

**MEETING:                   REGULAR MEETING OF THE PUBLIC WORKS &  
HIGHWAYS COMMITTEE**

**DATE & TIME:           Wednesday, January 8, 2025 at 5:30 PM**

**LOCATION:                 Germantown Village Hall Board Room  
N112 W17001 Mequon Road**

Any member of the body and/or citizen may attend the meeting virtually through the WebEx platform, Meeting #: **2557 846 7882** Password: **ZNmFyjsD343** which can be accessed by phone at 408-418-9388 or by logging on at: <https://villageofgermantown.my.webex.com/villageofgermantown.my/j.php?MTID=m8eef03d366e5505d540c4823225bd9fe>

Citizens not wishing to attend the meeting personally or virtually may submit any public comments by sending an email to [comments@germantownwi.gov](mailto:comments@germantownwi.gov) by 4 p.m. on the day of the meeting so that it can be provided to the members of the body for their consideration.

Previously recorded Village Board Meeting Videos can be viewed at [https://www.youtube.com/channel/UCOYp0EgELzTCa9X\\_iCohyhQ](https://www.youtube.com/channel/UCOYp0EgELzTCa9X_iCohyhQ).

## **AGENDA**

- I.     **CALL TO ORDER:** *This meeting has been given public notice in accordance with Section 19.83 and 19.84, Wis. Stats, in such form that will apprise the general public and news media of subject matter that is intended for consideration and action.*
- II.    **ROLL CALL:**
- III.   **APPROVAL OF MINUTES:**
  - A.     December 4, 2024
- IV.    **PUBLIC COMMENT:** *Please be advised per State Statute Section 19.84(2), information will be received from the public. It is the policy of this municipality that there be a three-minute time period, per person, with time extensions per the Chief Presiding Officer's discretion; be further advised that there may be limited discussion on the information received, however, NO ACTION will be taken under public comments.*
- V.     **UNFINISHED BUSINESS**
- VI.    **NEW BUSINESS:**
  - A.     Award of 2025 GIS Services to Ruekert & Mielke for an amount not to exceed \$45,125.00.
  - B.     Authorization to purchase 2025 Wastewater pickup truck in an amount not to exceed \$81,000.00.
  - C.     Authorization to purchase 2025 Highway Department pickup truck in an amount not to exceed \$71,000.00.
  - D.     Authorization to replace hydrants, replace valves, water main breaks, and water service repairs in 2025 up to identified amounts.
  - E.     Approval to purchase JRB416 loader bucket from Kelbe Brothers for an amount not to exceed \$9,100.00.
  - F.     Discussion and action on preliminary design for Division Road including typical sections and specific improvements.
  - G.     Approval of the 2025 paving plan, the 10-Year Road program, and the 5-Year Sealcoating Program.

- H. Acceptance of improvements to public infrastructure (various locations, various projects).
- I. Acceptance of the WISDOT Agricultural Road Improvement Program grant in the amount of \$2,581,888.00.
- J. Modify section 7.03 of the Municipal Code to reduce the speed limit on a segment of Division Road to 35 miles per hour.
- K. Approval of a Budget Amendment transferring \$83,901.69 of unencumbered and unspent funds from the 2024 road program.
- L. Award of a professional services agreement to TADI for an update to the 2020 traffic safety study in an amount not to exceed \$14,982.
- M. Approval to purchase 2025 Highway Department patrol truck from Truck Country of Wisconsin / Burke Truck & Equipment for an amount not to exceed \$311,874.38.

**VII. DIRECTORS'S REPORT:**

- A. January Director's Report

**VIII. NEXT MEETING DATE:**

**IX. ANNOUNCEMENTS:**

**X. ADJOURNMENT:**

UPON REASONABLE NOTICE, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information or to request this service, please contact the Village Clerk at (262)250-4745 at least 2 days prior to the meeting.



|                       |                                                                       |
|-----------------------|-----------------------------------------------------------------------|
| <b>MEETING:</b>       | <b>REGULAR MEETING OF THE PUBLIC WORKS &amp; HIGHWAYS COMMITTEE</b>   |
| <b>DATE AND TIME:</b> | <b>Wednesday, December 4, 2024 5:30 PM</b>                            |
| <b>LOCATION:</b>      | <b>Germantown Village Hall Board Room<br/>N112 W17001 Mequon Road</b> |

## MINUTES

### **I. CALL TO ORDER:**

Chairperson Kaminski called the Public Works and Highways Committee meeting to order at 5:30PM.

### **II. ROLL CALL:**

**Present:** Trustee Terri Kaminski, Trustee Phil Hudson, Trustee Robert Warren, Trustee Rick Miller (late due to weather)

**Absent:** None

**Excused:** None

### **III. APPROVAL OF MINUTES:**

A. November 12, 2024

**Motion:** Approve as presented

**Motioned By:** Robert Warren

**Seconded By:** Phil Hudson

**Yes:** Terri Kaminski, Phil Hudson, Robert Warren

**No:** None

**Abstain:** None

**Motion Passed (Yes 3, No 0, Abstained 0)**

### **IV. PUBLIC COMMENT:**

One citizen spoke:

Melanie Smythe (N140W17938 Cedar Lane)

### **V. UNFINISHED BUSINESS**

A. Award of a professional services agreement with Foth for an amount not to exceed \$72,000 for construction administration and inspection services related to generator replacements at Wells 2 and 7.

Director of Public Works Matt Mortwedt requested approval of services agreement with Foth not to exceed \$72,000.00 after the November meeting's Foth proposal of \$100,000.00 was sent back by the board. Following the November PWHC, DPW staff and Foth discussed the proposals in attempts to find opportunities for reductions. Areas identified for reduction, included:

- Bid Award/Contracting - This item proceeded under existing authority to ensure the good public bid was awarded in a timely manner and has been removed from the attached proposals.
- Limited coordination and meetings and submittal review time.
- Limited inspections and coordination - hours were reduced for conducting site inspections. Utility staff will have to pick up some aspects of site inspection.
- Limited time for close out, documentation, etc.

It is also worth noting that this bid included more than just a one-for-one generator replacement. The work also includes installation of variable frequency drives, electrical improvements, concrete pad and sidewalk replacement and site grading. The revised scope represents 17.8-18.8% of the contract. DPW staff will get proposals for future water utility work.

**Motion:** Approve as presented

**Motioned By:** Robert Warren

**Seconded By:** Phil Hudson

**Yes:** Terri Kaminski, Rick Miller, Phil Hudson, Robert Warren

**No:** None

**Abstain:** None

**Motion Passed (Yes 4, No 0, Abstained 0)**

**VI. NEW BUSINESS:**

- A. Approval of a change order to JH Hassinger for an amount not to exceed \$30,000 for cold weather work conditions on Well 12 construction.

Director of Public Works Matt Mortwedt explained that due to a series of delays in the Well 12 construction project recently including the Operator's Union strike, the liner evaluation and decision-making process, and delays from sharing the site with Tower 4, JH Hassinger is requesting \$30,000 to enclose the Well 12 structure and continue work over the winter.

The change order amount was originally proposed at \$85,000, but staff worked cooperatively to find opportunities to keep the project moving while pushing some scope until spring. Alternatively, Germantown could opt to pause work over the winter, but the contractor has outlined that the cost associated with pausing the project will be greater than \$30,000. The \$30,000 would allow them to enclose and heat the site and continue working on the internal portion of the project.

**Motion:** Approve as presented

**Motioned By:** Robert Warren

**Seconded By:** Rick Miller

**Yes:** Terri Kaminski, Rick Miller, Phil Hudson, Robert Warren

**No:** None

**Abstain:** None

**Motion Passed (Yes 4, No 0, Abstained 0)**

- B. Approval for a blanket PO not to exceed \$100,000.00 with Merton-Franier for the purchase of water meters.

Director of Public Works Matt Mortwedt requested authorization to have an ongoing PO with Metron-Franier not to exceed \$100,000.00 for the replacement of water meters in our ongoing meter replacement program.

**Motion:** Approve as presented

**Motioned By:** Rick Miller

**Seconded By:** Phil Hudson

**Yes:** Terri Kaminski, Rick Miller, Phil Hudson, Robert Warren

**No:** None

**Abstain:** None

**Motion Passed (Yes 4, No 0, Abstained 0)**

- C. Award of a professional services agreement with Wachtel Tree Science for an amount not to exceed \$20,000 for Village Forester and tree consulting services.

Director of Public Works Matt Mortwedt requested approval of continued arboricultural consulting services with Wachtel Tree Science & Services. Wachtel provides many forestry related services, which include but are not limited to the following: acting Village Forester, management of the GIS tree layer, assisting staff with Emerald Ash Borer treatment specifications and contracts, assisting staff with tree removal specifications and contracts, assisting staff with tree planting specifications and contracts, providing staff with direction on difficult forestry related resident concerns, and performing plan review from a forestry perspective. The cost of this service will be billed on a time and material basis in an amount not to exceed \$20,000.00 (\$160/hr Project Manager, \$145/hr Certified Arborist).

**Motion:** Approve as presented

**Motioned By:** Phil Hudson

**Seconded By:** Robert Warren

**Yes:** Terri Kaminski, Rick Miller, Phil Hudson, Robert Warren

**No:** None

**Abstain:** None

**Motion Passed (Yes 4, No 0, Abstained 0)**

- D. Approval to purchase two fabricated fall protection ladders from RARE Specialties at Wells 3 and 11 for an amount not to exceed \$15,840.00.

Director of Public Works Matt Mortwedt requested approval to purchase two fabricated fall protection ladders to assist in installing filter media in our filtration tanks at Well #3 and Well #11 from RARE Specialties. This project was approved as part of the 2025

CIP and budgeted at \$30,000. The order would be placed in early 2025.

**Motion:** Approve as presented

**Motioned By:** Rick Miller

**Seconded By:** Phil Hudson

**Yes:** Terri Kaminski, Rick Miller, Phil Hudson, Robert Warren

**No:** None

**Abstain:** None

**Motion Passed (Yes 4, No 0, Abstained 0)**

E. Approval of the 2025 Village of Germantown Labor and Equipment Rates.

Director of Public Works Matt Mortwedt requested approval of the 2025 Labor and Equipment rates. Equipment rates reflect a 3% increase from 2024. Labor rates have been adjusted based on salary and anticipated benefits. A 15% administrative charge has been added to base salary and benefits, similar to past years. Labor and equipment rates will be used whenever the Village performs work that is charged out. Examples of where staff time and equipment may be charged/billed out includes work for developers, insurances companies, and residents.

**Motion:** Approve as presented

**Motioned By:** Rick Miller

**Seconded By:** Phil Hudson

**Yes:** Terri Kaminski, Rick Miller, Phil Hudson, Robert Warren

**No:** None

**Abstain:** None

**Motion Passed (Yes 4, No 0, Abstained 0)**

**VII. DIRECTORS'S REPORT:**

A. December Director's Report

Director of Public Works Matt Mortwedt gave his December Director's Report to the Board. The report included the plan for sidewalk repairs/improvements in 2025. Our Village Engineer is working on the High Point Pass Design and anticipation of a January bid. Our Civil Engineer is working on the Division Rd design. Our Engineer techs are working on the Division Rd survey, GIS updates for PSC CPR report, the 10 Year Road and 5 Year Seal Coat Plan to be presented to the Board in January's Public Works and Highway meeting.

The Ruekert and Mielke Facilities Study amendment is on hold pending an agreed upon SSSA. The Ruekert and Mielke Main St and Old Farm study kick off meeting was held on Novemeber 6th, the 2024 cured in place sewer lining is approved and out for signatures, the tree pruning and removal project began December 2nd, and winter brine training and prep being done.

There will be a meeting with consultants on the Public Safety Building additional scope

the week of December 2nd. There will be a recommendation on Wastewater fees coming in the near future.

**VIII. NEXT MEETING DATE:**

The next Public Works and Highway Committee Meeting will be held January 8, 2025 at 5:30PM.

**IX. ANNOUNCEMENTS:**

**X. ADJOURNMENT:**

Chairperson Kaminski adjourned the meeting at 6:24PM.

## **BUSINESS OF THE PUBLIC WORKS & HIGHWAYS COMMITTEE**

MEETING DATE: January 8, 2025

PLACEMENT: Action Item

ITEM TITLE: Award of 2025 GIS Services to Ruekert & Mielke for an amount not to exceed \$45,125.00.

SUBMITTED BY: Matthew Mortwedt, Public Works Director

### SUMMARY EXPLANATION:

GIS services and associated fees for 2025. Budgets for each category are shown in the attachment, with descriptions on the following pages. Core Services and Tool Suites will be charged a flat fee. Maintenance will be charged as Time and Material and will not exceed the amount that is listed unless approved by the Village.

### ATTACHMENT:

1. Germantown 2025 GIS Annual Services Agreement

### STAFF RECOMMENDATION:

Staff recommends the approval of GIS services agreement with Ruekert-Mielke not to exceed \$45,125.00.

### ACTION BY Committee:

December 19, 2024

Mr. Matthew Mortwedt  
Director of Public Works  
Village of Germantown  
P.O. Box 337  
Germantown, WI 53022

Re: 2025 GIS Annual Services Agreement

Dear Matthew,

In preparation for your upcoming budgeting effort, we present to you our recommended GIS services and associated fees for 2025. Budgets for each category are shown below, with descriptions on the following pages. Core Services and Tool Suites will be charged a flat fee. Maintenance will be charged as Time and Material and will not exceed the amount that is listed unless approved by the Village.

| Category                                                | Annual Fee      |
|---------------------------------------------------------|-----------------|
| <b>GIS Core Services</b>                                | <b>\$11,700</b> |
| Engineering, Streets, Wastewater, and Water Funds       | \$2,925 x 4     |
| <b>Tool Suites</b>                                      | <b>\$18,125</b> |
| Storm Suite, Streets/Highway Suite, & Sanitary Suite    | \$4,000 x 3     |
| Water Suite + Water Meter Tool                          | \$6,125         |
| Category                                                |                 |
| <b>GIS Maintenance</b>                                  | <b>\$15,300</b> |
| • Engineering Fund                                      | \$3,100         |
| • Streets Fund                                          | \$3,100         |
| • Wastewater Fund                                       | \$3,100         |
| • Water Fund                                            | \$6,000         |
| <b>Total 2025 Budget</b>                                | <b>\$45,125</b> |
| <b>(Excluding GIS Software Update Transition Costs)</b> |                 |
| <b>GIS Software Upgrade Estimates</b>                   |                 |
| GIS Software Upgrade                                    | \$35,000        |
| Esri Licenses                                           | \$9,000         |
| <b>Total GIS Software Upgrade Estimate</b>              | <b>\$44,000</b> |
| <b>(Q2 of 2025)</b>                                     |                 |

### **GIS Core Services**

Services provided by Ruekert & Mielke, Inc. (R/M) under GIS Core Services are summarized below:

1. Hardware & Software – R/M will ensure its platform, networking, and hardware resources meet or exceed industry standards for performance and security. Routine software updates may be completed.
2. Facilities - Provide a physically safe, secure, and climate-controlled Amazon data center where data and equipment are resistant to natural disaster or malicious attack.
3. Data Storage – Provide expandable, secure, data storage for any municipal data such as CCTV data, inspection photos, documents, as-builts, and more.
4. Backups – Maintain a rigorous backup plan to minimize the risk of data loss due to user error or hardware failure.
5. Troubleshooting – R/M will make reasonable efforts to resolve errors or technical issues. Client understands R/M cannot guarantee a complete or immediate resolution due to circumstances outside of R/M's control such as software bugs, unforeseen use cases, etc.
6. IT Services – Provide human resources for the management, optimization, and research for all the above services.
7. Access to GIS Customer Success Managers.

### **Tool Suites Subscription**

The Tool Suites subscription gives you continual access to hosted tools in your GIS site. Updates and upgrades result from the feedback we receive from the communities we service. Each tool within a suite may have automatic updates and upgrades that occur throughout the year.

Tool Suites give you several utility-related tools at a discounted price.

### **Important GIS Software Update**

Esri is discontinuing support for some of the programs that your current Geocortex software uses to run. They are requiring that everyone moves to their new licensing model and latest technology by the end of 2026. We expect our applications to continue working after support has ended, but only for a limited time. After Esri's technology shift, the old software applications won't receive support or updates.

To prepare for this transition, we have provided a general estimate based on the anticipated update effort and the current number of active GIS user accounts. Additional data review will determine more accurate estimates specific to Germantown and their software needs. We will be working with you and your staff to move your technology forward. Your Customer Success Manager will be reaching out with additional information soon.

The above-described professional services will be provided to you in accordance with the attached three-page **RM Standard Terms & Conditions** dated January 1, 2024, which are made part of this agreement by reference. Please indicate your acceptance of this agreement by having the appropriate authorized official(s) affix their signature(s) where indicated and returning one fully executed copy to our office.





Mr. Matthew Mortwedt  
2025 GIS Annual Services Agreement  
December 19, 2024  
Page 3

We appreciate the opportunity to serve you and welcome your feedback and ideas on how we can provide even greater products and services. If you have any questions regarding our services and fees, please contact our office.

Respectfully,

RUEKERT & MIELKE, INC.

A handwritten signature in black ink, appearing to read "Savannah Thomas".

Savannah Thomas  
GIS Customer Success Manager  
[stthomas@ruekert-mielke.com](mailto:stthomas@ruekert-mielke.com)

SRT:cal

cc: Jerad Wegner, P.E., Ruekert & Mielke, Inc.  
07-10007

2025 GIS ANNUAL SERVICES AGREEMENT  
Between Village of Germantown  
and  
Ruekert & Mielke, Inc.  
Dated December 19, 2024

CLIENT:

Village of Germantown

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

CONSULTANT:

Ruekert & Mielke, Inc.

Signature: Jason P. Lietha Digitally signed by Jason P. Lietha  
Date: 2024.12.20 08:22:57 -06'00'  
Jason P. Lietha, P.E.

Title: Vice President

Date: December 19, 2024

Designated Representative:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Designated Representative:

Name: Savannah Thomas

Title: GIS Customer Success Manager

Phone Number: (262) 288-1381

**A. Standards of Performance**

The standard of care for all Consultant services performed or furnished Consultant under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality. Consultant makes no warranties, express or implied, under this Agreement or otherwise, in connection with Consultant's services.

**B. Designated Representatives**

With the execution of this Agreement, Consultant and Client shall designate specific individuals to act as Consultant's and Client's representatives with respect to the services to be performed or furnished by Consultant and duties and responsibilities of Client under this Agreement. Such individuals shall have authority to transmit instructions, receive information, and render decisions relative to the Assignment on behalf of the respective party whom the individual represents.

**C. Payments to Consultant**

Invoices will be prepared in accordance with Consultant's standard invoicing practices and will be submitted to Client by Consultant monthly, unless otherwise agreed. Invoices are due and payable within 30 days of receipt. If Client fails to make any payment due Consultant for services and expenses within 30 days after receipt of Consultant's invoice therefore, the amounts due Consultant will be increased at the rate of 1.0% per month (or the maximum rate of interest permitted by law, if less) from said thirtieth day. In addition, Consultant may, after giving seven days written notice to Client, suspend services under this Agreement until Consultant has been paid in full all amounts due for services, expenses, and other related charges. Consultant's standard hourly rates are subject to annual adjustment.

**D. Ownership and Reuse of Documents**

All documents and services prepared or furnished by Consultant pursuant to this Agreement are instruments of service, and Consultant shall retain an ownership and property interest therein (including the copyright and the right of reuse) whether or not the Project is completed. Consultant grants Client a limited license to use the deliverable documents on the Project, extensions of the Project, and for related uses of the Client, subject to receipt by Consultant of full payment due and owing for all services relating to preparation of the documents. Such limited license shall not create any rights in third parties. Reuse of any documents pertaining to this Agreement by Client shall be at Client's sole risk; and Client agrees to indemnify, defend, and hold Consultant harmless from all claims, damages, and expenses including reasonable attorney's fees arising out of such reuse of documents by Client or by others acting through Client.

**E. Permits and Approvals**

It is the responsibility of the Client to obtain all necessary permits and approvals for the Project. Consultant will assist the Client in obtaining permits and approvals as mutually agreed to in writing.

**F. Opinions of Probable Cost**

Consultant's opinions of probable construction cost (if any) are to be made on the basis of Consultant's experience, qualifications, and general familiarity with the construction industry. However, because Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over contractors' methods of determining prices, or over competitive bidding or market conditions, Consultant cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable construction cost prepared by Consultant. If Client requires greater assurance as to probable construction costs, then Client agrees to obtain an independent cost estimate.

**G. Client and Third Party Provided Information**

Consultant shall have the right to rely on the accuracy of any information provided by Client and third parties. Consultant will not review this information for accuracy.

**H. Access**

Client shall arrange for safe access to and make all provisions for Consultant and Consultant's subconsultants to enter upon public and private property as required for Consultant to perform services under this Agreement.

**I. Construction Observation**

Consultant will observe the work as agreed to for general compliance with the construction documents. Consultant shall not at any time supervise, direct, control, or have authority over any contractor's work, nor shall Consultant have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any contractor, or the safety precautions and programs incident thereto, for security or safety at the Project site, nor for any failure of a contractor to comply with laws and regulations applicable to that contractor's furnishing and performing of its work. Consultant shall not be responsible for the acts or omissions of any contractor. Consultant has no stop work authority. Consultant shall not be responsible for any decision made regarding the construction contract requirements, or any application, interpretation, clarification, or modification of the construction contract documents, other than those made by Consultant.

**J. Environmental**

The parties acknowledge that Consultant's services do not include any services related to unknown or undisclosed Constituents of Concern. Consultant assumes no liability for the detection or removal of any hazardous substances found at or adjacent to the Project site.

#### K. Termination of Contract

1. Either party may at any time terminate this Agreement with 7 days written notice for cause in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.
2. Client may terminate this Agreement for convenience with 30 days written notice, or the Project may be suspended by Client with 30 days written notice.
3. Consultant may terminate this Agreement for cause with 7 days written notice (a) if Consultant is requested to furnish or perform services contrary to Consultant's responsibilities as a licensed professional, (b) if Consultant's services are delayed or suspended for more than 90 days for reasons beyond Consultant's control, (c) if payment due Consultant remains unpaid for 90 days, or (d) as the result of the presence of undisclosed Constituents of Concern. Consultant will have no liability to Client on account of any termination by Consultant for cause.
4. In the event of any termination, Client shall pay to Consultant all amounts owing to Consultant under this Agreement, for all work performed up to the effective date of notice.

#### L. Insurance

Consultant will maintain insurance at a minimum in the amounts following. Insurance certificates will be provided if requested by Client.

- General Liability \$1,000,000 Each Occurrence / \$2,000,000 General Aggregate
- Auto Liability \$1,000,000 Combined Single Limit
- Workers Compensation Statutory
- Employers Liability \$1,000,000 Each Accident / \$1,000,000 Each Employee / \$1,000,000 Policy Limit
- Umbrella \$1,000,000 Occurrence / Aggregate
- Professional Liability \$1,000,000 Per Claim / Aggregate

#### M. Indemnification and Allocation of Risk

1. To the fullest extent permitted by law, Consultant shall indemnify and hold harmless Client, Client's officers, directors, partners, and employees from damages and judgments (including reasonable fees), but only to the extent caused by any negligent act or omission of Consultant or Consultant's officers, directors, partners, employees, and subconsultants in the performance of Consultant's services under this Agreement.
2. To the fullest extent permitted by law, Client shall indemnify and hold harmless Consultant, Consultant's officers, directors, partners, employees, and subconsultants from damages and judgments (including reasonable fees), but only to the extent caused by any negligent act or omission of Client or Client's officers, directors, partners, employees, and consultants with respect to this Agreement.
3. To the fullest extent permitted by law, a party's total liability to the other party and anyone claiming by, through, or under the other party for any cost, loss, or damages caused in part by the negligence of the party and in part by the negligence of the other party or any other negligent entity or individual, will not exceed the percentage share that the party's negligence bears to the total negligence of Client, Consultant, and all other negligent entities and individuals.
4. The indemnification provision of paragraph M.1. is subject to and limited by the provisions agreed to by Client and Consultant in paragraph N. "Limit of Liability," of this Agreement.

#### N. Limit of Liability

To the fullest extent permitted by law, the total liability, in the aggregate, of Consultant and Consultant's officers, directors, partners, employees, agents, and subconsultants, or any of them to Client and anyone claiming by, through, or under Client, for any and all injuries, losses, damages and expenses, whatsoever arising out of, resulting from, or in any way related to this Agreement from any cause or causes including but not limited to the negligence, professional errors or omissions, strict liability or breach of contract or warranty, express or implied, of Consultant or Consultant's officers, directors, partners, employees, agents, and subconsultants, or any of them, shall not exceed the total amount of \$1,000,000, or the Consultant's total fee for services rendered on this project, whichever is greater. It is intended that this limitation apply to any and all liability or cause of action, including without limitation active and passive negligence, however alleged or arising, unless otherwise prohibited by law. In no event shall the Consultant's liability exceed the amount of available insurance proceeds.

