| Steel – Culvert | **2386** | 23304H00009B020 | VALLEY HIGHWAY | FISH CREEK | 3 | 19 | 2 | 29.9 | | 786 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2387** | 23304H00011B010 | KINSEL HWY | LITTLE THORNAPPLE RIVER | 5 | 5 | 1 | 37.7 | 34.1 | 1286 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2388** | 23305H00002B010 | LAMIE HIGHWAY | LITTLE THORNAPPLE RIVER | 5 | 5 | 1 | 60 | 34.3 | 2058 | | | | | | | | |
| Timber – Other | **2389** | 23305H00003B010 | GRESHAM HWY | THORNAPPLE RIVER | 7 | | 1 | 52.8 | 22 | 1162 | | | | | | | | |
| Timber – Slab | **2390** | 23305H00003B030 | GRESHAM HWY | LITTLE THORNAPPLE RIVER | 7 | 1 | 2 | 47.9 | 26.2 | 1255 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2391** | 23305H00018B010 | MOYER ROAD | THORNAPPLE RIVER | 5 | 5 | 1 | 65 | 29.9 | 1944 | | | | | | | | |
| Timber – Slab | **2392** | 23305H00019B010 | WHEATON ROAD | THORNAPPLE RIVER | 7 | 1 | 2 | 59.7 | 31.5 | 1881 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2393** | 23307H00005B010 | KALAMO HWY | BATTLE CREEK RIVER | 5 | 5 | 1 | 59 | 37.6 | 2218 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2394** | 23307H00014B010 | BROOKFIELD ROAD | BATTLE CREEK RIVER | 5 | 5 | 1 | 54 | 37.3 | 2014 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2395** | 23308H00004B010 | PETRIEVILLE ROAD | GRAND RIVER | 5 | 5 | 3 | 135.8 | 34.4 | 4672 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2397** | 23308H00008B010 | BUNKER HIGHWAY | GRAND RIVER | 5 | 5 | 3 | 159.8 | 32.8 | 5241 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2398** | 23309H00004B010 | BUCK HIGHWAY | SPRING BROOK DRAIN | 5 | 5 | 1 | 61 | 34.4 | 2098 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2399** | 23309H00005B010 | HOLMES HWY | SPRING BROOK | 5 | 5 | 1 | 36.7 | 30.8 | 1130 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2400** | 23309H00008B010 | BRADFORD HWY | SPRING BROOK | 5 | 5 | 1 | 50.9 | 30.8 | 1568 | | | | | | | | |
| Prestressed concrete – Box beam/girders—single/sprea | **2402** | 23309H00021B010 | WHITTUM ROAD | SPRING BROOK | 5 | 6 | 1 | 51 | 37.3 | 1902 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2403** | 23309H00027B010 | SMITHVILLE ROAD | GRAND RIVER | 5 | 5 | 3 | 178.8 | 34.8 | 6222 | | | | | | | | |
| Timber – Slab | **2404** | 23310H00006B010 | VALLEY HWY | SHANTY BROOK | 7 | 1 | 1 | 24 | 27.2 | 653 | | | | | | | | |
| Timber – Slab | **2405** | 23310H00006B020 | VALLEY HWY | LACEY CREEK | 7 | 1 | 1 | 25.9 | 27.9 | 723 | | | | | | | | |
| Timber – Slab | **2406** | 23310H00007B010 | KINSEL HWY | SHANTY BROOK | 7 | 1 | 2 | 40 | 31.5 | 1260 | | | | | | | | |
| Concrete – Culvert | **2407** | 23310H00007B020 | KINSEL HWY | LACEY CREEK | 1 | 19 | 1 | 24 | | 576 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2408** | 23312H00005B010 | EATON HWY | SABEWA CREEK | 5 | 5 | 1 | 49.9 | 31.2 | 1557 | | | | | | | | |
| Steel – Multistringer | **2409** | 23313H00003B010 | BISMARK HWY | SEBEWA CREEK | 3 | 2 | 1 | 30.8 | 18 | 554 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2410** | 23313H00007B010 | ST JOE HWY | SEBEWA CREEK | 5 | 5 | 1 | 44 | 37.4 | 1646 | | | | | | | | |
| Steel – Culvert | **2411** | 23313H00007B020 | ST JOE HWY | WINCHELL & UNION DRAIN | 3 | 19 | 1 | 23 | | 679 | | | | | | | | |
| Steel – Multistringer | **2413** | 23313H00011B010 | SAGINAW HWY | SEBEWA CREEK | 3 | 2 | 1 | 27.9 | 19.7 | 550 | | | | | | | | |
| Timber – Slab | **2415** | 23313H00013B010 | STRIMBACK ROAD | MUD CREEK | 7 | 1 | 1 | 25.9 | 31.8 | 824 | | | | | | | | |
| Steel – Multistringer | **2416** | 23313H00018B010 | SHAYTOWN ROAD | SEBEWA CREEK | 3 | 2 | 1 | 27.9 | 16.4 | 458 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2417** | 23314H00002B010 | LAMIE HWY | LACEY CREEK(POWERS DRN) | 5 | 5 | 1 | 65 | 28 | 1820 | | | | | | | | |
| Steel – Culvert | **2419** | 23314H00005B010 | GRESHAM HWY | THORNAPPLE CREEK | 3 | 19 | 2 | 25.9 | 29.5 | 764 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2420** | 23314H00011B010 | MASON ROAD | THORNAPPLE CREEK | 5 | 5 | 2 | 90 | 31.1 | 2799 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2421** | 23314H00018B010 | SHAYTOWN ROAD | THORNAPPLE RIVER | 5 | 5 | 1 | 126 | 32.8 | 4133 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2423** | 23315H00001B010 | BASE LINE HWY | INDIAN CREEK | 5 | 5 | 1 | 54.8 | 34.1 | 1869 | | | | | | | | |
| Prestressed concrete – Box beam/girders—multiple | **2424** | 23315H00002B010 | BUTTERFIELD ROAD | INDIAN CREEK | 5 | 5 | 1 | 30.8 | 24.6 | 758 | | | | | | | | |

# C. CULVERT ASSET MANAGEMENT PLAN SUPPLEMENT

## Culvert Primer

Culverts are structures that lie underneath roads, enabling water to flow from one side of the roadway to the other (Figure C-1 and Figure C-2). The important distinguishing factor between a culvert and a bridge is the size. Culverts are considered anything under 20 feet while bridges, according to the Federal Highway Administration, are 20 feet or more. While similar in function to storm sewers, culverts differ from storm sewers in that culverts are open on both ends, are constructed as straight-line conduits, and lack intermediate drainage structures like manholes and catch basins. Culverts are critical to the service life of a road because of the important role they play in keeping the pavement layers well drained and free from the forces of water building up on one side of the roadway.

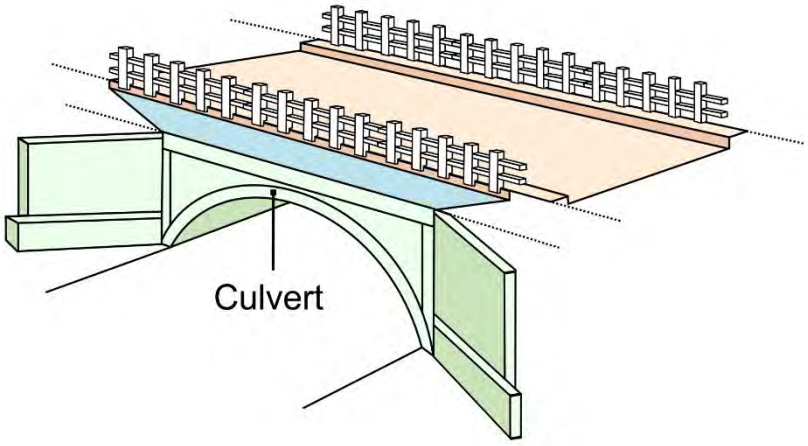



Figure C-1: Diagram of a culvert structure




Figure C-2: Examples of culverts. Culverts allow water to pass under the roadway (left), they are straight-line conduits with no intermediate drainage structures (middle), and they come in various materials (left: metal; middle and right: concrete) and shapes (left: arch; middle: round; right: box).

### *Culvert Types*

Michigan conducted its first pilot data collection on local agency culverts in the state in 2018. Of almost 50,000 culverts inventoried as part of the state-wide pilot project, the material type used for constructing culverts ranged from (in order of predominance) corrugated steel, concrete, plastic, aluminum, and masonry/tile, to timber materials. The shapes of the culverts were (in order of predominance) circular, pipe arch, arch, rectangular, horizontal ellipse, or box. The diameter for the majority of culverts ranged from less than 12 inches to 24 inches; a portion, however, ranged from 30 inches to more than 48 inches.

### *Culvert Condition*

Several culvert condition assessment practices exist. The FHWA has an evaluation method in its 1986 *Culvert Inspection Manual*. In conjunction with descriptions and details in the Ohio Department of Transportation's 2017 *Culvert Inspection Manual* and Wisconsin DOT's *Bridge Inspection Field Manual*, the FHWA method served as the method for evaluating Michigan culverts in the pilot. In 2018, Michigan local agencies participated in a culvert pilot data collection, gathering inventory and condition data; full detail on the condition assessment system used in the data collection can be found in Appendix G of the final report (https://www.michigan.gov/documents/tamc/TAMC_2018_Culvert_Pilot_Report_Complete_634795_7.pdf).

The Michigan culvert pilot data collection used a 1 through 10 rating system, where 10 is considered a new culvert with no deterioration or distress and 1 is considered total failure. Each of the different culvert material types requires the assessment of features unique to that material type, including structural deterioration, invert deterioration, section deformation, blockage(s) and scour. Corrugated metal pipe, concrete pipe, plastic pipe, and masonry culverts require an additional assessment of joints and seams. Slab abutment culverts require an additional assessment of the concrete abutment and the masonry abutment. Assessment of timber culverts only relied on blockage(s) and scour. The assessments come together to generate condition rating categories of good (rated as 10, 9, or 8), fair (rated as 7 or 6), poor (rated as 5 or 4), or failed (rated as 3, 2, or 1).

### *Culvert Treatments*

The *MDOT Drainage Manual* addresses culvert design and treatments. Of most importance to the longevity of culverts is regular cleaning to prevent clogs. More extensive treatments may include re-positioning the pipe to improve its grade and lining a culvert to achieve more service life after structural deterioration has begun.

# D. TRAFFIC SIGNALS ASSET MANAGEMENT PLAN SUPPLEMENT

## Traffic Signals Primer

### *Types*

Electronic traffic control devices come in a large array of configurations, which include case signs (e.g., keep right/left, no right/left turn, reversible lanes), controllers, detection (e.g., cameras, push buttons), flashing beacons, interconnects (e.g., DSL, fire station, phone line, radio), pedestrian heads (e.g., hand-man), and traffic signals. This asset management plan is only concerned with traffic signals (Figure D-1) as a functioning unit and does not consider other

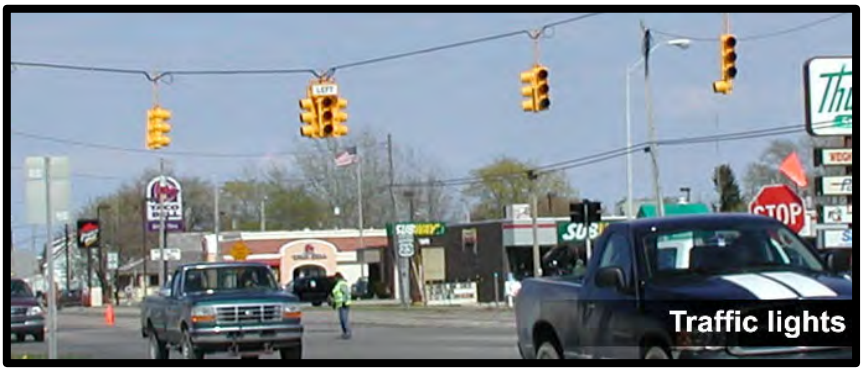



Figure D-1: Example of traffic signals

electronic traffic control devices.

### *Condition*

Traffic signal assessment considers the functioning of basic tests on a pass/fail basis. These tests include battery backup testing, components testing, conflict monitor testing, radio testing, and underground detection.

### *Treatments*

Traffic signals are maintained in accordance with the *Michigan Manual on Uniform Traffic Control Devices*. Maintenance of traffic signals includes regular maintenance of all components, cleaning and servicing to prevent undue failures, immediate maintenance in the case of emergency calls, and provision of stand-by equipment. Timing changes are restricted to authorized personnel only.

# E. GLOSSARY & ACRONYMS

## Glossary

**Alligator cracking:** Cracking of the surface layer of an asphalt pavement that creates a pattern of interconnected cracks resembling alligator hide. This is often due to overloading a pavement, sub-base failure, or poor drainage.[5]

**Asset management:** A process that uses data to manage and track road assets in a cost-effective manner using a combination of engineering and business principles. Public Act 325 of 2018 provides a legal definition: "an ongoing process of maintaining, preserving, upgrading, and operating physical assets cost effectively, based on a continuous physical inventory and condition assessment and investment to achieve established performance goals".[6]

**Biennial inspection:** Inspection of an agency's bridges every other year, which happens in accordance with National Bridge Inspection Standards and Michigan Department of Transportation requirements.

**Bridge inspection program:** A program implemented by a local agency to inspect the bridges within its jurisdiction systematically in order to ensure proper functioning and structural soundness.

**Capital preventative maintenance:** Also known as CPM, a planned set of cost-effective treatments to address of fair-rated infrastructure before the structural integrity of the system has been severely impacted. These treatments aim to slow deterioration and to maintain or improve the functional condition of the system without significantly increasing the structural capacity. Light capital preventive maintenance is a set of treatments designed to seal isolated areas of the pavement from water, such as crack and joint sealing, to protect and restore pavement surface from oxidation with limited surface thickness material, such as fog seal; generally, application of a light CPM treatment does not provide a corresponding increase in a segment's PASER score. Heavy capital preventive maintenance is a set of surface treatments designed to protect pavement from water intrusion or environmental weathering without adding significant structural strength, such as slurry seal, chip seal, or thin (less than 1.5-inch) overlays for bituminous surfaces or patching or partial-depth (less than 1/3 of pavement depth) repair for concrete surfaces.

**Chip seal:** An asphalt pavement treatment method consisting of, first, spraying liquid asphalt onto the old pavement surface and, then, a single layer of small stone chips spread onto the wet asphalt layer.

**City major:** A road classification, defined in Michigan Public Act 51, that encompasses the generally more important roads in a city or village. City major roads are designated by a municipality's governing body and are subject to approval by the State Transportation Commission. These roads do not include roads under the jurisdiction of a county road commission or trunkline highways.

[5] https://en.wikipedia.org/wiki/Crocodile_cracking
[6] Inventory-based Rating System for Gravel Roads: Training Manual

**City minor:** A road classification, defined in Michigan Public Act 51, that encompasses the generally less important roads in a city or village. These roads include all city or village roads that are not city major road and do not include roads under the jurisdiction of a county road commission.

**Composite pavement:** A pavement consisting of concrete and asphalt layers. Typically, composite pavements are old concrete pavements that were overlaid with HMA in order to gain more service life.

**Concrete joint resealing:** Resealing the joints of a concrete pavement with a flexible sealant to prevent moisture and debris from entering the joints. When debris becomes lodged inside a joint, it inhibits proper movement of the pavement and leads to joint deterioration and spalling.

**Concrete pavement:** Also known as rigid pavement, a pavement made from portland cement concrete. Concrete pavement has an average service life of 30 years and typically does not require as much periodic maintenance as HMA.

**Cost per lane mile:** Associated cost of construction, measured on a per lane, per mile basis. Also see *lane-mile segment*.

**County local:** A road classification, defined in Michigan Public Act 51, that encompasses the generally less important and low-traffic roads in a county. This includes all county roads that are not classified as county primary roads.

**County primary:** A road classification, defined in Michigan Public Act 51, that encompasses the generally more important and high-traffic roads in a county. County primary roads are designated by board members of the county road commissions and are subject to approval by the State Transportation Commission.

**CPM:** See *Capital preventive maintenance*.

**Crack and seat:** A concrete pavement treatment method that involves breaking old concrete pavement into small chunks and leaving the broken pavement in place to provide a base for a new surface. This provides a new wear surface that resists water infiltration and helps prevent damaged concrete from reflecting up to the new surface.

**Crack seal:** A pavement treatment method for both asphalt and concrete pavements that fills cracks with asphalt materials, which seals out water and debris and slows down the deterioration of the pavement. Crack seal may encompass the term “crack filling”.

**Crush and shape:** An asphalt pavement treatment method that involves pulverizing the existing asphalt pavement and base and then reshaping the road surface to correct imperfections in the road’s profile. Often, a layer of gravel is added along with a new wearing surface such as an HMA overlay or chip seal.

**Crust:** A very tightly compacted surface on an unpaved road that sheds water with ease but takes time to be created.

**Culvert:** A pipe or structure used under a roadway that allows cross-road drainage while allowing traffic to pass without being impeded; culverts span up to 20 feet.[7]

[7] Adapted from Inventory-based Rating System for Gravel Roads: Training Manual

**Dowel bar retrofit repair:** A concrete pavement treatment method that involves cutting slots in a cracked concrete slab, inserting steel bars into the slots, and placing concrete to cover the new bars and fill the slots. It aims to reinforce cracks in a concrete pavement.

**Dust control:** A gravel road surface treatment method that involves spraying chloride or other chemicals on the gravel surface to reduce dust loss, aggregate loss, and maintenance. This is a relatively short-term fix that helps create a crusted surface.

**Expansion joint:** Joints in a bridge that allow for slight expansion and contraction changes in response to temperature. Expansion joints prevent the build up of excessive pressure, which can cause structural damage to the bridge.

**Federal Highway Administration:** Also known as FHWA, this is an agency within the U.S. Department of Transportation that supports state and local governments in the design, construction, and maintenance of the nation's highway system.[8]

**Federal-aid network:** Portion of road network that is comprised of federal-aid routes. According to Title 23 of the United States Code, federal-aid-eligible roads are "highways on the federal-aid highways systems and all other public roads not classified as local roads or rural minor collectors".[9] Roads that are part of the federal-aid network are eligible for federal gas-tax monies.

**FHWA:** See *Federal Highway Administration*.

**Flexible pavement:** See *hot-mix asphalt pavement*.

**Fog seal:** An asphalt pavement treatment method that involves spraying a liquid asphalt coating onto the entire pavement surface to fill hairline cracks and prevent damage from sunlight and oxidation. This method works best for good to very good pavements.

**Full-depth concrete repair:** A concrete pavement treatment method that involves removing sections of damaged concrete pavement and replacing it with new concrete of the same dimensions in order to restore the riding surface, delay water infiltration, restore load transfer from one slab to the next, and eliminate the need to perform costly temporary patching.

**Geographic divides:** Areas where a geographic feature (e.g., river, lake, mountain) limits crossing points of the feature.

**Grants:** Competitive funding gained through an application process and targeted at a specific project type to accomplish a specific purpose. Grants can be provided both on the federal and state level and often make up part of the funds that a transportation agency receives.

**Gravel surfacing:** A low-cost, easy-to-maintain road surface made from aggregate and fines.

**Heavy capital preventive maintenance:** See *Capital preventive maintenance*.

**HMA:** See *hot-mix asphalt pavement*.

**Hot-mix asphalt overlay:** Also known as HMA overlay, this a surface treatment that involves layering new asphalt over an existing pavement, either asphalt or concrete. It creates a new

[8] Federal Highway Administration webpage https://www.fhwa.dot.gov/
[9] Inventory-based Rating System for Gravel Roads: Training Manual

wearing surface for traffic and to seal the pavement from water, debris, and sunlight damage, and it often adds significant structural strength.

**Hot-mix asphalt pavement:** Also known as HMA pavement, this type of asphalt creates a flexible pavement composed of aggregates, asphalt binder, and air voids. HMA is heated for placement and compaction at high temperatures. HMA is less expensive to construct than concrete pavement, however it requires frequent maintenance activities and generally lasts 18 years before major rehabilitation is necessary. HMA makes up the vast majority of local-agency-owned pavements.

**IBR:** See *IBR element*, *IBR number*, and/or *Inventory-based Rating System*™.

**IBR element:** A feature used in the IBR System™ for assessing the condition of roads. The system relies on assessing three elements: surface width, drainage adequacy, and structural adequacy.[10]

**IBR number:** The 1-10 rating determined from assessments of the weighted IBR elements. The weighting relates each element to the intensity road work needed to improve or enhance the IBR element category.[11]

**Interstate highway system:** The road system owned and operated by each state consisting of routes that cross between states, make travel easier and faster. The interstate roads are denoted by the prefix “I” or “U.S.” and then a number, where odd routes run north-south and even routes run east-west. Examples are I-75 or U.S. 2.[12]

**Inventory-based Rating System™:** Also known as the IBR System™, a rating system designed to assess the capabilities of gravel and unpaved roads to support intended traffic volumes and types year round. It assesses roads based on how three IBR elements, or features—surface width, drainage adequacy, and structural adequacy—compare to a baseline, or “good”, road.[13]

**Investment Reporting Tool:** Also known as IRT, a web-based system used to manage the process for submitting required items to the Michigan Transportation Asset Management Council. Required items include planned and completed maintenance and construction activity for roads and bridges and comprehensive asset management plans.

**IRT:** See *Investment Reporting Tool*.

**Jurisdiction:** Administrative power of an entity to make decisions for something. In Michigan, the three levels of jurisdiction classification for transportation assets are state highways, county roads, and city and village streets. State highways are under the jurisdiction of the Michigan Department of Transportation, county roads are under the jurisdiction of the road commission for the county in which the roads are located, and city and village streets are under the jurisdiction of the municipality in which the roads are located.

[10] Inventory-based Rating System for Gravel Roads: Training Manual
[11] Inventory-based Rating System for Gravel Roads: Training Manual
[12] https://www.fhwa.dot.gov/interstate/faq.cfm#question3
[13] Adapted from Inventory-based Rating System for Gravel Roads: Training Manual

**Jurisdictional borders:** Borders between two road-owning-agency jurisdictions, or where the roads owned by one agency turn into roads owned by another agency. Examples of jurisdictional borders are township or county lines.

**Lane-mile segment:** A segment of road that is measured by multiplying the centerline miles of a roadway by the number of lanes present.

**Lane-mile-years:** A network's total lane-miles multiplied by one year; a method to quantify the measurable loss of pavement life.

**Light capital preventive maintenance:** See *Capital preventive maintenance*.

**Limited access areas:** Areas—typically remote areas—serviced by few or seasonal roads that require long detours routes if servicing roads are closed.

**Main access to key commercial districts:** Areas where large number or large size business will be significantly impacted if a road is unavailable.

**Maintenance grading:** A surface treatment method for unpaved roads that involves re-grading the road to remove isolated potholes, washboarding, and ruts, and then restoring the compacted crust layer.

**MDOT:** See *Michigan Department of Transportation*.

**MDOT's Local Bridge Program Call for Projects:** A call for project proposals for replacement, rehabilitation, and/or preventive maintenance of local bridges that, if granted, receives bridge funding from the Michigan Department of Transportation. The Call for Projects is made by the Local Bridge Program.

**MGF:** See *Michigan Geographic Framework*.

**Michigan Department of Transportation:** Also known as MDOT, this is the state of Michigan's department of transportation, which oversees roads and bridges owned by the state or federal government in Michigan.

**Michigan Geographic Framework:** Also known as MGF, this is the state of Michigan's official digital base map that contains location and road information necessary to conduct state business. The Michigan Department of Transportation uses the MGF to link transportation assets to a physical location.

**Michigan Public Act 51 of 1951:** Also known as PA 51, this is a Michigan legislative act that served as the foundation for establishing a road funding structure by creating transportation funding distribution methods and means. It has been amended many times.[14]

**Michigan Public Act 325 of 2018:** Also known as PA 325, this legislation modified PA 51 of 1951 in regards to asset management in Michigan, specifically 1) re-designating the TAMC under Michigan Infrastructure Council (MIC); 2) promoting and overseeing the implementation of recommendations from the regional infrastructure asset management pilot program; 3) requiring local road three-year asset management plans beginning October 1, 2020; 4) adding asset classes that impact system performance, safety or risk management, including culverts and signals; 5) allowing MDOT to withhold funds if no asset management plan submitted; and 6)

[14] Inventory-based Rating System for Gravel Roads: Training Manual

prohibiting shifting finds from a country primary to a county local, or from a city major to a city minor if no progress toward achieving the condition goals described in its asset plan.[15]

**Michigan Public Act 499 of 2002:** Also known as PA 499, this legislation requires road projects for the upcoming three years to be reported to the TAMC.

**Michigan Transportation Asset Management Council:** Also known as the TAMC, a council comprised of professionals from county road commissions, cities, a county commissioner, a township official, regional and metropolitan planning organizations, and state transportation department personnel. The council reports directly to the Michigan Infrastructure Council.[16] The TAMC provides resources and support to Michigan's road-owning agencies, and serves as a liaison in data collection requirements between agencies and the state.

**Michigan Transportation Fund:** Also known as MTF, this is a source of transportation funding supported by vehicle registration fees and the state's per-gallon gas tax.

**Microsurface treatment:** An asphalt pavement treatment method that involves applying modified liquid asphalt, small stones, water, and portland cement for the purpose of protecting a pavement from damage caused by water and sunlight.

**Mill and hot-mix asphalt overlay:** Also known as a mill and HMA overlay, this is a surface treatment that involves the removal of the top layer of pavement by milling and the replacement of the removed layer with a new HMA layer.

**Mix-of-fixes:** A strategy of maintaining roads and bridges that includes generally prioritizes the spending of money on routine maintenance and capital preventive maintenance treatments to impede deterioration and then, as money is available, performing reconstruction and rehabilitation.

**MTF:** See *Michigan Transportation Fund*.

**National Bridge Inspection Standards:** Also known as NBIS, standards created by the Federal Highway Administration to locate and evaluate existing bridge deficiencies in the federal-aid highway system to ensure the safety of the traveling public. The standards define the proper safety for inspection and evaluation of all highway bridges.[17]

**National Center for Pavement Preservation:** Also known as the NCPP, a center that offers education, research, and outreach in current and innovative pavement preservation practices. This collaborative effort of government, industry, and academia entities was established at Michigan State University.

**National Functional Class:** Also known as NFC, a federal grouping system for public roads that classifies roads according to the type of service that the road is intended to provide.

**National highway system:** Also known as NHS, this is a network of roads that includes the interstate highway system and other major roads managed by state and local agencies that

[15] Inventory-based Rating System for Gravel Roads: Training Manual
[16] Inventory-based Rating System for Gravel Roads: Training Manual
[17] https://www.fhwa.dot.gov/bridge/nbis/

serve major airports, marine, rail, pipelines, truck terminals, railway stations, military bases, and other strategic facilities.

**NBIS:** See *National Bridge Inspection Standards*.

**NCPP:** See *National Center for Pavement Preservation*.

**NCPP Quick Check:** A system created by the National Center for Pavement Preservation that works under the premise that a one-mile road segment loses one year of life each year that it is not treated with a maintenance, rehabilitation, or reconstruction project.

**NFC:** See *National Functional Class*.

**Non-trunkline:** A local road intended to be used over short distances but not recommended for long-distance travel.

**Other funds:** Expenditures for equipment, capital outlay, debt principal payment, interest expense, contributions to adjacent governmental units, principal, interest and bank fees, and miscellaneous for cities and villages.

**PA:** See *Michigan Public Act 51*, *Michigan Public Act 325*, and/or *Michigan Public Act 499*.

**Partial-depth concrete repair:** A concrete pavement treatment method that involves removing spalled or delaminated areas of concrete pavement, usually near joints and cracks, and replacing with new concrete. This is done to provide a new wearing surface in isolated areas, to slow down water infiltration, and to help delay further freeze-thaw damage.

**PASER:** See *Pavement Surface Evaluation and Rating system*.

**Pavement reconstruction:** A complete removal of the old pavement and base and construction of an entirely new road. This is the most expensive rehabilitation of the roadway and also the most disruptive to traffic patterns.

**Pavement Surface Evaluation and Rating system:** Also known as the PASER system, the PASER system rates surface condition on a 1-10 scale, where 10 is a brand new road with no defects, 5 is a road with distress but that is structurally sound and requires only preventative maintenance, and 1 is a road with extensive surface and structural distresses that is in need of total reconstruction. This system provides a simple, efficient, and consistent method for evaluating the condition of paved roads.[18]

**Pothole:** A defect in a road that produces a localized depression.[19]

**Preventive maintenance:** Planned treatments to an existing asset to prevent deterioration and maintain functional condition. This can be a more effective use of funds than the costly alternative of major rehabilitation or replacement.

**Proactive preventive maintenance:** Also known as PPM, a method of performing capital preventive maintenance treatments very early in a pavement's life, often before it exhibits signs of pavement defect.

[18] Adapted from Inventory-based Rating System for Gravel Roads: Training Manual
[19] Inventory-based Rating System for Gravel Roads: Training Manual

**Public Act 51:** See *Michigan Public Act 51 of 1951*

**Public Act 325:** See *Michigan Public Act 325 of 2018*

**Public Act 499:** See *Michigan Public Act 499 of 2002*

**Reconstruction and rehabilitation programs:** Programs intended to reconstruct and rehabilitate a road.

**Restricted load postings:** A restriction enacted on a bridge structure when is incapable of transporting a state's legal vehicle loads.

**Rights-of-way ownership:** The owning of the right-of-way, which is the land over which a road or bridge travels. In order to build a road, road agencies must own the right-of-way or get permission to build on it.

**Rigid pavement:** See *concrete pavement*.

**Road infrastructure:** An agency's road network and assets necessary to make it function, such as traffic signage and ditches.

**Road:** The area consisting of the roadway (i.e., the travelled way or the portion of the road on which vehicles are intended to drive), shoulders, ditches, and areas of the right of way containing signage.[20]

**Roadsoft:** An asset management software suit that enables agencies to manage road and bridge related infrastructure. The software provides tools for collecting, storing, and analyzing data associated with transportation infrastructure. Built on an optimum combination of database engine and GIS mapping tools, Roadsoft provides a quick, smooth user experience and almost unlimited data handling capabilities.[21]

**Ruts/rutting:** Deformation of a road that usually forms as a permanent depression concentrated under the wheel path parallel to the direction of travel.[22]

**Scheduled maintenance:** Low-cost, day-to-day activities applied to bridges on a scheduled basis that mitigates deterioration.[23]

**Sealcoat pavement:** A gravel road that has been sealed with a thin asphalt binder coating that has stone chips spread on top.

**Service life:** Time from when a road or treatment is first constructed to when it reaches a point where the distresses present change from age-related to structural-related (also known as the critical distress point).[24]

**Slurry seal:** An asphalt pavement treatment method that involves applying liquid asphalt, small stones, water, and portland cement in a very thin layer with the purpose of protecting an existing pavement from being damaged by water and sunlight.

[20] Inventory-based Rating System for Gravel Roads: Training Manual
[21] Inventory-based Rating System for Gravel Roads: Training Manual
[22] Paving Class Glossary
[23] Inventory-based Rating System for Gravel Roads: Training Manual
[24] Inventory-based Rating System for Gravel Roads: Training Manual

**Structural improvement:** Pavement treatment that adds strength to the pavement. Roads requiring structural improvement exhibit alligator cracking and rutting and are considered poor by the TAMC definitions for condition.

**Subsurface infrastructure:** Infrastructure maintained by local agencies that reside underground, for example, drinking water distribution systems, wastewater collection systems, and storm sewer systems.

**TAMC:** See *Michigan Transportation Asset Management Council*.

**TAMC pavement condition dashboard:** Website for viewing graphs of pavement and bridge conditions, traffic and miles travelled, safety statistics, maintenance activities, and financial data for Michigan's cities and villages, counties, and regions, as well as the state of Michigan.

**TAMC's good/fair/poor condition classes:** Classification of road conditions defined by the Michigan Transportation Asset Management Council based on bin ranges of PASER scores and similarities in defects and treatment options. Good roads have PASER scores of 8, 9, or 10, have very few defects, and require minimal maintenance. Fair roads have PASER scores of 5, 6, or 7, have good structural support but a deteriorating surface, and can be maintained with CPM treatments. Poor roads have PASER scores of 1, 2, 3, or 4, exhibit evidence that the underlying structure is failing, such as alligator cracking and rutting. These roads must be rehabilitated with treatments like heavy overlay, crush and shape, or total reconstruction.

**Tax millages:** Local tax implemented to supplement an agency's budget, such as road funding.

**Thin hot-mix asphalt overlay:** Application of a thin layer of hot-mix asphalt on an existing road to re-seal the road and protect it from damage caused by water. This also improves the ride quality and provides a smoother, uniform appearance that improves visibility of pavement markings.[25]

**Transportation infrastructure:** All of the elements that work together to make the surface transportation system function including roads, bridges, culverts, traffic signals, and signage.

**Trigger:** When a PASER score gives insight to the preferred timeline of a project for applying the correct treatment at the correct time.

**Trunkline abbreviations:** The prefixes *M-*, *I-*, and *US* indicate roads in Michigan that are part of the state trunkline system, the Interstate system, and the US Highway system. These roads consist of anything from 10-lane urban freeways to two-lane rural highways and even one non-motorized highway; they cover 9,668 centerline miles. Most of the roads are maintained by MDOT.

**Trunkline bridges:** Bridge present on a trunkline road, which typically connects cities or other strategic places and is the recommended rout for long-distance travel.[26]

**Trunkline maintenance funds:** Expenditures under a maintenance agreement with MDOT for maintenance activities performed on MDOT trunkline routes.

[25] [second sentence] http://www.kentcountyroads.net/road-work/road-treatments/ultra-thin-overlay
[26] https://en.wikipedia.org/wiki/Trunk_road

**Trunkline:** Major road that typically connects cities or other strategic places and is the recommended route for long-distance travel.[27]

**Washboarding:** Ripples in the road surface that are perpendicular to the direction of travel.[28]

**Wedge/patch sealcoat treatment:** An asphalt pavement treatment method that involves correcting the damage frequently found at the edge of a pavement by installing a narrow, 2- to 6-foot-wide wedge along the entire outside edge of a lane and layering with HMA. This extends the life of an HMA pavement or chip seal overlay by adding strength to significantly settled areas of the pavement.

**Worst-first strategy:** Asset management strategy that treats only the problems, often addressing the worst problems first, and ignoring preventive maintenance. This strategy is the opposite of the "mix of fixes" strategy. An example of a worst-first approach would be purchasing a new automobile, never changing the oil, and waiting till the engine fails to address any deterioration of the car.

# List of Acronyms

CPM: capital preventive maintenance

FHWA: Federal Highway Administration

HMA: hot-mix asphalt

I: trunkline abbreviation for routes on the Interstate system

IBR: Inventory-based Rating

M: trunkline abbreviation for Michigan state highways

MDOT: Michigan Department of Transportation

MTF: Michigan Transportation Fund

NBIS: National Bridge Inspection Standards

NCPP: National Center for Pavement Preservation

NHS: National Highway System

PA 51: Michigan Public Act 51 of 1951

PASER: Pavement Surface Evaluation and Rating

R&R: reconstruction and rehabilitation programs

TAMC: (Michigan) Transportation Asset Management Council

[27] https://en.wikipedia.org/wiki/Trunk_road
[28] Inventory-based Rating System for Gravel Roads: Training Manual

US: trunkline abbreviation for routes on the US Highway system

# Eaton County Department of Construction Codes & Planning and Zoning

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"OUR GOAL IS TO PROVIDE A SAFER PLACE TO LIVE, WORK AND PLAY"

**Department of Construction Codes & Planning and Zoning Report 3/8/2024**
**For Public Works & Planning Committee March 13, 2024**

**Department Boards:**

- The **Planning Commission** met on March 5th, they approved a Conditional Use Permit for the construction of the new Narrow Lake Country Store located in Brookfield Township; the new store will include a restaurants and bar. The Planning Commission also recommended approval of DCA-3-24-1 and DCA-3-24-2, proposed text amendments to the Eaton County Zoning Ordinance.
- The **Zoning Board of Appeals** met on March 5th, they approved BA-4-24-1 an application requesting an interpretation of the Zoning Ordinance, specifically where Marihuana Facilities may operate within existing land uses.
- The **Construction Code Board of Appeals** did not meet in February due to lack of business.
- The **Zoning Ordinance Committee** did not meet in February. Their next meeting is scheduled for March 19th at 4:00 p.m.

**Online Permitting System (BS&A):**

We are pleased to announce the online permitting platform is now live. All contractors that are registered with our department have been notified. Customers are able to come to the office to obtain assistance with the online portal and applying for their permits. Online payment for permits with a credit or debit card is also available. Customers are able to pay with check or cash in the office if they choose to. We are working with the Treasurer's Office to allow for online payment with a check.

**Master Plan Update:**

The sixty-three (63) day review period has been going well with great comments from surrounding communities. Staff has continued to work with Mr. Eric DeYoung of Nederveld regarding the future land use for properties located in Carmel and Eaton Townships adjacent to the I-69 Interchange. Staff attended the March 7th Eaton Township meeting where Mr. DeYoung gave a presentation regarding his request. Staff will attend the March 21st Carmel Township meeting as well. The Planning Commission is expected to discuss the future land use of this property at their April 2, 2023 meeting. The public hearing for the Master Plan is scheduled for April 23rd at 6:00 p.m.

The Draft Eaton County Master Plan is located on the Eaton County Website:
https://www.eatoncounty.org/618/Master-Plan

**Community Outreach:**

Staff met with Oneida Township to discuss the possibility of performing their permitting and inspections. Staff also met with the Village of Dimondale to give a department update and answer zoning questions. Staff will continue to meet with municipalities located in Eaton County monthly.

**Code Enforcement (open/active):**

- Work without permits eight (8)
- Hazardous buildings twenty-two (22)
- Junk forty (40)
- Zoning thirty-two (32)

No tickets were issued in the month of February.

| County Wide Housing Starts | | January | February | March | April | May | June | July | August | September | October | November | December | 2023 Totals | 2024 Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Delta Twp. | Site Built | 2 | 1 | | | | | | | | | | | 23 | 3 |
| | Mobile Homes | 0 | 0 | | | | | | | | | | | 0 | 0 |
| | Totals | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 3 |
| Eaton County | Site Built | 4 | 1 | | | | | | | | | | | 78 | 5 |
| | Mobile Homes | 0 | 0 | | | | | | | | | | | 9 | 0 |
| | Totals | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 87 | 5 |
| Eaton Rapids | Site Built | 2 | 2 | | | | | | | | | | | 0 | 4 |
| | Mobile Homes | 0 | 0 | | | | | | | | | | | 10 | 0 |
| | Totals | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 4 |
| Grand Ledge | Site Built | 0 | 1 | | | | | | | | | | | 14 | 1 |
| | Mobile Homes | 10 | 0 | | | | | | | | | | | 5 | 10 |
| | Totals | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 11 |
| Oneida | Site Built | 0 | 0 | | | | | | | | | | | 2 | 0 |
| | Mobile Homes | 0 | 0 | | | | | | | | | | | 0 | 0 |
| | Totals | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| County Wide Total | | 18 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 141 | 23 |

| Monthly Activity Con Code | Tickets issued | | Magistrate hearings | | Court cases | | Commercial Plan Review | | Complaints regarding contractors | | Public Surveys | | TOTAL MONTH | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MO/YR | "23" | "24" | "23" | "24" | "23" | "24" | "23" | "24" | "23" | "24" | "23" | "24" | "23" | "24" |
| JAN | | 0 | 1 | 0 | 0 | 0 | 2 | 4 | 0 | 0 | 4 | 0 | 7 | 4 |
| FEB | | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 1 | 4 | 2 |
| MARCH | | | 0 | | 0 | | 0 | | 0 | | 3 | | 3 | 0 |
| APRIL | | | 0 | | 0 | | 4 | | 0 | | 2 | | 6 | 0 |
| MAY | | | 0 | | 0 | | 5 | | 0 | | 2 | | 7 | 0 |
| JUNE | | | 0 | | 0 | | 5 | | 1 | | 8 | | 14 | 0 |
| JULY | 22 | | 1 | | 0 | | 4 | | 0 | | 5 | | 32 | 0 |
| AUG | 6 | | 0 | | 1 | | 3 | | 0 | | 4 | | 14 | 0 |
| SEPT | 0 | | 1 | | 1 | | 4 | | 0 | | 2 | | 8 | 0 |
| OCT | 0 | | 0 | | 0 | | 4 | | 0 | | 3 | | 7 | 0 |
| NOV | 0 | | 0 | | 0 | | 7 | | 0 | | 2 | | 9 | 0 |
| DEC | 0 | | 0 | | 0 | | 4 | | 0 | | 2 | | 6 | 0 |
| TOTALS | 28 | 0 | 3 | 0 | 2 | 0 | 46 | 5 | 1 | 0 | 37 | 1 | 117 | 6 |

| Construction Inspections | Building | | Electrical | | Mechanical | | Plumbing | | TOTAL MONTH | |
|---|---|---|---|---|---|---|---|---|---|---|
| MO/YR | "23" | "24" | "23" | "24" | "23" | "24" | "23" | "24" | "23" | "24" |
| JAN | 224 | 348 | 132 | 110 | 211 | 119 | 78 | 86 | 645 | 663 |
| FEB | 240 | 319 | 109 | 124 | 106 | 174 | 96 | 96 | 551 | 713 |
| MARCH | 255 | | 89 | | 87 | | 156 | | 587 | 0 |
| APRIL | 237 | | 98 | | 89 | | 182 | | 606 | 0 |
| MAY | 326 | | 104 | | 86 | | 177 | | 693 | 0 |
| JUNE | 297 | | 120 | | 86 | | 62 | | 565 | 0 |
| JULY | 335 | | 101 | | 68 | | 47 | | 551 | 0 |
| AUG | 471 | | 148 | | 114 | | 71 | | 804 | 0 |
| SEPT | 432 | | 124 | | 59 | | 11 | | 626 | 0 |
| OCT | 437 | | 141 | | 114 | | 66 | | 758 | 0 |
| NOV | 361 | | 104 | | 97 | | 93 | | 655 | 0 |
| DEC | 347 | | 129 | | 121 | | 61 | | 658 | 0 |
| TOTALS | 3962 | 667 | 1399 | 234 | 1238 | 293 | 1100 | 182 | 7699 | 1376 |

| Construction Permits | Building | | Electrical | | Mechanical | | Plumbing | | TOTAL MONTH | |
|---|---|---|---|---|---|---|---|---|---|---|
| MO/YR | "23" | "24" | "23" | "24" | "23" | "24" | "23" | "24" | "23" | "24" |
| JAN | 50 | 33 | 69 | 71 | 85 | 84 | 44 | 51 | 248 | 239 |
| FEB | 64 | 23 | 46 | 70 | 63 | 70 | 259 | 42 | 432 | 205 |
| MARCH | 47 | | 57 | | 63 | | 78 | | 245 | 0 |
| APRIL | 78 | | 82 | | 71 | | 46 | | 277 | 0 |
| MAY | 83 | | 64 | | 64 | | 35 | | 246 | 0 |
| JUNE | 68 | | 80 | | 75 | | 34 | | 257 | 0 |
| JULY | 91 | | 80 | | 60 | | 22 | | 253 | 0 |
| AUG | 90 | | 79 | | 60 | | 40 | | 269 | 0 |
| SEPT | 143 | | 116 | | 74 | | 31 | | 364 | 0 |
| OCT | 65 | | 103 | | 107 | | 35 | | 310 | 0 |
| NOV | 67 | | 140 | | 174 | | 142 | | 523 | 0 |
| DEC | 63 | | 58 | | 96 | | 21 | | 238 | 0 |
| TOTALS | 909 | 56 | 974 | 141 | 992 | 154 | 787 | 93 | 3662 | 444 |

| Construction Enforcements | WWOP (NEW) | WWOP (NEW) | WWOP (CLOSED) | WWOP (PENDING) | HAZ BLDG (NEW) | HAZ BLDG (NEW) | HAZ BLDG (CLOSED) | HAZ BLDG (PENDING) |
|---|---|---|---|---|---|---|---|---|
| | | 2023 carryover 7 | | | | 2023 carryover 21 | | |
| MO/YR | 2023 | 2024 | 2024 | 2024(PENDING) | 2023 | 2024 | 2024 | 2024(PENDING) |
| JAN | 22 | 3 | 1 | 9 | 7 | 0 | 0 | 21 |
| FEB | 20 | 8 | 9 | 8 | 5 | 1 | 0 | 22 |
| MARCH | 14 | | | | 5 | | | |
| APRIL | 20 | | | | 0 | | | |
| MAY | 9 | | | | 5 | | | |
| JUNE | 12 | | | | 2 | | | |
| JULY | 14 | | | | 0 | | | |
| AUG | 8 | | | | 3 | | | |
| SEPT | 5 | | | | 1 | | | |
| OCT | 3 | | | | 5 | | | |
| NOV | 1 | | | | 0 | | | |
| DEC | 2 | | | | 1 | | | |
| TOTALS | 130 | 11 | 10 | 8 | 34 | 1 | 0 | 22 |
| | | | TOTAL WORK WITHOUT PERMITS (WWP) & HAZARDOUS BUILDINGS VIOLATIONS | | | | | 30 |

| Planning & Zoning Cases | Conditional Use Permits | | Board of Appeals | | Adminis-trative Variances | | District Change Amend-ments | | Site Plan Reviews | | Zoning Referrals | | Private Roads | | Agricultural Buildings | | Lot Line Adjustments | | Land Divisions Reviewed | | TOTAL MONTH | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MO/YR | "23" | "24" | "23" | "24" | "23" | "24" | "23" | "24" | "23" | "24" | "23" | "24" | "23" | "24" | "23" | "24" | "23" | "24" | "23" | "24" | "23" | "24" |
| JAN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 10 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 22 | 13 |
| FEB | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 10 | 0 | 0 | 2 | 2 | 5 | 1 | 1 | 5 | 24 | 18 |
| MARCH | 0 | 1 | 0 | 1 | 0 | | 0 | 2 | 0 | | 19 | | 0 | | 2 | | 1 | | 3 | | 25 | 4 |
| APRIL | 4 | 2 | 1 | 0 | 0 | | 1 | 0 | 0 | | 22 | | 0 | | 3 | | 0 | | 1 | | 32 | 2 |
| MAY | 3 | | 2 | | 0 | | 0 | | 0 | | 22 | | 0 | | 3 | | 2 | | 2 | | 34 | 0 |
| JUNE | 0 | | 0 | | 0 | | 0 | | 0 | | 22 | | 0 | | 1 | | 2 | | 1 | | 26 | 0 |
| JULY | 0 | | 0 | | 0 | | 0 | | 0 | | 32 | | 0 | | 1 | | 3 | | 1 | | 37 | 0 |
| AUG | 1 | | 0 | | 0 | | 1 | | 0 | | 25 | | 0 | | 4 | | 4 | | 2 | | 37 | 0 |
| SEPT | 1 | | 0 | | 0 | | 0 | | 0 | | 25 | | 0 | | 4 | | 2 | | 1 | | 33 | 0 |
| OCT | 4 | | 0 | | 0 | | 0 | | 0 | | 21 | | 0 | | 1 | | 3 | | 3 | | 32 | 0 |
| NOV | 0 | | 0 | | 0 | | 0 | | 0 | | 16 | | 0 | | 1 | | 2 | | 1 | | 20 | 0 |
| DEC | 2 | | 1 | | 0 | | 0 | | 0 | | 9 | | 0 | | 1 | | 2 | | 1 | | 16 | 0 |
| TOTALS | 15 | 3 | 4 | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 248 | 20 | 0 | 0 | 23 | 3 | 27 | 2 | 19 | 6 | 338 | 37 |

| Planning & Zoning Enfor. | JUNK (NEW) | JUNK (NEW) | JUNK (CLOSED) | JUNK (PENDING) | ZONING (NEW) | ZONING (NEW) | ZONING (CLOSED) | ZONING (PENDING) |
|---|---|---|---|---|---|---|---|---|
| | | 2023 carryover: 39 | | | | 2023 carryover: 33 | | |
| MO/YR | 2023 | 2024 | 2024 | 2024(PENDING) | 2023 | 2024 | 2024 | 2024(PENDING) |
| JAN | 3 | 0 | 0 | 39 | 2 | 0 | 1 | 32 |
| FEB | 2 | 1 | 0 | 40 | 1 | 0 | 0 | 32 |
| MARCH | 7 | | | | 3 | | | |
| APRIL | 2 | | | | 1 | | | |
| MAY | 2 | | | | 3 | | | |
| JUNE | 1 | | | | 2 | | | |
| JULY | 0 | | | | 0 | | | |
| AUG | 1 | | | | 0 | | | |
| SEPT | 2 | | | | 1 | | | |
| OCT | 3 | | | | 3 | | | |
| NOV | 0 | | | | 5 | | | |
| DEC | 0 | | | | 0 | | | |
| TOTALS | 23 | 1 | 0 | 40 | 21 | 0 | 1 | 32 |
| | | | TOTAL PENDING JUNK & ZONING VIOLATIONS | | | | | 72 |

**EATON COUNTY DEPARTMENT OF CONSTRUCTION CODES & PLANNING AND ZONING**
***1045 INDEPENDENCE BLVD.***
***CHARLOTTE, MI 48813***
***(517) 543-3689 Fax:(517) 543-9924***

# MEMORANDUM

**TO:** **PUBLIC WORKS AND PLANNING**

**FROM:** **Brandy Miller, Planning and Zoning Administrator**

**DATE:** **March 8, 2024**

**DCA-3-24-1:** Request by Eaton County Planning Commission to amend the Eaton County Land Development Code (Zoning Ordinance). Amendments are proposed to the entire document to update/correct the department name, Development Official title and public act corrections.

In July of 2023, departmental changes were made shifting planning and zoning responsibilities from the Community Development Department to the Construction Code Department. This amendment is to reflect the departmental changes. Specifically, changes are proposed to the following:

- Entire document – Change department name from Community Development to Department of Construction Codes & Planning and Zoning
- Entire document – Change Community Development Director, Development Code Official and Land Development Official to Development Official as defined in Article 5 of the Zoning Ordinance.
- Entire document – Correct Public Acts

On March 5, 2024 the Eaton County Planning Commission recommended approval of DCA-3-24-1 to the Eaton County Board of Commissioners for their review and consideration. Nine (9) Planning Commission members were in attendance; all voted in favor.

**EATON COUNTY BOARD OF COMMISSIONERS**

**March 20, 2024**

**RESOLUTION TO APPROVE DCA-3-24-1**

**Introduced by the Public Works and Planning Committee**

**PREAMBLE:** The Eaton County Land Development Code, an Ordinance adopted by the Commissioners of the County of Eaton pursuant to Public Act 183 of 1943, and administered pursuant to Public Act 110 of 2006, may be amended from time to time by following procedures outlined in Article 13 of the Development Code.

**WHEREAS,** Eaton County Planning Commission initiated a petition for a Comprehensive Amendment to the Eaton County Land Development Code (Zoning Ordinance) proposing amendments to the entire document to update/correct the department name, Development Official title and public act corrections; and

**WHEREAS,** the Eaton County Planning Commission held a duly advertised and noticed public hearing on **March 5, 2024**; and

**WHEREAS,** the Eaton County Planning Commission found the requested amendment to be consistent with the required findings of fact (Items A through G) contained in Section 13.6 of the Eaton County Land Development Code; and

**WHEREAS,** the Eaton County Planning Commission has taken action on **March 5, 2024** to recommend the adoption of the ordinance amendments for reasons stated at the meeting.

**NOW THEREFORE BE IT RESOLVED** that the Board of Commissioners of the County of Eaton, Michigan having considered the findings of facts and recommendations hereby:

**APPROVES** the request by Eaton County Planning Commission for a Comprehensive Amendment to the Eaton County Land Development Code (zoning ordinance) proposing amendments to the entire document to update/correct the department name, Development Official title and public act corrections.

At the regular meeting of the Eaton County Board of Commissioners on March 20, 2024 the Resolution regarding the approval of said request was adopted.

Those voting Aye:_____

_____

Those voting Nay:_____

Abstention: _____

Absent: _____

Motion carried.

_____
Jim Mott, Chairman
Eaton County Board of Commissioners

I hereby certify that the above Ordinance amending the Eaton County Land Development Code, which was approved, is a true and correct copy of that recorded in the official minutes of March 20, 2024 of the Eaton County Board of Commissioners.

_____
Diana Bosworth, Clerk
Eaton County Board of Commissioners

# EATON COUNTY LAND DEVELOPMENT CODE

## ZONING ORDINANCE AMENDMENT DCA-3-24-1

**District Change Amendment DCA-3-24-1 to amend the Land Development Code (Zoning Ordinance) of Eaton County, as enacted in 1981 pursuant to the provisions of Public Act 110 of 2006, as amended.**

An application for a District Change Amendment for a Comprehensive Amendment to the Eaton County Land Development Code (zoning ordinance) proposing amendments to the entire document to update/correct the department name, Development Official title and public act corrections.

**WHEREAS,** the Eaton County Planning Commission held a duly advertised and noticed public hearing on **March 5, 2024**; and

**WHEREAS,** the Eaton County Planning Commission has taken action on **March 5, 2024** to recommend approval of the text amendment:

**WHEREAS,** after careful consideration of the amendment, the Eaton County Board of Commissioners approved the aforementioned text amendment as follows:

Yeas_____
Nays_____
Abstaining_____
Absent_____

I, Diana Bosworth, Clerk for the County of Eaton, do hereby certify that the above and foregoing is a true copy of the amendment to the Eaton County Land Development Code (Zoning Ordinance), as amended and passed by the Eaton County Board of Commissioners on **March 20, 2024** and now on record in the office of the Clerk of said County.

IN TESTIMONY WHEREOF, I have set my hand and affixed the seal of said County at the City of Charlotte, Michigan, the

_____day of _____, 2024

_____
Jim Mott, Chairman
Eaton County Board of Commissioners

_____
Diana Bosworth, Clerk
Eaton County Board of Commissioners

**EATON COUNTY DEPARTMENT OF CONSTRUCTION CODES & PLANNING AND ZONING**
*1045 INDEPENDENCE BLVD.*
*CHARLOTTE, MI 48813*
*(517) 543-3689 Fax:(517) 543-9924*

# MEMORANDUM

**TO:** **PUBLIC WORKS AND PLANNING**

**FROM:** **Brandy Miller, Planning and Zoning Administrator**

**DATE:** **March 8, 2024**

**DCA-3-24-2:** Request by Eaton County Planning Commission to amend the Eaton County Land Development Code (Zoning Ordinance). Amendments are proposed to the following: Article 5 Definitions (amend Sections 5.3.16 P), Article 7 Land Development Districts (amend Sections 7.4A.2, 7.4A.3 and 7.4A.4), Article 12 Non-Conformities (amend Sections 12.2.2 A, and 12.2.5) and Article 14 Specific Provisions and Requirements (amend Section 14.25 Surface Mine and 14.27 Communication Towers and Antennas).

Changes are proposed to the following:

- Proposed change to Section 5.3.16 P, Personal Service Establishment to direct Zoning Ordinance users to definition and regulations and conditions in Section 14.40.
- Proposed change to Sections 7.4A.2, 7.4A.3 and 7.4A.4 by local property owner, requesting the construction of a duplex dwelling to be a use by right in the Low Density Residential (R-1) Zoning District.
- Proposed change to Subsection 12.2.2 A to include a date for Legal Non-conforming lots in line with the Land Division Act, PA 288 of 1967, last revision, March 31, 1997. Also add Section 12.2.5 Adjustment or Combination of Legal Non-conforming Lots to allow for the adjustment or combination of legal non-conforming lots without recourse to the Zoning Board of Appeals if the resulting lots are not more non-conforming (e.g. deeper than the allowed width to depth ratio, less road frontage than allowed, smaller parcel size than original or allowed by zoning district).
- Proposed change to Section 14.25 Surface Mining, Subsection 14.25.9 Permit Expiration to remove the expiration/re-application requirement of the Conditional Use Permit. All surface mines are inspected annually by staff and the Drain Commissioner's Office. Per Subsection 14.25.10, staff may approve modification of the site plan if needed. Staff may request the Planning Commission to review the permit at any time, which would result in a public hearing.
- Proposed change to Section 14.27 Communication Towers and Antennas, specifically Subsection 14.27.5 E.2 Compatibility removing the language not allowing for metal buildings and removing Subsection 14.27.5 E.6 Landscaping.

On March 5, 2024 the Eaton County Planning Commission recommended approval of DCA-3-24-2 to the Eaton County Board of Commissioners for their review and consideration. Nine (9) Planning Commission members were in attendance; all voted in favor. Vermontville Township recommended approval. No other responses were received.

**EATON COUNTY BOARD OF COMMISSIONERS**

**March 20, 2024**

**RESOLUTION TO APPROVE DCA-3-24-2**

**Introduced by the Public Works and Planning Committee**

**PREAMBLE:** The Eaton County Land Development Code, an Ordinance adopted by the Commissioners of the County of Eaton pursuant to Public Act 183 of 1943, and administered pursuant to Public Act 110 of 2006, may be amended from time to time by following procedures outlined in Article 13 of the Development Code.

**WHEREAS,** Eaton County Planning Commission initiated a petition for a Comprehensive Amendment to the Eaton County Land Development Code (Zoning Ordinance). Amendments are proposed to the following: Article 5 Definitions (amend Sections 5.3.16 P), Article 7 Land Development Districts (amend Sections 7.4A.2, 7.4A.3 and 7.4A.4), Article 12 Non-Conformities (amend Sections 12.2.2 A, and 12.2.5) and Article 14 Specific Provisions and Requirements (amend Section 14.25 Surface Mine and 14.27 Communication Towers and Antennas).; and

**WHEREAS,** the Eaton County Planning Commission held a duly advertised and noticed public hearing on **March 5, 2024**; and

**WHEREAS,** the Eaton County Planning Commission found the requested amendment to be consistent with the required findings of fact (Items A through G) contained in Section 13.6 of the Eaton County Land Development Code; and

**WHEREAS,** the Eaton County Planning Commission has taken action on **March 5, 2024** to recommend the adoption of the ordinance amendments for reasons stated at the meeting.

**NOW THEREFORE BE IT RESOLVED** that the Board of Commissioners of the County of Eaton, Michigan having considered the findings of facts and recommendations hereby:

**APPROVES** the request by Eaton County Planning Commission for a Comprehensive Amendment to the Eaton County Land Development Code (zoning ordinance). Amendments are proposed to the following: Article 5 Definitions (amend Sections 5.3.16 P), Article 7 Land Development Districts (amend Sections 7.4A.2, 7.4A.3 and 7.4A.4), Article 12 Non-Conformities (amend Sections 12.2.2 A, and 12.2.5) and Article 14 Specific Provisions and Requirements (amend Section 14.25 Surface Mine and 14.27 Communication Towers and Antennas).

At the regular meeting of the Eaton County Board of Commissioners on March 20, 2024 the Resolution regarding the approval of said request was adopted.

Those voting Aye:_____

_____

Those voting Nay:_____

Abstention: _____

Absent: _____

Motion carried.

_____
Jim Mott, Chairman
Eaton County Board of Commissioners

I hereby certify that the above Ordinance amending the Eaton County Land Development Code, which was approved, is a true and correct copy of that recorded in the official minutes of March 20, 2024 of the Eaton County Board of Commissioners.

_____
Diana Bosworth, Clerk
Eaton County Board of Commissioners

# EATON COUNTY LAND DEVELOPMENT CODE

## ZONING ORDINANCE AMENDMENT DCA-3-24-2

**District Change Amendment DCA-3-24-2 to amend the Land Development Code (Zoning Ordinance) of Eaton County, as enacted in 1981 pursuant to the provisions of Public Act 110 of 2006, as amended.**

An application for a District Change Amendment for a Comprehensive Amendment to the Eaton County Land Development Code (zoning ordinance). Amendments are proposed to the following: Article 5 Definitions (amend Sections 5.3.16 P), Article 7 Land Development Districts (amend Sections 7.4A.2, 7.4A.3 and 7.4A.4), Article 12 Non-Conformities (amend Sections 12.2.2 A, and 12.2.5) and Article 14 Specific Provisions and Requirements (amend Section 14.25 Surface Mine and 14.27 Communication Towers and Antennas).

**WHEREAS,** the Eaton County Planning Commission held a duly advertised and noticed public hearing on **March 5, 2024**; and

**WHEREAS,** the Eaton County Planning Commission has taken action on **March 5, 2024** to recommend approval of the text amendment:

**WHEREAS,** after careful consideration of the amendment, the Eaton County Board of Commissioners approved the aforementioned text amendment as follows:

Yeas_____
Nays_____
Abstaining_____
Absent_____

I, Diana Bosworth, Clerk for the County of Eaton, do hereby certify that the above and foregoing is a true copy of the amendment to the Eaton County Land Development Code (Zoning Ordinance), as amended and passed by the Eaton County Board of Commissioners on **March 20, 2024** and now on record in the office of the Clerk of said County.

IN TESTIMONY WHEREOF, I have set my hand and affixed the seal of said County at the City of Charlotte, Michigan, the

_____day of _____, 2024

_____
Jim Mott, Chairman
Eaton County Board of Commissioners

_____
Diana Bosworth, Clerk
Eaton County Board of Commissioners

**Eaton County Construction Code**

**Financial Report**

Fiscal Year 2023/24

Through the end of February, 2024

| | Original Budget | Adjusted Budget | Actual Year to Date | Projected Year to Date | Remaining Balance | % Used |
|---|---|---|---|---|---|---|
| Revenues | | | | | | |
| Permitting Revenue | | | | | | |
| Building Permits * | 300,000 | 350,375 | 455,143.01 | 711,148.05 | (360,773.05) | 203% |
| Mechanical Permits | 120,000 | 120,000 | 67,527.02 | 162,064.85 | (42,064.85) | 135% |
| Electrical Permits | 120,000 | 120,000 | 62,090.02 | 149,016.05 | (29,016.05) | 124% |
| Plumbing Permits | 65,000 | 65,000 | 36,666.00 | 87,998.40 | (22,998.40) | 135% |
| Total Permitting Revenue | 605,000 | 655,375 | 621,426.05 | 1,110,227.35 | (454,852.35) | |
| Other Revenue | | | | | | |
| Construction Code Services | 11,600 | 11,600 | 13,513.00 | 32,431.20 | (20,831.20) | 280% |
| Fines and Forfeitures | 500 | 500 | - | - | 500.00 | 0% |
| Fund Balance Carryover | 400,310 | 400,310 | - | - | 400,310.00 | 0% |
| Total Other Revenue | 412,410 | 412,410 | 13,513.00 | 32,431.20 | 379,978.80 | |
| Total Revenues | 1,017,410 | 1,067,785 | 634,939.05 | 1,142,658.55 | (74,873.55) | 107% |
| Operational Expenditures | | | | | | |
| Personnel | 682,374 | 682,374 | 195,073.74 | 660,939.43 | 21,434.57 | 97% |
| Supplies | 22,700 | 22,700 | 9,513.29 | 21,831.90 | 868.10 | 96% |
| Other Services & Charges | 59,012 | 79,387 | 24,744.85 | 49,387.64 | 29,999.36 | 62% |
| Total Operational Expenditures | 764,086 | 784,461 | 229,331.88 | 732,158.97 | 52,302.03 | |
| Other Expenditures | | | | | | |
| Debt Service - Vehicle Leases | 19,404 | 19,404 | 9,504.75 | 22,811.40 | (3,407.40) | 118% |
| Capital Outlay | 51,000 | 51,000 | - | 51,000.00 | - | 100% |
| Transfer Out - General Fund | 45,000 | 45,000 | - | 45,000.00 | - | 100% |
| Transfer Out - Public Improvement | 134,000 | 134,000 | - | 134,000.00 | - | 100% |
| Transfer Out - Computer Fund | 3,920 | 33,920 | - | 33,920.00 | - | 100% |
| Total Other Expenditures | 253,324 | 283,324 | 9,504.75 | 286,731.40 | (3,407.40) | 101% |
| Total Expenditures | 1,017,410 | 1,067,785 | 238,836.63 | 1,018,890.37 | 48,894.63 | 95% |
| Excess Revenues over Expenses (Net Carryover) | - | - | 396,102.42 | 123,768.18 | | |
| 9/30/2023 Estimated Fund Balance | 1,139,660 | 1,139,660 | 1,139,660 | 1,139,660 | | |
| *Projected 9/30/2024 Fund Balance* | *739,350* | *739,350* | *743,557* | *1,263,428* | | |

** Projected Building Permits Includes One-Time Single Permit for $288,036*

# Resource Recovery Department Report

For Public Works & Planning Committee
March 13th, 2024

**General Updates:**

New Environmental Sustainability Director Jared Bogdanov-Hanna has been touring the county and inspecting Eaton County Resource Recovery and municipal recycling/materials management operations. Jared is being introduced to Resource Recovery operations, networks and industry, especially as it relates to the development of the Materials Management Plan.

Jared Bogdanov-Hanna and Debbie Penfield attended the EGLE MMP Question and Answer session along with over 80 participants across the state of Michigan. EGLE is behind on offering support, MMP templates, and clarity on a number of MMP issues, and will be notifying counties as more resources are available.

Jared Bogdanov-Hanna and Debbie Penfield attended the Michigan Recycling Coalition Regional Planning Meeting, networking with adjacent county staff and environmental consulting firms. A follow-up meeting with Morgan Feldpausch of Ingham County was held to discuss MMP development efforts. Further meetings are going to be held with adjacent counties (Ionia, Barry, Clinton) in regard to the MMP.

**County Programs:**

Eaton County Resource Recovery Events are scheduled and ready to go public on 3/13/2024. The EGLE Scrap Tire Grant for tire clean-up is fully funded and Resource Recovery will operate the tire clean-up trailers on June 15th and August 10th. Resource Recovery is developing a marketing campaign to advertise the events throughout the county and to educate the public.

| | | |
|---|---|---|
| Spring Clean-Up | Delta Township | May 18, 2024 |
| Recycling Fever | Charlotte | June 15, 2024 |
| Recycle Palooza | Charlotte | August 10, 2024 |

At the Public Works & Planning meeting February 14, 2024, the Designated Implementing Agency hearing for LeBron Trash Hauling was rescheduled to March 13, 2024 to allow Mr. LeBron addition time to achieve compliance with the Solid Waste Ordinance Licensing and Solid Waste Ordinance Reporting. To date, Lebron Trash Hauling remains noncompliant with both and the scheduled hearing will proceed.

**Materials Management Plan**

Resource recovery is developing Eaton County's strategy on the creation and implementation of the MMP. The intention is to have action plans, timelines and personnel in place to maintain legal compliance with EGLE's requirements on the update to Part 115. Currently, the recommended strategy is to begin the official legal MMP process next month, April, with appointing the Eaton County Board of Commissioners as the County Approval Agency (CAA), the first step in the process.

# Resource Recovery Department

Public Works and Planning Committee

MMP Recommended Timeline

March 13, 2024

**EGLE MMP Timeline**

**Step 1: Determine County Approval Agency (CAA)** Eaton County Board of Commissioners "ACCEPTS" or "DECLINES" responsibility for the new MMP.

- **Due July 6, 2024**
- By "ACCEPTING"
    - The Eaton County BOC officially appoints themselves as the approval authority for official EGLE MMP process.
    - Eaton County BOC is responsible for official multi-county communications/collaborations. Official letters sent through certified mail is best practice. Resource Recovery can provide letter content.
    - Eaton County BOC is responsible for appointing the Designated Planning Agency (DPA), Resource Recovery Department, in 120 days.
    - Eaton County BOC is responsible for appointing the Materials Management Planning Committee (MMPC), in 180 days.
        - Up to 13 member committee consisting of government, private and community stakeholders in the new Materials Management Plan.
    - Eaton County BOC is responsible for approving recommendations by the Materials Management Plan Committee.
- By "DECLINING"
    - Eaton County BOC rescinds responsibility for the Materials Management Plan.
    - Tri-County Regional Planning Commission and county townships/municipalities can assume the County Approval Agency (CAA) role.
        - If these decline responsibility, EGLE will assume role as CAA.

**Eaton County BOC "ACCEPTS" CAA**
**April, 2024 (recommended by Resource Recovery)**

**Step 2: Letters of Intent to Adjacent Counties** The CAA will send official communications to neighboring counties on the intent to collaborate or not collaborate.

- **Due July 6th, 2024**
- "ACCEPT" Collaboration
    - The Eaton County BOC CAA can accept collaboration/partnership with 1-6 adjacent counties.
    - Collaboration would require a restructuring of the CAA to include multiple counties BOC and municipalities/townships.
    - $10,000 in additional EGLE grant money per year.
- "DECLINE" Collaboration
    - Eaton County BOC retains CAA role as the official approval body.
    - Recommended by Eaton County Resource Recovery.
    - Letters are in legal compliance only after the CAA is appointed.
- Counties to Contact – Ingham, Clinton, Calhoun, Ionia, Barry, and Jackson.

**Step 3: Determine Designated Planning Agency (DPA)**

- **Due November 3, 2024; Recommended by Resource Recovery for May, 2024 BOC Meeting (120 day deadline from NOI July 6, 2024).**
- Through official resolutions and documentation, the Eaton County BOC appoints a Designated Planning Agency (DPA).
    - Resource Recovery Department would officially act as the DPA and manage/oversee/lead the development of the MMP and work program through leading the Materials Management Planning Committee (MMPC).
    - The DPA is the official CAA liaison to the MMPC.
    - Publishes public notices and manages public comment process.

**Step 4: Determine the Materials Management Planning Committee (MMPC)** Eaton County BOC will need to appoint up to a 13 member planning committee of private, public and community stakeholders for 5 year terms.

- **Due January 3, 2025; Recommended by Resource Recovery by June, 2024 BOC Meeting (180 day deadline from NOI July 6, 2024).**
- MMPC Requirements:
    - Solid Waste Disposal facility operator.
    - Hauler of Managed Material representative.
    - Materials Recovery facility operator.
    - Composting Facility (Organics) operator.
    - Waste Diversion, Reuse, or Reduction Facility Operator
    - Environmental Interest Group representative.
    - Eaton County elected official.
    - Township elected official.
    - City or Village elected official.
    - Business that generates managed material representative.
    - Tri-County Regional Planning Commission representative.
    - Eaton County Resource Recovery staff.
    - OPTIONAL: Regional Managed Materials/Business representative.

**Step 5: Submit Notice of Intent (NOI) by July 6, 2024 to EGLE** The Eaton County BOC CAA officially submits the NOI outlining the results of the Multicounty Collaboration determination.

- Appointment of the DPA and the MMPC are due 120 days and 180 days, respectively, after the July 6, 2024 submission of the NOI. If more time is needed to appoint the DPA and MMPC than the recommended timeline, further considerations can be made.

**Eaton County Resource Recovery**

**Financial Report**

Fiscal Year 2023/24

Through the end of February, 2024

| | Original Budget | Adjusted Budget | Actual Year to Date | Projected Year to Date | Remaining Balance | % Used |
|---|---|---|---|---|---|---|
| Revenues | | | | | | |
| Administration | | | | | | |
| Private Grant | 36,000 | 36,000 | - | - | 36,000.00 | 0% |
| Donations | 11,000 | 11,000 | 100.00 | 8,000.00 | 3,000.00 | 73% |
| Transfers-In | 81,392 | 81,392 | - | 81,392.00 | - | 100% |
| Fund Balance - Carry Over | 33,395 | 33,395 | - | - | 33,395.00 | 0% |
| Total Administration Revenues | 161,787 | 161,787 | 100.00 | 89,392.00 | 72,395.00 | |
| Operational Revenues | | | | | | |
| Waste Hauler Licenses | 1,800 | 1,800 | 1,920.00 | 1,500.00 | 300.00 | 83% |
| Solid Waste Surcharge | 330,000 | 330,000 | 172,317.46 | 346,767.46 | (16,767.46) | 105% |
| Agricultural Plastic Revenue | 2,500 | 2,500 | 2,050.32 | 2,000.00 | 500.00 | 80% |
| Total Operational Revenues | 334,300 | 334,300 | 176,287.78 | 350,267.46 | (15,967.46) | |
| Total Revenues | 496,087 | 496,087 | 176,387.78 | 439,659.46 | 56,427.54 | 89% |
| Expenditures | | | | | | |
| Administration | | | | | | |
| Personnel | 192,908 | 192,908 | 30,305.67 | 183,260.84 | 9,647.16 | 95% |
| Supplies | 3,000 | 3,000 | 778.18 | 1,867.63 | 1,132.37 | 62% |
| Other Services | 10,104 | 10,104 | 4,974.97 | 16,939.93 | (6,835.93) | 168% |
| Debt Service - Vehicle Lease | - | - | 53,847.00 | 53,847.00 | (53,847.00) | 0% |
| Transfer Out - Public Improvement | 40,624 | 40,624 | - | 40,624.00 | - | 100% |
| Total Administration Expenditures | 246,636 | 246,636 | 89,905.82 | 296,539.40 | (49,903.40) | 120% |
| Operational Expenditures | | | | | | |
| County Projects | 132,350 | 132,350 | 1,875.76 | 132,350.00 | - | 100% |
| Local Projects | 117,101 | 117,101 | 31,843.26 | 117,101.00 | - | 100% |
| Total Operational Expenditures | 249,451 | 249,451 | 33,719.02 | 249,451.00 | - | 100% |
| Total Expenditures | 496,087 | 496,087 | 123,624.84 | 545,990.40 | (49,903.40) | 110% |
| Excess Revenues over Expenses (Net Carryover) | - | - | 52,762.94 | (106,330.94) | 6,524.14 | |
| Available Resources from Administration | (84,849) | (84,849) | (89,805.82) | (207,147.40) | 122,298.40 | |
| Available Resources from Operations | 84,849 | 84,849 | 142,568.76 | 100,816.46 | (15,967.46) | |
| Projected Net Carryover | - | - | 52,762.94 | (106,330.94) | 106,330.94 | |
| 9/30/2023 Estimated Fund Balance | 240,513 | 240,513 | 240,513 | 240,513 | | |
| *Projected 9/30/2024 Fund Balance* | *207,118* | *207,118* | *293,276* | *134,182* | | |

**Eaton County Resource Recovery**
**Program Update**
Fiscal Year 2023/24
Through the end of February, 2024

| Summary of Programs | Adopted Budget | Amended Budget | YTD Transactions | Projected YTD Transactions | Amended Budget Less YTD Transactions | % Used |
|---|---|---|---|---|---|---|
| 529 - County Programs | | | | | | |
| Roadside Cleanup | 1,900.00 | 1,900.00 | 865.04 | 1,900.00 | 1,034.96 | 100.0% |
| Household Battery Collection | 11,000.00 | 11,000.00 | - | 11,000.00 | 11,000.00 | 100.0% |
| Scrap Tire Collection | 36,000.00 | 36,000.00 | - | 36,000.00 | 36,000.00 | 100.0% |
| Household Hazardous Waste Collection | 60,000.00 | 60,000.00 | 822.77 | 60,000.00 | 59,177.23 | 100.0% |
| Education Programs | 1,000.00 | 1,000.00 | 54.95 | 1,000.00 | 945.05 | 100.0% |
| Electronic Recycling | 18,000.00 | 18,000.00 | - | 18,000.00 | 18,000.00 | 100.0% |
| Event Supplies & Contractual | 1,200.00 | 1,200.00 | 133.00 | 1,200.00 | 1,067.00 | 100.0% |
| Promotion Programs | 3,250.00 | 3,250.00 | 133.00 | 3,250.00 | 3,117.00 | 100.0% |
| **Total** | **132,350.00** | **132,350.00** | **2,008.76** | **132,350.00** | **130,341.24** | **100.0%** |

| | | | | | | |
|---|---|---|---|---|---|---|
| 530 - SWAG Programs | | | | | | |
| Bellevue/Olivet | 17,501.00 | 17,501.00 | 5,021.34 | 17,501.00 | 12,479.66 | 100.0% |
| Charlotte Area Recycling (CARA) | 28,500.00 | 28,500.00 | 10,645.94 | 28,500.00 | 17,854.06 | 100.0% |
| Delta Twp - Recycling Center | 27,600.00 | 27,600.00 | 4,202.97 | 27,600.00 | 23,397.03 | 100.0% |
| City of Grand Ledge - Recycling | 21,500.00 | 21,500.00 | 8,062.76 | 21,500.00 | 13,437.24 | 100.0% |
| Sunfield Recycling Center (Pilot Project) | 22,000.00 | 22,000.00 | 3,910.25 | 22,000.00 | 18,089.75 | 100.0% |
| **Total** | **117,101.00** | **117,101.00** | **31,843.26** | **117,101.00** | **85,257.74** | **100.0%** |

EATON COUNTY PARKS
133 Fitzgerald Park Dr.
Grand Ledge, MI 48837
(517) 627-7351 office
(517) 627-4234 fax
www.eatoncountyparks.org

**Directors Report-March 13th, 2024**

***Monthly Briefing:***
*Girl Scout Project*
*Updating Park Maps*
*Naturalist Position*
*Staff Training*
*Mparks Conference*
*Friends Update (Lights, Playground LBP)*
*Budget Process*
*Safety Training*

**Girl Scout Project:** Sarah Loren a 9th grade Girl Scout from Eaton Rapids has submitted a proposal to add mile markers, a displayed map, and a possible picnic area to the nature trail at Crandell Park. These additions would be great for the nature trail, Eaton County Parks is working with Sarah to see this project through.

**Park Maps:** I am currently working with John Merrick to update our park maps. As we start to implement the strategic plan making additions or changes can be added quickly.