#### O. Consequential Damages

To the fullest extent permitted by law, Client and Consultant waive against each other, and the other's employees, officers, directors, members, agents, insurers, partners, consultants and subconsultants, any and all claims for or entitlement to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to this Agreement, any Task Order, or a Specific Project, from any cause or causes. Such excluded damages include but are not limited to loss of profits or revenue; loss of use or opportunity; loss of good will; cost of substitute facilities, goods, or services; and cost of capital.

#### P. Third Party Beneficiaries

All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of Client and Consultant and not for the benefit of any other party. Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either Client or the Consultant. Consultant's services under this Agreement are being performed solely for the Client's benefit, and no other entity shall have any claim against Consultant because of this Agreement or the performance or nonperformance of services hereunder. Client agrees to include a provision in all contracts with contractors and other entities involved in this Project to carry out the intent of this paragraph.

#### Q. Severability and Waiver of Provisions

Any provision or part of the Agreement held to be void or unenforceable under any Laws or Regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Client and Consultant, who agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision. Non-enforcement of any provision by either party shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.

#### R. Hold Harmless

Consultant's commitments as set forth in this Agreement are based on the expectation that all of the services described in this Agreement will be provided. In the event Client later elects to reduce the Consultant's scope of services, Client hereby agrees to release, hold harmless, defend and indemnify Consultant from any and all claims, damages, losses, or costs associated with or arising out of such reduction in services.

#### S. Consultant's Services

Consultant's Services do not include: (1) serving as a "municipal advisor" for purposes of the registration requirements of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) or the municipal advisor registration rules issued by the Securities and Exchange Commission; (2) advising Client, or any municipal entity or other person or entity, regarding municipal financial products or the issuance of municipal securities, including advice with respect to the structure, timing, terms, or other similar matters concerning such products or issuances; (3) providing surety bonding or insurance-related advice, recommendations, counseling, or research, or enforcement of construction insurance or surety bonding requirements; or (4) providing legal advice or representation.

#### T. Changed Conditions

If, during the term of this Agreement, circumstances or conditions that were not originally contemplated by or known to the Consultant are revealed, to the extent that they affect the scope of services, compensation, schedule, allocation of risks or other material terms of this Agreement, the Consultant may call for renegotiation of appropriate portions of this Agreement. The Consultant shall notify the Client of the changed conditions necessitating renegotiation, and the Consultant and the Client shall promptly and in good faith enter into renegotiation of this Agreement to address the changed conditions. If terms cannot be agreed to, the parties agree that either party has the right to terminate this Agreement in accordance with the Termination provision hereof.

#### U. Delays

Consultant shall not be liable for any loss or damage arising directly or indirectly from any delays for causes beyond the Consultant's control. For purposes of this Agreement, such causes include, but are not limited to, strikes or other labor disputes; severe weather disruptions or other natural disasters or acts of God; fires, riots, war or other emergencies; pandemics, failure of any government agency to act in timely manner; failure of performance by the Client or the Client's contractors or consultants; or discovery of any hazardous substances or differing site conditions. If the delays resulting from any such causes increase the cost or time required by the Consultant to perform its services in an orderly and efficient manner, the Consultant shall be entitled to a reasonable adjustment in schedule and compensation.

#### V. Entire Agreement

This Agreement is the entire Agreement between the Client and the Consultant. It supersedes all prior communications, understandings and agreements, whether oral or written. Amendments to this Agreement must be in writing and signed by both the Client and the Consultant.

#### W. Assignment

Neither party to this Agreement shall transfer, sublet, or assign any rights or duties under or interest in this Agreement, including but not limited to monies that are due or monies that may be due, without the prior written consent of the other party. Subcontracting to subconsultants normally contemplated by the Consultant as a generally accepted business practice shall not be considered an assignment for purposes of this Agreement.

#### X. Dispute Resolution

Client and Consultant agree to negotiate all disputes between them in good faith for a period of 60 days from the date of notice, prior to invoking mediation. Subsequent to negotiation, Client and Consultant agree to submit any and all unsettled claims, counterclaims, disputes, and other matters in questions between them arising out or relating to this Agreement or the breach thereof ("disputes") to mediation as a condition precedent to litigation. Client and Consultant agree to participate in the mediation process in good faith and on a confidential basis.

#### Y. Governing Law

This Agreement will be governed by the laws of the state in which the project is located.

#### Z. Definitions

1. Contractor - Any person or entity (not including the Consultant, its employees, agents, representatives, subcontractors, and subconsultants), performing or supporting construction activities relating to the Project, including but not limited to contractors, subcontractors, suppliers, Client's work forces, utility companies, construction managers, testing firms, shippers, and truckers, and the employees, agents, and representatives of any or all of them.

2. Constituent of Concern – any substances, including without limitation asbestos, asbestos-containing materials, toxic or hazardous substances, PFASs, PCBs, combustible gases and materials, petroleum or radioactive materials (as each of these is defined in applicable state, provincial or federal statutes), pollutants, viruses, bacteria or pathogens of any kind, or any other substances under any conditions and in such quantities as would pose a substantial danger to persons or property exposed to such substances at or near the Project site.

**END OF DOCUMENT**

Page 3 of 3 pages

**(Ruekert & Mielke, Inc. Standard Terms and Conditions)**

## **BUSINESS OF THE PUBLIC WORKS & HIGHWAYS COMMITTEE**

MEETING DATE: January 8, 2025

PLACEMENT: Action Item

ITEM TITLE: Authorization to purchase 2025 Wastewater pickup truck in an amount not to exceed \$81,000.00.

SUBMITTED BY: Matthew Mortwedt, Public Works Director

### SUMMARY EXPLANATION:

Funds were allocated as part of the 2025 Wastewater budget in the amount of \$81,000.00 for the replacement of truck 555. Due to limited availability and high demand, General Motors has opened a very small commercial purchasing window each of the last four years. These commercial purchasing windows have in the past been opened and sold out within a single day. In recent years, this practice has made our competitive pricing and parliamentary procedure almost impossible to achieve.

Staff has been informed that short purchasing windows could again be a possibility this year. If time allows, it is staff's intension to request competitive pricing from several vendors. If the commercial purchasing window is limited like some recent years, staff would purchase directly from Ewald to ensure we have a vehicle available to us. Ewald has been able to provide vehicles to the Village through the state bid contract throughout the recent, difficult, purchasing years. To ensure that the village is prepared to purchase the 2026 **model year** pick-up truck, staff is requesting authorization to purchase a pick-up truck in an amount not to exceed \$81,000.00.

### ATTACHMENT:

### STAFF RECOMMENDATION:

Staff recommends the purchase of a 2026 model year pick-up truck in an amount not to exceed \$81,000.00, and to forward this request onto the Village Board with a positive recommendation. If approved, the funds shall be allocated from the Wastewater Utility capital account: 60000000-185000.

### ACTION BY Committee:

## **BUSINESS OF THE PUBLIC WORKS & HIGHWAYS COMMITTEE**

MEETING DATE: January 8, 2025

PLACEMENT: Action Item

ITEM TITLE: Authorization to purchase 2025 Highway Department pickup truck in an amount not to exceed \$71,000.00.

SUBMITTED BY: Matthew Mortwedt, Public Works Director

### SUMMARY EXPLANATION:

Funds were allocated as part of the 2025 Parks Department budget in the amount of \$71,000.00 for the replacement of a pick-up truck. Due to limited availability and high demand General Motors has opened a very small commercial purchasing window each of the last four years. These commercial purchasing windows have in the past been opened and sold out within a single day. In recent years, this practice has made our competitive pricing and parliamentary procedure almost impossible to achieve.

Staff has been informed that short purchasing windows could again be a possibility this year. If time allows, it is staffs intension to request competitive pricing from several vendors. If the commercial purchasing window is limited like some recent years, staff would purchase directly from Ewald to ensure we have a vehicle available to us. Ewald has been able to provide vehicles to the village throughout the recent difficult purchasing years and has been an awarded vendor during previous competitive pricing processes. To ensure that the village is prepared to purchase the 2026 **model year** pick-up truck, staff is requesting authorization to purchase a pick-up truck in an amount not to exceed \$71,000.00.

### ATTACHMENT:

### STAFF RECOMMENDATION:

Staff recommends the purchase of a 2026 model year pick-up truck in an amount not to exceed \$71,000.00, and to forward this request onto the Village Board with a positive recommendation. If approved, the funds shall be allocated from the Parks Department capital account: 40564000-592200.

### ACTION BY Committee:

## **BUSINESS OF THE PUBLIC WORKS & HIGHWAYS COMMITTEE**

MEETING DATE: January 8, 2025

PLACEMENT: Action Item

ITEM TITLE: Authorization to replace hydrants, replace valves, water main breaks, and water service repairs in 2025 up to identified amounts.

SUBMITTED BY: Matthew Mortwedt, Public Works Director

SUMMARY EXPLANATION:

The Water Utility is requesting an open PO on a time and material basis for hydrant replacements, water main and water lateral repairs, gate valve repairs and hard scape restoration. This is an ongoing replacement program and for emergency repairs as we identify old, malfunctioning areas and upgrading water infrastructure. This would also include resupply of underground materials.

ATTACHMENT:

STAFF RECOMMENDATION:

Staff recommends authorizing water utility staff to:

- Hire as needed contract services for the replacement of hydrants, lead, valve assembly and hardscape restoration not to exceed \$215,000.00 from account #550642000-531730.
- Hire as needed contract services for water lateral repair and hardscape restoration not to exceed \$50,000.00 from account # 50642000-531770.
- Hire as needed contract services for the repair of water mains, gate valve repair and hardscape restoration not to exceed \$150,000.00 from account #50-742-530-6730.

ACTION BY Committee:



## **BUSINESS OF THE PUBLIC WORKS & HIGHWAYS COMMITTEE**

MEETING DATE: January 8, 2025

PLACEMENT: Action Item

ITEM TITLE: Approval to purchase JRB416 loader bucket from Kelbe Brothers for an amount not to exceed \$9,100.00.

SUBMITTED BY: Matthew Mortwedt, Public Works Director

### SUMMARY EXPLANATION:

As part of the 2025 Highway Department non-borrowed capital budget, \$9,000.00 was allocated to purchase a JRB416 front-end loader bucket.

This purchase will be utilized to load road salt from the salt “dome” still in operation at our old facility. The use of the salt dome will take place during larger scale snow events. Its use will offer north and western route drivers of the ability to “top off” without having to travel back to the new facility. Having this ability will help staff be as efficient as possible when operating during larger snow events. The bucket currently owned by the village will be utilized in the salt “shed” at our new facility.

Staff solicited pricing from area vendors, and the results are listed below for review.

|                  |             |
|------------------|-------------|
| Kelbe Brothers:  | \$9,100.00  |
| Miller Bradford: | \$9,200.00  |
| Fabic Cat:       | \$11,500.00 |

### ATTACHMENT:

### STAFF RECOMMENDATION:

Staff recommends purchasing the JRB416 loader bucket from Kelbe Brothers in an amount not to exceed \$9100.00. If approved, funds shall be allocated from the Highway Department non-borrowed capital account: 10562000-591000.

### ACTION BY Committee:

## **BUSINESS OF THE PUBLIC WORKS & HIGHWAYS COMMITTEE**

MEETING DATE: January 8, 2025

PLACEMENT: Action Item

ITEM TITLE: Discussion and action on preliminary design for Division Road including typical sections and specific improvements.

SUBMITTED BY: Matthew Mortwedt, Public Works Director

### SUMMARY EXPLANATION:

DPW-Engineering is in preliminary design for Division Road reconstruction. We are presenting the following typical sections and improvements as our recommendations.

#### Typical Sections

TS1. Typical section - Roadway (12' lane typical) and path (8' typical with some realignment)

TS2. Typical section - Intersection

#### Specific Improvements (Issue addressed - location):

SI1. Path Connectivity and Safety - Installation of a path on the west side of Division Road from Wendy Lane to Dotty Way

SI2. Right of Way Acquisition for Access - NWC of Donges Bay Road

SI3. Safety - Installation of stormwater infrastructure on the west side of Division Road from Lilac Lane to the Jefferson Ditch.

SI4. Path Connectivity and Safety - Extend the path on the west side of Division Road to Lilac Lane.

#### Driveway Connection Strategy:

On the north leg of the project, we will include an alternate bid item to break out the cost of culvert replacement, backfill, asphalt work and restoration for private driveways. We will offer that price to affected businesses/residents as an option to replace at their cost in coordination with the project.

DPW-Engineering will proceed with additional design effort, professional services contracts, as needed, to continue the design process. As necessary those contracts will come before the PWHC and Village Board for approval. A large portion of design is being conducted in-house.

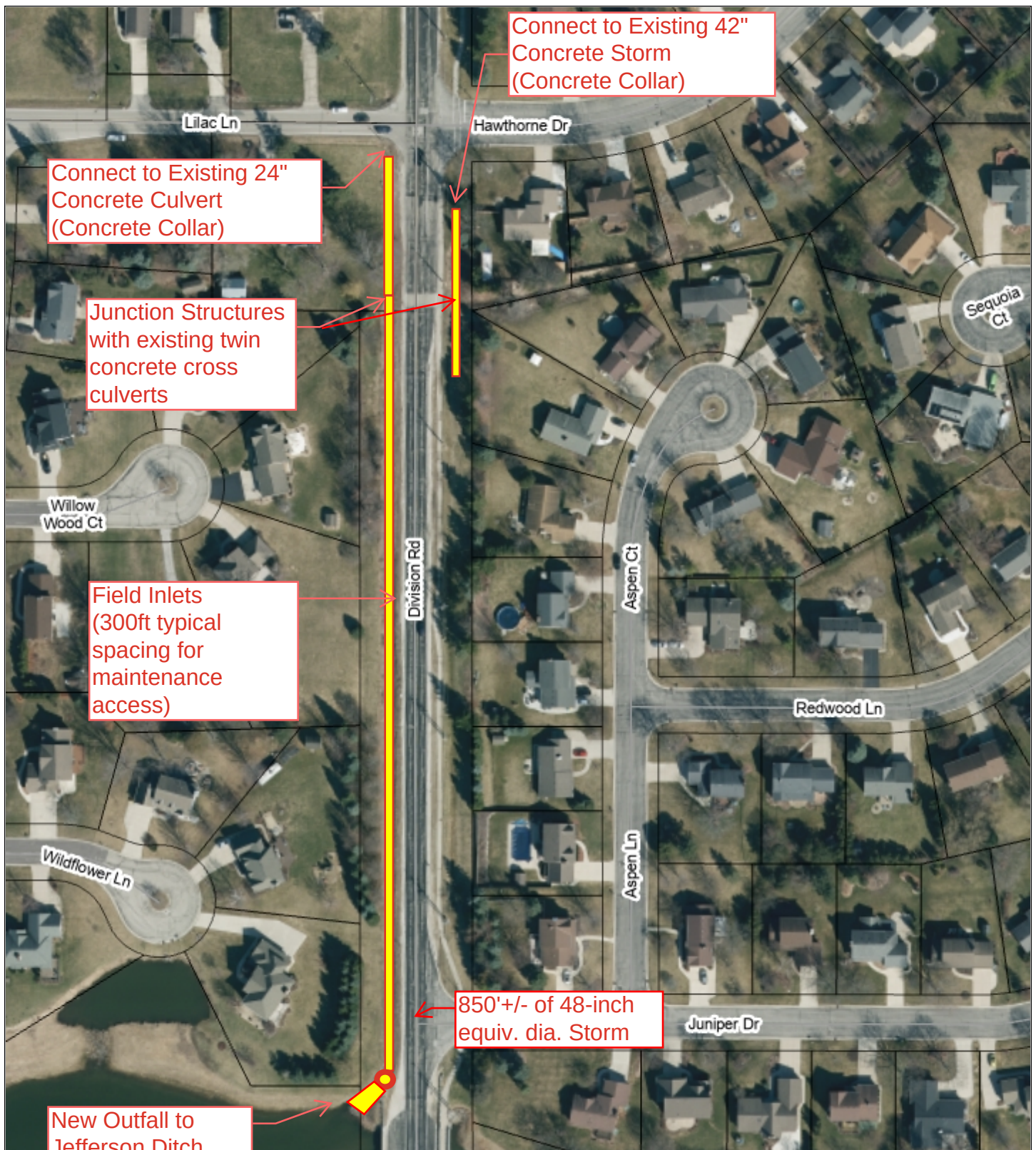
### ATTACHMENT:

1. 3a - Lilac (Storm)
2. 5 - Wendy-Dotty
3. 4 - Donges Bay Rd
4. 2 - Virginia-
5. 1 - 11 x 17 Portrait\_combined ROW

STAFF RECOMMENDATION:

A motion supporting staff progress, or a motion to direct staff to change their strategy on a specific item or items.

ACTION BY Committee:



**Village of Germantown GIS**  
Division Road - Storm Sewer Work

**DISCLAIMER:**

This map is not a survey of the actual boundary of any property this map depicts.

The Village of Germantown Does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.



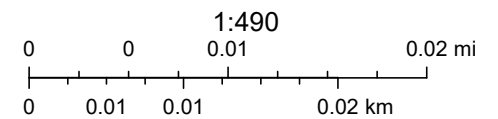
**Village Of Germantown**  
N112 W17001 Mequon Road  
Germantown, WI 53022  
262-250-4700



SCALE: 1 = 200'

Print Date: 1/2/2025

|                                                                                     |                |                                                                                     |                                           |                                                                                     |              |                                                                                     |                   |
|-------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------|-------------------|
|  | Current Parcel |  | Subdivision Name                          |  | PLSS Quarter |  | Right-of-Way      |
|  | Address Point  |  | Parcel Taxkey & Acreage                   |  | Lot          |  | Municipality      |
|  | Lot Number     |  | PLSS Boundary                             |  | Plat         |  | Local Road Labels |
|  | PLSS Section   |  | Assessor Plat; Cemetery Plat; Subdivision |  | Local Road   |                                                                                     |                   |







Village of Germantown GIS  
W172 N9805 DIVISION RD

**DISCLAIMER:**

This map is not a survey of the actual boundary of any property this map depicts.

The Village of Germantown Does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.

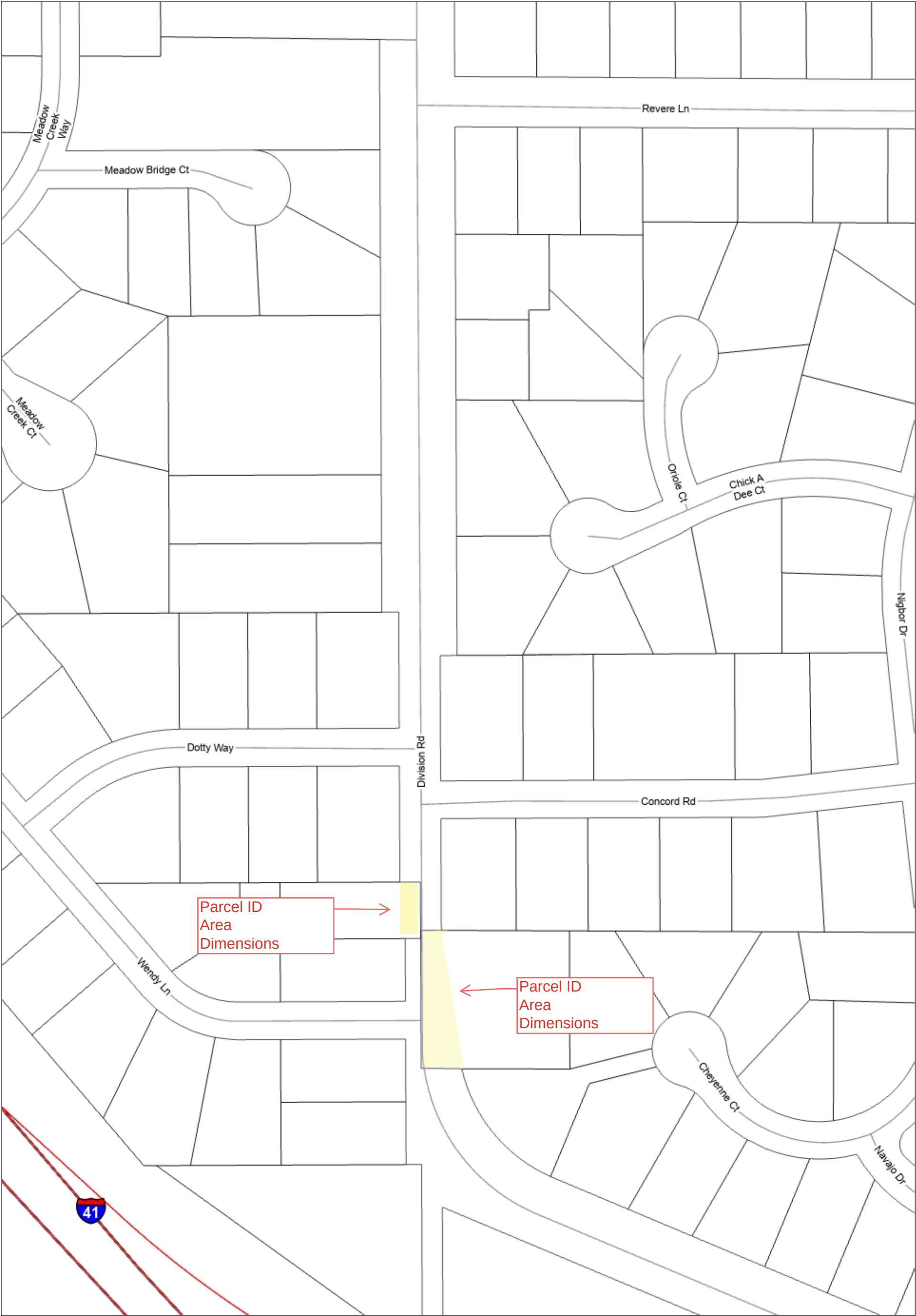


Village Of Germantown  
N112 W17001 Mequon Road  
Germantown, WI 53022  
262-250-4700



SCALE: 1 = 100'

Print Date: 5/23/2024



Village of Germantown GIS  
Division Road Right of Way

DISCLAIMER:

This map is not a survey of the actual boundary of any property this map depicts.

The Village of Germantown Does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.