**Naturalist:** We received some great candidates for the naturalist position, interviews will begin on Tuesday the 12th.

**Great Lakes Trainings:** Ben Youngs and Logan Miller participated in a week-long training during the last week of February. The training went over ways to manage seasonal and full-time employees, equipment safety and repairs, OSHA regulations, and how to optimize your facilities.

**Mparks Conference:** During the last week of February I attended the Mparks Conference in Kalamazoo. This is always a great experience and a wonderful opportunity for networking and seeing the newest park products and practices.

**Friends of Eaton County:** The friend's group has agreed to pay for the purchase and installation of lights for the parking lot at the Lincoln Brick Interpretive Center. The Lions Den is a popular rental for Eaton County Parks, by adding these lights they will help with security for the building as well as users. This also helps to eliminate the hazard of

walking to a vehicle in the dark. The friend’s group has also expressed interest in purchasing a playground for Lincoln Brick for ages 2-5 years old. I will update this board when I have more information.

**Budget Process:** I am still collecting bids and assessing park needs for submission for the upcoming budget.

**Safety Training:** Ben Youngs has been working on a new safety manual training for our seasonal employees that caters to our specific needs and covers all required material through OSHA.

**Eaton County Parks and Recreation**

**Financial Report**

Fiscal Year 2023/24

Through the end of February, 2024

| | Original Budget | Adjusted Budget | Actual Year to Date | Projected Year to Date | Remaining Balance | % Used |
|---|---|---|---|---|---|---|
| Revenues | | | | | | |
| Administration | | | | | | |
| Property Tax Revenues | 2,209,922 | 2,209,922 | 225.07 | 2,209,922.00 | - | 100% |
| Grant Revenues | - | - | - | - | - | 0% |
| Donations | 1,200 | 1,200 | 303.00 | 909.00 | 291.00 | 76% |
| Transfers-In | - | - | - | - | - | 0% |
| Fund Balance - Carry Over | (1,168,730) | (563,372) | - | - | (563,372.00) | 0% |
| Total Administration Revenues | 1,042,392 | 1,647,750 | 528.07 | 2,210,831.00 | (563,081.00) | |
| Operational Revenues | | | | | | |
| Site Fees | 12,310 | 12,310 | 3,050.00 | 7,320.00 | 4,990.00 | 59% |
| Naturalist & Special Program Revenues | 31,900 | 31,900 | 3,250.61 | 19,751.83 | 12,148.17 | 62% |
| Farm Rental Income | 17,700 | 17,700 | - | 17,000.00 | 700.00 | 96% |
| Total Operational Revenues | 61,910 | 61,910 | 6,300.61 | 44,071.83 | 17,838.17 | |
| Total Revenues | 1,104,302 | 1,709,660 | 6,828.68 | 2,254,902.83 | (545,242.83) | 132% |
| Expenditures | | | | | | |
| Administration | | | | | | |
| Personnel | 628,368 | 628,368 | 213,187.83 | 565,705.51 | 62,662.49 | 90% |
| Supplies | 36,057 | 36,057 | 9,366.86 | 21,480.46 | 14,576.54 | 60% |
| Other Services | 51,604 | 51,604 | 14,567.15 | 14,961.16 | 36,642.84 | 29% |
| Debt Service (Vehicle Lease) | 17,650 | 17,650 | 11,382.70 | 27,318.48 | (9,668.48) | 155% |
| Transfers Out - General Fund | - | - | - | - | - | 0% |
| Total Administration Expenditures | 733,679 | 733,679 | 248,504.54 | 629,465.62 | 104,213.38 | 86% |
| Operational Expenditures | | | | | | |
| Park Specific Expenses (less personnel) | 203,123 | 203,123 | 53,101.14 | 129,950.71 | 73,172.29 | 64% |
| Capital and One Time Purchases | 167,500 | 167,500 | 98,114.30 | 165,057.00 | 2,443.00 | 99% |
| Grant Program Expenses | - | 605,358 | 91,907.13 | 605,358.00 | - | 100% |
| Total Operational Expenditures | 370,623 | 975,981 | 243,122.57 | 900,365.71 | 75,615.29 | 92% |
| Total Expenditures | 1,104,302 | 1,709,660 | 491,627.11 | 1,529,831.32 | 179,828.68 | 89% |
| Excess Revenues over Expenses (Net Carryover) | - | - | (484,798.43) | 725,071.51 | (365,414.15) | |
| 9/30/2023 Estimated Fund Balance | 2,037,796 | 2,037,796 | 2,037,796 | 2,037,796 | | |
| *Projected 9/30/2024 Fund Balance* | *3,206,526* | *2,601,168* | *1,552,998* | *2,762,868* | | |

**Eaton County Parks and Recreation**
**Program Update**
Fiscal Year 2023/24
Through the end of February, 2024

| | Original Budget | Adjusted Budget | Actual Year to Date | Projected Year to Date | Remaining Balance | % Used |
|---|---|---|---|---|---|---|
| Park Specific Expenses (less personnel) | | | | | | |
| Fitzgerald Park | 97,423 | 97,423 | 37,514.04 | 90,033.70 | 7,389.30 | 92.4% |
| Fox Park | 47,000 | 47,000 | 5,580.03 | 13,392.07 | 33,607.93 | 28.5% |
| Bellevue Area Parks | 2,000 | 2,000 | 321.42 | 964.26 | 1,035.74 | 48.2% |
| Lincoln Park | 39,700 | 39,700 | 8,238.70 | 19,772.88 | 19,927.12 | 49.8% |
| Crandell Park | 17,000 | 17,000 | 1,446.95 | 5,787.80 | 11,212.20 | 34.0% |
| Total Park Specific Expenses | 203,123 | 203,123 | 53,101.14 | 129,950.71 | 73,172.29 | 64.0% |
| Capital and One Time Purchases | | | | | | |
| Admin - Equipment Trailer | 24,000 | 24,000 | - | 24,000.00 | - | 100.0% |
| Admin - Bobcat | 84,000 | 84,000 | 81,982.30 | 84,000.00 | - | 100.0% |
| Admin - Zero Turn Mower | 16,000 | 16,000 | 13,557.00 | 13,557.00 | 2,443.00 | 84.7% |
| Lincoln Park - HVAC Replacement/Repairs | 25,000 | 25,000 | - | 25,000.00 | - | 100.0% |
| Lincoln Park - Bathroom Auto Locks | 5,000 | 5,000 | - | 5,000.00 | - | 100.0% |
| Crandell Park - Kayak Dock Extension | 8,500 | 8,500 | - | 8,500.00 | - | 100.0% |
| Crandell Park - Bathroom Auto Locks | 5,000 | 5,000 | 2,575.00 | 5,000.00 | - | 100.0% |
| Total Capital and One Time Purchases | 573,746 | 573,746 | 204,316.58 | 424,958.42 | 148,787.58 | 74.1% |
| Grant Programs | | | | | | |
| Eaton Rapids - Mill Pointe Park Pavillion | - | 39,200 | - | 39,200.00 | - | 100.0% |
| City of Charlotte - Library Picnic Area | - | 5,000 | - | 5,000.00 | - | 100.0% |
| Delta Township - Webster Bridge Design | - | 150,750 | - | 150,750.00 | - | 100.0% |
| Grand Ledge - Grand Ledge Ball Park Phase I | - | 212,694 | - | 212,694.00 | - | 100.0% |
| Hamlin Township - Hamlin Park Picnic & Play | - | 87,157 | 87,157.13 | 87,157.00 | - | 100.0% |
| Olivet - Walking Bridge Fencing | - | 5,000 | 4,750.00 | 5,000.00 | - | 100.0% |
| Vermontville - Creating Safe Fall Space | - | 35,000 | - | 35,000.00 | - | 100.0% |
| Potterville - Sunset Hills Park | - | 65,557 | - | 65,557.00 | - | 100.0% |
| Signage | - | 5,000 | - | 5,000.00 | - | 100.0% |
| Total Grant Programs | - | 605,358 | 91,907.13 | 605,358.00 | - | 100.0% |

**EATON COUNTY BOARD OF COMMISSIONERS**

**MARCH 20, 2024**

# RESOLUTION AMENDING RESOLUTION 14-9-102 APPROVING THE ESTABLISHMENT OF A PROJECT ASSESSED CLEAN ENERGY (PACE) PROGRAM

**Introduced by the Public Works and Planning Committee**

**WHEREAS,** the Board of Commissioners of Eaton County, Michigan previously adopted Resolution 14-9-102, a Resolution approving the establishment of a property assessed clean energy program ("PACE Program") and creating a PACE district pursuant to Act No. 270, Public Acts of Michigan, 2010, as amended ("PACE Statute"), for the purpose of promoting the use of renewable energy systems and energy efficiency improvements by owners of certain real property; and

**WHEREAS,** the Board of Commissioners established a PACE Program as described in the PACE Report, so as to provide a property owner based method of financing and funds for projects, including owner-arranged financing from a commercial lender, which funds and financing shall be secured and repaid by assessments on the property benefited, with the agreement of the record owners, such that no County moneys, general County taxes or County credit of any kind whatsoever shall be pledged, committed, impaired or used in connection with any project as required by, and subject to the Pace Statute; and

**WHEREAS,** the Board of Commissioners hereby finds that financing PACE projects is a valid public purpose because it stimulates economic development, improves property values, reduces energy costs, reduces greenhouse gas emissions, and increases employment in the County; and

**WHEREAS,** the types of projects that may now be financed under the PACE Program include, but are not limited to: insulation in walls, roofs, floors, foundations, or heating and cooling distribution systems; storm windows and doors; multi-glazed windows and doors; heat-absorbing or heat-reflective glazed and coated window and door systems; and additional glazing, reductions in glass area, and other window and door system modifications that reduce energy consumption; automated energy control systems; heating, ventilating, or air-conditioning and distribution system modifications or replacements; caulking, weather-stripping, and air sealing; replacement or modification of lighting fixtures to reduce the energy use of the lighting system; energy recovery systems; day lighting systems; installation or upgrade of electrical wiring or outlets to charge a motor vehicle that is fully or partially powered by electricity; measures to reduce the usage of water or increase the efficiency of water usage; any other installation or modification of equipment, devices, or materials approved as a utility cost-savings measure by the Board of Commissioners; a fixture, product, device, or interacting group of fixtures, products, or devices on the customer's side of the meter that use one or more renewable energy resources to generate electricity. Renewable energy resources include, but are not limited to: biomass; solar and solar thermal energy; wind energy; geothermal energy and methane gas captured from a landfill.

**WHEREAS,** Public Act 270 of 2010 has been recently amended with the passage of Senate Bills 302 & 303 of 2023; and

**WHEREAS,** the projects that may now be financed under the PACE Program have been amended to provide the option for property owners of retrofits or rehab projects to waive the energy savings guarantee; for new construction, the energy savings guarantee is no longer required; require that new construction be built above Michigan's energy code; allow for the financing of environmental hazard projects including mitigation of lead, heavy metal, or PFAS contamination in potable water systems, mitigation of lead paint contamination; mitigation of the effects of floods or drought; and increase the resistance of property against severe weather.

**WHEREAS,** it has been determined that the PACE Program and PACE Report approved in 2014 requires amendment to be consistent with the amended statute; and

**WHEREAS,** an amended PACE Program Report has been prepared and reviewed.

**NOW, THEREFORE BE IT RESOLVED,** that the Eaton County Board of Commissioners amends Resolution No. 14-9-102 approving amendments to the Eaton PACE Program and adopts the amended PACE Program Report attached to this resolution.

**BE IT FURTHER RESOLVED,** that all other provisions of the PACE Program and PACE Report not amended herein shall remain in full force and effect.

**BE IT FURTHER RESOLVED,** that all resolutions and parts of resolutions are, to the extent of any conflict with this resolution, hereby rescinded.

# EATON COUNTY, MICHIGAN

# PACE PROGRAM REPORT

This Lean & Green Michigan™ PACE Program Report contains the information required by Section 9 of Michigan Public Act No. 270 of 2010, as amended. Additional information is available from Eaton County. The PACE Program and PACE Program Report were approved by the Board of Commissioners on September 17, 2014, by Resolution 14-9-102, subsequent to a public hearing held on September 17, 2014. The Eaton County PACE Program and PACE Program Report were amended on [DATE].

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## INTRODUCTION

Michigan Public Act No. 270 of 2010, as amended ("the PACE Statute") authorizes local units of government to adopt Property Assessed Clean Energy ("PACE") programs to promote the installation of renewable energy systems, energy efficiency improvements, water usage improvements, and environmental hazard projects by owners of commercial or industrial property within a district designated by the local unit of government.

In order to encourage economic development, improve property valuation, increase employment, reduce energy costs, reduce greenhouse gas emissions and contribute to the public health and welfare in Eaton County ("Eaton"), the Board of Commissioners established the Eaton County Property Assessed Clean Energy Program and PACE district pursuant to the PACE Statute by joining Lean & Green Michigan™ (the "PACE Program" or "Program"). The PACE Program has identified specific sources of commercial funding to finance PACE Projects within the County PACE district, which is coterminous with the County's jurisdictional boundaries.

The purpose of this PACE Program Report is to fulfill the requirements of the PACE Statute. Section 9 of the PACE Statute requires a report that includes: a form of contract between the County and the record owner; identification of an official authorized to enter into program contracts on behalf of the County; a maximum aggregate amount for financing provided by the County under the program; an application process and eligibility requirements; methods for determining repayment periods, the maximum amount of assessment, and interest rates on assessment installments; an explanation of how assessments will be made and collected; a plan for raising capital; procedures to determine information regarding reserve funds and fees of the program; a requirement that the term of the assessment not exceed the useful life of the project; a requirement of an appropriate ratio of the amount of the assessment to the assessed value of the property; requirement of consent from the mortgage holder; provisions for marketing and participant education; provisions for adequate debt service reserve fund; quality assurance and antifraud measures; and a requirement for baseline energy audit or energy modeling, ongoing savings measurements and performance guarantees for retrofit projects over $250,000 in assessments unless waived by the property owner; for new construction energy projects, a requirement that the building or other structure exceed applicable requirements of the Michigan uniform energy code.

As many of the details of a PACE transaction are determined on a project-specific basis, adjustments to the model contract may be required to fit a particular transaction. Additionally, there are several blanks left in the model contract that should be filled in when the corresponding information is known.

Lean & Green Michigan, LLC ("LAGM") developed a collaborative approach to PACE programs for local units of government by standardizing the administrative and legal process under which PACE programs are created and managed. Many local units of government throughout the state have joined or are in the process of joining the Lean & Green Michigan™ PACE program. This approach creates one efficient statewide market, allowing property owners, lenders and contractors to utilize a standardized process as they employ PACE financing in multiple jurisdictions throughout the state.

# EATON COUNTY PROGRAM REPORT

## 1. Form of PACE Contract

A form of model PACE Special Assessment Agreement is attached as **Appendix A**. Individual property owners may negotiate project-specific terms to be included in an actual agreement based upon the specific renewable energy systems, energy efficiency improvements, water usage improvement, and environmental hazard projects to be financed through the individual agreement, subject to the limitations set forth herein.

## 2. Authorized Official/PACE Administrator

The County Treasurer or his/her designee, (the "Authorized Official") is authorized to enter into PACE Contracts or PACE Special Assessment Agreements on behalf of Eaton in consultation with LAGM. The Authorized Official is further authorized to sign any agreement, documents or certificates necessary to facilitate the participation of property owners and to facilitate the purposes hereunder.

As part of Lean & Green Michigan™, LAGM will act as PACE administrator and manage Eaton County's PACE Program. LAGM is authorized to negotiate with credit providers and PACE project participants to facilitate the use of the PACE Program and to assist PACE project applicants in obtaining financing.

## 3. Financing Parameters

In establishing its PACE district, Eaton intends for Projects to be funded through owner-arranged private financing. The maximum aggregate annual amount of financing provided by Eaton shall be zero dollars. The maximum aggregate dollar amount for financing provided by Eaton may be adjusted and/or amended on an annual basis or more frequently by the Board of Commissioners and will remain at zero dollars unless and until it is changed.

Eaton shall not provide any financing for Projects under Eaton's PACE Program. Eaton's PACE Program shall be solely funded through owner-arranged financing from commercial lenders, as allowed under Act 270, Section 9(1)(g)(iii). Owner-arranged financing from commercial lenders is not included under the maximum aggregate annual dollar amount for financing provided by Eaton under the Program. There is no limit on the maximum aggregate annual amount of financing provided by private commercial lenders under the program. The dollar amount for financing of a particular Project will be established by the property owner seeking to implement and the commercial lender seeking to finance the implementation of renewable energy systems, energy efficiency improvements, water usage improvements, and environmental hazard projects; as approved by LAGM and the Authorized Official.

## 4. Application Process/Eligibility Requirements

### Application Process:

The application process for financing projects under the Program shall be that of LAGM. The current application form is attached as **SAA Appendix F**. This form may be changed or amended as necessary by LAGM.

### Eligibility Requirements:

The eligibility requirements for financing projects under the Program shall be those of LAGM. Eligibility requirements may be changed or amended as necessary by LAGM. The current list of eligibility requirements is attached as **SAA Appendix A**.

## 5. Financing Terms of Assessments

The interest rate for PACE special assessment installments supplied by commercial lenders shall be negotiated by the parties based on current market conditions.

The maximum allowable repayment period of a PACE special assessment must be included in the PACE Special Assessment Agreement and will be determined on a project-specific basis and shall not exceed the lesser of the useful life of the Project financed by the assessment or 25 years.

The maximum dollar amount of a PACE special assessment shall be negotiated on a project-specific basis between the property owner and the entity providing the financing based upon the specific renewable energy systems, energy efficiency improvements, and environmental hazard projects included in the individual PACE Special Assessment Agreement.

## 6. Assessment Collection Process

Within the parameters set forth herein, the Authorized Official will authorize one or more commercial lenders to provide financing to defray all or part of the cost of the Project, by special assessment upon the Special Assessment Parcel, which the Authorized Official will find is especially benefited in proportion to the costs of the renewable energy systems, energy efficiency improvements, water usage improvement, or environmental hazard projects.

The Special Assessment Roll, attached as **SAA Appendix C**, will be spread by the Authorized Official, or appropriate official, on behalf of Eaton and without objection by the property owner to allocate one hundred percent (100%) of the PACE special assessment levy created hereby to the Special Assessment Parcel.

The PACE special assessment, as allocated by the Authorized Official, or appropriate official, on behalf of Eaton without objection by the property owner, will be finally established against the property and the Project to be constructed on the Special Assessment Parcel. The PACE special assessment will be effective immediately upon the execution and delivery of the PACE Special Assessment Agreement by the property owner. The PACE special assessment

may be paid in annual or semi-annual installments pursuant to Section 13(2) of the PACE Statute. The Authorized Official, on behalf of Eaton, will confirm the Special Assessment Roll.

The Eaton County Delinquent Tax Revolving Fund ("DTRF") shall not be used to advance, satisfy, or pay any delinquent installment of the PACE special assessment, and no County funds will be used to repay any PACE special assessment placed under this program. The commercial lender will waive any claim to be able to seek payment from Eaton through the DTRF in the PACE Special Assessment Agreement.

**7. Financing Program**

LAGM has developed and will continue to develop an active roster of financial institutions, institutional investors and other sources of private capital available to finance PACE projects in Michigan. By participating in LAGM, Eaton helps its constituent property owners gain access to private capital made available through the statewide program. Eaton authorizes the use of owner-arranged financing from commercial lenders to finance qualified Projects under the Program.

**8. Reserve Fund**

By participating in the Lean & Green Michigan™ program, Eaton assists its constituent property owners in taking advantage of any and all appropriate loan loss reserve and gap financing programs of the Michigan Economic Development Corporation ("MEDC") and other federal and state entities. Such financing mechanisms can be used to finance a reserve fund if deemed necessary and appropriate by Eaton.

**9. Fee Schedule**

Application, administration and program fees for record owners shall be those of LAGM. Administration and program fees will be determined on a project-specific basis and will depend on the size, nature and complexity of the project(s) and financing mechanism(s) involved. A copy of the current LAGM administration and program fees is published by LAGM in its PACE Program Manual available upon request and at LAGM's website.

**10. Useful Life**

The maximum length of time allowable for repayment of a PACE assessment shall not exceed the lesser of the useful life of the Project paid for by the assessment or 25 years and will be determined on a project-specific basis by LAGM. Projects involving multiple energy efficiency improvements, renewable energy systems, or environmental hazard improvements may aggregate the useful life of each improvement to determine an overall useful life figure for financing purposes. In aggregating the improvements, the property owner must appropriately weigh each improvement's dollar cost.

## 11. Property Eligibility Parameters

The ratio of the amount of the assessment to the market value of the property must be appropriate and shall be set forth in the PACE Special Assessment Agreement for each project. Additionally, the overall indebtedness on the property must be appropriate. In calculating the appropriate ratios, the property owner and the lender providing the financing may determine the market value of the property using either: 1) the market value of the property before the Project as agreed to by the property owner and the lender providing the financing using a proper measure such as a recent appraisal or two times the State Equalized Value; or 2) the market value of the property upon completion of the Project as agreed to by the property owner and the lender providing the financing using a proper measure such as an appraisal of the "as completed" value of the property.

In calculating the appropriate ratio of the amount of the assessment to the market value of the property, the cost of the Project (excluding closing costs and interest) shall generally not exceed 25% of the market value of the property.

In calculating the appropriate ratio of total indebtedness on the property to the market value of the property, prior debt secured by the property plus the PACE loan shall generally not exceed 90% of the market value of the property.

LAGM and the Authorized Official may permit projects that exceed these values for reasonable cause on a case-by-case basis, and in such cases must include a letter of explanation as an addendum to the Special Assessment Agreement.

## 12. Mortgage Consent Requirement

If a property is subject to a mortgage the record owner must obtain written consent from the mortgagee to participate in the Program. Proof of lender consent must be submitted before a Special Assessment Agreement may be executed. A form of lender consent to participate in a PACE Program is attached as **SAA Appendix H**.

## 13. Marketing Program

LAGM has developed an ongoing marketing and participant education program. By joining Lean & Green Michigan™, Eaton gains access to this program and agrees to partner with LAGM in educating property owners in Eaton about opportunities to save energy, save money and improve their property value. Eaton authorizes the use of Eaton's logo by LAGM to be incorporated into the LAGM website and other communication vehicles. More information regarding the Program can be obtained at LAGM's website: www.leanandgreenmi.com; or at the County's website at www.eatoncounty.org/.

## 14. Quality Assurance and Antifraud Measures

LAGM includes the following quality assurance and antifraud measures:

- Business integrity review on clean energy contractors conducted by Michigan Saves;

- Background check process on clean energy contractors conducted by Michigan Saves; and
- Other general due diligence as may be necessary or required.

**15. Energy Audit or Energy Modeling Requirement**

As set forth in the PACE Program Application, a baseline energy audit or energy modeling must be completed before a Project is approved. Each contract should provide adequate funding for monitoring and verification of energy savings throughout the life of the special assessment.

**16. Savings-to-Investment Ratio and Savings Guarantee Requirements**

Unless waived by the record owner, Projects financed with more than $250,000 require ongoing measurements to establish energy savings and a guarantee from the contractor that the energy project will achieve a savings to investment ratio greater than one.

This requirement may be waived by the record owner, and is not applicable to a new construction energy project.

**17. Amendments to the Program**

A public hearing shall not be required to amend this Program. LAGM may amend Eaton PACE program as necessary from time to time.

# APPENDIX A

# SPECIAL ASSESSMENT AGREEMENT

_____SPACE ABOVE FOR RECORDING PURPOSES_____

## PACE SPECIAL ASSESSMENT AGREEMENT (OWNER-ARRANGED FINANCING)

*by and among*

**EATON COUNTY, MICHIGAN**

*and*

**PROPERTY OWNER**

*and*

**PACE LENDER**

**Dated: _____**

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## PACE SPECIAL ASSESSMENT AGREEMENT (OWNER-ARRANGED FINANCING)

**THIS PACE SPECIAL ASSESSMENT AGREEMENT** (this "Agreement") is made this [DATE] among Eaton County, a Michigan County corporation (the "County"), whose address is 1045 Independence Blvd, Charlotte, Michigan 48813, [PROPERTY OWNER], a Michigan limited liability company (the "Property Owner"), whose address is [ADDRESS], and [PACE LENDER], a Michigan limited liability company (the "Lender"), whose address is [ADDRESS].

### RECITALS:

A. Pursuant to the PACE Statute and a resolution adopted by the Board of Commissioners on September 17, 2014, the County has established the PACE Program as described in the PACE Program Report and has created the Special Assessment District under the PACE Program for the purpose, *inter alia*, of assisting a record owner of property within the Special Assessment District in obtaining Owner-Arranged Financing from a commercial lender to defray the costs of one or more Project on the property.

B. Under the PACE Statute, the County is authorized, pursuant to an agreement with the record owner of property within the Special Assessment District, to impose a special assessment on the property to be benefitted by the Project in order to secure and provide for the repayment of the Owner-Arranged Financing.

C. The Property Owner desires to undertake a certain Project on commercial, industrial, or agricultural property of the Property Owner located within the Special Assessment District, as described herein, and has obtained a commitment from the Lender to make the Loan to the Property Owner to defray its cost.

D. In order to induce the Lender to make the Loan to the Property Owner, the Property Owner has requested that the County enter into this Agreement to impose a special assessment on the property to be benefitted by the Projects, in accordance with the PACE Statute, which special assessment will secure and provide for repayment of the Loan from the Lender.

E. Pursuant to the PACE Statute and the PACE Program, the County is authorized to enter into this Agreement.

In consideration of the foregoing and the mutual covenants contained in this Agreement, the County, the Property Owner and the Lender agree that:

## ARTICLE I
## DEFINITIONS

**Section 1.01 Definitions.** Capitalized terms used in this Agreement and Recitals shall have the meanings stated in the PACE Statute and as stated immediately below, except to the extent the context in which they are used requires otherwise:

(a) "**Agreement**" means this PACE Special Assessment Agreement as same may be amended and/or restated.

(b) "**Applicable Interest Rate**" means the per annum rate of interest specified in the Loan Documents at which the Special Assessment Roll bears interest as calculated by the Lender in accordance with the provisions of Section 4.01 of this Agreement.

(c) "**Authorized Official**" means the [Authorized Official Title], or his/her designee, who is authorized to exercise the authority of an Authorized Official under the terms of the PACE Program Report.

(d) "**Default Rate**" means the rates dictated for cities by the Michigan General Property Tax Act of 1893 as amended (MCL 211.78a and 211.78g).

(e) "**Energy Efficiency Improvement**" means the acquisition, installation, replacement, or modification of equipment, devices, or materials intended to decrease energy consumption, including, but not limited to, all of the following: insulation in walls, roofs, floors, foundations, or heating and cooling distribution systems; storm windows and doors; multi-glazed windows and doors; heat-absorbing or heat-reflective glazed and coated window and door systems; and additional glazing, reductions in glass area, and other window and door system modifications that reduce energy consumption; automated energy control systems; heating, ventilating, or air-conditioning and distribution system modifications or replacements; caulking, weather-stripping, and air sealing; replacement or modification of lighting fixtures to reduce the energy use of the lighting system; energy recovery systems; day lighting systems; installation or upgrade of electrical wiring or outlets to charge a motor vehicle that is fully or partially powered by electricity; measures to reduce the usage of water or increase the efficiency of water usage; and any other installation or modification of equipment, devices, or materials approved as a utility cost-savings measure by the Board of Commissioners.

(f) "**Energy Project**" means any of the following: an Energy Efficiency Improvement; or the acquisition, installation, replacement or modification of a Renewable Energy System or anaerobic digester.

(g) "**Event of Default**" has the meaning set forth in Section 7.01 hereof.

(h) **"Environmental Hazard Project"** means the acquisition, installation, replacement, or modification of equipment, devices, or materials intended to address environmental hazards, including, but not limited to, measures to do any of the following:

mitigate lead, heavy metal, or PFAS contamination in potable water systems; mitigate the effects of floods or drought; increase the resistance of property against severe weather; mitigate lead paint contamination.

(i) "**Force Majeure**" means unforeseeable events beyond a party's reasonable control and without such party's failure or negligence including, but not limited to, acts of God, acts of public or national enemy, acts of the federal government, fire, flood, epidemic, quarantine restrictions, strikes and embargoes, labor disturbances, the unavailability of raw materials, and delays of contractors due to such causes, but only if the party seeking to claim Force Majeure takes reasonable actions necessary to avoid delays caused thereby.

(j) "**General Property Tax Act**" means the General Property Tax Act, Act 206, Public Acts of Michigan, 1893, as amended.

(k) "**Improvements**" means the renewable energy systems, energy efficiency improvements, water usage improvements, and environmental hazard projects being undertaken by the Property Owner on the Special Assessment Parcel as described in **Appendix E** attached hereto.

(l) **"LAGM"** shall mean Lean & Green Michigan, LLC, a Michigan limited liability company.

(m) "**Lean & Green Michigan™**" means a statewide property assessed clean energy program open to all local units of government operated as a public-private partnership by LAGM in order to facilitate property assessed clean energy program-financed transactions.

(n) "**Lender**" has the meaning set forth in the preamble.

(o) "**Loan**" means the loan obtained by the Property Owner from the Lender pursuant to Owner-Arranged Financing to defray a portion of the cost of the Improvements under the terms of the Loan Documents.

(p) "**Loan Documents**" means the Loan Agreement, dated as of [DATE], between the Property Owner and the Lender and any and all exhibits or attachments thereto, including any documents amending, restating, replacing, extending or otherwise modifying the Loan Agreement and all documents provided to the Lender from time to time by the Property Owner to evidence or secure the Loan as required pursuant to the terms of the Loan Agreement.

(q) "**Owner-Arranged Financing**" means the process by which a property owner secures financing for improvements to its property that does not involve bonds or any other form of funding provided by the County.

(r) "**PACE Program**" shall mean the property assessed clean energy program implemented by the County pursuant to the PACE Statute and the PACE Program Report to stimulate renewable energy systems, energy efficiency improvements, water usage improvement, and environmental hazard projects in conformity with the PACE Statute.

(s) "**PACE Program Report**" means the Lean & Green Michigan™ PACE Program Report approved by the Board of Commissioners on September 17, 2014, including any amendments or changes thereto made before the date of this Agreement.

(t) "**PACE Statute**" means Act 270 of the Michigan Public Acts of 2010, as amended, commonly referred to as the Property Assessed Clean Energy Act, MCL 460.931 et seq.

(u) "**Payment Schedule**" has the meaning set forth in Section 4.01 hereof.

(v) **"Project"** means an Environmental Hazard Project or Energy Project.

(w) "**Property Owner**" has the meaning set forth in the preamble.

(x) "**Renewable Energy System**" means a fixture, product, device, or interacting group of fixtures, products, or devices on the customer's side of the meter that use one (1) or more renewable energy resources to generate electricity, gas, or other power. Renewable Energy System includes a biomass stove but does not include an incinerator or digester.

(y) "**Special Assessment**" means the money obligation created pursuant to this Agreement with respect to the Special Assessment Parcel used to defray the cost of the Improvements and which shall, together with all interest, charges and penalties which may accrue thereon, be a lien upon the Special Assessment Parcel of the same priority and status as other property tax liens and other assessment liens as provided in the PACE Statute until such amounts have been paid in full.

(z) "**Special Assessment District**" means the Special Assessment District established as part of the PACE Program pursuant to the PACE Statute.

(aa) "**Special Assessment Parcel**" means the property located in the Special Assessment District to which one hundred percent (100%) of the Special Assessment has been spread by the County and which is more particularly described on the attached **Appendix B**.

(bb) "**Special Assessment Roll**" has the meaning set forth in Section 4.01 hereof.

## ARTICLE II
## DESCRIPTION OF IMPROVEMENTS

**Section 2.01 Description of Improvements.** The Improvements to be acquired, constructed, installed and financed by the Property Owner under the PACE Program are described in **Appendix E** attached hereto. If after project approval, the Property Owner seeks to undertake additional Improvements, **Appendix E** may be amended or supplemented from time to time. Such additional Improvements must meet all the eligibility criteria of the PACE Program and the PACE Program Report and may be added to the original application as a modification, or submitted as a new project, at the discretion of LAGM and the Authorized Official.

## ARTICLE III
## COVENANTS OF THE PROPERTY OWNER

**Section 3.01 Acquisition, Construction and Installation of Improvements.**

**(a)** The Property Owner covenants and agrees to acquire, construct and install the Improvements as described in **Appendix E** on the Special Assessment Parcel described on **Appendix B** in full conformity with all applicable laws and regulations and in compliance with the PACE Program eligibility requirements set forth in **Appendix A**. If the proceeds of the Loan are not sufficient to pay the costs of the Improvements as aforesaid, the Property Owner agrees to complete the Improvements and to pay that portion of the costs of the Improvements in excess of the amount of the Loan. The Property Owner acknowledges and agrees that the County makes no representation, either express or implied, that the proceeds of the Loan will be sufficient to pay the total costs of the Improvements, and the Property Owner agrees that if, after exhaustion of the proceeds of the Loan, the Property Owner shall be required to pay any portion of the costs of the Improvements from its own funds, the Property Owner shall not be entitled to any reimbursement therefore from the County or from the Lender, nor shall the Property Owner be entitled to any abatement or diminution of the amount of the Special Assessment created by this Agreement or of any interest, charges or penalties which may accrue thereon.

(b) To provide for monitoring and verification of the Project, the Property Owner has created an Energy Star Portfolio Manager account and has linked this account to the LAGM Energy Star Portfolio Manager account. The Property Owner has entered all electricity bills for the Special Assessment Parcel for the year (12 consecutive months) immediately preceding the installation of the Project. The Property Owner further agrees to enter its electricity bills for the duration of the Agreement on an annual basis. Annual electricity bills for the Special Assessment Parcel will be entered into the Property Owner's Energy Star Portfolio Manager account by January 31 of each year after the year for which the electricity bills are to be entered.

## ARTICLE IV
## PACE SPECIAL ASSESSMENT

**Section 4.01 PACE Special Assessment Created.**

(a) At the request of the Property Owner, the County hereby determines to assist the Property Owner in obtaining the Loan to defray a portion of the cost of the Improvements on the Special Assessment Parcel by the levy of the Special Assessment upon the Special Assessment Parcel, which the Authorized Official on behalf of the County finds is especially benefited in proportion to the cost of the Improvements. The Special Assessment created hereby has been spread by the Authorized Official on behalf of the County on the Special Assessment Roll attached hereto as **Appendix C** (the "Special Assessment Roll"), with the consent of the Property Owner, to allocate one hundred percent (100%) of the Special Assessment to the Special Assessment Parcel.

(b) The Special Assessment, as allocated by the Authorized Official with the consent of the Property Owner, is hereby finally established and levied against the Special Assessment Parcel as described on the attached **Appendix B** in the principal amount of [LOAN AMOUNT] as stated on the Special Assessment Roll. The Special Assessment is effective immediately upon the execution and delivery of this Agreement by the Property Owner. The Special Assessment shall be paid by the Property Owner in [NUMBER] semi-annual installments on the dates and in the amounts set forth in the payment schedule attached hereto as **Appendix D** (the "Payment Schedule"). The Special Assessment Roll and the Payment Schedule are hereby confirmed by the Authorized Official on behalf of the County. The unpaid amount of the Special Assessment Roll shall bear interest from the date of execution and delivery of this Agreement at the Applicable Interest Rate, as calculated by the Lender in accordance with the terms of the Loan Documents, payable by the Property Owner semi-annually on each date on which any installment of the Special Assessment is due in accordance with the Payment Schedule. Notwithstanding the foregoing, (i) if any installment of the Special Assessment or any interest due and payable on the Special Assessment Roll is not paid by the Property Owner when and as the same shall become due and payable in accordance with the provisions of this Section 4.01 or (ii) any "event of default" under the Loan Documents has occurred and is continuing, the unpaid amount of the Special Assessment Roll shall bear interest at the Default Rate as calculated by the Lender in accordance with the terms of the Loan Documents, for as long as such amounts remain unpaid or for so long as such "event of default" under the Loan Documents exists and is continuing. The County, the Property Owner and the Lender agree that the Lender shall be solely responsible for the determination from time to time of the Applicable Interest Rate and the Default Rate and the amount of interest due and payable by the Property Owner on the Special Assessment Roll on each day on which interest thereon is due and payable as provided in this Agreement, and the Lender's determination thereof shall be binding on the Property Owner absent manifest error. The Property Owner and the Lender agree that the County shall under no circumstance have any obligation to determine the Applicable Interest Rate or the Default Rate or to calculate the amount of any interest payment due on the Special Assessment Roll as provided in this Agreement, and the County may conclusively rely upon the Lender's determinations thereof for the purpose of exercising and discharging all of the County's rights and obligations under this Agreement. The Lender agrees to provide, or cause to be provided, notice to the Property Owner and the County of the determinations of the Applicable Interest Rate and the Default Rate, as applicable, pursuant to this Section 4.01(b) at such times, and from time to time, as the Property Owner or the County may request.

**Section 4.02 Assignment of Special Assessment Payments to Lender.** At the request of the Property Owner and the Lender, and pursuant to Section 9(g)(iii) of the PACE Statute, the County hereby irrevocably assigns to the Lender its right to receive all installments of the Special Assessment required to be paid by the Property Owner pursuant to this Agreement, whether in accordance with the Payment Schedule or upon prepayment of the Special Assessment in whole or in part in accordance with Section 4.06 of this Agreement, together with all payments of interest due and payable on the Special Assessment Roll at the Applicable Interest Rate or the Default Rate, as the case may be, as provided in Section 4.01(b) of this Agreement. In pursuance of the foregoing, the County, the Property Owner and the Lender agree that, except as provided in Section 4.05 of this Agreement, (i) all installments of the Special Assessment, whether payable in accordance with the Payment Schedule or upon prepayment of

the Special Assessment in whole or in part in accordance with Section 4.06 of this Agreement, together with all payments of interest due and payable upon the Special Assessment Roll at the Applicable Interest Rate or the Default Rate, as the case may be, shall be paid by the Property Owner directly to the Lender when due at such address in the United States as may be designated by the Lender in writing to the Property Owner and the County; (ii) the County shall have no obligation or duty to include any installments of the Special Assessment on any tax bill issued by the County or to bill, collect or remit to the Lender any installments of the Special Assessment or any interest due and payable upon the Special Assessment Roll; and (iii) absent receipt by the County of written notice from the Lender of a payment default in accordance with Section 4.05 hereof, the County shall be entitled to conclusively presume that all installments of the Special Assessment and all payments of interest due and payable on the Special Assessment Roll have been made by the Property Owner to the Lender when due as required by the terms of this Agreement.

**Section 4.03 Property Owner's Consent to Special Assessment; Waiver.**

(a) The Property Owner hereby irrevocably consents to and confirms the creation of the Special Assessment Roll and the levy of the Special Assessment established pursuant to this Agreement and EXPRESSLY WAIVES ANY AND ALL CLAIMS CHALLENGING AND DEFENSES TO, THE LEGALITY, VALIDITY, ENFORCEABILITY OR COLLECTABILITY OF THE SPECIAL ASSESSMENT, including, but not limited to, claims arising from, relating to or otherwise based upon any theory of procedural defect concerning the approval of the Improvements, the establishment of the Special Assessment District, confirmation of the Special Assessment Roll and the Payment Schedule, the County's right to place the Special Assessment lien on the Special Assessment Parcel, the collectability and due dates of the Special Assessment installments and interest due and payable on the Special Assessment Roll, or any other theory or claim. The Property Owner further waives notice of hearing and the right to file objections if and to the extent such rights exist under any special assessment ordinance of the County.

(b) Following the signing of this Agreement, no suit or action of any kind shall be instituted or maintained for the purpose of contesting or enjoining the collection of the Special Assessment, and the Property Owner, for itself and its successors in interest, lessees, purchasers, and assigns with respect to all or any part of the Special Assessment Parcel, hereby irrevocably waives its rights to contest the Special Assessment with any adjudicative body having jurisdiction over the subject matter, including, but not limited to, the Michigan Tax Tribunal.

(c) In addition to any conditions, covenants, warranties and representations specified in the Loan Documents, the Property Owner shall not sell, transfer, alienate or convey any of its interest in the Special Assessment Parcel without first having given written notice of the Special Assessment to any successors in interest, lessees, purchasers or assigns and having made a copy of this Agreement part of any purchase contract, sale contract, lease agreement, deed or any other conveyancing instrument by which the Property Owner purports to assign all or any part of its interest in the Special Assessment Parcel to any successors in interest, lessees, purchasers, transferees, licensees and assigns. This Agreement shall be recorded against the real property constituting the Special Assessment Parcel by the PACE lender with the Register of Deeds of Eaton County, State of Michigan.

(d) The Property Owner agrees that it, its successors and assigns shall, during the term of this Agreement and the Special Assessment, pay all ad valorem real property taxes and assessments levied against the Special Assessment Parcel when due and the Property Owner specifically waives, irrevocably for itself, its successors and assigns as to any and all portions of the Special Assessment Parcel, the right to pay ad valorem real property taxes and assessments on any other installment method which may be available to property owners in the County.

(e) The County agrees that following (i) payment by the Property Owner in full of the Special Assessment, together with all accrued interest on the Special Assessment Roll, and all other interest, charges and penalties which may accrue thereon, and (ii) receipt by the County of written acknowledgment from the Lender that the Special Assessment, together with all accrued interest on the Special Assessment Roll, has been paid to the Lender in full, it will promptly execute and deliver documentation discharging the lien of the Special Assessment on the Special Assessment Parcel. Until the Special Assessment liability has been fully satisfied and the lien discharged, each purchaser of all or any part of the Special Assessment Parcel, as a condition of closing on such purchase, shall execute and deliver to the County a written notice: (i) acknowledging the principal amount unpaid and outstanding on the Special Assessment; (ii) agreeing to the assumption of the liability to pay the Special Assessment, and any interest thereon, on a timely basis, when due, until the remaining balance and interest on said Special Assessment has been paid in full; (iii) acknowledging that the title insurance policy will state that the Special Assessment has not been paid at time of closing thereon; and (iv) agreeing to pay to the Lender at or prior to the close of the purchase all past due installments of the Special Assessment and all past due payments of interest on the Special Assessment Roll. The representations set forth in such written notice shall be enforceable at law and in equity, including without limitation, by way of specific performance.

**Section 4.04 Lien.** The Special Assessment is an obligation with respect to the Special Assessment Parcel, and shall, until paid, be a lien upon the Special Assessment Parcel for the amount of the Special Assessment and all interest, charges and penalties that may accrue thereon. Such lien shall be of the same character and effect as liens created pursuant to the ordinances of the County for County taxes and shall be treated as such with respect to procedures for collection as set forth in the General Property Tax Act and the ordinances of the County, including accrued interest, charges and penalties. The Special Assessment confirmed hereby is a debt to the County from the Property Owner and its successors in interest, lessees, purchasers and assigns. The right of the County to receive all installments of the Special Assessment required to be paid by the Property Owner pursuant to this Agreement, together with all payments of interest due and payable on the Special Assessment Roll at the Applicable Interest Rate or the Default Rate, as the case may be, as provided in Section 4.01, has been irrevocably assigned by the County to the Lender in accordance with the provisions of Section 4.02 of this Agreement. No judgment or decree shall destroy or impair any lien of the County upon the premises assessed for such amount of the Special Assessment as may have been equitably or lawfully charged and assessed thereon. Failure of the Property Owner or any subsequent property owner to receive any notice required to be sent under the provisions of the ordinances of the County or this Agreement shall not invalidate the Special Assessment or the Special Assessment Roll and shall not be a jurisdictional requirement.

**Section 4.05 Payment Default.**

(a) If any installment of the Special Assessment or interest due on the Special Assessment Roll shall not have been paid by the Property Owner to the Lender, as assignee of the County, at the time and in the amount required by Section 4.01 hereof (a "Payment Default"), the Lender shall, within thirty (30) days following the date such sums were due and payable (the "Payment Default Date"), deliver written notice to the County stating all of the following: (i) that a Payment Default has occurred under this Agreement; (ii) the Payment Default Date; (iii) the amount of the Special Assessment that was due and payable as of the Payment Default Date and which remains unpaid and the amount of interest on the Special Assessment Roll that was due and payable as of the Payment Default Date and which remains unpaid (collectively, the "Payment Default Amount"); and (iv) an attestation by an authorized officer of the Lender that the statements contained in the foregoing notice are true, correct and complete as of the date of such notice. Upon receipt of such notice from the Lender, the County shall take such actions as may be required to cause the Payment Default Amount to be certified for collection on the summer or winter tax bill next succeeding the Payment Default Date, and such Payment Default Amount shall be collected at the same time and in the same manner as is prescribed for the collection of the County taxes under the General Property Tax Act and the ordinances of the County. The County may assess a fee for delinquent taxes, interest, penalties, and fees as provided under General Property Tax Act Section 211.78. Notwithstanding the foregoing provisions of this Section 4.05(a), if the County shall determine that the notice of the Lender described in this Section 4.05(a) was not received by the County in sufficient time to permit the Payment Default Amount to be placed for collection on the summer or winter tax bill next succeeding the Payment Default Date, such Payment Default Amount shall be certified for collection on the next summer or winter tax bill issued thereafter. The County shall be entitled to conclusively rely upon any notice of the Lender delivered pursuant to this Section 4.05(a) as to the existence of a Payment Default and as to the Payment Default Amount, and shall not be liable to the Property Owner or to any other person for any action taken by the County pursuant to the terms of this Agreement or otherwise in reliance upon the information contained in such notice. Absent receipt by the County of written notice from the Lender of a Payment Default in accordance with this Section 4.05(a), the County shall be entitled to presume conclusively that all installments of the Special Assessment and all payments of interest due and payable on the Special Assessment Roll have been made by the Property Owner to the Lender when due as required by the terms of this Agreement, and the County shall have no obligation or duty to include any installments of the Special Assessment on any tax bill issued by the County or to bill, collect or remit to the Lender any installments of the Special Assessment or any interest due and payable upon the Special Assessment Roll.

(b) The County hereby agrees that, pursuant to the assignment set forth in Section 4.04, it will cause to be paid over to the Lender all amounts received by the County from the County Treasurer as collections of any Payment Default Amount within forty-five (45) days of the date such sums are received by the County from the County Treasurer. The parties hereto expressly acknowledge and agree that in no event shall the County advance to the Lender the amount of any unpaid Payment Default Amount, and the County shall be obligated to pay over to the Lender only such sums as are actually received by the County Treasurer as collections of any Payment Default Amount.

(c) In the event that any interest, penalties, fees or other charges shall be imposed upon the Special Assessment Parcel or against the Special Assessment Roll or the amount of any unpaid Special Assessment pursuant to the ordinances of the County or the General Property Tax Act, by Eaton County, Michigan, for the administration, billing, collection or enforcement of the Special Assessment created hereby, such amounts shall remain a debt of the Property Owner to Eaton County, Michigan, as their interests may appear, and shall not be deemed to have been assigned to the Lender pursuant to the terms of this Agreement or otherwise.

(d) The Lender hereby agrees and acknowledges that it shall have no right, and if such right were to be found to exist, hereby waives such right, to seek payment of any delinquent installment of the Special Assessment, and any interest, penalties, fees, or other charges, through the Eaton County Delinquent Tax Revolving Fund ("DTRF"), or any subsequent County fund which may replace the DTRF, or any other County funds.

**Section 4.06 Prepayment of Special Assessment.** Subject to the provisions of the Loan Documents, including, without limitation, prepayment penalties, if any, the Property Owner may, upon sixty (60) days' written notice to the Lender and the County, prepay any installment of the Special Assessment specified in the Payment Schedule by causing to be paid to the Lender the amount of the installment to be prepaid, together with accrued interest thereon to the date of prepayment. If such prepayment of any installment is not received by the Lender on the date specified for prepayment, the Lender shall promptly deliver written notice to the County that such prepayment was not received by the Lender.

**Section 4.07 Invalidity; Cure.** In the event of any invalidity of the Special Assessment, the Authorized Official, at the request of the Lender, and if the County shall have received indemnity satisfactory to the Authorized Official for its costs and expenses (including reasonable attorneys' fees), shall cause a new Special Assessment to be made for all or any part of the Improvements in accordance with the PACE Statute and the PACE Program as reasonably determined by the Authorized Official. The Property Owner, on behalf of itself and its successors in interest, lessees, purchasers, and assigns, hereby waives any objections to and agrees to the imposition of such new Special Assessment; *provided, however,* that the amount of the new Special Assessment shall not exceed the unpaid principal amount of the Loan at the time the new Special Assessment shall be established.

**Section 4.08 County or County Treasurer Becoming Owner of the Special Assessment Parcel**. In the event that the County Treasurer takes ownership of the Special Assessment Parcel by operation of law, the County Treasurer and the Lender agree that while the lien on the Special Assessment Parcel will remain in full force and effect, and all principal, interest, penalties, fees, and other charges, either based on Michigan Compiled Laws or the Loan Documents will continue to accrue during the period of time that the County Treasurer owns the Special Assessment Parcel. No loan or special assessment payments, including interest, penalties, fees or other charges, are required to be paid or will be accrued by the County Treasurer to the Lender. Any and all principal, interest, penalties, fees, and other charges which accrue during the period by which the County Treasurer own the Special Assessment Parcel will, in the sole and unlimited discretion of the Lender, either be: (1) considered immediately due and

payable by any person or entity who purchases the Special Assessment Parcel from the County Treasurer, and no sale or transfer of the Special Assessment Parcel is valid unless and until all principal, interest, penalties, fees, and other charges have been paid by the subsequent owner of the Special Assessment Parcel; or (2) capitalized into the outstanding principal balance of the Special Assessment, causing the Lender to provide a revised Payment Schedule in an amount necessary to amortize the new outstanding principal balance of the Special Assessment over the remaining number of payments. The lien created by the Special Assessment shall not be extinguished or released until all necessary principal and interest payments, as well as all penalties, fees, and other charges, as determined solely by Lender, have been paid and received by Lender.

## ARTICLE V
## CONDITIONS PRECEDENT

**Section 5.01 Conditions Precedent to the County's Obligations.**

The obligations of the County under this Agreement shall be subject to the satisfaction of the following conditions precedent on or prior to the date of execution and delivery of this Agreement by the County, unless waived in writing by the County:

(a) The County, the Property Owner and the Lender shall have authorized, executed and delivered this Agreement and all approvals required hereby shall have been secured.

(b) No action, suit, proceeding or investigation shall be pending before any court, public board or body to which the Property Owner or the County is a party, or shall be threatened in writing against the Property Owner or the County, contesting the validity or binding effect of this Agreement, the Special Assessment or the Owner-Arranged Financing contemplated hereby, or which, if adversely decided, could have a material adverse effect upon the ability of the Property Owner to pay or the County to levy the Special Assessment or to assign to the Lender the right to receive payments of the Special Assessment, or which could have a material adverse effect on the ability of the Property Owner or the County to comply with any of the obligations and terms of this Agreement.

(c) There shall be no ongoing breach of any of the covenants and agreements of the Property Owner required to have been observed or performed by the Property Owner under the terms of this Agreement and no Event of Default by the Property Owner, and no event which, with the passage of time or the giving of notice or both could become an Event of Default by the Property Owner under this Agreement, shall have occurred.

(d) All documents, schedules, materials, maps, plans, descriptions and related matters which are contemplated to be made Appendices to this Agreement shall have been fully completed by the Property Owner to the County's reasonable satisfaction and such Appendices shall be true, accurate and complete.

(e) The Property Owner shall meet all eligibility requirements as set forth in **Appendix A**.

(f) The Property Owner and the Lender shall have authorized, executed and delivered the Loan Documents, and the Lender shall have funded the Loan in accordance with the terms of the Loan Documents.

(g) The Property Owner shall not have filed for bankruptcy or sought the protections of any state or federal insolvency law providing protections to debtors.

(h) The Property Owner shall have obtained consent from each holder of a mortgage interest or lien upon the Special Assessment Parcel prior to the execution and delivery of this Agreement in substantially the form set forth in the PACE Program Report.

## ARTICLE VI
## REPRESENTATIONS AND WARRANTIES

**Section 6.01 Representations and Warranties of the County.**

The County represents and warrants to the Property Owner that, as of the date of this Agreement:

(a) The execution and delivery of this Agreement has been duly authorized by the County, and this Agreement complies with the PACE Statute and constitutes a valid and binding agreement of the County, enforceable against the County in accordance with its terms, except as enforceability may be limited by bankruptcy, insolvency, fraudulent conveyance or other laws affecting creditors' rights generally, now existing or hereafter enacted, and by the application of general principals of equity, including those relating to equitable subordination.

(b) Neither the execution and delivery of this Agreement nor the consummation of the transaction contemplated herein is in violation of any provision of any existing law, ordinance, rule, resolution or regulation to which the County is subject, or any agreement to which the County is a party or by which the County is bound, or any order or decree of any court or governmental entity by which the County is subject.

(c) There are no delinquent taxes, special assessments, or water or sewer charges on the Special Assessment Parcel that will be assessed under this Agreement; and there are no delinquent assessments on the Special Assessment Parcel under a PACE program.

**Section 6.02 Representations and Warranties of the Property Owner.**

The Property Owner represents and warrants to the County and the Lender that:

(a) The Property Owner is duly organized and validly existing as a limited liability company in good standing under the laws of the State of Michigan, with power under the laws of the State of Michigan to carry on its business as now being conducted, and is duly qualified to do business in the State of Michigan; and the Property Owner has the power and authority to own the Special Assessment Parcel and to carry out its obligation to complete the Improvements.

(b) The execution and delivery of this Agreement will not result in a violation or default by the Property Owner of any provision of its Articles of Organization or Operating Agreement, or under any indenture, contract, mortgage, lien, agreement, lease, loan agreement, note, order, judgment, decree or other instrument of any kind or character to which it is a party and by which it is bound, or to which it or any of its assets are subject.

(c) The Property Owner is the sole and exclusive legal and equitable title owner of fee simple title to the Special Assessment Parcel and the Improvements located, or to be located, thereon and has full legal power and authority to consent to the finalization and levying of the Special Assessment as provided herein.

(d) The execution and delivery of this Agreement and the consummation of the transactions contemplated hereby have been duly authorized by all requisite action, and this Agreement has been duly executed and delivered by the Property Owner and constitutes a valid and binding agreement enforceable against the Property Owner in accordance with its terms, except as enforceability may be limited by bankruptcy, insolvency, fraudulent conveyance or other laws affecting creditors' rights generally, now existing or hereafter enacted, and by the application of general principles of equity, including those relating to equitable subordination.

(e) Property Owner warrants and agrees that any contractual, legal or other disputes between it and the Lender--other than matters specifically related to enforcement of property tax obligations--or the contractor involved in the Improvements, do not involve the County, and Property Owner agrees to hold the County and its agents, including but not limited to LAGM, harmless from any such disputes or causes of action.

(f) The Property Owner, the Special Assessment Parcel and the Improvements satisfy all of the PACE Program eligibility and program requirements set forth in **Appendix A**.

**Section 6.03 Representations and Warranties of the Lender.**

The Lender represents and warrants to the County that:

(a) The Lender has experience in the market for property assessed clean energy programs and assessments and is capable of evaluating the merits and risks of its participation in the Owner-Arranged Financing contemplated by this Agreement.

(b) The Lender has made its own independent investigation of the Property Owner, the terms of this Agreement, the nature of the Special Assessment created hereby and the procedures for the collection and enforcement of the Special Assessment under this Agreement and the laws of the State of Michigan, and is not relying on the County, its agents, attorneys or employees for any of such information or with respect to the sufficiency and scope of such investigation. The Lender has not received, and is not relying on, any representations of the County with respect to the Property Owner.

(c) Lender warrants and agrees that any contractual, legal or other disputes between it and Property Owner--other than matters specifically related to enforcement of property tax obligations--do not involve the County, and Lender agrees to hold the County and its agents, including but not limited to LAGM, harmless from any such disputes or causes of action.

## ARTICLE VII
## DEFAULT

**Section 7.01 Property Owner Event of Default.** If the Property Owner shall default in the performance of any covenant or agreement on its part contained in this Agreement and such default shall continue for a period of ten (10) days after written notice thereof has been given to the Property Owner by the County, an "Event of Default" shall be deemed to have occurred under this Agreement.

**Section 7.02 Remedies for Property Owner Event of Default.** Upon the occurrence of an Event of Default as provided in Section 7.01 hereof, the County, after giving written notice as required, without further notice of any kind, and in addition to all other rights and remedies provided at law or in equity, shall be entitled to seek and obtain a decree of specific performance of this Agreement from a court of competent jurisdiction; or the right to recover from the Property Owner any damages incurred by the County and any costs incurred by the County in enforcing or attempting to enforce this Agreement or the Special Assessment, including attorneys' fees and expenses; or to foreclose on the Special Assessment Parcel and to sell all or any part of the Special Assessment Parcel to the extent necessary to recover any damages and costs; or any combination of the foregoing. Notwithstanding the foregoing, the parties hereto acknowledge and agree that the County shall not be obligated to institute any of the actions or proceedings or to exercise any of the remedies authorized by this Section 7.02 upon the occurrence of an Event of Default hereunder, and that its obligations with respect to the billing, collection and enforcement of the Special Assessment or any installment thereon shall be limited to those obligations set forth in Article IV of this Agreement. The Lender acknowledges that neither the Special Assessment nor any installment thereon can be accelerated.

**Section 7.03 The County Default.** If the County shall default in the performance of any covenant or agreement on its part contained in this Agreement and shall fail to proceed in good faith to cure such default within sixty (60) days after written notice thereof has been received by the County from the Property Owner or the Lender, a "County Default" shall be deemed to have occurred under this Agreement.

**Section 7.04 Remedy for County Default.** Upon the occurrence of a County Default as provided in Section 7.03 hereof, and if the Property Owner or the Lender, as the case may be, shall have otherwise fully performed all of its obligations hereunder, the Property Owner or the Lender, after giving written notice as required, without further notice or demand, shall be entitled to seek and obtain a decree of specific performance from a court of competent jurisdiction; but neither the Property Owner nor the Lender shall have the right to seek to recover money damages against the County, including any costs or fees (including attorneys' fees) incurred by the Property Owner or the Lender in enforcing or attempting to enforce this Agreement. Neither the

occurrence of a County Default nor the institution of any proceeding or the exercise of any remedy upon the occurrence of a County Default shall negate or diminish the obligations of the Property Owner hereunder to pay the installments of the Special Assessment and interest accrued on the Special Assessment Roll and all other costs hereunder when the same shall become due and payable.

**Section 7.05 Waiver.** Failure of any party hereunder to act upon discovery of a default or to act upon the existence of an Event of Default shall not constitute a waiver of the right to pursue the remedies provided herein.

## ARTICLE VIII
## MISCELLANEOUS

**Section 8.01 Term.** Except as otherwise provided in this Agreement, the terms of this Agreement shall commence on the date first written above and shall terminate at such time as the Special Assessment liability shall have been fully satisfied as provided in Section 4.03(e) hereof.

**Section 8.02 Assignment.**

(a) Except as otherwise provided herein and as provided in Section 8.02(b) hereof, no party to this Agreement may transfer, assign or delegate to any other person or entity all or any part of its rights or obligations arising under this Agreement without the prior written consent of the other parties hereto excepting as otherwise expressly provided herein.

(b) The Lender and its successors and assigns may assign its rights and obligations under this Agreement and its rights in the Special Assessment, in whole but not in part; *provided, however,* that any such assignment shall be made only in accordance with applicable law; *and provided further, however,* that no such assignment shall be effective unless the County shall have first received (i) notice of the assignment disclosing the name and the address of the assignee, which shall be an address in the United States and (ii) a Certificate of Assignment executed by the assignee in the form attached to this Agreement as **Appendix G**. From and after the date of satisfaction of the conditions for the assignment of this Agreement as provided in this Section 8.02(b), the assignee of the Lender shall be a party hereto and shall have the rights and obligations of the Lender specified hereunder, and such assignee shall be deemed to be the "Lender" for all purposes of this Agreement. Any costs or fees (including reasonable attorneys' fees) incurred by Eaton County in connection with any assignment made pursuant to this Section 8.02 shall be paid to Eaton County by the Lender or its assignee as a condition to the effectiveness of the assignment. From and after the date of satisfaction of the conditions for the assignment of this Agreement as provided in this Section 8.02(b), the assignee of the Lender shall be a party hereto and shall have the rights and obligations of the Lender specified hereunder, and such assignee shall be deemed to be the "Lender" for all purposes of this Agreement.

**Section 8.03 Notices.** All notices, certificates or communications required by this Agreement to be given shall be in writing and shall be sufficiently given and shall be deemed delivered when personally served, or when received if mailed by registered or certified mail, postage prepaid, return receipt requested, addressed to the respective parties as follows, or to such other address as such party may specify by written notice to the other parties hereto:

| | |
|---|---|
| If to the County: | Eaton County<br>1045 Independence Blvd<br>Charlotte, MI 48813<br>Attn: County Treasurer |
| With a copy to: | Eaton County PACE Administrator<br>Lean & Green Michigan<br>500 Temple Street, Suite 6270<br>Detroit, MI 48201 |
| If to the Property Owner: | PROPERTY OWNER<br>ADDRESS |
| With a copy to: | PACE LENDER<br>ADDRESS |
| With a copy to: | Eaton County PACE Administrator<br>Lean & Green Michigan<br>500 Temple Street, Suite 6270<br>Detroit, MI 48201 |
| If to the Lender: | PACE LENDER<br>ADDRESS |
| With a copy to: | Eaton County PACE Administrator<br>Lean & Green Michigan<br>500 Temple Street, Suite 6270<br>Detroit, MI 48201 |

**Section 8.04 Amendment and Waiver** No amendment or modification to or of this Agreement shall be binding upon any party hereto until such amendment or modification is reduced to writing and executed by each party hereto. No waiver of any term of this Agreement shall be binding upon any party until such waiver is reduced to writing, executed by the party to be charged with such waiver, and delivered to the other parties hereto.

**Section 8.05 Entire Agreement.** This Agreement constitutes the entire agreement between the County, on the one hand, and the Lender and the Property Owner, on the other hand. There are no other representations, warranties, promises, agreements or understandings, oral,

written or implied, between the County, on the one hand, and the Lender or the Property Owner, on the other hand.

**Section 8.06 Execution in Counterparts.** This Agreement may be executed in counterparts, each of which shall be an original and all of which shall constitute the same instrument.

**Section 8.07 Captions.** The captions and headings in this Agreement are for convenience only and in no way limit, define or describe the scope or intent of any provision of this Agreement.

**Section 8.08 Applicable Law.** This Agreement shall be governed in all respects, whether as to validity, construction, performance and otherwise, by the laws of the State of Michigan.

**Section 8.09 Mutual Cooperation.** Each party to this Agreement shall take all actions required of it by the terms of this Agreement as expeditiously as possible and shall cooperate to the fullest extent possible with the other parties to this Agreement. Each party to this Agreement shall exercise reasonable diligence in reviewing, approving, executing and delivering all documents necessary to accomplish the purposes and intent of this Agreement. Each party to this Agreement also shall use its best efforts to assist the other parties to this Agreement in the discharge of its obligations hereunder and to assure that all conditions precedent to the financing arrangements are satisfied.

**Section 8.10 Binding Effect; No Third-Party Beneficiary.** This Agreement shall be binding upon the parties hereto and upon their respective successors and assigns. In no event shall the provisions of this Agreement be deemed to inure to the benefit of or be enforceable by any third party, except for permitted assigns.

**Section 8.11 Force Majeure.** No party hereto shall be liable for the failure to perform its obligations hereunder if said failure to perform is due to Force Majeure. Said failure to perform shall be excused only for the period during which the event giving rise to said failure to perform exists; *provided, however,* that the party seeking to take advantage of this Section shall notify the other party in writing, setting forth the event giving rise to said failure to perform, within ten (10) business days after the occurrence of said event.

**Section 8.12 Severability.** If any provision of this agreement or the application to any person or circumstance is, determined to be invalid or unenforceable by means of law, the remainder of the agreement will remain in full force and effect.

[SIGNATURES ON THE FOLLOWING PAGE]

**IN WITNESS WHEREOF,** the COUNTY, PROPERTY OWNER, and PACE LENDER have caused this PACE Special Assessment Agreement to be duly executed and delivered as of the date first written above.

Witnessed:

_____
Signature of:

**PROPERTY OWNER**

By: _____

Its:

Witnessed:

_____
Signature of:

**COUNTY**

By: _____
Its: AUTHORIZED OFFICIAL

_____
Signature of:

By: _____
Its: AUTHORIZED OFFICIAL

Witnessed:

_____
Signature of:

**PACE LENDER**

By: Its:

State of Michigan )
) ss
County)

The foregoing instrument was acknowledged before me this ____ day of _____, 202_, by _____ the Authorized Signatory of _____ on behalf of _____.

_____
Notary Public
Eaton County, Michigan
My Commission expires _____

State of Michigan )
) ss
County)

The foregoing instrument was acknowledged before me this _____ day of _____, 202_, by [COUNTY AUTHORIZED OFFICIAL] on behalf of County.

_____
Notary Public
_____, Michigan
My Commission expires _____

State of _____)

County of _____ )

The foregoing instrument was acknowledged before me this number day of month, 202_, by PACE LENDER OFFICIAL the Authorized Signatory of PACE LENDER, on behalf of PACE LENDER.

_____
Notary Public
COUNTY NAME, STATE

My Commission expires _____

# APPENDIX A
## PROGRAM ELIGIBILITY CHECKLIST

Property is privately owned commercial, industrial, agricultural or multifamily residential, with 4 or more dwelling units, real property within the County's jurisdictional boundaries, which may be owned by any individual or private entity, whether for-profit or non-profit. MCL 460.933(g).

There are no delinquent ad valorem taxes, special assessments, or water or sewer charges on the property. The Authorized Official at his discretion may disqualify properties that although not currently delinquent, have been delinquent within six months of the application's submission. MCL 460.941(2)(a).

There are no delinquent assessments on the property under a PACE program. MCL 460.941(2)(b).

The term of assessment shall not exceed the lesser of the useful life of the Project paid for by the assessment or 25 years. Projects that consist of multiple energy projects or environmental hazard projects with varying lengths of useful life may blend the lengths to determine an overall assessment term that does not exceed the useful life of the improvements in aggregate. MCL 460.939(i).

An appropriate ratio must be determined for the amount of assessment in relation to the assessed value of the property. MCL 460.939(j).

Written consent from the mortgage holder must be obtained if the property is subject to a mortgage. MCL 460.939(k).

A baseline energy audit or energy modeling must be conducted for the Project on property that is approved by LAGM. Such approval may be granted retroactively if the audit meets the standards of LAGM. MCL 460.939(o).

For projects financed for more than $250,000, a performance guarantee must be provided by the contractor(s) to guarantee a savings to investment ratio greater than one (1). The performance guarantee must meet the standards set by LAGM, and include financial and logistical arrangements for ongoing measurement and verification of energy savings. This requirement may be waived by the property owner and is not applicable to new construction energy project. MCL 460.939(p).

## APPENDIX B

## SPECIAL ASSESSMENT PARCEL DESCRIPTION

Parcel Number:

Address:

LEGAL DESCR:

## APPENDIX C

## SPECIAL ASSESSMENT ROLL

PACE Project Special Assessment

Parcel Number:

Address:

City:

Owner:

Assessment:

Percent:

I certify that the above is the special assessment roll created for the PACE project referenced in this document in the applicable county, city, village, or applicable entity in the State of Michigan, subject to payment of the special assessment as outlined in Appendix C of this document.

_____

_____
Dated

## APPENDIX D

**PAYMENT SCHEDULE**
**(TBD)**

# APPENDIX E

## DESCRIPTION OF IMPROVEMENTS

**APPENDIX F**

# PACE Program Application

## Property and Property Owner Information

1. **Property/Parcel Legal Name(s)** (as they appear on property tax records)
   **Parcel #:** _____
   **Address:** _____
   **Owner:** _____

2. **Property Type** (double-click to check all that apply)
   ☐ **Agricultural**
   ☐ **Commercial** (including multifamily with 4 or more units)
   - Type of commercial property - _____

   ☐ **Industrial**
   ☐ **Nonprofit**

3. **Property Record Owner(s) Contact Information**

   **Property Owner/Company Name:** _____
   **Signatory Name:** _____
   **Address:** _____
   **E-mail Address:** _____
   **Telephone Number:** _____

4. **Property Owner(s) Type**

| | | |
|---|---|---|
| ☐ Individual | ☐ LLP | ☐ LLC |
| ☐ Corporation | ☐ 501(c)3 | ☐ Other _____ |

5. **Property Valuation**
   **State Equalized Value (SEV):** $_____
   **Date of SEV:** _____
   **Valuation (per Appraisal):** $_____
   **Date of Appraisal:** _____

6. **Existing Liens Against Property** (tax, special assessment, water or sewer charges, etc.)

| Amount | Type | End Date |
|---|---|---|
| $ _____ | _____ | _____ |
| $ _____ | _____ | _____ |

   **Total Dollar Amount of Liens Against Property: $**_____

7. **Balance of Any Mortgage(s):**

| | Amount of Mortgage | Name of Mortgage Holder |
|---|---|---|
| **Mortgage** | $ _____ | _____ |
| **Additional Debt on Property** | $ _____ | _____ |

a. **Consent:** If subject to a mortgage - Consent by mortgage holder(s) must be obtained.

## Project Information

**1. PACE Project Developer** (Lean & Green Michigan can make referrals if necessary.)

Name: _____
Address: _____
E-mail Address: _____
Telephone Number: _____
Other Contractors: _____

**2. Overall Project Cost:** _____

**3. Savings to Investment Ratio*** (as provided in Savings Guarantee)

**3a. Year 1**: _____
**3b. Overall:** _____
**3c. Waived** _____

**4. Useful Life of Project Measures**: _____ years

**5. User ID for Energy Star Portfolio Manager** (for property)**:** _____

## PACE Loan Details

**1. PACE Lender/Capital Provider** (Lean & Green Michigan can make referrals if necessary.)

Name: _____
Address: _____
E-mail Address: _____
Telephone Number: _____

**2. Requested Assessment Amount**

| | |
|---|---|
| Project Cost: | $ _____ |
| Energy Audit or Model | $ _____ |
| Engineering/Architect Plans | $ _____ |
| Building Permit Fees | $ _____ |
| Other (Please explain) | $ _____ |
| **Total Assessment Amount:** | **$** _____ **(Total of all lines above)** |

**3. Requested Assessment Repayment Period**: _____ years

**4. Interest Rate Offered by Lender:** _____%

## APPENDIX G

## FORM OF CERTIFICATE OF ASSIGNMENT

This Certificate of Assignment of the Special Assessment Agreement ("**Assignment**"), dated effective as of date, (the "**Effective Date**"), is made by [LENDER] ("**Assignor**") to _____ ("**Assignee**"). Assignor and Assignee are referred to at times, each individually as a "**Party**," and collectively as the "**Parties**."

Agreement

1. For good and valuable consideration and the payment of [PAYMENT AMOUNT], the receipt and sufficiency of which is hereby acknowledged, confessed, stipulated and agreed upon by Assignor, Assignor ASSIGNS, BARGAINS, GIVES, SETS OVER, CONVEYS, TRANSFERS and DELIVERS to Assignee all of Assignor's rights, title, interest, obligations, and duties under the Special Assessment Agreement entered into by Assignor, Property Owner, and _____ (the "**Transferred Interest**"), together with all of Assignor's rights to receive payments from Property Owner attributable to the Transferred Interest arising on and after the date of this Assignment.

2. Assignor warrants that: (i) it is authorized to execute this document; (ii) it is conveying good, indefeasible title to the Transferred Interest; and (iii) the Transferred Interest is free and clear of all liens and encumbrances, and no party has any rights in or to acquire, or hold as security, or otherwise, the Transferred Interest.

3. Assignor hereby agrees to make, execute and deliver to Assignee any and all further instruments of conveyance, assignment or transfer, and any and all other instruments, as may be necessary or proper to carry out the purpose and intent of this Assignment and/or to fully vest Assignee in all rights, titles, interests obligations, and duties of Assignor in and to the Transferred Interest, which instruments shall be delivered to Assignee as soon as possible without any condition or delay on the part of Assignor.

4. Assignee hereby accepts all of Assignor's rights, title, interest, obligations, and duties under the Special Assessment Agreement and agrees to be bound by its terms. From and after the date of this Assignment and satisfaction of the conditions contained in Section 8.02(b) of the Special Assessment Agreement, Assignee shall be a party to the Special Assessment Agreement and shall have the rights and obligations of the Assignor specified thereunder, and Assignee shall be deemed to be the "Lender" for all purposes of the Special Assessment Agreement.

5. All notices, certificates or communications provided pursuant to the Special Assessment Agreement to Assignee shall be delivered as provided in the Special Assessment Agreement to:

_____
(Name)

_____
(Address)

_____
(Attention)

IN WITNESS WHEREOF, Assignor and Assignee hereby agree to be bound by the terms of this Assignment and each has executed this Assignment to be effective as of the Effective Date.

ASSIGNOR:

_____
[LENDER]
By: _____
Its: _____

ASSIGNEE:

_____
Name: _____
By: _____
Its: _____

## APPENDIX H

## FORM OF LENDER CONSENT

Lender Consent and Acknowledgement of Owner Participation in
Eaton County, Michigan, PACE Program

This acknowledgement is granted date, 20__, by Name of Mortgage Holder (the "Lender"), and for the benefit of PROPERTY OWNER (the "Property Owner"), and Eaton County in the State of Michigan.

### Recitals

A. Pursuant to Public Act No. 270 of 2010, the County established the County Property Assessed Clean Energy ("PACE") Program on date, 20__, by resolution, to promote installation of energy projects and/or environmental hazard projects.

B. The Property Owner has applied to the Program to finance the amount of $ AMOUNT OF FINANCING, to be paid back as an assessment on Property Owner's real property, described in **Appendix D** attached hereto (the "Property"), over a period of twenty years.

C. Owner has previously executed a mortgage, deed of trust, dated _____ ___, 20__, to the Lender, covering the Property, to secure a promissory note in the sum of $ [AMOUNT OF LOAN], and recorded on _____ ____, 20__ at ___, Page ____, Eaton County Register of Deeds.

D. Repayment by the Property Owner under the PACE Special Assessment Agreement will be a statutory assessment levied against the Property notice of which shall be recorded against the Property in the Office of the County Clerk/Register of Deeds for XXXXXX County, and which assessment, together with interest and any penalties, shall constitute a lien (the "Lien") on the Property, and shall be collected subject to the terms agreed to between the parties and as contained in the PACE Special Assessment Agreement.

### Consent and Acknowledgement

Lender acknowledges that it has been informed of the Property Owner's participation in the County PACE Program and agrees that Property Owner's execution of the PACE Special Assessment Agreement will not constitute a default under Lender's Deed of Trust.

Execution of this Consent and Acknowledgement by Lender's representative shall constitute full and complete consent to the Property Owner's participation in the County PACE Program.

Name of Lender: _____ Date: _____

By: _____

Title: _____

STATE OF MICHIGAN

COUNTY

The foregoing instrument was acknowledged before me this ___ day of _____, 20__, by _____, on behalf of _____.

_____
_____, Notary Public
County, State of _____
Acting in _____ County
My Commission Expires:

## APPENDIX I

## FORM OF WAIVER OF SIR AND SAVINGS GUARANTEE

This waiver of the savings-to-investment ratio requirement and guarantee of savings ("Waiver") is acknowledged on this ___ day of ____, 20__ by [Property OWNER]

### Recitals

A. Pursuant to Public Act No. 270 of 2010, as amended, Eaton County established the Eaton County PACE Program to promote installation of renewable energy systems, energy efficiency improvements, water usage improvement, and environmental hazard projects.

B. The Property Owner has elected to participate in this program and plans to enter into a Special Assessment Agreement with Eaton County and [LENDER] for the purpose of financing the installation of [IMPROVEMENTS] on its property.

C. Pursuant to MCL 460.939(1)(p)(ii), unless waived by the Property Owner, the contractor must guarantee to the Property Owner that the project will achieve a savings-to-investment ratio greater than one, and agree to pay the property owner for any shortfall in savings, on an annual basis.

D. The Property Owner has elected to waive this requirement.

**IN WITNESS WHEREOF**, the Property Owner hereby waives the requirement that the project achieve a savings-to-investment ratio greater than one, and that the contractor guarantee the savings, and make up for any shortfall on an annual basis. Property Owner expressly waives any and all claims challenging the legality or validity of this waiver or the legality, validity, or collectability of the PACE special assessment.

**[PROPERTY OWNER]**

_____
By:
Its:

State of Michigan )
) ss
_____ County )

The foregoing instrument was acknowledged before me this ____ day of _____, 20__, by _____ the _____ of _____ on behalf of _____.

_____
Notary Public
_____County, Michigan
My commission expires _____

# *DCA-3-24-1* PROPOSED TEXT AMENDMENT

## TO THE EATON COUNTY LAND DEVELOPMENT CODE

Additions are shown in ***bold italic print*** and deletions are shown by ~~strikeout print~~.
All suggested changes are highlighted.

# ORDINANCE

## OF THE

# COUNTY OF EATON, MICHIGAN

## PREAMBLE

An ordinance to provide for the establishment of Land Development Regulations and Districts for those areas of Eaton County, Michigan, lying outside the limits of incorporated cities and villages, and outside of townships having their own ordinances adopted or amended pursuant to Public Act 110 of 2006, in order to encourage and regulate the proper use of land and natural resources, to provide for the administration, enforcement, and penalties for violation, to provide for the establishment of a Board of Appeals and to provide duties for the County Planning Commission pursuant to Act 282 of the Public Acts of 1945, as amended Public Act 110 of 2006, as amended.