Village Of Germantown  
N112 W17001 Mequon Road  
Germantown, WI 53022  
262-250-4700



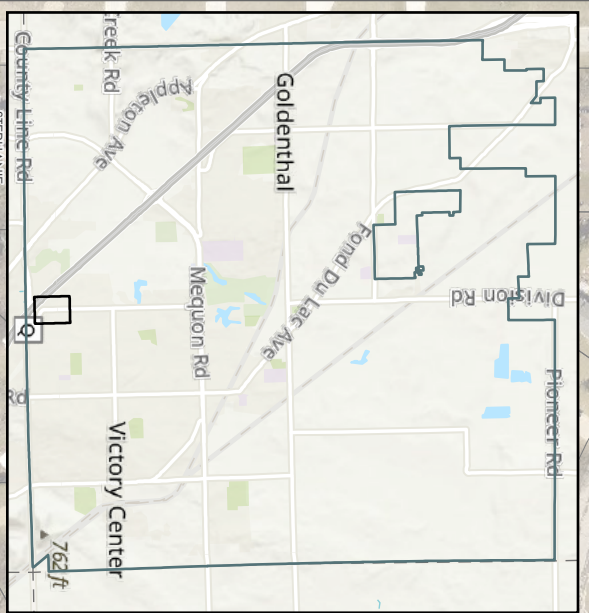
SCALE: 1 = 200'

Print Date: 12/4/2024



# Division Road Trail Plan

## Germantown Trail Master Plan



### Legend

- Proposed Trails**
- 10ft Proposed Asphalt Sidepath
  - 8ft Proposed Asphalt Sidepath
  - 5ft Proposed On-street Facility

- Existing Pedestrian/Bicycle Facilities**
- Width
  - 4.5ft
  - 5ft
  - 6ft
  - 8ft
  - 10ft or Greater
  - Variable Width Bike Lane

- Material**
- Asphalt
  - Concrete
  - Gravel

- 100 Year Floodplain**
- WWI Wetlands
  - Isolated Natural Resource Area
  - Environmental Corridor
  - Stream and River
  - Lake and Pond
  - Parcel
  - Municipalities

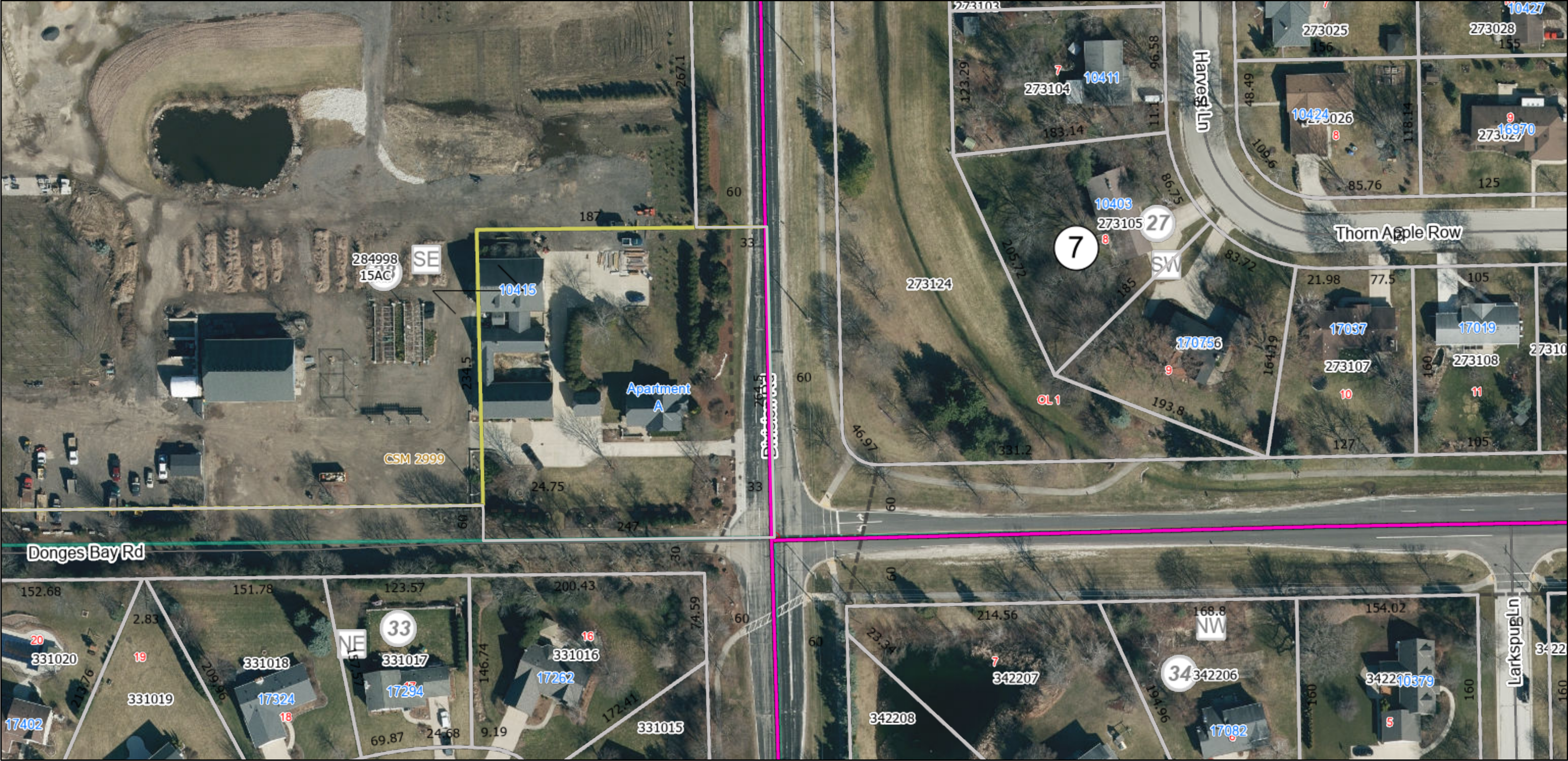


**Data Source:**  
 Environmental Corridors - SEWRPC  
 Wetlands - WDNR  
 Floodplain - FEMA  
 Basecamp Data - Washington County

**Scale:**  
 1 inch = 200 feet



Washington County, Wisconsin



12/27/2024, 2:41:44 AM

Current Parcel

●

Address Point

Existing on Street Path

Sidepath

Lot Number

Certified Survey Number

Subdivision Name

Leader Lines

Parcel Taxkey & Acreage

PLSS Boundary

PLSS Section

PLSS Quarter

Lot

Plat

Certified Survey Map

Assessor Plat; Cemetery Plat; Subdivision

Right-of-Way

Municipality

Local Road Labels

Local Road

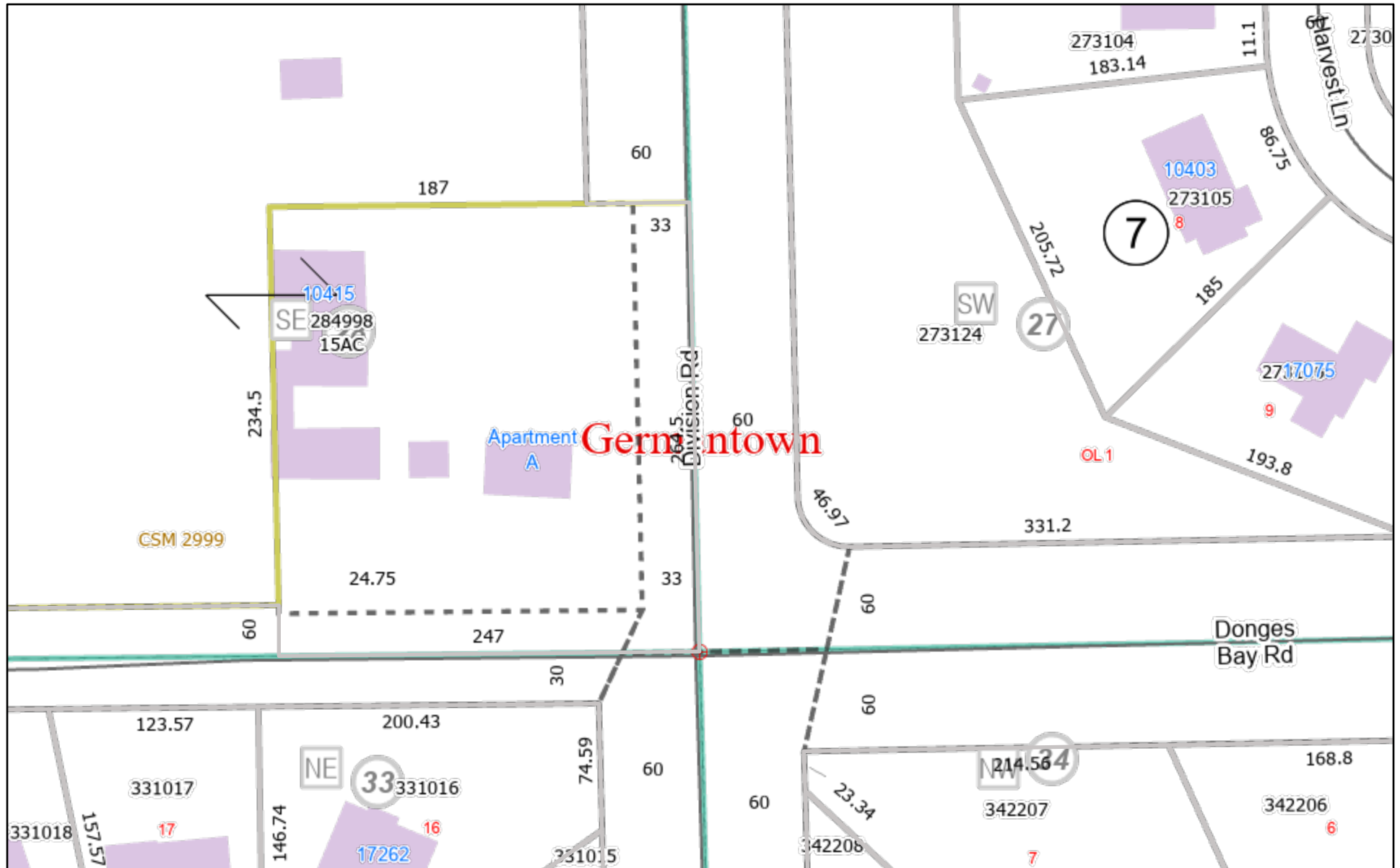
PLSS Monument

Landhook

Washington County GIS  
Washington County | Southeast Wisconsin Regional Planning Commission | Calvin Lawrence, Dennis Weise, Nina Rihn | Washington County, US Census Bureau |  
Page 27 of 213

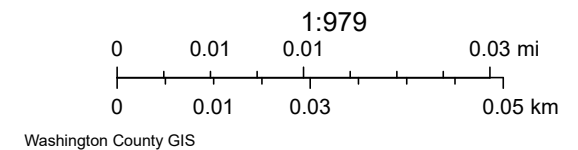


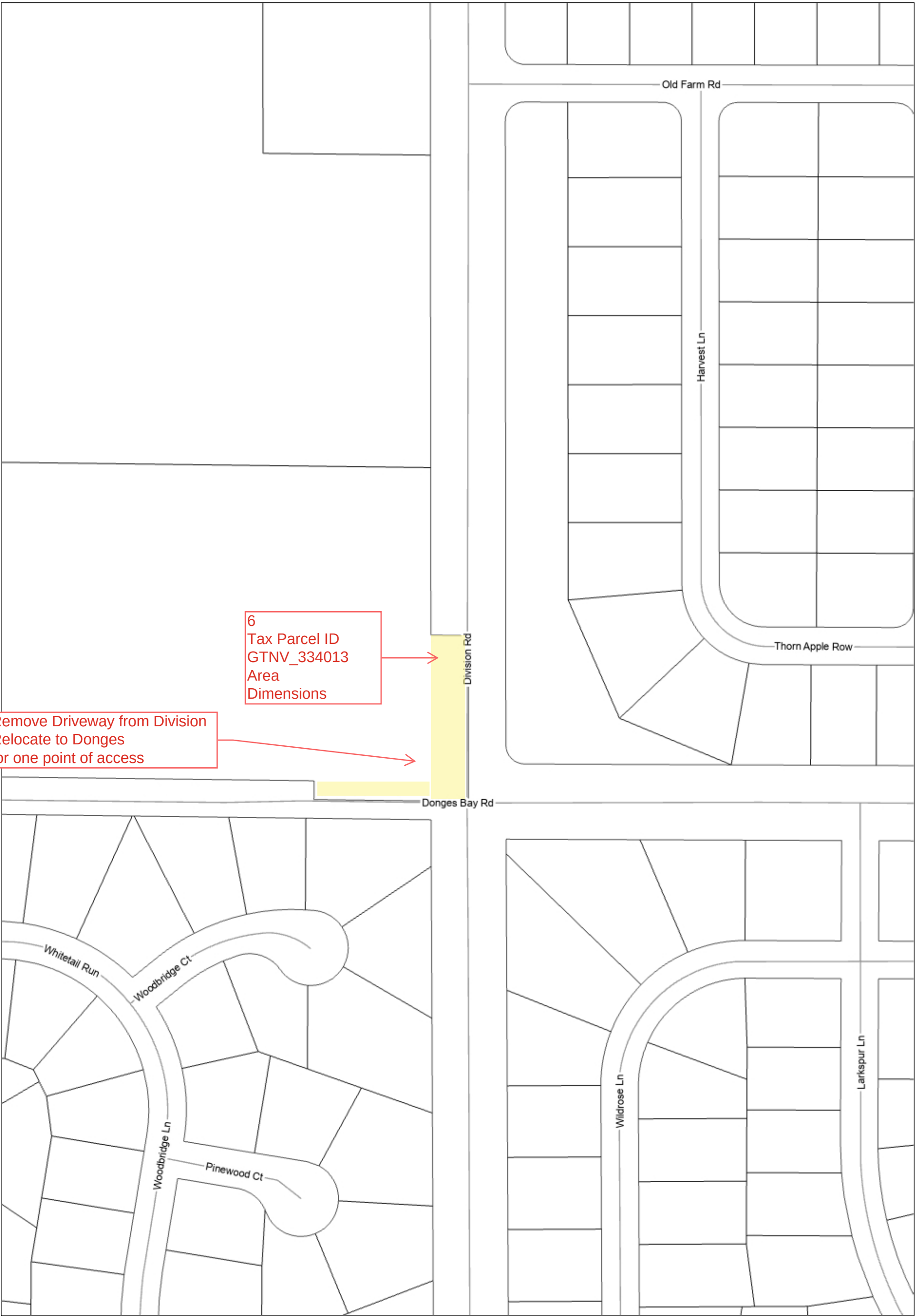
# Washington County, Wisconsin



12/27/2024, 2:17:33 AM

- |                                                                                                            |                                                                                                             |                                                                                                                               |                                                                                                       |
|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
|  Current Parcel          |  Leader Lines            |  Lot                                       |  Municipality      |
|  Address Point           |  Parcel Taxkey & Acreage |  Certified Survey Map                      |  Local Road Labels |
|  Lot Number              |  PLSS Boundary           |  Assessor Plat; Cemetery Plat; Subdivision |  Local Road        |
|  Certified Survey Number |  PLSS Section            |  Right-of-Way                              |  PLSS Monument     |
|  Subdivision Name        |  PLSS Quarter            |                                                                                                                               |  Landhook          |





Village of Germantown GIS  
Division Road Right of Way

DISCLAIMER:

This map is not a survey of the actual boundary of any property this map depicts.

The Village of Germantown Does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.



Village Of Germantown  
N112 W17001 Mequon Road  
Germantown, WI 53022  
262-250-4700



SCALE: 1 = 200'

Print Date: 12/4/2024



# Village of Germantown GIS Dongs Bay Road at Division Road

## DISCLAIMER:

This map is not a survey of the actual boundary of any property this map depicts.

The Village of Germantown Does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.



Village Of Germantown  
N112 W17001 Mequon Road  
Germantown, WI 53022  
262-250-4700



SCALE: 1 = 100'

Print Date: 12/26/2024





Village of Germantown GIS  
**SAFETY IMPROVEMENT**  
**Donges Bay Road at Division Road**

**DISCLAIMER:**

This map is not a survey of the actual boundary of any property this map depicts.

The Village of Germantown Does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.



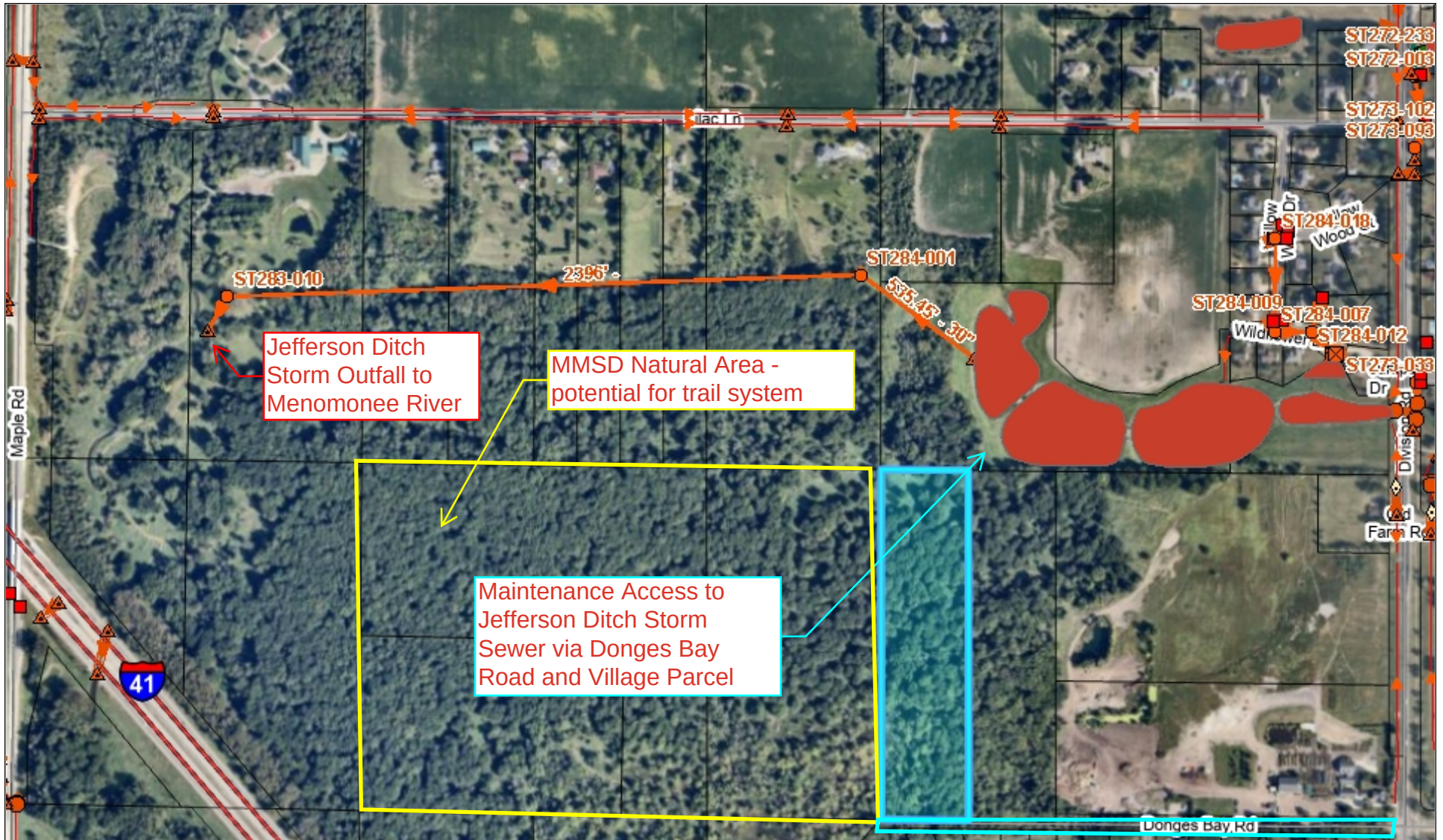
Village Of Germantown  
 N112 W17001 Mequon Road  
 Germantown, WI 53022  
 262-250-4700



SCALE: 1 = 100'

Print Date: 12/26/2024





## Village of Germantown GIS

### DISCLAIMER:

This map is not a survey of the actual boundary of any property this map depicts.

The Village of Germantown Does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.



Village Of Germantown  
N112 W17001 Mequon Road  
Germantown, WI 53022  
262-250-4700



SCALE: 1 = 740'

Print Date: 12/27/2024



Washington County, Wisconsin



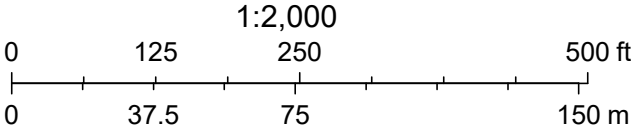
12/27/2024, 2:39:34 AM

- Current Parcel
- Address Point
- Lot Number
- Certified Survey Number

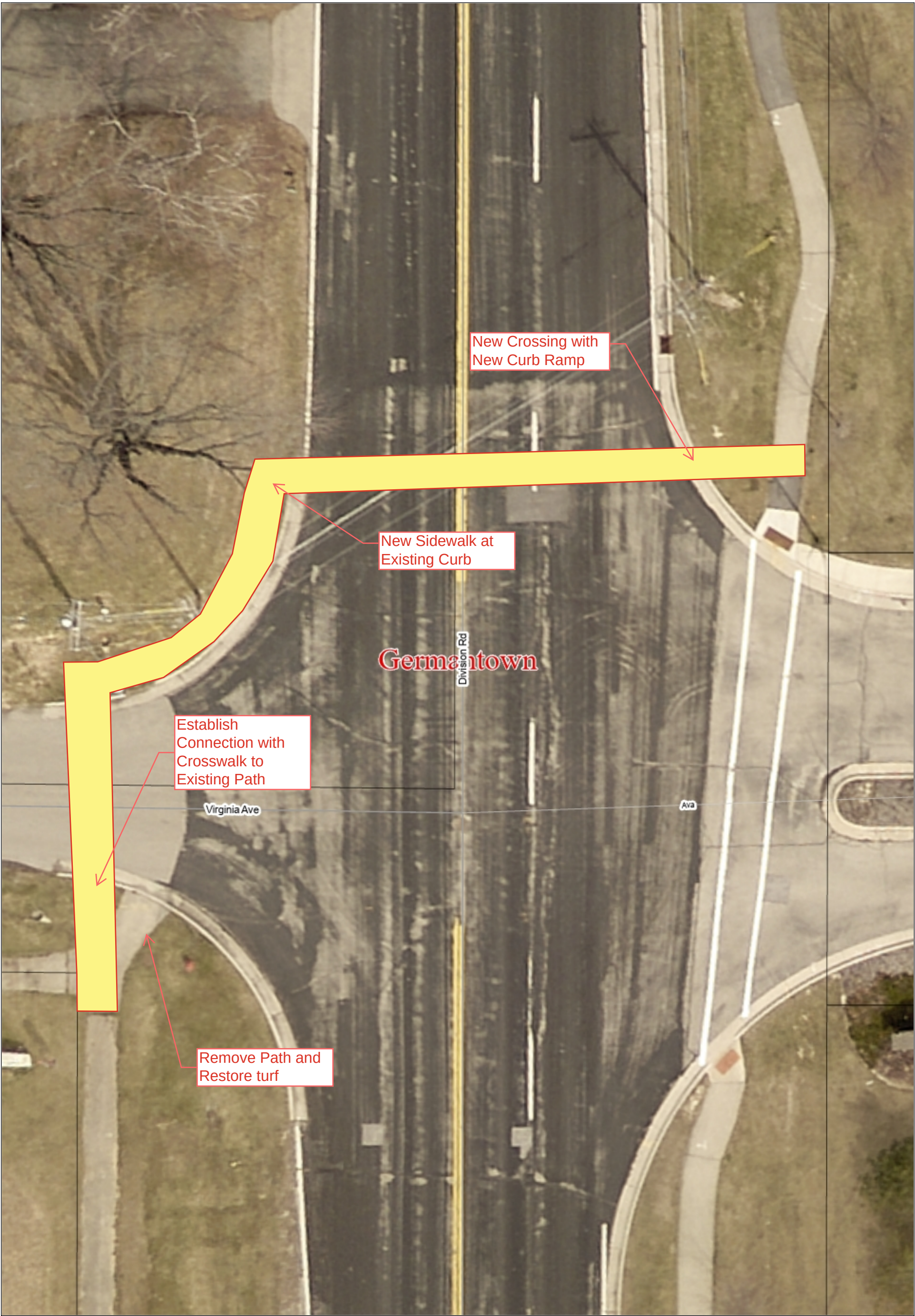
- Subdivision Name
- Parcel Taxkey & Acreage
- PLSS Boundary
- PLSS Section

- PLSS Quarter
- Lot
- Plat
- Certified Survey Map
- Assessor Plat; Cemetery Plat; Subdivision

- Right-of-Way
- Municipality
- Local Road Labels
- Local Road
- PLSS Monument







Village of Germantown GIS  
Division at Virginia

DISCLAIMER:

This map is not a survey of the actual boundary of any property this map depicts.

The Village of Germantown Does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.



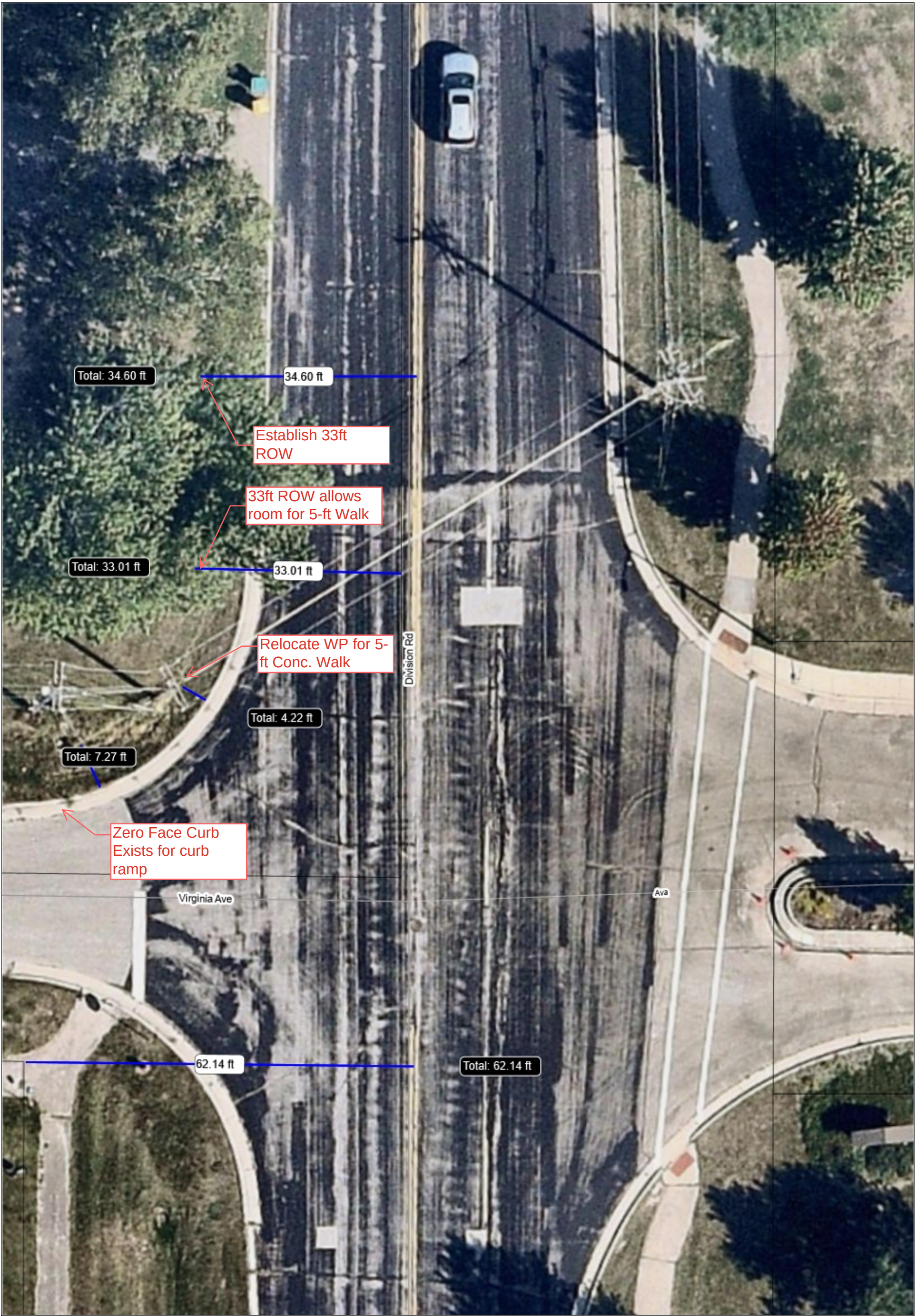
Village Of Germantown  
N112 W17001 Mequon Road  
Germantown, WI 53022  
262-250-4700



SCALE: 1 = 20'

Print Date: 12/3/2024





Village of Germantown GIS  
Virginia Ave

DISCLAIMER:

This map is not a survey of the actual boundary of any property this map depicts.