Whereas, after careful study of the proposed ordinance, the Eaton County Planning Commission has recommended the aforementioned ordinance to the Eaton County Board of Commissioners.

Therefore, the Board of Commissioners of the County of Eaton, Michigan ordains:

## ARTICLE 1
## SHORT TITLE

### 1.1 SHORT TITLE

This Ordinance shall be known, and may be cited, as the "Eaton County Land Development Code." All Articles, Sections, and other topical headings are for reference only and shall not be construed to be part of this Ordinance.

### 1.2 ENABLING AUTHORITY

This ordinance is adopted pursuant to the County Zoning Act No. 183 of the Public Acts of Michigan of 1943 (MCL 125.201 et seq.), as amended, and, when so far as it is applicable, Act No. 282 of the Public Acts of Michigan of 1945 (MCL 125.101 et seq.), as amended. The continued administration of this Ordinance, amendments to this Ordinance, and all other matters concerning operation of this Ordinance shall be done pursuant to the Michigan Zoning Enabling Act No. 110 of the Public Acts of Michigan of 2006, as amended, (MCL 125.3101 et seq.), hereinafter referred to as the "Zoning Act."

# ARTICLE 2
# INTENT AND PURPOSE

## SECTION 2.1 INTENT

The provisions of this Ordinance are based upon the County Comprehensive Development Plan. This Ordinance is designed to promote the public health, safety, and general welfare through the establishment of land development regulations and districts, in accordance with Act 110 of the Public Acts of 2006, as amended.

## SECTION 2.2 PURPOSE

The purpose of this Ordinance is to accomplish the following:

**2.2.1** Encourage the use of lands in accordance with their character and adaptability.

**2.2.2** Limit the improper use of land.

**2.2.3** Conserve natural resources and energy.

**2.2.4** Meet the needs of the state's citizens for food, fiber, and other natural resources, places of residence, recreation, industry, trade, service, and other uses of land.

**2.2.5** Insure that uses of land shall be situated in appropriate locations and relationships.

**2.2.6** Avoid the overcrowding of populations.

**2.2.7** Lessen congestion on public roads and streets.

**2.2.8** Reduce hazards to life and property.

**2.2.9** Facilitate adequate provision for a system of transportation, sewage disposal, safe and adequate water supply, education, recreation, and other public needs.

**2.2.10** Conserve the expenditure of funds for public improvements and services to conform with the most advantageous uses of land, resources, and properties.

**2.2.11** Conserve the value of property and natural resources.

## SECTION 2.3 RIGHT TO FARM

Customary Agricultural Operations as defined in this Ordinance are permitted as a matter of right in the Resource Conservation and Limited Agriculture land development districts in this Ordinance. Agriculture is the preferred use of land in the Resource Conservation and Limited Agricultural Land Development District. Eaton County shall bring no legal action against an agricultural operator for maintaining a public nuisance for reasons of noise; odors; dust; fumes; operation of machinery; ground or aerial seeding and spraying; the application of chemical fertilizers, insecticides, and herbicides provided the agricultural operation conforms to generally accepted agricultural practices and is not otherwise in violation of this Ordinance.

# ARTICLE 3
# ADMINISTRATION AND ENFORCEMENT

## SECTION 3.1 ADMINISTRATION

Administration of this Ordinance shall be supervised by the County Planning Commission and the County Board of Commissioners in accordance with Act 110 of the Public Acts of 2006, as amended. The Planning Commission shall have the primary responsibility for the supervision.

**3.1.1 Recommendation**: The Planning Commission may recommend to the Board of Commissioners, policies to assist the ~~County Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** in the administration and enforcement of this Ordinance. The Board of Commissioners, upon the recommendation of the Planning Commission, may adopt said policies.

**3.1.2 Development Official**: The Board of Commissioners may employ a Development Official to act as its officer to effect the proper and consistent administration and enforcement of this Ordinance. The terms and conditions of employment may be established by the Board of Commissioners. The Development Official or said agent, may have all power and authority granted by law, and necessary to enforce this Ordinance. Acting in this capacity, the Development Official may, among other responsibilities, be empowered to issue appearance summons, seek the issuance of warrants for the arrest of alleged violators through the Office of the Prosecuting Attorney and bring civil action in the name of the County against the violators of the provisions of this Ordinance.

**3.1.3 ~~Community Development Department~~ *Deparment of Construction Codes & Planning and Zoning***: ~~The County Board of Commissioners hereby establishes a Community Development Department.~~ The ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** may, along with its other duties and responsibilities, provide administrative support to the Board of Commissioners, the Planning Commission, the Board of Appeals, the Site Plan Review Committee, the Plat Board~~, the Development Official and the Building Official~~.

## SECTION 3.2 RELIEF FROM PERSONAL RESPONSIBILITY

The Development Official, Planning Commissioners, Members of the Board of Appeals or any other county employee or officer charged with duties and responsibilities pursuant to this Ordinance, while acting within the scope of their authority, are hereby relieved from all personal liability for damages to persons or property resulting from the exercise or discharge of their duties. In accordance with 1970 P.A. 55 M.C.L.A. 691.1408, any civil or criminal action brought against an officer or employee of the county, a member of the Planning Commission, or a member of the Board of Appeals, while acting within the scope of his or her authority may be defended by the legal representative of the county until final termination of proceedings. If a judgment for damages is awarded against the above mentioned officers, employees, or members as a result of a civil action for personal injuries or property damage caused while acting within

the scope of the individual's employment or while acting within the scope of his or her authority, the County of Eaton may pay, or compromise the judgment.

## SECTION 3.3 DUTIES OF THE DEVELOPMENT OFFICIAL

It shall be the responsibility of the ~~Development Official~~ ***Zoning Administrator*** to enforce the provisions of this Ordinance and, in so doing, to perform the following duties:

**3.3.1 Issue Permits**: All applications for permits required by this Ordinance may be submitted to the Development Official who may issue permits when all applicable provisions of this Ordinance have been complied with.

**3.3.2 File Applications**: The Development Official may maintain files of all applications for permits and may keep records of all permits issued. These files and records shall be kept open to public inspection. Copies may be furnished at cost upon request, to any person.

**3.3.3 Official Copies**: The Development Official will maintain one official copy of this Ordinance including the district map, as amended, in accordance with *Article 7* of this Ordinance.

**3.3.4 Inspections**: The Development Official may be empowered to make inspections of buildings or premises in order to properly carry out the enforcement of this Ordinance.

**3.3.5 Record of Complaints**: The Development Official may keep a record of every properly filed complaint of violation of the provisions of this Ordinance and of the action taken as a consequence of that complaint.

**3.3.6 Site Plan Review Committee**: The Development Official may serve on the Site Plan Review Committee in accordance with *Section 8.5* of this Ordinance.

## SECTION 3.4 DUTIES OF THE PLANNING COMMISSION

The Planning Commission will accomplish the following:

**3.4.1 Recommend policies** to the Board of Commissioners, and adopt guidelines for the proper administration and enforcement of this Ordinance.

**3.4.2 Act on policy matters** that may arise and are not covered by adopted policies or guidelines.

**3.4.3 Conduct public hearings** as required by this Ordinance, and Public Act 110 of 2006, as amended, making specific findings of fact and a determination on each matter.

**3.4.4 Make a comprehensive review** and recommend changes to this Ordinance periodically in cooperation with affected Township Boards of Trustees.

**3.4.5 Conduct studies** and make authoritative recommendations to the County Board of Commissioners on matters pertaining to this Ordinance.

## SECTION 3.5 DEVELOPMENT PERMITS

The Development Official is hereby authorized and directed to issue Development Permits in accordance with the following provisions, in addition to any other requirements contained in this Ordinance:

**3.5.1 Jurisdiction**: Excavation or buildings or structures may not be commenced, the erection, addition to, structural alteration of, or moving of any building or structure may not be undertaken nor may any use of land regulated by this Ordinance, be changed to a use of a different use group or land use classification until a Development Permit has been secured from the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***. A Development Permit may not be issued for those uses requiring a Conditional Use Permit as provided in this Ordinance, until a Conditional Use Permit has been approved in compliance with the provisions of *Article 9* of this Ordinance. ~~A Development Permit may not be issued for those uses requiring a Mobile Home Permit until a Mobile Home Permit is issued pursuant to *Article 16* of this Ordinance.~~ A Development Permit may not be issued for those uses requiring Parking and Loading Plan Review pursuant to *Section 10.2.1* of this Ordinance until such approval is granted. In the case of signs and other structures under the jurisdiction of *Article 11* of this Ordinance, a Sign Permit may be considered a Development Permit. Except upon written order of the Board of Appeals or Court Order, no Development Permit may be issued that would otherwise be a violation of any provision of this Ordinance.

**3.5.2 Application for Development Permits**: An application for a Development Permit may be considered for approval by the Development Official when said application contains the following information:

A. In the case of a permit for buildings proposed for human occupancy or required by law to have plumbing fixtures, either a report from the Barry-Eaton District Health Department certifying in writing the approval of a private sanitary sewage disposal system, or when public sanitary sewage service are available or required by local ordinance or state law, a written notice of acceptance or hook-up fee receipt may be required.

B. When a municipal, public or private water supply system is required by law or proposed by the applicant, either a report from the Barry-Eaton District Health Department, certifying approval of private water supply systems, or when municipal or public water supply is required by local ordinance or state law, a written notice of acceptance or hook-up fee may be required.

C. When a new or rehabilitated driveway is required or proposed, a receipt of an approved application for Driveway Permit from the County Road Commission and the MDOT may be required.

D. Whenever more than one (1) acre of land is disturbed or when development is proposed within 500 feet of a river, stream, flood plain, wetland, open drain, lake, or other water body, a receipt of an approved application for a Soil Erosion and Sedimentation Control Permit may be required.

E. Proof of ownership and a legal description of the property consisting of either a tax notice or tax role entry containing said description or a copy of the instrument of transfer or conveyance running to the applicant may be required.

F. An accurate, scaled drawing showing the following may be required except in the case of minor alteration, repair and demolition:

1. The legal dimensions of the lot.
2. The dimensioned location and height of buildings, structures and signs.
3. All existing and proposed site elements, drive, parking lots, walks, major vegetation, septic and well location, etc.
4. A scaled drawing of all proposed buildings including floor plans, foundation plans, front, side and rear elevations.
5. All proposed changes in elevation of the existing ground surface of the lot involved.
6. The location of utilities.

G. The applicant(s) consent to permit the Development Official or other employees of the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** making reasonable inspection of the property for the purpose of determining compliance with the Ordinance.

**3.5.3 Affidavit of Compliance**: Each application form may contain a signed affidavit stating that the applicant agrees to comply with all applicable state, federal and local laws, rules and regulations including, but not limited to, the following laws or their successor or re-codified provisions under the Natural Resources and Environmental Protection Act, which may be available for review at the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***.

A. The Subdivision Control Act No. 288 of 1967, as amended, including the Land Division Provisions, Act No. 591 of, 1996, and Act no. 87 of 1997.

B. The Barry-Eaton District Health Department Sanitary Code.

C. The Water Resources Commission Act 245 of 1929, as amended, specifically, Sections 2 through 5.

D. Michigan Public Health Code, Public Act 368 of 1978, as amended.

E. Farmland and Open Space Preservation Act 116 of 1975, as amended.

F. Wetlands Protection Act 59 of 1995, as amended.

G. Inland Lakes and Streams Act 346 of 1972, as amended.

H. "Miss Dig Law", Act 53 of 1974, as amended.

I. Airport Zoning Act 23 of 1950, as amended.

## SECTION 3.6 COORDINATED PERMIT PROCESS

**3.6.1 Administration of Development and Construction Permits**: In cases where a Construction Permit is required under the State Construction Code, the application for a Development Permit and a Construction Permit may be fully coordinated and integrated into a single application and inspection process.

**3.6.2 Site Inspection**: A site inspection and records search may be made on all applications for a Development Permit to insure compliance with the provisions of this Ordinance and

other applicable state, county and local regulations. Site inspection approval may be required before issuance of a Development Permit.

**3.6.3 Certificates of Occupancy:** Occupancy Certificates may be granted pursuant to the State Construction Code, provided that the provisions of the State Construction Code, this Ordinance, and any conditions of approval attached to a Conditional Use Permit, Planned Unit Development, or Site Plan Approval are complied with in full.

**3.6.4 Agricultural Buildings**: In the case of Agricultural Buildings and Structures which are exempt from the provision of the State Construction Code, the following may apply:

A. The applicant shall submit a written request for a Development Permit by contacting the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** during normal working hours.

B. Agricultural Buildings and Structures may be exempt from the provisions of *Sections 3.5.2E, 3.5.2F, 3.5.3, 3.6.2, and 3.6.3* of this Ordinance but other standards of this Zoning Ordinance shall apply to Agricultural Buildings and Structures.

C. Upon receipt of an application, ~~the County Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** may advise the applicant by letter of the relevant provisions of this Ordinance.

## SECTION 3.7 FEES

A schedule of fees may be established by resolution of the Board of Commissioners, and revised periodically, as necessary.

## SECTION 3.8 ENFORCEMENT, VIOLATIONS, PENALTIES

**3.8.1 General Enforcement Procedures:** The Development Official may enforce the provisions of this Ordinance in cooperation with the Prosecuting Attorney, or other retained legal counsel. The Prosecuting Attorney may take legal action against alleged violators of this Ordinance when presented sufficient evidence of violation by the Development Official. The Sheriff's Department is hereby authorized to enforce certain provisions of this Ordinance as may be delegated to the Sheriff's Department by resolution of the County Board of Commissioners.

**3.8.2 Violation Procedures**: Violations of this Ordinance noted by the Development Official and all complaints received by the Community Development Department may be recorded on a form designed for that purpose and filed in accordance with *Section 3.3.5* of this Ordinance. The name of the person who files a complaint with the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** may not be released without the prior consent of the complaining person. Upon receipt of a complaint, or upon other determination of probable cause to believe that a violation may exist, the Development Official may make an inspection to determine whether a violation of this Ordinance exists. When a violation is found, the Development Official may classify it as an active or passive violation, and proceed as follows:

A. Active Violations: Active violations are violations which involve ongoing construction, excavation, or other activities which increase the extent of the violation as time passes. All active violations may be issued a written "Stop-Work Order" which may be posted on the site and either delivered in person or mailed to the property owner by certified mail. A "Stop-Work Order" may state the nature of the violation, the date the violation was observed, the corrective action necessary, and the penalty for continued violation. If the person responsible fails to stop all work in furtherance of the violation of this upon receipt of a "Stop-Work Order", the Department may seek an immediate Temporary Restraining Order or other appropriate judicial relief from the Eaton County Circuit Court.

B. Passive Violations: Passive violations are violations which do not involve ongoing construction, excavation, or other activities which increase the extent of violation as time passes. The property owner maintaining a passive violation may be contacted in person or by mail by the Development Official. The Development Official may explain the intent of this Ordinance, the nature of the violation and the corrective action necessary to comply with this Ordinance. When a property owner or other party who has violated this Ordinance manifested by work or action and intent the Development Official may proceed without delay with the appropriate legal action. When a property owner or other party who has violated this Ordinance expresses an intent to correct the violation, the Development Official may allow a reasonable time period, not to exceed thirty (30) days, for correction of the violation.

1. At the end of the correction period, the Development Official may make a formal inspection of the property to determine if the noted violations have been corrected. A record of this inspection may be made and may contain photographs, instrument reading, and other information necessary to establish the nature and extent of any remaining violation.

2. If corrective action has been taken by the property owner or other person responsible for the violation, the Development Official may indicate in a letter to the property owner that the property is in compliance with this Ordinance.

3. If the noted violations remain and are evident in the record of formal inspections, the Development Official may issue a "Notice of Violation". Said notice may be delivered in person or by certified mail to the property owner or other person responsible for the violation and may contain the date of formal inspection, the provisions of this Ordinance violated, the penalties which may be imposed, and the amount of time allowed for corrective action not to exceed fifteen (15) calendar days.

4. At the end of this correction period, the Development Official may again make a formal inspection of the property to determine whether or not the indicated corrective actions have been taken.

5. If the violation remains, the Development Official may seek either a criminal warrant or appropriate civil action against the property owner or

other person responsible for the violation by presenting all evidence to the Prosecuting Attorney, or other retained legal counsel.

C. Appearance Summons: The use of an appearance summons in connection with a specified enforcement program is hereby authorized.

**3.8.3 Appeals**: Any person receiving a Notice of Violation or who is aggrieved by action taken by the ~~County~~ ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** pursuant to *Section 3.8.4* of this Ordinance may appeal the decision of the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** pursuant to *Section 4.6.1* of this Ordinance provided a Notice of Appeal is filed within ten (10) working days of receipt of Notice of Violation or Notice of Action taken pursuant to *Section 3.8.4* of this Ordinance.

**3.8.4 Administrative Sanction**: The ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** may refuse to issue Development Permits to any person who has failed to take corrective action upon receipt of a Notice of Violation, Stop-Work Order, or who is currently maintaining a violation of this Ordinance, or the Michigan Construction Code Act 230 of 197~~7~~2, as amended.

**3.8.5 Civil and Criminal Penalties**:

A. Except as otherwise provided within this Ordinance, any violation of any provision of the Land Development Code, or any permit, license or exception granted thereunder, or any lawful order of the Building Inspector, Development Official, Board of Appeals, or the County Board of Commissioners issued in pursuance of the Land Development Code may be a misdemeanor punishable by imprisonment in the Eaton County Jail for not more than ninety (90) days, or by a fine of not more than five-hundred dollars ($500.00) and the costs of prosecution, or by both such fine, costs and imprisonment at the discretion of the Court. A violation includes any act which is prohibited or made or declared to be unlawful or an offense and any omission or failure to act where the act is required by the Ordinance.

B. Any violation of *Subsection 6.2.9* of the Land Development Code, which prohibits the storage, placing or abandonment of junk, may be a municipal civil infraction.

C. The sanction for any violation of the Land Development Code, which is a municipal civil infraction, may be a civil fine as provided in *Section 3.8.6*, plus any costs, damages, expenses and other sanctions, as authorized under Chapter 87 of Act No. 236 of the Public Acts of 1961, as amended, and other applicable laws. For code enforcement, if the court ordered removal of junk or court ordered remedy of the property to bring it into compliance is effected by the County, the ~~Community~~ Development Official will certify the costs of such removal or remedy to the County Clerk. The owner or occupant of the property shall reimburse such costs to the County. The costs shall be placed as a lien on said real property to be included on the next available tax roll and collected with the taxes for said property. The lien shall remain on said property until fully and completely satisfied.

D. The Development Official and the Building Inspector, together with deputies of the Eaton County Sheriff, are the County officials authorized to issue municipal civil infraction citations and municipal civil infraction violation notices under this Ordinance.

E. In addition to enforcing violations as misdemeanors or municipal civil infractions, violations of this Ordinance may be enforced by civil action along with any other remedies provided by law. Violations of the Ordinance are a nuisance, per se, and adjudication of responsibility for a municipal civil infraction violation of this Ordinance may not preclude other civil proceedings to abate such nuisance.

F. Each day that a violation exists constitutes a separate offense or infraction.

**3.8.6 Municipal Civil Infraction:** Schedule of Fines

A. Fines for Citations:

1. A person, corporation or firm who, as a result of violating any provision of this Ordinance deemed to be a municipal civil infraction, may pay a civil fine of not less than $100 and not more than $500, plus costs and other sanctions, for each infraction.

2. Repeat offenses may be subject to increased fines as set forth below. As used in this subsection, "repeat offense" means a second (or any subsequent) municipal civil infraction violation of the same requirement or provision of this Ordinance (a) committed by a corporation, person or firm within any 24 month period and (b) for which the person admits responsibility or is determined to be responsible. The increased fine for a repeat offense under this Ordinance may be as follows:

(i) The fine for any offense that is a repeat offense may be no less than $250 plus costs and other sanctions.

(ii) The fine for any offense which is a second repeat offense or any subsequent repeat offense may be no less than $500 plus costs and other sanctions.

B. Fines for Violations: A person, corporation or firm who, as a result of violating any provision of this ordinance, receives a municipal civil infraction violation notice, upon a determination of responsibility thereon, may pay an initial civil fine at the Eaton County Municipal Ordinance Violations Bureau of $50.

1. In the case of another offense within one year of the date of the initial infraction, the civil fine may be $100. (This may be known as the second offense.)

2. In the case of another offense within one year of the date of the second offense, the civil fine may be $250. (This may be known as the third offense.)

3. In the case of another offense within one year of the date of the third offense, the civil fine may be $500. (This may be known as the fourth offense.) Each additional subsequent offense may be $500.00.

## SECTION 3.9 PUBLIC NOTICE

**3.9.1 Public Notification:** All applications for development approval requiring a public hearing shall comply with the Michigan Zoning Enabling Act, PA 110 of 2006, as amended, and the other provision of this Section with regard to public notification.

A. Responsibility: When the provisions of this Ordinance or the Michigan Zoning Enabling Act require that notice be published, the Development Official shall be responsible for preparing the content of the notice, having it published in a newspaper of general circulation in the County of Eaton and mailed or delivered as provided in this Section.

B. Content: All mail, personal and newspaper notices for public hearing shall contain the following information:

1. A description of the nature of the request shall be provided, including Identifying if the request is for a rezoning, text amendment, special land use, planned unit development, variance, appeal, ordinance interpretation or other purpose.

2. A description of the location of the property that is the subject of the request. The notice shall include a listing of all existing street addresses within the petitioned property. Street addresses do not need to be created and listed if no such addresses currently exist within the property. If there are no street addresses, other means of identification may be used such as a tax parcel identification number, identifying the nearest cross street, or including a map showing the location of the property. Street addresses are not required when eleven (11) or more adjacent properties are proposed for rezoning, or when the request is for an ordinance interpretation not involving a specific property.

3. Indication of when and where the request will be considered by providing the date, time and place of public hearing(s).

4. Inclusion of a statement describing when and where written comments will be received concerning the request. Also, indicate that the public may appear at the public hearing in person or by counsel.

5. Information concerning handicap access accommodates if applicable.

C. Personal and Mailed Notice: When the provisions of this Ordinance or the Zoning Act require that personal or mailed notice be provided, notice shall be provided to:

1. The owners of property for which approval is being considered, and the applicant, if different than the owner(s) of the property.

2. Except for rezoning requests involving eleven (11) or more adjacent properties or an ordinance interpretation request that does not involve a specific property; to all persons to whom real property is assessed within three hundred (300) feet of the boundary of the property subject to the request, regardless of whether the property or occupant is located within the boundaries of the County of Eaton. If the name of the occupant is not known, the term “occupant”: may be used in making notification.

3. All persons, organizations, entities and agencies having requested to receive notice pursuant to Section 3.9.2.

D. Timing of Notice: Unless otherwise provided in the Michigan Zoning Enabling Act, PA 110 of 2006, or this Ordinance where applicable, notice of a public hearing shall be provided for as follows:

1. Notice shall be given not less than fifteen (15) days before the date the application will be considered for approval.

### 3.9.2 Registration to Receive Notice by Mail.

1. Any neighborhood organization, public utility company, railroad or any other person may register with the Development Official to receive written notice of all applications for approval pursuant to Section 3.9.1.C.3., or written notice of all applications for development approval within the zoning district in which they are located. The Development Official shall be responsible for providing this notification. Fees may be assessed for the provision of this notice, as established by the Board of Commissioners.

   The requesting party must provide the Development Official information on an official form to ensure notification can be made.

# ARTICLE 4
# EATON COUNTY BOARD OF APPEALS

## SECTION 4.1 INTENT AND PURPOSE

The purpose of this Article is to insure that the objectives of this Ordinance are fully and equitably achieved, that a means be provided for competent interpretation of this Ordinance, that flexibility be provided for in the strict application of this Ordinance, that the spirit of the Ordinance be observed, public safety secured and substantial justice done.

## SECTION 4.2 MEMBERSHIP, COMPENSATION, AND REMOVAL

**4.2.1** **Membership**: The Board of Appeals shall consist of five (5) to seven (7) members. The term of each member shall be for three (3) years. Each member of the Board of Appeals shall be chosen from electors residing in Eaton County with priority consideration given to those residing in the unincorporated areas. An elected officer of the county or an employee of the County Board of Commissioners may not serve simultaneously as a member of the Board of Appeals. One (1) member of the Board of Appeals shall be a member of the County Planning Commission. One (1) regular member of the Board of Appeals may be a member of the Board of Commissioners, but shall not serve as chairperson. The Board of Commissioners may appoint not more than two (2) alternate members for the same term as regular members. An alternate member may be called as specified to serve in the absence of a regular member unable to attend one (1) or more meetings. An alternate member may also be called to serve for the purpose of reaching a decision on a case in which a member has abstained due to conflict of interest. The alternate member appointed shall serve in the case until a final decision is made. The alternate member has the same voting rights as a regular member of the Board of Appeals.

**4.2.2** **Compensation**: The members of the Board of Appeals shall be compensated a per diem amount as shall be determined by the Board of Commissioners and, in addition, shall be reimbursed for reasonable expenses incurred in the performance of their duties. The total amount allowed to members of the Board of Appeals in one (1) year shall not exceed a reasonable sum which shall be provided in advance by the County Board of Commissioners.

**4.2.3** **Removal**: The County Board of Commissioners may remove any member, or alternate member of the Appeals Board for nonfeasance or misfeasance in office. A member shall disqualify himself or herself from a vote in which the member has a conflict of interest. Failure of a member to disqualify himself or herself from a vote in which the member has a conflict of interest constitutes malfeasance in office.

## SECTION 4.3 ORGANIZATION

**4.3.1** **Rules of Procedure**: The Board of Appeals will adopt rules of procedure for the conduct of its meetings and implementation of its duties. The Board shall annually elect a chairperson, a vice-chairperson, and a secretary.

**4.3.2 Meetings and Quorum**: Meeting with the Board of Appeals shall be held in compliance with Public Act 267 of 1976, as amended. A majority of the total membership of the Board of Appeals shall comprise a quorum.

**4.3.3 Oaths and Witnesses**: The chairperson may administer oaths and compel the attendance of any witness in order to insure a fair and proper hearing.

**4.3.4 Records**: The minutes of all meetings will contain the grounds for every determination made by the Board of Appeals including all evidence and data considered, all findings of fact and conclusion drawn by the Board of Appeals for every case, along with the vote of each member and the final ruling on each case. The Board of Appeals will file its minutes in the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***.

**4.3.5 Counsel**: Legal Counsel may be retained by the Board of Appeals for any purpose deemed necessary provided that such appointment or retainer shall be approved in advance by the County Board of Commissioners.

## SECTION 4.4 PROCEDURES

**4.4.1 Notice of Appeals**: An appeal may be taken by a person aggrieved, or by an officer, department, board or bureau of the respective township or the County of Eaton. The justification for each appeal shall be stated on the appeal, along with a legal description of any property involved. The Board of Appeals will adopt a form for this purpose. Appellants may be represented by agent, counsel, or in person.

**4.4.2 Fees**: Appeal fees shall be established by the Board of Commissioners. The Board of Appeals may waive the appeal fee upon finding that the fee represents a financial hardship to the appellant.

**4.4.3 Procedures on Appeal**: Notice of Appeal shall be filed with the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** along with the required fees. The ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** will forthwith transmit the records from the action appealed to the Appeals Board. The Chairperson of the Board of Appeals will fix a reasonable time and date for a Public Hearing not to exceed seventy-five (75) days from the date of filing of the Notice of Appeal.

**4.4.4 Notice of Public Hearing**: Notice of Public Hearing for consideration of an Authorized Appeal application by the Board of Appeals shall be provided pursuant to Article 3.9, herein.

**4.4.5 Decisions**: The Board of Appeals will render its decision within seventy-five (75) days of filing of Notice of Appeal unless an extension of time is necessary to review new information pertinent to making the decision agreed upon by the appellant and a majority of the members of the Board of Appeals present. The vote of a majority of members appointed and serving, shall be necessary to take action on an appeal. The Board of Appeals may impose conditions with an affirmative decision. The decision of the Board of Appeals shall be final. A party aggrieved by the decision may appeal to the Circuit Court as provided under Section 606 of Public Act 110, of 2006, as amended.

## SECTION 4.5 JURISDICTION

The Board of Appeals will act upon questions as they arise in the administration of this Ordinance. The Board of Appeals may reverse or affirm wholly or partly or may modify the order, requirement, decision, or determination of the Development Official, the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***, the Site Plan Review Committee, the Planning Commission, or any other official administering or enforcing the provisions of this Ordinance, and may issue or direct the issuance of a Development Permit.

## SECTION 4.6 AUTHORIZED APPEALS

The Eaton County Board of Appeals shall hear the following specified categories of appeals in accordance with the following standards:

**4.6.1 Review of Administrative Decisions**: The Board of Appeals shall hear and decide appeals where it is alleged that there is an error in fact, judgment, procedure, or interpretation, in any order, requirement, permit, or decision made by the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** or any official administering or enforcing the provisions of this Ordinance.

**4.6.2 Interpretation of the Ordinance**: The Board of Appeals shall hear and decide on the following requests to:

A. Interpretation of the provision of this Ordinance when it is alleged that certain provisions are not clear or that they could have more than one meaning. In deciding upon such requests, the Board of Appeals will insure that its interpretation is consistent with the intent and purpose of the Ordinance and the Article in which the language in question is contained. The Board of Appeals may adopt a Dictionary of Land Development Terms to assist such interpretations.

B. Determination of the precise location of the boundary lines between zoning districts in accordance with *Section 7.1.3* of this Ordinance, and records, surveys, maps, and aerial photographs.

C. Determination the classification of a use of land not specifically mentioned as a part of the provisions of any district, so that it conforms to a comparable permitted or prohibited use of land, in accordance with the purpose and intent of each district.

D. Determination of the off-street parking and loading requirements of a use of land not specifically mentioned in *Article 10* of this ordinance such that it conforms to a comparable use of land contained in *Article 10* of this Ordinance.

**4.6.3 Variance**: The Board of Appeals may authorize specific variances to site development requirements, regulations and conditions, parking, and loading requirements and advertising structure requirements of this Ordinance, provided that all the required findings listed below are met and the record of proceedings of the Board of Appeals contains evidence supporting each conclusion. The Board of Appeals may not authorize

use variances, which are specific variances from the land uses zoning district land uses designated in Article 7 of this ordinance.

A. That there is a practical difficulty in the way of carrying out the strict letter of this Ordinance.

B. That the practical difficulty is due to unique circumstances related to the particular property and not general to other property in the district or neighborhood.

C. That the problem was not created by the applicant.

D. That granting the variance will not alter the essential character of the neighborhood or district.

E. Every variance granted shall be in the minimum amount necessary to overcome the inequity inherent in the particular property.

**4.6.4 Commencement and Reapplication**: Action of the Board of Appeals to grant or deny a variance shall be subject to the following conditions:

A. Every variance granted under the provisions of this Ordinance shall become null and void unless the construction authorized by such variance has been commenced within six (6) months after the granting of the variance.

B. No application for a variance which has been denied wholly or in part by the Board of Appeals shall be re-submitted for a period of one (1) year from the date of denial, except on the grounds of newly discovered evidence of proof of changed conditions found, upon inspection by the Board of Appeals, to be valid.

**4.6.5 Site Plan Review**: The Board of Appeals shall review and make final determination on properly filed appeals from action by the Site Plan Review Committee pursuant to *Article 8* of this Ordinance. The Board of Appeals has the power to sustain, reverse, or remand for further consideration the decision of the Site Plan Review Committee when it is found that the decision is inconsistent with the provisions of this Ordinance or that there was an error of fact involved in the decision of the Site Plan Review Committee. In making this determination, the Board of Appeals will examine the application and all accompanying data, as well as records, of the Site Plan Review Committee.

**4.6.6 Community Service Facility**: The Board of Appeals shall have the power to permit the erection and use of a building, or an addition to an existing building, for a public service corporation or for public utility purposes, in any permitted district to a greater height or of larger area than the district requirements herein established, and permit the location in any district of a public utility building or structure, reasonably necessary for the public convenience and service.

**4.6.7 Non-conformity Appeals**: Non-conforming uses or structures may be structurally altered, expanded, moved, re-established, or substituted with another non-conformity upon appeal, in cases of necessary hardship or other extenuating circumstances, when approval of said appeal will not have an adverse effect on surrounding property, public health, or safety, and will not substantially increase the level of non-conformity of the property pursuant to *Article 12 – (Non Conformities)* of this Ordinance. A legal non-conforming structure legally in existence as of September 16, 1981 may be improved or

expanded without recourse to the Zoning Board of Appeals pursuant to this *Article 4*, if such improvement or expansion shall not increase the degree or nature of the non-conformity.

**4.6.8 Review of Enforcement Decision**: The Board of Appeals shall review and make final determination on properly filed appeals from the decision of the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** to serve notice of violation of this Ordinance, pursuant to *Section 3.8* of this Ordinance. The Board of Appeals will review the decision of the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** for consistency with the provisions of this Ordinance, Public Act 110 of 2006, as amended, and any relevant court decision applicable to the matter in question.

**4.6.9 Conditional Use Permit**: The Board of Appeals will review and make final determination on properly filed appeals from action by the Planning Commission pursuant to *Article 9* of this Ordinance. The Board of Appeals has the power to sustain, reverse, or remand for further consideration the decision of the Planning Commission when it is found that the decision is inconsistent with the provisions of this Ordinance, or that there was an error of fact involved in the decision of the Planning Commission. In making this determination, the Board of Appeals will examine the application and all accompanying data as well as the records of the Planning Commission.

**4.6.10 Mobile Home Permit**: The Board of Appeals shall review and make final determination on properly filed appeals from action by the Development Official pursuant to *Article 16* of this Ordinance. The Board of Appeals has the power to sustain, reverse, or remand for further consideration the decision of the Development Official when it is found that the decision is inconsistent with the provisions of this Ordinance or that there was an error of fact involved in the decision of the Development Official. In making this determination, the Board of Appeals will examine the application and all accompanying data, as well as, the records of the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***.

## SECTION 4.7 CONDITIONS OF APPROVAL

The Board of Appeals may impose, in writing, specific conditions with the affirmative decision pursuant to Public Act 110 of 2006, as amended. An affirmative decision will remain valid only as long as the applicant begins the proposed land use, building or structure within six (6) months of written notification of the decision. The breach of any such condition shall be a violation of this Ordinance.

## SECTION 4.8 BONDING

The Board of Appeals may require that a bond be furnished to insure compliance with certain conditions imposed with the granting of any appeal, variance, or Site Plan Review approval. The amount and type of the bond shall be determined by the Eaton County Board of Appeals by estimating the scale of said operation. The bond shall be reasonable, appropriate, and commensurate with the scope of the project. The amount of the bond will be reduced at a rate equal to the ratio of work completed on the required improvements as work progresses. The

term "improvements" shall not be construed to mean the project itself, but rather those features associated with the project which are deemed necessary to protect the health, safety and welfare of Eaton County's resources and future users or inhabitants of the proposed project.

# ARTICLE 5
# DEFINITIONS AND INTERPRETATIONS

## SECTION 5.1 INTENT AND PURPOSE

The purpose of this Article is to establish rules for the interpretation of the text of this Ordinance, to define certain works and terms, and to provide for the interpretation of this Ordinance by adoption of a technical dictionary.

## SECTION 5.2 USE OF WORDS AND TERMS

For the purpose of this Ordinance any word or term not defined in this Article shall be interpreted by reference to "The Latest Illustrated Book of Development Definitions", Harvey S. Moshowitz, and Carl G. Lindbloom, 2004, Center for Urban Policy Research, New Brunswick, NJ, except when clearly contrary to the context in which the word is used. Any word which is neither defined in this Ordinance or in the above mentioned reference book shall be interpreted by the use of The American Heritage Dictionary of the English Language, Third Edition, 1996.

**5.2.1** **Words used in the present tense** shall include the future tense, words in the singular shall include the plural, and words in the plural number shall include the singular, unless the context clearly indicates and stipulates the contrary.

**5.2.2** The words **person, proprietor, property owner,** and **operator** shall be interpreted to include co-partnerships, corporations and joint tenants.

**5.2.3** The words **property**, **lot, parcel, real estate, premises, plot,** and **land** shall be interpreted to mean real property as delineated and described by legal documents and instruments.

**5.2.4** The word **road** shall also mean highway, street, alley, drive, lane or other public thoroughfare.

**5.2.5** The word **building** shall include the word structure.

**5.2.6** The words **used** or **occupied** when applied to any land or building shall be construed to include the words intended, arranged, or designed to be used or occupied.

**5.2.7** The word **"shall"** is always interpreted as mandatory and never as permissive or discretionary.

**5.2.8** The word **"may"** shall be interpreted as permissive or discretionary.

**5.2.9** The word **"required"** shall be construed to be mandatory.

## SECTION 5.3 DEFINITIONS

### *5.3.1 A*

**Above Ground Storage of Flammable Liquids:** See Flammable Liquids.

**Accessory Structure:** A building or structure located on the same lot as the principal building or structure, the use of which is incidental or secondary to the principal building or use.

**Accessory Use:** A use of land or of a building or portion thereof which is customarily and naturally incidental, subordinate, and devoted exclusively to the principal use of the land or building, and located on the same lot with the principal use.

**Addition:** A structure added to the existing structure, after the completion of the existing structure, which extends or increases the floor area or height of a building or structure.

**Adult Day Care Facility:** See *Section 14.16.C.5.*

**Adult Entertainment Establishments and Amusement Establishments**: See *Section 14.32*.

**Adjacent:** Adjoining, lying next to, or close to; parcels separated by an easement or road right-of-way will be deemed adjacent.

**Advertising Structure:** A structural poster panel or painted sign, either free-standing, mobile or attached to a building for the purpose of conveying information, knowledge or ideas to the public about a subject unrelated to the premises upon which it is located. (See *Article 11*).

**Agriculture:** See Farm.

**Agricultural Building or Structure:** An accessory building or structure which is incidental to the use of the same parcel of land for agricultural purposes excluding the business of retail trade.

**Agricultural Business**: See *Section 14.1*.

**Airport, Public and Heliport**: See *Section 14.21*.

**Airport, Private**: See *Section 14.20*.

**Alteration:** Any modification, remodeling, change or rearrangement in the structural or supporting members such as bearing walls, columns or girders, as well as any change in the doors or windows which affect the means of egress which is undertaken without adding to the floor area height or physical size of the building or structure.

**Animal Recreational (Domestic):** Tame or domesticated, including animals kept as pets or for riding or other recreational purposes.

**Animal (Exotic):** Not native to central Michigan.

**Animal (Livestock):** Useful domestic animals, such as horses, cattle, sheep, etc., kept or raised on a farm or ranch.

**Animal (Non-domestic):** Those species of animals which are not domestic.

**Animal Holding Area (Large Animal Boarding Business):** Short-term housing or land area used for retention of animals. This shall be considered the building(s) that the animals are housed in.

**Animal Holding Area (Veterinary Hospital, Clinic or Kennel):** Animal holding area includes structures, pens, fencing, runs and running areas**.**

**Archery and gun range**: See *Section 14.34*.

**Area of Shallow Flooding:** A designated AO Zone on a community's Flood Insurance Rate Map (FIRM) with base flood depths from one (1) to three (3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and indeterminate, and where velocity flow may be evident.

**Area of Special Flood Hazard:** The land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year.

**Assisted Living Facility:** See *Section 14.16.C.1.*

**Automobile Salvage and Scrapping Yard:** See *Section 14.2*.

## 5.3.2 B

**Base Flood Level:** The highest elevation of a flood having a one percent (1%) chance of being equaled or exceeded in any given year.

**Bed and Breakfast:** A rooming and boarding house offering overnight lodging and breakfast in no more than four (4) guest rooms or suites with guests staying not more than one week. (See *Section 14.30*).

**Berm:** An earthen mound, which is planted and maintained with approved landscaping and utilized as a buffer between different zoning districts.

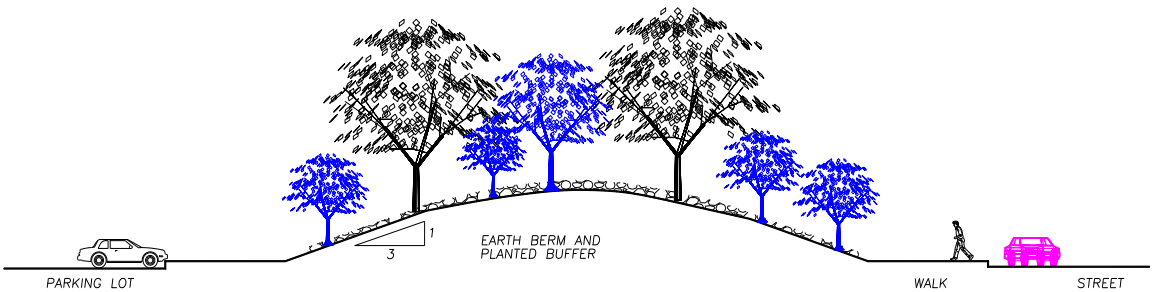



**Figure 1**

**Basement:** That portion of a building which is partly or completely below grade having at least one-half (1/2) its height below grade.

**Bufferyard:** An open space, landscaped area, berm, screenwall, fence or any combination thereof used to physically separate or screen one use or property from another so as to visually shield or block noise, lights, or other nuisances.

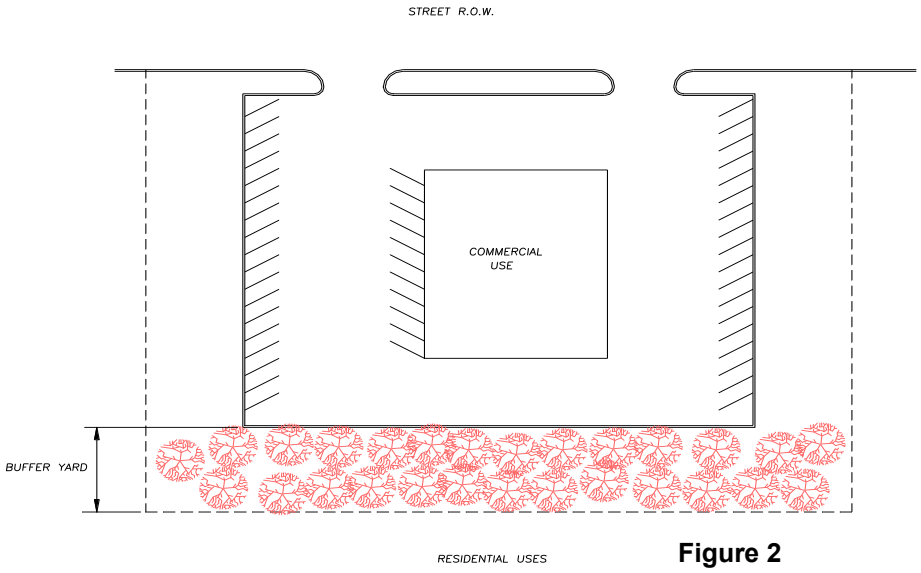



**Figure 2**

**Building:** A combination of materials, whether portable or fixed, forming a structure and having a roof supported by columns or by walls affording a facility or shelter for use or occupancy by persons, animals, or property.

**Building Material Supplier:** A business primarily engaged in the sale of materials, tools and equipment for the building construction industry and/or the general public; including such materials as lumber and hardware, roofing material, pre-fabricated building components, yard and landscape materials other than plantings, fencing and related materials.

**Building Official:** The officer or other designated authority charged with the administration and enforcement of the State Construction Code, or his duly authorized agent.

**Business Service Establishment:** An establishment engaged in rendering services to businesses on a fee or contract basis such as advertising and mailing, building maintenance, employment services, management consulting, protective services, equipment rental and leasing, commercial research, development and testing, photo finishing and personal supply services.

## 5.3.3 C

**Caliper:** The diameter of a tree trunk measured at chest height.

**Campground:** As defined in Public Act 368 of 1978, Part 125, as amended.

**Camping Unit:** A tent, pop-up camper, truck camper or similar structure used for recreation or vacation purposes.

**Cemetery:** See *Section 14.3*.

**Change of Use:** A use of a building, structure or parcel of land, or portion thereof which is different from the previous use in the way it is classified in this Ordinance or in the State Construction Code, as amended.

**Chemical Processing and Metallurgical Manufacturing:** Large scale manufacturing or processing facility involving bulk production, manipulation and/or storage of industrial, agricultural, pharmaceutical or defense-related chemicals and/or metal products; or similar facilities.

**Church:** See Religious Institution *Section 14.22.*

**Commercial Garage:** See *Section 14.19.C*.

**Commercial Recreation Facility:** An indoor or outdoor recreational facility operated as a business and open to the public for a fee. Such facilities must be located near a major travel corridor or a natural feature**.** A commercial recreation facility may include but is not limited to campgrounds, riding stables, rental cottages, swimming beaches, boat rentals, shooting preserves, and athletic fields.

**Commercial Use:** An activity carried out for pecuniary gain including, but not limited to, retail sales, repair service or salvage operators, business offices, food service, entertainment, and brokerages.

**Community Service Facility:** See *Section 14.5*.

**Composting:** A controlled process of degrading organic material by microorganism with the resulting material used for fertilizing, mulch and conditioning land as prescribed by the Michigan State University Extension Office.

**Condominium Subdivision:** A division of land on the basis of condominium ownership (Condominium Act 59 of 1978, as amended), which is not subject to the provisions of Land Division Act 288 of 1967 as amended. Any "condominium unit", or portion thereof, consisting of vacant land shall be equivalent to the term "lot" for the purposes of determining compliance of a condominium subdivision with the provisions of this ordinance pertaining to minimum lot size, minimum lot width and maximum lot coverage.

**Condominium Unit:** That portion of a condominium project designed and intended for separate ownership and use, as described in the master deed regardless of whether it is intended for residential, office, industrial, business, or recreational use as a time-share unit, or any other type of use.

**Construction:** The erection, alteration, repair, renovation, demolition or removal of any building or structure; and the excavation, filling, and grading of a lot in connection therewith.

**Construction Contractors Establishment:** A parcel of land, building or structure, or a portion thereof used to store trucks, excavation equipment, supplies, tools and materials

utilized by construction contractor, subcontractors, and builders. (See also *Section 14.29*.)

**Convenience Commercial Establishment:** See *Section 14.6*.

**Country Club:** See *Section 14.11.*

**County Development Plan:** A plan and set of policies, also known as the Comprehensive Development Plan, for the development of the county created by the Eaton County Planning Commission pursuant to *Section 4*, Public Act 282 of 1945, as amended.

**Crest:** The top of a hill or berm; summit.

**Customary Agricultural Operation:** A condition or activity which occurs on a parcel of land in connection with the commercial production of farm products and includes but is not limited to noise, odors, dust, fumes, operation of machinery and irrigation pumps, ground and aerial seeding and spraying, the application of chemical fertilizers, insecticides and herbicides and the employment of labor when such conditions or activities are as defined in the Michigan Right to Farm Act, Public Act 93 of 1981, as amended. Said activities shall be deemed to include the use of animals for recreational purposes.

## 5.3.4 D

**Day Care Facilities:** Day care facilities which are regulated by the Child Care Organization Act No. 116 of 1973 shall be defined as follows:

1. Family Day Care Home: A private home in which six (6) or fewer minor children, who are not related to an adult member of the household by blood, marriage, or adoption, are given care and supervision for periods of less than twenty-four (24) hours a day, for four (4) or more days a week, for two (2) or more consecutive weeks, unattended by a parent or legal guardian (MCLA 722.111(f)(iii)).
2. Group Day Care Home: A private home in which seven (7) to twelve (12) minor children, who are not related to an adult member of the household by blood, marriage, or adoption, are given care and supervision for periods of less than twenty-four (24) hours a day, for four (4) or more days a week, for two (2) or more consecutive weeks, unattended by a parent or legal guardian (MCLA 722.111(f)(iv)).
3. Child Care Center: A facility, other than a private home, in which one (1) or more minor children are given care and supervision for periods of less than twenty-four (24) hours a day, for four (4) or more days a week, for two (2) or more consecutive weeks, unattended by a parent or legal guardian (MCLA 722.111(e)).
4. Child Caring Institution: A facility in which six (6) or more minor children are given care and supervision on a twenty-four (24) hour basis operated throughout the year (MCLA 722.111(b)).

5. Adult Day Care: See Long-term Care Facilities, Unregulated.

**Demolition:** The purposeful razing or destruction, or disassembly of a building or structure.

**Density:** The number of dwelling units per unit of lot area (See Lot Area).

**Development:** The construction, reconstruction, conversion, structural alteration, relocation, or enlargement of any structure; any mining, excavation, land filling or land disturbance, and any extension of an existing use of land.

**Development Official:** The public official whose duty it is to administer and enforce this Ordinance (also known as Zoning Administrator ~~or Community Development Official, or Community Development Director~~).

**Development Permit:** A permit issued to a person proposing a development which is regulated by this Ordinance, which indicates compliance with the Ordinance and thereby permission to proceed.

**Distressed Vehicle Transporter:** See *Section 14.24.*

**Disturbed Land:** A parcel of land which is graded, filled, excavated or mined or stripped of its natural vegetative cover or grass for a purpose other than agricultural land use.

**Drive In Motion Picture Theatre:** See *Section 14.7.1.A*.

**Driveway:** A private path of travel over which an automobile may be driven which provides access from one parcel of land to a public or private road.

**Duplex Dwellings:** See *Section 14.9*

**Dwelling:** Any building, structure or portion thereof, which is designed or used exclusively for human habitation, or as a sleeping place for one (1) or more persons either temporarily or permanently.

**Dwelling Unit:** A building, or portion thereof, designed exclusively for human occupancy providing complete independent living facilities for one (1) or more persons including permanent provisions for living, sleeping, eating, cooking, and sanitation.

## ***5.3.5 E***

**Easement, Permanent Recorded:** A grant of one or more property rights from a property owner to another person which is permanent and appurtenant to the land and is recorded in the office of the Eaton County Register of Deeds.

**Educational Institution:** See *Section 14.10.1A*.

**Erection:** The construction, alteration, reconstruction or moving of a structure.

**Essential Cropland:** Land having soil quality and slopes which are well suited for agricultural crops when treated and managed in accordance with modern agricultural practices. The following are soil types listed in the Soil Survey of Eaton County, Michigan, United States Department of Agriculture 1978, and represented in said

document by these initials Tua, MaB, HaB, Owb, CaA, Pr, Co, KbA, MdA, Sb, MeA, Pa, CbB, BrA, Ho BbA, WnA.

**Excavation:** Removal or recovery, by any means whatsoever, of soil, rock, sand, gravel, peat, muck, marrow, shale, limestone, clay or other mineral or organic substances, for other than vegetation, from water or land on or beneath the surface thereof, or beneath the land surface, whether exposed or submerged.

**Existing Use:** The use of a parcel of land or a structure at the time of the enactment of this Ordinance.

**Extended Care Facility:** See *Section 14.16.C.4.*

## 5.3.6 F

**Family:** A group of individuals not necessarily related by blood, marriage, adoption, or guardianship living together in a dwelling unit as a single housekeeping unit under a common housekeeping management plan based on an intentionally structured relationship providing organization and stability.

**Farm:** Land, plants, animals, buildings, structures or ponds used for agricultural or aquacultural activities including machinery, equipment and other appurtenances used in the commercial production of farm products. Farms include, but are not limited to the raising of agricultural products, raising and breeding of livestock, equine, poultry, and dairy.

**Fence:** An artificially constructed barrier erected or built to enclose, screen, or separate areas. Materials: wood, plastic, boards, rails, wire or metal.

**Financial Institution:** A bank, savings and loan, credit union, credit agency, investment company, broker and dealer of securities and commodities, and similar facilities.

**Flood or Flooding:** A general and temporary condition of partial or complete inundation of normally dry land areas from:

1 The overflow of inland or tidal waters;

2 The unusual and rapid accumulation or runoff of surface waters from any source.

**Flammable Liquids, Above Ground Storage of:** The properly licensed and inspected storage of flammable liquids including, but not limited to, fuels, paints and coatings, fertilizers, lubricants, degreasers and related liquids in quantities in excess of twenty thousand (20,000) gallons.

**Flood Hazard Area:** Land which, on the basis of available flood-plain information, is subject to a one percent (1%) or greater chance of flooding in any given area.

**Flood Hazard Boundary Map:** An official map of a community, issued by the Federal Insurance Administration, whereon the boundaries of the areas of special flood hazards have been designated as Zone A.

**Flood Insurance Rate Map:** An official map of a community, on which the Federal Insurance Administration has delineated both the areas of special hazards and the risk premium zones applicable to the community.

**Flood Insurance Study:** The official report, provided by the Federal Insurance Administration, containing flood profiles, as well as the Flood Hazard Boundary-Floodway Map and the water surface elevation of the base flood.

**Floodway:** The channel of a river or other watercourse and the adjacent land areas designated in the Flood Insurance Study which must be reserved in order to discharge the base flood.

**Floor Area:** The sum of all horizontal areas of the several floors of a building or dwelling unit, measured from the exterior faces of exterior walls, or from the centerline of walls separating dwelling units. Unenclosed porches, courtyards and patios shall not be considered as part of floor area.

**Foster Care Facilities:** Foster care facilities which are regulated by the Child Care Organization Act No. 116 of 1973 and/or the Adult Foster Care Facility Licensing Act No. 218 of 1979 shall be defined as follows:

1. Foster Family Home: See *Section 14.4.1A*.
2. Foster Family Group Home: See *Section 14.4.1B*.
3. Adult Foster Care Family Home: See *Section 14.4.1C*.
4. Adult Foster Care Small Group Home: See *Section 14.4.1D.*
5. Adult Foster Care Large Group Home: See *Section 14.4E.*

**Frontage:** The total length of the front lot line.

**Funeral Home and Mortuary:** A building used for the preparation of the deceased for burial and the display of the deceased and rituals connected therewith before burial or cremation at another location.

## *5.3.7 G*

**Garage, Commercial:** See *Section 14.19.1C*.

**Garage, Parking:** See *Section 14.19.1B.*

**Garage Private:** A detached accessory building/structure or a portion of a principal building or structure used for the parking or storage of motor vehicles, boats, recreational vehicles, travel trailers and similar items owned by the occupants of the principal building or structure located on the same lot, and not operated as a commercial enterprise.

**General Retail Sales Establishment**: A business selling new merchandise and using no more than ten percent (10%) of the net floor area for repair facilities.

**Golf Course:** See *Section 14.11.*

**Government Facility:** See *Section 14.10.1B*.

**Grade:** The average elevation of the finished surface of ground after the development, filling, or excavation of a parcel of land.

**Greenhouse:** A building whose roof and sides are made largely of glass or other transparent or translucent material and in which the temperature and humidity can be regulated for the cultivation of delicate or out-of-season plants for subsequent sale or for personal enjoyment. (See also Nursery).

**Gun Range and Archery:** See *Section 14.34*.

**Gunsmithing:** The design, making, refurbishing, repair and test firing of small firearms, including pistols, rifles and shotguns.

## 5.3.8 H

**Hazardous Material:** See *Section 14.33.1C*.

**Heavy Manufacturing Facility:** An industrial yard and/or buildings used in the processing, assembly, partial assembly, disassembly, scrapping and recovery and manufacture of chemicals, metal components, machinery and related components or materials. Such operations may involve drop forging, heavy stamping, punch pressing, heat treating, cleaning, degreasing, plating, hammering, or other similar processing activities as well as the heavy truck or rail transport of raw materials, finished goods and/or scrap.

**Height:** The vertical distance of a structure measured from the average elevation of the finished grade within twenty (20) feet of the structure to the highest point of the structure.

**Home Business:** See *Section 14.13.*

**Home for the Aged:** See *Section 14.16.B.3.*

**Home Occupation:** See *Section 14.14*.

**Hospice Care Facility:** See *Section 14.16.B.4.*

**Hospital:** See *Section 14.16.1A.*

**Hotel or Motel:** See *Section 14.15*.

**Household:** A family living together in a single dwelling unit, with common access and common use of all living and eating areas and all areas and facilities for preparation and serving of food within the dwelling unit.

**Human Occupancy:** A building or portion thereof primarily used or intended to be used for individuals to congregate for any purpose, and which is equipped with means of egress, light, and ventilation facilities in accordance with the Michigan Construction Code, excluding a building or portion thereof incidental to the use for agricultural purposes of the land on which the building is located or a building used exclusively for the purpose of storage in which there are no employees or occupants.

## 5.3.9 I

**Independent Living Facility:** See *Section 14.16.C.2.*

**Industrial Use:** A structure, building, or parcel of land, or portion thereof, utilized or inherently designed to be utilized, for the purpose of production, manufacturing, processing, cleaning, testing, rebuilding, assembly, distribution, finishing, constructing, and printing of goods or products, and related research and development facilities.

## ***5.3.10 J***

**Junk:** Miscellaneous solid waste, rubbish, scrap, debris, and reclaimable material including, but not limited to, paper, rags, scrap metal and equipment, glass, household appliances, garbage, tires, vehicle parts, or motor vehicles which are inoperable, partially dismantled, wrecked, or abandoned, excluding farm machinery. Junk shall not be visible from any property line or right-of-way. Junk may be stored inside a fully enclosed building or be screened by an opaque fence of not less than six (6) feet in height.

## ***5.3.11 K***

**Kennel:** Any building and/or land use, designed, or arranged for the sale, boarding, breeding, grooming, training, care or treatment of dogs, cats, or other small domestic animals for a fee or compensation.

## ***5.3.12 L***

**Land Development Code:** The title given to this Ordinance which is more commonly referred to and known as the Zoning Ordinance.

**Landfill:** Any disposal area or tract of land, building, unit or appurtenance or combination thereof that is used to collect, store, handle, dispose of, bury, cover over, or otherwise accept or retain refuse.

**Land Use:** A description of how land is occupied or utilized.

**Land Use Policies:** Statements of policy for various types of development adopted pursuant to Public Act ~~282 of 1945~~ ***110 of 2006 and 33 of 2008***, as amended.

**Large Animal Boarding Business:** Any building and/or land use, designed, or arranged for the shelter and/or care to include, but not be limited to, horses, llamas, mules or donkeys which are rented or hired for compensation, also to include the renting of space for the above mentioned animals not owned by the owner/proprietor(s) of the property.

**Light Manufacturing Facility:** The assembly of pre-manufactured components, packaging industrial operations, jobbing and machine shops, metal or wood stripping establishments, monument and art stone production facilities, printing and publishing and similar operations.

**Long-term Care Facility, Regulated:** See *Section 14.16.1B.*

**Long-term Care Facility, Unregulated:** See *Section 14.16.1C.*

**Lot:** A parcel of land, described with fixed boundaries of sufficient size and configuration, to meet the site development requirement of this Ordinance and having access to a public or private road.

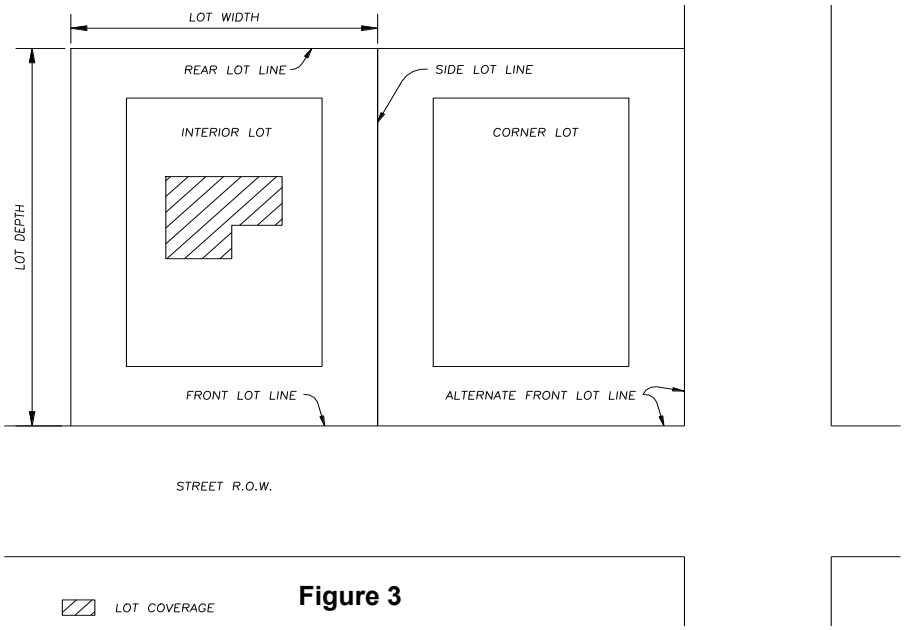



**Figure 3**

**Lot Area:** The total area within the described lot lines of a parcel of land, including road right-of-way, except when said right-of-way is owned in fee by another person or a public authority.

**Lot, Corner:** A parcel of land abutting upon two or more streets at their intersection, or upon parts of the same street forming an interior angle of less than one-hundred thirty-five (135) degrees.

**Lot Coverage:** That portion of the area of a lot that contains buildings and structures measured as a percentage of the entire lot area.

**Lot Depth:** The distance from the front lot line to the rear lot line measured in the general direction of the side lines of the lot.

**Lot, Interior:** A lot other than a corner lot.

**Lot Line:** The boundaries of a lot which divide one lot from another lot or from a public or existing private road or any other publicly owned parcel of land.

**Lot Line Front:** A lot line of a length equal to or greater than the minimum lot width as required in this Ordinance which is also the road right-of-way line on interior lots which front a public or private road and one of the right-of-way lines on corner lots and is the lot line most parallel to the closest public or private road on all other lots. For lots fronting on the turnaround of a cul-de-sac the minimum straight line distance between the side lot lines, at the road right-of-way, may be reduced to eighty (80%) percent of the required lot width (frontage).

**Lot Line, Rear:** The lot line opposite and most distant from the front lot line; or in the case of triangular or otherwise irregularly shaped lots, a line twenty (20) feet entirely within the lot parallel to, and at a maximum distance from, the front lot line.

**Lot Line, Side:** Any lot line other than a front or rear lot line.

**Lot Width:** The length measured in linear feet of the front lot line.

## 5.3.13 M

**Major Street:** For the purposes of this Ordinance, the following roads and highways and segments of roads and highways are designated as Major Streets:

| Roadway | Segment |
|---|---|
| M-66 | Entire length in the jurisdiction of this Ordinance |
| Grand Ledge Hwy. | Entire length in the jurisdiction of this Ordinance |
| Mt. Hope Hwy., | From Clinton Trail (M-50) to Cochran Road. |
| Vermontville Hwy. | Entire length in the jurisdiction of this Ordinance |
| Nashville Hwy., | From Curtis Road to Ionia Road |
| Packard Hwy., | From Lansing Road to Clinton Trail (M-50) |
| Lawrence Hwy. (M-79) | From Curtis Road to Wheaton Road |
| Island Hwy., | From I-69 to Smith Road. |
| Columbia Hwy, | From Smith Road to Waverly Rd. |
| Clinton Trail (M-50) | From Grand Ledge Hwy (M-43) to Packard Hwy,<br>From I-69 to Kemler Road<br>From Kinneville Road to South County Limits |
| M-78 (Battle Creek Hwy. and Butterfield Hwy.) | From West County Limits to Marshall Road |
| Bellevue Hwy. | Entire length in the jurisdiction of this Ordinance |
| V.F.W. Road | Entire length in the jurisdiction of this Ordinance |
| Petrieville Hwy. | Connecting the North and South Extensions of Canal Road |
| Ionia Road | Entire length in the jurisdiction of this Ordinance |
| Sunfield Road | From Eaton Hwy., to Clinton Trail (M-50) |
| Mulliken Road | From Eaton Hwy., to Clinton Trail (M-50) |
| Cochran Road | From Grand Ledge Hwy. (M-43) to Clinton Trail (M-50)<br>From I-69 to South County Limits |
| Hartel Road (M-100) | From Davis Hwy., to Island Hwy. |
| Chester Road | From Vermontville Hwy., to Lawrence Hwy. (M-79) |
| Canal Road | From Wilbur Hwy., to Eaton Rapids City Limits |
| Narrow Lake Road | From Flanders Road to South County Limits |
| Flanders Road | From Clinton Trail (M-50) to Narrow Lake Road |

| | |
|---|---|
| Waverly Road | From Wilbur Hwy., to Bellevue Hwy. |

| Roadway | Segment |
|---|---|
| Ainger Road | From Battle Creek Road to Marshall Road |
| Battle Creek Road | From Ionia Road to Carlisle Hwy. |
| Lansing Road | From I-69 to Royston Road |
| Marshall Road | From Five Point Hwy., to Baseline Hwy. |
| Michigan Road (M-99) | From Columbia Hwy., to Eaton Rapids City Limits |

**Manufactured Home or Mobile Home:** a structure transportable in one or more sections which is built on a chassis and designed to be used as a dwelling with or without permanent foundation, when connected to the required utilities, and includes the plumbing, heating, air conditioning, and electrical systems contained in the structure.

**Manufacturing of explosives:** Large scale manufacturing or processing facility involving bulk production, manipulation and/or storage of explosive materials including, but not limited to, explosives for weapons, fireworks, demolition or other purposes; or similar facilities.

**Meat or Poultry Processing Plant:** A processing facility for animal and poultry flesh and by-products for commercial purposes including, slaughter, cleaning, dressing, grinding, packaging, freezing, storage, mixing, disposal and related activities.

**Mining, Surface:** See *Section 14.25*.

**Mobile Home Development:** A mobile home park or a mobile home condominium development subject to the provisions of Public Act 96 of 1987, as amended. A parcel of land owned by a person upon which are located two or more mobile homes, whether attached or detached from each other or adjacent buildings, which are occupied for residential purposes, and are connected to a public or properly permitted private water supply or waste water disposal system either on a temporary or permanent basis, regardless of whether or not the development offers rental lots or mobile homes to the public. (See also *Section 14.18*.)

**Motor Fuel Service Station:** See *Section 14.19.A*.

**Motor Home:** A motor vehicle designed to be utilized as a temporary living quarters normally for recreational, camping or travel purposes, having kitchen and bathroom facilities.

**Moving:** The purposeful removal of a building or structure from a particular location in order to re-establish the building or structure in another location.

**Multiple Family Dwelling:** See *Section 14.8*.

**Municipal Water Supply:** A water supply system owned by a village, township, charter township, city, county, the State of Michigan, or an authority or commission comprised of these governmental units.

## 5.3.14 N

**New/Used Vehicle, Boat, Farm Implement Dealer:** A retail or wholesale use involving the indoor and/or outdoor display and storage and sales of new and used automobiles and trucks, recreational vehicles, boats and farm implements, and similar equipment. See *Section 14.17.*

**Nursery:** A parcel of land utilized for the purpose of growing ornamental trees, shrubbery, house plants, flowers, or perennial ground covers from seed or seedlings for the purpose of retail or wholesale trade.

**Nursing Home:** See *Section 14.16.B.1.*

## 5.3.15 O

**Occupancy Certificate:** A written document received from the Building Official stating that the State Construction Codes, as amended, and this Ordinance, have been complied with as they apply to the construction of a building or structure and the use of a lot, and that the building may now be occupied for its previously declared purpose.

**Occupy:** The residing of an individual or individuals overnight or for an extended period in a dwelling unit, or the installation, storage or use of equipment, merchandise or machinery in any institutional, commercial, agricultural, or industrial building.

**Off Premise Sign: See** *Section 11.11.2.L.*

**Office Building:** A building used primarily for conducting the affairs of a business, profession, service or industry (exclusive of manufacturing activities), or similar activity and may include ancillary services for office workers, such as a restaurant, coffee shop, newspaper or candy stand, and child care facilities.

**Open Air Business and Storage:** See *Section 14.33*.

**Open Space:** That portion of a lot which is not covered with structures and is open to the sky.

**Open Space, Common:** Open space which is held for the collective use and enjoyment of the owners, tenants, or occupants of a single development.

**Owner:** The owner of the freehold of the premises or lesser estate in the premises, a mortgagee or vendee in possession, an assignee of rents, receiver, executor, trustee, lessee, or any other person, sole proprietorship, partnership, association, or corporation directly or indirectly in control of a building, structure, or real property, or his or her duly authorized agent.

## 5.3.16 P

**Park, Parks and Recreational Facilities:** A parcel of land, building or structure used for recreational purposes including but not limited to playgrounds, sport fields, game courts, beaches, trails, picnicking areas, and leisure time activities.

**Parking Garage:** See *Section 14.19.B*.

**Permit:** An official document or certificate issued by an authorized official, empowering the holder thereof to perform a specified activity which is not forbidden by law, but not allowed without such authorization.

**Personal Service Establishment:** A business providing care for a person or his or her personal goods or apparel and may include laundry and dry cleaning, beauty shops, barbershops, shoe repair, health and fitness, licensed massage therapy, and tanning salons.

**Planned Unit Development (PUD):** A parcel of land of a minimum size, as specified in this Ordinance, which is planned and developed as a single entity containing residential clusters and common open space and may contain public, institutional and commercial uses.

**Preliminary Plat:** A proposal for the subdivision of land which is filed with a governmental agency pursuant to the Land Division Act ~~of 1996~~ ***PA 288 of 1967***, as amended.

**Principal Use:** The primary or predominant purpose to which a parcel of land is devoted as distinguished from an Accessory Use.

**Private Airport:** See *Section 14.20.*

**Private Driveway:** A private driveway may serve no more than one lot. If at any time, two (2) or more lots are to have a shared access or ingress and egress point, the provisions of Article 14.28 Privates Roads must be met.

**Private Road:** See *Section 14.28.*

**Private Sanitary Sewage Disposal System:** An individual, on-site sewage disposal system as defined in the Barry-Eaton District Health Department Sanitary Code.

**Private Water Supply:** A well or other water supply system approved by the Barry-Eaton District Health Department pursuant to Part 127 of Act 368 of the Public Acts of 1978, as amended.

**Prohibited Use:** A use of land which is not permitted within a particular land development district.

**Propane Service Facility:** A commercial operation providing liquid propane gas and bulk gas containers on a wholesale basis to fuel providers, retailers and dealers. (See also *Section 14.31*.)

**Public Airport and Heliport:** See *Section 14.21.*

**Public and Private Non-Commercial Park:** Nature preserves, wildlife areas, water and wetland areas and streams intended primarily for the appreciation of the natural environment without significant man-made improvements or commercial activities.

**Public Sanitary Sewer:** A system of pipe owned and maintained by a governmental unit, used to carry human, organic and industrial waste from the point of origin to a point of discharge.

**Public Water Course:** A stream or creek which may or may not be serving as a drain, as defined by Act 40 of Public Acts of 1956, as amended, being Sections 280.1 to 280.623 of the Compiled Laws of 1948; or any body of water which has definite banks, a bed and visible evidence of a continued flow or occurrence of water.

**Public Water Supply:** A water works system which provides water for drinking or household purposes to persons other than the supplier of water, except those water works systems which supply water to only one living unit, further defined in Public Act 399 of 1976, as amended.

## *5.3.17 Q*

## *5.3.18 R*

**Racetrack:** See *Section 14.7.1B*.

**Radio, Television and Communication Tower:** See *Section 14.27.*

**Recreational Unit:** A vehicular-type portable structure without a permanent foundation that can be towed, hauled or driven and is primarily designed as a temporary living accommodation for recreational and camping purposes. Recreational Units are limited to travel trailers, fifth wheel trailers and motor homes.

**Refiners and Power Generation:** Large-scale manufacturers of industrial or agricultural chemicals or the production of electrical, steam or nuclear power; or similar facilities.

**Rehabilitation:** The upgrading of an existing building or part thereof which is in a dilapidated or substandard condition.

**Religious Institutions:** See *Section 14.22*.

**Rental Storage Building:** See *Section 14.26.*

**Repair:** The reconstruction or renewal of any part of an existing building for the purpose of maintenance.

**Research and Development:** Establishments for carrying out investigations in science and/or business, and may include material, chemical and equipment testing and experimentation, economic and demographic study and/or the use of animal, plant or human subjects under controlled conditions.

**Residence:** A home, abode or place where an individual is living at a specific point in time.

**Residential Use:** The use of a building or portion thereof as living quarters, a residence, a domicile or any building or portion thereof designed to be used as a dwelling.

**Restaurants:** Establishments where food and drink are prepared, served and consumed either within the principal building or on a take-out or drive-through basis.

**Restoration:** The reconstruction or replication of an existing building's original architectural features.

**Right-of-Way:** A strip of land acquired by reservation, dedication, easement, prescription, purchase or commendation and permanently established for the passage of persons, vehicles, railroads, water, public and private utility lines, and similar uses.

**Road, All Season:** A public road designated as passable year-round by the Eaton County Road Commission.

**Road, Major:** See Major streets.

**Road, Minor:** Those public and private thoroughfares which are not designated as major streets.

**Road, Private:** A vehicular way, not under the jurisdiction of a government agency that was created by recorded right-of-way after January 1, 1991 to provide access to more than one (1) lot. (See *Section 6.2.2B and Section 14.28*.)

**Road, Public:** Any vehicular way which is under the jurisdiction of a state, county, municipality, or other governmental authority.

**Rooming and Boarding House:** A new or existing single family dwelling, a portion of which is used to provide for compensation, lodging and meals to individuals unrelated to the proprietors. (See also *Section 14.30*).

## ***5.3.19 S***

**Salvage, Scrapping Yard, Automobile:** See *Section 14.2*.

**Second Hand Store:** A building or portion thereof in which the public sale of previously owned goods having no generally recognized cultural or historic value as antiques, is carried-out for a period of a time greater than eight (8) days during a six (6) month period of time and/or for more than two (2) consecutive weeks.

**Senior Housing:** See *Section 14.16.C.3.*

**Service Station, Motor Fuel:** See *Section 14.19.1A*.

**Setback:** The minimum horizontal distance between the road right-of-way line and a building or structure.

**Setback Line:** A line parallel with and at the minimum required distance from the road right-of-way line.

**Shopping Center or Mall:** See *Section 14.23*.

**Sight-Proof Screening:** A method of visually shielding or obscuring one (1) abutting nearby structure or use from another. Fence, screen walls, landscaping, berm, or any combination of these which is built, planted, and maintained providing a minimum visual barrier of six (6) feet.

**Signs:** The following section includes the definitions for a variety of signs. This section has been placed here for convenience and may also be found in Article 11.

A. Sign: Sign shall mean and include every individual announcement, declarations, demonstration, display, illustration, insignia, surface or space when erected or maintained out of doors in view of the general public for identification, advertisement or promotion of the interests of any person. This definition shall include billboard signs, signs painted directly on walls of structures, and portable signs.

B. Sign, Advertising: Any sign erected for the purpose of advertising a business, product, service, event, person or subject not relating on the premises on which said sign is located.

C. Sign, Billboard: An off-premise sign applied to panels with over three-hundred (300) square feet of display area and used for out-door advertising of a business, product, service, event, person or subject including those signs as regulated by the Michigan Department of Transportation pursuant to Public Act 106 of 1972, as amended.

D. Sign, Business: Any sign erected for the purpose of advertising a business, product, or subject related to the premises on which said sign is located.

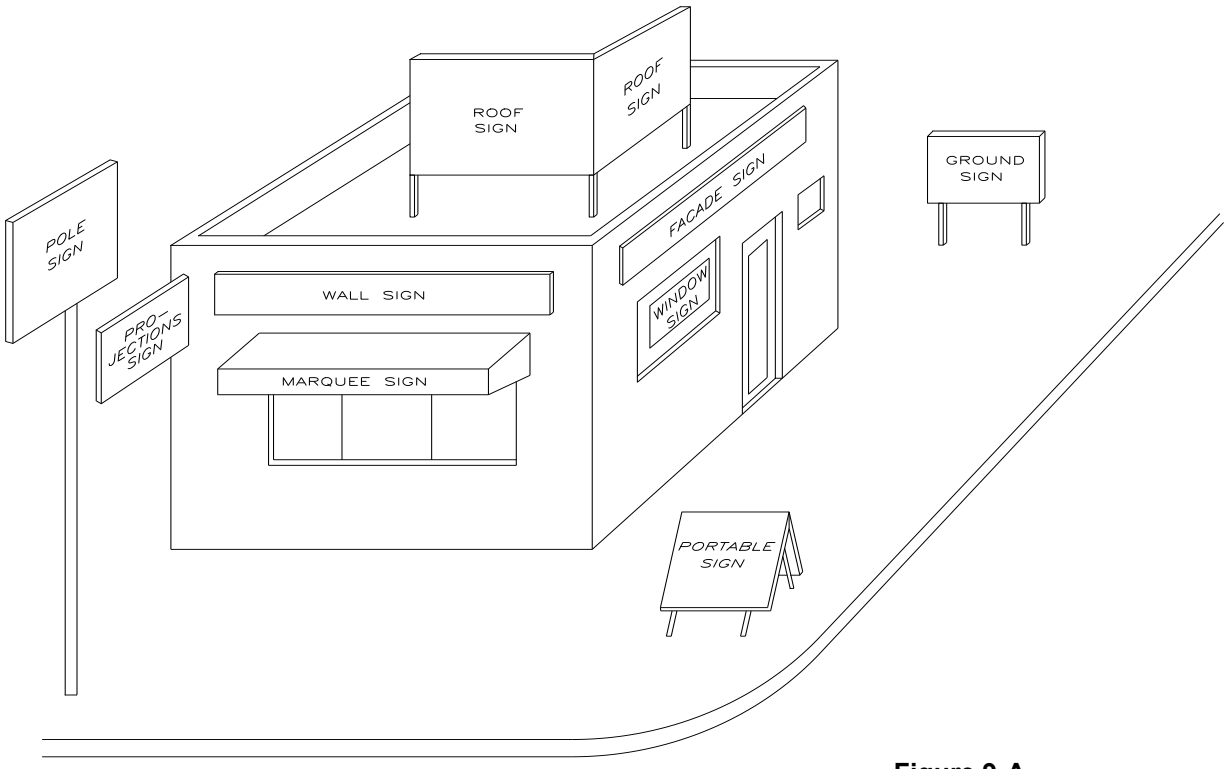



**Figure 9-A**

SIGN TYPES

E. Sign, Display Area: Display area means the entire area within a circle, triangle or parallelogram enclosing the extreme limits or writing, lighting, representation, emblem or any figure of similar character, together with any frame or other

material forming an integral part of the display or used to differentiate the sign from the background against which it is placed; excluding the necessary supports or uprights on which such sign is placed. Where a sign has two or more faces, the area of all faces shall be included in determining the area of the sign; except that where two such faces are placed back to back and are at no point more than three feet from one another, the area of the sign shall be taken as the area of one face if the two faces are of equal area, or as the area of the larger face if the two faces are of unequal area.