The Village of Germantown Does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.



Village Of Germantown  
N112 W17001 Mequon Road  
Germantown, WI 53022  
262-250-4700

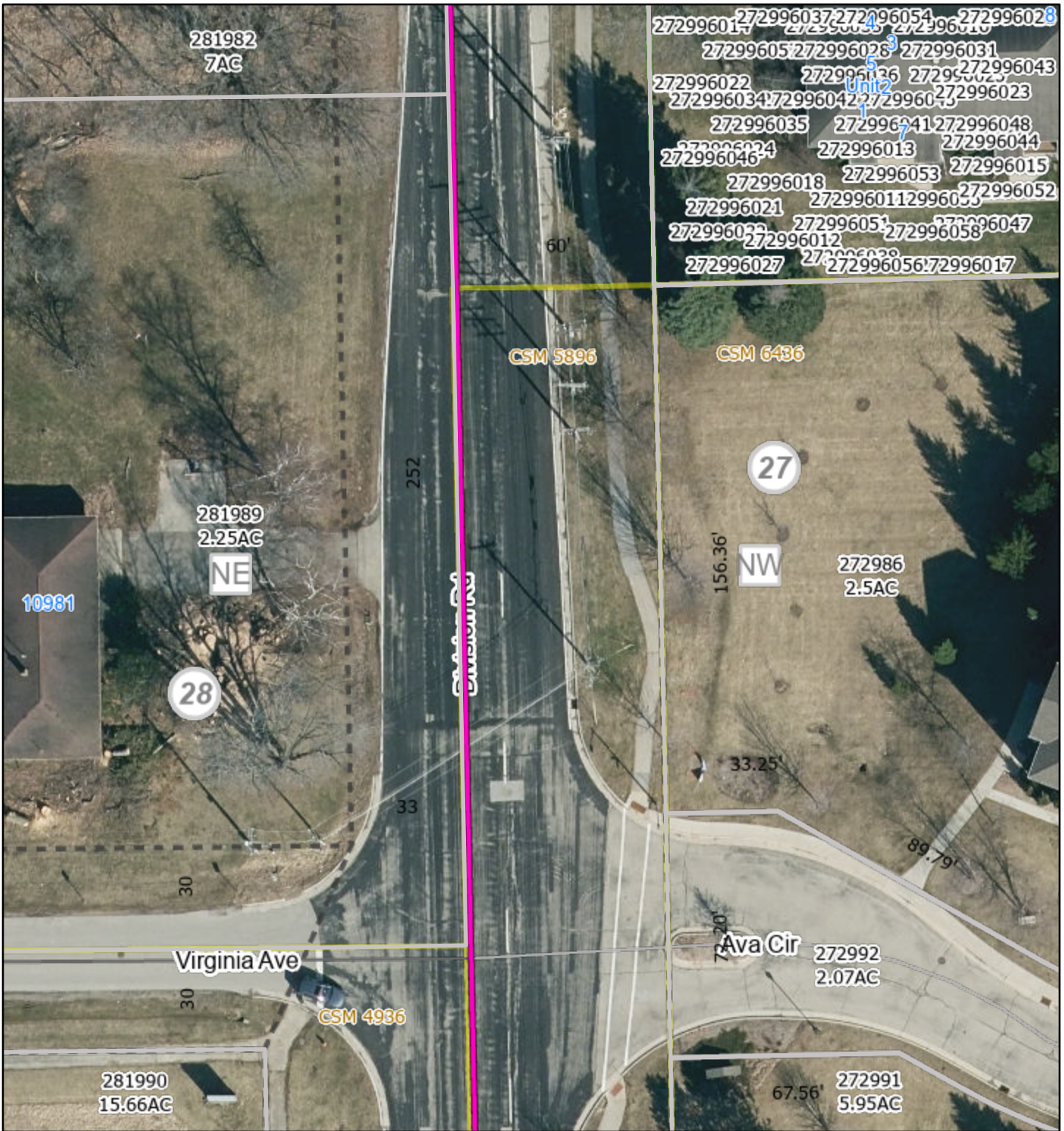


SCALE: 1 = 20'

Print Date: 12/26/2024

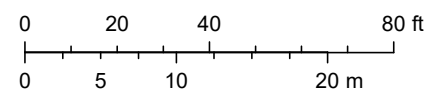
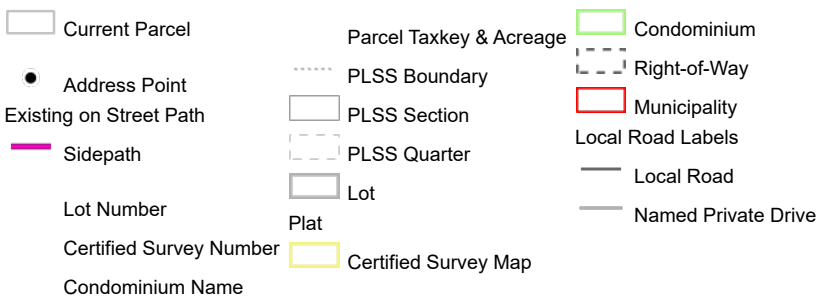


# Washington County, Wisconsin



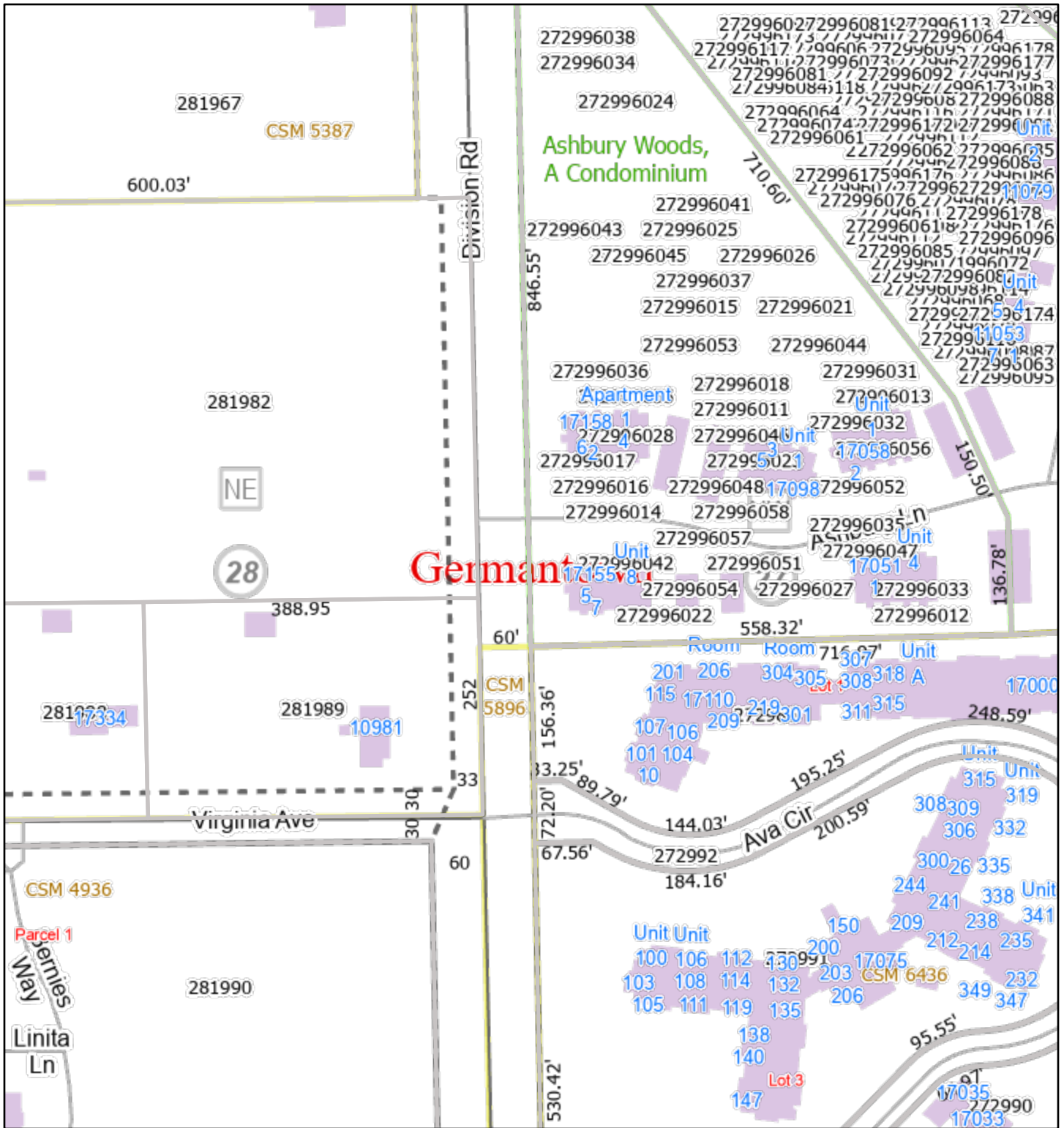
12/27/2024, 2:30:12 AM

1:500





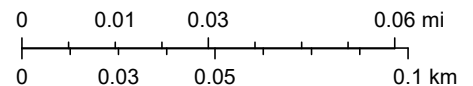
# Washington County, Wisconsin



12/27/2024, 2:21:11 AM

1:1,959

- Current Parcel
- PLSS Boundary
- Condominium
- PLSS Section
- Right-of-Way
- PLSS Quarter
- Municipality
- Lot
- Plat
- Certified Survey Map
- Parcel Taxkey & Acreage
- Local Road Labels
- Local Road
- Named Private Drive



Washington County GIS



Village of Germantown GIS  
Division Road Right of Way

DISCLAIMER:

This map is not a survey of the actual boundary of any property this map depicts.

The Village of Germantown Does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.



Village Of Germantown  
N112 W17001 Mequon Road  
Germantown, WI 53022  
262-250-4700



SCALE: 1 = 200'

Print Date: 12/4/2024





Village of Germantown GIS  
Division Road Right of Way

DISCLAIMER:

This map is not a survey of the actual boundary of any property this map depicts.

The Village of Germantown Does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.

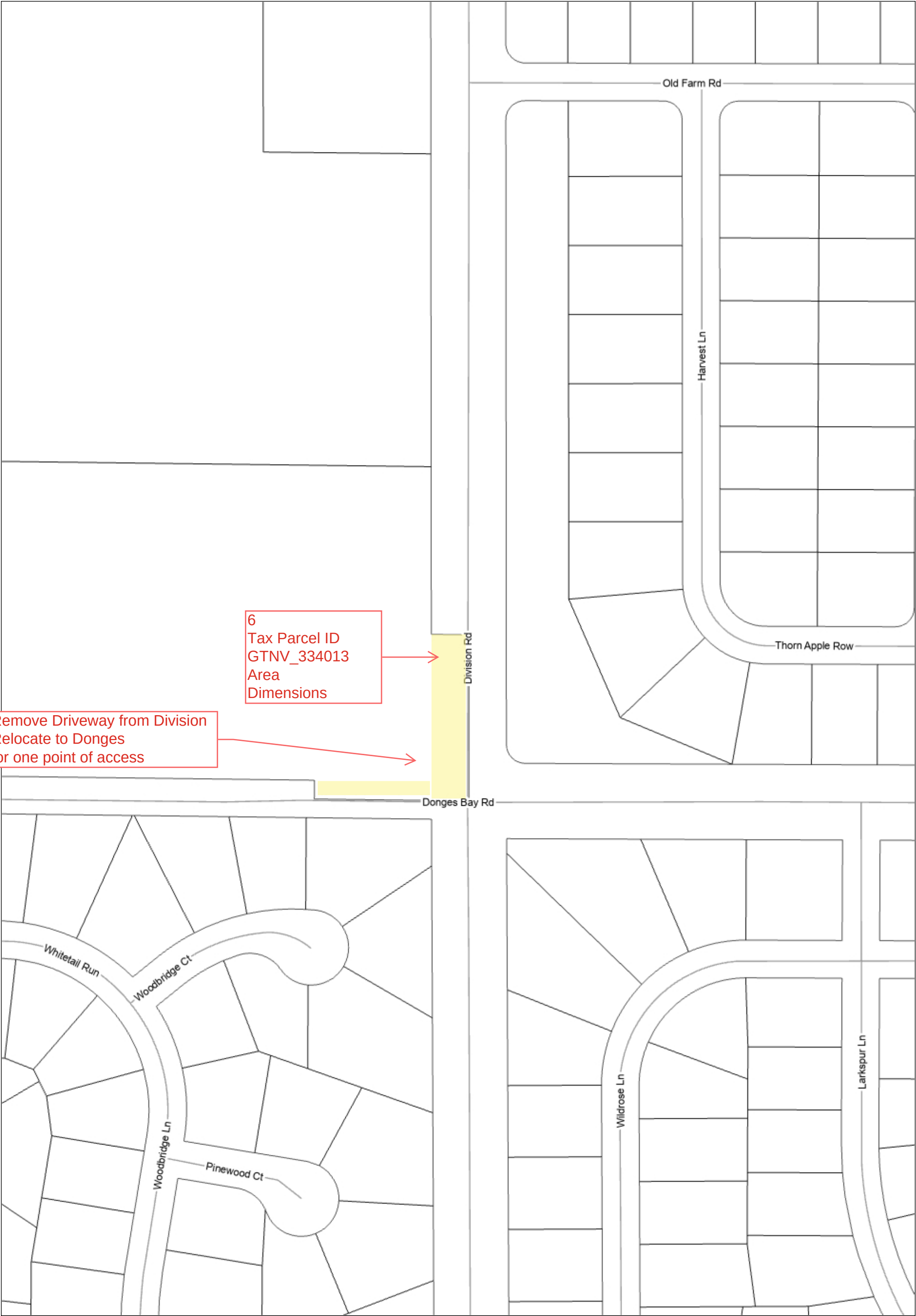


Village Of Germantown  
N112 W17001 Mequon Road  
Germantown, WI 53022  
262-250-4700



SCALE: 1 = 200'

Print Date: 12/4/2024



Village of Germantown GIS  
Division Road Right of Way

DISCLAIMER:

This map is not a survey of the actual boundary of any property this map depicts.

The Village of Germantown Does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.

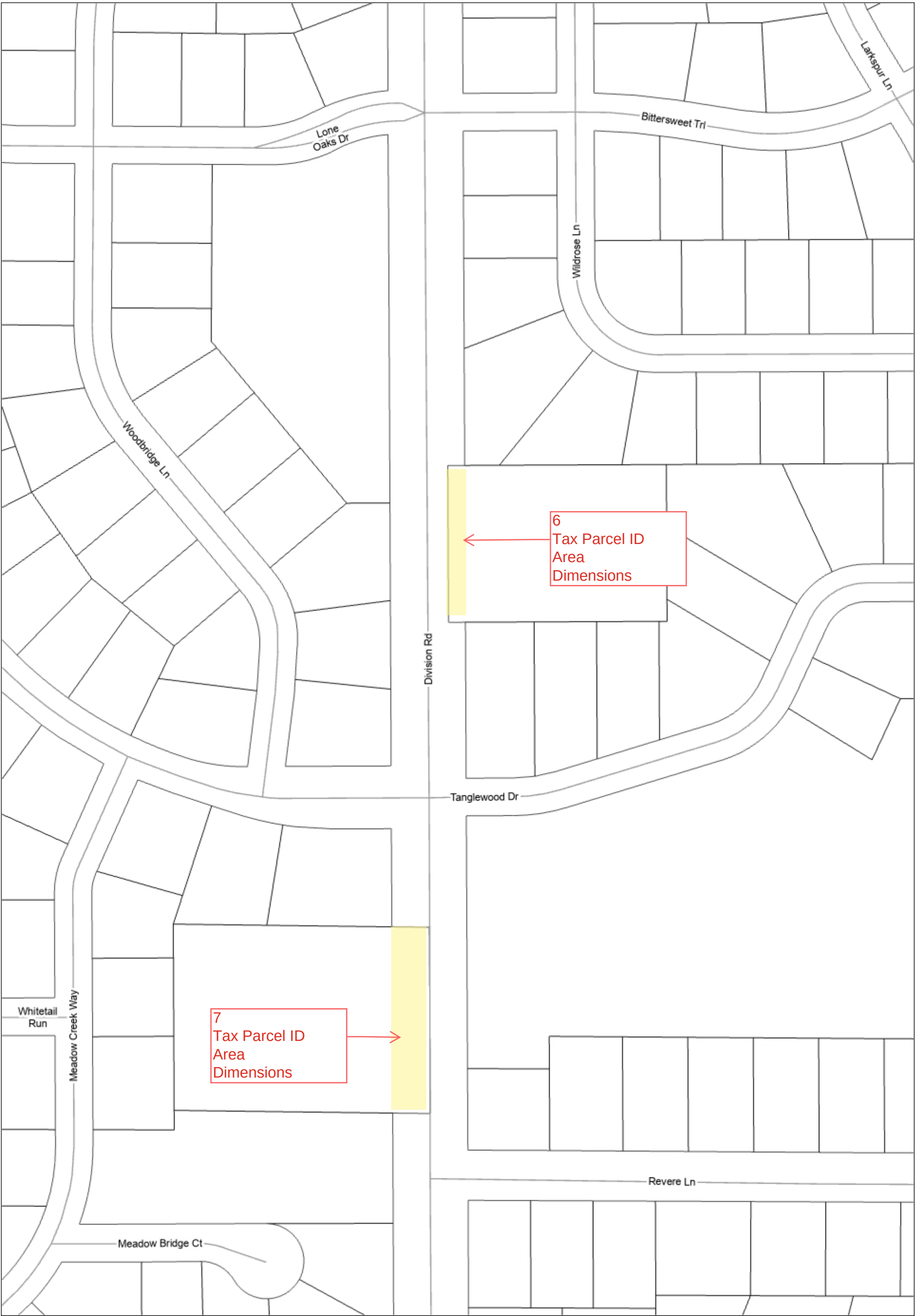


Village Of Germantown  
N112 W17001 Mequon Road  
Germantown, WI 53022  
262-250-4700



SCALE: 1 = 200'

Print Date: 12/4/2024



Village of Germantown GIS  
Division Road Right of Way

DISCLAIMER:

This map is not a survey of the actual boundary of any property this map depicts.

The Village of Germantown Does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.



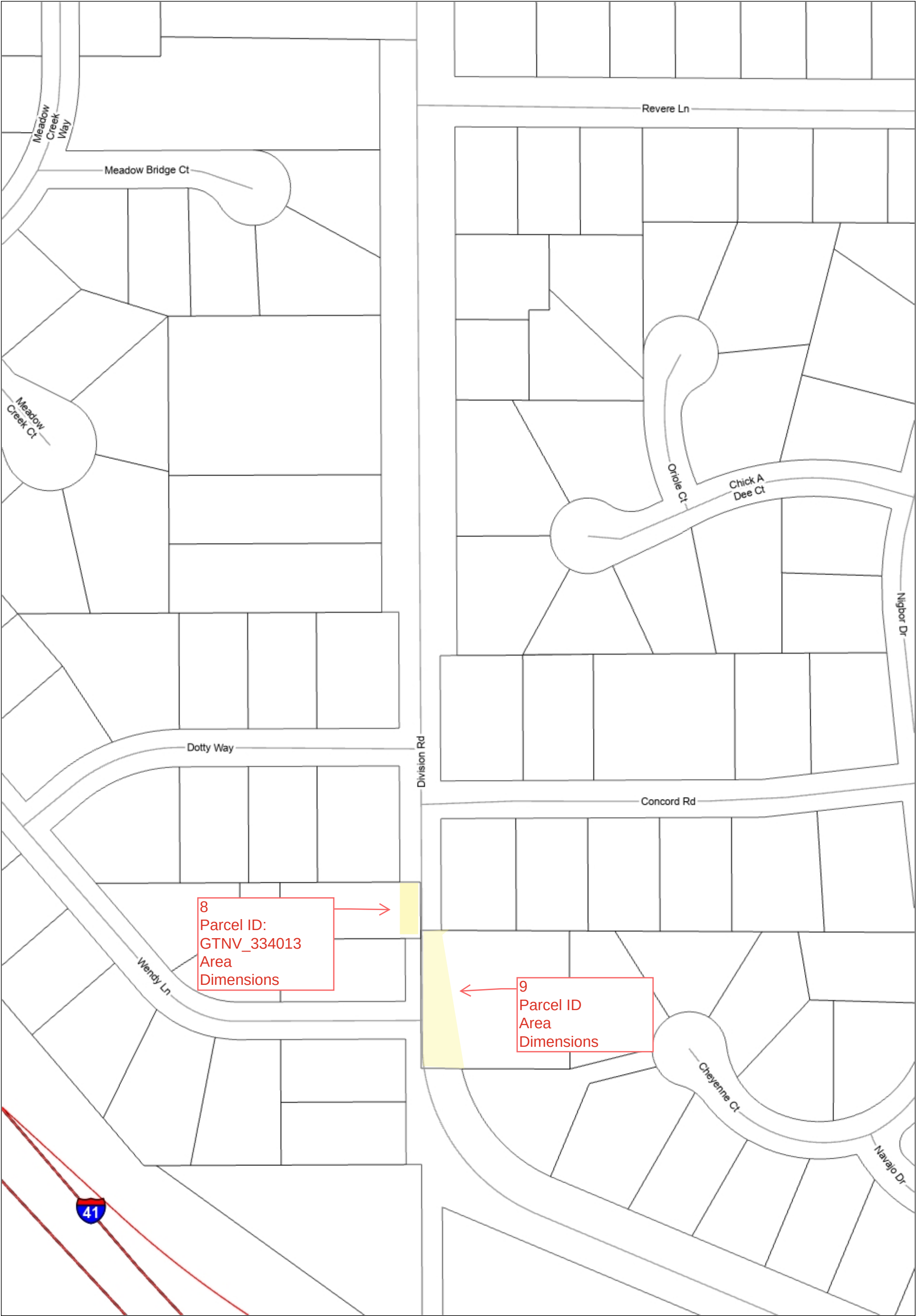
Village Of Germantown  
N112 W17001 Mequon Road  
Germantown, WI 53022  
262-250-4700



SCALE: 1 = 200'

Print Date: 12/4/2024





Village of Germantown GIS  
Division Road Right of Way

DISCLAIMER:

This map is not a survey of the actual boundary of any property this map depicts.

The Village of Germantown Does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.



Village Of Germantown  
N112 W17001 Mequon Road  
Germantown, WI 53022  
262-250-4700



SCALE: 1 = 200'

Print Date: 12/4/2024

## **BUSINESS OF THE PUBLIC WORKS & HIGHWAYS COMMITTEE**

MEETING DATE: January 8, 2025

PLACEMENT: Action Item

ITEM TITLE: Approval of the 2025 paving plan, the 10-Year Road program, and the 5-Year Sealcoating Program.

SUBMITTED BY: Matthew Mortwedt, Public Works Director

### SUMMARY EXPLANATION:

Staff is presenting the Updated Annual Road Program for review and discussion. In previous years a 5-year outlook was provided for the Paving Projects and Seal Coating Projects. This year staff is introducing a 10-year list of Paving Projects, and a 5-year list of Seal Coating projects. These lists are attached. The award of the WisDOT Agricultural Road Improvement Program selection is reflected in the attached plan.

The prioritization is based on road condition, known as the Pavement Surface Evaluation and Ratings. These are commonly referred to as "PASER ratings" where these ratings go from 1 to 10. A PASER=10 is new condition, and a PASER=1 is very poor and needs replacement. These PASER ratings are posted on the Village's website: <https://www.germantownwi.gov/262/PASER-Reports>

Roads with PASER <4 are prioritized, where roads with PASER=3 are the predominant road classification included on the list for pulverize and reconstruct, with select excavation below subgrade. Mill and Overlay projects are also identified for roads, where the major subgrade and base work is not required, however select excavation below subgrade is included.