EXCEPTION 1: The display area of signs painted directly on building wall surfaces shall be that area within a circle, triangle, or parallelogram enclosing the extreme limits of writing, letters, or numbers.

EXCEPTION 2: Time and temperature displays including clock facings.

F. Sign, Ground: A sign which is supported on a monument base or on one (1) or more supports where the sign height is less than eight (8) feet.

G. Sign, Height: The height of sign shall mean the maximum vertical distance from the uppermost extremity of a sign or sign support to the average ground level at the base of the sign.

H. Sign, Home Occupation: A sign containing only the name and occupation used for the purpose of advertising services in conjunction with a lawful home occupation.

I. Sign, Identification: A sign giving the nature, logo, trademark or other identifying symbol, address, or any combination of the name, symbol and address of a building, business, development or establishment on the premises where it is located.

J. Sign, Marquee: A sign which is attached to or hung from the underside of a marquee, awning, canopy, or other covered structure projecting from and supported by a building and does not project horizontally beyond or vertically above said marquee, awning, canopy, or covered structure.

K. Sign, Name Plate: A sign located on premises, giving the name or address, or both, or the owner or occupant of a building or premises.

L. Sign, Off-Premise: A sign located on a different parcel of land or lot or premise than where the business, product, service, event, or person or subject is being advertised.

M. Sign, On-Premise: A sign located on the parcel of land or lot advertising a business, product, service, event, person or subject being offered on said parcel of land or lot.

N. Sign, Pole: A sign which is supported on one (1) or more supports where the sign height is greater than eight (8) feet.

O. Sign, Portable: A sign that is not permanent, affixed to a building, structure or the ground including signs supported on mobile chassis other than motor vehicles.

P. Sign, Projecting: A sign which is attached directly to the building wall, and which extends more than fifteen (15) inches from the face of the wall.

Q. Sign, Roof: A sign which is erected, constructed and maintained upon or above the roof of a building, or parapet wall and which is wholly or partially supported by said building.

EXCEPTION: For the purpose of this definition of roof sign, a sign that is mounted on a mansard roof, roof overhang, parapet wall, above a marquee, or on a wall with a roof below, shall not be considered as a roof sign but shall instead be considered as a wall sign for that side of the building, provided that not part of such sign extends above the uppermost building line not including chimneys, flag poles, electrical, mechanical equipment, TV antennas and other similar equipment and extensions.

R. Sign, Setback: The minimum linear distance as measured from the road right-of-way line to the nearest part of the sign or advertising structure.

S. Sign, Wall: A sign that is attached directly to a wall, mansard roof, roof overhand, parapet wall, or above a marquee of a building with the exposed face of the sign in a plane parallel to the building wall or to the surface on which it is mounted, and which projects not more than fifteen (15) inches from the building or structure wall, and which does not have any part of such sign or sign supports extending above the uppermost building line not including chimneys, flag poles, electrical or mechanical equipment, TV antennas or any other similar equipment or extensions.

**Signs, Temporary:** Temporary signs shall include the following:

A. Balloon Sign: A portable sign which is inflated by air or any inert gas.

B. Portable Sign: A sign not permanently anchored or secured to either a building or the ground, such as, but not limited to, "A" frame, "T" or inverted "T" shaped sign structures and signs on movable trailers, or similar portable or moveable devices. Banners, balloon signs, or sign's objects or devices shall also be considered portable signs.

**Single-Family Dwelling:** A dwelling which is constructed in accordance with the State Construction Code and is at least fifteen (15) feet in width at the narrowest point and which is designed for and occupied by not more than one family, and is not attached to any other dwelling by any means.

**Solar Energy System:** See Section 14.39.

**Solid Waste:** Garbage, rubbish, paper, cardboard, metal containers, yard clippings, wood, glass, bedding, crockery, demolish building materials, ashes, incinerator residue, street cleanings, municipal and industrial sludges, and solid commercial and solid industrial waste, animal waste not including human body waste, liquid or other waste regulated by statute, ferrous or nonferrous scrap directed to a scrap metal processor or a re-user of ferrous or nonferrous products, and slag or slag products directed to a slag processor or to a re-user of slag or slag products.

**State Construction Code:** Michigan Law governing the construction, alteration, demolition, moving, occupancy, and use of buildings and structures. Specifically, Act 230 of the Public Acts of 1972, as amended.

**Stop Work Order:** An administrative order, which is either posted on the property or mailed to the property owner which directs a person not to continue, or not to allow the continuation of an activity which is in violation of this Ordinance.

**Storage Building, Rental:** See *Section 14.26*.

**Structural Alterations:** Any change in the supporting members of a building such as bearing walls, columns, beams or girders, or in the dimensions or configurations, or of the roof and exterior walls or means of egress.

**Structure:** A combination of materials, whether fixed or portable, anything constructed, erected, or artificially built-up, which requires a location on or below the surface of land or water including a part or parts thereof and all equipment within the structure; including, but not limited to, buildings, decks, fences, retaining walls, docks, swimming pools, accessory buildings, and fishing shanties.

**Subacute Care Facility:** See *Section 14.16.B.2.*

**Subdivision:** The partitioning or splitting of a parcel or tract of land by the proprietor thereof or by his or her heirs, executors, administrators, legal representatives, successors or assigns for the purpose of sale, or lease of more than one (1) year, or of building development that results in one (1) or more parcels of less than 40 acres or the equivalent, and that is not exempt from the platting requirements of the Land Division Act pursuant to *Sections 108 and 109* thereof.

**Subdivision Plat:** A map or chart depicting the subdivision of land as regulated by the Land Division Act ~~of 1996~~, Act ~~591~~***288*** of the Public Acts of ~~1996~~***1967***, as amended.

**Substantial Improvement:** Any repair, reconstruction or improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the market value of the structure either, (1) before the improvement or repair is started, or (2) if the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition, substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either (1) any project for improvement of a structure to comply with existing state of local health, sanitary or safety code specifications which are solely necessary to assure safe living conditions, or (2) any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

**Surface Mining:** See *Section 14.25.*

**Swimming or Bathing Pool:** A nonporous container containing water having a depth of greater than twenty-four (24) inches or having a surface area of greater than two-hundred fifty (250) square feet, or a pool permanently equipped with a water re-circulating system or constructed of structural materials.

## ***5.3.20 T***

**Tower, Freestanding:** Towers erected for the purpose of radio wave and/or digital communications which are more than eighty-five (85) feet in height above the grade at the base of the structure. (See *Section 14.27*).

**Travel Trailer:** A vehicular portable structure built on a chassis which is less than thirty-two (32) feet in length and is of such a width and weight not to require special highway movement permits when drawn by a vehicle.

**Truck and Rail Freight Terminal:** Facilities for the shipping and receiving of goods by truck and/or rail, including the transfer of goods between modes of transportation, the breaking down or the aggregation of shipments into smaller or larger loads, the storage of goods for future transport, and the parking of trucks and trailers.

## 5.3.21 U

**Use:** The purpose or activity for which land or structures are designed, arranged, or intended, or for which land or structures are occupied or maintained.

**Use Group:** The classification of a building or structure based upon its purpose as contained in the State Construction Code.

## 5.3.22 V

**Variance:** Permission given to a property owner to depart from the literal requirements of this Ordinance which may occur when compliance with this Ordinance would create a particular hardship on the property owner. See Section 4.6.

**Vehicle:** Every device in, upon, or by which any person or property is or may be transported or drawn upon a highway, or road, except devices moved by human power or used exclusively upon stationary rails or tracks.

**Vehicle Transporter, Distressed:** See *Section 14.24*.

**Veterinary Hospital, Clinic, and Kennel:** Any activity involving the permanent or temporary keeping, training or treatment of dogs or other animals operated by a licensed veterinarian or licensed trainer as a business.

## 5.3.23 W

**Wall:** The vertical exterior surface of a building and the vertical interior surfaces which divide a building's space into rooms.

**Warehouse:** A building used primarily for the storage of goods and materials either on a fee basis available to the general public or privately in connection with a primary use, such as a commercial or industrial operation.

**Watercourse:** An open conduit either naturally or artificially created which periodically or continuously contains moving water draining an area of at least two (2) acres.

**Wholesale Trade Business:** A business primarily engaged in selling merchandise to retailers; to industrial, commercial institutional or professional business users; to other

wholesalers; or acting as agents or brokers and buying merchandise for, or selling merchandise to such individuals or companies.

**Wood Product Processing Facility:** A processing facility for forest products and by-products for commercial purposes including, cutting, milling, salvage, chipping, assembly, finishing, burning, disposal and related activities.

## ***5.3.24 X***

## 5.3.25 Y

**Yard:** An open space on the same lot with a building which lies between the building and the nearest lot line or road right-of-way line, unoccupied and unobstructed from the ground upward, except as otherwise specifically provided for in this Ordinance.

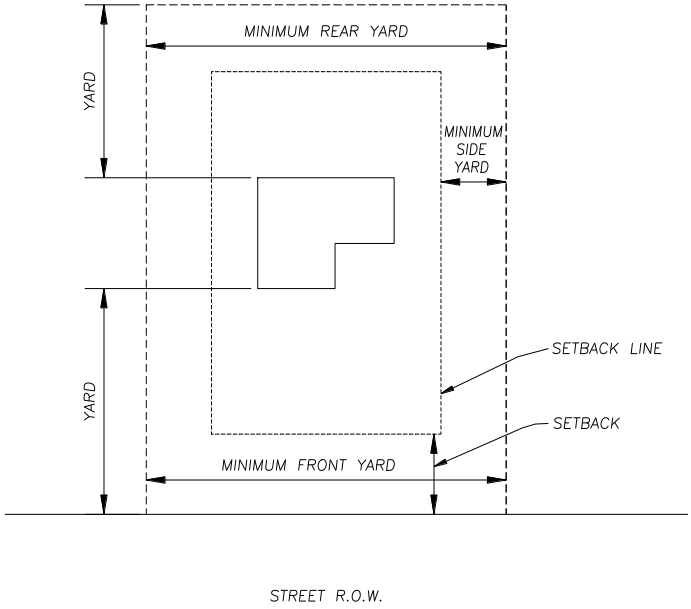



**Figure 4**

**Yard, Minimum Front:** A yard extending the full width of the lot on which a building is located and situated between the front lot line and a line parallel thereto at a distance therefrom equal to the depth of the minimum required yard.

**Yard, Minimum Rear:** A yard extending the full width of the lot on which a building is located and situated between the rear lot line and a line parallel thereto at a distance therefrom equal to the depth of the minimum required yard.

**Yard, Minimum Side:** A yard on the same lot as a building situated between the side lot line and a line parallel thereto at a distance therefrom equal to the depth of the minimum required yard.

## 5.3.26 Z

**Zoning:** The dividing of the County outside the limits of cities, villages, and townships having a zoning ordinance, into districts of a number and shape considered best suited to carry-out the purposes of the Michigan Enabling Act No. 110 of the Public Acts of Michigan 2006, as amended, and the creation of uniform regulations throughout each individual district. Such districts are referred to as Land Development Districts in this Ordinance.

# ARTICLE 6
# GENERAL PROVISIONS

## SECTION 6.1 INTENT AND PURPOSE

It is the purpose of this Article to establish within this Article regulations and conditions generally applicable to all districts of this Ordinance.

## SECTION 6.2 GENERAL REGULATIONS AND SPECIFICATIONS

The following regulations shall apply to all districts of this Ordinance unless specifically exempted elsewhere in this Ordinance.

**6.2.1 Minimum Lot Requirements:** Every principal structure shall be placed on its own lot. Principal structures shall not share lots. A legal description of the lot must be presented when application is made for a Building Permit.

**6.2.2 Access Required: All lots created or adjusted after the effective date of this Ordinance shall:**

A. Have the required minimum lot width (frontage) along and adjacent to a public road with access to that public road via a private driveway or,

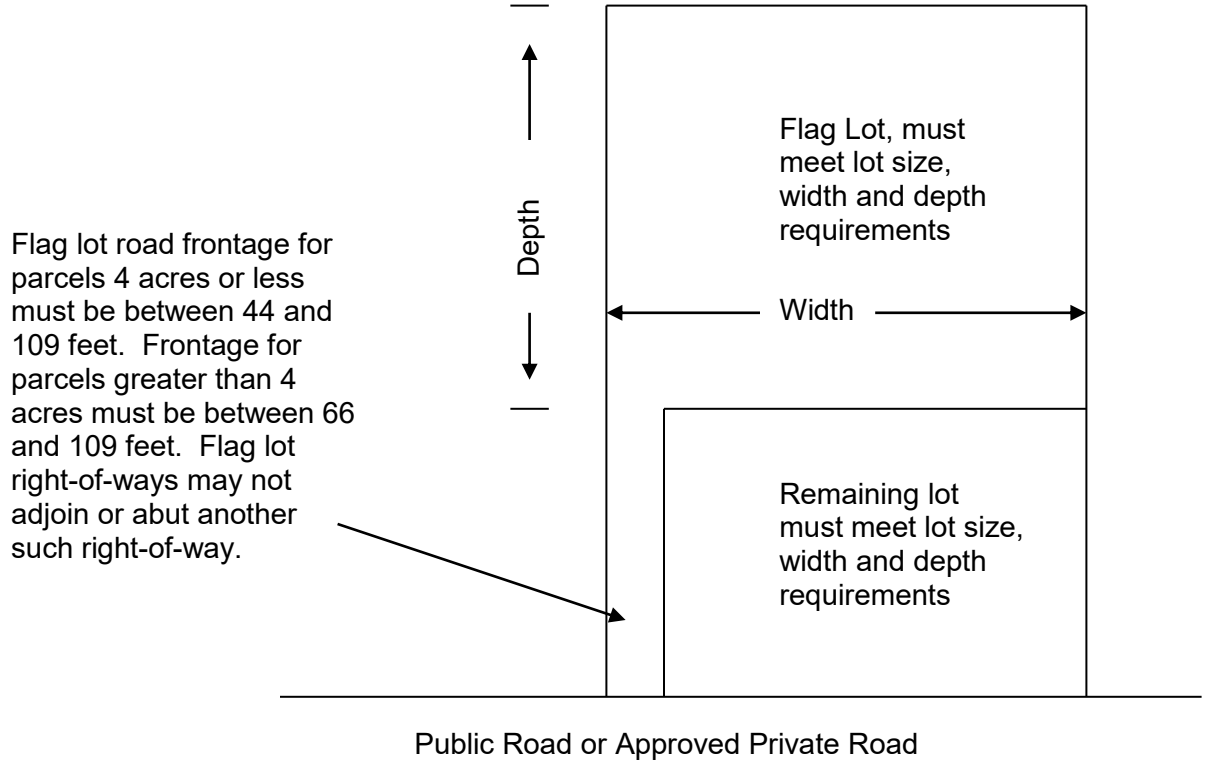
B. Have the required minimum lot width along and adjacent to an approved private road with access to that private road via a private driveway or,

C. Have access provided to a public or approved private road by either of the following:

1. Flag Lots**:** For legal parcels with a total area of four (4) acres or less in existence as of the date of adoption of this Ordinance, lots may be created from such parcel which have a minimum 44 feet of road frontage and may be provided access to a public road by that right-of-way 44 feet in width. For legal parcels with a total area of more than four (4) acres, lots may be created from such a parcel which have a minimum 66 ft. of road frontage and may be provided access to a public or approved private road by a right-of-way (sixty-six) 66 ft. in width. The road frontage and right-of-way area shall be established by recording transfers of legal or equitable title with the County Register of Deeds. A right-of-way shall provide access for a single lot without overlapping any existing access rights-of-way. No such right of way shall be established if it would adjoin or abut another such right-of-way serving an adjoining parcel.
2. Private Roads: Two (2) or more lots shall not share private driveways and must provide access to a public road with a private road. Lots served by private roads shall have the minimum lot width along and adjacent to the private road. A private road must meet the requirements of *Section 14.28* prior to the issuance of a private road or building permit.

D. All property addresses are subject to compliance with the Eaton County Address Ordinance.

**Figure 5, Flag Lot Illustration**




**6.2.3 Required Water Supply and Sanitary Sewage Facilities:** No structure for human occupancy shall be erected, altered, or moved upon any premises and used in whole or in part for residential assembly, business, industrial, institutional, mercantile or storage purpose unless said structure shall be provided with a water supply and waste water disposal system that conforms with the requirements of the Barry-Eaton District Health Department, Michigan Construction Code Act, Public Act 368 of 1978, as amended, and any local ordinances, applicable to public sanitary sewer and public water supply.

**6.2.4 Earth Removal, Grading, and Filling:** In order to protect adjacent properties, public roads, public watercourses, and to provide for adequate drainage of surface water, the following rules shall apply to all construction activities requiring permits pursuant to this Ordinance.

A. Final Grade Surface: The final grade surface of ground areas surrounding a building or structure shall be designed and landscaped such that surface water flow away from the building or structure and is managed in a manner which avoids: Increased flow onto adjacent properties or public roads, the erosion or filling of a roadside ditch, the blockage of a public watercourse or the creation of standing water over a private sewage disposal drainage field.

B. Grade Changes: Filling a parcel of land with earth or other materials to an elevation above the established grade of adjacent developed land is prohibited without the expressed written approval of the County Drain Commissioner.

C. Land Disturbance: Any land development which disturbs the existing grade more than one (1) acre of land or lies within five-hundred (500) feet of a river, stream, wetland, flood plain, lake, or open drain, shall require a Soil Erosion and Sedimentation Control Permit pursuant to Part 91, Act 451 of the Public Acts of 1994, as amended.

D. Fill or Excavate: Any development or use of property which proposed to fill or excavate the site such that more than three-hundred (300) cubic yards of earth will be removed from the site or hauled to the site from another location, shall require the written approval of the County Drain Commissioner.

**6.2.5 Lot Frontage/Depth Ratio:** In order to conserve land resources including productive farmland, and to limit the overcrowding of land, all lots created or adjusted after the effective date of this Ordinance shall meet the standards of the following table with respect to the ratio of lot width to depth:

**Width to Depth Table**

| Proposed Parcel Area | Majority of Soils Characterized as Essential Cropland | Majority of Soils NOT Characterized as Essential Cropland |
|---|---|---|
| 25 acres or More | No Ratio | No Ratio |
| 10 to 24.99 Acres | 1 to 3 | No Ratio |
| Less than 10 Acres | 1 to 3 | 1 to 4 |

***** For Flag Lots proposed pursuant to *Section 6.2.2 C.1*, Lot Width shall be determined at the point where the established right-of-way area adjoins the flag lot.

**6.2.8 Swimming Pools:** Pools used for swimming or bathing shall be constructed in conformance with the Michigan State Construction Code Act and shall conform to the setback requirements for accessory uses pursuant to *Section 6.2.10* of this Ordinance. No swimming or bathing pool shall be located within twenty (20) feet of a septic tank, sewer line, dry well, drainfield, or over any area designated as reserved for a replacement drain field by the Barry-Eaton District Health Department or the Michigan Department of Public Health.

**6.2.9 Junk:** No person shall store, place, abandon, or allow to be stored, placed, or abandoned, or allowed to remain on property in their ownership or control, material defined as junk in *Article 5* of this Ordinance, except as provided for in the definition of junk.

**6.2.10 Accessory Uses, Buildings and Structures:** Accessory uses, buildings, and structures that are customarily incidental to that of the principal use of a parcel shall be permitted provided said accessory uses, buildings, and structures are not otherwise regulated by this Ordinance and are in compliance with the following:

A. Attached Accessory Buildings and Structures: Shall be considered part of the principal building and shall conform to the site development standards of the land development district in which the structure is located.

B. Detached Accessory Buildings or Structures: Shall not be located within the area required for the front yard setback pursuant to *Section 7.7.3* of this Ordinance, and shall comply with Section 7.7 (Table A) except be no closer than ten (10) feet from other buildings or any lot line, provided that bus shelters, not to exceed one-hundred fifty (150) square feet in floor area, may be constructed with a minimum setback from the road right-of-way of eight (8) feet.

C. Accessory Dwelling Unit: A person may make application to the ~~Land~~ Development ~~Code~~ Official to construct an accessory dwelling unit for the purpose of housing a relative or domestic employee of the owner occupied principal dwelling structure. There may be no more than one accessory dwelling unit per a parcel. The Accessory Dwelling Unit may be no larger than 720 square feet and no smaller than 350 square feet per unit including kitchen and sanitary facilities. The accessory dwelling unit may be attached or detached from the principal structure. If attached it shall be considered part of the principal building and shall conform to the site development standards of the land development district in which the structure is located. If it is detached, accessory dwelling units may be no closer than 10 feet to any structure and no further than 200 linear feet from the principle dwelling structure and shall conform to the site development standards of the land development district in which the structure is located.

D. Lot Coverage: The lot coverage created by accessory buildings and structures when added to the lot coverage created by principal buildings and structures shall not exceed the maximum lot coverage for each land development district as specified in *Section 7.7.6* of this Ordinance.

E. Transportation: An accessory use in a Limited Agricultural or Commercial Zoning District may include the use of vehicles that are used in an otherwise permitted principal use on the property such as transporting of agricultural or commercial goods for trade or business, including the transfer of goods between vehicles, the breaking down or the aggregation of shipments into smaller or larger loads, and the storage of goods for future transport. All items brought back to the site shall be stored in a fully enclosed building or located within a fully enclosed (site proof) fenced area. This use shall be limited to no more than five (5) vehicles over 26,000 pounds gross vehicle weight and ten (10) trips (entrances and exits to the property) per day excluding trips generated by the principal use.

**6.2.11 Permitted Yard Encroachments:** The minimum yard size and setback requirements of this Ordinance shall be subject to the following permitted encroachments.

A. Existing Buildings or Structures: Shall be permitted to encroach upon the minimum yard area and setback requirements of this Ordinance with architectural elements that are necessary to the integrity of the structure of the building, or health or safety of the occupants such as cornices, eaves, gutters, chimneys,

pilasters, outside stairways, fire escapes, and similar features may project into a required yard area no more than five (5) feet.

B. Terraces, Patios, Porches and Decks: Provided that they are not covered with a roof, or that the deck or paved area is not more than thirty (30) inches above the average surrounding final grade, or that the deck or paved area is not fully enclosed by a wall or fence over five and one-half (5 1/2) feet in height above the average surrounding finished grade and provided that the paved area or deck is no closer than ten (10) feet from any lot line or public right-of-way line.

**6.2.12 Height Regulations:**

A. General Limitations: All buildings for human occupancy shall be limited to a maximum height of forty (40) feet above the median elevation of the finished grade line of the ground level within twenty (20) feet of the building to the highest point of the roof.

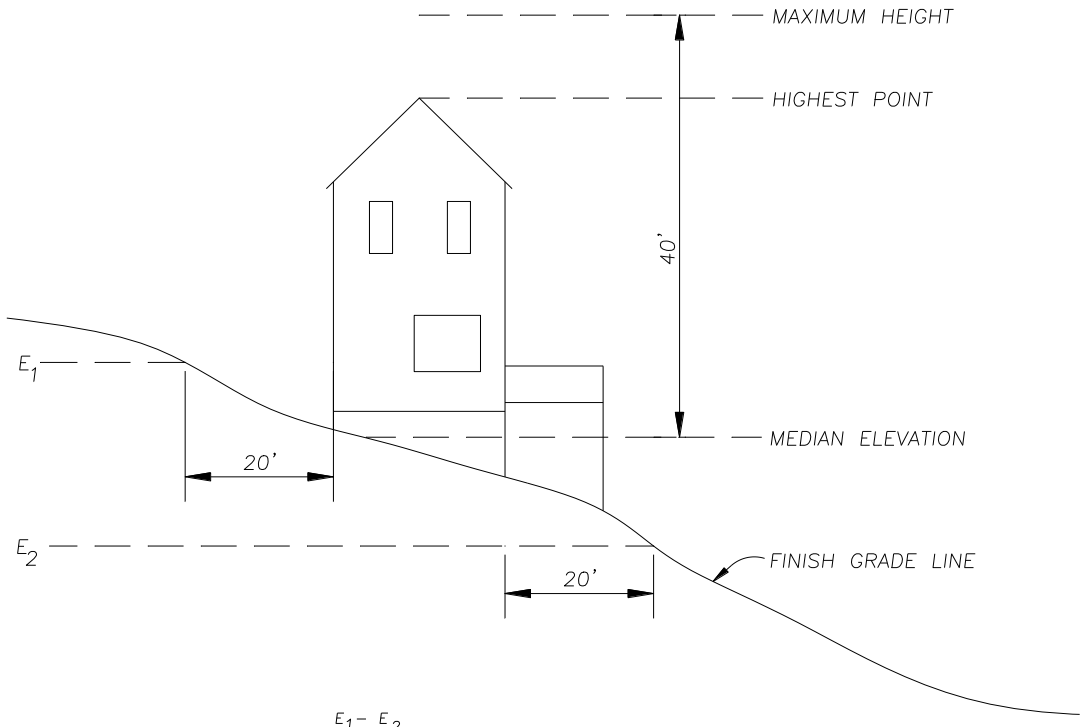



**Figure 6**

B. Permitted Exceptions: The following structural appurtenances shall be permitted to exceed the height limitations, provided that no portion of said appurtenances shall be used for human occupancy. Any structural exception to the height limitation shall be erected only to such height necessary to accomplish it's intended purpose. Structural appurtenances exceeding the maximum height limitations within two (2) miles of a public airport shall not be allowed without

the approval of the Michigan Aeronautics Commission pursuant to R259.292, Michigan Administrative Code.

1. Ornamental structural appurtenances such as church spires, belfries, cupolas, domes, ornamental towers, flag poles, and monuments.

2. Appurtenances necessary to mechanical or structural functions of a building and structures, such as chimney, smoke stacks, water tanks, wind generators and pumps, elevators, stairwell, penthouses, ventilators, bulkheads, cooling towers, barns, grain elevators, and silos; provided that structural appurtenances in the Low Density Residential (R-1) District, that are designed to serve the occupants of the individual residential use, and do not exceed seventy-five (75) feet in height as measured from the ground level at the base of the structure, and that structures for agricultural operations or designed to serve the occupant of a dwelling in the Resource Conservation (RC) or Limited Agricultural (LA) Districts shall not exceed one-hundred (100) feet in height as measured from the ground level at the structure.

3. Antennas, masts, or aerials as an accessory use of a building provided that it does not exceed eighty-five (85) feet in height as measured from ground level at the base of the structure.

**6.2.13 Allocation of Lot Areas:** No portion of a lot shall be used more than once in compliance with the site development requirements contained in *Section 7.7* of this Ordinance.

## SECTION 6.3 FLOOD HAZARD AREAS

### 6.3.1 Intent and Purpose:

A. It is the purpose of this Section to significantly reduce hazards to persons and damage to property as a result of flood conditions in Eaton County, and to comply with the provisions and requirements of the National Flood Insurance Program, as constituted in accord with the National Flood Insurance Act of 1968, as amended, and subsequent enactments and the rules and regulations promulgated in furtherance of this program by the United States Department of Housing and Urban Development, Federal Insurance Administration, as published in the Federal Register, Vol. 41, No. 207, Tuesday, October 26, 1976.

B. Further, the intent of this Section is to protect human life, health and property from the dangerous and damaging effects of flood conditions; to minimize public expenditures for flood control projects, rescue and relief efforts in the aftermath of flooding, repair of flood damaged public facilities and utilities, and the redevelopment of flood damaged homes, neighborhoods, commercial and industrial areas; to prevent private and public economic loss and social disruption as a result of flood conditions; to maintain stable development patterns not subject to the blighting influence of flood damage; to insure that the public has access to information indicating the location of land areas subject to periodic flooding; and to preserve the ability of flood plains to carry and discharge a base flood.

**6.3.2 Flood Hazard Area Delineation:**

A. The flood hazard area shall overlay existing Land Development districts delineated on the official Eaton County District Map. The boundaries of the flood hazard area shall coincide with the boundaries of the areas of special flood hazards (A zones) designated by the Federal Insurance Administration in the Flood Hazard Boundary Maps, which are hereby adopted by reference, and declared to be part of this Ordinance.

B. When Flood Hazard Boundary Maps are not available, the flood hazard area boundaries shall coincide with the Intermediate Region Flood designations as established by the U.S. Army Corps of Engineers, "Flood Plain Information" reports, which are hereby adopted by reference, and declared to be a part of this Ordinance.

**6.3.3 Development Permits:** No new construction, including the erection of structures and the placement of mobile homes, or prefabricated buildings, within a flood hazard area shall occur, except upon issuance of a development permit in accordance with the requirements of *Section 3.5* of this Ordinance and the following standards:

A. Applicable Permits: In addition to other permits required under this Ordinance or applicable state or local stature, the following permits shall have been issued by the appropriate authorities:

1. *Flood Plain Permit, or Letter of No Authority:* From the Land and Water Management Division of the Michigan Department of Environmental Quality (DEQ), pursuant to Part 31, Flood Plain Regulating Authority, of the Natural Resource Environmental Protection Act of 1994, P.A. 451, as amended.

2. *Soil Erosion and Sedimentation Control Permit:* From the Eaton County Drain Commissioner pursuant to Part 91, Act 451 of the Public Acts of 1994, as amended.

3. *Inland Lakes and Streams Act U.S. Army Corps of Engineers 404 Permit:* Administered by the Michigan Department of Environmental Quality pursuant to Part 301. Inland Lakes and Streams Act, of the Natural Resource Environmental Protection Act of 1994, as amended.

4. *Wetlands Protection Permit* pursuant to Part 303 of the Wetlands Protection Act, of the Natural Resource Environmental Protection Act of 1994, as amended.

B. All New Construction and Substantial Improvements of Residential Structures: Shall have the lowest floor, including basement, elevated to provide one (1) foot or more freeboard above the base flood level.

C. Mobile Homes*:* Shall be placed on a lot which is elevated on compacted fill or on pilings so that the lowest floor of the mobile home will be at or above base flood level.

D. All New Construction & Substantial Improvements of Non-Residential Structures: Shall have either:

1. The lowest floor, including basement, elevated to or above the base flood level; or

2. Be constructed such that, below base flood level, together with attendant utility and sanitary facilities, the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall certify that the standards of this subparagraph are satisfied, and that the flood-proofing methods employed are adequate to withstand the flood depths, pressures, velocities, impact, and uplift forces and other factors associated with a base flood in the location of the structure. Such certification shall indicate the elevation to which the structure is flood proofed.

E. Public Utilities and Facilities: Shall be designed, constructed and located to minimize or eliminate flood damage.

F. Access Drive: At least one (1) access drive shall be provided to any building which has a finished grade elevation, which is no lower than sixteen (16) inches below the base flood level, in order to provide for potential evacuation of the building.

**6.3.4 Disclaimer of Liability:** The degree of flood protection required by this Ordinance is considered reasonable for regulatory purposes and is based upon engineering and scientific methods of study. Larger floods may occur on rare occasions. Flood heights may be increased by man made or natural causes, such as ice jams and bridge openings restricted by debris. Approval of the use of land under this Section shall not be considered a guarantee or warranty of safety from flood damage.

This Ordinance does not imply that areas outside the flood hazard area will be free from flood damage. This Ordinance does not create liability on the part of the Eaton County ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** or any officer or employee thereof for any flood damages that result from reliance on this Ordinance or any administrative decision lawfully made thereunder.

## SECTION 6.4 TEMPORARY ASPHALT AND CEMENT MIXING PLANTS

The Development Official shall issue a permit for a Temporary Asphalt or Cement Mixing Plant for a period of time not to exceed one-hundred twenty (120) days during a single calendar year provided that the following conditions are met:

**6.4.1** The asphalt or cement mixing plant is necessary for a project under contract with an agency of a State, County, Township, City or Village or a private development interest.

**6.4.2** The site is located within the Limited Agricultural (LA) and Low Density Residential (R-1) Development District.

**6.4.3** The Plant location is at least one-thousand (1,000) linear feet from the nearest occupied residential building.

**6.4.4** The proposed site is approved by the Site Plan Review Committee pursuant to *Article 8* of this Ordinance.

**6.4.5** A Temporary Asphalt and Cement Mixing Plant that proposes to operate more than one-hundred twenty (120) days shall be considered permanent and will be required to obtain a Conditional Use Permit pursuant to *Article 9* of this Ordinance.

## SECTION 6.5 TEMPORARY HOUSING AND BUILDINGS

No building or structure hereafter erected or moved upon a lot, and which does not meet the requirements of this Ordinance, shall be used or occupied as a dwelling. No garage, barn, or accessory buildings, camping or recreational units, whether fixed or portable, shall be used or occupied as a dwelling for a period of time greater than thirty (30) consecutive days within a one (1) year period. The ~~Land~~ Development ~~Code~~ Official may issue temporary permits subject to the following procedures and limitations:

**6.5.1** **Temporary Housing and Buildings:** Shall not be located within the area required for the front yard setback pursuant to Section 7.7.3 of this Ordinance, and shall comply with Section 7.7 (Table A) except be no closer than ten (10) feet from other buildings or any lot line.

**6.5.2** **Temporary Housing During Construction:** The Development Official may grant thirty (30) day permits to reside in a temporary dwelling such as a travel trailer, motor home, cellar, garage, barn, or accessory structure when the occupant is actively constructing a site-built single family dwelling, provided that the temporary accommodations meet requirements of public health and construction code. These permits shall not exceed three-hundred-sixty (360) consecutive or nonconsecutive days during the construction of the dwelling. The temporary dwelling permit shall not be granted nor extended if construction ceases or the property is found in violation of any Local, State or Federal regulations.

**6.5.3** **Temporary Housing for Emergency Reasons:** When a dwelling is destroyed by fire, collapse, explosion, acts of God, or acts of a public enemy to the extent that it is no longer safe for human occupancy as determined by the Building Official, a Temporary Housing Permit for an approved single-wide mobile home as defined in Section 16.2.2 of this Ordinance shall be issued by the Development ~~Code~~ Official upon the request of the owner at the time of destruction. The Temporary Housing/Emergency Housing permit may be granted for not more than one (1) year provided the destroyed dwelling is located in the Resource Conservation (RC), Limited Agricultural (LA), or Low Density Residential (R-1) Land Development Districts.

**6.5.4** **Temporary Housing for Medical Reasons:** A person(s) may make application to the ~~Land~~ Development ~~Code~~ Official to occupy an approved single wide mobile home (per article 16.2), an accessory dwelling unit (per article 6.2.10) as an accessory use to the principal dwelling, or a travel trailer, fifth wheel trailer or motorhome in the Resource Conservation (RC), Limited Agricultural (LA), and Low Density Residential (R-1) Districts if a medical condition exists such that said occupant requires continued supervision. Such medical conditions shall be attested to by a licensed physician, stating the nature of the disorder and specifying the level and type of continued care needed by

the patient. The ~~Land~~ Development ~~Code~~ Official shall act on all such applications and either grant with certain restrictions or deny the same. A Temporary Housing Permit shall be granted if the Development ~~Code~~ Official finds adequate evidence of the need for supervision, that the proposed location of use will not be detrimental to property in the immediate vicinity, and the Barry-Eaton Health Department has approved the water supply and sanitary facilities. Economic hardship or considerations shall not in itself be grounds for authorization of a temporary housing permit. The temporary housing permit is issued to the party with the medical condition and is for the applicant's use only and not transferable to any other owner or occupant. The Temporary Housing Permit shall state that the temporary house shall be removed within one hundred eighty (180) days after the recovery, relocation or death of the applicant. Temporary houses shall be located within two-hundred (200) linear feet of the dwelling occupied by the person providing the continued supervision. The decision of the ~~Land~~ Development ~~Code~~ Official is subject to appeal under the provision of Section 4.6.1 of this Ordinance.

**6.5.5** **Temporary Housing:** The owner of a property may make application to the ~~Land~~ Development ~~Code~~ Official to allow for occupancy of a recreational unit (as defined in Section 5.3.18 R) in the Resource Conservation (RC) or Limited Agricultural (LA) Zoning Districts. There must be a primary dwelling located on the property and the primary dwelling driveway must be used (no new driveways may be constructed). Approval from the Barry Eaton District Health Department for the water supply and sanitary facilities must also be obtained. A Temporary Housing Permit shall not exceed four (4) months in a one (1) year period. The permit may be applied for annually.

**6.5.6** **Temporary Buildings & Storage Containers:** Mobile offices, tool sheds, storage trailers and storage containers, shall be permitted during the time of actual construction, provided they are located pursuant to *Section 6.2.10* of this Ordinance, and are in compliance with the Barry-Eaton District Health Department Sanitary Code. Said structures and storage containers shall be removed within twelve (12) working days after the completion or abandonment of construction work on the property.

## SECTION 6.6 ADMINISTRATIVE VARIANCES

**Procedure and Criteria:** The Development ~~Code~~ Official is hereby authorized to grant administrative variance to the provisions of this Ordinance in an amount not to exceed a 10% variation from the site development standards, parking and loading requirements, advertising structure requirements, and the specific provisions and requirements contained in *Article 14* of this Ordinance. Upon receipt of a request for an administrative variance, the Development ~~Code~~ Official shall file notice that the request has been received and the date the decision will be made in accordance with Public Act 110 of 2006, as amended. The Development ~~Code~~ Official shall also prepare a report of the situation and all factual data concerning the site in terms of the criteria stated in *Section 4.6.3 A through E* of this Ordinance. The Development ~~Code~~ Official shall determine whether or not the request meets the above stated criteria and shall approve or deny the request exclusively on that basis. Decisions rendered by the Development ~~Code~~ Official shall be in the form of a letter which states specifically a determination on each of the items contained in *Section 4.6.3 A through E* of this Ordinance with reference to the above

mentioned report. The decision of the Development ~~Code~~ Official may be appealed to the Board of Appeals pursuant to *Section 4.6.3* of this Ordinance.

## SECTION 6.7 APPROVED PROPERTY DIVISION

Any real property which is divided or lots created or adjusted after the effective date of this Ordinance must comply with the following:

**6.7.1 Property divided (or adjusted) after effective date of this Ordinance:** Must be reviewed and approved by the Local Township Unit and meet requirements of this ordinance prior to obtaining a building or development permit. Before such an approval can be granted, the Local Township Unit must be provided with the following information:

A. A completed Application for Proposed Land Divisions.

B. A boundary line survey and legal description of the proposed land divisions completed by a Licensed Land Surveyor for **all** parcels less than forty (40) acres or a quarter (1/4) quarter (1/4) section containing not less than thirty (30) acres or an approved platted subdivision plan or an approved condominium subdivision plan.

**6.7.2 Time Required for Review:** The Local Township Unit shall have a **maximum** of forty-five (45) days to review the proposed land division in compliance with the Michigan Land Division Act and Eaton County Land Development Code.

**6.7.3 Approval of Parcel:** Any land division which has not been approved by the Local Township Unit, is not part of an approved platted subdivision, or has not met approvals required for a condominium subdivision, will not be issued any portion of a building or development permit. Property divisions recorded with the Eaton County Register of Deeds after December 31 of each year, will not appear on the Township tax roll until the subsequent tax year.

**6.7.4 Requirements for Building Permits:** Prior to the issuance of any building or development permit for construction on a parcel of land divided, created, or adjusted after the effective date of this Ordinance, the following items must be provided to the Eaton County ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** to obtain a zoning referral:

A. The Local Township Unit must review and approve the land division, platted subdivision, or site condominium subdivision.

B. A Tax Roll Number: Must be assigned to the property division by the Eaton County Equalization & Property Description Department.

C. A Recorded Boundary Line Survey & Legal Description: Of the proposed land division as specified in Subsection 6.7.1 (B) of this Ordinance.

D. A recorded copy of a document showing the applicant's ownership interest in the property (warranty deed, quick-claim deed, land contract, etc.)

E. The lot boundary lines must be established in the field with stakes by a Licensed Land Surveyor.

**6.7.5 Effective Date:** This Ordinance took place effective 4/22/96 with amendments since then that took immediate effect upon their date of approval by the State of Michigan. (11/1/04)

## SECTION 6.8 CONDOMINIUM SUBDIVISION

It is the purpose of this section to regulate projects that divide real property under a contractual arrangement known as a condominium. All condominium subdivisions shall conform to the requirements of this Ordinance, all other applicable regulations, and the Condominium Act (PA 59 of 1978, as amended). Condominium Subdivisions must follow the regulations of this section as follows:

### 6.8.1 General Requirements

A. Each condominium unit consisting of vacant land shall be considered the equivalent of a "lot" as defined in the Eaton County Zoning Ordinance and shall comply with applicable regulations for the zoning district. The "lot" area is to be used when determining site development standards (Table A Section 7.7) and other requirements set forth in this Ordinance.

B. Single Family Detached Units: In the case of a condominium project in which the condominium units are intended for detached single-family residential purposes, not more than one (1) single-family dwelling unit and permitted accessory structure shall be proposed or constructed on a condominium "lot".

C. Duplex and Multiple Residential Units: All condominium buildings and units created by the construction of multiple or attached residential units containing individually owned condominium units must comply with all requirements of this Ordinance.

D. A site plan review for the establishment of a condominium per PA 59 of 1978, as amended, shall be evaluated for approval by the Eaton County Site Plan Review Committee.

**6.8.2 Review Requirements**: A condominium subdivision shall be subject to a site plan review and its requirements as specified in Section 8.4 and 8.5, and the following:

A. A developer of a condominium subdivision may submit a conceptual site plan for review by the Community Development Director, who may informally review the plan for general compliance with County Ordinance requirements. Such review is intended to allow the developer to receive direction and recommendations from County staff regarding unit or lot sizes, orientation, street layout, and other conceptual plan issues.

B. Request for a site plan review for a condominium subdivision shall also include a condominium subdivision plan as defined in Section 66 of PA 59 of 1978, as amended.

C. Any proposed changes to the approved condominium subdivision plan shall be subject to review and approval by the Site Plan Review Committee.

# ARTICLE 7
# LAND DEVELOPMENT DISTRICTS

## SECTION 7.1 ESTABLISHMENT OF DISTRICTS

For the purposes of this Ordinance, the portions of Eaton County lying outside the limits of cities and villages are hereby divided into the following districts:

| 7.1.1 | District Name | District Symbol |
|---|---|---|
| A. | **Resource Conservation** | RC |
| B. | **Limited Agricultural** | LA |
| C. | **Low Density Residential** | R-1 |
| D. | **Medium Density Residential** | R-2 |
| E. | **High Density Residential** | R-3 |
| F. | **Local Business** | C-1 |
| G. | **General Business** | C-2 |
| H. | **Industrial District** | I |

**7.1.2 Official District Map:** The boundaries of each district are defined and established as depicted on a map entitled "Official Land Development District Map of Eaton County, Michigan", which is hereby incorporated by reference and made an integral part of this Ordinance, and which, with explanatory matter thereon, shall be published as a part of this Section of this Ordinance.

A. The Map: The Official Land Development District Map of Eaton County, Michigan and subsequent amendments thereof shall bear the signature of the Chairperson of the Eaton County Board of Commissioners and be certified by the Eaton County Clerk.

B. Amendments: Amendments made to the district boundaries, designations, or other matter depicted on the Official Land Development District Map shall be made within five (5) working days after the effective date of the amendment. Each amendment shall be accompanied by a reference number of the district map which shall refer to the official action of the Eaton County Board of Commissioners.

C. Maintenance: The original of the Official Land Development District Map shall be maintained and kept up to date in the Office of the Clerk of Eaton County. In the event that the Official District Map becomes damaged, destroyed, lost, or difficult to interpret, the County Board of Commissioners may adopt by Ordinance, a new Official District Map. Said new District Map shall not have the effect of amending the prior Official District Map of this Ordinance and shall bear identifying signatures pursuant to *7.1.2A* above. Unless the prior Official District Map has been lost or totally destroyed, said map or any parts thereof remaining

shall be preserved together with all available records pertaining to its adoption or amendment.

**7.1.3 Rules for interpretation of the Official District Map:** Where uncertainty exists as to the boundaries of the districts as shown on the Official District Map, the following rules shall govern:

A. A boundary indicated as approximately following **the centerline of a highway, street, alley, or easement** shall be construed as following such centerline.

B. A boundary indicated as approximately following a **recorded lot line bounding a parcel** shall be construed as following such line.

C. A boundary indicated as approximately following **the municipal boundary line of a city, village, or township** shall be construed as following such line.

D. A boundary indicated as following a **railroad right-of-way line** shall be construed as following the centerline of that right-of-way.

E. A boundary indicated as following a **shoreline** shall be construed as following such shoreline, and in the event of a naturally occurring change in a shoreline, the boundary shall be construed as following the actual shoreline.

F. A boundary indicated as following the centerline of a **stream, river, canal, lake or other body of water** shall be construed as following such centerline.

G. A boundary indicated as **parallel to, or an extension of, a feature** indicated in *Section 7.1.3A* through *7.1.3F* shall be so construed.

H. A **distance not specifically indicated on the Official District Map** shall be determined by the scale of the map to the nearest foot.

I. Where a **natural or man-made feature** existing on the ground is at variance with that shown on the Official District Map, or in any other circumstances not covered by *Section 7.1.3A* through *7.1.3H*, the Board of Appeals shall interpret the location of the District Boundary.

**7.1.4 Scope of Provision:** Except as may otherwise be provided in this Ordinance, every building and structure erected, every use of any lot, building, or structure established, every structural alteration or relocation of any existing building or structure occurring, and every enlargement of, or addition to, an existing use, building and structure occurring after the effective date of this Ordinance shall be subject to all regulations of this Ordinance which are applicable in the District in which such use, building, or structure is located.

A. Uses Permitted by Right: All land development specifically listed under the heading, "Uses Permitted by Right," in the respective district descriptions contained in *Article 7* of this Ordinance shall be allowed when found to be in accordance with all provisions of this Ordinance and all other applicable laws regulations or codes having jurisdiction over the proposed use of land, or upon order of the Eaton County Board of Appeals.

B. Uses Permitted by Site Plan Approval: All land development specifically listed under the heading, "Uses Permitted by Site Plan Approval," in the respective

district descriptions contained in *Article 7* of this Ordinance shall be allowed only upon approval of the Site Plan pursuant to *Section 8.6* of this Ordinance or upon order of the Eaton County Board of Appeals.

C. Uses Permitted by Issuance of a Conditional Use Permit: All land development specifically listed under the heading of, "Uses Permitted by Conditional Use Permit," in the respective district descriptions contained in *Article 7* of this Ordinance, shall be allowed upon approval of the Eaton County Planning Commission after a duly advertised public hearing in accordance with *Article 9* of this Ordinance or upon order of the Eaton County Board of Appeals.

D. Uses Not Specifically Mentioned: Any use of land or development activity not specifically mentioned in this Ordinance shall be classified upon appeal or by request of the Community Development Department by the Eaton County Board of Appeals pursuant to *Section 4.6.2* of this Ordinance.

E. Uses Existing Before Ordinance: Any use of land or development activity existing on the effective date of this Ordinance may continue subject to the provisions contained in *Article 12* of this Ordinance.

## SECTION 7.2 RESOURCE CONSERVATION DISTRICT (RC)

**7.2.1 Intent and Purpose:** This district is intended to provide for the limited need to preserve historic places and structures, while providing for their adaptive use, to protect environmentally sensitive areas from improper development, and to provide for conservation areas, parks, and for property which is maintained in a manner consistent with those statutes referred to in *Section 3.5.3* of this Ordinance. This district is further intended to preserve, enhance, and stabilize existing areas within the county which are currently used predominately for general farming and livestock production and are best suited for agricultural use because of soil characteristics, location and parcel size. The purpose of this district is to conserve the expenditure of public funds for improvements and services, to meet the needs of the State's citizens for food, fiber, and other natural resources and to preserve the essential characteristics and economic value of the district.

**7.2.2 Uses Permitted by Right:**

A. **Accessory Use** as provided in *Subsection 6.2.10* of this Ordinance.

B. **Customary Agricultural Operation** as defined in *Article 5* of this Ordinance.

C. **Manufactured Home Dwelling** as provided in *Section 16.3* of this Ordinance.

D. **Public and Private Non-Commercial Park** as defined in *Article 5* of this Ordinance.

**7.2.3 Uses Permitted by Site Plan Approval pursuant to *Article 8* of this Ordinance:**

A. **Cemetery** as provided in *Section 14.3* of this Ordinance.

B. **Government Facility** as provided in *Section 14.10* of this Ordinance.

C. **Parks and Recreational Facilities** as defined in *Article 5* of this Ordinance.

D. **Single-Family Dwelling,** as defined in *Article 5* of this Ordinance.

E. **Uses similar** to the above uses permitted by to Site Plan Approval.

**7.2.4 Uses Permitted by Conditional Use Permit pursuant to *Article 9* of this Ordinance:**

A. **Agricultural Business** as provided in *Section 14.1* of this Ordinance.

B. **Archery and Gun Range** as provided in *Section 14.34* of this Ordinance.

C. **Commercial Recreation Facility** as defined in *Article 5* of this Ordinance.

D. **Community Service Facility** as provided in *Section 14.5* of this Ordinance.

E. **Educational Institution** as provided in *Section 14.10* of this Ordinance.

F. **Golf Course and Country Club** as provided in *Section 14.11* of this Ordinance.

G. **Gunsmithing** as defined in *Article 5* of this Ordinance.

H. **Home Business** as provided in *Section 14.13* of this Ordinance.

J. **Nurseries and Greenhouses** as provided in *Section 14.1* of this Ordinance.

K. **Private Airport** as provided in *Section 14.20* of this Ordinance.

L. **Religious Institutions** as provided in *Section 14.22* of this Ordinance.

M. **Uses similar** to the above uses permitted by Conditional Use Permit.

**7.2.5 Site Development Requirements:** All lots, buildings or structures created after the effective date of this Ordinance shall conform to the site development standards set forth in *Table A, Section 7.7* of this Ordinance, except as modified by *Article 6*, General Provisions; *Article 14, Specific Provisions and Requirements; Article 15, Planned Unit Developments; or as varied pursuant to Article 4, Board of Appeals*.

## SECTION 7.3 LIMITED AGRICULTURAL DISTRICT (LA)

**7.3.1 Intent and Purpose:** This district is primarily intended for agricultural operations and the limited development of very low density single-family dwellings. Such areas are not well suited for the development of residential neighborhoods nor are they expected to be provided with urban type public services.

**7.3.2 Uses Permitted by Right:**

A. **Accessory Use** as provided in *Subsection 6.2.10* of this Ordinance.

B. **Customary Agricultural Operation** as defined in *Article 5* of this Ordinance.

C. **Gunsmithing** as defined in *Article 5* of this Ordinance.

D. **Home Occupation** as provided in *Section 14.14* of this Ordinance.

E. **Home Office** as provided in *Section 14.35* of this Ordinance.

F. **Manufactured Home Dwelling** as provided in *Section 16.3* of this Ordinance.

G. **Single-Family Dwelling,** as defined in *Article 5* of this Ordinance.

H. **Foster Care Facility** as provided in *Section 14.4 A-C (and D if 6 or fewer residents)* of this Ordinance.

I. **Day Care Facilities**, as defined in Article 5, Section 5.3.4 D 1. (if 6 or fewer children of this Ordinance.

J. **Uses similar** to the above uses permitted by right.

**7.3.3 Uses Permitted by Site Plan Approval pursuant to *Article 8* of this Ordinance:**

A. **Community Service Facility** as provided in *Section 14.5* of this Ordinance.

B. **Parks and Recreational Facilities** as defined in *Article 5* of this Ordinance.

C. **Long-Term Care Facilities** as provided in Section 14.16 B (if 6 or fewer bedrooms and 6 or fewer residents)

**D. Wind Energy System** as provided in Section 14.41 of this Ordinance

E. **Uses similar** to the above uses permitted by Site Plan Approval.

**7.3.4 Uses Permitted by Conditional Use Permit pursuant to *Article 9* of this Ordinance:**

A. **Agricultural Business** as provided in *Section 14.1* of this Ordinance.

B. **Archery and Gun Range** as provided in *Section 14.34* of this Ordinance.

C. **Cemetery** as provided for in *Section 14.3* of this Ordinance.

D. **Commercial Recreation Facility** as defined in *Article 5* of this Ordinance.

E. **Construction Contractors Establishment** and storing of heavy equipment as provided in *Section 14.29* of this Ordinance.

F. **Distressed Vehicle Transporter** as provided in *Section 14.24* of this Ordinance.

G. **Educational Institutions**, including public and private schools, as provided in *Section 14.10* of this Ordinance.

H. **Foster Care Facility** as provided in *Section 14.4 D (if 7-12 residents) and E* of this Ordinance.

I. **Golf Course and Country Club** as provided in *Section 14.11* of this Ordinance.

J. **Government Facility** as provided in *Section 14.10* of this Ordinance.

K. **Home Business** as provided in *Section 14.13* of this Ordinance.

L. **Nursery and Greenhouse** as provided in *Section 14.1* of this Ordinance.

M. **Open Air Business and Storage** as provided in *Section 14.33* of this Ordinance.

N. **Planned Unit Development** (PUD) as provided in *Article 15* of this Ordinance.

O. **Private Airport** as provided in *Section 14.20* of this Ordinance.

P. **Public Airport and Heliport** as provided in *Section 14.21* of this Ordinance.

Q. **Communication Towers and Antennas**, as provided in *Section 14.27* of this Ordinance

R. **Religious Institutions** as provided for in *Section 14.22* of this Ordinance.

S. **Rental Storage Buildings** as provided in *Section 14.26* of this Ordinance.

T. **Rooming and Boarding Dwellings** as provided in *Section 14.30* of this Ordinance.

U. **Surface Mining** as provided in *Section 14.25* of this Ordinance.

V. **Veterinary Hospital or Clinic and Kennel** as provided in *Section 14.1* of this Ordinance.

W. **Agricultural Migrant Labor Housing** as provided in Section 14.36 of this Ordinance.

X. **Light Automotive, Small Engine Repair & Automotive Body Shop** as provided in Section 14.37 of this Ordinance.

Y. **Artisan's Workshop** as provided in Section 14.38 of this Ordinance.

Z. **Solar Energy Systems, Large or Medium** as provided in Section 14.39 of this Ordinance.

AA. **Wind Energy Systems**, Utility-Scale, as provided in Section 14.41 of this Ordinance.

BB. **Uses similar** to the above uses permitted by Conditional Use Permit.

**7.3.5 Site Development Requirements:** All lots, buildings or structures created after the effective date of this Ordinance shall conform to the site development standards set forth in *Table A, Section 7.7* of this Ordinance, except as modified by *Article 6, General Provisions; Article 14, Specific Provisions and Requirements; Article 15, Planned Unit Developments*; or as varied pursuant to *Article 4, Board of Appeals.*

## SECTION 7.4 RESIDENTIAL DISTRICTS

**7.4.1 Intent and Purpose:** It is the intent of the districts provided for in *Section 7.4* to provide the development of neighborhoods with all types of residential development in appropriate densities located in portions of the County served by streets, adequate public and private utilities, and located within relatively close proximity to schools, shopping, recreational facilities, and employment centers.

## 7.4A LOW DENSITY RESIDENTIAL DISTRICT (R-1)

**7.4A.1 Intent and Purpose:** The Low Density Residential (R-1) District is designed to provide for one (1) family, low density dwelling sites and residentially related uses in keeping with the adopted Eaton County Comprehensive Development Plan for residential development in Eaton County. The uses permitted by right and as conditional uses are intended to promote a compatible arrangement of land uses for homes, with the intent to keep neighborhoods quiet and free of unrelated traffic, and other noises. **The maximum density in the R-1 District shall not exceed three (3.0) units per acre**.

**7.4A.2. Uses Permitted by Right:** No building or land shall be used, and no building shall be erected except for one or more of the following specified uses, unless otherwise provided for in this Ordinance:

A. **Accessory Buildings and Accessory Uses** customarily incidental to the dwelling uses, such as the following:

1. A private garage having not more than eight hundred and fifty (850) square feet of usable floor area, to be used for the storage of noncommercial motor vehicles and not more than one (1) commercial vehicle of not more than one-ton capacity; there shall be no public shop or services in connection therewith. Provided, however, a parcel in excess of one (1) acre may be permitted by the Community Development Director to have a larger accessory building in accord with the following table:

| **Parcel Size** | **Maximum Possible Building Area** |
|---|---|
| 1.01 -2 Acres (no more than one (1) accessory building) | 1,200 square feet* |
| 2.01-4 Acres | 1,600 square feet* |
| 4.01 Acres or more | No restrictions |

* This is the <u>maximum</u> possible, a lesser building area may be required if necessary to preserve the character of the neighborhood.

2. The concealed storage or unconcealed storage of one unoccupied trailer, camper, recreational vehicle, semi-tractor and/or boat and trailer which is the property of the principal occupants of the principal building. Such vehicles shall be operative and duly licensed to remain on the property for more than three (3) months. Such storage shall not pose a visual or physical nuisance to the surrounding area.

B. **Manufactured Home Dwellings** as provided in *Section 16.3* of this Ordinance.

C. **Single Family Dwellings,** as defined in *Article 5* of this Ordinance.

D. **Foster Care Facility** as provided in *Section 14.4 A-C (and D if 6 or fewer residents)* of this Ordinance.

E. **Animals – Recreational** as provided in *Subsection 7.4A.6* of this Ordinance.

F. **Day Care Facilities**, as defined in Article 5, Section 5.3.4 D 1. (if 6 or fewer children of this Ordinance.

G. **Uses similar** to the above uses permitted by right.

**7.4A.3 Uses Permitted by Site Plan Review pursuant to *Article 8* of this Ordinance:**

A. **Community Service Facility** as provided in *Section 14.5* of this Ordinance.

B. **Duplex Dwellings – Conversion Only** as provided in *Section 14.9* of this Ordinance.

C. **Home Occupation** as provided in *Section 14.14* of this Ordinance.

D. **Home Office** as provided in *Section 14.35* of this Ordinance.

**7.4A.4 Uses Permitted by Conditional Use Permit pursuant to *Article 9* of this Ordinance:**

A. **Cemeteries** as provided in *Section 14.3* of this Ordinance.

B. **Duplex Dwellings** as provided in *Section 14.9* of this Ordinance.

C. **Educational Institution** including private and public schools, as provided in *Section 14.10* of this Ordinance.

D. **Foster Care Facility** as provided in *Section 14.4 D (if 7-12 residents) and E* of this Ordinance.

E. **Golf Course and Country Club** as provided in *Section 14.11* of this Ordinance.

F. **Government Facility** as provided in *Section 14.10* of this Ordinance.

G. **Gunsmithing** as defined in *Article 5* of this Ordinance.

H. **Parks and Recreational Facilities** as defined in *Article 5* of this Ordinance.

I. **Planned Unit Development** (PUD) as provided in *Article 15* of this Ordinance.

J. **Religious Institutions** as provided in *Section 14.22* of this Ordinance.

K. **Rooming and Boarding Dwellings** as provided in *Section 14.30* of this Ordinance.

L. **Uses similar** to the above uses permitted by Conditional Use Permit.

**7.4A.5 Site Development Requirements:** All lots, buildings or structures created after the effective date of this Ordinance shall conform to the site development standards set forth in Table A, *Section 7.7* of this Ordinance, except as modified by *Article 6, General Provisions*; [NOTE: refer to *Article 10, Section 10.2.5, Uses of Parking Area, Item C]*

*Article 14, Specific Provisions and Requirements; Article 15, Planned Unit Development;* or as varied pursuant to *Article 4, Board of Appeals*

**7.4A.6 Animals: Livestock, exotic and non-domesticated**

A. Minimum Parcel Size: Parcel size shall be a minimum of two (2) acres with a minimum additional one (1) acre for each animal over two (2). Exception: Animals which are born on the site are permitted to remain for up to six (6) months.

B. Suitability: The land is environmentally capable of accommodating the number and type of animals proposed.

C. Setback Requirements: Designated animal areas and animal waste spreading or storing areas must be a minimum of one-hundred (100) feet from all property lines and all road rights-of-way.

D. Retention of Neighborhood Character: The design and location of the buildings, fences, and other structures is compatible with adjacent lands and the character of the area. All animal activities which adversely and permanently alter the character of the neighborhood are prohibited.

E. Additional Requirements: Measures must be taken to ensure that all animal by-products, noxious odors, noises and all other nuisance factors created by the raising, caring, keeping of animals must be contained within the boundaries of the property i.e., additional visual screening, additional noise inhibitors, air filtration systems, etc.

## 7.4B MODERATE DENSITY RESIDENTIAL DISTRICT (R-2)

**7.4B.1 Intent and Purpose:** The Moderate Density Residential (R-2) District is intended to provide an environment suitable for families who typically will have children, but will be of smaller family size than those families living in the R-1 Residential Districts. To achieve this goal uses are primarily limited to moderately low density one (1) and two (2) family dwelling units, plus certain residentially related uses designed to provide a satisfactory neighborhood environment. The District also may serve as a zone of transition between higher density residential districts or nonresidential districts, and low density single family residential districts, and along major thoroughfares. **The maximum density in the R-2 District shall not exceed five (5.0) units per acre.**

**7.4B.2 Uses Permitted by Right:** No building or land shall be used, and no building shall be erected except for one or more of the following specified uses, unless otherwise provided for in this Ordinance:

A. **Accessory Buildings and Accessory Uses** customarily incidental to the above permitted uses such as the following:

1. Not more than one (1) detached private garage or accessory building having not more than eight hundred and fifty (850) square feet of usable floor area, to be used for the storage of noncommercial motor vehicles and

not more than one (1) commercial vehicle of not more than one-ton capacity; there shall be no public shop or services in connection therewith.

2. The concealed storage of one unoccupied trailer, camper, recreational vehicle, semi-tractor and/or boat and trailer which is the property of the principal occupants of the principal building. Such vehicles shall be operative and duly licensed to remain on the property for more than three (3) months. Such storage shall not pose a visual or physical nuisance to the surrounding area.

B. **Duplex Dwellings** as provided in *Section 14.9* of this Ordinance.

C. **Manufactured Home Dwellings** as provided in *Section 16.3* of this Ordinance.

D. **Single-Family Dwellings**, as defined in *Article 5* of this Ordinance.

E. **Foster Care Facility** as provided in *Section 14.4 A-C (and D if 6 or fewer residents)* of this Ordinance.

F. **Day Care Facilities**, as defined in Article 5, Section 5.3.4 D 1. (if 6 or fewer children of this Ordinance.

G. **Uses similar** to the above uses permitted by right.

**7.4B.3 Uses Permitted by Conditional Use Permit pursuant to *Article 9* of this Ordinance:**

A. **Cemeteries** as provided in *Section 14.3* of this Ordinance.

B. **Community Service Facility** as provided in *Section 14.5* of this Ordinance.

C. **Educational Institution,** including public and private schools, as provided in *Section 14.10* of this Ordinance.

D. **Foster Care Facility** as provided in *Section 14.4 D (if 7-12 residents) and E* of this Ordinance.

E. **Golf Course and Country Club** as provided in *Section 14.11* of this Ordinance.

F. **Government Facility** as provided in *Section 14.10* of this Ordinance.

G. **Home Occupation** as provided in *Section 14.14* of this Ordinance.

H. **Home Office** as provided in *Section 14.35* of this Ordinance.

I. **Parks and Recreational Facilities** as defined in *Article 5* of this Ordinance.

J. **Planned Unit Development** (PUD) as provided in *Article 15* of this Ordinance.

K. **Religious Institutions** as provided in *Section 14.22* of this Ordinance.

L. **Rooming and Boarding Dwellings** as provided in *Section 14.30* of this Ordinance.

M. **Uses similar** to the above uses permitted by Conditional Use Permit.

**7.4B.4 Site Development Requirements:** All lots, buildings or structures created after the effective date of this Ordinance shall conform to the site development standards set forth in Table A, *Section 7.7* of this Ordinance, except as modified by *Article 6, General Provisions; [NOTE: refer to Article 10, Section 10.2.5, Uses of Parking Area, Item C]*

*Article 14, Specific Provisions and Requirements; Article 15, Planned Unit Development;* or as varied pursuant to *Article 4, Board of Appeals.*

## 7.4C HIGH DENSITY RESIDENTIAL DISTRICT (R-3)

**7.4C.1 Purpose and Intent.** The High Density Residential (R-3) District is designed to provide sites for multiple dwelling structures with height restrictions compatible with single family residential districts, to serve the needs for the apartment type of unit, or a condominium type of unit, in an otherwise single family residential community, and to provide zones of transition. The R-3 District is intended generally for the development of a planned complex of buildings on larger contiguous parcels of land. **The maximum density in the R-3 District shall not exceed eight (8.0) units per acre.**

**7.4C.2 Uses Permitted by Right**

No building or land shall be used, and no building shall be erected except for one or more of the following specified uses, unless otherwise provided for in this Ordinance:

A. **Accessory Buildings and Accessory Uses** customarily incidental to the above permitted uses such as the following:

1. Not more than one (1) detached private garage or accessory building having not more than eight hundred and fifty (850) square feet of usable floor area, to be used for the storage of noncommercial motor vehicles and not more than one (1) commercial vehicle of not more than one-ton capacity; there shall be no public shop or services in connection therewith.

2. The concealed storage of one unoccupied trailer, camper, recreational vehicle, semi-tractor and/or boat and trailer which is the property of the principal occupants of the principal building. Such vehicles shall be operative and duly licensed to remain on the property for more than three (3) months. Such storage shall not pose a visual or physical nuisance to the surrounding area.

B. **Duplex Dwellings** as provided in *Section 14.9* of this Ordinance.

C. **Multiple Family Dwellings** as provided in *Section 14.8* of this Ordinance.

D. **Manufactured Home Dwellings** as provided in *Section 16.3* of this Ordinance.

E. **Single-Family Dwelling,** as defined in *Article 5* of this Ordinance.

F. **Foster Care Facility** as provided in *Section 14.4 A-C (and D if 6 or fewer residents)* of this Ordinance.

G. **Day Care Facilities**, as defined in Article 5, Section 5.3.4 D 1. (if 6 or fewer children of this Ordinance.

H. **Uses similar** to the above uses permitted by right.

**7.4C.3 Uses Permitted by Conditional Use Permit pursuant to *Article 9* of this Ordinance:**

A. **Cemeteries** as provided in *Section 14.3* of this Ordinance.

B. **Community Service facility** as provided in *Section 14.5* of this Ordinance.

C. **Convenience Commercial Establishment** as provided in *Section 14.6* of this Ordinance.

D. **Educational Institution** as provided in *Section 14.10* of this Ordinance.

E. **Foster Care Facility** as provided in *Section 14.4 D (if 7-12 residents) and E* of this Ordinance.

F. **Golf Course and Country Club** as provided in *Section 14.11* of this Ordinance.

G. **Government Facility** as provided in *Section 14.10* of this Ordinance.

H. **Home Occupation** as provided in *Section 14.14* of this Ordinance.

I. **Home Office** as provided in *Section 14.35* of this Ordinance.

J. **Hospital and Long-Term Care Facilities** as provided in *Section 14.16* of this Ordinance.

K. **Mobile Home Developments** as provided in *Section 14.18* of this Ordinance.

L. **Parks and Recreational Facilities** as defined in *Article 5* of this Ordinance.

M. **Planned Unit Development** (PUD) as provided in *Article 15* of this Ordinance.

N. **Religious Institutions** as provided in *Section 14.22* of this Ordinance.

O. **Rental Storage Buildings** as provided in *Section 14.26* of this Ordinance.

P. **Rooming and Boarding Dwellings** as provided in *Section 14.30* of this Ordinance.

Q. **Uses similar** to the above uses permitted by Conditional Use Permit.

**7.4C.4 Site Development Requirements:** All lots, buildings or structures created after the effective date of this Ordinance shall conform to the site development standards set forth in *Table A, Section 7.7* of this Ordinance, except as modified by *Article 6, General Provisions; [NOTE: refer to Article 10, Section 10.2.5, Uses of Parking Area, Item C] Article 14, Specific Provisions and Requirements; Article 15, Planned Unit Development;* or as varied pursuant to *Article 4, Board of Appeals.*

## SECTION 7.5 COMMERCIAL DISTRICTS

**7.5.1 Intent and Purpose:** It is the intent of the Local Business District (C-1) and the Regional Commercial District (C-2) to meet the commercial and convenience shopping needs of neighborhoods and the larger region, respectively. These districts provide for a variety of business and office uses in clustered functional centers located near major arterial streets in a limited number of locations in order to avoid strip and spot commercial development, lessen congestion on public streets, protect adjacent non-commercial land uses, and to promote the economic viability of commercial uses.

## 7.5A. LOCAL BUSINESS DISTRICT (C-1)

**7.5A.1 Intent and Purpose:** The Local Business (C-1) District is intended to serve the limited convenience shopping needs of the immediate neighboring area, and is intended to permit light, non-nuisance types of commercial activity that would have slight impact on the abutting area. In addition, the service areas are such that the permitted uses are not of a community wide or regional nature.

**7.5A.2 Uses Permitted by Right:** No building or land shall be used, and no building or land shall be erected except for one or more of the following specified uses, unless otherwise provided for in this Ordinance:

A. **Accessory Uses** as provided in *Subsection 6.2.10* of this Ordinance.

B. **Business Service Establishment** as defined in *Article 5* of this Ordinance.

C. **Convenience Commercial Establishment** as provided in *Section 14.6* of this Ordinance.

D. **Financial Institution** as defined in *Article 5* of this Ordinance, without drive through service.

E. **General Retail Sales Establishment** as defined in *Article 5* of this Ordinance.

F. **Government Facility** as provided in *Section 14.10* of this Ordinance.

G. **Personal Service Establishment** as defined in *Article 5* of this Ordinance.

H. **Religious Institutions** as provided in *Section 14.22* of this Ordinance.

I. **Uses similar** to the above uses permitted by right.

**7.5A.3 Uses Permitted by Site Plan Approval pursuant to *Article 8* of this Ordinance:**

A. **Commercial Recreation Facility** as defined in *Article 5* of this Ordinance.

B. **Educational Institutional**, including public and private schools, as provided in *Section 14.10* of this Ordinance.

C. **Financial Institution** as defined in *Article 5* of this Ordinance, with drive through service.

D. **Funeral Home and Mortuary** as defined in *Article 5* of this Ordinance.

E. **Office Building** as defined in *Article 5* of this Ordinance.

F. **Restaurants** as defined in *Article 5* of this Ordinance, excluding those with drive through service.

G. **Foster Care Facility** as provided in *Section 14.4* of this Ordinance.

H. **Veterinary Hospital, Clinic, and Kennel** as provided in *Section 14.1* of this Ordinance.

I. **Rental Storage Buildings** as provided in Section 14.26 of this Ordinance.

J. **Light Automotive, Small Engine Repair & Automotive Body Shop** as provided in Section 14.37 of this Ordinance.

K. **Hospital and Long-term Care Facilities** as provided in Section 14.16 of this Ordinance.

L. **Uses similar** to the uses herein permitted by Site Plan Approval.

**7.5A.4 Uses Permitted by Conditional Use Permit pursuant to *Article 9* of this Ordinance:**

A. **Community Service Facility** as provided in *Section 14.5* of this Ordinance.

B. **Customary Agricultural Operation** as defined in *Article 5* of this Ordinance if compatible with surrounding uses.

C. **Motor Fuel Service Station** as provided in *Section 14.19* of this Ordinance.

D. **Parks and Recreational Facilities** as defined in *Article 5* of this Ordinance.

E. **Planned Unit Development** (PUD) as provided in *Article 15* of this Ordinance.

F. **Communication Towers and Antennas** as provided in *Section 14.27* of this Ordinance.

G. **Restaurants** as defined in *Article 5* of this Ordinance, <u>including</u> those with drive through service.

H. **Indoor Video Archery Hunting Range** as provided in Section 14.34 of this Ordinance.

I. **Construction Contractors Establishment and Storage of Heavy Equipment** as provided in Section 14.29 of this Ordinance.

J. **Uses similar** to the above uses permitted by Conditional Use Permit.

## 7.5B GENERAL BUSINESS DISTRICT (C-2)

**7.5B.1 Intent and Purpose:** The Community Commercial (C-2) District is intended to serve the overall shopping needs of the population both within and beyond the County boundaries, including both convenience and comparison goods. As a result, the permitted uses are generally grouped so as to generate larger volumes of vehicular and pedestrian traffic than the C-1 District, and there may be some impact on the adjacent area.

**7.5B.2 Uses Permitted by Right**

No building or land shall be used, and no building shall be erected except for one or more of the following specified uses, unless other wise provided for in this Ordinance:

A. **Any Uses Permitted by Right in the C-1 District** subject to the requirements of this C-2 District.

B. **Nursery and Greenhouse** as provided in *Section 14.1* of this Ordinance.

C. **Off Premise Signs and Billboards** as provided in *Article 11* of this Ordinance.

D. **Restaurant** as defined in *Article 5* of this Ordinance <u>excluding</u> those <u>with</u> drive through service.

E. **Uses similar** to the above uses permitted by right.

**7.5B.3 Uses Permitted by Site Plan Approval pursuant to *Article 8* of this Ordinance:**

A. **Any Uses Permitted Subject to Site Plan Approval** in the C-1 District, subject to the requirements of this C-2 District.

B. **Building Material Supplier** as defined in *Article 5* of this Ordinance.

C. **Construction Contractors Establishment** and storage of heavy equipment as provided in *Section 14.29* of this Ordinance.

D. **Hospital and Long-term Care Facilities** as provided in *Section 14.16* of this Ordinance.

E. **Hotel and Motel** as provided in *Section 14.15* of this Ordinance.

F. **Rental Storage Buildings** provided in *Section 14.26* of this Ordinance.

G. **Restaurants** as defined in *Article 5* of this Ordinance, including those with drive through service.

H. **Uses similar** to the above uses permitted by Site Plan Approval.

**7.5B.4 Uses Permitted by Conditional Use Permit pursuant to *Article 9* of this Ordinance:**

A. **Adult Entertainment and Amusement Establishment**, as provided in *Section 14.32* of this Ordinance.

B. **Any Uses Permitted by Conditional Use Permit in the C-1 District**, subject to the requirements of this C-2 District.

C. **Drive-in Motion Picture Theater** as provided in *Section 14.7* of this Ordinance.

D. **Gunsmithing** as defined in *Article 5* of this Ordinance.

E. **New and Used Vehicle, Boat, or Farm Implement Dealer** as provided in *Section 14.17* of this Ordinance.

F. **Open Air Business and Storage** as provided in *Section 14.33* of this Ordinance.

G. **Parking Garage or Commercial Garage** as provided in *Section 14.19* of this Ordinance.

H. **Propane Service Facility** as provided in *Section 14.31* of this Ordinance.

I. **Racetrack** as provided in *Section 14.7* of this Ordinance.

J. **Shopping Center and Shopping Mall** as provided in *Section 14.2*3 of this Ordinance.

K. **Wholesale Trade Business** as defined in *Article 5* of this Ordinance.

L. **Uses similar** to the above uses permitted by Conditional Use Permit.

## 7.5C Site, Area and Bulk Requirements for the C-1 and C-2 Districts.

**7.5C.1 Site Development Requirements.** All lots, buildings, or structures created after the effective date of this Ordinance shall conform to the site development standards set forth in *Table A, Section 7.7* of this Ordinance, except as modified by the provisions stated below or as modified by *Article 6, General Provisions; Article 14, Specific Provisions*

*and Requirements; Article 15, Planned Unit Development;* or as varied pursuant to *Article 4, Board of Appeals*.

A. **Material which is normally and reasonably discarded from commercial uses** of property may be externally stored for a reasonable temporary period of time, provided such storage areas are completely screened by an opaque fence of not less than six (6) feet in height.

B. **When a side or rear lot line abuts areas adjacent to property located within the R-1, R-2 or R-3 Districts**, a buffer strip in addition to the minimum yard requirements of *Section 7.7* of this Ordinance shall be provided. The buffer strip shall consist of the following:

1. Landscaped strip: A landscaped strip at least fifty (50) feet in width along the entire length of the abutting R-1, R-2 or R-3 districts.

2. Trees: The number of trees shall be determined as follows, three (3) trees plus one (1) for each fifteen (15) feet of buffer strip on length. The trees may be placed within the buffer strip so as to provide the best screening as approved by the ~~Director of Community Development~~ ***Development Official*** or designee. The trees shall be at least the following size at the time of planting: evergreens - six (6) to eight (8) feet in height, deciduous - one and three quarter inches (1 3/4") in caliper measured six (6) inches above the ground level.