The Seal Coating work is for roads where the PASER rating typically ranges from 5~8. This Seal Coating work is to extend the life cycle of the roads and reduce the rate of pavement deterioration. This Seal Coating of roads is a common practice incorporated throughout Wisconsin and the region, and Village staff recommends continuing with seal coating as part of the Village's pavement management system.

### ATTACHMENT:

1. Ex A - 10 Year Road 2025-2035
2. 5 Year Sealcoat 2025-2029

### STAFF RECOMMENDATION:

Positive recommendation to the Village Board for approval of the 2025 paving plan, the 10-Year Road program, and the 5-Year Seal Coat program.

### ACTION BY Committee:





# VILLAGE OF GERMANTOWN 10 YEAR PAVING PROGRAM

- |      |      |
|------|------|
| 2025 | 2026 |
| 2027 | 2028 |
| 2029 | 2030 |
| 2031 | 2032 |
| 2033 | 2034 |

HOLY HILL RD

FRIESTADT RD

PILGRIM RD

MEQUON RD

DIVISION RD

STH 175

141/45

STH 145



| 2025 - PAVING PROGRAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                 |                  |                  |                 | Reconstruction Modifier*: \$107/LF<br>Mill & Overlay Modifier*: \$87/LF |                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------|------------------|-----------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Begin Termini   | End Termini      | Road Length (LF) | 2023 PASER      | Estimated Cost                                                          | Comments                                                                                                                |
| Maple Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Lannon Rd       | I41 Bridge       | 2750             | 3               | \$239,250.00                                                            | Mill and Overlay                                                                                                        |
| Emmer Rd                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | River Crest Dr  | CTH Q            | 750              | 4               | \$80,250                                                                |                                                                                                                         |
| Sylvan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Pilgrim Rd      | Montgomery Dr    | 850              | 3               | \$432,000.00                                                            | Montgomery Square/Catie Vista                                                                                           |
| Montgomery                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Sylvan Cir      | Mequon Rd        | 1450             | 3               |                                                                         | Significant Curb/Drainage Work                                                                                          |
| Francese                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Sylvan Cir      | Pilgrim Rd       | 520              | 3               |                                                                         |                                                                                                                         |
| Francese                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Pilgrim Rd      | Termini          | 390              | 3               |                                                                         |                                                                                                                         |
| Wagon Tr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Jefferson Ditch | Donges Bay Rd    | 2000             | 3               | \$500,000.00                                                            | Significant Curb Work                                                                                                   |
| Squire Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Mequon Rd       | Main St          | 2600             | 4               | \$270,741.50                                                            | Mill & Overlay                                                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |                  |                  |                 | -\$63,000.00                                                            | LRIP Reimbursement                                                                                                      |
| Old 145                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | STH 145         | Termini          | 422              | 3               | \$46,420.00                                                             | Use as an alternate if needed.                                                                                          |
| Pleasant View Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Friestadt Rd    | Bonniwell Rd     | 10560            | 3               | \$300,000.00                                                            | ONLY IF RECEIVED ARIP 90/10 FUNDING. INCLUDES CULVERT WORK.                                                             |
| Rockfield Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Division Rd     | Pleasant View Dr | 7920             | 3               |                                                                         |                                                                                                                         |
| Catchbasin on Park                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                 |                  |                  |                 | \$15,000.00                                                             | Install Catchbasin on Park Ave. in response to drainage concern.                                                        |
| Fire Station Parking Lot                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                 |                  |                  |                 |                                                                         | Included in Bid for possible better bid price                                                                           |
| Division Rd                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Mequon Rd       | Jefferson Ditch  |                  |                 |                                                                         | Phase 1. Reconstruction funded by other sources                                                                         |
| * The modifiers are estimates based on average roadway costs across previous years per linear foot of roadway completed, with inflation increases year-to-year. This approximation includes allowances for curb and gutter, some storm utility work, base patching within the roadway, and restoration. Reconstruction indicates full pulverization or removal of existing pavement, base patching, and repaving. A Mill & Overlay is a 2" typical removal of pavement, with a 2" replacement of pavement in-kind. |                 |                  |                  | Total Base Est: | \$1,820,662                                                             | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |

| 2025 - PAVING PROGRAM    |                 |                  |                  |                 | Reconstruction Modifier*: \$107/LF<br>Mill & Overlay Modifier*: \$87/LF |                                                                                                                         |
|--------------------------|-----------------|------------------|------------------|-----------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Road                     | Begin Termini   | End Termini      | Road Length (LF) | 2023 PASER      | Estimated Cost                                                          | Comments                                                                                                                |
| Sylvan                   | Pilgrim Rd      | Montgomery Dr    | 850              | 3               | \$440,000.00                                                            | Montgomery Square/Catie Vista                                                                                           |
| Francesce                | Sylvan Cir      | Pilgrim Rd       | 520              | 3               |                                                                         | Significant Curb/Drainage Work                                                                                          |
|                          |                 |                  |                  |                 |                                                                         |                                                                                                                         |
| Wagon Tr                 | Jefferson Ditch | Donges Bay Rd    | 2000             | 3               | \$500,000.00                                                            | Significant Curb Work                                                                                                   |
| Squire Drive             | Mequon Rd       | Main St          | 2600             | 4               | \$270,741.50                                                            | Mill & Overlay                                                                                                          |
|                          |                 |                  |                  |                 | -\$63,000.00                                                            | LRIP Reimbursement                                                                                                      |
| Pleasant View Drive      | Friestadt Rd    | Bonniwell Rd     | 10560            | 3               | \$300,000.00                                                            | ONLY IF RECEIVED ARIP 90/10 FUNDING. INCLUDES CULVERT WORK.                                                             |
| Rockfield Road           | Division Rd     | Pleasant View Dr | 7920             | 3               |                                                                         |                                                                                                                         |
| Catchbasin on Park       |                 |                  |                  |                 | \$15,000.00                                                             | Install Catchbasin on Park Ave. in response to drainage concern.                                                        |
| Fire Station Parking Lot |                 |                  |                  |                 |                                                                         | Included in Bid for possible better bid price                                                                           |
| Division Rd              | Mequon Rd       | Jefferson Ditch  |                  |                 |                                                                         | Phase 1. Reconstruction funded by other sources                                                                         |
|                          |                 |                  |                  | Total Base Est: | \$1,462,742                                                             | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |

\* The modifiers are estimates based on average roadway costs across previous years per linear foot of roadway completed, with inflation increases year-to-year. This approximation includes allowances for curb and gutter, some storm utility work, base patching within the roadway, and restoration. Reconstruction indicates full pulverization or removal of existing pavement, base patching, and repaving. A Mill & Overlay is a 2" typical removal of pavement, with a 2" replacement of pavement in-kind.



| 2026 - PAVING PROGRAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                 |               |                  |            | Reconstruction Modifier*: \$108/LF<br>Mill & Overlay Modifier*: \$88/LF |                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------|------------------|------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Begin Termini   | End Termini   | Road Length (LF) | 2023 PASER | Estimated Cost                                                          | Comments                                                                                                                |
| Heritage Hills Pky.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Lincoln Dr.     | South Loop    | 3300             | 3          | \$464,400                                                               | Heritage Hills                                                                                                          |
| Heritage Hills Cul-de-sacs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                 |               | 1000             | 3          |                                                                         |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |               |                  |            |                                                                         |                                                                                                                         |
| Esquire Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Western Ave     | Termini       | 1200             | 3          | \$599,500.00                                                            | Esquire Estates<br><br>Full Depth Mill and Reconstruct                                                                  |
| Kings Way                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Western Ave     | Esquire Ct    | 2000             | 3          |                                                                         |                                                                                                                         |
| Kings Ct                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Kings Way       | Termini       | 300              | 3          |                                                                         |                                                                                                                         |
| Queens Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | North Termini   | South Termini | 500              | 3          |                                                                         |                                                                                                                         |
| Western Avenue                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Mequon Rd       | Hawthorne Dr  | 1500             | 3          |                                                                         |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |               |                  |            |                                                                         |                                                                                                                         |
| Roger Dr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Termini         | Donges Bay Rd | 1250             | 3          | \$326,350.00                                                            | Donges Bay Village                                                                                                      |
| Regency Way                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | North           | South         | 1800             | 3          |                                                                         |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |               |                  |            |                                                                         |                                                                                                                         |
| Fond Du Lac Ave                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Pilgrim Rd      | Termini       | 845              | 3          | \$168,410.00                                                            | Use in 2025 if no ARIP Funding                                                                                          |
| Gettysburg Dr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Fond Du Lac Ave | Potomac Cir   | 686              | 4          |                                                                         |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |               |                  |            |                                                                         |                                                                                                                         |
| APPLY FOR LRIP APPROVAL FOR MEQUON ROAD (STH 175 TO HILLTOP) TO BE CONSTRUCTED IN 2027                                                                                                                                                                                                                                                                                                                                                                                                                             |                 |               |                  |            |                                                                         |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |               |                  |            |                                                                         |                                                                                                                         |
| Division Road                      Jefferson Ditch                      Donges Bay Rd                                                                                                                                                                                                                                                                                                                                                                                                                              |                 |               |                  |            | Phase 2. Reconstruction funded by other sources                         |                                                                                                                         |
| * The modifiers are estimates based on average roadway costs across previous years per linear foot of roadway completed, with inflation increases year-to-year. This approximation includes allowances for curb and gutter, some storm utility work, base patching within the roadway, and restoration. Reconstruction indicates full pulverization or removal of existing pavement, base patching, and repaving. A Mill & Overlay is a 2" typical removal of pavement, with a 2" replacement of pavement in-kind. |                 |               |                  | Total Est: | \$1,558,660                                                             | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |

| 2026 - PAVING PROGRAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                 |               |                  |            | Reconstruction Modifier*: \$108/LF<br>Mill & Overlay Modifier*: \$88/LF |                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------|------------------|------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Begin Termini   | End Termini   | Road Length (LF) | 2023 PASER | Estimated Cost                                                          | Comments                                                                                                                |
| Heritage Hills Pky.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Lincoln Dr.     | South Loop    | 3300             | 3          | \$464,400                                                               | Heritage Hills                                                                                                          |
| Heritage Hills Cul-de-sacs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                 |               | 1000             | 3          |                                                                         |                                                                                                                         |
| Esquire Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Western Ave     | Termini       | 1200             | 3          | \$599,500.00                                                            | Esquire Estates<br><br>Full Depth Mill and Reconstruct                                                                  |
| Kings Way                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Western Ave     | Esquire Ct    | 2000             | 3          |                                                                         |                                                                                                                         |
| Kings Ct                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Kings Way       | Termini       | 300              | 3          |                                                                         |                                                                                                                         |
| Queens Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | North Termini   | South Termini | 500              | 3          |                                                                         |                                                                                                                         |
| Western Avenue                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Mequon Rd       | Hawthorne Dr  | 1500             | 3          |                                                                         |                                                                                                                         |
| Old 145                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | STH 145         | Termini       | 422              | 3          | \$37,980.00                                                             | Use as an alternate if needed.                                                                                          |
| Montgomery                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Sylvan Cir      | Mequon Rd     | 1450             | 3          | \$126,150.00                                                            |                                                                                                                         |
| Francese                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Pilgrim Rd      | Termini       | 390              | 3          | \$33,930.00                                                             |                                                                                                                         |
| Maple Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Lannon Rd       | I41 Bridge    | 2750             | 3          | \$200,000.00                                                            | Mill and Overlay                                                                                                        |
| Emmer Rd                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | River Crest Dr  | CTH Q         | 750              | 4          | \$100,000                                                               | Add new curb along south edge of roadway                                                                                |
| APPLY FOR LRIP APPROVAL FOR MEQUON ROAD (STH 175 TO HILLTOP) TO BE CONSTRUCTED IN 2027                                                                                                                                                                                                                                                                                                                                                                                                                             |                 |               |                  |            |                                                                         |                                                                                                                         |
| Division Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Jefferson Ditch | Donges Bay Rd |                  |            |                                                                         | Phase 2. Reconstruction funded by other sources                                                                         |
| * The modifiers are estimates based on average roadway costs across previous years per linear foot of roadway completed, with inflation increases year-to-year. This approximation includes allowances for curb and gutter, some storm utility work, base patching within the roadway, and restoration. Reconstruction indicates full pulverization or removal of existing pavement, base patching, and repaving. A Mill & Overlay is a 2" typical removal of pavement, with a 2" replacement of pavement in-kind. |                 |               |                  |            | <b>Total Est:</b> \$1,561,960                                           | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |



| 2027 - PAVING PROGRAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |               |                |                  |            | Reconstruction Modifier*: \$109/LF<br>Mill & Overlay Modifier*: \$89/LF |                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------|------------------|------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Begin Termini | End Termini    | Road Length (LF) | 2023 PASER | Estimated Cost                                                          | Comments                                                                                                                |
| Carnegie Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Mequon Rd     | Maple Rd       | 1500             | 4          | \$165,000.00                                                            | Full Depth Pavement Removal, Consider Concrete Upgrade                                                                  |
| Lincoln Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Bel Aire Ln   | Preserve Pkwy  | 1625             | 4          | \$177,125.00                                                            | Full Depth Mill and Reconstruct                                                                                         |
| Heritage Parkway                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Bel Aire Ln   | Lincoln Dr     | 1000             | 4          | \$109,000.00                                                            |                                                                                                                         |
| Heritage Pkwy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Bell Aire Ln  | Drainageway    | 1700             | 3          | \$610,200                                                               | Heritage Hills North                                                                                                    |
| Lincoln Dr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Bell Aire Ln  | Termini        | 2200             | 4          |                                                                         |                                                                                                                         |
| Harrison Ave                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Monroe Ct     | Termini        | 850              | 4          |                                                                         |                                                                                                                         |
| Monroe Ct                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Termini       | Termini        | 900              | 4          |                                                                         |                                                                                                                         |
| Division Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Main St       | Cove Ct        | 1000             | 3          | \$89,000.00                                                             | 50% Full depth 50% mill and overlay between Main and Mequon                                                             |
| Division Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Cove Ct       | Mequon Rd      | 1500             | 3          | \$163,500.00                                                            |                                                                                                                         |
| Mequon Rd.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | I-41 Bridge   | Meeker Hill Ln | 3200             | 3          | \$277,400                                                               | Reconstruct and repave, LRIP 63K                                                                                        |
| Meeker Hill Lane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | STH 175       | STH 175        | 1500             | 3          | \$162,000                                                               |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                |                  |            | -\$63,000.00                                                            | LRIP Reimbursement                                                                                                      |
| * The modifiers are estimates based on average roadway costs across previous years per linear foot of roadway completed, with inflation increases year-to-year. This approximation includes allowances for curb and gutter, some storm utility work, base patching within the roadway, and restoration. Reconstruction indicates full pulverization or removal of existing pavement, base patching, and repaving. A Mill & Overlay is a 2" typical removal of pavement, with a 2" replacement of pavement in-kind. |               |                |                  |            | <b>Total Est.:</b> \$1,690,225                                          | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |

| 2027 - PAVING PROGRAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                 |                |                  |            |                         | Reconstruction Modifier*: \$109/LF                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------|------------------|------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |                |                  |            |                         | Mill & Overlay Modifier*: \$89/LF                                                                                       |
| Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Begin Termini   | End Termini    | Road Length (LF) | 2023 PASER | Estimated Cost          | Comments                                                                                                                |
| Lincoln Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Bel Aire Ln     | Preserve Pkwy  | 1625             | 4          | \$177,125.00            | Full Depth Mill and Reconstruct                                                                                         |
| Heritage Parkway                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Bel Aire Ln     | Lincoln Dr     | 1000             | 4          | \$109,000.00            |                                                                                                                         |
| Heritage Pkwy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Bell Aire Ln    | Drainageway    | 1700             | 3          | \$610,200               | Heritage Hills North                                                                                                    |
| Lincoln Dr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Bell Aire Ln    | Termini        | 2200             | 4          |                         |                                                                                                                         |
| Harrison Ave                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Monroe Ct       | Termini        | 850              | 4          |                         |                                                                                                                         |
| Monroe Ct                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Termini         | Termini        | 900              | 4          |                         |                                                                                                                         |
| Division Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Main St         | Cove Ct        | 1000             | 3          | \$89,000.00             | 50% Full depth 50% mill and overlay between Main and Mequon                                                             |
| Division Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Cove Ct         | Mequon Rd      | 1500             | 3          | \$163,500.00            |                                                                                                                         |
| Mequon Rd.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | I-41 Bridge     | Meeker Hill Ln | 3200             | 3          | \$277,400               | Reconstruct and repave, LRIP 63K                                                                                        |
| Meeker Hill Lane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | STH 175         | STH 175        | 1500             | 3          | \$162,000               |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |                |                  |            | -\$63,000.00            | LRIP Reimbursement                                                                                                      |
| Fond Du Lac Ave                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Pilgrim Rd      | Termini        | 845              | 3          | \$168,410.00            |                                                                                                                         |
| Gettysburg Dr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Fond Du Lac Ave | Potomac Cir    | 686              | 4          |                         |                                                                                                                         |
| * The modifiers are estimates based on average roadway costs across previous years per linear foot of roadway completed, with inflation increases year-to-year. This approximation includes allowances for curb and gutter, some storm utility work, base patching within the roadway, and restoration. Reconstruction indicates full pulverization or removal of existing pavement, base patching, and repaving. A Mill & Overlay is a 2" typical removal of pavement, with a 2" replacement of pavement in-kind. |                 |                |                  |            | Total Est.: \$1,693,635 | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |



| 2028 - PAVING PROGRAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |               |                    |                  |            | Reconstruction Modifier*: \$110/LF<br>Mill & Overlay Modifier*: \$90/LF |                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------------|------------------|------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Begin Termini | End Termini        | Road Length (LF) | 2023 PASER | Estimated Cost                                                          | Comments                                                                                                                |
| Sunny View Ave                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Roberrts Dr   | Williams Dr        | 920              | 3          | \$584,820.00                                                            | Pleasant View<br><br>Reconstruct and repave. Misc ditch work. Coordinate with utility relays.                           |
| Daniels Dr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Roberts Dr    | N of Williams Dr   | 1110             | 3          |                                                                         |                                                                                                                         |
| Kurt Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Roberts Drive | Termini            | 1115             | 3          |                                                                         |                                                                                                                         |
| Williams Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Pilgrim Rd    | Kurt Dr            | 1120             | 3          |                                                                         |                                                                                                                         |
| Roberts Dr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Sunny View    | Valley Dr          | 1150             | 3          |                                                                         |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                    |                  |            |                                                                         |                                                                                                                         |
| McCormick Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Friestadt Rd  | Mequon Rd          | 5280             | 3          | \$580,800.00                                                            | Full Depth Pavement Removal, Consider Concrete Upgrade                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                    |                  |            |                                                                         |                                                                                                                         |
| Bel Aire Lane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | STH 145       | 300' W Heritage Pk | 2100             | 4          | \$228,900.00                                                            |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                    |                  |            |                                                                         |                                                                                                                         |
| Hilltop Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Friestadt Rd  | 1500' South        | 1500             | 3          | \$162,000                                                               | LRIP CANDIDATE - RECONSTRUCT AND REPAVE                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                    |                  |            | -\$64,000                                                               | LRIP REIMBURSEMENT                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                    |                  |            |                                                                         |                                                                                                                         |
| De'la Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Holy Hill Rd  | Holy Hill Rd       | 600              | 3          | \$64,200                                                                |                                                                                                                         |
| * The modifiers are estimates based on average roadway costs across previous years per linear foot of roadway completed, with inflation increases year-to-year. This approximation includes allowances for curb and gutter, some storm utility work, base patching within the roadway, and restoration. Reconstruction indicates full pulverization or removal of existing pavement, base patching, and repaving. A Mill & Overlay is a 2" typical removal of pavement, with a 2" replacement of pavement in-kind. |               |                    |                  |            | <b>Total Est: \$1,492,520</b>                                           | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |

| 2028 - PAVING PROGRAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |               |                    |                  |                                      | Reconstruction Modifier*: \$110/LF<br>Mill & Overlay Modifier*: \$90/LF |                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------------|------------------|--------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Begin Termini | End Termini        | Road Length (LF) | 2023 PASER                           | Estimated Cost                                                          | Comments                                                                                                                |
| Sunny View Ave                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Roberrts Dr   | Williams Dr        | 920              | 3                                    | \$584,820.00                                                            | Pleasant View<br><br>Reconstruct and repave. Misc ditch work. Coordinate with utility relays.                           |
| Daniels Dr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Roberts Dr    | N of Williams Dr   | 1110             | 3                                    |                                                                         |                                                                                                                         |
| Kurt Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Roberts Drive | Termini            | 1115             | 3                                    |                                                                         |                                                                                                                         |
| Williams Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Pilgrim Rd    | Kurt Dr            | 1120             | 3                                    |                                                                         |                                                                                                                         |
| Roberts Dr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Sunny View    | Valley Dr          | 1150             | 3                                    |                                                                         |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                    |                  |                                      |                                                                         |                                                                                                                         |
| McCormick Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Friestadt Rd  | Mequon Rd          | 5280             | 3                                    | \$580,800.00                                                            | Full Depth Pavement Removal, Consider Concrete Upgrade                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                    |                  |                                      |                                                                         |                                                                                                                         |
| Roger Dr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Termini       | Donges Bay Rd      | 1250             | 3                                    | \$326,350.00                                                            | Donges Bay Village                                                                                                      |
| Regency Way                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | North         | South              | 1800             | 3                                    |                                                                         |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                    |                  |                                      |                                                                         |                                                                                                                         |
| Bel Aire Lane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | STH 145       | 300' W Heritage Pk | 2100             | 4                                    | \$228,900.00                                                            |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                    |                  |                                      |                                                                         |                                                                                                                         |
| APPLY FOR LRIP APPROVAL FOR HILLTOP ROAD (2029)                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                    |                  |                                      |                                                                         |                                                                                                                         |
| * The modifiers are estimates based on average roadway costs across previous years per linear foot of roadway completed, with inflation increases year-to-year. This approximation includes allowances for curb and gutter, some storm utility work, base patching within the roadway, and restoration. Reconstruction indicates full pulverization or removal of existing pavement, base patching, and repaving. A Mill & Overlay is a 2" typical removal of pavement, with a 2" replacement of pavement in-kind. |               |                    |                  | <b>Total Est:</b> <b>\$1,720,870</b> |                                                                         | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                    |                  |                                      |                                                                         |                                                                                                                         |



| 2029 - PAVING PROGRAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |               |                   |                  |            | Reconstruction Modifier*: \$110/LF<br>Mill & Overlay Modifier*: \$90/LF |                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------|------------------|------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Begin Termini | End Termini       | Road Length (LF) | 2023 PASER | Estimated Cost                                                          | Comments                                                                                                                |
| Mequon Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Goldendale Rd | Carnegie Dr       | 3000             | 4          | \$270,000.00                                                            | Full Depth Pavement Removal, Consider Concrete Upgrade                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                   |                  |            |                                                                         |                                                                                                                         |
| Mohawk Dr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Donges Bay Rd | Council Bluffs Dr | 1500             | 3          | \$361,880                                                               | Yorktowne South<br><br>Reconstruct and repave                                                                           |
| Founders Ln                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Termini       | Mohawk Dr         | 460              | 4          |                                                                         |                                                                                                                         |
| Yorktowne Ln                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Termini       | Mohawk Dr         | 640              | 4          |                                                                         |                                                                                                                         |
| Flintlock Tr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Termini       | Mohawk Dr         | 720              | 4          |                                                                         |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                   |                  |            |                                                                         |                                                                                                                         |
| Country Aire Drive S.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Mequon Rd     | STH 145           | 3150             | 4          | \$346,500                                                               | Pulverize and Reconstruct                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                   |                  |            |                                                                         |                                                                                                                         |
| Squire Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Mequon Rd     | Hawthorne Dr      | 1450             | 4          | \$752,510                                                               | Full Depth Pavement Removal and Repaving. Significant Curb Work Needed.                                                 |
| Cromwell Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Catskill Ln   | Squire Rd         | 1000             | 4          |                                                                         |                                                                                                                         |
| Briarcliff Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Cromwell Rd   | Termini           | 475              | 4          |                                                                         |                                                                                                                         |
| Catskill Lane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Squire Rd     | Meadow Dr         | 866              | 4          |                                                                         |                                                                                                                         |
| * The modifiers are estimates based on average roadway costs across previous years per linear foot of roadway completed, with inflation increases year-to-year. This approximation includes allowances for curb and gutter, some storm utility work, base patching within the roadway, and restoration. Reconstruction indicates full pulverization or removal of existing pavement, base patching, and repaving. A Mill & Overlay is a 2" typical removal of pavement, with a 2" replacement of pavement in-kind. |               |                   |                  |            | <b>Total Est:</b> \$1,730,890                                           | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |

| 2029 - PAVING PROGRAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |               |                   |                  |                        |                | Reconstruction Modifier*: \$110/LF<br>Mill & Overlay Modifier*: \$90/LF                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------|------------------|------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------|
| Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Begin Termini | End Termini       | Road Length (LF) | 2023 PASER             | Estimated Cost | Comments                                                                                                                |
| Mequon Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Goldendale Rd | Carnegie Dr       | 3000             | 4                      | \$270,000.00   | Full Depth Pavement Removal, Consider Concrete Upgrade                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                   |                  |                        |                |                                                                                                                         |
| De'la Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Holy Hill Rd  | Holy Hill Rd      | 600              | 3                      | \$64,200       |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                   |                  |                        |                |                                                                                                                         |
| Mohawk Dr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Donges Bay Rd | Council Bluffs Dr | 1500             | 3                      | \$361,880      | Yorktowne South                                                                                                         |
| Founders Ln                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Termini       | Mohawk Dr         | 460              | 4                      |                | Reconstruct and repave                                                                                                  |
| Yorktowne Ln                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Termini       | Mohawk Dr         | 640              | 4                      |                |                                                                                                                         |
| Flintlock Tr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Termini       | Mohawk Dr         | 720              | 4                      |                |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                   |                  |                        |                |                                                                                                                         |
| Country Aire Drive S.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Mequon Rd     | STH 145           | 3150             | 4                      | \$346,500      | Pulverize and Reconstruct                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                   |                  |                        |                |                                                                                                                         |
| Hilltop Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Friestadt Rd  | 1500' South       | 1500             | 3                      | \$162,000      | LRIP CANDIDATE - RECONSTRUCT AND REPAVE                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                   |                  |                        | -\$64,000      | LRIP REIMBURSEMENT                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                   |                  |                        |                |                                                                                                                         |
| Squire Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Mequon Rd     | Hawthorne Dr      | 1450             | 4                      | \$752,510      | Full Depth Pavement Removal and Repaving. Significant Curb Work Needed.                                                 |
| Cromwell Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Catskill Ln   | Squire Rd         | 1000             | 4                      |                |                                                                                                                         |
| Briarcliff Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Cromwell Rd   | Termini           | 475              | 4                      |                |                                                                                                                         |
| Catskill Lane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Squire Rd     | Meadow Dr         | 866              | 4                      |                |                                                                                                                         |
| * The modifiers are estimates based on average roadway costs across previous years per linear foot of roadway completed, with inflation increases year-to-year. This approximation includes allowances for curb and gutter, some storm utility work, base patching within the roadway, and restoration. Reconstruction indicates full pulverization or removal of existing pavement, base patching, and repaving. A Mill & Overlay is a 2" typical removal of pavement, with a 2" replacement of pavement in-kind. |               |                   |                  | Total Est: \$1,893,090 |                | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |



| 2030 - PAVING PROGRAM |                |             |                  |            | Reconstruction Modifier*: \$111/LF<br>Mill & Overlay Modifier*: \$91/LF |                                                        |
|-----------------------|----------------|-------------|------------------|------------|-------------------------------------------------------------------------|--------------------------------------------------------|
| Road                  | Begin Termini  | End Termini | Road Length (LF) | 2023 PASER | Estimated Cost                                                          | Comments                                               |
| Carnegie Drive        | Maple Rd       | Whitney Dr  | 950              | 3          | \$471,750.00                                                            | Full Depth Pavement Removal, Consider Concrete Upgrade |
| Whitney Drive         | Carnegie Dr    | Edison Dr   | 1400             | 4          |                                                                         |                                                        |
| Clinton Drive         | Maple Rd       | Whitney Dr  | 950              | 4          |                                                                         |                                                        |
| Edison Drive          | Maple Rd       | Whitney Dr  | 950              | 3          |                                                                         |                                                        |
| Neptune Dr            | CTH Q          | Mars Dr     | 2900             | 4          | \$790,875.00                                                            | Starlite Subdivision<br><br>Drainage Work Needed.      |
| Mars Dr               | Moonlite Dr    | Termini     | 725              | 4          |                                                                         |                                                        |
| Moonlite Dr           | Termini        | Termini     | 1400             | 3          |                                                                         |                                                        |
| Venus Ct              | Moonlite Dr    | Termini     | 725              | 4          |                                                                         |                                                        |
| Starlite Dr           | Pilgrim Rd     | Termini     | 1375             | 4          |                                                                         |                                                        |
| Catskill Lane         | Meadow Dr      | Legend Ave  | 927              | 4          | \$437,470.00                                                            |                                                        |
| Abbot Court           | Catskill Ln    | Termini     | 450              | 4          |                                                                         |                                                        |
| Potters Court         | Catskill Ln    | Termini     | 200              | 4          |                                                                         |                                                        |
| Meadow Drive/Court    | Hidden Glen Dr | Termini     | 2400             | 4          |                                                                         |                                                        |

\* The modifiers are estimates based on average roadway costs across previous years per linear foot of roadway completed, with inflation increases year-to-year. This approximation includes allowances for curb and gutter, some storm utility work, base patching within the roadway, and restoration. Reconstruction indicates full pulverization or removal of existing pavement, base patching, and repaving. A Mill & Overlay is a 2" typical removal of pavement, with a 2" replacement of pavement in-kind.

|            |             |                                                                                                                         |
|------------|-------------|-------------------------------------------------------------------------------------------------------------------------|
| Total Est: | \$1,700,095 | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |
|------------|-------------|-------------------------------------------------------------------------------------------------------------------------|

## 2030 - PAVING PROGRAM

**Reconstruction Modifier\*: \$111/LF**  
**Mill & Overlay Modifier\*: \$91/LF**

| Road               | Begin Termini  | End Termini | Road Length (LF) | 2023 PASER | Estimated Cost | Comments                                               |
|--------------------|----------------|-------------|------------------|------------|----------------|--------------------------------------------------------|
| Carnegie Drive     | Mequon Rd      | Maple Rd    | 1500             | 4          | \$165,000.00   | Full Depth Pavement Removal, Consider Concrete Upgrade |
| Carnegie Drive     | Maple Rd       | Whitney Dr  | 950              | 3          | \$471,750.00   | Full Depth Pavement Removal, Consider Concrete Upgrade |
| Whitney Drive      | Carnegie Dr    | Edison Dr   | 1400             | 4          |                |                                                        |
| Clinton Drive      | Maple Rd       | Whitney Dr  | 950              | 4          |                |                                                        |
| Edison Drive       | Maple Rd       | Whitney Dr  | 950              | 3          |                |                                                        |
| Neptune Dr         | CTH Q          | Mars Dr     | 2900             | 4          | \$790,875.00   | Starlite Subdivision<br><br>Drainage Work Needed.      |
| Mars Dr            | Moonlite Dr    | Termini     | 725              | 4          |                |                                                        |
| Moonlite Dr        | Termini        | Termini     | 1400             | 3          |                |                                                        |
| Venus Ct           | Moonlite Dr    | Termini     | 725              | 4          |                |                                                        |
| Starlite Dr        | Pilgrim Rd     | Termini     | 1375             | 4          |                |                                                        |
| Catskill Lane      | Meadow Dr      | Legend Ave  | 927              | 4          | \$437,470.00   |                                                        |
| Abbot Court        | Catskill Ln    | Termini     | 450              | 4          |                |                                                        |
| Potters Court      | Catskill Ln    | Termini     | 200              | 4          |                |                                                        |
| Meadow Drive/Court | Hidden Glen Dr | Termini     | 2400             | 4          |                |                                                        |

\* The modifiers are estimates based on average roadway costs across previous years per linear foot of roadway completed, with inflation increases year-to-year. This approximation includes allowances for curb and gutter, some storm utility work, base patching within the roadway, and restoration. Reconstruction indicates full pulverization or removal of existing pavement, base patching, and repaving. A Mill & Overlay is a 2" typical removal of pavement, with a 2" replacement of pavement in-kind.

Total Est:

\$1,865,095

Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates



| 2031 - PAVING PROGRAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                      |                      |                  |            |                        | Reconstruction Modifier*: \$112/LF                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|------------------|------------|------------------------|-------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                      |                  |            |                        | Mill & Overlay Modifier*: \$92/LF                                                                                       |
| Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Begin Termini        | End Termini          | Road Length (LF) | 2023 PASER | Estimated Cost         | Comments                                                                                                                |
| Friestadt Rd                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Goldendale Rd        | Maple Rd             | 5280             | 4          | \$485,760.00           | Mill & Overlay, 3"                                                                                                      |
| Santa Fe Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Wagon Trail          | Council Bluffs Drive | 2450             | 3/4        | \$640,310.00           | Park View Hills<br><br>Traffic Calming Measures on Santa Fe, Remove Pavement and Repave.                                |
| Apache Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Santa Fe Drive       | Termini              | 368              | 4          |                        |                                                                                                                         |
| Indianwood Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Santa Fe Drive       | Termini              | 720              | 4          |                        |                                                                                                                         |
| Cherokee Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Santa Fe Drive       | Termini              | 372              | 4          |                        |                                                                                                                         |
| Commanche Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Santa Fe Drive       | Termini              | 386              | 4          |                        |                                                                                                                         |
| Shoshone Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Council Bluffs Drive | Termini              | 250              | 4          |                        |                                                                                                                         |
| Pawnee Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Council Bluffs Drive | Termini              | 325              | 4          |                        |                                                                                                                         |
| Council Bluffs Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Santa Fe Drive       | Pilgrim Road         | 950              | 4          |                        |                                                                                                                         |
| Heritage Hills Parkway                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Donges Bay Rd        | Raintree Dr          | 1575             | 4          | \$257,600.00           | Sunberry Downs Addition 1                                                                                               |
| Hawkey Ct                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Heritage Pkwy        | Termini              | 375              | 4          |                        | Mill & Overlay                                                                                                          |
| Kings Hill Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Heritage Pkwy        | +200'                | 325              | 4          |                        |                                                                                                                         |
| Providence Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Heritage Pkwy        | Termini              | 525              | 4          |                        |                                                                                                                         |
| Clinton Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | McCormick Dr         | Maple Rd             | 1900             | 4          | \$425,600.00           | Full Depth Pavement Removal, Consider Concrete Upgrade                                                                  |
| Edison Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | McCormick Dr         | Maple Rd             | 1900             | 4          |                        |                                                                                                                         |
| * The modifiers are estimates based on average roadway costs across previous years per linear foot of roadway completed, with inflation increases year-to-year. This approximation includes allowances for curb and gutter, some storm utility work, base patching within the roadway, and restoration. Reconstruction indicates full pulverization or removal of existing pavement, base patching, and repaving. A Mill & Overlay is a 2" typical removal of pavement, with a 2" replacement of pavement in-kind. |                      |                      |                  |            | Total Est: \$1,809,270 | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |

## 2032 - PAVING PROGRAM

**Reconstruction Modifier\*: \$113/LF**  
**Mill & Overlay Modifier\*: \$93/LF**

| Road                                                                                                                                                                                                                                                                                                                                                                                      | Begin Termini | End Termini  | Road Length (LF) | 2023 PASER | Estimated Cost | Comments                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|------------------|------------|----------------|-------------------------------------------------------------------------------------------------------------------------|
| Windsong Circle                                                                                                                                                                                                                                                                                                                                                                           | Windsong Rd   | Windsong Rd  | 5700             | 6          | \$823,400.00   | Windsong Subdivision<br><br>Mill & Overlay                                                                              |
| Windsong Rd                                                                                                                                                                                                                                                                                                                                                                               | Donges Bay Rd | Windsong Cir | 300              | 6          |                |                                                                                                                         |
| Whetherfird Ct                                                                                                                                                                                                                                                                                                                                                                            | Windsong Cir  | Termini      | 300              | 6          |                |                                                                                                                         |
| Raintree Ct                                                                                                                                                                                                                                                                                                                                                                               | Windsong Cir  | Termini      | 450              | 6          |                |                                                                                                                         |
| Summer Hill Ct                                                                                                                                                                                                                                                                                                                                                                            | Windsong Cir  | Termini      | 250              | 5          |                |                                                                                                                         |
| Windsong Ct                                                                                                                                                                                                                                                                                                                                                                               | Windsong Cir  | Termini      | 250              | 6          |                |                                                                                                                         |
| Snow Hill Ct                                                                                                                                                                                                                                                                                                                                                                              | Windsong Cir  | Termini      | 200              | 4          |                |                                                                                                                         |
| Raintree Dr                                                                                                                                                                                                                                                                                                                                                                               | Windsong Cir  | +100'        | 1000             | 6          |                |                                                                                                                         |
| Rimrock Rd                                                                                                                                                                                                                                                                                                                                                                                | Windsong Cir  | +300'        | 300              | 6          |                |                                                                                                                         |
| Kingshill Rd                                                                                                                                                                                                                                                                                                                                                                              | Windsong Cir  | +200'        | 200              | 5          |                |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                           |               |              |                  |            |                |                                                                                                                         |
| Fulton Dr                                                                                                                                                                                                                                                                                                                                                                                 | McCormick     | River Ln     | 4595             | 4          | \$807,950      | Full Depth Pavement Removal, Consider Concrete Upgrade                                                                  |
| Morse Dr                                                                                                                                                                                                                                                                                                                                                                                  | Bunsen Dr     | River Ln     | 2750             | 4          |                |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                           |               |              |                  |            |                |                                                                                                                         |
| Jefferson Ln                                                                                                                                                                                                                                                                                                                                                                              | Pilgrim Rd    | Hamilton Ct  | 700              | 4          | \$136,800.00   | Yorktowne Estates                                                                                                       |
| Hamilton Ct                                                                                                                                                                                                                                                                                                                                                                               | Pilgrim Rd    | Termini      | 500              | 4          |                |                                                                                                                         |
| * The modifiers are estimates based on average roadway costs across previous years per linear foot of roadway completed, with inflation increases year-to-year. This approximation includes allowances for curb and gutter, some storm utility work, base patching within the roadway, and restoration. Reconstruction indicates full pulverization or removal of existing pavement, base |               |              |                  | Total Est: | \$1,768,150    | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |

\* The modifiers are estimates based on average roadway costs across previous years per linear foot of roadway completed, with inflation increases year-to-year. This approximation includes allowances for curb and gutter, some storm utility work, base patching within the roadway, and restoration. Reconstruction indicates full pulverization or removal of existing pavement, base patching, and repaving. A Mill & Overlay is a 2" typical removal of pavement, with a 2" replacement of pavement in-kind.



# 2033 - PAVING PROGRAM

Reconstruction Modifier\*: \$114/LF  
Mill & Overlay Modifier\*: \$94/LF

| Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Begin Termini | End Termini | Road Length (LF) | 2023 PASER | Estimated Cost         | Comments                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------|------------------|------------|------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Bunsen Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | McCormick     | River Ln    | 4600             | 4          | \$524,400.00           | Full Depth Pavement Removal, Consider Concrete Upgrade                                                                  |
| Lyle Lane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Pilgrim Rd    | Bel Aire    | 1800             | 4          | \$541,500              | The Preserve                                                                                                            |
| Bel Aire Lane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Pilgrim Rd    | Bel Aire    | 1950             | 4          |                        |                                                                                                                         |
| Honeysuckle Lane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Preserve Pkwy | Bel Aire    | 1000             | 4          |                        |                                                                                                                         |
| Creek Terrace                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Captains Dr   | Cobbler Ln  | 1200             | 4          | \$783,750.00           | Yorktowne Estates/Brookhollow 2                                                                                         |
| Cobbler Ln                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Creek Ter     | Hudson Dr   | 1200             | 4          |                        |                                                                                                                         |
| Catskill Lane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Creek Ter     | Hudson Dr   | 1075             | 4          |                        |                                                                                                                         |
| Captains Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Creek Ter     | Hudson Dr   | 900              | 5          |                        |                                                                                                                         |
| Jackson Lane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Catskill Ln   | Cobbler Ln  | 575              | 4          |                        |                                                                                                                         |
| Cobblers Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Hudson Dr     | Termini     | 125              | 4          |                        |                                                                                                                         |
| Hudson Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Pilgrim Rd    | Legend Ave  | 1500             | 4          |                        |                                                                                                                         |
| Captains Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Hudson Dr     | Termini     | 300              | 4          |                        |                                                                                                                         |
| * The modifiers are estimates based on average roadway costs across previous years per linear foot of roadway completed, with inflation increases year-to-year. This approximation includes allowances for curb and gutter, some storm utility work, base patching within the roadway, and restoration. Reconstruction indicates full pulverization or removal of existing pavement, base patching, and repaving. A Mill & Overlay is a 2" typical removal of pavement, with a 2" replacement of pavement in-kind. |               |             |                  |            | Total Est: \$1,849,650 | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |

| 2034 - PAVING PROGRAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |               |               |                  |            | Reconstruction Modifier*: \$115/LF<br>Mill & Overlay Modifier*: \$95/LF |                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|------------------|------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Begin Termini | End Termini   | Road Length (LF) | 2023 PASER | Estimated Cost                                                          | Comments                                                                                                                |
| Catskill Lane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Hudson Dr     | Legend Ave    | 2300             | 5          | \$764,750.00                                                            | Legend Acres                                                                                                            |
| Legend Avenue                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Hudson Dr     | Mequon Rd     | 2100             | 4          |                                                                         |                                                                                                                         |
| Preachers Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Legend Ave    | Termini       | 275              | 4          |                                                                         |                                                                                                                         |
| Blacksmiths Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Legend Ave    | Termini       | 275              | 5          |                                                                         |                                                                                                                         |
| Vienna Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Legend Ave    | Termini       | 450              | 4          |                                                                         |                                                                                                                         |
| Deacons Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Catskill Ln   | Termini       | 225              | 5          |                                                                         |                                                                                                                         |
| Candlers Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Catskill Ln   | Termini       | 250              | 5          |                                                                         |                                                                                                                         |
| Prophets Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Catskill Ln   | Termini       | 275              | 4          |                                                                         |                                                                                                                         |
| Weavers Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Catskill Ln   | Termini       | 150              | 4          |                                                                         |                                                                                                                         |
| Traders Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Catskill Ln   | Termini       | 175              | 5          |                                                                         |                                                                                                                         |
| Tinkers Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Catskill Ln   | Termini       | 175              | 4          |                                                                         |                                                                                                                         |
| Raintree Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Donges Bay Rd | Windsong Cir  | 2525             | 6          | \$429,875                                                               | Sunberry Downs/Sunberry Downs South<br><br>Mill & Overlay                                                               |
| Rainberry Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Raintree Dr   | Termini       | 550              | 6          |                                                                         |                                                                                                                         |
| Sunberry Court                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Raintree Dr   | Termini       | 400              | 6          |                                                                         |                                                                                                                         |
| Sun Valley Trail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Raintree Dr   | Ridgefield Rd | 350              | 6          |                                                                         |                                                                                                                         |
| Sunberry Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Raintree Dr   | Sunburst Tr   | 700              | 6          |                                                                         |                                                                                                                         |
| Maple Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Friestadt Rd  | Mequon Rd     | 5500             | 5          | \$632,500                                                               | Full Depth Pavement Removal, Consider Concrete Upgrade                                                                  |
| * The modifiers are estimates based on average roadway costs across previous years per linear foot of roadway completed, with inflation increases year-to-year. This approximation includes allowances for curb and gutter, some storm utility work, base patching within the roadway, and restoration. Reconstruction indicates full pulverization or removal of existing pavement, base patching, and repaving. A Mill & Overlay is a 2" typical removal of pavement, with a 2" replacement of pavement in-kind. |               |               |                  |            | Total Est: \$1,827,125                                                  | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |



| 2025                      |               |                  |                |                 |           |                |                                                                                                                         |
|---------------------------|---------------|------------------|----------------|-----------------|-----------|----------------|-------------------------------------------------------------------------------------------------------------------------|
| Road                      | Begin Termini | End Termini      | Road Area (SY) | AVG PASER       | Treatment | Estimated Cost | Comments                                                                                                                |
|                           |               |                  |                |                 |           |                |                                                                                                                         |
| High Park Addition 1      |               |                  | 10750          | 6               | Micro     | \$16,125.00    |                                                                                                                         |
|                           |               |                  | 1000           | 6               | Flex      | \$7,000.00     |                                                                                                                         |
|                           |               |                  |                |                 |           |                |                                                                                                                         |
| Colonial Drive            | Concord Rd    | County Line Rd   | 3200           | 6               | GSB-88    | \$4,800.00     |                                                                                                                         |
|                           |               |                  |                |                 |           |                |                                                                                                                         |
| Virginia Avenue           | Division Rd   | Termini          | 3000           | 7               | GSB-88    | \$4,500.00     |                                                                                                                         |
|                           |               |                  |                |                 |           |                |                                                                                                                         |
| Berrywood Subd.           |               |                  | 6000           | 5               | Micro     | \$19,500.00    |                                                                                                                         |
|                           |               |                  | 1500           | 5               | Flex      | \$10,500.00    |                                                                                                                         |
|                           |               |                  |                |                 |           |                |                                                                                                                         |
| Spaten Court              | STH 145       | Termini          | 3200           | 7               | GSB-88    | \$4,800.00     |                                                                                                                         |
|                           |               |                  |                |                 |           |                |                                                                                                                         |
| Wasaukee Heights Subd.    |               |                  | 16060          | 8               | GSB-88    | \$24,090.00    |                                                                                                                         |
|                           |               |                  |                |                 |           |                |                                                                                                                         |
| Hilltop Dr                | STH 175       | Mequon           | 11600          | 6               | Chip      | \$31,900.00    |                                                                                                                         |
|                           |               |                  |                |                 |           |                |                                                                                                                         |
| Friestadt Rd              | Wasaukee Rd   | Pleasant View Dr | 24459          | 5               | Micro     | \$79,491.75    |                                                                                                                         |
|                           |               |                  | 4000           | 5               | Flex      | \$28,000.00    |                                                                                                                         |
|                           |               |                  |                |                 |           |                |                                                                                                                         |
| Wagon Trail/Creek Terrace | Carriage Ave  | Jefferson Ditch  | 5200           | 5               | Micro     | \$16,900.00    |                                                                                                                         |
|                           |               |                  | 1500           | 5               | Flex      | \$10,500.00    |                                                                                                                         |
|                           |               |                  |                |                 |           |                |                                                                                                                         |
|                           |               |                  |                | Total Base Est: |           | \$258,107      | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |

GSB-88 1.5 SY  
 CHIP SEAL 2.75 SY  
 MICROSURFACE 3.25 SY  
 FLEXPATCH 7 LF

| 2026             |               |                  |                |           |           |                |                                                                                                                         |
|------------------|---------------|------------------|----------------|-----------|-----------|----------------|-------------------------------------------------------------------------------------------------------------------------|
| Road             | Begin Termini | End Termini      | Road Area (SY) | AVG PASER | Treatment | Estimated Cost | Comments                                                                                                                |
| Hilltop Road     | Mequon Rd     | Hilltop Circle   | 13600          | 5         | Chip      | \$37,400.00    |                                                                                                                         |
| Edgewood/Fox     | Hilltop Dr    | Termini          | 5000           | 7         | GSB-88    | \$7,500.00     |                                                                                                                         |
| Friestadt Rd     | STH 145       | Pleasant View Dr | 24600          | 5         | Micro     | \$79,950.00    |                                                                                                                         |
|                  |               |                  | 3000           | 5         | Flex      | \$21,000.00    |                                                                                                                         |
| Maple Rd         | Rockfield Rd  | Cedar Ln         | 12100          | 6         | Chip      | \$33,275.00    |                                                                                                                         |
| Cedar Ln         | Maple Rd      | CTH G            | 12200          | 6         | Chip      | \$33,550.00    |                                                                                                                         |
| RiversBend/Crest | CTH Q         | Termini          | 8100           | 8         | GSB-88    | \$12,150.00    |                                                                                                                         |
| Preserve Parkway | Donges Bay Rd | Buckthorn Dr     | 7300           | 6         | Micro     | \$23,725.00    |                                                                                                                         |
|                  |               |                  | 1500           | 6         | Flex      | \$10,500.00    |                                                                                                                         |
| Concord Rd       | Colonial Dr   | Division Rd      | 9700           | 8         | GSB-88    | \$14,550.00    |                                                                                                                         |
| Highland Road    | Wasaukee Rd   | Mary Buth Ln     | 5500           | 6         | Chip      | \$15,125.00    |                                                                                                                         |
| Oakwood Court    | Mary Buth Ln  | Termini          | 2300           | 6         | Chip      | \$6,325.00     |                                                                                                                         |
| Total Base Est:  |               |                  |                |           |           | \$257,650      | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |

|              |         |
|--------------|---------|
| GSB-88       | 1.5 SY  |
| CHIP SEAL    | 2.75 SY |
| MICROSURFACE | 3.25 SY |
| FLEXPATCH    | 7 LF    |



| 2027                     |                |                 |                |                 |           |                |                                                                                                                         |
|--------------------------|----------------|-----------------|----------------|-----------------|-----------|----------------|-------------------------------------------------------------------------------------------------------------------------|
| Road                     | Begin Termini  | End Termini     | Road Area (SY) | AVG PASER       | Treatment | Estimated Cost | Comments                                                                                                                |
|                          |                |                 |                |                 |           |                |                                                                                                                         |
| Woodside Acres Subd.     |                |                 | 11000          |                 | 9 GSB-88  | \$16,500.00    |                                                                                                                         |
|                          |                |                 |                |                 |           |                |                                                                                                                         |
| Goldendale Road          | Holy Hill Rd   | Fond du Lac Ave | 19700          |                 | 5 Chip    | \$54,175.00    |                                                                                                                         |
|                          |                |                 | 2000           |                 | 5 Flex    | \$14,000.00    |                                                                                                                         |
|                          |                |                 |                |                 |           |                |                                                                                                                         |
| Elm Lane                 | Wasaukee Rd    | Harvest Ridge   | 6500           | 8               | GSB-88    | \$9,750.00     |                                                                                                                         |
|                          |                |                 |                |                 |           |                |                                                                                                                         |
| Prairie Glen Subdivision |                |                 | 11375          |                 | 7 GSB-88  | \$36,968.75    |                                                                                                                         |
|                          |                |                 | 1000           |                 | 7 Flex    | \$7,000.00     |                                                                                                                         |
|                          |                |                 |                |                 |           |                |                                                                                                                         |
| Revere Lane              | Division Rd    | Termini         | 6350           |                 | 5 Micro   | \$20,637.50    |                                                                                                                         |
| Woodcock Drive           | Nigbor Dr      | Robins Way      | 5250           |                 | 5 Micro   | \$17,062.50    |                                                                                                                         |
| Rustic Lane              | Revere Ln      | Robins Way      | 4450           |                 | 5 Micro   | \$14,462.50    |                                                                                                                         |
| Robins Way               | Revere Ln      | Rustic Ln       | 2200           |                 | 4 Micro   | \$7,150.00     |                                                                                                                         |
| Mary Kay Lane            | Concord Rd     | Rustic Ln       | 1400           |                 | 5 Micro   | \$4,550.00     |                                                                                                                         |
| Cardinal Court           | Rustuc Ln      | Termini         | 1050           |                 | 5 Micro   | \$3,412.50     |                                                                                                                         |
| Nigbor Drive             | Revere Ln      | Concord Rd      | 3925           |                 | 6 Micro   | \$12,756.25    |                                                                                                                         |
| Oriole Court             | Chick-a-Dee Ct | Termini         | 875            |                 | 5 Micro   | \$2,843.75     |                                                                                                                         |
| Chick-a-Dee Court        | Termini        | Termini         | 2525           |                 | 6 Micro   | \$8,206.25     |                                                                                                                         |
| Mayflower Drive          | Concord Rd     | Termini         | 4300           |                 | 5 Micro   | \$13,975.00    |                                                                                                                         |
|                          |                |                 | 2000           |                 | 5 Flex    | \$14,000.00    |                                                                                                                         |
|                          |                |                 |                |                 |           |                |                                                                                                                         |
|                          |                |                 |                | Total Base Est: |           | \$257,450      | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |

|              |         |
|--------------|---------|
| GSB-88       | 1.5 SY  |
| CHIP SEAL    | 2.75 SY |
| MICROSURFACE | 3.25 SY |
| FLEXPATCH    | 7 LF    |

| 2028                             |                   |                |                |           |           |                |                                                                                                                         |
|----------------------------------|-------------------|----------------|----------------|-----------|-----------|----------------|-------------------------------------------------------------------------------------------------------------------------|
| Road                             | Begin Termini     | End Termini    | Road Area (SY) | AVG PASER | Treatment | Estimated Cost | Comments                                                                                                                |
| Creek Terrace                    | Captains Ct       | Termini        | 4050           | 8         | GSB-88    | \$6,075.00     |                                                                                                                         |
| Holy Hill Road                   | CTH G             | Termini        | 6350           | 8         | GSB-88    | \$9,525.00     |                                                                                                                         |
| Pheasant Lane                    | County Aire Drive | Termini        | 2800           | 8         | GSB-88    | \$4,200.00     |                                                                                                                         |
| Country Aire Drive               | Mequon Road       | Friestadt Road | 14675          | 9         | Micro     | \$47,693.75    | Drive Lanes Only                                                                                                        |
| Willow Creek Heights Subdivision |                   |                | 23650          | 10        | GSB-88    | \$35,475.00    |                                                                                                                         |
| Lovers & Century Lanes           | Division Rd       | Fond du Lac Rd | 8200           | 9         | Chip      | \$22,550.00    |                                                                                                                         |
| Lovers Lane                      | Maple Rd          | Fond du Lac Rd | 8800           | 8         | Chip      | \$24,200.00    |                                                                                                                         |
| Harvest Hills Subdivision        |                   |                | 11725          | 8         | GSB-88    | \$17,587.50    |                                                                                                                         |
| Church Street                    | Main St           | Fond du Lac Rd | 2300           | 10        | GSB-88    | \$3,450.00     |                                                                                                                         |
| Sylvan Circle                    | Squire Dr         | Pilgrim Rd     | 11000          | 10        | GSB-88    | \$16,500.00    |                                                                                                                         |
| Hilbert Dr                       | Sylvan Circle     | Termini        | 4900           | 10 (2024) | GSB-88    | \$7,350.00     |                                                                                                                         |
| Main St                          | Division Rd       | STH 145        | 12000          | 8         | Micro     | \$39,000.00    |                                                                                                                         |
| Park Ave                         | Main St           | STH 145        | 3550           | 8         | Micro     | \$11,537.50    |                                                                                                                         |
|                                  |                   |                | 1500           | 8         | Flex      | \$10,500.00    |                                                                                                                         |
| Total Base Est:                  |                   |                |                |           |           | \$255,644      | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |

GSB-88 1.5 SY  
CHIP SEAL 2.75 SY  
MICROSURFACE 3.25 SY  
FLEXPATCH 7 LF



| 2029                      |               |               |                |                 |           |                |                                                                                                                         |
|---------------------------|---------------|---------------|----------------|-----------------|-----------|----------------|-------------------------------------------------------------------------------------------------------------------------|
| Road                      | Begin Termini | End Termini   | Road Area (SY) | AVG PASER       | Treatment | Estimated Cost | Comments                                                                                                                |
| Holy Hill Road            | I41           | Goldendale Rd | 28500          | 9               | Micro     | \$92,625.00    |                                                                                                                         |
| Gateway Crossing          | Holy Hill Rd  | Rockfield Rd  |                | 8               | Micro     |                |                                                                                                                         |
| Gateway Court             | Holy Hill Rd  | Termini       |                | 8               | Micro     |                |                                                                                                                         |
| Tree Tops, Add. 1, Add. 2 |               |               | 24000          | 6               | Micro     | \$78,000.00    |                                                                                                                         |
|                           |               |               | 1500           | 6               | Flex      | \$10,500.00    |                                                                                                                         |
| Tree Tops Add. 3, Add. 4  |               |               | 18100          | 6               | Micro     | \$58,825.00    |                                                                                                                         |
|                           |               |               | 1750           | 6               | Flex      | \$12,250.00    |                                                                                                                         |
| Bonniwell Road            | CTH G         | Termini       | 4900           | 9               | GSB-88    | \$7,350.00     |                                                                                                                         |
|                           |               |               |                | Total Base Est: |           | \$259,550      | Additional roads from the next 2 years and any roads not completed from the previous year may be included as Alternates |
| GSB-88                    | 1.5           | SY            |                |                 |           |                |                                                                                                                         |
| CHIP SEAL                 | 2.75          | SY            |                |                 |           |                |                                                                                                                         |
| MICROSURFACE              | 3.25          | SY            |                |                 |           |                |                                                                                                                         |
| FLEXPATCH                 | 7             | LF            |                |                 |           |                |                                                                                                                         |

## **BUSINESS OF THE PUBLIC WORKS & HIGHWAYS COMMITTEE**

MEETING DATE: January 8, 2025

PLACEMENT: Action Item

ITEM TITLE: Acceptance of improvements to public infrastructure (various locations, various projects).

SUBMITTED BY: Matthew Mortwedt, Public Works Director

### SUMMARY EXPLANATION:

The Department of Public Works has inspected the following public infrastructure improvements related to projects and developments and is requesting acceptance from the Public Works and Highways Committee.

1. Willow Creek Heights, Hilbert Lane, and Glenwood Subdivision Phase II pavement reconstruction by Wolf Paving Company (2024 Road Program).
2. Maple Road Paving by Stark Paving.
3. Water main relays in Hilbert Ln and Glenwood Subdivision Phase II by Vinton Construction Co.
4. Glenwood Subdivision Phase I pavement reconstruction by Payne and Dolan (2023 Road Program).
5. Water main in the Keller/Town 9 development by Keller Town 9/F-street.
6. Donges Bay Road reconstruction by Vinton Construction.

In some cases, acceptance initiates a 1-year warranty period.

### ATTACHMENT:

### STAFF RECOMMENDATION:

Acceptance of the improvements as presented by staff.

### ACTION BY Committee:



## **BUSINESS OF THE PUBLIC WORKS & HIGHWAYS COMMITTEE**

MEETING DATE: January 8, 2025

PLACEMENT: Action Item

ITEM TITLE: Acceptance of the WISDOT Agricultural Road Improvement Program grant in the amount of \$2,581,888.00.

SUBMITTED BY: Matthew Mortwedt, Public Works Director

### SUMMARY EXPLANATION:

WisDOT started the Agricultural Road Improvement program (ARIP) with \$50 million eligible in 2024 and \$100 million eligible in 2025. Eligibility is based on pavement condition ratings of 2-4. The poor conditions of Pleasant View Drive and Rockfield Road made them ideal candidates for this program. ARIP funding guidelines indicated these roads are eligible for a cost share of 90/10.

Pleasant View Rd from Freistadt Rd to Bonniwell Road is 10,750 feet, and the estimate to pulverize and reconstruct is \$1,130,000. Rockfield Road from Pleasant View to Division Road is 7,900 feet, and the estimate to pulverize and reconstruct is \$830,000. In addition, the culvert replacement with safety improvements on Pleasant View Road at the Menomonee River is included for \$250,000. This work is anticipated in 2025 once the State Municipal Agreement is signed. The total project estimate is \$2,557,000. The Village's share would be 10% share or approximately \$258,000. The reconstruction of these roads would be otherwise delayed if the only available funding was the typical \$1,500,000 annual road program.

### ATTACHMENT:

1. ARIP\_AwardLetter

### STAFF RECOMMENDATION:

Acceptance of the WISDOT ARIP grant in the amount of \$2,581,888.00.

### ACTION BY Committee:



**Wisconsin Department of Transportation**  
Office of the Secretary  
4822 Madison Yards Way, S903  
Madison, WI 53705

Governor Tony Evers  
Secretary Kristina Boardman  
[wisconsindot.gov](http://wisconsindot.gov)  
Telephone: (608) 266-1114  
Email: [sec.exec@dot.wi.gov](mailto:sec.exec@dot.wi.gov)

January 3, 2025

Matthew Uselding  
Village of Germantown  
N112 W17001 Mequon Rd  
Germantown, WI 53022

Dear Matthew Uselding:

Congratulations! This letter confirms funding for your local project on **Pleasant View Road & Rockfield Road** from the second 2024-25 Agricultural Roads Improvement Program (ARIP) project solicitation. ARIP is a reimbursement program administered by the Wisconsin Department of Transportation (WisDOT) which improves highways functionally classified as local roads or minor collectors providing access to agricultural lands or facilities used to produce agricultural goods, including forest products. The ARIP program covers up to 90% of the total eligible project costs, with the balance of eligible costs funded by the political subdivision where the work is performed.

Your project was one of 55 selected in Wisconsin for funding in the second solicitation of the 2024-25 biennium. The total eligible cost of the project is currently estimated at \$2,944,000.00. **WisDOT reimbursement to Village of Germantown will be limited to a maximum of ninety percent (90%) participation in eligible items or to the \$2,581,888.00 limit approved for the improvement – whichever is less.**

**It is important that you not incur any project costs until receipt of your signed State Municipal Project Agreement (SMA) from WisDOT.**

I greatly appreciate your commitment to providing a quality transportation system that promotes public safety and economic development. Our state and local partnership is imperative to the future of Wisconsin's transportation infrastructure. Congratulations on your project award, which is a key piece of this effort.

Please respond to this notification to acknowledge your acceptance of this project award letter.

Sincerely,

A handwritten signature in black ink, appearing to read "Kristina Boardman", with a long horizontal flourish extending to the right.

Kristina Boardman  
Secretary



## **BUSINESS OF THE PUBLIC WORKS & HIGHWAYS COMMITTEE**

MEETING DATE: January 8, 2025

PLACEMENT: Ordinance

ITEM TITLE: Modify section 7.03 of the Municipal Code to reduce the speed limit on a segment of Division Road to 35 miles per hour.

SUBMITTED BY: Matthew Mortwedt, Public Works Director

### SUMMARY EXPLANATION:

Staff is requesting the Committee to consider an Ordinance Revision to Reduce Speed Limits on Division Road from STH 145/Fond du Lac Avenue to Freistadt Road. This is associated with the WisDOT roundabout project (2475-04-71).

Speed reduction from 40 MPH to 35 MPH for Division Road from STH 145 to Freistadt road will allow for WisDOT design to maintain the existing two-lane width configuration.

### ATTACHMENT:

1. Ex A - Ordinance Setting Speed Limit on Division Road
2. Ex B - 8.5 x 11 Portrait - Division from 145 to Freistadt
3. Ex C - 7.03\_\_\_SPEED\_LIMITS\_Rev

### STAFF RECOMMENDATION:

A positive recommendation of the requested ordinance modification to the Village Board.

### ACTION BY Committee:

ORDINANCE NO. \_\_\_\_-2025

AN ORDINANCE TO AMEND § 7.03 OF THE GERMANTOWN MUNICIPAL CODE  
SO AS TO SET THE SPEED LIMIT ON DIVISION ROAD  
AND TO AMEND THE OFFICIAL TRAFFIC MAP TO REFLECT THE SAME

---

WHEREAS, Wis. Stat. § 349.11 authorizes municipalities to regulate the speed limit of certain roads within their jurisdiction; and

WHEREAS, the Village Board, having previously adopted § 7.03 of the Municipal Code of Germantown, regulates the maximum allowable speed limit upon the streets and highways within the Village; and

WHEREAS, the Village Board previously adopted an Official Traffic Map dated November 1, 1988 which identifies, among other things, school zones, speed limits and the locations where stopping, standing and parking are prohibited within the Village; and

WHEREAS, the Village Board desires to adjust the speed limit on Division Road; and

WHEREAS, the regulation of vehicle speed on the streets and highways of the Village promotes the health, safety and welfare of the Community;

NOW, THEREFORE, the Village Board of the Village of Germantown, Wisconsin, do ordain as follows:

SECTION I:

Section 7.03(3)(g) of the Municipal Code of Germantown is hereby amended to read as follows (Note: added text is underlined, deleted text is ~~struck-through~~):

- (l) Division Road (C.T.H. G) between Fond du Lac Avenue (S.T.H. 145) ~~Freistadt Road~~ and Camelot Drive.

SECTION II:

Section 7.03(2)(h) is hereby created to read as follows:

- (h) Division Road (C.T.H. G) between Freistadt Road and Fond du Lac Avenue (S.T.H. 145).



SECTION III:

The Official Traffic Map of the Village of Germantown is hereby amended to reflect the prohibitions and modifications specified in Sections I through II.

SECTION IV:

The Director of Public Works is hereby directed and shall erect appropriate traffic signals and markings reflecting the modifications specified in Sections I through II.

SECTION V:

The terms and provisions of this ordinance are severable. Should any term or provision of this ordinance be found to be invalid by a court of competent jurisdiction, the remaining terms and provisions shall remain in full force and effect.

SECTION VI:

All ordinances or parts of ordinances contravening the terms of this ordinance are hereby to that extent repealed.

SECTION VII:

This ordinance shall take effect and be in full force upon its passage and the day after publication.

Introduced by Trustee:

Adopted:

Vote: Ayes:

Nays:

Absent:

\_\_\_\_\_  
Dean Wolter, Village President

ATTEST:

\_\_\_\_\_  
Donna Ott, Village Clerk

Approved as to form:

ORDINANCE NO. \_\_\_\_-2025  
Page 3

---

Brian C. Sajdak, Village Attorney

Published:





**Village of Germantown GIS**  
Division Road from Freistadt Rd to STH 145

**DISCLAIMER:**

**This map is not a survey of the actual boundary of any property this map depicts.**

The Village of Germantown Does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.



**Village Of Germantown**  
N112 W17001 Mequon Road  
Germantown, WI 53022  
262-250-4700



SCALE: 1 = 500'

Print Date: 10/4/2024

---

### 7.03 SPEED LIMITS. (Rep. & Recr. Ord. #11-98)

The Village Board hereby determines that the statutory speed limits on the following streets or portions thereof are unreasonable, unsafe and imprudent and modifies such speed limits as follows:

(1) **30 MILES PER HOUR.**

- (a) Bonniwell Road, between Goldendale Road and Shadow Lane.
- (b) Century Lane, between Fond du Lac Avenue (S.T.H. 145) and Lovers Lane.
- (c) Deppert Road, between Freistadt Road and Goldendale Road (C.T.H. Y).
- (d) Division Road, between Camelot Drive and Rockfield Road.
- (e) Fond du Lac Avenue (S.T.H. 145), between 1/4 of a mile north of Park Avenue and Gettysburg Drive.
- (f) Freistadt Road (C.T.H. F), between the Wisconsin Central Railroad tracks east of Pilgrim Road and Fond du Lac Avenue (S.T.H. 145).
- (g) Freistadt Road, between Deppert Road and Merkel Drive.
- (h) Highland Road, between Wasaukee Road (C.T.H. M) and Mary Buth Lane.
- (i) Lovers Lane, between Century Lane and Division Road (C.T.H. G).
- (j) Mary Buth Lane, between Oakwood Drive and Highland Road.
- (k) Meeker Hill Lane, between Mequon Road and Appleton Avenue (S.T.H. 175).
- (l) Mequon Road, between Lannon Road and Maple Road.
- (m) Mequon Road, between Mountbrook Drive and Amy Belle Road.
- (n) Pilgrim Road, between Mequon Road and Freistadt Road (C.T.H. F).
- (o) Rockfield Road, between Maple Road and Division Road (C.T.H. G).
- (p) Western Avenue, between Main Street and Mequon Road (S.T.H. 167E).
- (q) Willow Creek Road, between Appleton Avenue (S.T.H. 175) and Amy Belle Road.

(2) **35 MILES PER HOUR.**

- (a) Amy Belle Road, between Willow Creek Road and Appleton Avenue (S.T.H. 175).
- (b) County Line Road, between Maple Road and Fond du Lac Avenue (S.T.H. 145).
- (c) Division Road, between Mequon Road (S.T.H. 167E) and County Line Road.
- (d) Mequon Road (S.T.H. 167E), between Stonewood Drive and Fond du Lac Avenue (S.T.H. 145).
- (e) Pilgrim Road, between Mequon Road (S.T.H. 167E) and County Line Road.
- (f) Lannon Road (C.T.H. Y), between County Line Road (C.T.H. Q) and Appleton Avenue (S.T.H. 175). (Cr. Ord. #41-98)
- (g) Donges Bay Road, between Division Road and Wasaukee Road. (Cr. Ord. #04-15)

**(h) Freistadt Road between Pilgrim Road and Pleasant View Drive.**

**(i) Division Road between Freistadt Road and STH 145/Fond du Lac Avenue**

(3) **40 MILES PER HOUR.**



- 
- (a) Bonniwell Road, between Country Aire Drive and the Wisconsin Southern and Wisconsin Central Railroad tracks.
  - (b) Cedar Lane, between Wasaukee Road and County Aire Drive.
  - (c) Cedar Lane, between Division Road (C.T.H. G) and Maple Road.
  - (d) Country Aire Drive, between Bonniwell Road and Pioneer Road.
  - (e) Country Aire Drive, between Fond du Lac Avenue (S.T.H. 145) and Freistadt Road (C.T.H. F).
  - (f) County Line Road, between Fond du Lac Avenue (S.T.H. 145) and Wasaukee Road.
  - (g) Division Road (C.T.H. G), between **STH 145/Fond du Lac Avenue Freistadt Road** and Camelot Drive.
  - (h) Division Road (C.T.H. G), between Rockfield Road and Bonniwell Road.
  - (i) Reserved. (Rep. Ord. #04-15)
  - (j) Freistadt Road, between Fond du Lac Avenue (S.T.H. 145) and Merkel Drive.
  - (k) Freistadt Road, between Deppert Road and Townline Road.
  - (l) Goldendale Road, between Mequon Road and Freistadt Road. (Am. Ord. #11-2020)
  - (m) Hilltop Drive, between Appleton Avenue (S.T.H. 175) and Freistadt Road.
  - (n) Holy Hill Road, between Fond du Lac Avenue (S.T.H. 145) and Wisconsin Central Railroad tracks.
  - (o) Reserved. (Rep. Ord. #41-98)
  - (p) Lilac Lane, between Division Road and Maple Road.
  - (q) Lovers Lane, between Mary Buth Lane and Pleasant View Drive.
  - (r) Lovers Lane, between Fond du Lac Avenue (S.T.H. 145) and Maple Road.
  - (s) Maple Road, between Appleton Avenue (S.T.H. 175) and Rockfield Road.
  - (t) Mary Buth Lane, between Freistadt Road (C.T.H. F) and Oakwood Drive.
  - (u) Mequon Road, between Maple Road and Mountbrook Drive.
  - (v) Pioneer Road, between Fond du Lac Avenue (S.T.H. 145) and Rocky Lane.
  - (w) Pleasant View Drive, between Freistadt Road (C.T.H. F) and Lovers Lane.
  - (x) River Lane, between Mequon Road (S.T.H. 167E) and Freistadt Road.
  - (y) Rockfield Road, between Goldendale Road (C.T.H. Y) and U.S.H. 41/45.
  - (z) Rockfield Road, between Division Road (C.T.H. G) and Pleasant View Drive.
  - (aa) Shadow Lane, between Bonniwell Road and the north Village limits.
  - (bb) Wasaukee Road (C.T.H. M), between Highland Road and County Line Road.
- (4) **45 MILES PER HOUR.**
- (a) Appleton Avenue (S.T.H. 175), between County Line Road (C.T.H. Q) and Amy Belle Road.
  - (b) Fond du Lac Avenue (S.T.H. 145), between Mequon Road (S.T.H. 167E) and County Line Road.
  - (c) Fond du lac Avenue (S.T.H. 145), between 1/10 of a mile north of Park Avenue and 1/10 of a mile north of Holy Hill Road.



- 
- (d) Freistadt Road (C.T.H. F), between Wasaukee Road (C.T.H. M) and Pleasant View Drive. the Wisconsin Central Railroad tracks.
  - (e) Goldendale Road, between Freistadt Road and Fond du Lac Avenue (STH 145). (Cr. Ord. #11-2020)
  - (f) Holy Hill Road, between Fond du Lac Avenue (S.T.H 145) and U.S.H. 41/45.
  - (g) Mequon Road (S.T.H. 167E), between Lannon Road and Stonewood Drive.
  - (h) Mequon Road (S.T.H. 167E), between Fond du Lac Avenue (S.T.H. 145) and Wasaukee Road.
  - (i) Pioneer Road, between Division Road (C.T.H. G) and Wasaukee Road.
- (5) **50 MILES PER HOUR.**
- (a) Cedar Lane, between Maple Road and Fond du Lac Avenue (S.T.H. 145).
  - (b) County Line Road (C.T.H. Q), between Lannon Road and Amy Belle Road.
  - (c) Division Road (C.T.H. G), between Cedar Lane and Bonniwell Road.
  - (d) Goldendale Road (C.T.H. Y), between the Wisconsin Southern Railroad tracks and Fond du Lac Avenue (S.T.H. 145).
  - (e) Lannon Road, between Appleton Avenue (S.T.H. 175) and Mequon Road.
  - (f) Maple Road, between Rockfield Road and Cedar Lane.
  - (g) Pleasant View Drive, between Lovers Lane and Bonniwell Road.
  - (h) Wasaukee Road, between Highland Road and Pioneer Road.
- (6) **55 MILES PER HOUR.**
- (a) Division Road (C.T.H. G), between Bonniwell Road and the north Village limits.
  - (b) Fond du Lac Avenue (S.T.H. 145), between 1/4 of a mile north of Holy Hill Road and the north Village limits.
- (7) **65 MILES PER HOUR.**
- (a) U.S.H. 41/45 between County Line Road (C.T.H. Q) and the north Village limits.

**State law reference**—Authority to alter speed limits, Wis. Stats. § 349.11.

## **BUSINESS OF THE PUBLIC WORKS & HIGHWAYS COMMITTEE**

MEETING DATE: January 8, 2025

PLACEMENT: Action Item

ITEM TITLE: Approval of a Budget Amendment transferring \$83,901.69 of unencumbered and unspent funds from the 2024 road program.

SUBMITTED BY: Matthew Mortwedt, Public Works Director

### SUMMARY EXPLANATION:

This amendment will roll over 2024 road program funding that was not spent or invoiced in 2024 to two accounts.

\$20,000 will be rolled into the Highway capital equipment account.

\$63,901.69 will be rolled into the 2025 road program account.

This will allow for the upgrade of the 2025 Highway patrol truck to include brine distribution equipment. It will also allow for a traffic safety study to proceed that may serve as the basis for future HSIP grants.

### ATTACHMENT:

### STAFF RECOMMENDATION:

Recommendation of the budget amendment transferring \$83,901.69 of 2024 Road Program funding in account 40562000-531340 to the 2025 account 40562000-531340.