3. Sight-proof screening: Sight proof screening four (4) feet in height shall be provided along the entire length of the abutting R-1, R-2 or R-3 Districts by use of the following landscape elements; wooden fencing, evergreen shrubs and berms. These elements may be used separately or in combination as determined by the ~~Director of Community Development~~ ***Development Official***, or designee.

**7.5C.2 Area and Bulk Requirements.**

Refer to *Article 7.7* for regulations limiting the height and bulk of buildings, the maximum size of lot or parcel permitted by land use, and the maximum density permitted.

## SECTION 7.6 INDUSTRIAL DISTRICT (I)

**7.6.1 Intent and Purpose**: The intent of this district is to provide for a variety of industrial and commercial uses in areas of the County affording direct access to all weather highways, adequate storm drainage, and existing utilities of power, water, and waste water disposal. Such Industrial Areas should be free of non-compatible uses designed so as to harm adjacent conforming uses, and provided with adequate land for expansion. Since such property is limited in availability, it will be conserved and restricted for industrial uses in the interest of the community's economic growth and development.

**7.6.2 Uses Permitted by Right**: The following uses are permitted provided there is **not** open storage of products or materials except vehicle and farm implements.

A. **Accessory Uses** as provided in *Subsection 6.2.10* of this Ordinance.

B. **Building Material Supplier** as defined in *Article 5* of this Ordinance.

C. **Commercial Garage, Parking Garage** as provided in *Section 14.19* of this Ordinance.

D. **Community Service Facility** as provided in *Section 14.5* of this Ordinance.

E. **Construction Contractors Establishment** and storage of heavy equipment as provided in *Section 14.29* of this Ordinance.

F. **Government Facility** as provided in *Section 14.10* of this Ordinance.

G. **Light Manufacturing Facility** as defined in *Article 5* of this Ordinance.

H. **Off Premise Signs and Billboards** as provided in *Article 11* of this Ordinance.

I. **Research and development establishment** as defined in *Article 5* of this Ordinance.

J. **Truck and Rail Freight Terminal** as defined in *Article 5* of this Ordinance.

K. **Wholesale Trade Business** as defined in *Article 5* of this Ordinance, excluding, however, the storage of flammable liquids.

L. **Uses similar** to the above uses permitted by right.

**7.6.3 Uses Permitted by Site Plan Approval pursuant to *Article 8* of this Ordinance:**

A. **Above Ground Storage of Flammable Liquids** as defined in *Article 5* of this Ordinance.

B. **Motor Fuel Service Stations** as provided in *Section 14.19* of this Ordinance.

C. **Open Air Business and Storage** as provided in *Section 14.33* of this Ordinance.

D. **Propane Service Facility** as provided in *Section 14.31* of this Ordinance.

E. **Public Airports and Heliports** as provided in *Section 14.21* of this Ordinance.

F. **Rental Storage Buildings** as provided in *Section 14.26* of this Ordinance.

G. **Wood Product Processing Facility** as defined in *Article 5* of this Ordinance.

H. **Uses similar** to the above uses permitted by Site Plan Approval.

**7.6.4 Uses Permitted by Conditional Use Permit pursuant to *Article 9* of this Ordinance:**

A. **Automotive Salvage Yards and Scrapping Yards** as provided in *Section 14.2* of this Ordinance.

B. **Chemical Processing and Metallurgic Manufacturing** as defined in *Article 5* of this Ordinance.

C. **Customary Agricultural Operation** as defined in *Article 5* of this Ordinance if compatible with surrounding uses.

D. **Distressed Vehicle Transporter** as provided in *Section 14.24* of this Ordinance.

E. **Heavy Manufacturing** as defined in *Article 5* of this Ordinance.

F. **Manufacturing of explosives** as defined in *Article 5* of this Ordinance

G. **Meat or Poultry Processing Plant** as defined in *Article 5* of this Ordinance.

H. **Communication Towers and Antennas** as provided in *Section 14.27* of this Ordinance.

I. **Refiners and Power Generating Plant** as defined in *Article 5* of this Ordinance.

J. **Solar Energy Systems, Large or Medium** as provided in Section 14.39 of this Ordinance.

K. **Wind Energy Systems** Utility-Scale, as provided in Section 14.41 of this Ordinance.

L. **Uses similar** to the above uses permitted by Conditional Use Permit.

**7.6.5 Site Development Requirements**: All lots, buildings, or structures created after the effective date of this Ordinance shall conform to the site development standards set forth in *Table A, Section 7.7* of this Ordinance, except as modified by the provision stated below, or as modified by *Article 6, General Provisions; Article 14, Specific Provisions and Requirements; Article 15, Planned Unit Development;* or as varied pursuant to *Article 4, Board of Appeals*.

A. **External areas for storage** are permitted when screened on all sides by an opaque fence of not less than six (6) feet in height.

B. When a **side or rear lot line abuts areas adjacent to property located within the R-1, R-2 or R-3 districts**, a buffer strip in addition to the minimum yard requirements of *Section 7.7* of this Ordinance shall be provided. The buffer strip shall consist of the following:

1. Landscaped Strip: A landscaped strip at least fifty (50) feet in width along the entire length of the abutting the R-1, R-2 or R-3 districts.

2. Trees: The number of trees shall be determined as follows: three (3) trees plus one (1) for each fifteen (15) feet of buffer strip length. The trees may be placed within the buffer strip so as to provide the best screening as approved by the ~~Director of Community Development~~ ***Development Official***, or designee. The trees shall be at least the following size at the time of planting: evergreens - six (6) to eight - (8) feet in height, deciduous - one and three quarter inches (1 3/4" ) in caliper.

3. Sight-Proof Screening: Sight proof screening six (6) feet in height shall be provided along the entire length of the abutting R-1, R-2 or R-3 districts by use of the following landscape elements: wooden fencing, evergreen shrubs and berms. These elements may be used separately or in combination as determined by the ~~Director of Community Development~~ ***Development Official***, or designee.

# INSERT TABLE A

**Notes.**

a. Platted

b. When attached to public sanitary sewer facilities

c. Total both sides

d. Including mobile homes

e. Per dwelling unit

f. Multiple family dwelling units

g. When fronting on a major street as defined in this Ordinance

h. When subdivided and served by a public water supply

Accessory uses – See *Subsection 6.2.10* of this Ordinance.

# ARTICLE 8
# ZONING REFERRAL AND SITE PLAN REVIEW

## SECTION 8.1 INTENT AND PURPOSE

It is the purpose of this Article to authorize review and approval of certain proposed developments by the ~~Community Development Director~~ ***Development Official*** or his/her designee and to require Site Plan Review Committee approval for certain buildings, structures, and uses that can be expected to have a significant impact on natural resources, traffic patterns and the character of future development in the area. The requirements contained in this Article are intended to insure compliance with all applicable statutes, administrative rules and ordinances in order to promote the harmonious relationship or uses through proper design.

## SECTION 8.2 JURISDICTION

No development permit for a use permitted by right shall be issued unless and until referred to and approved by the ~~Community Development Director~~ ***Development Official***, or the designee ~~of the Community Development Director~~, for compliance with the requirements of this Section. No development permit for a use permitted by Site Plan Approval or Conditional Use Permit shall be issued until the provisions of this Article are complied with in full and Site Plan Approval received.

## SECTION 8.3 ZONING REFERRAL

~~The Construction Code Department shall refer all applications for development authorization to the Community Development Department for evaluation for compliance with the terms of this Code~~. All uses permitted by right shall be evaluated for conformance with this Code and shall be so certified ~~to the Construction Code Department~~ on a special form designed for that purpose ~~adopted by the Community Development Department~~ and accompanied by a fee in an amount established and amended from time to time, by resolution of the Eaton County Board of Commissioners.

## SECTION 8.4 SITE PLAN REVIEW PROCEDURES

**8.4.1 Application:** The owner or his designated agent shall file an application requesting Site Plan Review in the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** on a special form designed for the purpose adopted by the Site Plan Review Committee.

**8.4.2 Application Fee:** An application shall be accompanied by a fee in an amount established, and amended from time to time, by resolution of the Eaton County Board of Commissioners for Site Plan Review.

**8.4.3 Site Plan:** Each application for Site Plan Review shall be accompanied by a specified number of copies of a Site Plan to be determined by the ~~Community Development Director~~ ***Development Official***. The Site Plan shall consist of the following materials

unless specifically waived as not applicable by the ~~Community Development Director~~ ***Development Official:***

A. **Graphic Materials Required For Plans -** Every application for a Site Plan review and approval shall contain plans that locate the development site and graphically demonstrate existing and proposed natural, man-made and legal features on and near the site in question. Site Plans shall show on the first page the following information:

1. Name of applicant and property owner. *
2. Name of development (if any).
3. North arrow. *
4. Legend. *
5. Location. A location map that shows the location of the project in the broad context of the County.
6. Scale. Site Plans shall be drawn to a readable scale, such that all features required to be shown on the plans are readily discernible. The Community Development Director shall make the final determination whether the plans submitted are drawn to the appropriate scale. *
7. All of the features required to be shown on plans in the following Section may be included on one set of plans so long as the features are distinctly discernible.

B. **Existing Natural, Man-made, and Legal Features** - Site Plans shall show all existing natural, man-made, and legal features on the lot where the development is to take place, including but not limited to those listed below.

**1. Existing Natural Features:**

a) Tree line of wooded areas. *

b) Individual trees twelve (12) inches in diameter or more, identified by common or scientific name.

c) Orchards or other agricultural groves by common or scientific name.

d) Streams, ponds, drainage ditches, swamps, boundaries of floodways, and floodplains. *

e) If more than five (5) acres of land are to be developed, base flood elevation data. *

f) Contour lines (shown as dotted lines) with no greater than two (2) foot contour intervals

**2. Existing Manmade Features:**

a) Vehicle accommodation areas (including parking areas, loading areas, and circulation areas, all designated by surface material and showing the layout of existing parking spaces and direction of travel lanes, aisles, or driveways. *

b) Streets, private roads, sidewalks, and other walkways, all designated by surface material. *

c) Curbs and gutters, curb inlets and curb cuts, and drainage grates.

d) Other stormwater or drainage facilities, including manholes, pipes, and drainage ditches, including sizes and materials.

e) Underground utility lines (sizes and materials), including water, sewer, electric power, telephone, gas, and cable television.

f) Above ground utility lines and other utility facilities.

g) Fire hydrants.

h) Buildings, structures, and signs.*

i) Location of exterior light fixtures.*

j) Location of dumpsters.*

**3. Existing Legal Features:**

a) The zoning of the property, including zoning district lines where applicable.

b) Property lines (with dimensions identified).*

c) Street right-of-way lines.*

d) Utility or other easement lines. *

C. **Proposed Changes In Existing Features Or New Features** - Site development plans shall also show proposed new legal features (especially new property lines, street right-of-way lines, and utility and other easements), as well as proposed man-made features, including, but not limited to, the following:

1. Lot dimensions, including lot widths. *

2. The location and dimensions of all buildings and freestanding signs on the lot, as well as the distances all buildings and freestanding signs are set back from property lines, streets, or street right-of-way lines. *

3. Principal side(s) building elevations for typical units of new buildings or exterior remodeling of existing buildings, showing exterior building materials, building heights, and proposed wall sign or window sign area.

4. Areas intended to remain as usable open space. The plans shall clearly indicate whether such open space areas are intended to be offered for dedication to public use or to remain privately owned.

5. Streets, labeled by classification and street name showing whether curb and gutter or shoulders and swales are to be provided and indicating street paving widths. Public roads in subdivisions shall also be shown and clearly labeled as such.

6. Curbs and gutters, curb inlets and curb cuts, and drainage grates.

7. Other stormwater or drainage facilities (proposed sizes and materials), including manholes, pipes, drainage ditches, retention ponds, etc. *
8. Sidewalks and walkways, showing widths and surface material.
9. Bridges.
10. Outdoor illumination with lighting fixtures sufficiently identified to demonstrate orientation and extent of illumination. *
11. Underground utility lines (proposed sizes and materials), including water, sewer, electric power, telephone, gas, and cable television. Water and sewer pipe line sizes shall be labeled including the location of water well(s), septic tanks and drainfields. *
12. Above ground utility lines.
13. Fire hydrants.
14. Dumpsters. *
15. Proposed contour lines resulting from earth movement (shown as solid lines) at no greater than two (2) foot contour intervals (existing lines should be shown as dotted lines).
16. Scale drawings of all signs requiring permits pursuant to the provisions of Article 11 of this Ordinance, together with an indication of the location and dimensions of all such signs. *
17. Vehicle accommodation areas (including parking areas, handicapped parking areas, loading areas, and circulation areas), all designated by surface material and showing the dimensions and layout of proposed parking spaces and the dimensions and direction of travel lanes, aisles, and driveways. *
18. Proposed landscaping or construction of other devices to comply with the screening and buffering requirements of this Ordinance. Plans shall label shrubbery by common or scientific name, show the distance between plants, and indicate the height at the time of planting and expected mature height and width. Plans shall label trees by common or scientific name, and show the circles of the mature crowns. *

D. **Documents And Written Information In Addition To Plans** - In addition to the written application and the plans, whenever the nature of the proposed development makes information or documents such as the following relevant, such documents or information shall be provided. The following is a representative list of the types of information or documents that may be requested at the discretion of the Planning Commission:

1. Documentation confirming that the applicant has a legally sufficient interest in the property proposed for development to use it in the manner requested, or is the duly appointed agent of such a person.

2. Certifications from the appropriate agencies that proposed utility systems are or will be adequate to handle the proposed development, and that all necessary easements have been provided.

3. Legal documentation establishing property owner associations or other legal entities responsible for control over required common areas and facilities.

4. Bonds, letters of credit, or other surety devices.

5. Time schedules for the completion of phases in staged development.

6. The environmental impact assessment of the development, including its effect on historically significant or ecologically fragile or important areas and its impact on pedestrian or traffic safety or congestion.

7. A fiscal impact analysis of the development on the County, the local jurisdiction and other governmental units (e.g., schools, public safety, roads, etc.).

8. A traffic impact analysis of the proposed development on the County and the local unit(s) of government.

9. Calculations for drainage and stormwater design detention/retention.

* Denotes data required for **Zoning Referral Submittals**, unless otherwise waived by the ~~Community Development Director~~ ***Development Official***.

**8.4.4 Commencement and Reapplication:** Every approval granted under the provisions of this Ordinance shall become null and void unless construction of the authorized land use, building or structure has been commenced within six (6) months after approval has been granted.

## SECTION 8.5 SITE PLAN REVIEW

Site Plans shall be required for all uses so designated under *Article 7* of this Ordinance. Site Plans shall be evaluated by the ~~Community Development Director~~ ***Development Official*** in consultation with the Site Plan Review Committee and appropriate County, State and Local Officials. A Site Plan Review checklist shall be utilized to record and summarize the input of all relevant County, State and Local Officials. [A detailed written report of the relevant input of all officials shall be provided to the Planning Commission along with the evaluation and recommendation of the ~~Community Development Director~~ ***Development Official***.]

**8.5.1 Membership:** The Site Plan Review Committee may include representatives of any or all of the following: The ~~Community Development Director~~ ***Development Official***, ***Building Official*** the Chief Executive Officer of the local governmental unit in which the proposed development is located, the Eaton County Drain Commissioner, the Eaton County Road Commission Engineer-Manager, the Director of Environmental Health, the Fire Chief or Fire Marshall of the fire department servicing the site, the Eaton Conservation District District conservationist, two (2) members of the Eaton County Planning Commission, plus one (1) member of the Planning Commission whose domicile is located closest to the proposed land development.

**8.5.2 Recommendation:** The recommendations of the Site Plan Review Committee shall be considered by the ~~Community Development Director~~ ***Development Official*** in approving, denying or approving with modifications any Site Plan under this Section.

**8.5.3 Review Period Limitations:** The ~~Community Development Director~~ ***Development Official*** shall act on an application within thirty (30) working days after its receipt by the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***. This time limitation may be extended only by the mutual consent of the applicant and the ~~Community Development Director~~ ***Development Official***.

**8.5.4 Appeal of Decision:** The decision of the ~~Community Development Director~~ ***Development Official*** is subject to appeal in accordance with *Section 4.6* of this Ordinance.

## SECTION 8.6 STANDARDS FOR SITE PLAN REVIEW APPROVAL

Applications for Site Plan Review that meet the following standards in the judgment of the Planning Commission shall be approved:

**8.6.1 Requirements**: The proposed Site Plan shall fully conform with the requirements of this Ordinance including but not limited to the provisions contained in *Articles 10, 11, and 14.*

**8.6.2 Surface Water Drainage:** The proposed Site Plan shall fully comply with the published surface water drainage standards of the Eaton County Drain Commissioner.

**8.6.3 Driveway and Traffic Safety:** The proposed Site Plan shall fully conform with the driveway and traffic safety standards of the Michigan Department of Transportation and/or the Eaton County Road Commission.

**8.6.4 Fire Safety and Emergency:** The proposed Site Plan shall comply with the applicable fire safety and emergency vehicle access requirements of the State Construction Code and/or any local Fire Code having jurisdiction.

**8.6.5 Soil Erosion and Sedimentation:** The proposed Site Plan shall be in compliance with the Soil Erosion and Sedimentation Control Ordinance of Eaton County.

**8.6.6 Public Health:** The proposed Site Plan shall comply with the applicable requirements of the Michigan Department of Public Health and the Barry-Eaton District Health Department.

**8.6.7 Water/Sewer/Waste Removal:** The proposed Site Plan comply with all applicable local ordinances including but not limited to ordinances governing the use of public water, sanitary sewage, and solid waste removal.

**8.6.8 State and Federal Statutes:** The proposed Site Plan shall conform with all applicable State and Federal statutes.

**8.6.9 General Approval Standards:** In addition to the preceding standards, the Planning Commission will find that the proposed Site Plan meets the following approval standards:

A. The location and design of driveways providing vehicular ingress to and egress from the site shall promote safety and convenience of both vehicular and pedestrian traffic, both within the site and on access and adjoining streets.

B. Automobile parking areas are designed to avoid common traffic problems and promote safety.

C. There shall be a satisfactory and harmonious relationship between the development on the site and existing and prospective development of contiguous land in adjacent neighborhoods or areas.

D. The proposed development shall not have an unreasonable detrimental nor an injurious effect upon the natural characteristics and features of the parcels being developed in the larger area of which the parcel is a part.

E. The proposed development will promote the intent and purpose of the Zoning Ordinance.

F. The proposed development will be designed, constructed, operated, maintained and managed so as to be compatible, harmonious, and appropriate in appearance with the existing or planned character of the general vicinity, adjacent use as a land, the natural environment, the capacity of public services and facilities effected by the land use, and the community as a whole.

G. The proposed development will be served adequately by essential public facilities and services, such as highways, streets, police and fire protection, drainage ways, refuse disposal, or that the persons or agencies responsible for the establishment of the land use or activity shall be able to provide adequately any such service.

H. The proposed use will not be detrimental, hazardous, or disturbing to existing or future neighboring uses, persons, property or the public welfare.

I. The proposed development will not create additional requirements at public cost for public facilities and services that will be detrimental to the economic welfare of the community.

J. The proposed development will be serviced by an adequate road system, and that the proposed development shall not significantly or adversely impact the level of service on any adjacent roads.

# ARTICLE 9
# CONDITIONAL USE PERMITS

## SECTION 9.1 INTENT AND PURPOSE

It is the purpose of this Article to provide procedures and standards for the submission, review and approval of Special Land Use Permits. It is the intent of these provisions to allow for flexibility and practical latitude while maintaining sound provisions for the protection of the public health, safety, and general welfare. In order to achieve this purpose, certain land uses, buildings, and structures are required to be reviewed for compliance with the specific and general standards contained in this Ordinance.

## SECTION 9.2 JURISDICTION

No land use, building, or structure requiring a Conditional Use Permit shall be authorized unless the owner, lessee, or agent thereof, shall apply for, and receive a Conditional Use Permit.

## SECTION 9.3 CONDITIONAL USE PERMIT PROCEDURES

An application for a Conditional Use Permit shall be submitted and processed in accordance with the following:

**9.3.1** **Application Requirements:** All applications shall be submitted on a form designed for that purpose and adopted pursuant to *Section 3.4.1* of this Ordinance, and shall be accompanied by twenty (20) copies of an accurately drawn Site Plan, containing all the requirements listed in *Section 8.4.3* of this Ordinance.

**9.3.2** **Application Fee:** An application shall be accompanied by a fee in an amount established, and amended from time to time, by resolution of the Eaton County Board of Commissioners.

**9.3.3** ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** **Review:** The ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** shall review each application to insure that all required and necessary information has been received. An incomplete application shall be returned with a letter indicating its deficiencies. A complete application shall be processed as provided for in this Ordinance.

**9.3.4** **Review by Township Board of Trustees:** A copy of the completed application and Site Plan shall be forwarded to the Township Clerk of the Township in which the proposal is located, within five (5) business days of receipt by the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***. The Township Board of Trustees may take action on the application and submit a written recommendation to the Planning Commission within thirty (30) days after receipt of the application and Site Plan. Such recommendations shall be made a part of the record of the public hearing held by the Planning Commission. The applicant or representative of the applicant shall be required to appear at a meeting of the Township Board of Trustees

to discuss the proposal prior to the date of the public hearing held by the Planning Commission.

**9.3.5 Action by County Planning Commission:** The County Planning Commission shall conduct at least one (1) public hearing following action by the Site Plan Review Committee.

A. Notice of Public Hearing for consideration of a Conditional Use Permit application by the Planning Commission shall be provided pursuant to Article 3.9, herein.

B. Any person having interest in the application, may speak, present documents, or evidence in support of a position regarding the application at the public hearing.

C. It shall be incumbent upon the representatives of the applicant for a Conditional Use Permit, to provide documentation and evidence in support of the proposal. It shall also be the obligation of said applicant, to furnish evidence, or proof of compliance with the specific and general criteria contained in this Ordinance.

**9.3.6 Basis of Planning Commission Decisions:** The Planning Commission's decision will be based upon compliance with the specific requirements contained elsewhere in this Ordinance, and the general standards listed below:

A. The project complies with the applicable land use policies contained in the Eaton County Comprehensive Development Plan, and promotes the intent and purpose of the Eaton County Land Development Code, and other County ordinances, standards, and requirements.

B. Essential public facilities are adequately provided to the project, including, but not limited to, highways, streets, police and fire protection, emergency medical care, schools, storm water drainage, public transportation, and public recreation, or the owner/developer shall provide adequately any such service(s). Additional requirements at public cost for such facilities and services will not be detrimental to the economic welfare of the community.

C. Location and design of driveways providing vehicular ingress and egress, and automobile parking areas for the project are designed to avoid common traffic problems and promote the safety and convenience of vehicular and pedestrian traffic. The level of traffic generated by the project will not significantly or adversely impact the adjacent road system.

D. On-site sanitation facilities, if any, including sewage disposal, potable water supply, storm water, and solid waste disposal, are properly designed and capable of handling the project's long term needs.

E. The project is harmonious and compatible with the existing land use, natural features, and planned character of the adjacent property and general vicinity, and the project will not result in conditions that are detrimental to surrounding persons or property.

**9.3.7 Statements of Conclusion:** The Planning Commission shall specify in writing the conclusions and findings on each request in terms of the general standards listed above in *Subsection 9.3.6* of this Ordinance.

**9.3.8 Required Approval by Planning Commission:** The Planning Commission shall approve a request for Conditional Use Permit for any applicant which fully meets the specific requirements and general standards contained in this Ordinance.

**9.3.9 Conditions of Approval:** The Planning Commission may require reasonable conditions in conjunction with the approval of a Conditional Use Permit. Such conditions shall include conditions necessary to ensure that public services and facilities affected will be capable of accommodating increased service and facility loads caused by the proposed land use or activity, to protect the natural environment and conserve natural resources and energy, to ensure compatibility with adjacent uses of land, and to promote the use of land in socially and economically desirable manner. The conditions imposed shall be recorded in the minutes of the Planning Commission and on the Conditional Use Permit. These conditions shall remain unchanged unless a written request is submitted to the Planning Commission for change of conditions.

A request for change of conditions shall be scheduled for a public hearing before the Planning Commission. Prior to the hearing the request shall be reviewed under the appropriate Site Plan Review process. The recommendations from the Site Plan Review process shall be reported during the hearing. A public notice shall be mailed to all property owners within three-hundred (300) feet of the Conditional Use Permit site. Approval of the change of conditions shall be granted only upon an affirmative vote of the majority of the Planning Commission. All changes shall be recorded in the minutes of the meeting and on the Conditional Use Permit.

**9.3.10 Requirements for Reasonable Conditions of Approval:** Conditions of approval imposed upon Conditional Use Permits shall meet the following requirements:

A. Be designed to protect natural resources, the health, safety, and welfare, as well as the social and economic well-being of those who will use the land use or activity under consideration, residents, and landowners immediately adjacent to the proposed land use or activity, and the community as a whole.

B. Be related to the valid exercise of the police power, and to the proposed use or activity.

C. Be necessary to meet the intent and purpose of the zoning requirements; be related to the standards established in this Ordinance for the land use or activity under consideration; and be necessary to insure compliance with those standards.

## SECTION 9.4 ISSUANCE OF CONDITIONAL USE PERMITS

A Conditional Use Permit shall be issued in writing specifying all conditions of approval, the specific requirements and a copy of the Site Plan stamped approved and signed by the Development Official.

**9.4.1 Duration of Conditional Use Permit:** A Conditional Use Permit shall be valid as long as the permitted use continues in accordance with the conditions, requirements, and Site Plan included in said permit; unless, as a part of approval, the Planning Commission shall have established a limit on the duration of the Permit. Provided, however, that an applicant must begin the proposed land use, building, or structure within six (6) months of issuance of the Conditional Use Permit. In addition any use for which a Conditional

Use Permit has been granted and which ceases to continuously operate for a twelve (12) month period shall be considered abandoned and the Conditional Use Permit shall become null and void.

**9.4.2 Re-application:** No application for a Conditional Use Permit which has been denied by the County Planning Commission shall be resubmitted before the expiration of one (1) year of the date of such denial, except upon grounds of newly discovered evidence or documentation of change of physical conditions.

**9.4.3 Assignment of Conditional Use Permit Approval:** Conditional use permit approval shall not be assigned to new or different ownership entities without the prior approval of the Planning Commission.

## SECTION 9.5 BONDING

The Planning Commission may require that a bond be furnished to insure compliance with certain conditions imposed with the granting of a Conditional Use Permit. The amount and type of bond shall be determined by the Planning Commission by estimating the scale of the operation. The bond shall be reasonable, appropriate and commensurate with the scope of the project. The amount of the bond shall be reduced at a rate equal to the proportion of work completed on the required improvements as work progresses. The term "improvements" should not be construed to mean the project itself, but rather those features associated with the project which are deemed necessary to protect the health, safety and welfare of Eaton County's resources and future users or inhabitants of the proposed project.

## SECTION 9.6 APPEAL OF DECISIONS

Any person aggrieved by the decision of the Planning Commission may have that action reviewed by the Board of Appeals. An appeal of a Planning Commission decision to the Board of Appeals shall be filed within 30 days after the date of the final vote taken for such action. A public hearing shall be conducted as required by Public Act 110 of 2006 and Section 3.9 Public Notices of this ordinance. The Board of Appeals shall review the matter based on the standards contained in this Ordinance and shall give written justification for any decision rendered pursuant to *Subsection 4.6.9* of this Ordinance.

# ARTICLE 10
# OFF-STREET PARKING AND LOADING

## SECTION 10.1 INTENT AND PURPOSE

It is the intent of this Ordinance that off-street parking spaces shall be provided and adequately maintained by each property owner in every district for the parking of motor vehicles for the use of occupants, employees and patrons of each building and premise constructed, altered, or enlarged under the provisions of this Ordinance.

## SECTION 10.2 JURISDICTION

At the time any building or structure is erected, enlarged or increased in capacity, or uses established, off-street parking spaces shall be provided in all districts according to the requirements herein specified.

**10.2.1 Parking and Loading Plan Review:** Whenever ten (10) or more vehicle parking spaces are required for a given use of land, plans and specifications for the construction or alteration of an off-street parking area shall be submitted to the Site Plan Review Committee and approved pursuant to *Article 8* of this Ordinance before a development permit is issued.

**10.2.2 Location of Parking Areas:** All off-street parking and loading areas shall be located on the same lot or an adjacent lot in the same land development district as the building, structure, or use the parking area is intended to serve.

**10.2.3 Parking Areas Existing Before the Effective Date of this Ordinance:** No parking area or parking space or loading area which exists at the time this Ordinance becomes effective or which subsequent thereto is provided for the purpose of complying with the provisions of this Ordinance shall thereafter be relinquished or reduced in any manner below the requirements established in this Ordinance.

**10.2.4 Use of Right-of-Way:** The right-of-way of any county road or state highway shall not be used for off-street parking or loading without the written permission of the County Road Commission for county roads and streets or the Michigan Department of Transportation for State Highways.

**10.2.5 Uses of Parking Areas:**

A. Parking spaces and loading areas shall be used exclusively for the parking of vehicles associated with a building, structure or land use for which those employees and patrons it is designed to serve. No commercial activity or selling of any kind shall be conducted within required parking areas.

B. Directional Signs: No signs shall be erected in parking areas except the following: No more than one (1) directional sign at each entrance or exit may be erected which may also bear the name of the enterprise the lot is intended to serve. Handicap parking space signs, as provided by the Michigan Construction

Act, Public Act 230 of 1972, as amended. Such signs shall not project beyond the property line of the premises.

C. The outdoor parking of motor vehicles in the R-1, R-2 or R-3 districts shall be limited to registered and licensed passenger vehicles and commercial vehicles built on a chassis which is rated one ton or less and not exceeding ten thousand (10,000) pounds in gross vehicle weight, except when said vehicles are associated with the use permitted by a Conditional Use Permit pursuant to *Article 9* of this Ordinance.

D. The storage of travel trailers, motor homes, camper trailers, or parking other trailers, boats or recreational vehicles in required parking spaces for a period in excess of fourteen (14) days is hereby prohibited.

## SECTION 10.3 UNITS OF MEASUREMENT

**10.3.1 Seating Capacity:** When benches, pews, or other similar seating is used, each eighteen (18) inches of said seating shall be counted as one seat.

**10.3.2 Employees:** Requirements for parking stated in terms of employees shall be based upon the maximum number of employees likely to be on the premises during the largest shift.

**10.3.3 Floor Area:** The entire enclosed area of a building as measured from the exterior surface of exterior walls.

**10.3.4 Fractional Spaces:** Where units or measurement determining the number of required parking spaces result in a fraction equal to or greater than one half an additional space shall be required.

## SECTION 10.4 OFF-STREET PARKING SPACE REQUIREMENTS

| USE | # OF MOTOR VEHICLE PARKING SPACES REQUIRED/UNIT OF MEASURE |
|---|---|
| Adult Entertainment Establishment and/or Amusement Establishment (Art 14.32) | One for each 100 square feet of floor area |
| Above Ground Storage or Flammable Liquids (Art 5 Definitions) | One (1) for every two (2) employees in the largest working shift OR One (1) for every 1,000 square feet of floor area whichever is greater |
| Accessory Dwelling Unit | Two (2) for each dwelling unit |
| Agricultural Businesses (Art 14.1) | **Commercial riding stable**-One space for every four persons of maximum expected capacity<br>**Food, feed, fiber, alcohol processing facility**-One for every two employees in the largest working shift OR one for every 1,700 sq ft of floor area, which ever is greater<br>**Grain and feed elevators**-One for every two employees<br>**Greenhouses with on premise retail sales**-One for every 300 sq ft of sales area<br>**Livestock auction yards**- One space for every three persons of maximum expected capacity |

| | |
|---|---|
| | plus one for every two employees<br>**Livestock transport facilities**- One space for every three persons of maximum expected capacity plus one for every two employees<br>**Nurseries with on premise retail sales**- One for every 400 sq ft of area for sales<br>**Sawmills-** One for every two employees in the largest working shift OR one for every 1,700 sq ft of floor area, which ever is greater<br>**Seasonal farm markets**- One for every 300 sq ft of floor area<br>**Slaughterhouse selling products butchered on site**-One for every 400 sq ft of floor area<br>**Veterinary Hospital, Clinic, Kennel**- One for every 300 sq ft of floor area |
| Archery and Gun Range (Art 14.34) | One (1) space for each three (3) persons of maximum capacity |
| Artisan's Workshop | Two (2) spaces, plus one (1) space for every two (2) employees OR one (1) space for every three-hundred (300) square feet of the business whichever is greater. |
| Automobile Salvage and Scrapping Yard (Art 14.2) | One (1) for each service bay, and one (1) for each two (2) employees, and no more than sixteen (16) vehicles stored at any one time |
| Barber & Beauty Shops | (see "Personal Service Establishment") |
| Building Material Supplier (Art 5) | One (1) for every three (3) employees in the largest working shift OR One (1) for every 2,000 square feet of floor area whichever is greater |
| Business Service Establishment (Art 5) | One (1) for every 600 square feet of floor area |
| Car Washes, Drive-in Automatic or Self-serve | Two standing spaces for each bay |
| Cemetery (Art 14.3) | Minimum 4 spaces plus one for every five (5) acres over |
| Chemical Processing & Metallurgic Manufacturing facilities (Art 5) | One (1) for every two (2) employees in the largest working shift OR<br>One (1) for every 1,000 square feet of floor area whichever is greater |
| Commercial Recreation Facility (Art 5) including but not limited to campgrounds, swimming beaches, riding stables, boat rentals, shooting preserves, athletic, game, or paintball fields, rental cottages | One (1) space for each four (4) persons of maximum anticipated capacity |
| Community Service Facility (Art 14.5) | One (1) space per facility |
| Commercial Garage (Art. 14.19) | One (1) for each service bay, and one (1) for each two (2) employees, and no more than sixteen (16) vehicles stored at any one time. Parking or storage of inoperable vehicles must be surrounded by sight proof fencing minimum six (6) ft. in height. |
| Construction Contractors Establishment & Storage of Heavy Equipment (Art 14.29) | One (1) plus one (1) for each employee not to include spaces designated for the outdoor storage of equipment, vehicles, trailers, materials, and machinery associated with the operation of the business. |
| Convenience Commercial Establishment (Art 14.6) Except as otherwise listed in this article. | One (1) for each 500 square feet of floor area |
| Distressed Vehicle Transporter (Art 14.24) | One (1) for each service bay, and one (1) for each |

| | |
|---|---|
| | two (2) employees, and no more than sixteen (16) vehicles stored at any one time |
| Drive-In Motion Picture Theater & Racetrack (Art 14.7) | One (1) space for each four seats OR for each four (4) persons of maximum capacity, whichever is greater, plus one (1) for each employee |
| Duplex (Art 14.9) | Two (2) for each dwelling unit |
| Educational Institutional & Government Facility (Art 14.10) | Day Care Facility: One (1) for each employee and one (1) for every six children licensed capacity.<br>Elementary & Junior High (Middle) Schools: One (1) for every two employees in addition to the requirements of the auditorium<br>Senior High Schools: One (1) for each two employees plus one (1) for each ten (10) students plus the requirements of the auditorium, or stadia; whichever is greater.<br>Theaters & Auditoriums: One (1) for each six (6) seats plus one (1) for each employee<br>Stadia/Sports Arena & similar: One (1) for each six seats<br>Government Facilities: One (1) space for each 400 square feet of floor area OR One (1) space for each four (4) persons permitted to occupy the building by law, whichever is greater |
| Financial Institution Building<br><br>Financial Institution Drive-Thru (Art 5) | Building: One (1) for every 400 square feet of floor area<br>Drive Thru: Three (3) standing spaces for each drive-in window in addition to normal parking required for Financial Institution Building |
| Foster Care Facility (Art 14.4) | One (1) for each four (4) beds plus One (1) for each two (2) employees |
| Funeral Home & Mortuary (Art 5) | One (1) for each 100 square feet of parlor space, chapels and reception areas |
| General Retail Sales (Art 5) | One (1) for each 300 square feet of floor area |
| Golf Courses & Country Clubs (Art 14.11) | Three (3) spaces for each golf hole and One (1) for each two employees |
| | |
| Gunsmithing (Art 5) | One (1) for each 500 square feet of floor area used for the business |
| Heavy Manufacturing Facility (Art 5) | One (1) for every three (3) employees in the largest working shift OR<br>One (1) for every 2,000 square feet of floor area whichever is greater |
| Home Business (Art 14.13) | One (1) for each 300 square feet of business area |
| Home Occupation (Art 14.14) | Two (2) for each dwelling unit, may include parking required for the dwelling |
| Home Office (Art 14.35) | Two (2) for each dwelling unit, may include parking required for the dwelling |
| Hospital & Long-Term Care Facilities regulated and unregulated (Art 14.16) | One (1) for each two (2) patient beds plus one for each two (2) employees |
| Hotel & Motel (Art 14.15) | One (1) for each occupancy unit plus at least 50% of the additional spaces required by this ordinance for other uses such as dining rooms, ballrooms or meeting rooms. |
| Light Manufacturing Facility (Art 5) | One (1) for every three (3) employees in the largest |

| | |
|---|---|
| | working shift OR One (1) for every 2,000 square feet of floor area whichever is greater |
| Manufacturing of Explosives (Art 5) | One (1) for every two (2) employees in the largest working shift OR One (1) for every 1,000 square feet of floor area whichever is greater |
| Meat or Poultry Processing Plant (Art 5) | One (1) for every two (2) employees in the largest working shift OR One (1) for every 1,000 square feet of floor area whichever is greater |
| Mobile Home Development (Art 14.18) | Two (2) for each dwelling unit |
| Mobile Home Dwelling (Art 16.5) | Two (2) for each mobile home or home site |
| | |
| Motor Fuel Service Station (Art 14.19) | One (1) for each service bay, and one (1) for each two (2) employees, plus extra spaces for other uses as required by this ordinance, and no more than sixteen (16) vehicles stored at any one time |
| Multiple Family Dwelling (Art 14.8) | Two (2) for each dwelling unit |
| New/Used Vehicle, Boat, Farm Implement Dealer (Art 14.17) | One (1) for each 600 square feet of indoor area used for the business plus one for every six display vehicles |
| Office Building (Art 5) | One (1) for every 400 square feet of floor area |
| Open Air Business & Storage (Art 14.33) | Four (4) plus one (1) for each employee not to include spaces designated for the outdoor storage of equipment, vehicles, trailers or materials associated with the operation of the business. |
| Parking Garage (art 14.19) | One space for each vehicle at maximum occupancy of the Parking Garage plus one for each two employees and plus extra spaces for other uses as required by this ordinance. |
| Park & Recreation Facilities (Art 5) | One (1) space for each three (3) persons of maximum anticipated capacity |
| Personal Service Establishment (Art 5) including, but not limited to dry cleaning, laundry, shoe repair, tanning or health and fitness salons, Barbershops, Beauty parlors, etc. | Minimum two spaces plus one for each 400 sq ft. of floor area used for the business over 1000 sq. ft.<br>**OR Beauty Parlor, Barbershop, Nail Salon**: One space for each chair/station plus one for each employee in the largest working shift<br>**OR Laundromat:** One space for each four washing machines |
| Private Airport (Art 14.20) | One (1) space for each four (4) persons of maximum capacity |
| Propane Service Facility (Art 14.31) | One space for every 400 square feet of indoor area used for the business |
| Public Airport & Heliport (Art 14.21) | One (1) space for each three (3) persons of maximum capacity |
| Public & Private Non-Commercial Park (Art 5) | One (1) space for each three (3) persons of maximum anticipated capacity |
| Refiners & Power Generating Plant (Art 5) | One (1) for every two (2) employees in the largest working shift OR<br>One (1) for every 2,000 square feet of floor area whichever is greater |
| Religious Institutions Small & Large (Art 14.22) | One (1) for each four (4) seats in the main room for worship, plus<br>One (1) for every two (2) employees |
| Rental Storage Building (Art 14.26) | One (1) space for each six (6) rental units within the buildings |

| | |
|---|---|
| Research & Development Establishment (Art 5) | One (1) for every three (3) employees in the largest working shift OR<br>One (1) for every 1,000 square feet of floor area whichever is greater |
| Restaurants, Taverns, Bars & Nightclubs Dine In<br><br>Restaurants, Drive-Thru (Art 5) | **Dine-In:** One (1) for each three (3) persons allowed within the maximum occupancy load established by the Uniform Building Code plus one per each 2 employees in the largest shift.<br>**Drive-Thru:** One (1) for every four (4) patron seats OR One (1) for each 100 square feet of floor area, whichever is greater |
| Rooming & Boarding House (Art 14.30) | One (1) for each two (2) beds |
| Second Hand Store (Art 5.3.19) | Two (2) spaces plus one additional space for every 500 sq. ft of sales area over 1000 square feet. |
| Shopping Center or Mall (Art 14.23) | Three (3) per 1,000 square feet of floor area |
| Single Family Dwelling (Art 5) | Two (2) for each dwelling unit |
| Surface Mine (Art 14.25) | One (1) for every four (4) employees working on the largest working shift |
| Truck & Rail Freight Terminal (Art 5) | One (1) for every four (4) employees in the largest working shift OR One (1) for every 2,000 square feet of floor area whichever is greater |
| Warehousing or Wholesale Trade Business (Art 5) | One (1) for every three (3) employees in the largest working shift OR One (1) for every 3400 square feet of floor area whichever is greater |
| Wood Product Processing Facility (Art 5) | One (1) for every three (3) employees in the largest working shift OR One (1) for every 2,000 square feet of floor area whichever is greater |

**10.4.6 Uses Not Mentioned:** In the case of a use not specifically mentioned, the requirements of off-street parking for a use which is mentioned and which is most similar to the use not listed shall apply.

## SECTION 10.5 SITE DEVELOPMENT REQUIREMENTS

All off-street parking areas shall be designed, constructed and maintained in accordance with the following standards:

**10.5.1 Surfacing:** All parking areas with ten (10) or more spaces required that are located in the R-2, R-3, C-1 and C-2 districts shall provide adequate storm drainage facilities and provided with a smooth, durable, dustless surface consisting of bituminous asphalt or concrete. Parking lots consisting of 10 or fewer spaces and not otherwise required by the ordinance may utilize an aggregate stone or gravel surface properly graded for storm drainage. Said surface shall be maintained and replaced if necessary during the period of occupancy of the building it serves.

**10.5.2 Parking Space Minimum Dimensions:** A minimum area of one-hundred eighty (180) square feet consisting of nine (9) feet in width by twenty (20) feet in depth shall be provided for each vehicle parking space. Handicapped parking spaces as required to meet state standards shall be provided and included in the calculations for meeting the standards of this Ordinance.

**10.5.3 Maneuvering Lanes:** The minimum width of aisles or maneuvering lanes shall be as follows:

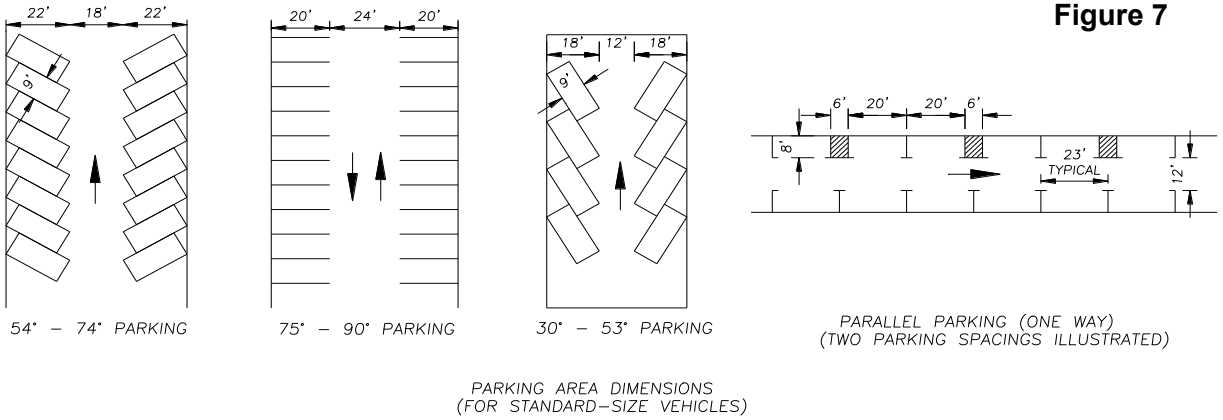
A. For parking angles from 75 degrees to 90 degrees, the maneuvering lane width shall be a minimum of twenty-four (24) feet.

B. For parking angles from 54 degrees to 74 degrees, the maneuvering lane width shall be a minimum of eighteen (18) feet.

A. For parking angles from 30 degrees to 53 degrees, the maneuvering lane width shall be a minimum of twelve (12) feet.

D. For parallel parking, the maneuvering lane width shall be a minimum of twelve (12) feet.

**Figure 7**




PARKING AREA DIMENSIONS
(FOR STANDARD–SIZE VEHICLES)

**10.5.4 Access to Public Street:** Ingress and egress to parking areas shall be provided by means of clearly limited and defined drives as provided for below:

A. All parking areas must have direct access to a public or private street. Those areas providing more than ten (10) parking spaces with an entry/exit drive may have a drive of not less than twenty (20) feet in width. When one-way drives or boulevards are utilized, the minimum width of each lane shall be twelve (12) feet.

B. All parking areas providing ten (10) or more spaces shall be designed so as to not make it necessary for vehicles to back directly onto a street and parking shall not be permitted within ten (10) feet of the edge of the public right-of-way.

**10.5.5 Landscaping and Snow Storage:** All parking lots consisting of more than ten parking spaces shall provide a landscaped area for snow storage with an area equivalent to 15% of the parking area and maneuvering lanes. For example, a parking lot with twenty (20) parking spaces, each consisting of 180 square feet and a maneuvering lane of 100 feet long and twenty-four feet wide, would encompass 6,000 square feet of parking area and maneuvering lane. Therefore, a landscaped area of at least 900 square feet (15%) must be provided for snow storage. Landscaping and planting materials used in such area shall be of a variety that is suitable for the location and hardy to the climate.

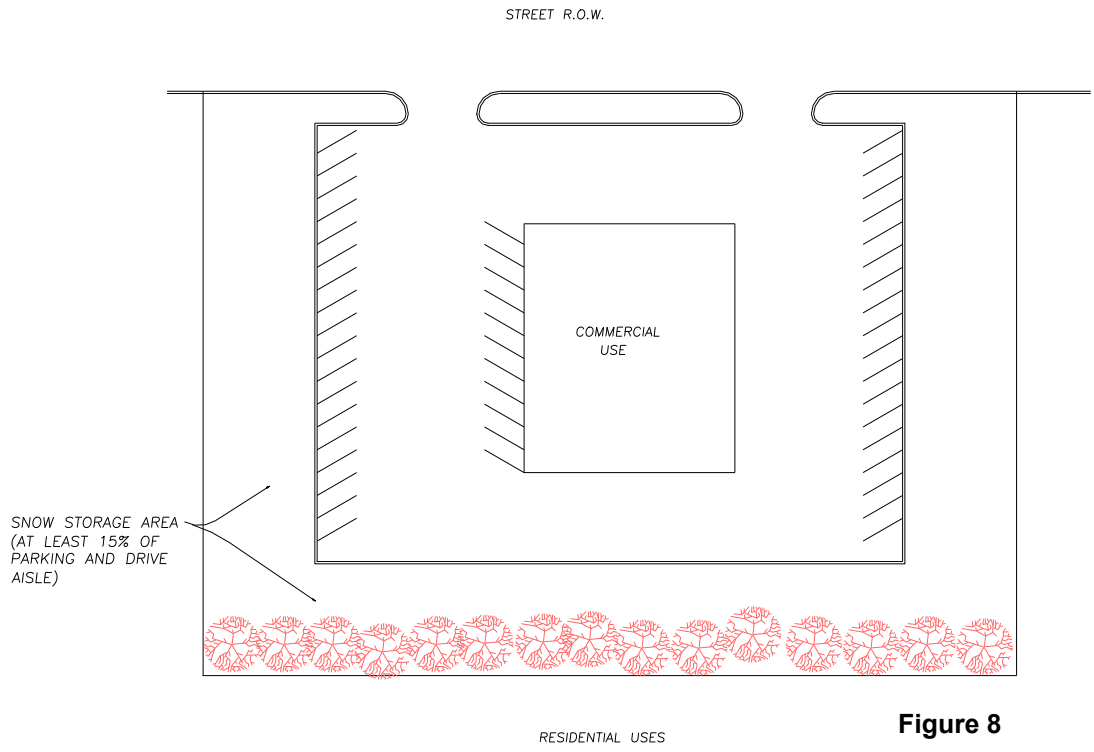



**Figure 8**

**10.5.6 Storm Water Drainage:** All parking lots of more than ten (10) spaces shall provide for storm water management structures to prevent off-site run-off except as approved by the County Drain Commissioner, or a designated representative of the office of the County Drain Commissioner.

**10.5.7 Joint Use of Parking Areas:** The use of a single parking area by two or more uses which are individually required to maintain more than ten (10) parking spaces is encouraged whenever such use is practical, and when all requirements for location, design, and construction are met.

A. Capacities: In computing capacities of any joint use of parking areas, the total parking space requirement is the sum of the individual requirements that will occur at the same time each day. When parking space requirements for individual uses occur at distinctly different times during the day, the total required parking spaces may be reduced by action of the Site Plan Review Committee provided that no parking spaces shall be counted which are more than five hundred (500) feet from any entrance to building using joint parking areas.

B. Recording: A copy of an agreement between the joint users of a parking area shall be recorded with the Eaton County Register of Deeds. Such agreements shall guarantee the long term use and maintenance of the parking facility by each party and shall provide that such agreement shall become null and void in the event that the nature of any of the joint uses changes such that additional parking shall be required. The agreement shall also expressly provide the County with

authority, but not the obligation, to enforce its terms, in accordance with the Zoning Ordinance.

**10.5.8 Building Additions and Change of Use:** Whenever a building, structure, or use is modified, expanded, or changed in use and such activity requires a permit pursuant to this Ordinance, the parking space requirements shall be reviewed and the facilities shall be made to comply with the standards of this Ordinance.

**10.5.9 Off-Street Parking Facilities:** for trucks, buses and recreational vehicles at restaurants, motels, hotels, service stations, commercial garages, and similar establishments, shall be sufficient in size to adequately service large vehicles and trucks without interfering with other vehicles using the same facility. Parking spaces for such vehicles shall be not less than twelve (12) feet in width and forty (40) feet in length. Access drives for such vehicles shall be designed with adequate turning radius and special provision for slow entry onto public streets and highways. Site Plan Review and approval pursuant to *Article 8* of this Ordinance shall be required for any use proposing to serve trucks, buses or recreational vehicles.

# ARTICLE 11
# ADVERTISING STRUCTURES, SIGNS, AND NAME PLATES

## SECTION 11.1 INTENT AND PURPOSE

The purpose of this Article is to promote traffic safety, public safety, and the conservation of property values through the application of reasonable controls over the use, size, placement, and general appearance of signs, billboards, and other advertising structures.

## SECTION 11.2 JURISDICTION

No sign, billboard, name plate, marquee, or other advertising structure shall be erected, replaced, structurally altered, enlarged, illuminated, changed in purpose, or relocated without first obtaining a sign permit pursuant to *Section 11.3* of this Ordinance, except those signs specifically exempted by *Section 11.8* of this Ordinance, and those structures specifically exempted from this ordinance regulation by the Highway Advertising Public Act 106, of 1972, as amended.

## SECTION 11.3 SIGN PERMITS

An application for a sign permit shall be made to the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***, by submission of a form approved for this purpose pursuant to *Section 3.4.1* of this Ordinance, by the owner of the property on which the sign is proposed to be located or by his agent, or lessee. Said application shall contain the following information:

**11.3.1** Property owner's name and address

**11.3.2** Applicant's name, address, and phone number

**11.3.3** Address or legal description of property on which the sign is proposed

**11.3.4** Name and address of the owner of the sign

**11.3.5** Total display area in square feet

**11.3.6** Proposed setback from road right-of-way

**11.3.7** Sign type, purpose, height

**11.3.8** Height and width of building if the sign is a wall or wall projecting type

## SECTION 11.4 REVIEW OF APPLICATIONS

The ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** shall review all properly filed applications for sign permits and issue permits only for those applicants fully meeting the criteria established in this Ordinance and the State Construction Code. The ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** shall approve or reject said applications within three (3) full working days of receipt of a completed application submittal.

## SECTION 11.5 SIGN PERMIT APPLICATION FEES

A schedule of permit fees shall be established and amended from time to time by resolution of the County Board of Commissioners.

## SECTION 11.6 APPEALS

The Board of Appeals may authorize a reduction, modification, or waiver of any of the requirements of this Article upon request provided the standards established in *Section 4.6.3* of this Ordinance are fully met.

## SECTION 11.7 PROHIBITED SIGNS

The following listed signs are prohibited in any district of this Ordinance:

**11.7.1** A sign displaying intermittent lights resembling the flashing lights customarily used in traffic signals, or police, fire, ambulance, or rescue vehicles.

**11.7.2** A sign using the words, "Stop", "Danger", or any other words, phrases, symbols, or characters, in such a manner as to interfere with, mislead, or confuse a vehicle driver.

**11.7.3** Billboards located within three-hundred (300) feet of a residential district

**11.7.4** Any sign which obstructs the ingress or egress from a required door, window, or other required exit

**11.7.5** Billboards used for on premise advertising

**11.7.6** Signs located in the right-of-way of public streets or highways

**11.7.7** Window signs located on the face of windows which cover more than twenty-five percent (25%) percent of the window area.

## SECTION 11.8 EXEMPT SIGNS

The following signs are permitted as indicated below and are not required to obtain a Sign Permit. Provided, however, that all exempt signs shall be installed outside the public right-of-way in such a manner as to not obstruct clear vision.

**11.8.1** **Real Estate Sale** and For Rent or Lease Signs which are not exceeding eight (8) square feet in display area when located within the LA, R-1, R-2, and R-3 districts, and not exceeding thirty-two (32) square feet in display area in all other land development districts. Said signs must be located on the actual property for sale, lease or rent.

**11.8.2** **Building Construction Signs** identifying contractors, architects, builders, or owners name during the period of construction not exceeding fifty (50) square feet in display area. Signs designating the future site of an establishment shall not be considered Building Construction Signs.

**11.8.3** **Political Campaign Signs** not exceeding thirty-two (32) square feet in display area. Political campaign signs supporting a candidate for public office shall be removed seven (7) days following the election for the office in question. Political campaign

signs expressing a viewpoint shall be treated as an exempt sign under this Section provided they are removed after ninety (90) days.

**11.8.4** **No Hunting**, No Trespassing, Garage Sale and On Premise Directional Signs not exceeding six (6) square feet in display area.

**11.8.5** **Signs identifying a building's address** and/or the names of the occupants but do not exceed six (6) square feet in display area.

**11.8.6** **Historic Markers,** signs identifying the name of a building or date of erection of a structure and official notices of any court or public agency not exceeding six (6) square feet in display area

**11.8.7** **Signs located on the premise of a customary agricultural operation** as defined in this Ordinance which identify and advertise, name of a farm, the operator's name, seed, fertilizer, herbicide, pesticide, feed, feed supplements, livestock, test plots, farm organizations, awards, and similar agricultural activities, including seed, feed, fertilizer, herbicide, and pesticide dealers, but excluding equipment and implement dealer and related repair facilities. Such signs shall not exceed thirty-two (32) square feet in display area.

**11.8.8** **Signs identifying the owner, operator, or name of a customary agricultural operation** when located on agricultural buildings without display area limitations.

**11.8.9** **Traffic Control**, Directional, Warning, or Information Signs when authorized by a public agency having appropriate jurisdiction without display area limitations

**11.8.10** **Flags (no larger than forty (40) square feet in display area), banners and signs (no larger than two (2) square feet in display area)** bearing the official insignia of a nation, state, county, municipality, or educational institution.

**INSERT ARTICLE 11 SCHEDULE A PAGE 11-4 HERE**

**INSERT ARTICLE 11 SCHEDULE A PAGE 11-5 HERE**

## SECTION 11.10 SIGN SETBACK REQUIREMENTS

Sign setbacks for all districts shall be as follows:

| | |
|---|---|
| Ground Signs: | Ten (10) feet from the edge of the road right-of-way to any portion of the sign or its supports |
| Pole Signs: | |
| Up to 20 feet sign height | Twenty (20) feet from edge of the road right-of-way to any portion of the sign or its supports |
| For signs greater than 20 feet in sign height | One (1) foot of additional setback for each additional foot of sign height |

## SECTION 11.11 DEFINITIONS AS USED IN THIS ARTICLE

The following definitions refer to this Article of this Ordinance and are placed here for convenience.

**11.11.1 Use of Words and Terms:** *Section 5.2* of this Ordinance shall be used for the purpose of interpreting the following definitions.

**11.11.2 Definitions:**

A. Sign: Sign shall mean and include every individual announcement, declarations, demonstration, display, illustration, insignia, surface or space when erected or maintained out of doors in view of the general public for identification, advertisement or promotion of the interests of any person. This definition shall include billboard signs, signs painted directly on walls of structures, and portable signs.

B. Sign, Advertising: Any sign erected for the purpose of advertising a business, product, service, event, person or subject not relating on the premises on which said sign is located.

C. Sign, Billboard: An off-premise sign applied to panels with over three-hundred (300) square feet of display area and used for out-door advertising of a business, product, service, event, person or subject including those signs as regulated by the Michigan Department of Transportation pursuant to Public Act 106 of 1972, as amended.

D. Sign, Business: Any sign erected for the purpose of advertising a business, product, or subject related to the premises on which said sign is located.

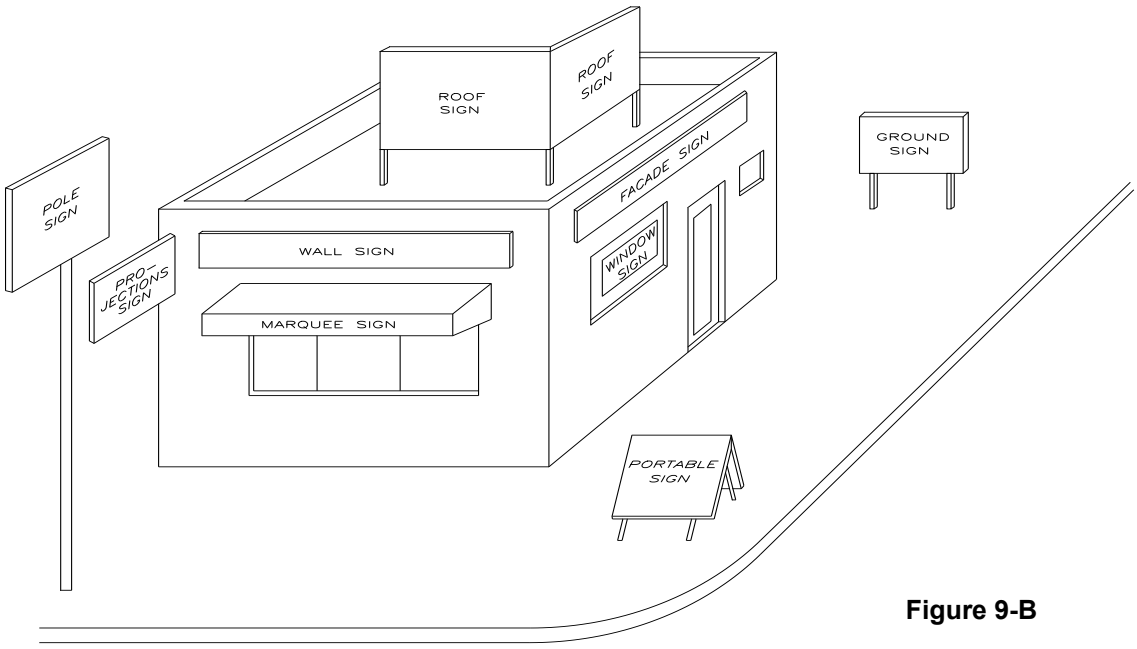



**Figure 9-B**

SIGN TYPES

E. Sign, Display Area: Display area means the entire area within a circle, triangle or parallelogram enclosing the extreme limits or writing, lighting, representation, emblem or any figure of similar character, together with any frame or other material forming an integral part of the display or used to differentiate the sign from the background against which it is placed; excluding the necessary supports or uprights on which such sign is placed. Where a sign has two or more faces, the area of all faces shall be included in determining the area of the sign; except that where two such faces are placed back to back and are at no point more than three feet from one another, the area of the sign shall be taken as the area of one face if the two faces are of equal area, or as the area of the larger face if the two faces are of unequal area.

EXCEPTION 1: The display area of signs painted directly on building wall surfaces shall be that area within a circle, triangle, or parallelogram enclosing the extreme limits of writing, letters, or numbers.

EXCEPTION 2: Time and temperature displays including clock facings.

F. Sign, Ground: A sign which is supported on a monument base or on one (1) or more supports where the sign height is less than eight (8) feet.

G. Sign, Height: The height of sign shall mean the maximum vertical distance from the uppermost extremity of a sign or sign support to the average ground level at the base of the sign.

H. Sign, Home Occupation: A sign containing only the name and occupation used for the purpose of advertising services in conjunction with a lawful home occupation.

I. Sign, Identification: A sign giving the nature, logo, trademark or other identifying symbol, address, or any combination of the name, symbol and address of a building, business, development or establishment on the premises where it is located.

J. Sign, Marquee: A sign which is attached to or hung from the underside of a marquee, awning, canopy, or other covered structure projecting from and supported by a building and does not project horizontally beyond or vertically above said marquee, awning, canopy, or covered structure.

K. Sign, Name Plate: A sign located on premises, giving the name or address, or both, or the owner or occupant of a building or premises.

L. Sign, Off-Premise: A sign located on a different parcel of land or lot or premise than where the business, product, service, event, or person or subject is being advertised.

M. Sign, On-Premise: A sign located on the parcel of land or lot advertising a business, product, service, event, person or subject being offered on said parcel of land or lot.

N. Sign, Pole: A sign which is supported on one (1) or more supports where the sign height is greater than eight (8) feet.

O. Sign, Portable: A sign that is not permanent, affixed to a building, structure or the ground including signs supported on mobile chassis other than motor vehicles.

P. Sign, Projecting: A sign which is attached directly to the building wall, and which extends more than fifteen (15) inches from the face of the wall.

Q. Sign, Roof: A sign which is erected, constructed and maintained upon or above the roof of a building, or parapet wall and which is wholly or partially supported by said building.

EXCEPTION: For the purpose of this definition of roof sign, a sign that is mounted on a mansard roof, roof overhang, parapet wall, above a marquee, or on a wall with a roof below, shall not be considered as a roof sign but shall instead be considered as a wall sign for that side of the building, provided that not part of such sign extends above the uppermost building line not including chimneys, flag poles, electrical, mechanical equipment, TV antennas and other similar equipment and extensions.

R. Sign, Setback: The minimum linear distance as measured from the road right-of-way line to the nearest part of the sign or advertising structure.

R. Sign, Wall: A sign that is attached directly to a wall, mansard roof, roof overhand, parapet wall, or above a marquee of a building with the exposed face of the sign in a plane parallel to the building wall or to the surface on which it is mounted, and which projects not more than fifteen (15) inches from the building or structure wall, and which does not have any part of such sign or sign supports extending above the uppermost building line not including chimneys, flag poles, electrical or mechanical equipment, TV antennas or any other similar equipment or extensions.

## SECTION 11.12 TEMPORARY SIGNS

Temporary signs shall be permitted as set forth in this section.

**11.12.1** As used in this ordinance, temporary signs include:

C. Balloon Sign: A portable sign which is inflated by air or any inert gas.

D. Portable Sign: A sign not permanently anchored or secured to either a building or the ground, such as, but not limited to, "A" frame, "T" or inverted "T" shaped sign structures and signs on movable trailers, or similar portable or moveable devices. Banners, balloon signs, or sign's objects or devices shall also be considered portable signs.

**11.12.2** Portable Signs: A portable sign, other than a balloon sign as regulated herein, may be permitted in any zoning district. Only one (1) portable sign shall be permitted on a site at any one time for a period not to exceed a total of thirty (30) days in any calendar year. A portable sign shall not exceed thirty-two (32) square feet in area, except for balloon signs as regulated herein and shall not have any flashing, colored or glaring lights. Further, such signs shall be placed no closer than ten (10) feet from the public right of way and shall not hamper the visibility of a driver on or off the site. A permit shall be obtained from the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** each time a portable sign is installed on a site.

**11.12.3** Balloon Signs: Balloon signs shall be permitted in the C-1, C-2, I and PUD zoning districts subject to the following regulations:

A. A balloon sign shall not be more than thirty-five (35) feet high from the point where the balloon rests on any surface if the balloon rests on a surface, or from the point of tie-down, if it does not rest on a surface.

B. All balloon signs shall be securely anchored to the ground or to a building in accordance with the requirements of the ~~Eaton County~~ ***State of Michigan*** Building Code, as amended. All anchoring devices shall be inspected and approved by the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***. Balloon signs over fifteen (15) feet high shall be anchored with a minimum of six (6) ropes or similar tie-down devices. Additional ropes or tie-down devices may be required by the ~~Construction Code~~ ***Building*** Official to ensure proper anchoring.

C. Any electrical motor, pump or similar devise used to inflate the balloon sign shall be installed in accordance with the requirements of the ~~Eaton County~~ ***State of Michigan*** Building Codes, as amended.

D. A balloon sign shall be setback a minimum distance of one and one-half (1½ ) times its inflated height from all property lines. **For example**, a balloon sign with a total inflated height of forty (40) feet must be anchored at least sixty (60) feet from all property lines.

E. A balloon sign placed on the ground shall not, in the opinion of the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***, interfere with the on-site or off-site traffic circulation, utility lines, hamper the visibility of drivers or obstruct fire lanes. The placement of a balloon sign on the ground shall not result in a reduction of the number of parking spaces required herein for that site on which the balloon sign is located.

F. A temporary barricade shall be installed completely around a balloon sign to deter easy access. This barricade must be clearly visible and be comprised of rope, portable fence or similar materials, excluding barbed wire.

G. A balloon sign, if mounted on top of a building, shall not protrude over the edge of that building.

H. All balloon signs shall be equipped with a quick deflation system so that the balloon sign will deflate instantly if it breaks loose from its anchor. The ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** shall inspect the balloon sign to ensure that this system is installed properly.

I. All balloon signs shall be taken down if wind speeds exceed thirty (30) knots (35 mph). The installer of the sign shall be responsible for monitoring weather conditions.

J. Balloon signs are considered portable signs and shall comply with the Portable Sign regulations in this Ordinance including limitations on the duration a balloon sign may remain on a site in a calendar year.

K. Balloon signs may be illuminated from the inside or by exterior lights placed to direct the glare away from adjacent roadways and properties. Balloon signs shall not have any flashing, colored or glaring lights.

L. A balloon sign installer shall carry at least one million dollars ($1,000,000) in liability insurance coverage and shall provide proof of this to the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** prior to the issuance of the sign permit.

M. Balloon signs shall be installed so as not to interfere with utility lines, flight paths or radio and television reception.

# ARTICLE 12
# NON-CONFORMITIES

## SECTION 12.1 INTENT AND PURPOSE

It is the purpose of this Article to provide for the continuance of lawful uses of land or structures which existed before the enactment of this Ordinance, or before the effective date of an amendment to this Ordinance, governing an otherwise lawful existing use of land or structures. Such non-conformities are permitted to continue under the conditions specified in this Article which are intended to minimize disharmony and incompatibility between uses of land and provide for either the eventual discontinuance or conversion of non-conformities.

## SECTION 12.2 CLASSIFICATION OF NON-CONFORMITIES

**12.2.1 Illegal Non-conformity:** Any use of land or structure which has been established in violation of the provisions of this Ordinance or a previous valid County Zoning Ordinance, having jurisdiction at the time said use of land or structure was established, and any use of land or structure which has been lawfully established under this Ordinance or a previous valid County Zoning Ordinance and subsequently violates the terms of the permit under which it was established shall be termed an illegal non-conformity, except when said illegal non-conformity is in full compliance with the provisions of this Ordinance.

**12.2.2 Legal Non-conformity:** An existing use of land, lot or structure which does not fully comply with the provisions of this Ordinance, as amended, and either was lawfully established, created, or commenced during a period of time when no valid zoning ordinance was in effect, or was lawfully established under the jurisdiction of this Ordinance, or a previously valid County Zoning Ordinance, and remains in compliance with the terms of a permit issued at that time.

A. Legal Non-conforming Lot: Any existing lot lawfully created which fails to meet the minimum lot area and minimum lot frontage requirements contained in this Ordinance, and can be shown to have been created as a legal non-conformity by examination of either a legal instrument of transfer or property, or property tax assessment rolls, shall be classified as a non-conforming lot.

B. Legal Non-conforming Structure: Any existing building, structure, sign, parking area, or other land development which fails to meet the setback, side yard, rear yard, and other requirements of this Ordinance, as amended, and can be shown to have established or commenced as a legal non-conformity shall be classified as a non-conforming structure.

C. Legal Non-conforming Use: Any use of land located in a district in which it is not permitted by right, or by Site Plan Approval pursuant to this Ordinance, as amended, and can be shown to have established, or commenced as a legal non-conformity shall be classified as a non-conforming use.

**12.2.3 Regulation of Non-conformities:** Legal non-conformities as defined in *Subsection 12.2.2* shall be permitted to continue provided there is compliance with the following regulations:

A. Discontinuance or Abandonment: Whenever a nonconforming use has been discontinued for twelve (12) consecutive months, such discontinuance shall be considered conclusive evidence of an intention to abandon legally the nonconforming use. At the end of this period of abandonment, the nonconforming use shall not be re-established and any future use shall be in conformity with the provisions of this Ordinance.

B. Expansion: No legal non-conforming use shall be permitted to expand, enlarge or extend the land area occupied by the non-conforming use, except the non-conforming use of a building may be extended throughout any portions of a building which can be shown to have been manifestly arranged or designed for such use, and except in the case of surface mining operations, the existing site or holes may be continued and enlarged within the boundaries of the parcel on which the operation was lawfully established.

C. Structural Alteration: No legal non-conforming use shall undertake a structural change requiring a Construction Permit, pursuant to Public Act 230 of 1972, as amended, specifically, *Section 10(1)* and *Section 105* of the Building Code and *Section R105* of the Michigan Residential Code, as amended, provided, however that mechanical, electrical, plumbing, sewage disposal, and well permits shall be issued when no structural alteration or modification is involved, and provided the strengthening or restoring to safe condition of any building, structure, or part thereof declared to be unsafe by any public official charged with protecting the public health or safety may be structurally altered to the extent necessary to comply with the order of said public official. Provided, further, that a legal non-conforming structure that can be shown to be legally in existence prior to 1981 may be improved or expanded without recourse to the Zoning Board of Appeals pursuant to *Article 4* of this Ordinance, if such improvement or expansion shall not encroach into the setback areas any further than the original (pre-1981) structure encroached into that same setback. For example, a home whose front wall is located too close to the road right of way could be added to as long as no portion of the addition was located any closer to the right of way than the existing home front wall and also provided that the addition meets all other side and rear yard setbacks.

D. Completion: Any lawful use of land or structure which is under construction in furtherance of the establishment of a building or structure before the enactment of this Ordinance shall be permitted to continue as a legal non-conformity.

E. Substitution: A legal non-conforming use or a legal non-conforming structure shall not be changed in use to another non-conformity. A legal non-conformity which is succeeded by a use, building or structure in compliance with this Ordinance shall lose its vested right as a legal non-conformity and hereafter continue in compliance with the provisions of this Ordinance.

F. Re-establishment: A legal non-conforming use or legal non-conforming structure which is damaged by fire, collapse, explosion, high winds, vandalism, or other means beyond the owner's control, may not be replaced but may be repaired to its former condition upon certification of a licensed appraiser or the insurance adjuster whose company insures the property that the cost of repair does not exceed the former value of the buildings and structures located on said property.

G. Moving: No non-conforming use shall be moved in whole or in part **except** when such moving results in full compliance with the provisions of this Ordinance.

H. Continuance: An illegal non-conformity shall be corrected to comply with the provisions of this Ordinance or discontinued, and shall be subject to enforcement action pursuant to this Ordinance when applicable or pursuant to a previous County Zoning Ordinance in effect at the time said land use or structure was unlawfully established.

I. Initial Construction: A legal non-conforming lot shall be issued a development permit, provided that the proposed development meets all of the provisions of this Ordinance **except** the minimum lot area and minimum lot frontage requirements of the district in which it is situated.

**12.2.4 Expansion of Non-conforming Structures:** The expansion of non-conforming structures is hereby authorized provided the actual addition, or accessory building is in compliance with the applicable requirements of this Ordinance. A legal non-conforming structure that can be shown to be legally in existence prior to 1981 may be improved or expanded without recourse to the Zoning Board of Appeals pursuant to *Section 4.6.7* of this Zoning Ordinance, if such improvement or expansion shall not encroach into the setback areas any further than the original (pre-1981) structure encroached into that same setback. For example, a home whose front wall is located too close to the road right of way could be added to as long as no portion of the addition was located any closer to the right of way than the existing home front wall and also provided that the addition meets all other side and rear yard setbacks.

**12.2.5 Non-conformities Summary Table**

| REGULATION OF NON-CONFORM-ITIES | ILLEGAL NON-CONFORM-ITIES | NON-CON-FORMING LOTS | NON-CON-FORMING STRUCTURES | NON-CON-FORMING USES |
|---|---|---|---|---|
| **12.2.3** | **12.2.1** | **12.2.2A** | **12.2.2B** | **12.2.2C** |
| A | | | Abandonment | Abandonment |
| B | | | | Expansion |
| C | | | | Alteration |
| D | | | Completion | Completion |
| E | | | Substitution | Substitution |
| F | | | Re-Establishment | Re-Establishment |
| G | | | | Moving |
| H | Continuance | | | |
| I | | Construction | | |

## SECTION 12.3 APPEALS

The Board of Appeals may authorize a modification or waiver of certain requirements of this Article. Upon receipt of a specific request, the Appeals Board may:

**12.3.1** Allow the expansion of a legal non-conforming use.

**12.3.2** Allow the structural alteration of a legal non-conforming use.

**12.3.3** Allow the substitution of another legal non-conforming use having a less deleterious effect on surrounding property.

**12.3.4** Allow the re-establishment of a legal non-conforming structure or use.

**12.3.5** Allow the moving of a legal non-conforming structure.

# ARTICLE 13
# AMENDMENTS

## SECTION 13.1 INTENT AND PURPOSE

The purpose of this Article is to provide for the amendment of this Ordinance as needed when provisions become obsolete, when identifiable conditions change related to this Ordinance, when errors are found, or when changes are made in land use policy or the County Development Plan.

## SECTION 13.2 INITIATION OF AMENDMENTS

**13.2.1** The County Board of Commissioners may, from time to time**,** amend, modify, supplement, or revise the land development district boundaries or the provisions of this Ordinance.

**13.2.2** Amendments may be initiated by the Board of Commissioners, the County Planning Commission, any Township Board of Trustees whose township is under the jurisdiction of this Ordinance, or by application of one or more persons having interest in property located within the jurisdiction of this Ordinance.

## SECTION 13.3 FILING FEE

The County Board of Commissioners shall establish by resolution, a fee to be paid in full at the time of receipt of any application to amend this Ordinance. Said fee will be collected by the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** and no part shall be refundable to the applicant. No fee shall be charged when the applicant is a governmental body.

## SECTION 13.4 PROCEDURE

**13.4.1** The Planning Commission will adopt an application form to be completed by the applicant and filed with the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***. An application shall be submitted for each parcel of land which is not contiguous to any adjacent parcel of land being proposed for the same amendment.

**13.4.2** The ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** will review the application for completeness. Any application not properly filed or complete shall be returned to the applicant. Complete applications will be transmitted to the Planning Commission.

**13.4.3** The ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** shall provide notice of the proposed amendment in accordance Public Act 110 of 2006, as amended and pursuant to Article 3.9, herein. In addition to the above, the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** will notify the following agencies within five (5) business days of receipt of a proper application, requesting their comments and recommendations:

A. The township Board of Trustees in all townships affected, and any other governmental unit having jurisdiction within 1/2 mile of property affected by the proposed amendment.

B. Barry-Eaton District Health Department.

C. The Eaton County Board of Commissioners.

D. The Eaton County Drain Commissioner.

E. Any school district affected by the proposed amendment.

**13.4.5 Comment and Recommendations:** The above mentioned review agencies may submit comments and recommendations on the proposed amendment within thirty-five (35) calendar days of receipt of notice. If no written correspondence is received by the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** within said 35 calendar days, the Planning Commission shall presume that the review agency has no objections to the proposed rezoning.

**13.4.6** When the proposed amendment is a request for a change of designation on the Land Development District Map (Rezoning), the applicant or a representative of the applicant shall be required to appear at a meeting of the affected Township Board of Trustees to discuss the proposal prior to the date of the public hearing held by the Planning Commission.

**13.4.7** The Planning Commission will prepare, adopt by resolution and maintain a policy establishing general guidelines to be followed when considering the amendment of this Ordinance and the Zoning Map to change the Land Development District for properties within the County. Said policy guidelines will be applied by the ~~Community Development Director~~ ***Development Official*** and the Planning Commission and will be communicated to applicants seeking the re-zoning of properties within the County.

A. **Residential Rezoning Performance Standards:** Certain areas of the County incorporated in the Low Density (R-1) Residential District may be suitable for Medium Density(R-2) or High Density (R-3) Residential development. However, prior to approving any request to rezone such lands, the Planning Commission shall apply the following performance standards and must find that the proposed rezoning meets all of the designated standards:

| Rezoning | PERFORMANCE STANDARDS | BASIS |
|---|---|---|
| **From Low Density R-1 to Medium Density R-2 Residential** | **Public Wastewater:** Public services shall either be available to the site or planned within the reasonably foreseeable future. | Medium density living environments generate greater effluent with the potential to ultimately cause groundwater pollution. |
| **From Low Density R-1 to Medium Density R-2 Residential** | **Road Surface, type and capacity:** The roadway(s) that would serve the proposed site shall be all-season or paved public roads capable of serving the proposed residential density | Medium density living environments may generate additional automobile traffic and will need to be readily served by such service vehicles as school buses, emergency equipment and maintenance equipment. |

| | | |
|---|---|---|
| **From Low Density R-1 to Medium Density R-2 Residential** | **Social Services:** The proposed site shall be located within reasonable proximity of areas zoned and used for such social services as schools, medical offices, parks and recreational facilities, shopping and other similar services. | Residents of medium density living environments require convenient access to support services. Furthermore, locations in proximity to other services further the efficient use of land and services. |
| **From Low Density R-1 to High Density R-3 Residential** | **Public Wastewater:** Public services shall be either available to the site or planned within the reasonable foreseeable future. | High density living environments generate greater wastewater effluent with the potential to ultimately cause groundwater pollution. |
| **From Low Density R-1 to High Density R-3 Residential** | **Public Water:** Public services shall either be available to the site or planned within the reasonable foreseeable future, or in the alternative the site shall be proposed to be served by a property regulated community well and distribution system. | A reliable source of plentiful, potable water is vitally important for all residents. In high density living environments the importance of a reliable source is magnified by the number of families that rely on it. |
| **From Low Density R-1 to High Density R-3 Residential** | **Road Surface, type and capacity:** The roadway(s) that would serve the proposed site shall be paved, all-season public roads capable of serving the proposed residential density | High density living environments generate additional automobile traffic and will need to be readily served by such service vehicles as school buses, emergency equipment, and maintenance equipment. |
| **From Low Density R-1 to High Density R-3 Residential** | **Social Services:** The proposed site shall be located within reasonable proximity of areas zoned and used for such social services as schools, medical offices, parks and recreational facilities, shopping and other similar services. | Residents of high density living environments require convenient access to support services. Furthermore, locations in proximity to other services further the efficient use of land and services. |

A. **Commercial Rezoning Performance Standards**: Certain areas of the County may be suitable for C-1 Local Business or C-2 General Business development. However, prior to approving any request to rezone such lands, the Planning Commission shall apply the following performance standards and must find that the proposed rezoning meets all the designated standards:

| **Rezoning from LA, R-1, R-2, R-3 to:** | **PERFORMANCE STANDARD** | **BASIS** |
|---|---|---|
| **To C-1 Local Business** | **Surrounding Uses and zoning**: Land uses and the zoning classification surrounding the proposed site shall be compatible with local businesses. | Local Business land uses can produce traffic and commercial activity that could be a detriment to surrounding properties. |
| **To C-1 Local Business** | **Road surface, type and capacity:** The roadway(s) that would serve the proposed site shall be all season or paved public roads capable of serving a local business land use. | Commercial land uses may generate automobile and pedestrian traffic and may require deliveries from commercial vehicles that are best served by a fully improved roadway system. |
| **To C-1 Local Business** | **Community Services:** the proposed site shall be reasonably accessible to the public safety and other community services. | Local business land uses may generate a need for public safety or other community services and the proposed location should be reasonably accessible to receive such services. |
| **To C-1 Local Business** | **Population Centers:** The proposed site shall be located adjacent to or in close proximity to areas of population concentration. | Local business can contribute to the amenities and services of a neighborhood and require reasonable access to population for economic viability. |
| **Rezoning from Local Business District C-1 to General Business District C-2** | **PERFORMANCE STANDARD** | **BASIS** |
| **Rezoning from Local Business District C-1 to General Business District C-2** | **Surrounding Uses and Zoning:** Land uses and the zoning classification surrounding the proposed site shall be compatible with general business. | General and regional commercial land uses generate traffic, frequently maintain long hours of operation and may produce other off-site |

| | | |
|---|---|---|
| | | impacts which are not compatible with all land uses. |
| **Rezoning from Local Business District C-1 to General Business District C-2** | **Public wastewater:** Public services shall either be available to the site or planned within the reasonably foreseeable future. | General business land uses can generate greater wastewater effluent with the potential to ultimately cause groundwater pollution. |
| **Rezoning from Local Business District C-1 to General Business District C-2** | **Public Water:** Public services shall either be available to the site or planned within the reasonably foreseeable future. | A reliable source of plentiful potable water is vitally important for many commercial operations and for fire suppression. |
| **Rezoning from Local Business District C-1 to General Business District C-2** | **Road surface, type and capacity**: The roadway(s) that would serve the proposed site shall be paved all-season roads capable of serving the proposed commercial development. | Commercial land uses generate automobile and pedestrian traffic and may require deliveries from commercial vehicles or services from emergency equipment that are best served by a fully improved roadway system. |
| **Rezoning from Local Business District C-1 to General Business District C-2** | **Population Centers**: The proposed site shall be located adjacent to or in close proximity to areas of population concentration. | General business can contribute to the amenities and services available within a community and require reasonable access to population centers for economic viability. |

## SECTION 13.5 PUBLIC HEARINGS

**13.5.1** The Planning Commission will schedule a public hearing on the proposed amendment, not less than forty-five (45) days or more than sixty (60), after receipt of an application to amend this Ordinance.

**13.5.2** Notice of Public Hearing for consideration of an amendment to the Ordinance by the Planning Commission shall be provided pursuant to Article 3.9, herein.

## SECTION 13.6 SCOPE OF EXAMINATION

**13.6.1 Scope of Examination:** In reviewing the application for an amendment to this Ordinance, the Planning Commission will identify and evaluate all factors relevant to the application, and will report its findings in full along with its recommendations for disposition of the application, to the County Board of Commissioners. The matters to be

considered by the Planning Commission will include, but shall not be limited to, the following:

A. What, if any, identifiable conditions related to the application have changed which justify the proposed amendment?

B. What, if any, error was made in the original Ordinance which justifies the proposed amendment?

C. What are the precedents and possible effects of such precedents which might result from the approval or denial of the petition?

D. What is the impact of the amendment on the ability of the County and other governmental agencies to provide adequate public services and facilities, and/or programs that might reasonably be required in the future if the proposed amendment is adopted?

E. Does the petitioned district change adversely affect environmental conditions, or result in conditions that are detrimental to persons or property in the vicinity.

F. Does the petitioned district change generally comply with the adopted Eaton County Comprehensive Development Plan?

G. The ability of the property in question to be put to a reasonable economic use in the Land Development District in which it is presently located.

**13.6.2** All findings of fact shall be made a part of the public records of the meetings of the Planning Commission. The Planning Commission will transmit its findings of fact and a summary of comments received at the public hearing to the Board of Commissioners.

## SECTION 13.7 CONSIDERATION BY THE BOARD OF COMMISSIONERS

After receiving the recommendations of the Planning Commission, the Board of Commissioners, at any regular meeting or at any special meeting called for that purpose, will consider said findings of fact and recommendations and vote upon the adoption of the proposed amendment. Such action shall be by ordinance, requiring a majority vote of the full membership of the County Board of Commissioners. The Board of Commissioners may refer any proposed amendments to the Planning Commission for consideration and comment within a time specified by the Board of Commissioners. The Board of Commissioners may hold additional public hearings if it considers it necessary or as required. The Board of Commissioners shall grant a hearing on a proposed Ordinance provision to a property owner who request a hearing by certified mail, addressed to the County Clerk. If the Board of Commissioners so chooses or is appropriately requested to hold a public hearing, such notice shall be conducted as provided for in Article 3.9, herein. It is further understood that in order to lessen the possibility of adverse litigation concerning the Land Development decisions of the Board of Commissioners, that said Board will make a complete record of the rationale for the action taken on each application for amendment to this Ordinance.

## SECTION 13.8 NOTICE OF ORDINANCE ADOPTION AND EFFECTIVE DATE

**13.8.1** Notice of Adoption. Following the adoption of an amendment by the Board of Commissioners, the amendment shall be filed with the County Clerk and a notice of amendment

adoption shall be published in a newspaper of general circulation in the County of Eaton within 15 day after adoption. A copy of the notice of adoption shall also be mailed to the airport manager of an airport entitled to notice. The notice of adoption shall include the following information:

A. A summary of the regulatory effect of the amendment, including the geographic area affected, or the text of the amendment.

B. The effective date of the amendment.

C. The place and time where a copy of the Ordinance and/or Amendment may be purchased or inspected.

**13.8.2** Effective Date. The amendment shall become effective seven (7) days after publication as required by Article 13.8.1, above. The filing and publication requirements under this section supersede any other statutory requirements relating to the filing and publication of other county ordinances.

# ARTICLE 14
# SPECIFIC PROVISIONS AND REQUIREMENTS

The following definitions, regulations and conditions apply to the uses of land listed in *Article 7* of this Ordinance, provided that a specific reference is made to this Article.

## SECTION 14.1 AGRICULTURAL BUSINESS

**14.1.1 Definition:** The sales, service, repair, storage, and processing activities which are directly dependent upon the agricultural community of the county and are necessary to support agricultural enterprise.

**14.1.2 Permitted Uses:**

A. Commercial riding stable

B. Processing facilities for food, feed, fiber and alcohol processing facilities, for more than one farm operator

C. Grain and feed elevators

D. Greenhouses with on premise retail sales

E. Livestock auction yards

F. Livestock transport facilities

G. Nurseries with on premise retail sales

H. Sawmills

I. Seasonal farm markets; provided, however, that seasonal farm markets selling only fresh produce raised on the premises and conducting retail sales with total gross annual sales of less than $2,000, shall not be regulated under this Article.

J. Slaughterhouse selling products butchered on the premises

K. Veterinary Hospital, Clinic or Kennel

L. Large Animal Boarding Business

**14.1.3 Regulations and Conditions:**

A. Animal holding area shall be setback one-hundred (100) feet from all property lines and the road right-of-way.

B. No storage of manure or dust producing material within one-hundred (100) feet of any property line or road right-of-way.

C. Signs shall comply with *Article 11* of this Ordinance.

D. Parking areas shall comply with *Article 10* of this Ordinance.

E. Agricultural business shall be established and conducted in compliance with all other applicable laws and ordinances.

## SECTION 14.2 AUTOMOBILE SALVAGE AND SCRAPPING YARD

**14.2.1 Definition:** A parcel of land used for the purpose of selling, exchanging or dealing in motor vehicle or vehicle parts which requires a license from the Secretary of State pursuant to Public Act No. 300 of 1949, as amended, specifically those operations defined as Used Vehicle Parts Dealer, a Vehicle Salvage Pool, or a Vehicle Scrap Metal Processor as defined in the aforementioned State Statute.

**14.2.2 Regulations and Conditions:**

A. All uses shall be established and maintained in accordance with all applicable state laws.

B. The site shall be a minimum of five (5) acres in size.

C. The site shall have access on a major street as defined in *Section 5.3.13M* of this Ordinance.

D. A solid fence, wall or earthen berm at least six (6) feet in height and no greater than twelve (12) feet in height shall be provided around the periphery of the site to screen said site from surrounding property. Such fence, wall or berm shall be of sound construction, painted or otherwise finished neatly and inconspicuously. All activities shall be confined within the enclosed area. There shall be no stocking of material above the height of the fence or wall, except that movable equipment used on site may exceed the wall or fence height. No equipment, material, signs or lighting shall be used or stored outside the enclosed area.

E. Industrial processes involving the use of equipment for cutting, compressing, or packaging shall be conducted within a completely enclosed building.

## SECTION 14.3 CEMETERY

**14.3.1 Definition:** Privately owned property, which guarantees perpetual care of grounds used solely for the interment of deceased human beings or customary household pets.

**14.3.2 Regulations and Conditions:** Cemeteries shall be established in compliance with Public Act 368 of 1978, as amended, Public Act 88 of 1875, as amended, and other applicable state laws.

## SECTION 14.4 FOSTER CARE FACILITIES

**14.4.1 Definition:** A structure constructed for residential purposes that is licensed by the State pursuant to Act No. 218 of the Public Acts of 1979, as amended, being Sections 400.701 to 400.735 of the Michigan Compiled Laws, or Act No. 116 of the Public Act of 1973, as amended, being Sections 722.111 to 722.128 of the Michigan Compiled Laws, and that provides resident services or care for persons under twenty-four (24) hour supervision for persons in need of that supervision or care. The following facilities are defined and are classified as foster care facilities:

A. Foster Family Home: A private home in which one (1), but not more than four (4), minor children, who are not related to an adult member of the household by blood, marriage, or adoption, are given care and supervision for twenty-four (24) hours a day, for four (4) or more days a week, for two (2) or more consecutive weeks, unattended by a parent or legal guardian (MCLA 722.111(f)(i)).

B. Foster Family Group Home: A private home in which more than four (4) but fewer than 7 minor children who are not related to an adult member of the household by blood, marriage or adoption, are provided care for twenty-four (24) hours a day, for more than four (4) days a week, for two (2) or more consecutive weeks, unattended by a parent or legal guardian (MCLA 722.111(f)(ii)).

C. Adult Foster Care Family Home: A private home with the approved capacity to receive six (6) or fewer adults to be provided with foster care for five (5) or more days a week and for two (2) or more consecutive weeks. An AFC Family Home licensee must provide the care and be a member of the household and an occupant of the home (MCLA 400.703(5)).

D. Adult Foster Care Small Group Home: A facility with the approved capacity to receive twelve (12) or fewer adults (MCLA 400.703(7). If the facility has six (6) or fewer residents, it is allowed by right in residential zoning districts (R-1, R-2 and R3). Care must be provided by paid staff that does not necessarily live on site, and there must be one caregiver for every six (6)

E. Adult Foster Care Large Group Home: A facility with the approved capacity to receive at least thirteen (13) but not more than twenty (20) adults to be provided with foster care (pursuant to MCLA 400.703(6)).

**14.4.2 Regulations and Conditions:**

A. A state licensed residential facility shall at all times maintain any and all licenses required under the ordinances of Eaton County and the laws of the State of Michigan. Failure to maintain any such required license(s) shall be grounds for the revocation of a conditional use permit issued under this Ordinance.

B. A state licensed residential facility shall have not more than twelve (12) residents.

C. A state licensed residential facility shall comply with all lot area and setback regulations required for single-family homes.

D. Signs shall comply with *Article 11* of this Ordinance.

E. Parking areas shall comply with *Article 10* of this Ordinance.

## SECTION 14.5 COMMUNITY SERVICE FACILITY

**14.5.1 Definition:** A public or private utility installation including, but not limited to water towers, pumping stations, microwave transmission towers, high voltage electrical transmission equipment and accessories or communications equipment which is licensed by the Federal Communications Commission that is reasonably necessary to provide needed community facilities and services. See Sections 14.39 for Solar Energy and 14.41 Wind Energy Systems specific provisions and requirements.

**14.5.2 Regulations and Conditions:**

A. Freestanding towers shall be setback from property lines and street right-of-way lines a distance equal to the elevation of the tower or three-hundred (300) feet, whatever is less. Freestanding towers in excess of one-hundred (100) feet in height above grade level shall be prohibited within a two (2) mile radius of a public airport.

B. Mechanical equipment which is not located within a fully enclosed building shall be screened from view with suitable plant material and fenced to the extent necessary to protect the public safety and to conserve the value of surrounding property.

## SECTION 14.6 CONVENIENCE COMMERCIAL ESTABLISHMENT

**14.6.1 Definition:** A Convenience Commercial Establishment such as retail, office, restaurant, tavern, service business, or other commercial use permitted in *Subsection 7.5A.2* of this Ordinance, which is operated from a single building containing not more than 1,500 square feet in gross floor area and is established solely to meet the needs of the population residing within three (3) mile radius of the convenience commercial establishment.

**14.6.2 Regulations and Conditions:**

A. Business or establishment shall not exceed 1,500 square feet in gross floor area.

B. Business or establishment shall provide a landscape buffer strip pursuant to *Article 17* of this Ordinance.

C. Related repair and service facilities shall not occupy more than fifteen (15) percent of the net floor area of the establishment.

D. All signs shall comply with Article 11 of this Ordinance.

E. All parking areas shall comply with Article 10 of this Ordinance.

## SECTION 14.7 DRIVE-IN MOTION PICTURE THEATER AND RACETRACK

### 14.7.1 Definitions:

A. Drive-in Motion Picture Theater: An establishment designed for viewing motion pictures from automobiles along with such accessory uses as food service, and playgrounds.

B. Racetrack: An establishment for the viewing of outdoor sports events which involve competition for the fastest time, greatest distance or other quantitative measure, in events which normally involve vehicles or animals such as cars, motorcycles, go-karts, airplanes, horses, and dogs.

### 14.7.2 Regulations and Conditions:

A. All drive-in motion picture theaters or racetracks shall have direct access to a major street as defined in *Section 5.3.13M* this Ordinance.

B. All drive-in motion picture theaters and racetracks shall have at least four-hundred (400) feet of frontage and a lot area of at least ten (10) acres in area.

C. All drive-in theaters and racetracks shall be enclosed around the entire periphery with an opaque fence at least six (6) feet in height.

D. Drive-in motion picture theaters shall contain ticket gates in accordance with the following:

| Capacity of Drive-in Theater | Required Ticket Gates |
|---|---|
| 300 | 1 |
| 600 | 2 |
| 800 | 3 |
| 1000 | 4 |

Vehicle queuing areas between gates and the right-of-way of a public street shall be at least twenty-five percent (25%) of the vehicle capacity of the drive-in motion picture theater.

E. Drive-in motion picture theater screens shall not face a public street and shall be located such that they cannot be viewed from any major street as defined in *Section 5.3.13M* of this Ordinance.

## SECTION 14.8 MULTIPLE FAMILY DWELLING

### 14.8.1 Definitions:

A. Multiple Family Dwelling: A single building or a series of buildings with abutting walls containing three (3) or more residential dwelling units each with separate housekeeping, kitchen, and bathroom facilities built upon a single lot or parcel of land and including condominium developments.

### 14.8.2 Regulations and Conditions:

A. Building and lot shall conform to the site development requirements contained in *Section 7.7* of this Ordinance.

B. All signs shall conform to the provisions of *Article 11* of this Ordinance.

C. All off-street parking shall conform to the provisions of *Article 10* of this Ordinance

D. No dwelling unit shall have its principal access more than one-hundred fifty (150) feet from either an access drive or a public street, and the required off-street parking area.

E. All structures shall be a minimum of twenty-five (25) feet from property lines.

F. The minimum horizontal distance between the nearest points of buildings shall be forty (40) feet.

G. The site shall be adjacent to and served by a major street as defined in *Section 5.3.13M* of this Ordinance.

## SECTION 14.9 DUPLEX DWELLINGS

### 14.9.1 Definitions:

A. Duplex Dwelling: A single building located on a single lot containing two (2) dwelling units, each of which is totally separated from the other by an un-pierced wall and for use as a residence by two families living separately from one another. A duplex may be built as a duplex structure, or it may be created by the conversion of an existing single-family residence.

### 14.9.3 Regulations and Conditions:

A. Building and lot shall conform to the site development requirements contained in *Section 7.7* of this Ordinance for the land development district in which it is located.

B. Approval of the conversion from a single dwelling to a two (2) family dwelling shall be obtained from the Barry-Eaton District Health Department stating the maximum number of inhabitants capable of being served by the approved on-site sewage disposal system and water supply, or approval from the municipality operating public sanitary sewer and/or municipal water supply.

C. Parking shall be provided in accordance with *Article 10* of this Ordinance.

D. All signs shall conform to the provisions of *Article 11* of this Ordinance.

E. No dwelling unit shall have its principal access more than one-hundred fifty (150) feet from either an access drive or a public street, and the required off-street parking area.

## SECTION 14.10 EDUCATIONAL INSTITUTIONAL AND GOVERNMENT FACILITY

**14.10.1 Definitions:**

A. Educational Institution: A public or private accredited kindergarten through twelfth grade school, college, trade, or business school, nursery school, pre-school, or day care facility, and/or related administrative offices, excluding maintenance garage.

B. Government Facility: A facility under the operational control of a governmental unit, specifically a Township, City, Village, County, State, the United States Government, or some combination of governmental units, including, but not limited to, offices, libraries, museums, town halls, post offices, courts, and civic centers; excluding, vehicle and equipment maintenance and correctional institutions.

**14.10.2 Regulations and Conditions:**

A. No building for public use shall be closer than fifty (50) feet to any property or street right-of-way line. Accessory buildings for storage must meet the requirements of Section 6.2.10 B. Family and Group day care homes are exempt from this requirement, but must meet the required setbacks for the zoning district in which they are located.

B. Group day care homes must meet the requirements in section MCL 125.3206 of PA 110 of 2006, as amended.

C. No more than twenty-five (25%) percent of the gross site area shall be covered by buildings.

D. All signs shall comply with *Article 11* of this Ordinance.

E. All off-street parking shall comply with *Article 10* of this Ordinance.

## SECTION 14.11 GOLF COURSES AND COUNTRY CLUBS

**14.11.1 Definition:** A public or private owned facility open to members only or the general public, offering the use of golf links, and related facilities such as a restaurant, tavern, swimming pool, tennis courts, and exercise facilities, and seasonal skiing facilities to its clientele.

**14.11.2 Regulations and Conditions:**

A. The site area shall be at a minimum of twenty (20) acres and shall be located on a major street as defined in *Section 5.3.13M* of this Ordinance.

B. All buildings, parking areas, swimming pools, and tennis courts shall be set back a minimum of one-hundred (100) feet from any property or street right-of-way lines.

C. A landscaped buffer strip shall be provided between the parking and principal building area and any adjacent residential development in accordance with *Article 17* of this Ordinance.

D. All signs shall comply with *Article 11* of this Ordinance.

E. All off-street parking shall comply with *Article 10* of this Ordinance.

## SECTION 14.13 HOME BUSINESS

**14.13.1 Definition:** A Home Business is an accessory use to a household involving the sale of goods and services which is conducted either from within the dwelling and/or from accessory buildings located on the same parcel and within five-hundred (500) linear feet of the dwelling unit occupied by the family conducting the home business. If the proposed home business activity does not create retail sales on the property, does not employ anyone other than the residents of the home, does not generate traffic to the property, does not have signage, or create noise, dust, vibration, odor, smoke, glare, electrical interference, or fire hazard to a greater extent than normal or substantially increase the use of services such as water, sanitary sewer, storm drainage, or garbage collection, the activities may be conducted within the home or accessory structure without having to obtain a conditional use permit. Prohibited businesses are identified in Article 14.13.3.

**14.13.2 Regulations and Conditions:**

A. The business shall hire no more than two (2) employees other than the resident occupants of the dwelling.

B. The business shall be conducted in a fully enclosed building.

C. All materials, equipment, and business vehicles must be stored out of sight in an enclosed building or in an enclosed outdoor storage area. Outdoor storage of materials, equipment, and vehicles must be completely fenced to obstruct view to a height equal to the elevation of the tallest material to be stored; provided, however, that up to two (2) display units produced on site may be exhibited outside a fence with Planning Commission approval. The area allocated to outdoor storage together with any approved outdoor display exhibits, shall not exceed 850 square feet total.

D. Adequate off-street parking for clients and employees shall be provided in accordance with *Article 10* of this Ordinance. Business related equipment and vehicles with business identification must be parked inside an enclosed building or fenced storage area.

E. No external alteration of the dwelling that would change its residential appearance shall be made to accommodate the home business.

F. The home business shall at all times comply with all other applicable laws and ordinances.

G. Signs shall be permitted in accordance with *Article 11* of this Ordinance.

H. Total floor area for the home business use located both within a dwelling and accessory buildings when taken together shall not exceed two-thousand (2,000) square feet.

I. The Home Business shall not produce fumes, odors, dust, vibration, noise, smoke, electrical interference, fire or chemical hazards or other conditions not typically associated with the uses of the residence and accessory structures for a residential dwelling.

**14.13.3 Prohibited Home Business:**

A. Motor Fuel Service Station, Parking Garage and Commercial Garage.

B. Automobile Salvage Yard.

C. New and Used Vehicle Sales.

D. Research and Development establishment

E. Truck and Rail Freight Terminal

F. Wholesale Trade Business

G. Above Ground Storage of Flammable Liquids

H. Propane Service Facility

I. Automotive Salvage Yards and Scrapping Yards

J. Chemical Processing and Metallurgic Manufacturing

K. Meat or Poultry Processing Plant

L. Refiners and Power Generating Plant

M. Heavy Manufacturing

N. Manufacturing of explosives

## SECTION 14.14 HOME OCCUPATIONS

**14.14.1 Definition:** An accessory use of a dwelling unit involving the manufacture, provision, or sale of goods and/or services which is conducted entirely within the dwelling and is clearly incidental and secondary to the use of the dwelling as a residence. If the proposed home occupation activity does not create retail sales on the property, does not employ anyone other than the residents of the home, does not generate traffic to the property, does not have signage, or create noise, dust, vibration, odor, smoke, glare, electrical interference, or fire hazard to a greater extent than normal or substantially increase the use of services such as water, sanitary sewer, storm drainage, or garbage collection, the activities may be conducted within the home or attached garage without having to obtain a conditional use permit or site plan review.

**14.14.2 Regulations and Conditions:**

A. No employees other than the resident/occupant of the dwelling.

B. No more than twenty five (25%) percent of the floor area of the dwelling or four hundred eighty (480) square feet, whichever is smaller, shall be utilized for purposes of the home occupation.

C. There shall be no outdoor storage of materials related to the home occupation, or outdoor storage of vehicles with more than one (1) ton rated capacity.

D. Adequate off-street parking shall be provided in accordance with *Article 10* of this Ordinance.

E. No external alteration of the dwelling design to accommodate the home occupation shall be permitted.

F. The use of a garage or accessory buildings for home occupations is not permitted.

G. Signs shall be permitted in accordance with *Article 11* of this Ordinance.

H. Compliance with all other applicable laws and ordinances.

## SECTION 14.15 HOTEL AND MOTEL

**14.15.1 Definition:** A building used for transient lodging facility together with such accessory uses as meeting rooms, restaurants, taverns, swimming pools, and caretaker or proprietors residence including lodging houses, boarding houses, tourist homes, fraternity and sorority houses and dormitories.

**14.15.2 Regulations and Conditions:**

A. Minimum floor area of each guest unit shall contain not less than two-hundred fifty (250) square feet.

B. The minimum lot area shall be one (1) acre with a minimum width of one hundred fifty (150) feet, provided that there shall be at least eight hundred (800) square feet of lot for each guest.

C. The maximum lot coverage of all buildings, including accessory buildings shall not exceed more than twenty-five (25%) percent of the area within the boundary lines of land developed at any one time.

D. All parking areas shall have direct access to a major street as defined in Section 5.3.13M of this Ordinance.

E. All signs shall comply with Article 11 of this Ordinance.

F. All parking areas shall comply with Article 10 of this Ordinance.

## SECTION 14.16 HOSPITAL AND LONG-TERM CARE FACILITIES

**14.16.1 Definitions:**

A. Hospital: A building, structure, or institution in which sick or injured persons are given medical or surgical treatment and operating under license by the Health Department and the State of Michigan, and is used for primarily in-patient services, and including such related facilities as laboratories, out-patient departments, central service facilities, and staff offices.

B. Long-term Care Facility, Regulated: Long-term care facilities which are regulated by Public Health Code Act No. 368 of 1978 shall be defined as follows:

1. Nursing Home: A facility that provides twenty-four (24) hour organized nursing care and medical treatment to seven (7) or more unrelated elderly and non-elderly adult persons

2. Subacute Care Facility: A "transitional care" facility that provides twenty-four (24) hour organized nursing care and medical treatment to one (1) or more persons.

3. Home for the Aged: A facility providing room, board (at least two (2) meals a day), and supervised personal care (no nursing care is offered) to twenty-one (21) or more unrelated, non-transient, individuals 60 years of age or more (MCLA 333.21311).

4. Hospice Care Facility: A facility, often part of a hospital, that provides twenty-four (24) hour in-patient and out-patient medical care to one (1) or more persons.

C. Long-term Care Facility, Unregulated: Long-term care facilities which are unregulated by state statute shall be defined as follows:

1. Assisted Living Facility: A facility offering housing and supervised personal care to one (1) or more persons.

2. Independent Living Facility: A facility offering housing and a varying degree of activities of daily living (ADLs) to one (1) or more elderly persons

3. Senior Housing: A facility offering housing to primarily elderly persons, and often located close to or in cooperation with care oriented facilities.

4. Extended Care Facility: A facility, often in combination with senior type housing, that provides twenty-four (24) hour (or less) medical care to residents.

5. Adult Day Care Facility: A private home or facility in which one (1) or more persons 18 years or older are given care and supervision for twenty-four (24) hours a day, for four (4) or more days a week, for two (2) or more consecutive weeks.

**14.16.2 Regulations and Conditions:**

A. Lot area shall be at least two (2) acres and front on a major street as defined by *Section 5.3.13M* of this Ordinance.

B. The emergency entrance, the delivery area and the refuse disposal container area shall be obscured from the general view.

C. No building shall be any closer than seventy-five (75) feet to any property line or road right-of-way.

D. All signs shall be in compliance with the provisions of *Article 11* of this Ordinance.

E. All off-street parking shall be in compliance with *Article 10* of this Ordinance.

## SECTION 14.17 NEW/USED VEHICLE, BOAT, FARM IMPLEMENT DEALER

14.17.1 **Definition:** A retail or wholesale use involving the indoor and/or outdoor display and storage and sales of new and used automobiles and trucks, recreational vehicles, boats and farm implements, and similar equipment.

**14.17.2 14.17.2 Regulations and Conditions.**

A. The minimum lot size shall be one (1) acre and the minimum lot width shall be two hundred (200) feet.

B. Any outdoor storage or sales area which adjoins a residential district shall be enclosed with a six (6) foot fence, which fence shall be capable of containing debris, trash and other blowing objects.

C. The lot area used for display purposes shall have a permanent, durable and dustless surface and shall be graded and drained to dispose of all surface water.

D. All exterior lighting shall be shielded from adjacent residential areas.

E. A New/Used Vehicle, Boat, Farm Implement Dealer use that provides vehicle service, the sale of new and rebuilt vehicle parts and body repair and service shall meet the requirements of *Section 14.19* of this Ordinance.

F. New and Used Vehicle Sales facilities shall include landscape buffer areas as provided in *Article 17* of this Ordinance.

G. All signs shall comply with the provisions of *Article 11* of this Ordinance.

H. All off-street parking shall comply with *Article 10* of this Ordinance.

## SECTION 14.18 MOBILE HOME DEVELOPMENT

**14.18.1 Definition:** A Mobile Home Park or a Mobile Home Condominium Development subject to the provisions of Public Act 96 of 1987, as amended, or as defined in *Article 5* of this Ordinance. A parcel of land owned by a person upon which are located two or more mobile homes, whether attached or detached from each other or adjacent buildings, which are occupied for residential purposes, or are connected to a water supply or waste water disposal system either on a temporary or permanent basis, regardless of whether or not the development offers rental lots or mobile homes to the public.

**14.18.2 Regulations and Conditions:**

A. Connection to publicly owned sanitary sewer facilities or on site privately owned and licensed sanitary sewage disposal system, subject to the approval of the Barry - Eaton Health Department.

B. Site shall be adjacent to and served by a major street as defined *Section 5.3.13M* of this Ordinance.

C. The site shall conform to the minimum site development standards for mobile home parks as established by the Michigan Mobile Home Commission and the Michigan Department of Public Health pursuant to Act 96 of the Michigan Public Acts of 1987, as amended.

D. The Planning Commission shall review the proposed conditional use in accordance with Section 14.18 and the general standards in Article 9 of this Ordinance and with regard to the landscaping, storm protection and other amenities of the proposed facility.

## SECTION 14.19 MOTOR FUEL SERVICE STATION, PARKING GARAGE, AND COMMERCIAL GARAGE

### 14.19.1 Definitions:

A. Motor Fuel Service Station: A structure, building, or parcel of land, or any portion thereof used for the retail dispensing or sale of vehicular fuels or other flammable fuels, and including minor repair services as defined in R257.111, Michigan Administrative Code, as amended.

B. Parking Garage: A structure, building, or parcel of land, or any portion thereof used for the storage or parking of motor vehicles, or boats operated as a business, and excluding minor or major repair services as defined in R257.111, Michigan Administrative Code, as amended.

C. Commercial Garage: A building, structure, or parcel of land, or any portion thereof used for the repairing, cleaning, sewing, equipping, painting or diagnosing of motor vehicles when operated as a business and not necessarily required to be registered as a Motor Vehicle Repair Facility pursuant to Act 300 of 1974, as amended.

### 14.19.2 Regulations and Conditions:

A. Parking or storage of inoperative vehicles shall be completely surrounded by an opaque fence of not less than six (6) feet in height.

B. Minimum road frontage of one-hundred fifty (150) feet shall be required.

C. Minimum lot area shall be increased five-hundred (500) square feet for each fuel pump unit in excess of four (4), and one-thousand (1,000) square feet for each service bay in excess of two (2), and three-hundred (300) square feet for each parking space intended for the storage of inoperative vehicles.

D. All buildings and accessory structures including gasoline pumps shall be setback fifty (50) feet from any lot line and seventy-five (75) feet from any street right-of-way line.

E. All equipment including hydraulic hoist, pits, and oil lubrication, greasing and automobile washing, repairing equipment and body repair shall be entirely enclosed within a building. There shall be no outdoor storage of merchandise such as tires, lubricants and other accessory equipment.

F. All activities, except those required to be performed at the fuel pump shall be carried on inside a building. All vehicles upon which work is performed shall be located entirely within a building.

G. There shall be no above ground tanks for the storage of gasoline, liquefied petroleum gas, oil or other flammable liquids or gases.

H. All signs shall comply with *Article 11* of this Ordinance.

I. All parking areas shall comply with *Article 10* of this Ordinance.

## SECTION 14.20 PRIVATE AIRPORT

**14.20.1 Definition:** A facility designed for the take-off, landing, and storage of small aircraft which is not available to the public, is not shown on aeronautical charts, is not licensed by the Michigan Aeronautic Commission, and does not offer charter flight service, the sale of gasoline or oil, student instruction, flying lessons, aviation maintenance services or other commercial services to the public.

**14.20.2 Regulations and Conditions:**

A. Private airports shall not be located within five (5) miles of a public use airport which is licensed by the Michigan Aeronautic Commission without the prior written approval of the Bureau of Aeronautics pursuant to R259.253 of the Michigan Administrative Code.

B. The elements of safety, design, and construction of a private airport facility shall be certified by an aviation engineer licensed in the State of Michigan.

## SECTION 14.21 PUBLIC AIRPORT AND HELIPORT

**14.21.1 Definition:** A facility designed for the take-off, landing, and storage of aircraft which is required to be licensed by the Michigan Aeronautics Commission, along with related accessory uses, such as, charter service, flying lessons, sale of fuel, mechanics, terminal buildings, and hanger facilities, which are available to the public.

**14.21.2 Regulations and Conditions:**

A. Public airports shall meet the standards for Class A, B, or C, commercial airports, contained in the Rules and Regulations of the Michigan Aeronautics Commission.

B. Conditional Use Permits for such facilities shall not be granted until the facility has been granted a Landing Area License pursuant to Part 5 of the Rules and Regulations of the Michigan Aeronautics Commission.

C. Public airports shall not be permitted within an area where an existing dwelling, or other existing buildings classified in "Use Group A, H, I or R" as defined in the Michigan Construction Code are found. Said area shall extend two hundred (200) feet on either side of the centerline of the proposed runways and extended for a distance of two thousand five hundred (2,500) feet from both ends of the proposed runway.

D. All public airports shall have direct access to a major street as defined in *Section 5.3.13M* of this Ordinance.

## SECTION 14.22 RELIGIOUS INSTITUTIONS (SMALL AND LARGE)

**14.22.1 Definitions:**

A. Religious Institution, Small: A church, bible school, temple, shrine, or convent, including accessory class rooms, kitchens, offices, and housing quarters for religious leaders with a maximum of ten thousand (10,000) square feet of total floor area.

B. Religious Institution, Large: A church, bible school, temple, shrine, or convent, including accessory classrooms, kitchens, offices, and housing quarters for religious leaders with more than ten thousand (10,000) square feet of total floor area.

**14.22.2 Regulations and Conditions for Small Religious Institutions:**

A. Lot area shall be at least two (2) acres.

B. No building shall be closer than fifty (50) feet to any property or road right-of-way line.

C. Signs shall comply with *Article 11* of this Ordinance.

D. Parking areas shall comply with *Article 10* of this Ordinance.

**14.22.3 Regulations and Conditions for Large Religious Institutions:**

A. Lot area shall be at least five (5) acres and not less than two hundred (200) linear feet of road frontage on a major street, as herein defined.

B. No building shall be closer than fifty (50) feet to any property or road right-of-way line.

C. Signs shall comply with *Article 11* of this Ordinance.

D. Parking areas shall comply with *Article 10* of this Ordinance.

## SECTION 14.23 SHOPPING CENTER OR MALL

**14.23.1 Definition:** A group of four (4) or more adjacent commercial and/or office buildings with a central parking area that is developed as a single project.

**14.23.2 Regulations and Conditions:**

A. The site area shall be a minimum of five (5) acres.

B. A minimum of four hundred (400) feet of road frontage on a major street as defined in *Section 5.3.13M* of this Ordinance shall be required.

C. All buildings shall be setback not less than one hundred (100) feet from a street right-of-way line, side lot line or rear lot line.

D. Shopping centers and malls shall be served by public sanitary sewer and public water supply.

E. Pedestrian traffic between buildings shall be possible without crossing drives or parking areas.

F. No building within the proposed project shall have separate access to a public street.

G. All signs comply with the provisions of *Article 11* of this Ordinance.

H. All off street parking shall comply with *Article 10* of this Ordinance.

## SECTION 14.24 DISTRESSED VEHICLE TRANSPORTER

**14.24.1 Definition:** A person engaged in the business of buying salvage vehicles for the purpose of sale to a used vehicle parts dealer, or a vehicle scrap metal processor, who is not engaged in the business of selling used vehicle parts, used vehicles, repairing vehicles or processing vehicles into scrap metal.

**14.24.2 Regulations and Conditions:**

A. Area of the proposed site shall be a minimum of five (5) acres.

B. The use shall be established and maintained in accordance with all applicable State laws and Ordinances.

C. Outdoor storage area shall not exceed four thousand (4,000) square feet.

D. No more than sixteen (16) salvage vehicles may be stored at anytime on the premises.

E. The parking or storage of salvage vehicles shall be completely surrounded by a solid fence at least six (6) feet in height and no greater than twelve (12) feet in height above base grade through which the vehicles cannot be seen.

## SECTION 14.25 SURFACE MINING

**14.25.1 Definition:** A surface mine is a parcel of land utilized for the removal or extraction of natural mineral deposits, soil, and organic soils by open pit-mining methods.

**14.25.2 Excavation of Soils and Minerals**: The excavation of peat, mulch, sand, gravel, clay, limestone, shale, or other natural mineral deposits shall be permitted only upon the issuance of a Conditional Use Permit.

**14.25.3 Site Plan Requirements:** In addition to the regular application for a Conditional Use Permit and payment of fees, the application shall be accompanied by a Site Plan. The Site Plan shall be drawn to a readable scale on a Certified Boundary Survey of the property and said plan shall include the following information:

A. Name and address of owner(s) of land which removal will take place.

B. Name, address and telephone number of person, firm, or corporation who will be conducting the actual removal operation.

C. Location, size and legal description of the total site area to be mined.

D. A plan for extraction and reclamation for the total project which shall include:

1. Existing and proposed contours at a minimum two (2) foot interval.
2. Surface overburden and topsoil stripping and stockpiling plans.
3. Provisions for grading, re-vegetation, and stabilization that will minimize soil erosion, sedimentation and public safety problems.

E. Surface water drainage provisions and outlets.

F. The location and size of any structures.

G. All required setbacks areas for excavation and machinery storage.

H. Interior access roads, parking lots, haul road, loading and unloading areas.

**14.25.4 Rehabilitation:** All extraction areas shall be rehabilitated progressively as they are worked out. Rehabilitated sites shall be reasonably natural and inconspicuous and shall be reasonably lacking in hazard. All slopes and banks remaining above water level and below water level to a depth of five (5) feet shall be graded to angles which do not exceed one (1) foot in elevation for each three (3) feet of horizontal surface and they shall be treated to prevent erosion or any other potential deterioration.

**14.25.5 Site Development Requirements:**

A. Setbacks in which no part of the mining operation may take place, except for ingress and egress shall be as follows:

1. Excavation shall not take place within fifty (50) feet from any structure.
2. Excavation below the existing grade of adjacent roads or property lines shall not take place within twenty-five (25) feet from any adjacent property line or road right-of-way.
3. No machinery will be erected or maintained within one hundred (100) feet of any property or road right-of-way line.

B. Screening: If screening is deemed a necessary requirement of the Conditional Use Permit, the Planning Commission shall specify the type and location of the required screening. Screening may be any combination of fencing, berms, or plantings as determined by the Planning Commission. The Planning Commission shall take into account the scale of the operation, the population density in the surrounding area, neighboring residential districts, or otherwise occupied properties.

C. Interior access roads, parking lots, haul road, loading and unloading areas and stockpiled materials shall be maintained so as to limit the nuisance caused by wind blown dust.

D. Hours of operation shall be Monday through Friday from 7:00 a.m. to 6:00 p.m. and Saturday from 7:00 a.m. to 12:00 p.m.

No hours of operation on Sundays or the following holidays:

(1) New Year's Day - January 1st
(2) Memorial Day – Last Monday of May
(3) Independence Day – July 4th
(4) Labor Day – First Monday in September

(5) Thanksgiving Day – Fourth Thursday in November
(6) Christmas Day – December 25th

E. Signage: Signage shall be placed where it is visible and legible at the entrance to the site. It shall be weather durable and not exceed six (6) square feet in size. The sign shall include the name and address of the surface mine owner/operator, a phone number, and contact person from whom additional information may be obtained. Additional signage for identification of the business shall be per Section 11 of this Ordinance.

F. Failure to maintain all required State or Federal licenses and/or to develop and maintain a surface mining operation in accord with the terms of the conditional use permit may result in the immediate revocation of said conditional use permit and any and all other sanctions and/or penalties available to the County.

**14.25.6 Evidence of Continuing Use:** When activities on or the use of the mining area, or any portion thereof, have ceased for more than one (1) year or when, by examination of the premises or other means, the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** determines a manifestation of intent to abandon the mining area, the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** shall give the operator written notice of their intention to declare the mining area or portion thereof abandoned. Within thirty (30) days following receipt of said notice, the operator shall have the opportunity to rebut the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** 's evidence and submit other relevant evidence to the contrary. If the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** finds the operator's evidence of continued use satisfactory, it shall not declare abandonment.

**14.25.7 Financial Guarantees:** A minimum pit bond of $3,000.00 plus a minimum $2,000.00 per excavated acre shall be filed with the County Treasurer. The bond shall be in the form of a surety bond executed by a reputable surety company authorized to do business in the State of Michigan or a cash bond posted in lieu of a surety bond. The amount of a cash bond filed with the county may be one-half (1/2) the total required bond if approved by the Planning Commission. The bond shall be returned when all conditions stipulated in the Conditional Use Permit shall have been complied with and the Conditional Use Permit revoked prior to its release. There shall be no partial release of the bond.

**14.25.8 Issuance of a Conditional Use Permit:** Permits for surface mining shall be issued to the operator. If an operator disposes of his interest in an extraction area prior to final reclamation by sale, lease, assignment, termination of lease, or otherwise, the Planning Commission may release the operator from the duties imposed upon him by this Ordinance, as to the operation, but only if the successor, operator, or property owner assumes the obligations of the former operator with reference to the reclamation activities. At that time the Conditional Use Permit may be transferred.

**14.25.9 Permit Expiration:** If approval for a Conditional Use Permit is granted by the Eaton County Planning Commission it shall be for a specific period of time not to exceed five (5) years. Those permits granted for a period exceeding one (1) year shall be inspected a minimum of once a year by the ~~Community Development Department~~ ***Department of***

***Construction Codes & Planning and Zoning*** to insure compliance with the permit and Ordinance.

**14.25.10 Modification of the General Site Plan**: The Site Plan may be modified at any time by mutual consent of the operator and the Development Official to adjust the excavation and storage areas or to correct an oversight on the property as long as the proposed new areas are within the required setback areas. All modifications to the Site Plan approved by the Development Official shall be reported to the Planning Commission.

The Planning Commission or Development Official may require the modification of the General Site Plan when:

A. Modification of the plan is necessary so that it will conform with the existing laws.

B. It is found that the previously approved plan is clearly impractical to implement and maintain.

C. The approved plan is obviously not accomplishing the intent of the Ordinance.

## SECTION 14.26 RENTAL STORAGE BUILDING

**14.26.1 Definition:** Buildings or portions of buildings offered to the public for a fee on a monthly or yearly basis for the storage of goods.

**14.26.2 Regulations and Conditions**:

A. The area of the proposed site shall be at least two (2) acres in size except within the R-3 district where the minimum site area shall be one (1) acre.

B. The use shall be established and maintained in accordance with all applicable Local, State and Federal laws.

C. All storage shall be inside an enclosed building. No outdoor storage is allowed.

D. The size of the storage areas shall not exceed a total of four-thousand (4,000) square feet if located within the R-3 district and eight thousand (8,000) square feet if located within the Limited Agriculture (LA) district. Building size limits in the C-1, C-2 and I districts shall be determined by lot coverage standards set forth in Article 7 of this Ordinance.

E. One (1) parking space shall be provided for each six (6) rental units within the buildings.

F. One (1) pole or ground sign up to thirty-two (32) square feet in total area and up to eight (8) feet in total height, shall be allowed on the site.

## SECTION 14.27 COMMUNICATION TOWERS AND ANTENNAS

**14.27.1 Definitions:**

**Communication Towers and Antennas** – A tall structure used for transmitting, receiving or relaying radio, television, cellular phone signals, or any transmitting or relay structure as licensed by the Federal Communications Commission (FCC).

**Collocate** – To place or install wireless communications equipment on an existing wireless communications support structure and within which wireless communications equipment is located.

**Wireless communications equipment** – The set of equipment and network components used in the provision of wireless communications services, including, but not limited to, antennas, transmitters, receivers, base stations, equipment shelters, cabinets, emergency generators, power supply cables, and coaxial and fiber optic cables, but excluding wireless communications support structures.

**Wireless communications support structure** – A structure designed to support, or is capable of supporting, wireless communications equipment, including a monopole, self-supporting lattice tower, guyed tower, water tower, utility pole or building.

**14.27.2 Intent and purpose:** It is the general purpose and intent of the County to minimize adverse visual effects of towers through careful design, siting and screening; allow for reasonable location and use for communication towers as required pursuant to applicable state and federal law; and to minimize the proliferation of telecommunications towers by requiring applicants to exhaust all reasonable avenues for collocation on existing towers.

**14.27.3 Location Requirements:** No new Communication Towers and Antennas may be approved for a location within three (3 miles) of any existing Communication Towers and Antennas unless the applicant has demonstrated that the wireless communications equipment planned for the proposed tower cannot be accommodated on an existing or approved tower within the applicant's search radius of the proposed tower due to one or more of the following reasons:

A. Existing or approved towers within the search area cannot accommodate the planned equipment at a height necessary to provide the necessary coverage of the applicant's own service and/or capacity as documented by a qualified and licensed professional engineer. Record of propagation predictions must be given to the Eaton County ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** verifying that existing structures within applicant's coverage area will not provide the required coverage and/or capacity for the applicant's system. The propagation maps must include a signal strength color legend, the scale and the operating parameters of each of the sites, scale and minimum required signal.

B. The wireless communication equipment would exceed the structural capacity of the existing or approved tower(s) within the three (3) mile radius, as documented by a qualified and licensed professional engineer. Record of such must be given to the Eaton County ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***.

C. The applicant is already currently collocated on all existing or approved towers within the three (3) mile radius of the applicant's site. Record must be given to the Eaton County ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** verifying the applicant is currently collocated on all existing or approved towers within said search area.

D. For public safety and security all government entity owned communication towers and antennas are exempt from this section.

**14.27.4 Application Requirements:**

A. A Site Plan scaled as per article 17.3, showing the property boundaries, tower, guy wire anchors, "safe fall" zone, existing structures, proposed transmission buildings, proposed tower (tower height and design including cross-section) and/or other accessory uses, access, parking, fences, landscape plan, and existing land uses around the site.

B. A letter of intent committing the tower owner and his or her successors to allow shared use of the tower (minimum of three additional carriers) if a future applicant agrees in writing to pay any reasonable charge for shared use. Said letter of intent shall be filed in the office of the Eaton County ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** prior to any construction related permits being issued. If the future applicant's request for collocation is denied, the tower owner must demonstrate to the Planning commission why collocation is not feasible at the requested site. For public safety and security all government entity owned communication towers and antennas are exempt from this section.

C. Written authorization from the owner of the site to apply for the Conditional Use Permit.

D. A minimum escrow fee of $600.00 (in addition to the $400.00 application fee) shall be submitted to the Eaton County ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** at the time of application to be used for payment of an expert review**.** The purpose of such review shall be to verify the accuracy and completeness of the materials submitted. All application materials and documentation submitted by an applicant shall be reviewed by an appropriate professional with expertise in the field of communication towers and antenna technology. Monies not used for the expert review will be refunded to the applicant after the Planning Commission renders a final decision on the application. At no time shall the total fee for the application and expert review exceed $1000.00.

E. After an application is filed with the Eaton County ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***, staff shall determine if the application is administratively complete. The application shall be considered to be administratively complete upon staff's determination or fourteen (14) business days after the Department's receipt of the application, whichever is first. If, before the expiration of the fourteen (14) day period, Department staff notifies the applicant the application is not administratively complete, or notifies the applicant fees required to accompany the application, to include the escrow fee, have not been paid, specifying the amount due, the running of the fourteen (14) business days shall stop until the applicant submits to Department staff the information and/or fees due. Said notification to the applicant by Department staff shall be given in writing or by electronic notification.

F. The Eaton County Planning Commission shall approve or deny an application not more than ninety (90) days after the application is considered to be administratively complete. If the Planning Commission fails to timely approve or deny the application, the application shall be considered approved.

**14.27.5 Regulations and Conditions:**

A. A report from a professional engineer which describes the tower height and design including a cross-section of the structure; demonstrates the tower's compliance with applicable structural standards; and describes the tower's capacity, including the number and type of antennas that it can accommodate. Towers must accommodate, at a minimum, the tower applicant and three additional carriers for a total capacity of at least four carriers.

B. A photocopy of the Federal Aviation Administration (FAA) "Determination of No Hazard", a photocopy of the Federal Communications Commission (FCC) license and a photocopy of the Michigan Aeronautics Commission (MAC) "Tall Structure Permit" must be submitted at the time a zoning referral is approved prior to construction.

C. **Height:** All towers shall be located on the lot so that the distance from the base of the tower to any adjoining property line is a minimum of fifty (50%) percent of the proposed tower height.

D. **Accessory Buildings:** Any accessory buildings or structures shall be located a minimum of fifty (50) feet from any adjoining property line. The accessory facilities shall not include offices, long-term vehicle storage, other outdoor storage of broadcast studios, or other uses that are not needed to send or receive transmissions, except for emergency purposes.

E. **Construction:** All towers shall be self-collapsing and comply with all Michigan Building Code regulations. The applicant shall provide all appropriate engineering information, Site Plans, and drawings to the Eaton County ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** at the date of application. No building, sidewalk, parking lot, or other area with anticipated pedestrian or vehicular traffic shall be permitted within the self-collapsing or "safe fall" area to be defined by the Applicant's Engineer.

1. All new Communication Towers and Antennas approved by the County shall be designed to accommodate at least three (3) additional carriers each with nine panel antennas, having a wind area of nine square feet per antenna. Applicants shall agree as a condition of approval to permit the collocation of future installations by others on said new tower. Applicant shall also agree as a condition of approval to permit collocation of Eaton County Public Safety agencies if the tower has sufficient structural capacity as documented by a qualified and licensed professional engineer.

2. **Compatibility:** The entire facility must be aesthetically and architecturally compatible with the surrounding environment. The use of residentially compatible materials such as wood, brick and stucco is

required for associated support buildings which shall be designed to architecturally match the exterior of residential structures within the neighborhood. In no case will metal exteriors be allowed.

3. **Lighting:** When lighting is required and is permitted by the FAA or other Federal or State authority, the Planning Commission shall approve any and all lighting on the tower. It shall be oriented inward so as not to project onto surrounding properties.

4. **Fencing:** Six (6) foot in height, climb proof fencing must be provided to prevent access to the tower.

5. **Signs:** Signs and logos are prohibited on the tower. At least one (1) but not more than two (2) signs totaling twelve (12) square feet in area shall be placed on the fence that is visible and legible from the entrance to the site. Signage shall be weather durable and should include the name and address of the communication tower owner/operator, a phone number, and contact person from whom additional information may be obtained. Appropriate County building permits shall be obtained prior to installation of the signage.

6. **Landscaping:** A Landscape Plan shall be provided per Article 17 to adequately screen the tower, accessory structures, and support cables.

7. **Maintenance:** The site, including the tower, accessory structures, support cables, and landscaping shall be reasonably well maintained in relationship with surrounding properties. A copy of the annual FCC license and general maintenance report shall be submitted yearly to the Eaton County ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***.

F. **Abandonment:** A tower which remains unused for a period of twelve (12) months will be considered abandoned. Applicants or current owners are required to demolish and remove any unused tower, accessory buildings, fences, and any other related cellular facility effects. Upon removal, the site shall be revegetated to blend with the existing surrounding vegetation.

G. **Financial Guarantees:** A minimum bond of $10,000 shall be filed with the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** prior to receiving any construction related permits for the tower to ensure removal of the tower when it has been abandoned or is no longer needed. The bond shall be in the form of a surety bond executed by a reputable surety company authorized to do business in the State of Michigan or a cash bond posed in lieu of a surety bond filed with the County Treasurer.

**14.27.6 Requirements for Collocation(s) on Existing or Approved Towers:**

A. If wireless communication equipment is proposed for collocation on an existing or approved tower(s) it may be a use permitted by right provided all requirements of MCL 125.3514 for a use permitted by right are met and documentation of such is provided to the Eaton County ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***.

B. If the proposed wireless communications equipment for collocation does not meet the requirements of Section 14.27.6A, as a permitted use by right, an application for a Conditional Use Permit must be submitted to the Eaton County ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** for Planning Commission approval. Application requirements for collocations that do not meet the conditions as a use by right shall be as follows:

1. A Site Plan scaled as per article 17.3, showing the property boundaries, tower, guy wire anchors, "safe fall" zone, existing structures, proposed transmission buildings and/or other accessory uses, access, parking, fences, landscape plan, and existing land uses around the site.

2. A report from a professional engineer which describes the tower height and design including a cross-section of the structure; demonstrates the tower's compliance with applicable structural standards; and describes the tower's capacity, including the number and type of antennas that it can accommodate.

3. After an application is filed with the Eaton County ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***, staff shall determine if the application is administratively complete. The application shall be considered to be administratively complete upon staff's determination or fourteen (14) business days after the Department's receipt of the application, whichever is first. If, before the expiration of the fourteen (14) day period, Department staff notifies the applicant the application is not administratively complete, or notifies the applicant fees required to accompany the application have not been paid, specifying the amount due, the running of the fourteen (14) business days shall stop until the applicant submits to Department staff the information and/or fees due. Said notification to the applicant by Department staff shall be given in writing or by electronic notification.

4. The Eaton County Planning Commission shall approve or deny an application not more than sixty (60) days after the application is considered to be administratively complete. If the Planning Commission fails to timely approve or deny the application, the application shall be considered approved.

## SECTION 14.28 PRIVATE ROADS

**14.28.1 Definition:** A road servicing two (2) or more lots or parcels which provides access to a public road.

**14.28.2 Regulations and Conditions:** To obtain a permit, the applicant shall provide documented proof of the following:

A. Plans: All plans for Private Roads which are extended or laid out for access to two (2) or more lots, parcels, or principal buildings, must be reviewed and approved

by the ~~Community~~ Development Official. Following review, a permit must be issued by the ~~Community~~ Development Official before construction may begin.

1. Plans shall give dimensions and bearings of the road right-of-way prepared by a licensed surveyor.

2. The road way shall be shown within the right-of-way with road alignment and profile grades. A Licensed Professional Engineer shall design and seal the plans.

B. Maintenance Agreements: A Maintenance Agreement must bind the owners of all affected lots and parcels whose primary access is provided by the Private Road, including their successors and assigns. It must be recorded with the Eaton County Register of Deeds. It must be submitted to the ~~Community~~ Development Official prior to issuance of a Private Road Permit. The Maintenance Agreement must include the following minimum information.

1. **Co-Owner Association**: A provision for an incorporated association of co-owners along the proposed Private Road, which shall be responsible to collect fees and to build and maintain the Private Road or Roads.

2. **Restrictive Covenant**: A restrictive covenant shall be included in the Maintenance Agreement establishing the responsibility for maintaining the Private Road on all lots and parcels to be serviced by the Private Road.

3. **Financing**: Feasible and practical method for financing the repair and maintenance of the Private Road in compliance with this ordinance.

C. Prohibited: Neither the respective Township nor the Eaton County Road Commission shall be obligated to perform regular inspections of the easement area or provide necessary repairs or maintenance to the Private Road. The Eaton County ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** is not responsible for the legality or enforcement of the maintenance agreement.

D. Minimum Road Standards: All private roads shall comply with the following construction standards and applicants for private road approval shall obtain all required permits prior to construction.

1. **Easement**: Shall be dedicated in an amount between sixty-six (66) and one hundred (100) feet wide.

2. **Driving surface**: Shall be a minimum of eighteen (18) feet wide with two (2) foot shoulders on both sides.

3. **Materials**: The driving surface shall have a minimum of six (6) inches of ***22A*** Aggregate Surface over a minimum six (6) inch CL II sand subbase over a compacted base. Surface must be crowned six (6) inches (see figure 10). Sand subbase and 22A aggregate must be compacted to 95% maximum dry density. Certifications must be provided that the materials meet applicable MDOT specification or test results provided by an approved soils laboratory.

4. **Drainage**: A drainage plan shall be submitted on a topographic map

showing how surface drainage is being dispersed. Drainage and drainage calculations shall be approved by the Eaton County Drain Commissioner. If the Drain Commissioner determines ditching is required, the road shall be ditched on both sides to prevent the accumulation of water upon the driving surface and shoulders. Ditches shall be a minimum of eighteen (18) inches below the edge of shoulder with 1 on 4 slopes and a one (1) foot bottom width. Cross culverts shall have a minimum of twelve (12) inch cover. Drainage in relationship to its impact on a County Road shall also be approved by the Eaton County Road Commission.

5. **Ingress and Egress**: The end of the road shall have a cul-de-sac with a forty-eight (48) foot minimum outside radius (fifty (50) foot radius to edge of shoulder). An optional island shall have a twenty (20) foot radius (larger if outside radius is increased). The cul-de-sac shall have a sixty-five (65) foot minimum radius circular easement (see figure 11).

6. **Notification**: A copy of this ordinance, signed by the lot owner, must be presented to the Community Development Official before a Zoning Referral Permit will be issued for any lot along a Private Road.

7. **Inspection:** The private road construction shall be inspected under the direction of a Licensed Professional Engineer. A letter from the Licensed Professional Engineer stating the completed project complies with approved plans and this ordinance shall be provided to the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***.

8. **Access to public roads**: The access to public roads shall be approved by the Eaton County Road Commission or the Michigan Department of Transportation (MDOT) depending on the roads jurisdiction. The intersection shall be designed in accordance with the jurisdictional agency requirements.

**Figure 10**

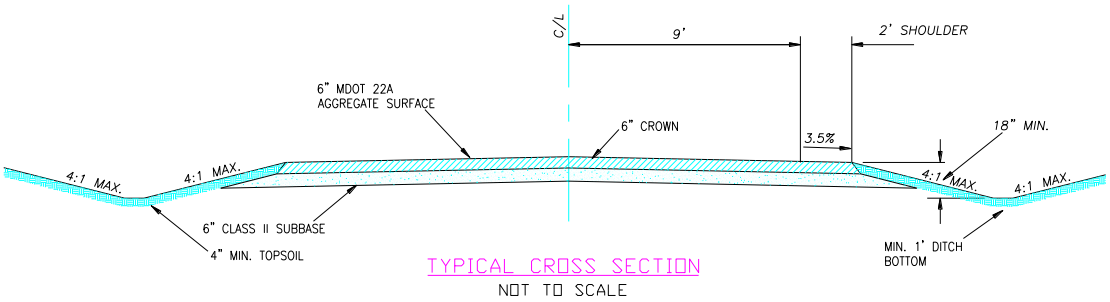
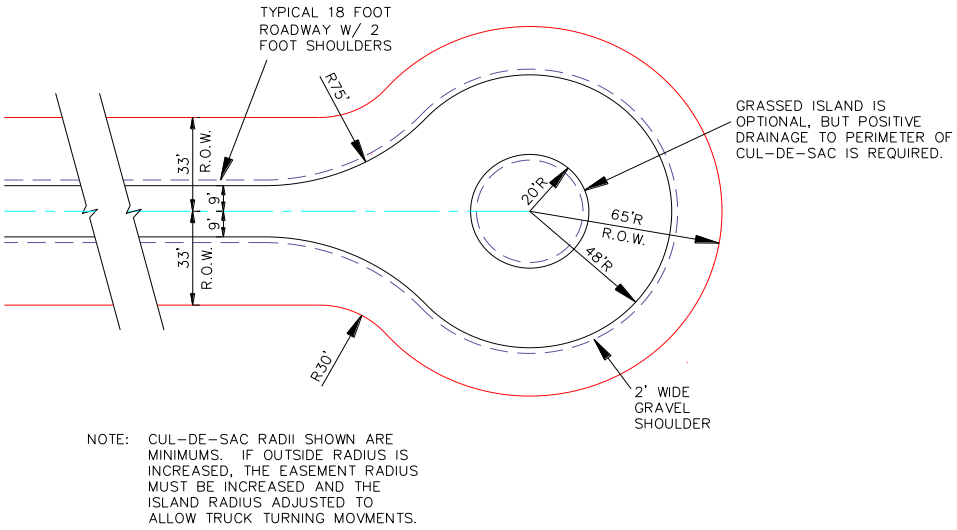


**Figure 11**




E. Road Name: Road name shall be approved by the Eaton County Road Commission, the Tri-County Regional Planning Commission, 911 Central Dispatch, and the Eaton County ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***.

F. Signage: The following signage must be provided to receive a Private Road permit:

1. Road Name Sign: A type approved by the County Road Commission placed at the intersections of the Private Road and Public or Private Roads. The bottom of the sign face shall be placed a minimum of six (6) feet above the adjacent road surface.

2. "Private Road" Sign: Shall face the intersection along the Private Road one (1) foot outside the public road right-of-way. The bottom of the sign face shall be placed a minimum of five (5) feet above the adjacent road surface. The sign face size shall be twelve (12) to eighteen (18) inches in width and eighteen (18) to twenty-four (24) inches in height.

G. Duration of Permit: Any permit granted under this ordinance shall expire two (2) years after it is granted, unless road construction is completed within that time. Prior to its expiration, a permit may be renewed for additional terms of one (1) year by application to the Eaton County ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***.

H. Amendments: Any additions, deletions, or alterations from the original recorded agreement or plans shall be recorded as amendments to the original at the Register of Deeds office and submitted to the ~~Community~~ Development Official to determine compliance with this ordinance.

I. Preexisting Roads**:** Prior to the extension of existing private roads (those roads created prior to 2/4/08) or the addition of one or more lots or a site condominium development, with access provided by the Private Road, all portions of the road

(existing and/or new) shall be improved to meet the standards of this Ordinance. If an existing recorded maintenance agreement describes an easement area for a preexisting private road and the road and cul-de-sac (wholly located within said easement) meet current Ordinance Standards, the easement areas are not required to be expanded.

## SECTION 14.29 CONSTRUCTION CONTRACTORS ESTABLISHMENT AND STORAGE OF HEAVY EQUIPMENT

**14.29.1 Definition:** Buildings and outdoor storage areas associated with the operation of an excavation or similar construction business, including the outdoor storage of equipment, vehicles, trailers, materials and machinery.

**14.29.2 Regulations and Conditions:**

A. The area of a site proposed for use as a construction contractors establishment and/or for the storage of heavy equipment shall not be less than one (1) acre in size.

B. The site MAY be fenced on both sides and rear with chain link or similarly durable fencing. If fencing is deemed a necessary requirement of the Conditional Use Permit, the Planning Commission shall specify the type and location of the required fencing.

C. The site MAY require a bufferyard to act as a visual shield or to block noise, light, etc. If deemed necessary, the Planning Commission shall specify the location and the method of the bufferyard per Subsections 17.5, 17.6 or 17.7 of this Ordinance.

D. No building materials, scrap, or equipment (other than heavy equipment) shall be stored outdoors in any configuration higher than the surrounding fencing or screening. Heavy equipment such as cranes, lift trucks and similar equipment, stored outdoors shall be parked in the lowest profile configuration possible without unnecessary vertical extension of cranes, booms or other equipment.

## SECTION 14.30 ROOMING AND BOARDING HOUSE

**14.30.1 Definition:** An existing single family dwelling, a portion of which is used to provide, for compensation, lodging and meals to individuals unrelated to the proprietors. Rooming and Boarding houses shall include Bed and Breakfast facilities which shall be defined as a Rooming and Boarding House offering overnight lodging and breakfast in no more than four (4) guest rooms or suites with guests staying not more than one (1) week. In all cases, the proprietors of the Rooming and Boarding House shall have their personal residence on the premises of the Rooming and Boarding House.

**14.30.2 Regulations and Conditions.**

A. Prior to occupancy by any roomers, all required state and local licensing and permitting requirements shall be met and documentation of such licensing and approved permits shall be provided to the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***.

B. No cooking facilities shall be permitted in any rooms or suites used by roomers.

C. Rooming and Boarding Houses providing five (5) or more guest rooms or suits or serving more than one (1) meal per day shall be permitted only in the R-3 district.

D. All Rooming and Boarding Houses other than Bed and Breakfast facilities shall provide a landscaped buffer in accordance with *Article 17* of this Ordinance.

E. All signs shall be in accordance with the provisions of *Article 11* of this Ordinance.

F. All off-street parking shall be in compliance with *Article 10* of this Ordinance.

## SECTION 14.31 PROPANE SERVICE FACILITY

**14.31.1 Definition:** A commercial operation providing liquid propane gas and bulk gas containers on a wholesale basis to fuel providers, retailers and dealers.

**14.31.2 Regulations and Conditions:**

A. Propane Service Facilities shall be properly licensed and inspected as provided by Federal, State and Local law and the rules and regulations promulgated thereunder.

B. No Propane Service Facility shall be permitted under the terms of this Ordinance until documentation is provided that all required Federal, State and Local licensing requirements have been fulfilled.

C. A Propane Service Facility shall be located on an all-season paved State highway or an all-season paved County Primary Road.

D. Propane storage or dispensing equipment or operations shall be located on property and carried out in regulation with State of Michigan requirements per Section 29.31 of PA 207 of 194~~7~~***1*** as amended, as stated in Chapter 6 of NFPA 58 Liquefied Petroleum Gas Code, current adopted edition.

E. The minimum lot size for a Propane Service Facility shall be one (1) acre.

F. A Propane Service Facility shall incorporate a landscape buffer as provided in *Article 17* of this Ordinance.

G. All signs shall comply with the provisions of *Article 11* of this Ordinance.

H. All off-street parking shall comply with *Article 10* of this Ordinance.

## SECTION 14.32 ADULT ENTERTAINMENT ESTABLISHMENTS AND AMUSEMENT ESTABLISHMENTS

**14.32.1 Preamble:** In the development and execution of this section, it is recognized that there are some uses which, because of their very nature, have serious objectionable operational characteristics, particularly when several of them are concentrated in near proximity to a residential zone, thereby having a deleterious effect upon the adjacent areas. Special regulation of these uses is necessary to insure that these adverse effects will not contribute to the blighting or downgrading of the surrounding neighborhood. These special regulations are itemized in this section. These controls are for the

purpose of preventing a concentration of these uses within any one area, or to prevent deterioration or blighting of a nearby residential neighborhood. These controls do not legitimatize activities which are prohibited in other sections of this Ordinance.

Uses subject to these controls are Adult Book Stores, Adult Cabarets, Adult Motion Picture Theaters, Massage Establishments, Nude Artist and Photography Studios, and similar adult-oriented establishments.

**14.32.2 Definitions:** As used in this section, the following terms shall have the indicated meanings:

A. **Adult Book Store**: An establishment having as a substantial or significant portion of its stock in trade, books, magazines, or other periodicals which are distinguished or characterized by their emphasis on matter depicting, describing or relating to "specified sexual activities" or "specified anatomical areas", as defined herein, or an establishment with a segment or section devoted to the sale or display of such material.

B. **Adult Cabaret**: A cabaret which features go-go dancers, erotic dancers, strippers, male or female impersonators, or similar entertainers.

C. **Adult Motion Picture Theaters**: Any establishment used for presenting material distinguished or characterized by an emphasis on matter depicting, describing or relating to "specified sexual activities" or "specified anatomical areas", as defined herein for observation by patrons therein.

D. **Cabaret:** A cafe, restaurant or bar where patrons are entertained by performers who dance, sing or play musical instruments.

E. **Massage Establishment:** Any establishment having a fixed place of business where persons conduct, or permit to be conducted, or engaged in, massages of the human body by rubbing, stroking, kneading, tapping or vibrating with the hand or any instrument administered solely or in combination with any other service or activity for pay, to provide relaxation or enjoyments to the recipient by persons not licensed or certified by the State of Michigan as registered nurses, physicians, massage therapists, rehabilitation therapists, or myomassologists. This definition shall not be construed to include barber shops or beauty salons in which massages are administered only to the scalp, the face, the neck or the shoulder.

F. **Nude Artist and Photography Studios**: Any building, structure, premises or part thereof used solely or primarily as a place which offers as its principal activity the providing of models to display "specified anatomical areas" as defined herein for artists and photographers for a fee or charge.

G. **Specified Anatomical Areas**: Specified anatomical areas are defined as less than completely and opaquely covered human genitals, pubic region, buttock, female breast below a point immediately above the top of the areola; and human male genitals in a discernibly turgid state, even if completely and opaquely covered.

H. **Specified Sexual Activities**: Specified sexual activities are defined as: Human genitals in a state of sexual stimulation or arousal; acts of human masturbation, sexual intercourse or sodomy; fondling or other erotic touching of human genitals, pubic region, buttock or female breast.

**14.32.3 Regulations and Conditions:**

A. Approval: Any of the regulated uses listed in this section shall be permitted only after a finding has been made by the Planning Commission at a public hearing that the following conditions exist:

1. If the use is an Adult Entertainment and Amusement Establishment, the use is located within only the General Business District (C-2).

2. The use is located outside a five hundred (500) foot distance of any residential zone district, regardless of the jurisdiction in which said residential district is located.

3. The use is located outside a five hundred (500) foot distance of any existing public or private school or church, regardless of the jurisdiction in which said public or private school or church is located.

4. The use is not located within a one thousand (1,000) foot radius of one other such use, regardless of the jurisdiction in which said other use is located. Provided, however that such restriction may be waived by the Planning Commission if the following findings are made:

   a) That the proposed use will not be contrary to the public interest or injurious to nearby properties, and that the spirit and intent of this section will be observed.

   b) That the proposed use will not enlarge or encourage the development of a blighted or deteriorating area in its immediate surroundings.

   c) That the establishment of a regulated use, or an additional regulated use, in the area will not be contrary to any program of neighborhood conservation, nor will it interfere with any program of urban renewal.

   d) That all applicable state laws and local ordinances will be observed.

5. An approved adult entertainment establishment and amusement establishment shall at all times maintain any and all licenses required under the ordinances of Eaton County and the laws of the State of Michigan. Failure to maintain any such required license shall be grounds for the revocation of a Conditional Use Permit issued under this Ordinance.

B. Limit on Reapplication: No application for a use regulated under this Section which has been denied wholly or in part shall be resubmitted for a period of one (1) year from the date of said order of denial, except on the grounds of new evidence not previously available or proof of changed conditions.

## SECTION 14.33 OPEN AIR BUSINESS AND STORAGE

**14.33.1 Definitions:** For the purposes of this Ordinance, the follow definitions shall apply:

A. **Open Air Business** shall include retail wholesale businesses that store, display, exhibit and demonstrate products outdoors.

B. **Open Air Storage** shall include the storage of any raw material, components, new or used equipment, product, by-product, waste or other material as a primary use, an accessory use or an incidental activity associated with a legal use under this Ordinance.

C. **Hazardous Materials** shall include any substance or material that, by reason of its flammable, explosive, corrosive, caustic, toxic, abrasive or otherwise injurious properties, may be detrimental or deleterious to the health or safety of persons, property or the environment.

**14.33.2Regulations and Conditions:**

A. The minimum lot size for an Open Air Business shall be one (1) acre and the minimum lot width for an Open Air Business shall be two hundred (200) feet.

B. Except in the Limited Agriculture (LA) district, Open Air Businesses and Open Air Storage shall be enclosed with a six (6) foot solid fence along the rear and sides of the lot, which the fence shall be capable of containing debris, trash and other blowing objects.

C. The lot area used for display, storage and/or parking for an Open Air Business shall have a permanent, durable and dustless surface and shall be graded and drained to dispose of all surface water.

D. All exterior lighting of an Open Air Business or Open Air Storage shall be shielded from adjacent residential areas.

E. Open Air Businesses and Open Air Storage shall include landscape buffer areas as provided in *Article 17* of this Ordinance.

F. Materials may not be stored or exhibited within ten (10) feet of any road right-of-way or property lines.

G. An Open Air Business or Open Air Storage which involves hazardous materials shall comply with the following requirements, in addition to the foregoing:

1. No Open Air Business involving hazardous materials shall be permitted under the terms of this Ordinance until documentation is provided that all required Federal, State and Local licensing requirements have been fulfilled.

2. An Open Air Business involving hazardous materials shall be located on an all-season paved State Highway or an all-season paved County Primary Road.

3. No Hazardous Materials or containers for hazardous materials shall be located within one hundred (100) feet from any lot line.

## SECTION 14.34 ARCHERY AND GUN RANGE

**14.34.1 Definitions:** Indoor Video Archery Hunting Range or Indoor/Outdoor Archery and Gun Ranges operated for educational purposes, as a business or open to the public for a

fee for practice and competitive archery and marksmanship using bow and arrow, crossbow and small firearms, including handguns, rifles or shotguns.

**14.34.2 Regulations and Conditions:**

A. Archery and Gun Ranges shall be designed and constructed in accordance with the standards of the National Rifle Association (NRA) and the design shall be certified as meeting such requirements by an Architect or Engineer licensed to practice in the State of Michigan.

B. Outdoor Archery Ranges shall be located not less than six hundred sixty (660) feet (1/8 mile – straight line measurement) from any residential, institutional, commercial, recreational, educational or other use where there is a risk of accidental injury to persons on adjoining lands. Gun Ranges shall be located not less than 2,640 feet (1/2 mile – straight line measurement) from any residential, institutional, commercial, recreational, educational or other use where there is a risk of accidental injury to persons on adjoining lands. The Planning Commission may approve an isolation distance less than the above if an applicant presents a Site Plan which is certified by an Architect or Engineer licensed to practice in the State of Michigan to effectively mitigate all off-site noise and safety impacts.

C. The applicant shall acquire from the owners of all property over which the required isolation distance extends, a recorded affidavit consenting to the location of the proposed Archery and/or Gun Range.

D. An applicant for a Conditional Use Permit for an Indoor Video Archery Hunting Range or Indoor/Outdoor Archery and Gun Ranges shall submit an application on forms provided by the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***. The application shall require information on the proposed Indoor Video Archery Hunting Range or Indoor/Outdoor Archery and Gun Ranges and the background and experience of the applicant and any key individuals to operate the proposed facility.

E. All signs shall comply with the provisions of *Article 11* of this Ordinance.

F. All off-street parking shall comply with *Article 10* of this Ordinance.

## SECTION 14.35 HOME OFFICE

**14.35.1 Definition:** A clerical or business services business operated entirely within the home that provides a clerical service or coordinates services or off-site activities. Examples include but are not limited to tax preparation services, bookkeeping, appointment setting or telecommunications businesses, etc. Such businesses are not expected to generate traffic to the site.

**14.35.2 Regulations and Conditions:**

A. No signs

B. No storage of commercial vehicles over 1 ton capacity.

C. No more than two vehicles used for business purposes on the site, other than the personal use vehicles of the resident occupants of the dwelling.

D. No more than 2 employees other than the resident occupants on the site at any time.

E. Business is restricted to the dwelling and may not occupy more than 20% of the dwelling floor space.

F. No outdoor storage or display of materials or products. No inventory of goods or products for sale or distribution may be stored or distributed from the site.

G. All parking must be located off the street.

H. The office area may be in accessory structure.

## SECTION 14.36 AGRICULTURAL MIGRANT LABOR HOUSING

### 14.36.1 Definitions:

A. **Agricultural Labor Housing:** Dwellings constructed or converted for use as living quarters, which are licensed by the Michigan Department of Agriculture and Rural Development (MDARD), for agricultural laborers and their immediate family (spouse and/or children) who are engaged in agricultural activities, including related food processing.

B. **Agricultural Laborer:** Laborer who is employed engaged in agricultural activities, including related food processing.

C. **Agricultural Labor Housing Operator:** A person who owns, establishes, operates, conducts, manages, ***leases*** or maintains agricultural labor housing.

D. **Farm Operator*:*** The farm operator is the person who runs the farm, making day-to-day management decisions. The operator could be an owner, hired manager, cash tenant, share tenant, and/or a partner. If land is rented or worked on shares, the tenant or renter is the operator.

### 14.36.2 Regulations and Conditions:

A. Agricultural labor housing may only be used for the housing of persons directly employed by the farm operator and the employee's immediate family (spouse and/or children). It shall not be used for persons not directly employed by the farm operator or for any other residential purposes. Occupancy of housing licensed by MDARD must at all times be compliant with the time frames and other applicable provisions established and posted on the housing operators MDARD license.

B. The rules, regulations, and standards of the State of Michigan governing the licensing and operation of agricultural labor housing shall apply where any dwelling is used to house agricultural laborers, as applicable under Part 124 of Public Act 368 of 1978 as amended. Evidence of compliance from MDARD in the form of a license and certification of inspection, must be provided to the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** on an annual basis.

C. No agricultural labor housing shall have more than two levels above ground nor contain more than three (3) dwelling units per building. Said housing shall not exceed more than one (1) dwelling unit for each five (5) acres of land area of the farming activity taking place. Each dwelling unit shall provide a minimum floor area of not less than seven hundred twenty (720) square feet. One (1) vehicle parking space per dwelling unit must be provided. Multiple stories used as separate living units are considered for approval only when they comply with local and state agency requirements for fire and safety rules regarding egress and use.

D. Agricultural labor housing shall be set back at least sixty-seven (67) feet from any road right-of –way, forty (40) feet from any side and rear property lines, and one hundred (100) feet from any dwelling of an adjacent property owner to the side or rear of the property. Landscape buffering and visual screening may be required.

E. To ensure adequate access for emergency vehicles and personnel, no agricultural labor housing shall be located closer than thirty (30) feet to any other building or structure.

F. In the event mobile home(s) are used for agricultural labor housing, they must also be compliant with Article 16 with the exception of Article 16.5.4 Compatibility Criteria, which does not apply.

G. Any agricultural labor housing that is not occupied by agricultural laborers during two (2) consecutive years shall be removed by the camp operator, or must comply with the zoning

ordinance and zoning district of the property, either of which must occur within ninety (90) days.

## SECTION 14.37 LIGHT AUTOMOTIVE, SMALL ENGINE REPAIR & AUTOMOTIVE BODY SHOP:

**14.37.1 Definition:** An establishment primarily engaged in the repair or maintenance of passenger automobiles, motorcycles, light duty trucks and small engines.

A. Light Automotive: Includes passenger Automobiles, Motorcycles and Light Duty Trucks: Vehicles which do not exceed 9,000 pounds gross weight. Work performed is limited to the replacement of any part that does not require removal of the engine, engine transmission or differential. May include repairs and replacement of cooling, electrical, fuel, oil and exhaust systems, brake adjustments, relining and repairs; wheel alignment and balancing and repair and replacement of shock absorbers.

B. Small Engines: Lawnmowers, tractors, all terrain vehicles (ATV), off road vehicles (ORV), boats, jet skis, dirt bikes, mopeds and snowmobiles.

C. Automotive Body Shop: A facility which provides collision repair services, including body frame straightening, replacement of damaged parts and painting or undercoating of vehicles which do not exceed 9,000 pounds gross weight

**14.37.2 Regulations and Conditions:**

A. The business shall conform to the requirements of Section 14.13 Home Business. Any requirements in this section which are more restrictive than 14.13 shall be followed.

B. The licensed mechanic shall be the property owner and reside in the home located on the property.

C. Facility where work is being performed must be licensed by the State of Michigan. The license shall be submitted to the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** annually.

D. The Mechanic performing work shall be licensed by the State of Michigan. The license shall be submitted to the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** prior to submitting a Conditional Use Permit Application and annually if approved.

E. The business shall have a contract with a licensed waste hauler to remove all fuel, oils, solvents and coolant from the property. Personal disposal is prohibited. A copy of the signed contract from the hauler shall be submitted to the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** annually.

F. Only the property owner which is licensed by the State of Michigan and one (1) employee shall perform work.

G. There shall be no outdoor storage of materials associated with operation of the business outside of business hours. There shall be no more than one (1) vehicles stored outdoors at any one time. Vehicles may NOT be in any state of visible disrepair. All work performed on vehicles shall be done inside the licensed facility.

H. Hours of operation are limited to Monday through Friday 7:00 a.m. to 6:00 p.m. and Saturday 8:00 a.m. to 12:00 p.m.

I. There shall be no sale of parts or fuels which are not associated with the repair or body work of a vehicle or small engine.

J. Small engine repair businesses are exempt from items C and D and the licensing requirement of item F.

K. All paints used for the business shall be water compliant.

L. Automotive body shops shall be setback a one-hundred (100) feet from all property lines and the road right-of-way.

M. Automotive body shops shall be in compliance with all applicable regulations of the United States Environmental Protection Agency and Michigan Department of Environmental Quality and shall submit documentation of compliance to the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** annually.

N. Automotive body shops shall have a safety inspection done by the local fire department or county building official on an annual basis. A copy of their findings shall be submitted to the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** on an annual basis.

O. Businesses operated in the Local Business Zoning District (C-1) are exempt from the requirements of items A., B., F. & I.

## 14.38 ARTISAN'S WORKSHOP

**14.38.1 Definition:** An establishment for the on-site creation of hand crafted goods such as but not limited to: artwork, jewelry, sculpture, pottery, leather craft, hand-woven articles and related items.

**14.38.2 Regulations and Conditions:**

A. The floor area for an Artisan Workshop shall not exceed two-thousand (2,000) square feet.

B. Retail space shall not exceed twenty-five (25) percent of the floor area of the business.

C. There shall be no outdoor storage of materials.

D. All work must be performed indoors.

E. No more than two (2) display products, produced on site, may be exhibited outside and only with Planning Commission approval.

F. All off-street parking shall comply with Article 10 of this Ordinance.

G. All signage shall comply with Article 11 of this Ordinance.

H. Food related businesses are prohibited as an Artisan Workshop.

## SECTION 14.39 SOLAR ENERGY SYSTEM

**14.39.1 Definitions:**

**Solar Energy System – Large:** A utility-scale commercial facility, over twenty (20) acres in size, that converts sunlight into electricity, whether by photovoltaics, concentrating solar thermal devices or any other various experimental solar technologies for the primary purpose of wholesale or retail sales of generated electricity off-site.

**Solar Energy System – Medium:** A utility-scale commercial facility, up to twenty (20) acres in size, that converts sunlight into electricity, whether by photovoltaics, concentrating solar thermal devices or any other various experimental solar technologies for the primary purpose of wholesale or retail sales of generated electricity off-site.

**Solar Energy System – Small:** A solar energy system installed at individual residential or commercial locations (e.g. roof or ground mounted panels) that are used exclusively for private purposes and not utilized for any resale of any energy, except for the sales of surplus electrical energy back to the electrical grid. These installations are permitted as "Accessory Uses or Structures" under Section 6.2.10.

**Solar Array:** Any number of Photovoltaic Devices connected together to provide a single output of electric energy or other energy.

**14.39.2 Intent and Purpose:** It is the intent of this section to regulate the safe, effective and efficient use of solar energy systems in order to reduce or replace the consumption of electricity supplied by utility companies.

**14.39.3 Site Plan Requirements:** In addition to the regular application for a Conditional Use Permit and payment of fees, the application shall be accompanied by a Site Plan. The Site Plan shall be drawn to a readable scale on a certified boundary survey and shall be sealed by a licensed professional engineer and shall include the following information:

A. Name and address of owner(s) of land which the Large or Medium Solar Energy System development will take place.

B. Name and address of person, firm, or corporation responsible if different than owner.

C. All lot lines and dimensions of each lot or parcel comprising the Large or Medium Solar Energy System.

D. Location and height of all proposed Solar Array(s) buildings, structure, electrical tie lines and transmission lines, security fencing, and all above-ground structures and utilities associated with a Large or Medium Solar Energy System.

E. Location of all existing and proposed overhead and underground electrical transmission or distribution lines within the Large or Medium Solar Energy System and within 100 feet of all exterior property lines of the Large or Medium Solar Energy System.

F. Proposed setbacks from the Solar Arrays to all existing and proposed structures within the Large or Medium Solar Energy System.

G. Access driveways off from public road(s) or private road(s) and within the Large or Medium Solar Energy System, together with a detailed narrative regarding dimensions, composition, and maintenance of each proposed driveway. All driveways off from public roads are subject to the approval of the Eaton County Road Commission or Michigan Department of Transportation.

H. Proposed landscaping and screening/buffering plan to include any plans for extraction and reclamation of any disturbed soils and provisions for grading, re-vegetation, and stabilization that will minimize soil erosion.

I. A revegetation plan shall be submitted and shall include the revegetation and the maintenance of the vegetative cover on the entire solar site. The planting must control site soil erosion and must be maintained throughout out the life of the solar installation. The primary purpose is control of erosion and maintenance of soil quality. Grazing, cropping, and wildlife habitat are acceptable secondary uses. The plan shall include the plant species and the rate of application or planting. Invasive species listed by the Michigan Department of Environmental Quality (DEQ) as restricted or that are on the DEQ Watch List are not allowed. The plan shall address seedbed preparation, fertilization, mulching, and, if needed, irrigation, for establishment and maintenance. Seed tags or seed and plant invoices are to be available to County staff at completion of the installation. The plan shall also include maintenance schedules and methods (mowing, replanting, etc.). The site is subject to annual inspection including for maintenance of the vegetative cover and control of erosion.

J. A drainage plan shall be submitted on a topographic map showing how surface drainage is being dispersed. Drainage and drainage calculations shall be approved by the Eaton County Drain Commissioner. Drainage in relationship to its impact on a County Road shall be approved by the Eaton County Road Commission. The Michigan Department of Transportation (MDOT) shall approve drainage in relationship to its impact on a State Road.

K. Environmental Impact Statement/Study of the proposed area to include, but not be limited to, a review of the impact of the following factors: water quality and supply, air quality, wildlife, floodplains and wetlands, identification of any solid or hazardous waste generated, and any other environmental factors typically evaluated for the proposed use or as requested.

L. A written description of the maintenance program to be used for the Solar Array and other components of the Large or Medium Solar Energy System. The description shall include maintenance schedules and types of maintenance to be performed.

M. Additional detail(s) and information as required by the Eaton County Zoning Ordinance, or as required by the Eaton County Planning Commission.

### 14.39.4 Regulations and Conditions:

A. **Minimum lot size:** There is no minimum lot size. Large or Medium Solar Energy Systems are permitted by conditional use permit and as such will be reviewed and considered for their compatibility with the surrounding area.

B. **Height Restrictions:** Maximum height of a Solar Array, other collection device, components or buildings of the Large or Medium Solar Energy System, excluding substation and electrical transmission equipment, shall not exceed sixteen (16) feet (as measured from the natural grade at the base of improvements) at any time or location on the property. Substation and electrical equipment shall not exceed one hundred (100) feet.

C. **Setbacks:**

1. Medium Solar Energy System: All buildings and Solar Arrays shall have a minimum setback distance of sixty-seven (67) feet from any existing public or private road rights-of-way and all other exterior property lines.

2. Large Solar Energy System: All buildings and Solar Arrays shall have a minimum setback distance of one hundred (100) feet from any existing public or private road rights-of-way and all other exterior property lines. If property surrounding a Large Solar Energy System is zoned Commercial or Industrial, the Planning Commission may allow for a lesser setback down to twenty-five (25) feet.

D. **Maximum Lot Coverage:** A Large or Medium Solar Energy System is exempt from maximum lot coverage limitations.

E. **Fencing and Landscaping:** A Large or Medium Solar Energy System shall be completely enclosed by perimeter security fencing to restrict unauthorized access. Fencing height and material to be proposed and reviewed/approved through the conditional use permit process. The perimeter of the Solar Energy System shall also be buffered per Article 17 along any public or private road right-of-way and perimeter of adjacent properties with a residential structure or whenever existing natural vegetation does not otherwise reasonably obscure it from entire perimeter. Berms, screen walls, and fences are prohibited as bufferyards for solar energy systems. Evergreen trees, a minimum of six feet in height at the time of planting, shall be used for all landscape buffers. The Planning Commission may reduce the landscape buffer requirements if adjoining properties are located within a Commercial or Industrial Zoning District. Site disturbance including but not limited to, grading, cut and fill, soil removal, excavation and soil compaction, shall be minimized; soil removal shall be prohibited.

F. **Signage:** No advertising or non-project related graphics shall be on any part of the Solar Arrays or other components or buildings of the Large or Medium Solar Energy System. This exclusion does not apply to entrance gate(s) signage which shall placed on the fence in a visible area and not exceed six (6) square feet in size. Signage shall be weather durable and should include the name and address of the Large or Medium Solar Energy System owner/operator, a phone number, and contact person from whom additional information may be obtained.

G. **Lighting:** All lighting for parking lots, driveways, external illumination of buildings or the illumination of signs shall be directed away from and be shielded from adjacent properties and shall be arranged as to not adversely affect driver visibility on adjacent public or private roads.

H. **Glare:** All solar panels shall be located or placed so that concentrated solar glare shall not be directed toward or onto nearby properties or roadways (public or private) at any time of the day.

I. **Distribution, Transmission and Interconnection:** All collection lines and interconnections from the Solar Array(s) to any electrical substations shall be located and maintained underground inside the Large or Medium Solar Energy System. This requirement excludes transmission equipment meant to connect the project substation to the local transmission system.

J. **Abandonment and Decommissioning:** A Large or Medium Solar Energy System shall be decommissioned following the operational life of the project or at which time it remains non-operational for a period of six (6) months and is considered abandoned. The applicant shall submit a Decommissioning Plan, prepared by a Licensed Professional Engineer, with the Conditional Use Permit application. The Decommissioning Plan shall include, but not be limited to, steps to remove the system, dispose of or recycle its components, restoration of the land and an estimated cost schedule to meet the requirements as follow: The owner/operator of the Large or Medium Solar Energy System is required to remove all equipment, conduit, structures, fencing, roads and building foundations, including any equipment or materials below-grade, offsite for disposal. Upon removal, the ground must be restored to its original condition and the site shall be revegetated to blend with the existing surrounding vegetation. The ground must be restored within six (6) months of abandonment or decommissioning. For agricultural lands, this explicitly entails restoration of the soils to their original USDA classification, as confirmed by a soil survey conducted in accordance with standards of the National Cooperative Soil Survey.

K. **Financial Guarantees:** If any Large or Medium Solar Energy System is approved for construction under this section, the applicant shall post a decommissioning financial guarantee prior to the start of the construction for an amount necessary to accomplish the work specified in the decommissioning plan as agreed upon by the Eaton County Planning Commission and the applicant. The amount shall be reasonably sufficient to restore the property to its previous condition prior to construction and operation of the Large or Medium Solar Energy System. When determining the amount of each required security, the Planning Commission may also require an annual escalator or increase based on the Consumer Price Index (or the equivalent or its successor). The financial guarantee shall be in the form of a surety bond executed by a reputable surety company authorized to do business in the State of Michigan or a cash bond posted in lieu of a surety bond. The bond shall be returned when all conditions stipulated in the Conditional Use Permit and the Decommissioning Plan have been completed. There shall be no partial release of the bond. This financial guarantee shall be kept in full force and effect during the entire time the Large or Medium Solar Energy System exists or is in place, it shall be irrevocable and non-cancelable.

## SECTION 14.40 PERSONAL SERVICE ESTABLISHMENT

**14.40.1 Definition:** A business providing care for a person or his or her personal goods or apparel and may include laundry and dry cleaning, beauty shops, barbershops, shoe repair, health and fitness, licensed massage therapy, and tanning salons.

**14.40.2 Regulations and Conditions:**

A. The business shall conform to the requirements of Section 14.13 Home Business. Any requirements in this section which are more restrictive than 14.13 shall be followed.

B. The business operator shall reside in the home located on the property.

C. Licensed Massage Therapy businesses must provide all business and employee/worker State of Michigan licenses to the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** prior to submitting a Conditional Use Application and annually if approved.

D. Only the property owner and one (1) employee shall perform the work or service.

E. Hours of operation are limited to Monday through Friday 7:00 a.m. to 7:00 p.m. and Saturday 8:00 a.m. to 12:00 p.m.

F. Businesses operated in the Local Business Zoning District (C-1) and General Business District (C-2) are exempt from the requirements of items A., B., and D.

## SECTION 14.41 WIND ENERGY SYSTEM (WES)

**14.41.1 Intent and Purpose:** It is the intent of this section to regulate the safe, effective and efficient use of wind energy systems in order to generate electricity.

**14.41.2 Definitions:**

**Wind Energy System (WES):** A land use for generating electric power from wind with a structural device (such as a wind generator, windmill, or wind turbine) that measures and/or converts wind into electricity through the use of specialized equipment. This does not include wiring to connect the wind energy system to the grid.

**Wind Energy System (WES) Utility-Scale:** A land use for generating electric power from wind at multiple tower locations in a community and includes accessory uses such as but not limited to an anemometer tower and electric substation. A utility-scale WES is designed and built to provide electricity to the electric utility.

**Wind Energy System (WES) Testing Site:** A land use containing a structure and equipment for determining the potential placement of one or more WES improvements which contains instrumentation, such as anemometers or other meteorological devices, designed to provide wind speeds and other data.

**Wind Energy System (WES) On-Site:** A land use for generating electric power from wind that is an accessory use designed and constructed to provide electricity only to the

property where the structure is located, or to adjacent properties under the same ownership or control.

**Anemometer Tower:** A freestanding tower containing instrumentation such as anemometers that is designed to provide present moment wind data for use by the supervisory control and data acquisition (SCADA) system which is an accessory land use to a utility-scale WES.

**Height:** The distance between the base of the wind turbine tower, measured from the ground level at grade to the tip of the blade at its highest reach.

**Horizontal Axis Wind Turbine:** A design in which the shaft is parallel to the ground and the blades are perpendicular to the ground.

**Vertical Axis Wind Turbine:** A design where the rotating shaft is perpendicular to the ground and the cups or blades rotate parallel to the ground.

**Participating Parcel:** One or more parcels under lease or easement for development of a utility-scale WES.

**Non-Participating Parcel:** A parcel for which there is no signed lease or easement for development of a utility-scale WES associated with the applicant project.

**A-weighted sound level:** The sound pressure level in decibels as measured on a sound level meter using the A-weighted network, a method for weighting the frequency spectrum to mimic the human ear. Expressed as dB(A) or dBA.

**Shadow Flicker:** Alternating changes in light intensity caused by the moving blades of a wind energy system casting shadows on the ground and stationary objects, such as but not limited to a window of a dwelling.

### 14.41.3 Wind Energy System (WES) Utility-Scale Requirements:

**A.** **Site Plan Requirements**: In addition to the regular application for a Conditional Use Permit and payment of fees, the application shall be accompanied by a Site Plan. The Site Plan shall be drawn to a scale of 1 inch to 200 feet on a certified boundary survey and shall be sealed by a licensed professional engineer and shall include the following information:

1. Name and address of owner(s) of participating parcels on which the WES development will take place.
2. Name and address of person, firm, or corporation responsible if different than owner.
3. All lot lines and dimensions of each participating parcels comprising the WES.

4. Location of all existing and proposed overhead and underground electrical transmission or distribution lines within the WES and within 100 feet of all exterior property lines of the participating parcels WES.
5. Existing and proposed setbacks of all structures located on the participating parcels.
6. Location, height, and dimensions of all proposed WES buildings, structures, towers, security fencing and other above ground structures and utilities associated with the WES.
7. Location and height of all existing buildings, structures, and above ground utilities located within radius equal to the height of the WES Utility-Scale tower structure. Specific distances to other on-site buildings, structures, and utilities shall also be provided.
8. Location of access driveways off from public road(s) or private road(s) and within the WES area, together with a detailed narrative regarding dimensions, grade, composition, and maintenance of each proposed driveway. All driveways off from public roads are subject to the approval of the Eaton County Road Commission or Michigan Department of Transportation for ingress and egress.
9. A site grading, erosion control and storm water drainage plan must be submitted on a topographic map and be approved by the Eaton County Drain Commissioner prior to any Conditional Use Permit application being submitted. Drainage in relationship to its impact on a County Road shall be approved by the Eaton County Road Commission. The Michigan Department of Transportation (MDOT) shall approve drainage in relationship to its impact on a State Road.
10. Additional detail(s) and information as required by the Eaton County Zoning Ordinance, or as required by the Eaton County Planning Commission.

**B. Application Requirements**: In addition to all other applicable information the application
shall include:

1. The estimated construction timeline.
2. An approved Road Maintenance Agreement from the Eaton County Road Commission and/or Michigan Department of Transportation.
3. An illustration of the proposed type of Utility-Scale WES
4. A detailed description of the complaint resolution process developed by the applicant to resolve complaints from nearby residents concerning the construction or operation of the WES. The process shall not preclude the County from acting on the complaint. During construction the applicant shall maintain and make available to nearby residents a telephone number where the project representative can be reached during normal business hours.
5. A study and report declaring the ambient and potential sound created by the Utility-Scale WES. The report must be produced by a qualified acoustic

consultant and meet ANSI standards and methodology for the measurement of sound to the extent that those standards and methods are applicable to providing accurate and substantive information for review by the Planning Commission. The report shall, at a minimum include.

a) A description and map of the projects sound producing features of each Utility-Scales WES, including the range of decibel levels expected (to be measured in dB(A)), and the basis for the expectation.

b) A description and map of the existing land uses and structures within a quarter (1/4) mile of the proposed Utility-Scale WES participating parcel boundaries. The description and map shall include the location of the structures, their use or uses, distances from the source of the sound or Utility-Scale WES and ambient decibel readings (including the date and time when measurements are taken) for each identified land use and structure described and mapped.

c) A detailed description of any proposed sound control features for each Utility-Scales WES, including specific measurers to minimize noise impacts to structures and land uses identified in the preceding item (b).

6. A detailed study/analysis on potential shadow flicker for all neighboring/adjacent occupied structures on non-participating parcels within half (1/2) mile of the proposed Utility-Scale WES participating parcel boundaries. The study/analysis shall identify the locations from sunrise to sunset over the course of a year.

7. A written description of the maintenance program to be used for the WES. The description shall include maintenance schedules and types of maintenance to be performed.

8. A Decommissioning Plan, prepared by a Licensed Professional Engineer, to ensure the Utility-Scale WES is properly decommissioned upon the end of project life, inoperability of individual WES turbine, or facility abandonment. The Decommissioning Plan shall include, but not be limited to, steps to remove all structures, fencing and equipment, foundations, footings, roads and debris to a depth of four (4) feet, as well as restoration of the soil and vegetation. Upon removal of the WES, the ground must be restored and revegetated to blend with the existing surrounding vegetation. For agricultural lands, this explicitly entails restoration of the soils to their original USDA classification, as confirmed by a soil survey conducted in accordance with standards of the National Cooperative Soil Survey. Upon written request by the property owner, access drives and associated drainage improvements, if any, may continue to exist as long as they were part of the original plan or an approved amended plan. The decommissioning including restoration shall be completed within one (1) year of the end of project life, inoperability of individual WES turbine(s), or facility abandonment. Extensions may be granted upon written request to the Planning Commission prior to expiration of the one (1) year decommissioning period. The Decommissioning Plan shall state (a) how the facility will be decommissioned to meet the criteria above, (b) how the system and its components will be disposed of or recycled, (c) the

Professional Engineer's estimated cost of decommissioning, (d) the financial resources to be used to accomplish decommissioning, and (e) that the resources shall be deposited with the Eaton County Treasurer.

**C. Regulations and Conditions:**

1. **Height Restrictions:** Utility-Scale WES are exempt from the height requirements of this ordinance.

2. **Setbacks:** All required setbacks shall be measured from the edge of the base of a Utility-Scale WES to the applicable property line, structure or other feature where setbacks are noted as required.

    a) All Utility-Scale WES shall be setback from non-participating parcel property lines a distance of no less than two times the height of the wind turbine tower. Setbacks shall only apply to perimeter property lines of participating parcels and shall not apply to property lines between participating parcels.

    b) All Utility-Scale WES shall be setback a distance of no less than one (1) foot for every one (1) foot of wind turbine tower height to a public road, private road, or active railroad right-of-way boundary. No setback is required from a drain right-of-way. An encroachment permit from the Eaton County Drain Commissioner will be required for work done within any drain easement area.

    c) All Utility-Scale WES shall be setback from the nearest non-participating parcel, school, hospital, church or public library, or any other occupied buildings a distance of no less than one thousand five hundred (1,500) feet. Any structure above constructed after the approval of a WES on a Participating or Non-Participating Parcel, shall not be required to meet the minimum setback.

    d) All Utility-Scale WES shall be setback a distance of no less than one (1) foot for every one (1) foot of wind turbine tower height to an existing above-ground public electric power line, telephone line or under-ground gas transmission line, unless said utility owner provides a waiver of such setback. Utility lines implemented as part of the application for a WES or those utility lines installed after the approval of a WES, shall be exempt from meeting this requirement.

3. **Sound Levels:** Any ten (10) minute LAeq shall not exceed forty-five (45) dB(A) at the property line of a non-participating parcel(s) boundary.

    a) Sound level limits are to be evaluated using the A-weighted equivalent sound level (LAeq) descriptor. The LAeq is measured using ten-minute time interval.

4. **Shadow Flicker:** A Utility-Scale WES shall be designed, sited, operated, and equipped with proven technology to minimize shadow flicker. Utility-Scale WES shall be placed such that shadow flicker to any occupied buildings occurs no more than 30 hours per year. Shadow Flicker in excess of 30 hours per year must be mitigated or eliminated.

5. **Visual Appearance:** The color and surface treatment of the Utility-Scale WES and supporting structures shall be neutral in color. No lettering, company insignia, advertising or graphics shall be on any part of the tower, hub, or blades of the WES. The main structure of any Utility-Scale WES shall be of a monopole design and not have any guy wires.

6. **Environmental Impact:** The Utility-Scale WES shall comply with all applicable parts of the Michigan Natural Resources and Environmental Protection Act (Public Act 451 of 1994, as amended).

7. **Safety Measurers:**

   a) All Utility-Scale WES shall have automatic braking, governing, or a feathering system to prevent uncontrolled rotation or over speeding.

   b) The minimum vertical blade tip clearance from grade on any Utility-Scale WES shall be seventy-five (75) feet for a horizontal axis rotor.

   c) All Utility Scale WES shall meet Federal Aviation Administration requirements, the Michigan Airport Zoning Act (PA 23 of 1950), the Michigan Tall Structures Act (PA259 of 1959) and any local jurisdiction airport overlay zone regulations. Minimum FAA lighting standards shall not be exceeded. The lighting plan submitted to the FAA shall include an Aircraft Detection Lighting System (ADLS) for the utility-scale WES. The tower shaft shall not be illuminated unless required by the FAA. Any required lighting shall be shielded to the extent possible to reduce glare and visibility from the ground.

   d) A Professional Engineer shall provide as built plans and certifications for the construction and installation of the Utility-Scale WES which meets or exceeds the manufacture's construction and installation standards.

   e) No WES shall be installed in any location where its proximity with existing fixed broadcast, transmission, or reception antennas for television, radio, or wireless phone other personal communication systems would produce interference with signal transmission or reception

   f) The applicant shall provide planned security measures to prevent unauthorized trespass and access. Additionally, all WES shall be unclimbable by design or protected by anti-climbing devices.

   g) Each Utility-Scale WES shall have one sign posted at the entrance off from the public road. The sign shall be weather durable and should include the following information: warning high voltage and an emergency contact with phone number. No advertising or non-project related graphics shall be on any part of the WES or other components or buildings of the WES. The sign shall be visible and not exceed six (6) square feet in size.

8. **Compliance Reporting**: At the end of the first year (12 full months) of operation, the owner/operator shall provide to the County a compliance report

that at a minimum addresses compliance with the shadow flicker and sound regulations of this Ordinance. The compliance report shall be well-documented, including measurements and location where measurements are taken. Such compliance report shall meet, where applicable, ANSI standards and methodology for the measurement of the sound, light, or shadow.

9. **Complaint Procedure:** Should a resident allege a WES is not in compliance with the requirements of this Ordinance, the procedure shall be as follows:

    a) Complaints must be submitted to the Development Official, or his or her designee, in writing from the affected resident, and include their name, address, and contact information. If the affected resident does not own the property allegedly being subjected to violations of the Ordinance, the name address, and contact information for the owner of the parcel shall be provided.

    b) Upon investigation by the County, if a complaint is deemed credible, the owner/operator of the WES shall be notified in writing. Within fourteen (14) calendar days of the date of notice, the owner/operator of the WES shall provide a statement of compliance or non-compliance. The owner/operator may be responsible to pay for an independent investigation conducted by qualified professionals acceptable to Eaton County to determine compliance.

10. **Abandonment:** A Utility-Scale WES not operated for a continuous period of twelve (12) months shall be considered abandoned.

11. **Financial Guarantee:** If a Utility-Scale WES is approved under this section, a decommissioning financial guarantee shall be posted prior to the start of construction for an amount necessary to accomplish the work specified in the decommissioning plan as agreed upon by the Eaton County Planning Commission and the applicant and may include an annual escalator or increase based on the Consumer Price Index (or the equivalent or its successor).

    a) The financial guarantee for decommissioning shall be in the form of a surety bond executed by a reputable surety company authorized to do business in the State of Michigan or a cash bond posted in lieu of a surety bond.

    b) The bond shall be returned when all conditions stipulated in the Conditional Use Permit and the Decommissioning Plan have been completed. There shall be no partial release of the bond. The financial guarantee shall be kept in full force and effect during the entire time the WES exists or is in place, it shall be irrevocable and non-cancelable.

    c) The County shall have access to the funds for the express purpose of completing the decommissioning, if decommissioning is not completed by the applicant within one (1) year of the end of project life, inoperability of individual WES turbine, or facility abandonment, or upon expiration of any extension granted by the Planning

Commission. Escrow funds may be used for administrative fees and costs associated with decommissioning.

d) The County (or its designated agent) is granted the right of entry onto the site, pursuant to reasonable notice, to effect or complete decommissioning as necessary.

e) The County is also granted the right to seek and obtain injunctive relief to effect or complete decommissioning, as well as the right to collect reimbursement from applicant or applicant's successor for decommissioning costs in excess of the amount deposited in escrow and to file a lien against any real estate owned by applicant or applicant's successor, or in which they have an interest, for the amount of the excess costs, and to take all steps allowed by law to enforce the lien.

12. **Enforcement:** Eaton County reserves the right upon issuing any WES conditional use permit to inspect the premises on which the WES is located. The owner or operator, landowner, firm, association, corporation or representative of any WES found by Eaton County to be in violation of the conditional use permit, or to be Abandoned or unsafe as defined in this Ordinance:

    a) Shall provide abatement by shut down, repair, or removal of the WES within forty-five (45) days upon written notification from the Development Official (or other County designee). If abatement cannot be achieved within forty-five (45) days, a plan shall be provided showing resolution to the matter with a timeline for compliance.

    b) Shall be subject to all enforcement mechanisms available to the County.

    c) May be subject to revocation of the conditional use permit for excessive and continued violations.

    d) May be required to reimburse Eaton County for cost(s) and expenses of obtaining other relief including a temporary or permanent injunction.

**D. Post Construction Activities:** To ensure compliance the following actions must be taken pending completion of any Utility-Scale WES:

1. **Certification**: Following the completion of construction, certification that all construction was completed pursuant to the Conditional Use Permit.

2. **As-built site plan drawings:** Within twelve (12) months of the project completion, the applicant shall submit as-built site plan drawings of the constructed WES, in the formats of Adobe PDF, or similar as a hard copy and as saved on electronic media, including location date (x,y coordinates) of site features, inclusive of turbines, access roads, junction boxes, the underground power collection system, and any borings underneath roads or drains. The applicant shall also submit all information listed above in GIS and CAD, or similar formats.

3. **Sound Study:** A post construction study documenting sound level measurements shall be provided to the Eaton County ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** by a third party qualified professional, selected by the Planning Commission and at the expense of the applicant and/or owner, within 12 months from the commencement of operation of the project. The study should generally follow the procedures in the most recent versions of American National Standard Institute (ANSI). The post construction study shall be performed as established by the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** prior to the study.

**E. Administrative Provisions Following Approval:**

1. **Expiration of Permit**: An approved conditional use permit for a Utility Scale WES shall expire if construction has not commenced within twenty-four (24) months from the date of issuance. Commencement shall mean the erection of a Utility Scale WES structure.
2. **Amendment of Site Location**: The Development Official may approve changes in the location of a Utility Scale WES and access drives so long as the modification is not more than one hundred (100) feet from the approved location and continues to meet all regulations of this Section.

**Wind Energy System (WES) Testing Site:**

**A. Site Plan Requirements**: In addition to the regular application for a Site Plan Review and payment of fees, the application shall be accompanied by a Site Plan. The Site Plan shall be drawn to a scale of 1 inch to 200 feet and shall include the following information:

1. Name and address of owner(s) of participating parcels on which the WES Testing Site structure will be located.
2. Name and address of person, firm, or corporation responsible if different than owner.
3. The lot lines and dimensions of the parcel(s) on which the WES Testing Site structure will be located.
4. Location of all existing overhead and underground electrical transmission or distribution lines.
5. Existing and proposed setbacks of all structures located on the participating parcels.
6. Location, height, and dimensions of all proposed WES Testing Site buildings, structures, towers, security fencing and other above ground structures and utilities associated with the WES Testing Site.
7. Location of all existing buildings, structures, and above ground utilities located within the area equal to the height of the WES Testing Site tower structure. Specific distances to other on-site buildings, structures, and utilities shall also be provided.

8. Location of access driveways off from public road(s) or private road(s) and within the WES Testing Site area.

**B. Application Requirements**: In addition to all other applicable information the application
shall include:

1. The estimated construction timeline.
2. An illustration of the proposed type of the WES Testing Site structure.
3. A detailed description of the complaint resolution process developed by the applicant to resolve complaints from nearby residents concerning the construction or operation of the WES Testing Site. The process shall not preclude the County from acting on the complaint. During construction the applicant shall maintain and make available to nearby residents a telephone number where the project representative can be reached during normal business hours.
5. A Decommissioning Plan, prepared by a Licensed Professional Engineer, to ensure a WES Testing Site is properly decommissioned upon the end of its project life, inoperability, abandonment or expiration of the Site Plan Approval. The Decommissioning Plan shall include, but not be limited to, steps to remove all structures, fencing and equipment, foundations, footings, roads and debris to a depth of four (4) feet, as well as restoration of the soil and vegetation. Upon removal of the WES, the ground must be restored and revegetated to blend with the existing surrounding vegetation. The decommissioning including restoration shall be completed within six (6) months of the end of project life, inoperability, abandonment or expiration of the Site Plan Approval. The Decommissioning Plan shall state (a) how the facility will be decommissioned to meet the criteria above, (b) how the system and its components will be disposed of or recycled, (c) the Professional Engineer's estimated cost of decommissioning, (d) the financial resources to be used to accomplish decommissioning, and (e) that the resources shall be deposited with the Eaton County Treasurer.

**C. Regulations and Conditions:**

1. **Height Restrictions:** WES Testing Sites are exempt from the height requirements of this ordinance.
2. **Setbacks:** All required setbacks shall be measured from the edge of the base of a WES Testing Site to the applicable property line, structure or other feature where setbacks are noted as required.
    a) All WES Testing Sites shall be setback from non-participating parcel property lines a distance of no less than two times the height of the tower. Setbacks shall only apply to perimeter property lines of participating parcels and shall not apply to property lines between participating parcels.
    b) All WES Testing Sites shall be setback a distance of no less than one (1) foot for every one (1) foot of tower height to a public road, private

road, or active railroad right-of-way boundary. No setback is required from a drain right-of-way. An encroachment permit from the Eaton County Drain Commissioner will be required for work done within any drain easement area.

c) All WES Testing Sites shall be setback a distance no less than one (1) foot for every one (1) foot of tower height to an existing above-ground public electric power line, telephone line or under-ground gas transmission line, unless said utility owner provides a waiver of such setback. Utility lines implemented as part of the application for a WES or those utility lines installed after the approval of a WES, shall be exempt from meeting this requirement.

3. **Visual Appearance:** The color and surface treatment of the WES Testing Site and supporting structures shall be neutral in color. No lettering, company insignia, advertising or graphics shall be on any part of the WES Testing Site.

4. **Safety Measurers:**

a) All WES Testing Sites shall meet Federal Aviation Administration requirements, the Michigan Airport Zoning Act (PA 23 of 1950), the Michigan Tall Structures Act (PA259 of 1959) and any local jurisdiction airport overlay zone regulations. Any required lighting shall be shielded to the extent possible to reduce glare and visibility from the ground.

b) All WES Testing Sites shall comply with all applicable state construction and electrical codes and local building permit requirements.

c) A Professional Engineer shall provide as built plans and certifications for the construction and installation of the WES Testing Site which meet or exceed the manufacture's construction and installation standards.

d) The applicant shall provide planned security measures to prevent unauthorized trespass and access. Additionally, all WES shall be unclimbable by design or protected by anti-climbing devices.

e) Each WES Testing Site shall have one sign posted at the entrance off from the public road. The sign shall be weather durable and should include the following information: warning high voltage and an emergency contact with phone number. No advertising or non-project related graphics shall be on any part of the WES or other components or buildings of the WES. The sign shall be visible and not exceed six (6) square feet in size.

5. **Abandonment:** A WES Testing Site not operated or used for a continuous period of twelve (12) months shall be considered abandoned. Upon this determination, the Decommissioning Plan and Financial Guarantee processes will be followed.

6. **Financial Guarantee:** If a WES Testing Site is approved under this section, a decommissioning financial guarantee shall be posted prior to the start of construction for an amount necessary to accomplish the work specified in the decommissioning plan as agreed upon by the Eaton County Site Plan Review Committee and the applicant and may include an annual escalator or increase based on the Consumer Price Index (or the equivalent or its successor).

    a) The financial guarantee for decommissioning shall be in the form of a surety bond executed by a reputable surety company authorized to do business in the State of Michigan or a cash bond posted in lieu of a surety bond.

    b) The bond shall be returned when all conditions stipulated in the Conditional Use Permit and the Decommissioning Plan have been completed. There shall be no partial release of the bond. The financial guarantee shall be kept in full force and effect during the entire time the WES exists or is in place, it shall be irrevocable and non-cancelable.

    c) The County shall have access to the funds for the express purpose of completing the decommissioning, if decommissioning is not completed by the applicant within one (1) year of the end of project life, inoperability, or abandonment. Escrow funds may be used for administrative fees and costs associated with decommissioning.

    d) The County (or its designated agent) is granted the right of entry onto the site, pursuant to reasonable notice, to effect or complete decommissioning as necessary.

    e) The County is also granted the right to seek and obtain injunctive relief to effect or complete decommissioning, as well as the right to collect reimbursement from applicant or applicant's successor for decommissioning costs in excess of the amount deposited in escrow and to file a lien against any real estate owned by applicant or applicant's successor, or in which they have an interest, for the amount of the excess costs, and to take all steps allowed by law to enforce the lien.

7. **Enforcement:** Eaton County reserves the right upon issuing any WES Testing Site approvals, to inspect the premises on which the WES is located. The owner or operator, landowner, firm, association, corporation or representative of any WES found by Eaton County to be in violation of a site plan review approval or to be Abandoned or unsafe as defined in this Ordinance:

    a) Shall provide abatement by shut down, repair, or removal of the WES within forty-five (45) days upon written notification from the Development Official (or other County designee). If abatement cannot be achieved within forty-five (45) days, a plan shall be provided showing resolution to the matter with a timeline for compliance.

b) Shall be subject to all enforcement mechanisms available to the County.

c) May be subject to revocation of the Site Plan Review approval for excessive and continued violations.

d) May be required to reimburse Eaton County for cost(s) and expenses of obtaining other relief including a temporary or permanent injunction.

**D. Administrative Provisions Following Approval:**

1. **Expiration of Site Plan Approval**: Site Plan approval for a WES Testing Site shall expire if the land use or construction permitting have not commenced within twelve (12) months. At no time shall a Site Plan Approval for a WES Testing Site be granted for more two (2) years. Any request to extend operations beyond this two (2) year time period must be made to the Eaton County Planning Commission with adequate documentation.

2. **Amendment of Site Location**: The Development Official may approve changes in the location of a WES Testing Site and access drives so long as the modification is not more than one hundred (100) feet from the approved location and continues to meet all regulations of this Section.

### 14.41.4 Wind Energy System (WES) On-Site:

**A. Site Plan Requirements**: In addition to the required application and payment of fees, the application shall be accompanied by a Site Plan. The Site Plan shall be drawn to a readable scale and shall include the following information:

1. Name and address of owner(s) of the parcel on which the On-Site WES will be located.

2. The lot lines and dimensions of the parcel on which the On-Site WES will be located.

3. Location of all existing overhead and underground electrical transmission or distribution lines on the property.

4. Existing and proposed setbacks of all structures located on the property.

5. Location, height, and dimensions of all proposed On-Site WES buildings, structures, towers, security fencing and other above ground structures and utilities associated with the On-Site WES.

6. Location of all existing buildings, structures, and above ground utilities located within the area equal to the height of the On-Site WES tower structure. Specific distances to other on-site buildings, structures, and utilities shall also be provided.

7. Location of access driveway(s) off from public road(s) or private road(s) and within the On-Site WES area.

**B. Application Requirements**: All On-Site WES sixty-six (66) feet in height or under shall be a use permitted by Site Plan Approval. All On-Site WES over sixty-six (66)

feet in height shall be a use permitted by Conditional Use Permit. In addition to the appropriate application and all other applicable information, the application shall include:

1. The estimated construction timeline.
2. An illustration to scale of the proposed type of the On-Site WES.
3. A detailed description of the complaint resolution process developed by the applicant to resolve complaints from nearby residents concerning the construction or operation of the On-Site WES. The process shall not preclude the County from acting on the complaint.
4. The applicant shall provide documentation from the manufacturer in reference to the sound levels of the On-Site WES. The sound generated shall not exceed forty-five (45) dB(A) at any Non-Participating Parcel boundary.

**C. Regulations and Conditions:**

1. **Height Restrictions:** On-Site WES are exempt from the height requirements of this ordinance providing they are compliant with the setback requirements of this section as noted below.
2. **Setbacks:** All required setbacks shall be measured from the edge of the base of an On-Site WES to the applicable property line, structure or other feature where setbacks are noted as required.
    a) All On-Site WES shall be setback from non-participating parcel property lines, public roads, private roads, or active railroad right-of-way boundary lines, no less than one (1) foot for every one (1) foot of tower height. Setbacks shall only apply to perimeter property lines of participating parcels and shall not apply to property lines between participating parcels. No setback is required from a drain right-of-way. An encroachment permit from the Eaton County Drain Commissioner will be required for work done within any drain easement area
    b) All On-Site WES shall be setback a distance of no less than one (1) foot for every one (1) foot of tower height to an existing above-ground public electric power line, telephone line or under-ground gas transmission line, unless said utility owner provides a waiver of such setback. Utility lines implemented as part of the application for an On-Site WES or those utility lines installed after the approval of an On-Site WES, shall be exempt from meeting this requirement.
3. **Sound Levels:** The sound generated from an On-Site WES shall not exceed forty-five (45) dB(A) at any non-participating parcel boundary.
4. **Visual Appearance:** The color and surface treatment of the On-Site WES and supporting structures shall be neutral in color. No lettering, company insignia, advertising or graphics shall be on any part of the tower, hub, or blades of the On-Site WES.
5. **Safety Measurers:**

a) All On-Site WES shall have automatic braking, governing, or a feathering system to prevent uncontrolled rotation or over speeding.

b) Horizontal axis On-Site WES must have a minimum distance of twenty (20) feet between the lowest extension of a rotational blade and the average grade at the base of the structure.

Vertical axis On-Site WES are exempt from this ground clearance provision, provided sufficient clearance is maintained for the safety of people, animals, machinery, or others that may traverse under or near the vertical axis system.

c) All On-Site WES shall meet with Federal Aviation Administration requirements, the Michigan Airport Zoning Act (PA 23 of 1950), the Michigan Tall Structures Act (PA259 of 1959) and any local jurisdiction airport overlay zone regulations. Any required lighting shall be shielded to the extent possible to reduce glare and visibility from the ground.

d) All On-Site WES shall comply with all applicable state construction and electrical codes and local building permit requirements. A copy of the manufacturer's installation instructions shall be provided. Included as part of or as an attachment to the installation instructions shall be standard drawings of the structural components of the wind energy system and support structures, including base and footings provided along with engineering data and calculations to demonstrate compliance with the structural design provisions of the ~~County~~ ***State of Michigan*** Building Code; drawings and engineering calculations shall be certified by a registered engineer licensed to practice in the State of Michigan.

e) On-Site WES must meet or exceed the manufacturer's construction and installation standards.

f) No On-Site WES shall be installed in any location where its proximity with existing fixed broadcast, transmission, or reception antennas for television, radio, or wireless phone other personal communication systems would produce interference with signal transmission or reception

g) All On-Site WES shall be unclimbable by design or protected by anti-climbing devices.

6. **Complaint Procedure:** Should a resident allege an On-Site WES is not in compliance with the requirements of this Ordinance, the procedure shall be as follows:

a) Complaints must be submitted to the Development Official, or his or her designee, in writing from the affected resident, and include their name, address, and contact information. If the affected resident does not own the property allegedly being subjected to violations of the Ordinance, the name address, and contact information for the owner of the parcel shall be provided.

b) Upon investigation by the County, if a complaint is deemed credible, the owner/operator of the On-Site WES shall be notified in writing. Within fourteen (14) calendar days of the date of notice, the owner/operator of the On-Site WES shall provide a statement of compliance or non-compliance.

7. **Abandonment:** An On-Site WES not operated or used for a continuous period of twelve (12) months shall be considered abandoned.

8. **Decommissioning:** On-Site WES shall be properly decommissioned upon the end of its project life, inoperability or abandonment. The owner/operator of the On-Site WES are to demolish and remove any WES structure(s) and accessories associated with its use. The County is granted the right to seek and obtain injunctive relief to effect or complete decommissioning, as well as the right to collect reimbursement from owners/operator or their successor, for decommissioning costs by filing a lien against any real estate owned by the owner/operator successor, or in which they have an interest, for the amount of the decommission and any other associated or related cost, and to take all steps allowed by law to enforce the lien.

9. **Enforcement:** Eaton County reserves the right upon issuing any On-Site WES site plan approval or conditional use permit to inspect the premises on which the On-Site WES is located. The owner/operator of the On-Site WES found by Eaton County to be in violation of a site plan approval or conditional use permit, or to be abandoned or unsafe as defined in this Ordinance:

   a) Shall provide abatement by shut down, repair, or removal of the On-Site WES within forty-five (45) days upon written notification from the Development Official (or other County designee). If abatement cannot be achieved within forty-five (45) days, a plan shall be provided showing resolution to the matter with a timeline for compliance.

   b) Shall be subject to all enforcement mechanisms available to the County.

   c) May be subject to revocation of the site plan review approval or conditional use permit for excessive and continued violations.

   d) May be required to reimburse Eaton County for cost(s) and expenses of obtaining other relief including a temporary or permanent injunction.

**D. Distribution, Transmission and Interconnection:**

1. **Interconnection**: No On-Site WES shall be interconnected with a local electrical utility company until the utility company has reviewed and commented upon it. The interconnection of the On-Site WES with the utility company shall adhere to the State Electrical Code as adopted by the County.

**E. Administrative Provisions Following Approval:**

1. **Expiration of Permit/Approval**: The approved Site Plan Review or Conditional Use Permit for an On-Site WES shall expire if the proposed land

use or structure has not commenced within six (6) months of the date of approval.

2. **Amendment of Site Location**: The Development Official may approve changes in the location of an On-Site WES and access drive so long as the modification is not more than one hundred (100) feet from the approved location and continues to meet all regulations of this Section.

# ARTICLE 15
# PUD - PLANNED UNIT DEVELOPMENT DISTRICT

## SECTION 15.1 INTENT AND PURPOSE

This Article provides enabling authority and standards for the submission, review, and approval of applications for Planned Unit Developments. It is the intent of this Article to authorize the consideration and use of Planned Unit Development regulations for the following purposes:

A. To encourage the use of land in accordance with its character and adaptability.

B. To promote the conservation of natural features and fragile lands and the preservation of important community resources.

C. To encourage flexibility and innovation in land use and design to protect the rural character of the community and enhance the quality of life in the County.

D. To promote the efficient use of land to facilitate a more economic arrangement of buildings, circulation systems, land use and utilities.

E. To promote the enhancement of housing diversity, shopping, traffic circulation, and recreational opportunities for the people of the County.

F. To promote and ensure greater compatibility of design and use between and among neighboring properties.

A Planned Unit Development must comply with this Article. The provisions of this Article are intended to result in land use and development substantially consistent with the underlying zoning, with modifications and departures from generally applicable requirements made in accordance with standards provided in this Article to ensure appropriate, fair, and consistent decision-making. The Planned Unit Development provisions are not intended as a device for ignoring the Zoning Ordinance or the planning upon which it has been based.

## SECTION 15.2 QUALIFYING CONDITIONS:

A. In order to be eligible for PUD rezoning, the proposed area shall consist of a **minimum of ten (10) acres** if the proposed PUD includes any residential land uses, or **five (5) acres** if no residential land uses are proposed.

B. Public water and sanitary sewer shall be available to service the site or the proposed development shall include a community water and wastewater system designed and built to ultimately connect to public systems.

C. A PUD may be permitted in **all** zoning districts.

D. As a condition of a rezoning to PUD, the applicant must demonstrate that the PUD will result in a recognizable and substantial benefit to the ultimate users and occupants of the project and to the community, where such benefit would otherwise be unfeasible or unlikely. Such benefits may include, but shall not be limited to, the preservation of important natural features, wildlife areas, the

provision of open lands, the provision of a mix of housing types or land uses, and/or innovation in design and project configuration.

## SECTION 15.3 DEVELOPMENT REQUIREMENTS

A. **IN GENERAL**. The Planning Commission shall evaluate each residential PUD application in accordance with the following general standards. The proposed development:

1. shall be designed, constructed, and maintained to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity;
2. shall not change the essential character of the area in which it is proposed;
3. shall be served adequately by essential public facilities and services, such as highways, streets, pedestrian ways, police and fire protection, drainage structures, refuse disposal, water and sewer;
4. shall not create excessive additional requirements at public cost for public facilities and services;
5. shall be developed in accordance with the intent for a Planned Unit Development as contained herein.

B. **DENSITY AND DWELLING UNIT COMPUTATION**. The maximum density for residential uses in any PUD shall not exceed 110% of the density which would be permitted in a feasible Comparison Plan, prepared in accordance with County regulations pertaining to the underlying zoning, except as provided in *Section 15.3.C*. For the purposes of this Article, a Comparison Plan shall consist of a feasible layout of dwelling units which may be permitted by right in accordance with the underlying zoning applicable to the proposed site. The Comparison Plan shall include the information required for Site Plan Review pursuant to *Section 8.3* of this Ordinance. The maximum number of dwelling units permitted for the PUD shall be determined based on the number of units that may be properly developed within the net development area of the site multiplied by a factor of 1.1. Provided, however, the maximum density for the proposed development may be adjusted in accordance with *Section 15.3.C* hereof. The net development area is determined by subtracting the following from the gross or total site area:

1. Area within existing or proposed road and/or utility rights-of-way
2. Areas devoted to non-residential uses.
3. Areas located within regulated wetlands, designated floodways and slopes in excess of 33%; provided, however, that for the purposes of the dwelling unit computation, such areas may be included in the non-developed portion of the site.

   In the case where the proprietor proceeds in phases and develops only a portion of the total proposed development at one time, each phase shall consist of land use(s) planned and developed in such a way that the

average of all completed phases shall not exceed the maximum average density for the entire development. This may be accomplished through the utilization of conservation easements, or other lawful means, as approved by the County.

**PUD Density and Open Space Bonus Illustration**
**(Not a part of this Ordinance)**

| | | |
|---|---|---|
| Gross Parcel Area = | | 100 Acres |
| Existing R.O.W. | 7 Acres | |
| Proposed R.O.W. | 10 Acres | |
| Areas devoted to non-residential land uses | 5 Acres | |
| Areas located in wetlands, floodway & steep slopes | + 15 Acres | |
| UNDEVELOPABLE AREA | 37 Acres | - 37 Acres |
| NET DEVELOPMENT AREA | | 63 ACRES |
| Comparison Plan Density at 36,200 sq. ft. per unit | | 74.9 Units |
| Permitted PUD Density Ratio at 1.1 times Comparison Plan | | 82.0 Units |
| Minimum Open Space Required at 25% of area devoted to Residential use (95 acres x 25%) | | 23.7 Acres |
| MAXIMUM PERMITTED DWELLING UNITS IN PUD with 35% open space (Comparison plan density times 120%) | | 89.8 Units |

C. **OPEN SPACE**: Each PUD shall contain open space areas equal to a minimum of twenty-five (25%) percent of the total site area which is devoted to residential use. Such open space shall be maintained in perpetuity by the owner, owner's agent or homeowner's association and shall be set aside for the common use of the home or lot owners within the PUD with recorded assurances satisfactory to the County that the required open space shall be properly maintained in perpetuity. In any such recorded assurances, the County shall be identified as having the right, but not the obligation, to enforce the conditions, covenants and restrictions placed on the open space.

To the extent that the proposed development provides open space as defined in this section in excess of twenty-five (25%) percent of the total site area, the maximum density of the development may be increased. For the purposes of this paragraph, for each one (1%) percent additional open space as defined herein in

excess of twenty-five (25%) percent which is proposed, the overall density of the project may be increased by one (1%) percent up to a maximum of one hundred-twenty (120%) percent of the density provided in the feasible Comparison Plan. (Refer to the chart above.)

For purposes of this section, open space shall only be considered to be those areas having a minimum dimension fifty (50) feet by one hundred (100) feet. Land in streets, sidewalks, parking areas or in required yard or setback areas shall not be considered as open space. Open space areas may include open air recreational uses and/or unimproved natural areas. The Planning Commission shall have the discretion to approve alternative open space uses, such as public or semi-public recreational use. Open space may include incidental and accessory buildings and structures as determined by the Planning Commission.

D. **LANDSCAPING AND GRADING**: In order to keep all graded areas and cuts to a minimum, to eliminate unsightly grading and to preserve the natural appearance and beauty of the property as far as possible while enabling an economic development, specific requirements may be placed on the size of areas to be graded or to be used for building and on the extent of removal of trees and natural features. All areas indicated as natural open space shall be undisturbed by grading, excavation or structures to the greatest extent possible. Where drainage improvements, utility lines, hiking or bicycle paths or similar recreational improvements are to be placed in natural areas, best engineering and design practices shall be used to make such improvements as unobtrusive as practicable. The PUD Concept and Final Development Plan shall include provision for the retention of existing landscape features and for the installation of appropriate new plantings of varying species, dimensions and design.

E. **PERMITTED USES WITHIN A PUD**: In the PUD District, the Planning Commission shall permit principal and/or accessory uses, and may permit any conditional uses, which are authorized in either the underlying zoning district(s) or the corresponding districts as set forth in the following table. Such uses must be compatible with the design principles and purposes of this Article and the land uses in the general vicinity of the project:

| | **Underlying Zoning *** | | | | | |
|---|---|---|---|---|---|---|
| | **RC & LA** | **R-1** | **R-2 & R-3** | **C-1** | **C-2** | **I** |
| Uses permitted in a residential PUD are limited to those permitted in the corresponding Zoning Districts | R-1 | R-1<br>R-2<br>R-3 | R-1<br>R-2<br>R-3<br>C-1 | R-1<br>R-2<br>R-3<br>C-1 | R-2<br>R-3<br>C-1<br>C-2 | I |

* For proposed PUDs with more than one underlying zoning district, the standards of the most restrictive district would apply.

If two-family or multi-family housing units are permitted in the PUD District which would otherwise not be permitted in the underlying zoning, **at least 60% of the land area** in the PUD district shall be reserved and used for land uses that are permitted in the underlying zone district and the remaining **40%** of the land area may be developed at the density and use as stipulated in the chart included in this paragraph 3(e).

**PUD Illustration**
**(Not a part of this Ordinance)**

| | |
|---|---|
| Total Site area | 20 Acres |
| Underlying Zoning | Low Density Residential (R-1) |
| Are Two-Family and Multifamily uses permitted by right in underlying zoning? | No |
| Maximum percentage of PUD area in which Two-Family and Multifamily uses may be permitted | 40% |
| Maximum area of PUD that may be devoted to Two-Family and Multi-family uses | 8 acres |

## SECTION 15.4 APPLICABLE REGULATIONS

A. Unless specifically waived by the Planning Commission through the provisions of *Section 15.4.B* below, all regulations of the underlying zoning district prior to the PUD request relative to lot size, lot width, yard area, lot coverage, structure height, setback, signs, parking and loading, landscaping, general provisions and other applicable regulations shall apply. In projects with more than one underlying district, the most restrictive district regulations within this Ordinance shall apply.

B. Consistent with the Planned Unit Development concept, and to encourage flexibility and creativity in development, departures from the regulations outlined in *Section 15.4.* may be granted at the discretion of the Planning Commission as part of the approval of a Planned Unit Development. Such departures may be authorized if there are features or planning mechanisms incorporated into the project which would achieve the objectives of each of the regulations from which a departure is being requested.

C. The stages or phases of any PUD development shall be so structured and scheduled that, if later stages or phases of the development are not implemented, the initial stage(s) shall be consistent with the provisions of this Article and shall not detract from the feasibility of developing the remaining portion of the subject PUD area in an appropriate and desirable manner. The Planning Commission shall determine that each phase of a PUD project shall be capable of standing on

its own as a desired land use, in the event that subsequent phases are not completed.

D. Private roads within the PUD, if any, shall conform to the minimum road construction standards established by the Eaton County Road Commission for public roads, the requirements of Section 14.28 of this Ordinance, and the Applicant must pay all costs of inspection and maintenance. All necessary agreements pertaining to private road construction and maintenance shall be reviewed and approved by the County and must be executed and recorded prior to the commencement of construction.

E. The proposed location and arrangement of structures shall not have a detrimental effect on residents of existing developments in the vicinity of the proposed PUD. Open space shall be used as a transitional device to buffer surrounding uses, as appropriate.

F. Any existing use of property zoned PUD (including property with an approved final development plan) shall be subject to the provisions of Article 12 of this Ordinance pertaining to non-conforming land uses.

## SECTION 15.5 PUD DESIGN CONSIDERATIONS

A proposed Planned Unit Development shall take into account the following specific design considerations, as they are necessary to ensure compliance with all applicable regulations and to ensure the compatibility of the project with adjoining properties and the general area in which the property is located.

A. Perimeter setbacks, as they may be modified in accordance with *Subsection 15.4B* of this Ordinance.

B. Street drainage and utility design with respect to location, availability, ownership, and compatibility.

C. Underground installation of utilities.

D. Separation of pedestrian and bicycle paths from vehicular traffic.

E. Achievement of integrated and harmonious development with respect to signs, lighting, landscaping, and construction materials.

F. Noise reduction and visual screening mechanisms from adjoining residential uses.

G. Ingress and egress to the property with respect to automotive and pedestrian safety and convenience, traffic flow and control, street capacity, and emergency access.

H. Off-street parking, loading, refuse, and other service areas with respect to ingress and egress and the potential effects of noise, glare, vibration, and odor emanating from such facilities on adjoining properties and uses.

I. Screening and buffering with respect to dimensions and character.

J. Yard areas and other open space.

K. Density and intensity of development expressed in terms of percent of gross and net land area coverage and/or gross and net housing units per acre and the height of buildings and other structures.

L. The preservation of natural resources and natural features.

## SECTION 15.6 APPLICATION AND PROCESSING PROCEDURES

A. **IN GENERAL**. The procedure for application, review and approval of a PUD shall be a two (2) part process.

1. The first part shall be application and approval of a Concept Development Plan, which shall require a legislative enactment amending the Zoning Ordinance so as to reclassify the property to PUD. Such action shall confer upon the applicant concept approval for the length of time established by the County Board of Commissioners in the amendatory ordinance granting the PUD designation.

2. The second part of the review and approval process shall be the application for approval of a Final Development Plan for the entire project or for any one or more phases of the project. Final Development Plan approval shall require the granting of Site Plan approval by the Planning Commission using the standards for Site Plan approval set forth in to *Article 8* of the Zoning Ordinance.

B. **EFFECTS**: The granting of a Planned Unit Development rezoning application shall require an amendment of the Zoning Ordinance and the Zoning Map constituting a part of this Ordinance. An approval granted under this Article including all aspects of the Final Site Development Plan and conditions imposed shall constitute an inseparable part of the Zoning Ordinance and an unique zoning district incorporating the provisions of the Final Site Development Plan. Each approved PUD district will be assigned a unique identification number by the Community Development Director, which shall be used to reference the standards, restrictions, uses and all other aspects of the particular PUD district.

C. **PREAPPLICATION CONFERENCE**: Prior to the submission of an application for Planned Unit Development, the applicant shall meet with the ~~Community Development Director~~ ***Development Official***, and/or such consultants as deemed appropriate. The applicant shall present at such conference, or conferences, a sketch plan of the Planned Unit Development, and the following information:

1. A **legal description** of the property in question;

2. The **total number of acres** to be included in the project;

3. A statement of the **approximate number of residential units** and/or the approximate number, type, and square footage of non-residential units;

4. A **Comparison Plan** indicating the maximum number of dwelling units that may be developed on the site under the terms of the existing Zoning

Ordinance and District, taking into account unbuildable areas as set forth in *Section 15.3.B*

5. The approximate **number of acres to be occupied** and/or devoted to or by each type of use;

6. **Departures from the regulations** of the Ordinance which may be requested;

7. The number of acres to be preserved as **open space** or recreation space; and

8. All known **natural resources** and **natural features**.

9. The **benefits that are expected** to result from the adoption of the PUD provisions pertaining to the subject site.

D. **PRELIMINARY CONCEPT DEVELOPMENT PLAN - SUBMISSION AND CONTENT**: Following the above conference or conferences, **20** copies of a Preliminary Concept Development Plan and application for a PUD rezoning request shall be submitted. The submission shall be made to the ***Development*** Official who shall forward it to the Planning Commission for consideration at a regular or special meeting. The plan shall be prepared by a Licensed Professional Engineer, Community Planner or Architect and shall be accompanied by an application form and fee as determined by the County Board of Commissioners. The preliminary site development plan shall contain the following information unless specifically waived by the ~~Community~~ Development Official:

1. Date, north arrow, and scale which shall not be more than 1" = 100'.

2. Locational sketch of site in relation to surrounding area.

3. Legal Description of property including common street address.

4. Size of parcel, total acres.

5. All lot or property lines with dimensions.

6. General location of all buildings within one hundred (100) feet of the property lines.

7. General location and size of all existing structures on the site.

8. General location and size of all proposed structures on the site.

9. General location and dimensions of all existing and proposed streets, driveways, parking areas, including total number of spaces and typical dimensions.

10. General size and location of all areas devoted to open space.

11. Location of existing vegetation and general location and size of proposed landscaped areas and buffer strips.

12. All areas within the 100-year floodplain, wetland areas or bodies of water.

13. Existing topographical contours at a minimum of five (5) foot intervals.

14. A Comparison Plan indicating the maximum number of dwelling units that may be developed on the site under the terms of the existing Zoning District, taking into account unbuildable areas as set forth in Section 15.3.C.

15. An illustration of any project phases or stages.

16. A specific listing of all departures from the regulations of the Ordinance which are requested.

17. A narrative describing:

    a) The nature and concept of the project.

    b) The proposed density, number, and types of dwelling units if a residential PUD.

    c) A statement describing how the proposed project meets the objectives of the PUD including the benefits that are expected to result from the adoption of the PUD provisions pertaining to the subject site.

    d) A detailed description of the legal mechanisms and structures proposed to assure the perpetual maintenance of all open space proposed.

    e) A statement from a registered professional engineer describing how the proposed project will be served by public water, sanitary sewer, and storm drainage. In the event a private water and/or wastewater system is proposed, the applicant shall submit documentation that the Barry-Eaton Health Department or the jurisdiction in which the project is located will accept responsibility for operation and maintenance of such systems, in the event the developer and any successors thereto fail to perform the required activities. The terms of such acceptance of responsibility for the operation and maintenance of such systems shall be established in an agreement between the applicant and the County or the jurisdiction in which the project is located. Said agreement shall provide for a performance bond, letter of credit or other mechanism acceptable to the Planning Commission, in an amount sufficient to assure the proper continued operation of such systems.

    f) A narrative description of the phasing or staging plan

    g) Proof of ownership or legal interest in property.

18 The name, address and phone number of the applicant.

19. The name, address and seal of the professional engineer, planner or architect that prepared the Plan.

E. **PRELIMINARY CONCEPT DEVELOPMENT PLAN - PLANNING COMMISSION REVIEW**: The Planning Commission shall review the preliminary site development plan and shall make reasonable inquiries of the applicant. The Planning Commission shall review the Preliminary Concept Development Plan according to the provisions of *Sections 15.3* through *Section*

*15.6* herein and transmit its recommendations for changes or modifications of the Preliminary Concept Development Plan to the applicant.

F. **PUBLIC HEARING**: Prior to setting the public hearing, the applicant shall submit all required and requested information to the ~~County~~ ***Department of Construction Codes & Planning and Zoning***. Once complete, the ~~Community Development Director~~ ***Development Official*** shall transmit the complete application to the Planning Commission. The Planning Commission, at a regular or special public meeting, shall set a time and place for a public hearing and provide for the legal publishing and proper posting of notices of such hearing, time and date in a newspaper of general circulation in the County, the first to be printed not more than thirty (30) days nor less than twenty (20) days and the second not more than eight (8) days before the date of the hearing. Not less than twenty (20) days notice of the time and place of such hearing shall also be given by mail to each electric, gas, pipeline, and telephone public utility company that registers its name and mailing address with the County for the purpose of receiving such notice and to each railroad operating within the district or zone affected. Planning Commission shall give a notice of the proposed rezoning to the owner of the property in question, to all persons to whom any real property within three hundred (300) feet of the premises in question is assessed, and to the occupants of all single and multi-family dwellings within three hundred (300) feet. The notice shall be delivered personally or by mail to the respective owners and tenants at the addresses given in the last assessment role. If the tenant's name is not known, the term "occupant" may be used.

If the notice is delivered by mail, an affidavit of mailing shall be filed with the Planning Commission before the hearing. Such notices shall include the places and times at which the tentative text and map change may be examined plus the following:

1. Describe the nature of the PUD use requested.
2. Indicate the property which is the subject of the PUD request.
3. State when and where the PUD use request will be considered.
4. Indicate when and where written and oral comments will be received concerning the request.

## SECTION 15.7 STANDARDS FOR ZONING APPROVAL

Following the public hearing, the Planning Commission shall recommend to the County Board of Commissioners either approval, denial, or approval with conditions of the PUD rezoning request and Preliminary Concept Development Plan. In making its recommendation, the Planning Commission shall find that the proposed PUD meets the intent of the PUD District and the following standards:

A. Granting of the Planned Unit Development rezoning will result in a recognizable and substantial benefit to the ultimate users of the project and to the community where such benefit would otherwise be unfeasible or unlikely to be achieved.

B. In relation to underlying zoning, the proposed type and density of use shall not result in a material increase in the need for public services, facilities, and utilities, and shall not place a material burden upon the subject or surrounding land or property owners and occupants or the natural environment.

C. The proposed development shall be compatible with the County Comprehensive Development Plan and shall be consistent with the intent and spirit of this Article.

D. The Planned Unit Development shall not change the essential character of the surrounding area.

E. The proposed development shall be under single ownership or control such that there is a single person or entity having responsibility for completing the project in conformity with this Ordinance. This provision shall not prohibit a transfer of ownership or control upon due notice to the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning***.

F. The proposed phasing plan is feasible and each of the proposed phases shall be capable of standing on its own and in conjunction with previously constructed phases in terms of the provision of all required services, facilities, open space and amenities to insure the protection of natural resources and the health, safety and welfare of the users of the PUD and surrounding residents.

## SECTION 15.8 COUNTY BOARD OF COMMISSIONERS APPROVAL

After receiving the recommendation of the Planning Commission, the County Board of Commissioners shall either approve, deny, or approve with conditions the PUD application and Preliminary Concept Development Plan in accordance with the requirements of *Article 13. Amendments* and the standards for approval and conditions for a PUD as contained herein. A building permit shall not be issued until Planning Commission approval of the PUD Final Development Plan.

Where provisions of Michigan Public Act 288 of 1967 as amended shall apply, the applicant shall thereafter submit the information and plans as may be required by Act 288, *Section 17.100*, the Subdivision Control Ordinance, and all other local procedures or regulations pertaining to platting approval.

Where a PUD contains plans for a site condominium development, the development shall comply with the requirements of Act 59 of 1978, as amended and all other local procedures or regulations pertaining to site condominium approval.

## SECTION 15.9 EFFECT OF APPROVAL

The Planned Unit Development amendment including the Preliminary Concept Development Plan as approved, the incorporated narrative and all conditions imposed, if any, shall constitute the land use authorization for the property. Such authorization shall remain in effect for a period of one (1) year unless a longer period is granted by the County Board of Commissioners upon the recommendation of the Planning Commission. All uses not specifically identified in the Preliminary Concept Development Plan are disallowed and not permitted on the property. All improvements and uses shall be in conformity with this amendment, except as permitted by

*Section 15.15*. During the period of effectiveness of the Concept Development Plan, the applicant shall be permitted to submit one (or more if the project is to be proposed in phases) site plan applications seeking Final Site Development Plan approval pursuant to *Section 15.10* of this Article.

In the event that an application for a Final Site Development Plan is not submitted within the time limits set forth in the approved Preliminary Concept Development Plan and any extensions thereof that may be permitted and approved, the approval granted under this Article shall **expire**, and the Planning Commission shall commence rezoning proceedings to an appropriate zone district.

The applicant shall record an affidavit with the Eaton County Register of Deeds which shall contain the following:

A. Date of approval of the PUD by the County Board of Commissioners.

B. Legal Description of the property.

C. Legal Description of the required open space along with a plan stating how this open space is to be maintained.

D. A statement that the property shall be developed in accordance with the approved PUD Final Site Development Plan and any conditions imposed by the County Board of Commissioners or Planning Commission unless an amendment thereto is duly approved by the County upon the request and/or approval of the applicant or applicant's transferee's and/or assigns.

## SECTION 15.10 FINAL SITE DEVELOPMENT PLAN

After receiving the PUD rezoning and preliminary site development plan approval from the County Board of Commissioners, the applicant shall submit a Final Site Development Plan for review and approval by the Planning Commission prior to starting any construction.

A. **CONTENTS OF FINAL SITE DEVELOPMENT PLAN**: The Final Site Development Plan shall contain the same information required for the Preliminary Concept Development Plan, the information required for Site Plan Review in *Article 8*, following additional information and information specifically requested by the Planning Commission in its review of the Preliminary Site Development Plan:

1. Location and size of all water, sanitary sewer, and storm sewer lines serving the development and each of the buildings and units within the project.
2. Proposed landscaping including type, number, and size of trees and shrubs.
3. Location of signs and exterior lighting.
4. Location of sidewalk, foot paths, or other pedestrian walkways.
5. Distance of all buildings from lot lines, right-of-ways, and other principal buildings.
6. Exterior architectural drawings noting building materials, height and area of buildings, accessory structures and fencing

7. Proposed phases of project.

B. **PUBLIC HEARING**: The Planning Commission shall not establish the date and time for a public hearing on the Final Site Development Plan until the applicant has submitted all required and requested information to the County. Once complete, the ~~Community Development Director~~ ***Development Official*** shall transmit the complete application to the Planning Commission. The Planning Commission shall determine a date for and hold a public hearing for consideration of the PUD Final Site Development Plan. Notice shall be given as follows:

1. Notice shall be published within a newspaper which circulates within the County. An additional notice shall be sent by mail or by personal delivery to all owners of property as listed on the current tax assessment roll of the County and to all occupants of all structures with three hundred (300) feet of boundary of the property that is the subject of the application and to the petitioner.

2. Such notice must be given no less than ten (10) days nor more than fifteen (15) days before the date the application will be considered.

3 The notice shall include the following:

a) Describe the nature of the Final Site Development Plan and PUD approval requested.

b) Indicate the property which is the subject of the Final Site Development Plan request.

c) State when and where the Final Site Development Plan request will be considered.

d) Indicate when and where written and oral comments will be received concerning the request.

## SECTION 15.11 STANDARDS FOR PUD FINAL SITE DEVELOPMENT PLAN APPROVAL

Following the public hearing, the Planning Commission shall either approve, deny, or approve with conditions the Final Site Development Plan.

In making its decision, the Planning Commission shall find that the proposed PUD meets the intent of the PUD District and the following standards:

A. The Site Plan Approval Standards set forth in *Article 8* except where specific deviations have been authorized pursuant to the approved PUD Concept Development Plan.

B. Ingress and egress to the property and proposed structures, with particular reference to motor vehicle and pedestrian safety and convenience, traffic flow and control, and access in cases of fire, catastrophe, or emergency.

C. Off-street parking and loading areas where required, with particular attention to noise, glare, and odor effects of each use in the plan on adjoining properties and properties in the proposed development.

D. Sewer, water, and storm drainage with reference to locations, availability, and compatibility.

E. Screening and buffering with reference to type, dimensions, and character.

F. Signs, if any, and their proposed lighting relative to glare, traffic safety, economic effect, and compatibility and harmony with adjoining properties.

## SECTION 15.12 CONDITIONS

A. In approving a PUD Final Site Development Plan, the Planning Commission may impose reasonable conditions which include but are not limited to conditions necessary to: ensure that public services and facilities affected by a proposed land use or activity will be capable of accommodating increased service and facility loads caused by the land use or activity; protect the natural environment and conserve natural resources and energy; ensure compatibility with adjacent uses of land, and to promote the use of land in a socially and economically desirable manner. Conditions imposed shall meet all of the following requirements:

1. Be designed to protect natural resources, the health, safety, and welfare, and the social and economic well being of those who will use the land use or activity under consideration, residents, and landowners immediately adjacent to the proposed land use or activity, and the community as a whole.

2. Be related to the valid exercise of the police power, and purposes which are affected by the proposed use or activity.

3. Be necessary to meet the intent and purpose of the Zoning Ordinance, be related to the standards established in the ordinance for the land use or activity under consideration, and be necessary to ensure compliance with those standards.

B. The conditions imposed with respect to the approval of a PUD Final Site Development Plan shall be recorded in the record of the approval action and shall remain unchanged except upon the mutual consent of the Planning Commission and the landowner. The Planning Commission shall maintain a record of conditions which are unchanged. The Final Site Development Plan, as approved, shall act as a restriction upon the development. The development must conform with the Final Site Development Plan and no building permit shall be issued for any improvements that are not in compliance with said Plan.

## SECTION 15.13 DEVELOPMENT AGREEMENT

The terms of the final approved Planned Unit Development shall be incorporated in a Development Agreement to be executed by the applicant and ~~the~~ an authorized representative of

the County. Said Agreement shall reference all approved application materials, plans, specifications and related documents and shall be recorded by the applicant with the Eaton County Register of Deeds to run with the land.

## SECTION 15.14 PERFORMANCE GUARANTEES

The Planning Commission may require a performance bond, letter of credit or similar guarantee in order to ensure the completion of required improvements.

## SECTION 15.15 COMMENCEMENT OF CONSTRUCTION

Construction of a PUD must be started within one (1) year from the effective date of the granting of Final Site Development Plan approval. This time limit may be extended one (1) year upon application to the Planning Commission if it is demonstrated that substantial progress is being made in completing plans and securing financing. In the case of a multiple-phase PUD, beginning construction of a phase shall satisfy the requirements of this paragraph even though the total PUD may be a number of years from completion; provided, however, that consecutive phases must be started within the later of one (1) year of: The schedule set forth in the approved Concept Development Plan, or completion of the previous phase. This time limit may be extended by the Planning Commission annually for a cumulative total of four (4) years, if it is determined by the Planning Commission that conditions beyond the applicant's control have caused the need for the extension, and, taking into consideration any changed facts or circumstances. In the event that construction has not commenced within these time limits and any extensions thereof that may be permitted and approved, the approval granted under this Article shall expire, and the Planning Commission shall commence rezoning proceedings to an appropriate zone district. For the purposes of this paragraph, completion of a phase shall be the date all structures intended for occupancy by homeowners, tenants, residents or businesses have been approved for occupancy.

Where a PUD project is proposed for construction in phases, the planning and construction of each phase, in conjunction with any previously completed phases shall be capable of standing on its own in terms of the provision of all required services, facilities, open space and amenities to insure the protection of natural resources and the health, safety and welfare of the users of the PUD and surrounding residents.

## SECTION 15.16 MODIFICATION OF A PUD

Minor changes to a PUD Final Site Development Plan may be approved by mutual agreement of the applicant or successors in interest and the Planning Commission, provided the changes comply with all applicable requirements of this Zoning Ordinance and all other County regulations or State law. Minor changes include:

A. All matters that were approved by the Planning Commission in the Final Site Development Plan that were not part of the Preliminary Concept Development Plan,

B. The relocation of structures, roads, planting areas, parking areas, signs, lighting, and driveways provided that all such improvements remain in the same general

location as approved in the Preliminary Concept Development Plan, as determined by the Planning Commission, and

C. Adjustments to building size that does not exceed five thousand (5,000) square feet or five (5%) percent of the gross floor area, whichever is smaller.

A major change to an approved PUD shall comply with the original approval procedures for a PUD. Major changes include but are not limited to increase in density or number of dwelling units, increase in land area or building size, except as noted above or changes in, or the addition of other uses not authorized by the original PUD approval.

INSERT PUD PROCESS ILLUSTRATION HERE

INSERT PUD PROCESS ILLUSTRATION HERE

# ARTICLE 16
# MANUFACTURED HOMES

## SECTION 16.1 INTENT AND PURPOSE

It is the intent of this article to establish regulations under which manufactured homes may be used as a single family dwelling on parcel located outside of a manufactured home community. It is recognized that the modern manufactured home dwelling compares favorably with existing site constructed dwellings provided that such manufactured homes are similar in appearance, design and construction with existing residential development in the vicinity. It is the purpose of this article to provide standards for construction, installation, and appearance of manufactured homes to be placed on its own individual lot in order to ensure compatibility with existing dwellings located in the surrounding area.

## SECTION 16.2 DEFINITIONS

**16.2.1** **Manufactured Home:** A manufactured home is a structure transportable in one (1) or more sections, which is eight (8) body feet or more in width and is thirty-two (32) body feet or more in length, and which is built on a permanent chassis and designed to be used as a dwelling, with a permanent foundation, when connected to required utilities and including plumbing, heating and electrical systems contained herein.

**16.2.2** **Approved New Single-Wide Manufactured Home:** An approved new single-wide manufactured home is a manufactured home as defined above which contains at least seven-hundred twenty (720) square feet in floor area, measures between twelve (12) and sixteen (16) body feet in width at the narrowest point and is certified to be in compliance with the United States Department of Housing and Urban Development, Manufactured Home Construction and Safety Standards (Code of Federal Regulations, Part 3280). Certification to be determined by examining the mobile home title which shows that the date of manufacture and examination of certification of compliance with the above standards attached to the manufactured home by the manufacturer.

**16.2.3** **Approved New Wide Body Manufactured Home:** An approved wide body manufactured home is a manufactured home as defined above which is transported in two (2) or more sections and assembled on the site. An approved wide body manufactured home contains at least seven-hundred twenty (720) square feet in floor area and is more than sixteen (16) feet in body width at the narrowest point and is certified to be in compliance with the United States Department of Housing and Urban Development, Manufactured Home Construction and Safety Standards (Code of Federal Regulations, Part 3280). Certification to be verified as specified in Section 16.2.2.

**16.2.4** **Approved Used Manufactured Home:** An approved used manufactured home is one that is proposed to be moved from a manufactured home community to private property or from a private property to another private property. An approved used manufactured home shall meet all standards listed above (Sections 16.2.2 or 16.2.3). In addition, to ensure public health and safety, an inspection report from a licensed Housing and Urban Development (HUD) Inspector or an Architect or Engineer licensed to do business in the State of Michigan shall be submitted. The report shall ensure the manufactured home

meets the standards listed above and is capable of meeting the standards in Code of Federal Regulations, Part 3285, Model Manufactured Home Installation Standards and the standards listed in Section 16.3.3 of this Ordinance.

## SECTION 16.3 STANDARDS FOR APPROVAL

The Development Official shall render a decision based solely on the following requirements and criteria. Applications (Zoning Referral) which comply with the requirements listed below shall be approved. Applications which fail to comply shall be denied. No Administrative Variances shall be granted by the Development Official from the standards and requirements contained in this section of the Ordinance.

**16.3.1** **Site Development Requirements:** The proposed lot and location of the manufactured home on said lot shall comply with the Site Development Requirements for the particular Land Development District in which it is located. (see Table A, *Section 7.7*)

**16.3.2** **Development Permit Requirements:** The application for a Manufactured Home Permit (Zoning Referral) shall be in compliance with requirements for a Development Permit pursuant to *Section 3.5.2* and *Article 7* of this Ordinance.

**16.3.3** **Present Condition Standards:** Manufactured Homes shall be of an approved type consistent with Section 16.2.2, 16.2.3, or 16.2.4 and shall be in a present condition consistent with the requirements of the certification program under which the manufactured home was manufactured. In addition, the manufactured home shall be watertight, free of exterior damage and oxidation and free of openings which would allow entry by insects and vermin. Electrical and mechanical systems shall be fire-safe, and plumbing pipes and fixtures shall be operable and free of leaks or damage.

**16.3.4** **Compatibility Criteria:** The ~~Community Development Director~~ ***Development Official*** or designee shall examine the proposed manufactured home site and surrounding area to determine whether or not the application meets the following criteria:

A. An approved wide body manufactured home as defined in this Article is hereby determined to be compatible with the existing development and is not subject to the limitations listed below.

B. An approved single-wide manufactured home as defined in this Article shall be permitted only when the application receives less than five (5) points as determined by the following criteria:

| CRITERIA | POINT ASSIGNMENT |
|---|---|
| The number of site constructed dwellings, State Construction Code Commission approved pre-manufactured dwellings, or wide body manufactured homes currently located within a one-thousand three-hundred twenty (1,320) foot radius of the proposed site property as specified in the application. | +1 point for each dwelling unit |

## SECTION 16.4 INSTALLATION REQUIREMENTS

**Minimum Specifications:** Manufactured homes shall be installed according to the Manufacturer's written instructions for the specific unit to be installed or at a minimum comply with the following specifications when the manufacturers instructions are not available.

**16.4.1 Code of Federal Regulations***:* All manufactured homes are required to meet the Code of Federal Regulations, Part 3280, Manufactured Home Construction and Safety Standards and Part 3285 Model Manufactured Homes Installation Standards

**16.4.2 Site Built Alterations and Additions to Manufactured Homes:** any landing, deck, stair, handrail, guardrail, crawl space, basement, roof overs, additions, etc., shall comply with the current Michigan Building Code as adopted by the State of Michigan.

**16.4.3 Pre-Manufactured Additions:** Pre-manufactured expando, add-a-room, tag-a-long additions shall comply with the standards for construction as listed in Section 16.6.1. Separate wide-body manufactured homes and single-wide manufactured homes shall not be used as additions to the principle dwelling structure.

## SECTION 16.5 APPEALS OF DECISIONS

Any interested person aggrieved by the decision of the Development Official may have that decision reviewed by the Board of Appeals at their next regular meeting or special meeting called for that purpose. The Board of Appeals shall review the matter based on standards contained in this Ordinance and shall give written justification for any decision pursuant to *Section 4.6.10* of this Ordinance.

# ARTICLE 17
# BUFFERYARDS

## SECTION 17.1 INTENT AND PURPOSE

Bufferyards with landscaping and screening are necessary for the protection and enhancement of the environment and for the continued vitality of all land uses within the County. The purpose and intent of this section are as follows:

A. **Aid in stabilizing the environment's ecological balance** by contributing to the processes of air purification, oxygen regeneration, groundwater recharge, and stormwater runoff retardation, while at the same time aiding in noise, glare, and heat abatement;

B. **Conserve energy**; and to protect the **public health, safety**, and **general welfare**;

C. Encourage the **preservation of existing trees** and vegetation;

D. Provide **visual buffering** and enhance the beautification of the County;

E. Preservation, protection, and **restoration of the character**, unique identity, environment, appearance, property value and the economic base of Eaton County;

F. **Provide standards** for the development of landscaped areas, bufferyards, or berms as required elsewhere in this Ordinance, by the Site Plan Review Committee, or the Planning Commission.

## SECTION 17.2 SCOPE OF APPLICATION

**Applicability:** The requirements set forth in this section shall apply to all uses, lots, sites, and parcels which require commercial or industrial zoning classification, accommodate a commercial or industrial use, or which abut one (1) of the previous two (2) uses, lots, sites, or parcels, any development requiring Site Plan review, or as required by *Articles 6, 7, 9*, and *14*, or as required by the Planning Commission as a condition of approval for a permit. No Site Plan shall be approved unless said Site Plan shows landscaping, bufferyards, and/or berms consistent with the provisions of this ordinance. Where a bufferyard is required, a Conditional Use Permit, Site Plan Review application, Variance or other Board of Appeals application, Site Condominium Plan, and/or a Building Permit shall not be approved or issued until the required landscape plan is submitted and approved by the Development Official.

## SECTION 17.3 PLAN REQUIREMENTS

The following plan requirements shall apply to all developments which are required to build and maintain landscaping, bufferyards, or berms within this Ordinance or by condition of the Planning Commission unless specifically exempted elsewhere in this Ordinance.

**Bufferyard Plan Requirements:** A detailed landscape plan shall be required to be submitted to the ~~Community Development Department~~ ***Department of Construction Codes & Planning and Zoning*** prior to the acceptance of any application. The landscape plan shall demonstrate that all requirements of this section are met and shall include, but not be limited to, the following items:

A. **Location, size, spacing**, and **a description** for each **plant type** proposed for use within the required landscape area.

B. **Minimum scale**: 1"= 40' for property less than (3) three acres or 1"= 100' for property (3) three acres or greater.

C. **Typical straight cross section** including slope, height, and width of berms and type of ground cover, or height and type of construction of wall, including footings.

D. Identification of **all planting materials**.

E. Identification of **landscape maintenance** program including statement that all deceased, damaged, or dead materials shall be replaced in accordance with the standards of this ordinance.

## SECTION 17.4 MINIMUM STANDARDS FOR BUFFERYARDS

The following regulations shall apply to all developments and uses requiring or making use of a bufferyard.

A bufferyard shall be **a strip of land which visually shields or blocks noise, light, and/or other nuisances** between two or more conflicting or potentially conflicting uses. It shall consist of the following:

A. **Minimum Size**: A bufferyard shall be a minimum of thirty (30) feet in width commencing along the entire length of the abutting side or rear property line.

B. **Sight Proof Screening**: A bufferyard must provide site proof screening of six (6) feet in height along the entire length of the abutting side or rear property line.

C. **Methods**: The sight proof screening may be created using any permissible combination of the following: landscaping, berms, screenwalls, and fencing as provided in *Section 17.5, 17.6,* and *17.7.*

D. **External Areas of Storage**: May not exceed one hundred and fifty (150) square feet and shall be screened on all sides by an opaque screen wall or fence.

## SECTION 17.5 MINIMUM STANDARDS FOR LANDSCAPING AND PLANT MATERIALS

The following minimum standards shall apply to all developments requiring a bufferyard and to all developments requiring landscaping.

**17.5.1 Landscaping and Plant Material Standards:** All plant materials shall be hardy to Eaton County, free of disease and insects and conform to the standards of the American Association of Nurserymen. A list of recommended plants are available from the Development Official.

A. **Minimum Trees Required**: Three (3) trees, plus one (1) tree for each fifteen (15) feet of bufferyard length. This is a minimum requirement additional trees may be necessary to meet the screening purpose of the bufferyard.

B. **Drainage and Safety**: All plant materials shall be planted and maintained in such as manner so as not to alter drainage patterns on site or adjacent properties, obstruct vision for reasons of safety, vehicular or pedestrian ingress or egress, or cause damage to utility lines (above and below ground) and public roadways.

C. **Minimum Plant Sizes, at time of Installation**:

| TYPE | SIZE |
|---|---|
| Deciduous Canopy Tree | 1 1/2" Caliper |
| Deciduous Ornamental Tree | 1" Caliper |
| Evergreen Tree | 6' height |
| Deciduous Shrub | 2' height |
| Upright Evergreen Shrub | 2' height |
| Spreading Evergreen Shrub | 18-24" spread |

1. **Method of Measurement**: The planting must comply with the above standards as measured in the following manner: The measurement will be taken six (6) inches above ground level if the planting caliper is four (4) inches or less, or the measurement will be taken twelve (12) inches above ground level if the planting caliper is greater than four (4) inches.

2. **Achievement of Screening Effect**: The plant material shall achieve its horizontal and vertical screening effect within four (4) years of initial installation.

D. **Existing Plant Material:** which complies with standards and intent of the ordinance, as determined by the zoning official, may be credited toward meeting the landscape requirements.

E. **Landscape Design:** Clustering of trees and shrubs within the bufferyards which comply with the standards and intent of the ordinance as determined by the zoning official, are encouraged.

A. **Prohibited:** The following trees are not permitted as they split easily; their wood is brittle and breaks easily; their roots clog drains and sewers; and they are unusually susceptible to disease or insect pests:

| Common Name | Horticultural Name |
|---|---|
| Boxelder | Acer Negundo |
| Ginkgo | Ginkgo Biloba (female only) |
| Honey locust | Gleditsia Triacanthos (with thorns) |
| Mulberry | Morus Species |
| Poplars | Populus Species |
| Blank Locust | Robinia Species |
| Willows | Salix species |
| American Elm | Ulmus Americana |
| Siberian Elm | Ulmus Pumila |
| Slippery Elm; Red Elm | Ulmus Rubra |
| Chinese Elm | Ulmus Parvifola |

## SECTION 17.6 MINIMUM STANDARDS FOR BERMS

The following regulations shall apply to all developments requiring landscaping, bufferyards, and berms.

**17.6.1 Berm Standards:** Berms shall comply and be maintained with the following minimum standards.

A. **Slope**: Berms shall be constructed so as to maintain a side slope not to exceed a one (1) foot rise to a three (3) foot run ratio. (See Figure 1, *Section 5.3.2*)

B. **Ground Cover Maintained**: Berm areas not containing planting beds shall be covered with grass or living ground cover maintained in a healthy growing condition.

C. **Prohibited**: Berms shall be constructed in such a manner so as not to alter drainage patterns on site or adjacent properties or obstruct vision as it pertains to vehicle/pedestrian safety, ingress or egress.

D. **Retaining Walls and Terracing**: If a berm is constructed with a retaining wall or by terracing, the earthen slope shall face the exterior of the site and both the terraced area and the exterior earthen slope must comply with the landscaping provisions of this ordinance.

## SECTION 17.7 MINIMUM STANDARDS FOR SCREEN WALLS AND FENCES

The following shall apply to all developments requiring or making use of screen walls and fences.

**17.7.1 Screen Walls:** The following are the required standards for screen walls.

A. **Height:** The maximum height for a wall or fence shall be six (6) feet which follows the grade of the property unless otherwise specified elsewhere in this Ordinance.

B. **Materials**: All screen walls and fences shall be constructed with new, durable, weather resistant and easily maintainable materials. All screen walls and fences shall be reasonably maintained for the duration of the permitted use it is screening.

C. **Permitted Openings**: The wall or fence may be constructed with openings that do not exceed twenty (20%) percent of the wall surface. The openings shall not reduce the intended obscuring effect of the wall.

D. **Prohibited On-site and Off-site Alterations**: Screen walls or fences shall be constructed so as not to alter drainage on site or adjacent properties or obstruct vision for reasons of ingress or egress.

E. **Detention or Retention Areas**: These areas shall be permitted within buffer zones provided they do not hamper the screening intent of the buffer or jeopardize the survival of the plant materials.

# ARTICLE 18
# SEVERABILITY CLAUSE

This Ordinance and the various articles, sections and clauses thereof, are hereby declared to be severable. If any part, sentence, paragraph, section, clause or word is adjudged unconstitutional or invalid for any reason, by any Court, such invalidity shall not affect the remaining portions or applications of this Ordinance which can be given effect without the invalid portion or application provided such remaining portions are not determined by the Court to be inoperable.

# ARTICLE 19
# CONFLICTING PROVISIONS

Where a provision of this Ordinance conflicts with a provision of another Ordinance, the strictest provision shall prevail.

# ARTICLE 20
# SAVINGS CLAUSE

This Ordinance shall not impair or affect any act done, offense committed or right accruing, accrued or acquired, or liability, penalty, forfeiture or punishment incurred prior to the time this Ordinance takes effect, but the same may be enjoyed, asserted, enforced, prosecuted or inflicted as fully and to the same extent as if this Ordinance had not been adopted. Such proceedings may be consummated under and according to the Ordinance in force at the time such proceedings are or were commanded. All prosecution, or other actions, pending at the effective date of this Ordinance, or offenses or acts committed prior to the effective date of this Ordinance, may be continued or instituted under and in accordance with the provisions of the Ordinance in force at the time of such offense.

# ARTICLE 21
# EFFECTIVE DATE (September 16, 1981)

This ordinance shall be in full force and effect on the date following its approval by the Director of the Department of Commerce of the State of Michigan pursuant to the provisions of Public Act 183 of 1943, as amended. The continued administration of this Ordinance, amendments to this Ordinance, and all other matters concerning operation of this Ordinance shall be done pursuant to the Michigan Zoning Enabling Act No. 110 of the Public Acts of Michigan of 2006, as amended, (MCL 125.3101 et seq.), hereinafter referred to as the "Zoning Act."

# HISTORY OF ADOPTION

## I. INTERIM

A. Resolution of intent July 18, 1956.

B. Established Zoning Commission October 9, 1956.

C. Board of Supervisors approved Interim Zoning Ordinance October 14, 1956.

D. Board of Supervisors renewed Interim Zoning Ordinance for one (1) year.

## II. PERMANENT ZONING ORDINANCE

A. Resolution of intent December 18, 1957.

B. Zoning Commission adopting Ordinance April 22, 1959.

C. Advertised Zoning Ordinance April 22, 1959.

D. Board of Supervisors adopted Zoning Ordinance May 20, 1959.

1. Mailed to Michigan Economic Development Commission.
2. To become effective after approval.

E. Approved by the Michigan Economic Development Commission June 29, 1959.

F. Effective date October 1, 1959.

## III. REVISION

A. Amendment #45 advertised November 11, 18, and 25, 1970.

B. Adopted by Zoning Commission December 2, 1970.

C. Adopted by Board of Commissioners January 20, 1971.

D. Approved by Office of Economic Development Expansion February 1, 1971.

E. Amendment #46 advertised July 7, 14, and 21, 1971.

F. Approved by Study Committee of Board of Commissioners July 28, 1971.

G. Adopted by Board of Commissioners on August 18, 1971.

H. Approved by the Office of Economic Expansion, Michigan Department of Commerce September 15, 1971.

## IV. MAJOR TEXT EMENDMENTS TO THE OCTOBER 13, 1981 LAND DEVELOPMENT CODE & EFFECTIVE DATE:

| | | |
|---|---|---|
| A. | DCA-3-83 | April 5, 1983 - [8.2.1] two members of E.C.P.C. appointed annual; [8.3] no development permit for a use permitted by SPA or CUP shall be issued until provisions on compliance & SPA is received; [8.6.2] chairman of "SPR Committee to notify each member 9 working days in advance of meeting. |
| B. | DCA-8-83 | September 7, 1983 - limit the land area use for Home business purpose to 4,000 sq. ft., permit mobile homes to be in certain areas, & to limit residential signs no greater than 6 sq. ft. |
| C. | DCA-11-83 | March 21, 1984 - [16.5.3] mobile home compatibility. |
| D. | DCA-3-84 | May 25, 1984 - [3.2] Relief from personal responsibility |
| E. | DCA-4-85 | January 30, 1986 - [7.7.2] minimum lot area, [7.7.8] add Notes a. and h. when subdivided and served by a public water supply. |
| F. | DCA-9-86 | October 18, 1986 - [5.3.10] junk; [6.5] mobile home circumstantial permits; [6.6] issuance of variances; [7.3.4] comm. recreation facility to land use permit in LA; [8.3] establish major & minor Site Plans; [8.4] authorize Plan Dept. to grant SPA for minor Site Plans; [8.5] required approval of certain county agencies for major Site Plans. [14.24] allow CUPs for distressed vehicle transporters in LA districts; [16.6.4] repeal vermin proofing requirements for mobile homes. |
| G. | DCA-3-87 | July 22, 1987 - [14.20] Private airports. |

| | | |
|---|---|---|
| H. | DCA-8-87 | October 16, 1987 - [7.2.3] Resource Conservation (RC) uses permitted by SPA pursuant to Art. 8; [7.2.4] uses permitted by CUP pursuant to Art. 9; [J] Private airport as provided in Sec. 14.20; [7.3.3] uses permitted by SPA pursuant to Art. 8; [I] Private airport as provided in Sec. 14.2 |
| I. | DCA-1-89 | June 6, 1989 - [Art. 9.3.9] CUP procedure conditions of approval; [Art. 10.2] jurisdiction for parking & loading for 10 or more spaces; [14.4.2] community residential care facility, new buildings no closer than 50', [14.2.5] surface mining operating hours; [14.25.7] financial guarantee bonds; [14.26.1] rental storage buildings' size, use, storage, total area, parking & sign regulations; [16.2.2] Single-wide are requirement. |
| J. | DCA-9-90 | February 6, 1991 - [Art. 6.2.2] minimum lot width (with specific requirement) access to a public road by either flag lot right-of-way or private road (with specific) requirements; [5.3.18] private & public road definition. |
| K. | DCA-6-91 | November 25, 1991 - [Art. 16.2.2] Single-wide mobile home approved regulations; [Art. 16.2.3] Double-wide mobile home approved regulations. |
| L. | DCA-1-93 | October 13, 1993 - [Art. 3.8.5] Civil & criminal penalties enforcement. |
| M. | DCA 3-94 | July 13, 1994 - [Art 3.9] Planning Dept. assign street addresses. |
| N. | DCA-8-94 | November 9, 1994 - [6.2.1] min. lot requirements: one principal structure per lot, legal desc. Required for building permits; [6.2.2] lot access required by flag lot with right-of-way or private road. Road name requirements. Private road sign requirements. |

| | | |
|---|---|---|
| O. | DCA-1-95 | June 21, 1995 - Delete [6.2.13] renumber [6.2.14] to [6.2.13]; [7.6.5] when side or rear lot line abuts GR property, a buffer strip with minimum yard requirements (7.7) shall be installed; [7.5.5] same for commercially zoned property; [8.5.1] SPR Committee membership, change Planning Dept. to Building & Zoning Dept.; [8.5.2] 10 day advance notice to meetings; [8.5.3] lack of response by required agency indicates approval; [16.4.3] change Planning Dept. to Building & Zoning Dept. throughout section; [16.5.5] delete Item 2 - point assignment [16.6.5 - 16.6.9] delete all wording, replace with [16.6.5] utility hook ups, [16.6.6] Site built alterations to mobile homes shall comply with Mich. Dept. of Labor, [16.6.7] pre-manufactured additions shall comply with HUD. |
| P. | DCA-3-95 | February 21, 1996 - Revisions to Articles 3: Civil & Criminal Penalties, Art. 4: Incorrect reference of PA 184, Art. 5 Berm & Domestic Animals definition, Art. 6: Private Road specification change, Requirement of boundary line survey for building permits, Art. 7: Add CUP permitted use to include Nursery, Relay Towers, Duplex Conversion, Convenience Commercial Est. & Vet. Hospital & Propane Service Facility, & Restrictions for Animals in GR District, Art. 8: Six month approval limit, Art. 14: adds new text from Art. 6 & 7 to this section, Art 16: delete Sec. 16.6.4. |
| Q. | DCA-8-96-5 | November 18, 1996 – Articles 5: Adjacent, Bufferyard, Child or Elderly-Care Center, Family, Family day-care home, Fence, Group day-care home, Household, Sight Proof Screening, Art. 6: word “certified” added to certified survey, Art. 7: bufferyard, compliance with Section 17, Art. 9: bufferyard and landscaping, Art.17: bufferyard and landscaping intent, bufferyard applicability, bufferyard plan requirements, minimum standards for bufferyards, minimum standards for landscaping and plant materials, minimum standards for berms, minimum standards for screen walls and fences. |
| R. | DCA-11-97-1 | Request by Richard Alwood for a change in district land use classification from LA, Limited Agricultural to C, Commercial in Eaton Twp., Section 5. THAT PART OF NW ¼ OF SE ¼ LYING NW-LY OF PROPOSED 1-69 SECT. 5, TN2, R4W, EATON TOWNSHIP |
| S. | DCA-11-97-2 | **Article 6, Section 6.7** Approved Property Division (add/delete text). **6.7.1** Property divided after effective date of this Ordinance (delete existing language Item A & B) (add new language Item A & B) A.. A completed Application for Proposed Land Division. B. A boundary line survey and legal |

description of the proposed land divisions completed by a Licensed Land Surveyor for all parcels not less than forty (40) or a quarter (1/4) quarter (1/4) section containing not less than thirty (30) acres. **6.7.2** Time required for review (Add/delete text)**. 6.7.3** Approval of parcel (Add/delete text)**. 6.7.4** Requirements for building permits (Add/delete text) (Add new language item C) C. A recorded boundary line survey and legal description of the proposed land division as specified in Subsection 6.7.1 (B) of this Ordinance**. 6.7.5** Effective date (Add/delete text).

**Article 7, Section 7.3** Limited Agricultural (LA). **7.3.3** Uses Permitted by Site Plan Approval pursuant to **Article 8** of this Ordinance (add new language Item D) D. Radio, Television, and Cellular Phone Towers as provided in Subsection 14.27.4 of this Ordinance. **Section 7.5** Commercial (C). **7.5.3** Uses Permitted by site Plan Approval pursuant to Article 8 of this Ordinance. (Add new language Item L) L. Commercial recreation facility as provided in Section 14.17 of this Ordinance. **Section 7.6** Industrial (I). **7.6.3** Uses permitted by Site Plan Approval pursuant to Article 8 of this Ordinance (add new language Item H) H. Radio, Television, and Cellular Phone Towers as provided in Subsection 14.27.4 of this Ordinance.

**Article 14, Section 14.27** Radio, Television and Cellular Phone Tower. 14.27.1 Definition (add new language) "as licensed by the Federal Communications Commission (FCC)." 14.27.2 Application Requirements (add new text Item A) (add new language Items B, C, D, E, & F). Items B, C, D, E, and F refer to application requirements to be included when submitting for requested use. **14.27.3** Regulations and Conditions (Add/delete text) (Add new language Items A) Height: All towers shall be located on the lot so that the distance from the base of the tower to any adjoining property line is a minimum of 50 percent of the proposed tower height. (Add new language item B) Accessory Buildings: Item B refers to Accessory Buildings or Structures on site. (Reletter existing Item B to Item C) Construction: (Add text). (Reletter existing Item C to Item D) Compatibility: (Delete text and add new language Item D (2)) Fencing: Six (6) foot climb proof fencing must be provided to prevent access to the tower. (Add new language Item D (3)) Signs: One six (6) square foot sign shall be placed on the fence that is visible and legible from the entrance to the site. The sign shall be

weather durable and should include the name and address of the communication tower owner/operator, a phone number, and contact person from whom additional information may be obtained. Appropriate county building Permits shall be obtained prior to installation of the signage. Add new language Item D (4)) Landscaping: A landscape plan shall be provided per Article 17 to adequately screen the tower, accessory structures, and support cables. (Add new language Item D (5)) Maintenance: The site, including the tower, accessory structures, support cables, and landscaping shall be reasonably well maintained in relationship with surrounding properties. A copy of the annual FCC license and general maintenance report shall be submitted yearly to the Eaton County Community Development Department. (Delete existing Items D and E) Airport or Helipad Setbacks and Review (Reletter existing Item F to Item E) Abandonment: (Add new language to Item E) "and remove any unused tower, accessory building, fences, and any other related cellular facility effects. Upon removal, the site shall be revegetated to blend with the existing surrounding vegetation." (Add new **Subsection 14.27.4**) Uses Permitted by Sire Plan Approval pursuant to Article 8 of this Ordinance: (Add new language Items A, B, C, and D) Items A, B, C, and D refer to those uses permitted under Site plan Approval. **Section 14.28** Private Roads, **14.28.2** Regulations and Conditions (add/delete text Item A) Plans: (add/delete text Item B) Maintenance Agreements: (Add/delete text item C) Prohibited: (Add/delete text Item D) Minimum Road Standards: (Reletter existing Item K to Item E) (Add/delete text Item E) Road Name: (Reletter existing Item L to Item F) Signage: (Reletter existing Item M to Item G) (Add/delete text Item G) Duration of Permit: (Reletter existing Item N to Item H) (Add/delete text Item H) Amendments (Reletter existing Item O to Item I) (Add/delete text Item I) Preexisting Roads: Item I refers to extension of existing private roads and subdivision of lots on existing private roads being required to meet current Private Road Standards.

T. DCA-12-99-5

Throughout the ordinance, certain terms were adjusted to correspond to the current practice of the County. For example, reference to the Planning Department was changed to the Community Development Department.

**Article 5** Definitions and Interpretations, definitions were added for the following terms: Building material supplier

(**Section 5.3.2**), Business service establishment (**Section 5.3.2**), Financial Institution (**Section 5.3.6**), Frontage (**Section 5.3.6**), Funeral home and mortuary (**Section 5.3.6**), General retail sales establishment (**Section 5.3.7**), Gunsmithing (**Section 5.3.7**), Light manufacturing facility (**Section 5.3.12**), Office Building (**Section 5.3.15**), Personal service establishment (**Section 5.3.16**), Public and private non-commercial park (**Section 5.3.16**), Research and development (**Section 5.3.18**), Restaurants (**Section 5.3.18**), Truck and rail freight terminal (**Section 5.3.20**), Wholesale trade business (**Section 5.3.23**).

**Article 6** General Provisions (**Section 6.2**). An illustration of a flag lot was added along with a more detailed description of the depth to width standards to be applied to new lots.

**Article 7**. The general residential district was divided into Low Density R-1 (**Section 7.4A**), Medium Density R-2 (**Section 7.4B**) and High Density R-3 (**Section 7.4C**) districts. The Commercial (**Section 7.5**), Local Business C-1 (**Section 7.5A**) and, General Business C-2 (**Section 7.5B**) districts. Accordingly, many changes were made in the listing of uses permitted by right, by Site Plan approval and by conditional use permit.

**Article 8**. Zoning Referral and Site Plan Review. Language was added to validate the procedures used by the Community Development Department in implementing the ordinance. Specifically, the requirement that the Community Development Department must certify compliance with the Land Development Code to the Building Code Department was institutionalized in the amendment. In addition, the description of the Site Plan Review Committee was adjusted to reflect actual practice (**Section 8.5**). The amendment included expanded detail on the required contents of a submittal for Site Plan review.(**Section 8.5**)

**Article 9.** Conditional Use Permits. Adjustments were made in the standards to be applied for the review and approval of site plans (**Section 9.3**).

**Article 10**. Off-Street Parking and Loading. The minimum parking standards were adjusted for Homes for the aged and nursing homes (**Section 10.4.2**), Drive-in restaurants and self-serviced restaurants (**Section 10.4.3**), Barber and beauty shops

(**Section 10.4.3**), funeral homes and mortuaries (**Section 10.4.3**), Industrial or research establishments (**Section 10.4.5**). Parking surface standards were adjusted (**Section 10.5.1**), an illustration of minimum parking lot dimensions was added (**Section 10.5.2**), standards were added for landscaping and snow storage (**Section 10.5.5**), drainage and joint use of parking facilities (**Section 10.5.6**).

**Article 11.** Advertising Structures, Signs and Name Plates. Standards were added to limit the extent of window signs (**Section 11.11.2**), standards were added for political signs (**Section 11.11.2**), sign setback, balloon and portable signs (**Section 11.11.2**).

**Article 13.** Amendments. Standards were added pertaining to adverse impacts to surrounding properties and persons. In addition, rezoning performance standards were added to guide the rezoning process.

**Article 14.** Specific Provisions and Requirements. The following changes were made:

- **14.1** Standards were added for seasonal farm markets.
- **14.2** and **14.24**. Fencing requirements were increased for Automobile Salvage and Scrapping Yards (**Section 14.2.2**) and for Distressed Vehicle Transporter (**Section 14.24.2**)
- **14.25**. Standards were added for the subsurface grading of rehabilitated surface mines.
- **14.26**. Lot size and the size of storage areas were added to address Rental Storage Buildings.
- **14.27**. Security requirements (**Section 14.27.3**) and provision for expert review (**Section 14.27.3M**) were added to the radio, television and telecommunication towers language.
- **14.29**. Language governing construction contractors establishment and storage of heavy equipment was added

- **14.30** Language governing rooming and boarding houses was added

- **14.31** Language governing propane service facilities was added.

- **14.32** Language governing Adult Entertainment Establishments and Amusement Establishments was added.

- **14.33** Language governing open air business and storage was added.

- **14.34** Language governing archery and gun ranges was added.

**Article 15** Planned Unit Development was amended in its entirety to provide further guidance to the Planning Commission and density incentives to promote the preservation of open space.

U. DCA-11-01-03 Throughout the ordinance, certain terms were adjusted to correspond to the current practice of the County.

V. DCA 5-03-03 1. Text Amendment to Section 3.8.5 C Enforcement, Violations, Penalties

Text was added describing procedures for reimbursement to the county for court ordered clean-ups.

2. Text Amendment to **Article 14.13 Home Business**

Text amended to clarify the definition, regulations and conditions of a home business.

3. Text Amendment to **Article 14.35 Home Office**

Text amended to clarify the regulations and conditions of a home office.

4. Text Amendment to **Article 13.4.7**

5. Text Amendment to **Articles 6.2 and 6.5**

This amendment removed **Section 6.2.6** Temporary Dwellings as well as **Section 6.2.7** Temporary Buildings and moved their contents into **Section 6.5**. This amendment also added a subsection called "C Accessory Dwelling Unit" into **Section**

**6.2.10** Accessory Uses, Buildings and Structures to provide for an additional dwelling unit on a site for relatives or domestic employees.

6. Text Amendment to **Article 6.7** Approved Property Division
This text amendment addresses development of land, adding consideration of lots created under the Plat Act and under the Condominium Act.

W. DCA-12-03-7

1. Amendment to **Article 6.2.2** A Flag Lots

Changed the minimum frontage required to 44 ft to coordinate with current Eaton County Road Commission standards and permits.

2. Amendment to **Article 7.4** Residential District (R-1):

Included the following as uses permitted by Site Plan Review: Community Service Facilities, Duplex Conversions, Home Occupations and Home Offices.

3. Amendment to **Article 12** Non-Conformities

Changed 12.2.3C and 12.2.4 to allow for additions to legal non-conforming structures built prior to 1981 without recourse to the Board of Appeals as long as the addition does not encroach any further into the setback area than the existing structure.

X. DCA-6-04-2

1. Amendment to **Article 6.2.2**

Correct the text of **Article 6.2.2** to allow the creation of more than one flag lot from parcels provided that they do not have adjoining or abutting entrances. By eliminating the text "one (1) flag lot may be created."

2. Amendment to **Articles 14.8, 14.9 and 14.12** revises **Section 14.8 and 14.9** and eliminates **Section 14.12**:

Consolidated and clarified the three sections **14.8, 14.9, and 14.12**. **Section 14.8** defined multiple family dwellings and duplexes, **section 14.9** discussed the creation of duplexes (or the conversion of single family homes to duplexes), and the **section 14.12** defined multiple family dwellings again in almost identical language, but called them "group housing." The goal of this revision was to consolidate these three sections into two and clarify the requirements for structures that house more than one dwelling unit.

3. Amendments Proposed to **Article 4**:

The proposed amendment clarifies that the Board of Appeals may not consider or grant variances from the land uses

allowed in each zoning district. To allow the granting of a variance from the basic land uses that are permitted in each zoning district would be a de facto re-zoning of a parcel to a zoning district designation that allowed such use. This amendment clarifies that the correct procedure for changing the uses allowed on a parcel is to rezone the parcel, not get permission to vary from the allowed uses.

4. Amendments to **Articles 5, 10 and 14**:

The text throughout the ordinance was corrected to use the same terms for land uses and to improve the consistency of the Development Code. For example, a structure with two dwelling units is now referred to as a "duplex dwelling" throughout the ordinance.

Also, the definition of "Farm" **(Art. 5.3.6F)** changed to reflect current definition used by the State of Michigan.

5. Amendments to **Article 10** Parking Space Requirements:

This amendment re-ordered the land uses and their parking requirements into alphabetical order so that they are easier to look up. Land uses mentioned elsewhere in the ordinance, particularly in **Articles 5, 7, and 14**, have been added to the table and language clarified to refer to them with consistent terms. This will reduce the staff interpretations of "uses similar to" and improve the clarity of the number of parking spaces required for various land uses allowed under the ordinance. The requirements for number of spaces and the calculations used to determine the number of required spaces have also been revised to reduce the required amount of impervious surface required for land uses.

6. Amendments to **Articles 5, 7, and 14**:

The amendment changed State Licensed Residential Facility (SLRF) to Foster Care Facility. It also clarified the number of residents allowed for the home to be considered a use permitted by right (6 or fewer) or a use permitted with a conditional use permit (7-12).

Y. DCA-9-05-04 Amendments to **Article 14.13**:

**1.** The following language was added: If the proposed home business activity does not create retail sales on the property, does not employ anyone other than the residents of the home, does not generate traffic to the property, does not

have signage, or create noise, dust, vibration, odor, smoke, glare, electrical interference, or fire hazard to a greater extent than normal or substantially increase the use of services such as water, sanitary sewer, storm drainage, or garbage collection, the activities may be conducted within the home or accessory structure without having to obtain a conditional use permit. Prohibited businesses are identified in Article **14.13.3.**

2. The following language was deleted: I. A Home business is for the sale of goods and services made and/or assembled on the home business property. At any time, no more than 15% of the products and materials sold as a part of the business may be made and/or assembled off of the approved Home Business property.

Amendments to Article **14.14**:

1. The following language was added: If the proposed home occupation activity does not create retail sales on the property, does not employ anyone other than the residents of the home, does not generate traffic to the property, does not have signage, or create noise, dust, vibration, odor, smoke, glare, electrical interference, or fire hazard to a greater extent than normal or substantially increase the use of services such as water, sanitary sewer, storm drainage, or garbage collection, the activities may be conducted within the home or attached garage without having to obtain a conditional use permit or site plan review.

Z. DCA-11-06-05 Throughout the ordinance, certain terms and public act numbers were adjusted to be in compliance with Public Act 110 of 2006.

AA. DCA-2-07-1 Amendments to Article 5 Definitions and Interpretations:

5.2: Changed the language to allow for the use of the Latest edition of Illustrated Book of Development Definitions.
5.3.1 A: Added definition for animal holding area
5.3.11 K: Added definition for kennel
5.3.12 L: Added definition for large animal boarding business.
5.3.16 P: added definition for private driveway

Amendments to **Article 6 General Regulations**:

6.2.2 Access Required: Changed the language for a lot and the language for driveway access to the lot.

Amendment to **Article 7.5 A Local Business District (C-1)**:

7.5A.3 Uses permitted by SPA: added K. Rental storage buildings

Amendment to **Article 9 Conditional Use Permits**:

9.4.1 Duration of Conditional Use Permit, language was added regarding abandonment of operation.

Amendment to **Article 14 Specific Provisions and Requirements**:

14.1 Agricultural Business: B and K were changed to clarify the intent of the ordinance. Item L. Large Animal Boarding Business was added.

Amendment to **Article 14.5 Community Service Facility**:

14.5.1 Definition: was changed to to clarify language and intent.

Amendment to **Article 14.25 Surface Mining**:

14.25.7 Financial Guarantees: the language for insurance policies was removed.

**Amendment to Article 14.26 Rental Storage Building**:

14.26.1 E: Language for parking was changed to fix a discrepancy with Article 10.

BB. DCA-1-08-1 Amendment to Article 5 Definitions and Interpretations:

5.3.3 C: Commercial Recreation Facility: language was changed to further clarify the intent of the Ordinance.

5.3.13 L: Lot Line Front: language was changed to further clarify the intent of the Ordinance for properties with road frontage off from a cul-de-sac.

Amendment to **Article 6 General Regulations and Specifications**:

6.2.5 Lot Frontage/Depth Ratio: language was changed to further clarify the intent of the Ordinance.

Amendment to **Article 7 Land Development Districts**:

7.3 Limited Agricultural District (LA):

7.3.3 B Duplex Dwelling Conversion Only REMOVED

7.3.4 Uses permitted by CUP: added item X. Migrant Housing

Amendment to **Article 14 Specific Provisions and Requirements**:

14.27 Radio, Television and Communication Towers: Changed the language to further clarify

the intent of the Ordinance and keep up with local federal and state requirements.
14.28 Private Roads: Changed the language to further clarify the intent of the Ordinance.
14.36 Migrant Labor Housing: Added

Amendment to **Article 21 Effective Date**:
Added language to include PA 110 of 2006.

CC. DCA-9-08-4 Amendment to Article 4 Eaton County Board of Appeals:
4.7 Conditions of Approval: Language updated to include PA 110 of 2006.

Amendment to **Article 5 Definitions and Interpretations:**
5.3.19 S: Second Hand Store: Changed the language to further clarify the intent of the Ordinance.

Amendment to **Article 6 General Provisions:**
6.2.5 Lot Frontage/Depth Ratio: Changed the language to further clarify the intent of the Ordinance

Amendment to **Article 7 Land Development Districts:**
7.3.4 Uses permitted by CUP: Changed the order of the items.

Amendment to **Article 9 Conditional Use Permits:**
9.3.4 Review by Township Board of Trustees: Increased required notification to five business days.

Amendment to **Article 13 Amendments:**
13.4.3 Language was added to allow for consistency for notification deadlines with other articles of the Ordinance.

Amendment to **Article 10 Off Street Parking and Loading:**
Parking requirements for Open Air Business & Storage was changed.

Amendment to **Article 12 Non-Conformities:**
12.2.3 Regulation of Non-conformities Item A: Language was changed to clarify the intent of the Ordinance.

DD. DCA-1-10-1 Amendment to Article 11 Advertising Structures, Signs and Name Plates: 11.8 Exempt Signs: Language was added to clarify the intent of the Ordinance. Amendment to **Article 14 Specific Provisions and Requirements:** 14.5 Community Service Facility: Language was added to clarify the intent of the Ordinance. 14.10 Educational Institutional and Government Facility: Language was added to exempt family and group day care homes from the fifty (50) foot setback. Language was also added to require them to

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|---|---|---|
| | | meet the requirements of PA 110 of 2006. 14.28 Private Road: Language was added to allow the Drain Commissioner to determine if ditching is required for a proposed private road. 14.34 Archery and Gun Range: Language was added to clarify the intent of the Ordinance. |
| EE. | DCA-2-10-2 | Amendment to Article 7 Land Development Districts: To allow for consistency between PA 110 of 2006 and the Ordinance, day care facilities with six or fewer children were added as a use by right in the following zoning districts: Limited Agricultural (LA), Low Density Residential (R-1), Moderate Density Residential (R-2) and High Density Residential (R-3). Amendment to Article 10 Off Street Parking and Loading: Parking for requirements for day care facilities was changed |
| FF. | DCA-6-10-5 | Amendments to Article 7 Land Development Districts: To include the operation of a Light Automotive and small engine repair business as a use on Limited Agriculturally zoned property with a Conditional Use Permit. Amendments to Article 14 Specific Provisions and Requirements: Add Section 14.37 Light Automotive and Small Engine Repair Business |
| GG. | DCA-10-10-7 | Amendments to Articles 3, 5, 6, 7, 8, 9 and 14 to clarify the intent, update and improve comprehension of the Eaton County Land Development Code. |
| HH. | DCA-8-11-2 | Amendments to the Article 7 Land Development Districts (amend Sections 7.3.3, 7.4A.2A.1, 7.4B.2A.1 & 7.4C.2A.1) & Article 14 Specific Provisions and Requirements (amend Section 14.27.2). |
| II. | DCA-9-11-3 | Amendments to allow an Automotive Body Shop as a use allowed in the Limited Agricultural Zoning district with a Conditional Use Permit. Amend Article 14 Specific Provisions and Requirements (amend Section 14.37) |
| JJ. | DCA-3-12-1 | Amendments to Article 6 General Provisions (amend Section 6.5.4), Article 7 Land Development Districts (amend Section 7.5A.3) & Article 14 Specific Provisions and Requirements (amend Sections 14.25.5 A, 14.28.2 I & 14.37.2) |
| KK. | DCA-8-12-4 | Amendments to Article 6 General Provisions (amend Section 6.2.10 to add to Accessory Uses), Article 7 Land Development Districts (amend Section 7.3.4 to add Artisan's Workshop), Article 10 Off-Street Parking and Loading (amend Section 10.4 to add Artisan's Workshop), Article 11 Advertising Structures, Signs and Name Plates (amend Section 11.9 to add Artisan's Workshop) & Article 14 Specific Provisions and Requirements (amend Sections 14.13 Home Business, 14.37 Light Automotive and Small Engine Repair & add Section 14.38 Artisan's Workshop) |
| LL. | DCA-10-12-5 | Amendments to Article 7 Land Development Districts (amend Section 7.5A. 4 to include Indoor Video Archery Hunting Range) and Article 14 Specific Provisions and Requirements (amend |

| | |
|---|---|
| | Sections 14.34 to include language for an Indoor Video Archery Hunting Range). |
| MM. DCA-2-13-2 | Amendments to Article 14 Specific Provisions and Requirements (amend Section 14.27 Communication Towers and Antennas). |
| NN. DCA-12-14-3 | Amendments to Article 14 Specific Provisions and Requirements (amend Sections 14.27 Communication Towers and Antennas & 14.31 Propane Service Facility). |
| OO. DCA-11-15-6 | Amendments to Article 5 Definitions and Interpretations (amend Sections 5.3.3 C, 5.3.6 F. & 5.3.10 J.), Article 7 Land Development Districts (amend Sections 7.3.3, 7.3.4, 7.5A.3, 7.5A.4, 7.6.3 and 7.6.4) Article 14 Specific Provisions and Requirements (amend Sections 14.13 Home Business, 14.25 Surface Mining, 14.28 Private Roads and 14.29 Construction Contractors Establishment and Storage of Heavy Equipment). |
| PP. DCA-3-16-1 | Amendments to Article 5 Definitions and Interpretations (amend Sections 5.3.10 J.) and Article 6 General Provisions (amend Section 6.2.9 Junk). |
| QQ. DCA-8-17-1 | Amendments to Article 6 General Provisions (amend Section 6.5 Temporary Housing). |
| RR. DCA-3-18-2 | Amendments to Article 5, Definitions and Interpretations (amend Section 5.3.19 S. to include solar energy system), Article 7, Land Development Districts (amend Sections 7.3.4 and 7.6.4 to allow Solar Energy Systems Large or Medium as use on Limited Agricultural and Industrial zoned property with a Conditional Use Permit), and Article 14 Specific Provisions and Requirements (addition of Section 14.39 Solar Energy Systems to provide definitions, regulations, and requirements for small, medium and large Solar Energy Systems). |
| SS. DCA-3-20-2 | Amendments to Article 7, Land Development Districts (amend Section 7.7 Site Development Standards for Principle Buildings and Structures, Table A), Article 8, Zoning Referral and Site Plan Review (amend Section 8.6.9 C. General Approval Standards), Article 9 Conditional Use Permits (amend Section 9.6 Appeal of Decisions), Article 14 Specific Provisions and Requirements (amend Section 14.36 Agricultural Migrant Labor Housing) and Article 16 Mobile Homes (amendments to entire section) |
| TT. DCA-4-21-1 | Amendment to Article 14.32 Adult Entertainment Establishments and Amusement Establishments, Section 14.32.2 Definitions item E. Massage Establishment. The request is to add licensed massage therapists to those establishments exempt from this sections requirement. |
| UU. DCA-11-21-4 | Amendment to Article 7 Land Development Districts, Section 7.5A. Local Business District (C-1), Subsection 7.5A.3 Uses Permitted by Site Plan Approval; Hospitals and Long Term Care |

| | |
|---|---|
| | Facilities. |
| VV. DCA-12-21-6 | Amendments to Article 5 Definitions (amend Sections 5.3.3 C and 5.3.18 R), Article 6 General Provision (amend Sections 6.2.10 C., 6.5, 6.5.1, and add 6.5.5), Article 7 Land Development Districts (amend Section 7.2.2 C, 7.3.2 F., 7.4A.2 B., 7.4B.2 C., 7.4C.2 D., 7.5A.4), and Article 14 Specific Provisions and Requirements (amend Section 14.10 Educational Institutional and Government Facility and 14.25 Surface Mining). |
| WW. DCA-8-23-2 | Amendments to include regulations and conditions for Wind Energy Systems - Article 7 Land Development Districts, add Wind Energy Systems as a use in Sections 7.3.3 & 7.3.4 (Limited Agricultural) and Section 7.6.4 (Industrial); Article 14 Specific Provisions and Requirements, amend Section 14.5 Community Service Facility and add Section 14.41 Wind Energy System (WES). |

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# *DCA-3-24-2* PROPOSED TEXT AMENDMENT

## TO THE EATON COUNTY LAND DEVELOPMENT CODE

Additions are shown in ***bold italic print*** and deletions are shown by ~~strikeout print~~.

All suggested changes are highlighted.

**Proposed change to Section 5.3.16 P, Personal Service Establishment to direct Zoning Ordinance users to definition and regulations and conditions in Section 14.40.**

# ARTICLE 5
# DEFINITIONS AND INTERPRETATIONS

***5.3.16 P***

**Personal Service Establishment:** ~~A business providing care for a person or his or her personal goods or apparel and may include laundry and dry cleaning, beauty shops, barbershops, shoe repair, health and fitness, licensed massage therapy, and tanning salons.~~ ***See Section 14.40***

**Proposed change to Sections 7.4A.2, 7.4A.3 and 7.4A.4 by local property owner, requesting the construction of a duplex dwelling to be a use by right in the Low Density Residential (R-1) Zoning District. Request was reviewed by the Zoning Ordinance Committee at their November 21, 2023 meeting.**

# ARTICLE 7
# LAND DEVELOPMENT DISTRICTS

## SECTION 7.4 RESIDENTIAL DISTRICTS

**7.4.1 Intent and Purpose:** It is the intent of the districts provided for in *Section 7.4* to provide the development of neighborhoods with all types of residential development in appropriate densities located in portions of the County served by streets, adequate public and private utilities, and located within relatively close proximity to schools, shopping, recreational facilities, and employment centers.

## 7.4A LOW DENSITY RESIDENTIAL DISTRICT (R-1)

**7.4A.1 Intent and Purpose:** The Low Density Residential (R-1) District is designed to provide for one (1) family, low density dwelling sites and residentially related uses in keeping with the adopted Eaton County Comprehensive Development Plan for residential development in Eaton County. The uses permitted by right and as conditional uses are intended to promote a compatible arrangement of land uses for homes, with the intent to keep neighborhoods quiet and free of unrelated traffic, and other noises. **The maximum density in the R-1 District shall not exceed three (3.0) units per acre**.

**7.4A.2. Uses Permitted by Right:** No building or land shall be used, and no building shall be erected except for one or more of the following specified uses, unless otherwise provided for in this Ordinance:

A. **Accessory Buildings and Accessory Uses** customarily incidental to the dwelling uses, such as the following:

1. A private garage having not more than eight hundred and fifty (850) square feet of usable floor area, to be used for the storage of noncommercial motor vehicles and not more than one (1) commercial vehicle of not more than one-ton capacity; there shall be no public shop or services in connection therewith. Provided, however, a parcel in excess of one (1) acre may be permitted by the Community Development Director to have a larger accessory building in accord with the following table:

| **Parcel Size** | **Maximum Possible Building Area** |
|---|---|
| 1.01 -2 Acres (no more than one (1) accessory building) | 1,200 square feet* |
| 2.01-4 Acres | 1,600 square feet* |
| 4.01 Acres or more | No restrictions |

* This is the maximum possible, a lesser building area may be required if necessary to preserve the character of the neighborhood.

2. The concealed storage or unconcealed storage of one unoccupied trailer, camper, recreational vehicle, semi-tractor and/or boat and trailer which is the property of the principal occupants of the principal building. Such vehicles shall be operative and duly licensed to remain on the property for more than three (3) months. Such storage shall not pose a visual or physical nuisance to the surrounding area.

B. **Manufactured Home Dwellings** as provided in *Section 16.3* of this Ordinance.

C. **Single Family Dwellings,** as defined in *Article 5* of this Ordinance.

***D. Duplex Dwellings as provided in Section 14.9 of this Ordinance.***

***E.*** ~~**D.**~~ **Foster Care Facility** as provided in *Section 14.4 A-C (and D if 6 or fewer residents)* of this Ordinance.

***F.*** ~~**E.**~~ **Animals – Recreational** as provided in *Subsection 7.4A.6* of this Ordinance.

***G.*** ~~***F.***~~ **Day Care Facilities**, as defined in Article 5, Section 5.3.4 D 1. (if 6 or fewer children of this Ordinance.

***H.*** ~~***G.***~~ **Uses similar** to the above uses permitted by right.

**7.4A.3 Uses Permitted by Site Plan Review pursuant to *Article 8* of this Ordinance:**

A. **Community Service Facility** as provided in *Section 14.5* of this Ordinance.

~~B. **Duplex Dwellings – Conversion Only** as provided in *Section 14.9* of this Ordinance.~~

***B***. ~~*C.*~~ **Home Occupation** as provided in *Section 14.14* of this Ordinance.

***C.*** ~~*D.*~~ **Home Office** as provided in *Section 14.35* of this Ordinance.

**7.4A.4 Uses Permitted by Conditional Use Permit pursuant to *Article 9* of this Ordinance:**

A. **Cemeteries** as provided in *Section 14.3* of this Ordinance.

~~**B. Duplex Dwellings** as provided in *Section 14.9* of this Ordinance.~~

***B.*** ~~**C.**~~ **Educational Institution** including private and public schools, as provided in *Section 14.10* of this Ordinance.

***C.*** ~~**D.**~~ **Foster Care Facility** as provided in *Section 14.4 D (if 7-12 residents) and E* of this Ordinance.

***D.*** ~~**E.**~~ **Golf Course and Country Club** as provided in *Section 14.11* of this Ordinance.

***E.*** ~~**F.**~~ **Government Facility** as provided in *Section 14.10* of this Ordinance.

***F.*** ~~**G.**~~ **Gunsmithing** as defined in *Article 5* of this Ordinance.

***G.*** ~~**F.**~~ **Parks and Recreational Facilities** as defined in *Article 5* of this Ordinance.

***H.*** ~~**I.**~~ ***Planned* Unit Development** (PUD) as provided in *Article 15* of this Ordinance.

***I.*** ~~**J.**~~ **Religious Institutions** as provided in *Section 14.22* of this Ordinance.

***J.*** ~~**K.**~~ **Rooming and Boarding Dwellings** as provided in *Section 14.30* of this Ordinance.

***K.*** ~~**L.**~~ **Uses similar** to the above uses permitted by Conditional Use Permit.

**7.4A.5 Site Development Requirements:** All lots, buildings or structures created after the effective date of this Ordinance shall conform to the site development standards set forth in Table A, *Section 7.7* of this Ordinance, except as modified by *Article 6, General Provisions*; [NOTE: refer to *Article 10, Section 10.2.5, Uses of Parking Area, Item C] Article 14, Specific Provisions and Requirements; Article 15, Planned Unit Development;* or as varied pursuant to *Article 4, Board of Appeals*

**7.4A.6 Animals: Livestock, exotic and non-domesticated**

A. Minimum Parcel Size: Parcel size shall be a minimum of two (2) acres with a minimum additional one (1) acre for each animal over two (2). Exception: Animals which are born on the site are permitted to remain for up to six (6) months.

B. Suitability: The land is environmentally capable of accommodating the number and type of animals proposed.

C. Setback Requirements: Designated animal areas and animal waste spreading or storing areas must be a minimum of one-hundred (100) feet from all property lines and all road rights-of-way.

D. Retention of Neighborhood Character: The design and location of the buildings, fences, and other structures is compatible with adjacent lands and the character of the area. All animal activities which adversely and permanently alter the character of the neighborhood are prohibited.

B. Additional Requirements: Measures must be taken to ensure that all animal by-products, noxious odors, noises and all other nuisance factors created by the raising, caring, keeping of animals must be contained within the boundaries of the property i.e., additional visual screening, additional noise inhibitors, air filtration systems, etc.

**Proposed change to Subsection 12.2.2 A to include a date for Legal Non-conforming lots in line with the Land Division Act, PA 288 of 1967, last revision, March 31, 1997. Also add Section 12.2.5 Adjustment or Combination of Legal Non-conforming Lots to allow for the adjustment or combination of legal non-conforming lots without recourse to the Zoning Board of Appeals if the resulting lots are not more non-conforming (e.g. deeper than the allowed width to depth ratio, less road frontage than allowed, smaller parcel size than**

# ARTICLE 12
# NON-CONFORMITIES

## SECTION 12.1 INTENT AND PURPOSE

It is the purpose of this Article to provide for the continuance of lawful uses of land or structures which existed before the enactment of this Ordinance, or before the effective date of an amendment to this Ordinance, governing an otherwise lawful existing use of land or structures. Such non-conformities are permitted to continue under the conditions specified in this Article which are intended to minimize disharmony and incompatibility between uses of land and provide for either the eventual discontinuance or conversion of non-conformities.

## SECTION 12.2 CLASSIFICATION OF NON-CONFORMITIES

**12.2.1 Illegal Non-conformity:** Any use of land or structure which has been established in violation of the provisions of this Ordinance or a previous valid County Zoning Ordinance, having jurisdiction at the time said use of land or structure was established, and any use of land or structure which has been lawfully established under this Ordinance or a previous valid County Zoning Ordinance and subsequently violates the terms of the permit under which it was established shall be termed an illegal non-conformity, except when said illegal non-conformity is in full compliance with the provisions of this Ordinance.

**12.2.2 Legal Non-conformity:** An existing use of land, lot or structure which does not fully comply with the provisions of this Ordinance, as amended, and either was lawfully established, created, or commenced during a period of time when no valid zoning ordinance was in effect, or was lawfully established under the jurisdiction of this Ordinance, or a previously valid County Zoning Ordinance, and remains in compliance with the terms of a permit issued at that time.

A. Legal Non-conforming Lot: Any existing lot lawfully created ***prior to March 31, 1997*** which fails to meet the minimum lot area and minimum lot frontage requirements contained in this Ordinance, and can be shown to have been created as a legal non-conformity by examination of either a legal instrument of transfer or property, or property tax assessment rolls, shall be classified as a non-conforming lot.

**12.2.4 Expansion of Non-conforming Structures:** The expansion of non-conforming structures is hereby authorized provided the actual addition, or accessory building is in compliance with the applicable requirements of this Ordinance. A legal non-conforming structure that can be shown to be legally in existence prior to 1981 may be improved or expanded without recourse to the Zoning Board of Appeals pursuant to *Section 4.6.7* of

this Zoning Ordinance, if such improvement or expansion shall not encroach into the setback areas any further than the original (pre-1981) structure encroached into that same setback. For example, a home whose front wall is located too close to the road right of way could be added to as long as no portion of the addition was located any closer to the right of way than the existing home front wall and also provided that the addition meets all other side and rear yard setbacks.

***12.2.5 Adjustment or Combination of Legal Non-conforming Lots: A legal non-conforming lot that can be shown to have been legally created prior to March 31, 1997 by examination of either a legal instrument of transfer or property, or property tax assessment rolls may be adjusted or combined with other lots without recourse to the Board of Appeals if the end resulting lot (s) are not more non-conforming.***

**12.2.~~5~~ *6* Non-conformities Summary Table**

| REGULATION OF NON-CONFORM-ITIES | ILLEGAL NON-CONFORM-ITIES | NON-CON-FORMING LOTS | NON-CON-FORMING STRUCTURES | NON-CON-FORMING USES |
|---|---|---|---|---|
| **12.2.3** | **12.2.1** | **12.2.2A** | **12.2.2B** | **12.2.2C** |
| A | | | Abandonment | Abandonment |
| B | | | | Expansion |
| C | | | | Alteration |
| D | | | Completion | Completion |
| E | | | Substitution | Substitution |
| F | | | Re-Establishment | Re-Establishment |
| G | | | | Moving |
| H | Continuance | | | |
| I | | Construction | | |

**Proposed change to Section 14.25 Surface Mining, Subsection 14.25.9 Permit Expiration to remove the expiration/re-application requirement of the Conditional Use Permit. All surface mines are inspected annually by staff and the Drain Commissioner's Office. Per Subsection 14.25.10, staff may approve modification of the site plan if needed. Staff may request the Planning Commission to review the permit at any time, which would result in a public hearing.**

**Proposed change to Section 14.27 Communication Towers and Antennas, specifically Subsection 14.27.5 E.2 Compatibility removing the language not allowing for metal buildings and removing Subsection 14.27.5 E.6 Landscaping.**

# ARTICLE 14
# SPECIFIC PROVISIONS AND REQUIREMENTS

The following definitions, regulations and conditions apply to the uses of land listed in *Article 7* of this Ordinance, provided that a specific reference is made to this Article.

## SECTION 14.25 SURFACE MINING

**14.25.1 Definition:** A surface mine is a parcel of land utilized for the removal or extraction of natural mineral deposits, soil, and organic soils by open pit-mining methods.

**14.25.2 Excavation of Soils and Minerals**: The excavation of peat, mulch, sand, gravel, clay, limestone, shale, or other natural mineral deposits shall be permitted only upon the issuance of a Conditional Use Permit.

**14.25.3 Site Plan Requirements:** In addition to the regular application for a Conditional Use Permit and payment of fees, the application shall be accompanied by a Site Plan. The Site Plan shall be drawn to a readable scale on a Certified Boundary Survey of the property and said plan shall include the following information:

A. Name and address of owner(s) of land which removal will take place.

B. Name, address and telephone number of person, firm, or corporation who will be conducting the actual removal operation.

C. Location, size and legal description of the total site area to be mined.

D. A plan for extraction and reclamation for the total project which shall include:

1. Existing and proposed contours at a minimum two (2) foot interval.

2. Surface overburden and topsoil stripping and stockpiling plans.

3. Provisions for grading, re-vegetation, and stabilization that will minimize soil erosion, sedimentation and public safety problems.

E. Surface water drainage provisions and outlets.

F. The location and size of any structures.

G. All required setbacks areas for excavation and machinery storage.

H. Interior access roads, parking lots, haul road, loading and unloading areas.

**14.25.4 Rehabilitation:** All extraction areas shall be rehabilitated progressively as they are worked out. Rehabilitated sites shall be reasonably natural and inconspicuous and shall be reasonably lacking in hazard. All slopes and banks remaining above water level and below water level to a depth of five (5) feet shall be graded to angles which do not exceed one (1) foot in elevation for each three (3) feet of horizontal surface and they shall be treated to prevent erosion or any other potential deterioration.

**14.25.5 Site Development Requirements:**

A. Setbacks in which no part of the mining operation may take place, except for ingress and egress shall be as follows:

1. Excavation shall not take place within fifty (50) feet from any structure.

2. Excavation below the existing grade of adjacent roads or property lines shall not take place within twenty-five (25) feet from any adjacent property line or road right-of-way.

3. No machinery will be erected or maintained within one hundred (100) feet of any property or road right-of-way line.

B. Screening: If screening is deemed a necessary requirement of the Conditional Use Permit, the Planning Commission shall specify the type and location of the required screening. Screening may be any combination of fencing, berms, or plantings as determined by the Planning Commission. The Planning Commission shall take into account the scale of the operation, the population density in the surrounding area, neighboring residential districts, or otherwise occupied properties.

A. Interior access roads, parking lots, haul road, loading and unloading areas and stockpiled materials shall be maintained so as to limit the nuisance caused by wind blown dust.

B. Hours of operation shall be Monday through Friday from 7:00 a.m. to 6:00 p.m. and Saturday from 7:00 a.m. to 12:00 p.m.

No hours of operation on Sundays or the following holidays:

(1) New Year's Day - January 1st
(2) Memorial Day – Last Monday of May
(3) Independence Day – July 4th
(4) Labor Day – First Monday in September
(5) Thanksgiving Day – Fourth Thursday in November
(6) Christmas Day – December 25th

A. Signage: Signage shall be placed where it is visible and legible at the entrance to the site. It shall be weather durable and not exceed six (6) square feet in size. The sign shall include the name and address of the surface mine owner/operator, a phone number, and contact person from whom additional information may be obtained. Additional signage for identification of the business shall be per Section 11 of this Ordinance.

B. Failure to maintain all required State or Federal licenses and/or to develop and maintain a surface mining operation in accord with the terms of the conditional use permit may result in the immediate revocation of said conditional use permit and any and all other sanctions and/or penalties available to the County.

**14.25.6 Evidence of Continuing Use:** When activities on or the use of the mining area, or any portion thereof, have ceased for more than one (1) year or when, by examination of the premises or other means, the Community Development Department determines a manifestation of intent to abandon the mining area, the Community Development Department shall give the operator written notice of their intention to declare the mining area or portion thereof abandoned. Within thirty (30) days following receipt of said notice, the operator shall have the opportunity to rebut the Community Development Department's evidence and submit other relevant evidence to the contrary. If the Community Development Department finds the operator's evidence of continued use satisfactory, it shall not declare abandonment.

**14.25.7 Financial Guarantees:** A minimum pit bond of $3,000.00 plus a minimum $2,000.00 per excavated acre shall be filed with the County Treasurer. The bond shall be in the form of a surety bond executed by a reputable surety company authorized to do business in the State of Michigan or a cash bond posted in lieu of a surety bond. The amount of a cash bond filed with the county may be one-half (1/2) the total required bond if approved by the Planning Commission. The bond shall be returned when all conditions stipulated in the Conditional Use Permit shall have been complied with and the Conditional Use Permit revoked prior to its release. There shall be no partial release of the bond.

**14.25.8 Issuance of a Conditional Use Permit:** Permits for surface mining shall be issued to the operator. If an operator disposes of his interest in an extraction area prior to final reclamation by sale, lease, assignment, termination of lease, or otherwise, the Planning Commission may release the operator from the duties imposed upon him by this Ordinance, as to the operation, but only if the successor, operator, or property owner assumes the obligations of the former operator with reference to the reclamation activities. At that time the Conditional Use Permit may be transferred.

**14.25.9 ~~Permit Expiration~~ *Inspection Requirement*:** ~~If approval for a Conditional Use Permit is granted by the Eaton County Planning Commission it shall be for a specific period of time not to exceed five (5) years. Those permits granted for a period exceeding one (1) year~~ ***All surface mines*** shall be inspected a minimum of once a year by the ~~Community Development Department~~ ***Development Official*** ~~to~~ to insure compliance with the permit and Ordinance.

**14.25.~~10~~ *9* Modification of the General Site Plan**: The Site Plan may be modified at any time by mutual consent of the operator and the Development Official to adjust the excavation and storage areas or to correct an oversight on the property as long as the proposed new areas are within the required setback areas. All modifications to the Site Plan approved by the Development Official shall be reported to the Planning Commission.

The Planning Commission or Development Official may require the modification of the General Site Plan when:

A. Modification of the plan is necessary so that it will conform with the existing laws.

B. It is found that the previously approved plan is clearly impractical to implement and maintain.

C. The approved plan is obviously not accomplishing the intent of the Ordinance.

## SECTION 14.27 COMMUNICATION TOWERS AND ANTENNAS

**14.27.1 Definitions:**

**Communication Towers and Antennas** – A tall structure used for transmitting, receiving or relaying radio, television, cellular phone signals, or any transmitting or relay structure as licensed by the Federal Communications Commission (FCC).

**Collocate** – To place or install wireless communications equipment on an existing wireless communications support structure and within which wireless communications equipment is located.

**Wireless communications equipment** – The set of equipment and network components used in the provision of wireless communications services, including, but not limited to, antennas, transmitters, receivers, base stations, equipment shelters, cabinets, emergency generators, power supply cables, and coaxial and fiber optic cables, but excluding wireless communications support structures.

**Wireless communications support structure** – A structure designed to support, or is capable of supporting, wireless communications equipment, including a monopole, self-supporting lattice tower, guyed tower, water tower, utility pole or building.

**14.27.2 Intent and purpose:** It is the general purpose and intent of the County to minimize adverse visual effects of towers through careful design, siting and screening; allow for reasonable location and use for communication towers as required pursuant to applicable state and federal law; and to minimize the proliferation of telecommunications towers by requiring applicants to exhaust all reasonable avenues for collocation on existing towers.

**14.27.3 Location Requirements:** No new Communication Towers and Antennas may be approved for a location within three (3 miles) of any existing Communication Towers and Antennas unless the applicant has demonstrated that the wireless communications equipment planned for the proposed tower cannot be accommodated on an existing or approved tower within the applicant's search radius of the proposed tower due to one or more of the following reasons:

A. Existing or approved towers within the search area cannot accommodate the planned equipment at a height necessary to provide the necessary coverage of the applicant's own service and/or capacity as documented by a qualified and licensed professional engineer. Record of propagation predictions must be given to the Eaton County Community Development Department verifying that existing structures within applicant's coverage area will not provide the required coverage and/or capacity for the applicant's system. The propagation maps must include a signal strength color legend, the scale and the operating parameters of each of the sites, scale and minimum required signal.

B. The wireless communication equipment would exceed the structural capacity of the

existing or approved tower(s) within the three (3) mile radius, as documented by a qualified and licensed professional engineer. Record of such must be given to the Eaton County Community Development Department.

C. The applicant is already currently collocated on all existing or approved towers within the three (3) mile radius of the applicant's site. Record must be given to the Eaton County Community Development Department verifying the applicant is currently collocated on all existing or approved towers within said search area.
D. For public safety and security all government entity owned communication towers and antennas are exempt from this section.

**14.27.4 Application Requirements:**

A. A Site Plan scaled as per article 17.3, showing the property boundaries, tower, guy wire anchors, "safe fall" zone, existing structures, proposed transmission buildings, proposed tower (tower height and design including cross-section) and/or other accessory uses, access, parking, fences, landscape plan, and existing land uses around the site.

B. A letter of intent committing the tower owner and his or her successors to allow shared use of the tower (minimum of three additional carriers) if a future applicant agrees in writing to pay any reasonable charge for shared use. Said letter of intent shall be filed in the office of the Eaton County Community Development Department prior to any construction related permits being issued. If the future applicant's request for collocation is denied, the tower owner must demonstrate to the Planning commission why collocation is not feasible at the requested site. For public safety and security all government entity owned communication towers and antennas are exempt from this section.

C. Written authorization from the owner of the site to apply for the Conditional Use Permit.

D. A minimum escrow fee of $600.00 (in addition to the $400.00 application fee) shall be submitted to the Eaton County Community Development Department at the time of application to be used for payment of an expert review**.** The purpose of such review shall be to verify the accuracy and completeness of the materials submitted. All application materials and documentation submitted by an applicant shall be reviewed by an appropriate professional with expertise in the field of communication towers and antenna technology. Monies not used for the expert review will be refunded to the applicant after the Planning Commission renders a final decision on the application. At no time shall the total fee for the application and expert review exceed $1000.00.

E. After an application is filed with the Eaton County Community Development Department, staff shall determine if the application is administratively complete. The application shall be considered to be administratively complete upon staff's determination or fourteen (14) business days after the Department's receipt of the application, whichever is first. If, before the expiration of the fourteen (14) day period, Department staff notifies the applicant the application is not administratively complete, or notifies the applicant fees required to accompany the application, to include the escrow fee, have not been paid, specifying the amount due, the running of the fourteen (14) business days shall stop until the

applicant submits to Department staff the information and/or fees due. Said notification to the applicant by Department staff shall be given in writing or by electronic notification.

F. The Eaton County Planning Commission shall approve or deny an application not more than ninety (90) days after the application is considered to be administratively complete. If the Planning Commission fails to timely approve or deny the application, the application shall be considered approved.

**14.27.5 Regulations and Conditions:**

A. A report from a professional engineer which describes the tower height and design including a cross-section of the structure; demonstrates the tower's compliance with applicable structural standards; and describes the tower's capacity, including the number and type of antennas that it can accommodate. Towers must accommodate, at a minimum, the tower applicant and three additional carriers for a total capacity of at least four carriers.

B. A photocopy of the Federal Aviation Administration (FAA) "Determination of No Hazard", a photocopy of the Federal Communications Commission (FCC) license and a photocopy of the Michigan Aeronautics Commission (MAC) "Tall Structure Permit" must be submitted at the time a zoning referral is approved prior to construction.

C. **Height:** All towers shall be located on the lot so that the distance from the base of the tower to any adjoining property line is a minimum of fifty (50%) percent of the proposed tower height.

D. **Accessory Buildings:** Any accessory buildings or structures shall be located a minimum of fifty (50) feet from any adjoining property line. The accessory facilities shall not include offices, long-term vehicle storage, other outdoor storage of broadcast studios, or other uses that are not needed to send or receive transmissions, except for emergency purposes.

E. **Construction:** All towers shall be self-collapsing and comply with all Michigan Building Code regulations. The applicant shall provide all appropriate engineering information, Site Plans, and drawings to the Eaton County Community Development Department at the date of application. No building, sidewalk, parking lot, or other area with anticipated pedestrian or vehicular traffic shall be permitted within the self-collapsing or "safe fall" area to be defined by the Applicant's Engineer.

1. All new Communication Towers and Antennas approved by the County shall be designed to accommodate at least three (3) additional carriers each with nine panel antennas, having a wind area of nine square feet per antenna. Applicants shall agree as a condition of approval to permit the collocation of future installations by others on said new tower. Applicant shall also agree as a condition of approval to permit collocation of Eaton County Public Safety agencies if the tower has sufficient structural capacity as documented by a qualified and licensed professional engineer.

2. **Compatibility:** The entire facility must be aesthetically and architecturally compatible with the surrounding environment. The use of residentially compatible materials such as wood, brick and stucco is

required for associated support buildings which shall be designed to architecturally match the exterior of residential structures within the neighborhood. ~~In no case will metal exteriors be allowed.~~

3. **Lighting:** When lighting is required and is permitted by the FAA or other Federal or State authority, the Planning Commission shall approve any and all lighting on the tower. It shall be oriented inward so as not to project onto surrounding properties.

4. **Fencing:** Six (6) foot in height, climb proof fencing must be provided to prevent access to the tower.

5. **Signs:** Signs and logos are prohibited on the tower. At least one (1) but not more than two (2) signs totaling twelve (12) square feet in area shall be placed on the fence that is visible and legible from the entrance to the site. Signage shall be weather durable and should include the name and address of the communication tower owner/operator, a phone number, and contact person from whom additional information may be obtained. Appropriate County building permits shall be obtained prior to installation of the signage.

~~6. **Landscaping:** A Landscape Plan shall be provided per Article 17 to adequately screen the tower, accessory structures, and support cables.~~

~~7.~~ ***6.*** **Maintenance:** The site, including the tower, accessory structures, support cables, and landscaping shall be reasonably well maintained in relationship with surrounding properties. A copy of the annual FCC license and general maintenance report shall be submitted yearly to the Eaton County Community Development Department.

F. **Abandonment:** A tower which remains unused for a period of twelve (12) months will be considered abandoned. Applicants or current owners are required to demolish and remove any unused tower, accessory buildings, fences, and any other related cellular facility effects. Upon removal, the site shall be revegetated to blend with the existing surrounding vegetation.

G. **Financial Guarantees:** A minimum bond of $10,000 shall be filed with the Community Development Department prior to receiving any construction related permits for the tower to ensure removal of the tower when it has been abandoned or is no longer needed. The bond shall be in the form of a surety bond executed by a reputable surety company authorized to do business in the State of Michigan or a cash bond posed in lieu of a surety bond filed with the County Treasurer.

**14.27.6 Requirements for Collocation(s) on Existing or Approved Towers:**

A. If wireless communication equipment is proposed for collocation on an existing or approved tower(s) it may be a use permitted by right provided all requirements of MCL 125.3514 for a use permitted by right are met and documentation of such is provided to the Eaton County Community Development Department.

B. If the proposed wireless communications equipment for collocation does not meet the requirements of Section 14.27.6A, as a permitted use by right, an application for a Conditional Use Permit must be submitted to the Eaton County Community Development Department for Planning Commission approval.

Application requirements for collocations that do not meet the conditions as a use by right shall be as follows:

1. A Site Plan scaled as per article 17.3, showing the property boundaries, tower, guy wire anchors, “safe fall” zone, existing structures, proposed transmission buildings and/or other accessory uses, access, parking, fences, landscape plan, and existing land uses around the site.

2. A report from a professional engineer which describes the tower height and design including a cross-section of the structure; demonstrates the tower's compliance with applicable structural standards; and describes the tower's capacity, including the number and type of antennas that it can accommodate.

3. After an application is filed with the Eaton County Community Development Department, staff shall determine if the application is administratively complete. The application shall be considered to be administratively complete upon staff’s determination or fourteen (14) business days after the Department’s receipt of the application, whichever is first. If, before the expiration of the fourteen (14) day period, Department staff notifies the applicant the application is not administratively complete, or notifies the applicant fees required to accompany the application have not been paid, specifying the amount due, the running of the fourteen (14) business days shall stop until the applicant submits to Department staff the information and/or fees due. Said notification to the applicant by Department staff shall be given in writing or by electronic notification.

4. The Eaton County Planning Commission shall approve or deny an application not more than sixty (60) days after the application is considered to be administratively complete. If the Planning Commission fails to timely approve or deny the application, the application shall be considered approved.