### ACTION BY Committee:

## **BUSINESS OF THE PUBLIC WORKS & HIGHWAYS COMMITTEE**

MEETING DATE: January 8, 2025

PLACEMENT: Action Item

ITEM TITLE: Award of a professional services agreement to TADI for an update to the 2020 traffic safety study in an amount not to exceed \$14,982.

SUBMITTED BY: Matthew Mortwedt, Public Works Director

### SUMMARY EXPLANATION:

A traffic study conducted by TADI in 2020 was used to prioritize intersection improvements and serve as a precursor to HSIP funding for the Maple and Lannon project. Since 2000 other intersections have been reconstructed or are planned to be. Staff is requesting that the study be updated to reflect the current state of intersections and come up with a new prioritized list for intersection improvements. The effort could be used to justify additional HSIP funding, which is historically a 90/10 State/local split. The 2020 study and the proposal are included in the packet.

### ATTACHMENT:

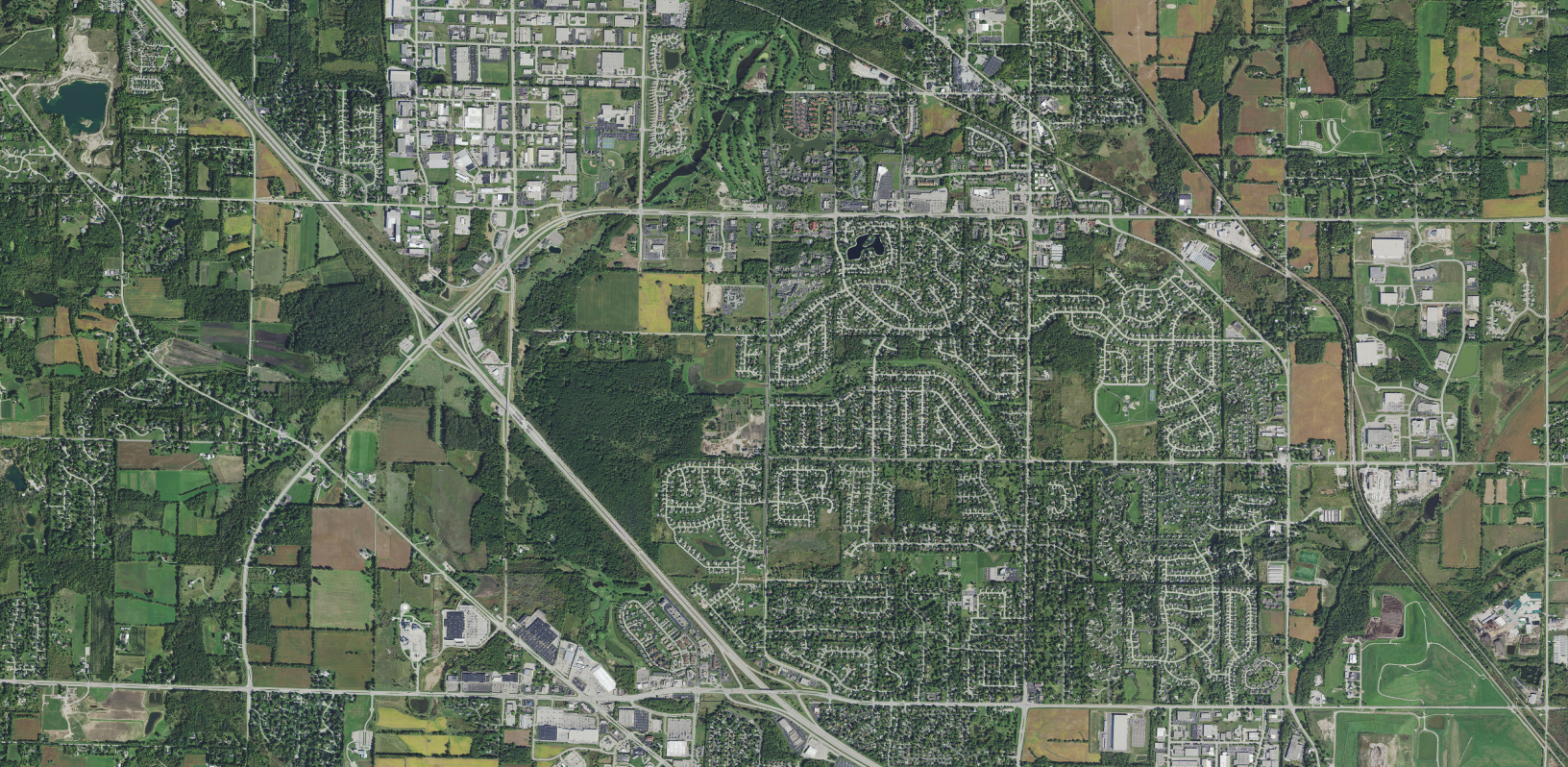
1. Ex A - 2020 Germantown Screening Report
2. Ex B - Germantown Safety Screening Scope 12-24-24

### STAFF RECOMMENDATION:

Award of a professional services agreement to TADI for an update to the 2020 traffic safety study in an amount not to exceed \$14,982.

### ACTION BY Committee:





# VILLAGE OF GERMANTOWN SAFETY SCREENING STUDY

YEARS 2015 - 2019

DATE SUBMITTED: NOVEMBER 11, 2020

## **PREPARED FOR:**

Village of Germantown

Contact Person: Mr. Lawrence Ratayczak

Director of Public Works

Phone: (262) 250-4721

Email: [lratayczak@village.germantown.wi.us](mailto:lratayczak@village.germantown.wi.us)

## **PREPARED BY:**

Traffic Analysis and Design, Inc. (TADI)

P.O. Box 128

Cedarburg, WI 53012

Authors: John Campbell, P.E., RSP<sub>2</sub>

Amy Pomeroy, P.E., RSP<sub>1</sub>

Christian R. Sternke, P.E., RSP<sub>1</sub>

Phone: (800) 605-3091



November 11<sup>th</sup>, 2020

## **Executive Summary**

### **Introduction**

TADI was hired by the Village of Germantown to conduct a village-wide intersection safety screening study. TADI worked with Village to determine the locations in the study and includes 28 total intersections and one short corridor section.

### **Objective**

The study had three main objectives.

1. To identify safety issues that could be eligible for remediation through the Highway Safety Improvement Program (HSIP), which can provide up to a 90 percent Federal Funding contribution for improvements.
2. To identify safety issues that the Village of Germantown may want to address locally.
3. To provide a five-year summary (2015 – 2019) of the crash data to be used as a reference resource in addressing safety-related issues and questions.

### **Economic Loss Ranking**

Intersections are referenced in the subsequent text by their economic loss rank, which is a good indicator of the severity of safety issues and can be used as a resource when prioritizing projects.

### **Summary of Results**

The results are summarized into the following categories:

- A. Potentially eligible HSIP projects at connecting highway intersections
- B. Potentially eligible HSIP projects at local intersections\*
- C. Remaining intersections\* and local improvement options

\* note – some intersections may be county or WisDOT jurisdiction

#### **A. Potentially Eligible HSIP Projects at Connecting Highway Intersections**

The following intersections are connecting highway intersections that have potentially eligible HSIP projects. Please note HSIP projects on connecting highways are required to have more than 50 percent of the project costs be roadway (non-incidental) work.

1. Maple Rd. & Lannon Rd/STH 167  
Improve signal visibility and right-turn channelization – good chance
2. Pilgrim Rd & Mequon Rd/STH 167  
Improve signal visibility, offsetting left-turns, and improving right-turn channelization – maybe chance
7. Pilgrim Rd & Sylvan Cir  
Consider converting the 4-lane undivided cross-section of Pilgrim Road to a 3-lane TWLTL from Francese Dr to Fond du Lac Ave – maybe chance
8. STH 145/Fond du Lac Ave & Mequon Rd  
Consider adding an eastbound left turn lane and an offset eastbound right turn lane to improve the triangle sight distance. Views were often obscured by EB vehicles in the outside lane – good chance

## **B. Potentially Eligible HSIP Projects at Local Intersections\***

The following intersections local intersections that have potentially eligible HSIP projects.

\* note – some intersections may be county or WisDOT jurisdiction. HSIP projects on state jurisdiction roadways are required to have more than 50 percent of the project costs be roadway (non-incidental) work.

### *Consider All-Way Stop Control*

The following intersections had crash patterns potentially mitigatable by a change to all-way stop control from minor-stop control. At these locations, a traffic study is recommended to determine if all-way stop control is warranted.

3. STH 145/Fond du Lac Ave & CTH G/Division Road
4. Wasaukee Rd & Freistadt Rd
9. STH 145/Fond du Lac Ave & Freistadt Rd

### *Other Improvements*

6. Wasaukee Rd & Highland Rd

Forty percent of the crashes involved vehicles disregarding the traffic control. Consider improving stop sign visibility by adding double stop signs and add “Cross Traffic Does Not Stop” signs. Clear and grub vegetation to improve sight distance. While project would likely be eligible for HSIP, small projects tend to be more cost-effective to fund locally.

14. STH 175/Appleton Ave & Willow Creek Rd

Consider centerline rumble strips from Willow Creek Rd to Hilltop Rd. Fatal head-on crash (NB crossed centerline) - maybe chance.

## **C. Remaining Intersections and Local Improvement Options**

Also identified in the report were safety improvement options unlikely to qualify for HSIP funding (see table C1 and C2 in report). These are improvements the Village may want to consider implementing themselves or bringing to the issues/improvements to the attention of the county or state. Many of the local improvement options listed in the report are low cost safety improvements (e.g., additional signing, pavement marking, retroreflective backplates, etc.).

### **Next Steps**

It is recommended that the Village of Germantown use the information in this report as a planning tool for making local safety improvements, applying for HSIP funding, and bringing safety issues to the county or WisDOT’s attention. For the intersections the Village of Germantown has an interest in potentially improving through the HSIP program, it is suggested to discuss potential safety solutions, strategies, and HSIP eligibility with TADI & WisDOT. If the February 15, 2021 application deadline is not able to be met, the next HSIP application deadline is six months later, on August 15<sup>th</sup>, 2021.



# Village of Germantown Safety Screening Study



*Date Submitted: November 11, 2020*

---

**To:** Larry Ratayczak, Public Works Director

**From:** John Campbell, P.E., RSP<sub>2</sub>  
Amy Pomeroy, P.E., RSP<sub>1</sub>  
Christian R. Sternke, P.E., RSP<sub>1</sub>

**Subject:** Village of Germantown Safety Screening Study (Five Years: 2015 thru 2019)

## **Introduction**

TADI was hired by the Village of Germantown to conduct a village-wide safety screening study. The study focused on the village roadway network, including state and municipal highways. TADI worked with the Village of Germantown to determine the locations in the study, and address intersections of concern. The analysis was conducted using electronic crash data retrieved through the WisTransPortal system provided by the Wisconsin Traffic Operations Laboratory. Five-years of crash data (2015 – 2019) were screened.

## **Objective**

The study had three main objectives.

1. To identify safety issues that could be eligible for remediation through the Highway Safety Improvement Program (HSIP), which can provide up to a 90 percent federal funding contribution for improvements.
2. To identify safety issues that the Village of Germantown may want to address locally.
3. To provide a five-year summary (2015 – 2019) of the crash data within the Village of Germantown to be used as a reference resource in addressing safety-related issues and questions.

## **Google Maps**

Intersection crash data compiled for this report is available on Google Maps using the link below. Intersections are shown with red circles.

**Google Login Link:** <https://accounts.google.com/Login>

**Google Username:** germantownsafetyscreening@gmail.com

**Google Password:** 2savelives!

**Map Link:** <https://www.google.com/maps/d/edit?mid=137jzFq4J503lzgQ0BE-Tg6PvUS5809pX&usp=sharing>

## **RANKING DESCRIPTIONS & DEFINITIONS**

The crash data was ranked using multiple techniques to assist in the identification of potential safety issues. Below is a description of the various rankings:

### **Appendix A1 – Intersection Rankings**

#### *A1.1 Intersection Database*

An intersection database was assembled for 28 intersections in the Village of Germantown. The database includes the following information about each intersection: intersection name, traffic control (traffic signal, all-way stop, minor street stop, other-stop, uncontrolled, modern roundabout), number of legs, entering AADT (if available), and GIS coordinates. Also provided in the database is the five-year crash frequency, intersection crash rate, and economic loss associated with crashes.

#### *A1.2 Economic Loss Ranking*

A common and helpful method for measuring the severity of crashes is to associate economic loss values with different injury severities. There are a multitude of ways to assign and define economic loss. For this study, a basic methodology that assigns \$85,000 for crashes resulting in a fatality (K-Level), incapacitating injury (A-Level), and non-incapacitating injury (B-Level) was used. These are referred to as KAB crashes. For possible injury (C-Level), a value of \$25,000 was assigned to each crash and for non-injury (i.e., property damage only or PDO) a value of \$4,000 was assigned.

Ranking the intersections by economic loss is an effective method for identifying intersections that not only could warrant safety improvements, but also may be eligible for funding through the HSIP program administered by the Wisconsin Department of Transportation (WisDOT). The HSIP program uses economic loss as a measure when determining a project's eligibility. While they do not match the figures WisDOT uses (WisDOT HSIP economic loss values are not publicly available), we are comfortable making recommendations based on our past experiences using these values.

#### *A1.3 Crash Frequency Ranking*

A ranking of the intersections by the number of crashes that occurred in the five-year time span of 2015 thru 2019, categorized by crash severity.

#### *A1.4 Crash Rate Ranking*

Intersection crash rate, which is reported as the number of crashes per million entering vehicles, is a commonly used statistic. It measures the risk of a crash occurring per one million entering vehicles. It can be a helpful statistic for measuring crash risk and comparing to other locations.

#### *A1.5 Night-Time Crash Ranking*

The number of crashes occurring in low-light (dawn/dusk) or at night are considered night-time crashes in this analysis and are summarized in this ranking. A high number of night-time crashes can indicate a need to add or upgrade street lighting.

#### *A1.6 Slippery Conditions Crash Ranking*

The number of crashes occurring in slippery pavement conditions (wet, snow, or ice) are summarized in this ranking. A high number of slippery pavement crashes can indicate a need to improve the pavement friction or to consider more aggressive winter maintenance.

#### *A1.7 Pedestrian Crashes*

The number of crashes and economic loss associated with crashes involving pedestrians are displayed in this ranking. Bicyclists that are struck by vehicles in crosswalks are considered pedestrian crashes in this analysis as safety improvement solutions for crosswalk crashes are typically categorized with pedestrian safety improvements.

#### *A1.8 Bicycle Crashes*

The number of crashes and economic loss associated with crashes involving bicyclists are displayed in this ranking. As noted previously, bicyclists that are struck by vehicles in crosswalks are considered pedestrian crashes in this analysis.

#### *A1.9 Top Crash Types*

The overall top 50 crash types (e.g., right-angle crashes at the intersection of Maple Road & Lannon Road) were ranked by economic loss and are provided in in this ranking. This information is helpful in identifying the most frequent crash patterns at intersections in Germantown.

#### *A1.10 Top Crash Types (by direction)*

The overall top 50 specific crash types by direction were ranked by economic loss and are provided in in this ranking. The crash patterns are directionally specified, such as “WB rear-end crash”. This analysis is helpful in identifying specific crash patterns that might be overlooked when looking at total intersection crash statistics.

### **Appendix A2 - Intersection Collision Diagrams**

Intersection collision diagrams and crash statistics are provided in Appendix A2 and are also available via the Google Maps link. The visualization of the data in a collision diagram format is helpful in identifying potential safety issues. It should be noted that the collision diagrams are based on the directional information provided in the electronic crash data, but fatal and injury crashes have been validated with a review of each individual crash report form. For each of the 28 intersections, there is a collision diagram on the first page and details about each individual crash on the second page.

### **Appendix B1 – Corridor Safety Analysis**

Safety analysis sheets that summarize the number and type of crashes along the corridor screened in this study are provided in Appendix B1.

### **Summary**

The safety analysis was used to help identify safety issues and recommendations at intersections and for one corridor. The analysis was also used to identify crash patterns and behavior characteristics (e.g., percent speed-related) that the village may want to target addressing.



## RECOMMENDATIONS

The recommendations of the study are meant to serve as a planning tool for the Village of Germantown to address safety issues throughout the village with local improvements and with potential federal aid assistance through the HSIP program.

### ***Intersection Evaluation***

Recommendations for intersections are organized into four categories. Because the HSIP program is both dynamic (crash modification factors are constantly evolving) and competitive (applications are received from all over the state), our recommendations are broadly categorized as a Tier 1 – a good chance treatments would be eligible for HSIP funding, a Tier 2 - maybe treatments would be eligible for HSIP funding, a Tier 3 - low chance treatments would be eligible for HSIP funding. Intersections with a “M” – are suggested for monitoring traffic volumes. A “√” indicates that a traffic study is recommended to evaluate the best solutions to the safety issues identified.

The categories represent our interpretation of the data available to estimate the likelihood of HSIP eligibility. HSIP eligibility is a function of the expected crash reduction benefits weighed against the anticipated construction costs. The calculations to determine eligibility are performed internally by WisDOT. While we do not have access to the calculations, our experience with similar projects and HSIP applications helps us to estimate the eligibility of potential projects.

Recommendations for individual intersections are shown on the tables spanning the subsequent pages. The intersections are labeled by number in order of economic loss. The intersections are organized into the following groups:

- A. Potentially eligible HSIP projects at connecting highway intersections
- B. Potentially eligible HSIP projects at local intersections\*
- C. Remaining intersections\* and local improvement options

\* note – some intersections may be county or WisDOT jurisdiction

### ***Corridor Evaluation***

Crashes were analyzed on the STH 145/Pilgrim Road corridor. A one-page summary of the crash statistics is provided for this corridor in the appendix and has information about the crash trends observed. A corridor location map and target crash types the village may want to aim to reduce are shown on the summary page.

The following corridor was evaluated:

B1.1 STH 145/Pilgrim Road (Francese Drive to Fond du Lac Avenue) – 0.3 miles

Based on the estimated daily traffic (8,200 vehicles per day), crash types and injury severity of those crashes, it is recommended that the Village of Germantown consider converting the 0.3 mile 4-lane undivided roadway to a 3-lane roadway with two thru-lanes and a center two-way left-turn lane (TWLTL).

## **CONCLUSIONS**

The study found there are opportunities to improve traffic safety throughout the Village of Germantown with projects that appear to be good candidates for applying for 90 percent Federal Funding through the HSIP program. It is recommended to use the information in this memorandum as a planning tool for making local safety improvements and applying for HSIP funding.

## **NEXT STEPS**

HSIP application are due on February 15, 2021 for the next cycle of applications. If Germantown is interested in pursuing any of the potential projects listed in this study, it is suggested that such applications are begun as soon as possible to ensure time to prepare the applications and proactively coordinate with WisDOT. For the locations and projects in the Tier 1 – “good” and Tier 2 – “maybe” categories that Germantown has interest in potentially improving through the HSIP program, it is suggested to discuss potential safety solutions, strategies, and HSIP eligibility with TADI & WisDOT. If the February 15<sup>th</sup>, 2021 deadline is not able to be met, the next HSIP application deadline is six months later, on August 15<sup>th</sup>, 2021.

A. Potentially Eligible HSIP Projects at Connecting Highway Intersections

|   |                                                                    |   |                           |
|---|--------------------------------------------------------------------|---|---------------------------|
| 1 | Tier 1 - Good chance treatments would be eligible for HSIP funding |   |                           |
| 2 | Tier 2 - Maybe treatments would be eligible for HSIP funding       |   |                           |
| 3 | Tier 3 - Low chance treatments would be eligible for HSIP funding  |   |                           |
| M | Recommended to Monitor Traffic Volumes                             | ✓ | Traffic Study Recommended |

RECOMMENDATIONS

| Label & Link         | Econ Loss Rank | Intersection Name                   | Traffic Control   | Entering AADT | Total Crashes | Economic Loss | CAUSATION                                                                                                                           |                                                                                                                                             | CHANGE IN TRAFFIC CONTROL                                                                             |                                                                                                    |                                                                                                  | TRAFFIC SIGNAL IMPROVEMENTS                                                                                         |                                                                                                                     |                                                                                                                |                                                                                                          |                                                                                                   | DESIGN IMPROVEMENTS                                                                                         |                                                                                                           |                                                                                                                  |                                                                                                              |                                                                                                                |                                                                                                        |                                                                                           | Monitor Traffic Volumes | Traffic Study Recommended? | NOTES                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------|----------------|-------------------------------------|-------------------|---------------|---------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                      |                |                                     |                   |               |               |               |  Failure to Yield Crashes (i.e., gap acceptance) |  Dis-regard Traffic Control Crashes (e.g., run-red/stop) |  Modern Roundabout |  Traffic Signal |  All-Way Stop |  Full Traffic Signal Replacement |  Partial Traffic Signal Upgrades |  Retroreflective Backplates |  Countdown Ped Timers |  Signal Timing |  Geometric Modifications |  High-Friction-Surface |  Street Lighting Improvements |  Pavement Marking/Signing |  High-Visibility Crosswalks |  Upgrade Curb Ramps |  Other |                         |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <a href="#">A2.1</a> | 1              | Maple Rd & Lannon Rd/STH 167        | Traffic Signal    | 27,550        | 73            | \$ 865,000    | 10                                                                                                                                  | 7                                                                                                                                           |                                                                                                       |                                                                                                    |                                                                                                  | 1                                                                                                                   |                                                                                                                     | 1                                                                                                              |                                                                                                          |                                                                                                   | 1                                                                                                           |                                                                                                           | 2                                                                                                                |                                                                                                              |                                                                                                                |                                                                                                        |                                                                                           |                         |                            | Patterns of right angle, left-turn angle and rear-end crashes indicate the need to improve the visibility of the signal heads (good chance). Consideration should be given to placing a signal head over each lane with retro-reflective backplates, as well as improving the channelization of the right-turn lanes (good chance). Twenty-one percent of the crashes occurred at night; improvements to street lighting could be a possibility (maybe chance). |
| <a href="#">A2.2</a> | 2              | Pilgrim Rd & Mequon Rd/STH 167      | Traffic Signal    | 23,500        | 54            | \$ 771,000    | 17                                                                                                                                  | 3                                                                                                                                           |                                                                                                       |                                                                                                    |                                                                                                  |                                                                                                                     |                                                                                                                     | 2                                                                                                              |                                                                                                          |                                                                                                   | 2                                                                                                           |                                                                                                           |                                                                                                                  |                                                                                                              |                                                                                                                |                                                                                                        |                                                                                           |                         |                            | There were sixteen left-turn angle crashes at this intersection. Consideration should be given to improving the offset to provide a positive offset of all left-turn lanes. To improve the visibility of the signal heads, it is recommended that retro-reflective backplates be considered. A pattern of right-turn rear-end crashes indicate that consideration could be given to improving the channelization of the right-turn lanes.                       |
| <a href="#">A2.7</a> | 7              | Pilgrim Rd & Sylvan Circle          | Minor Street Stop | 10,250        | 8             | \$ 377,000    | 5                                                                                                                                   |                                                                                                                                             |                                                                                                       |                                                                                                    |                                                                                                  |                                                                                                                     |                                                                                                                     |                                                                                                                |                                                                                                          |                                                                                                   | 2                                                                                                           |                                                                                                           |                                                                                                                  |                                                                                                              |                                                                                                                |                                                                                                        |                                                                                           |                         |                            | Consider converting the 4-lane undivided cross-section to a 3-lane TWLTL from Francese Dr to Fond du Lac Ave. Possibly improve street lighting. (see corridor analysis)                                                                                                                                                                                                                                                                                         |
| <a href="#">A2.8</a> | 8              | STH 145/Fond du Lac Ave & Mequon Rd | Minor Street Stop | 13,600        | 21            | \$ 369,000    | 16                                                                                                                                  |                                                                                                                                             |                                                                                                       |                                                                                                    |                                                                                                  |                                                                                                                     |                                                                                                                     |                                                                                                                |                                                                                                          |                                                                                                   | 1                                                                                                           |                                                                                                           |                                                                                                                  |                                                                                                              |                                                                                                                |                                                                                                        |                                                                                           |                         |                            | Consider adding an eastbound left turn lane and an offset eastbound right turn lane to improve the triangle sight distance. Views were often obscured by EB vehicles in the outside lane.                                                                                                                                                                                                                                                                       |



B. Potentially Eligible HSIP Projects at Local Intersections

|   |                                                                    |   |                           |
|---|--------------------------------------------------------------------|---|---------------------------|
| 1 | Tier 1 - Good chance treatments would be eligible for HSIP funding |   |                           |
| 2 | Tier 2 - Maybe treatments would be eligible for HSIP funding       |   |                           |
| 3 | Tier 3 - Low chance treatments would be eligible for HSIP funding  |   |                           |
| M | Recommended to Monitor Traffic Volumes                             | ✓ | Traffic Study Recommended |

RECOMMENDATIONS

| M Recommended to Monitor Traffic Volumes ✓ Traffic Study Recommended |                |                                                 |                   |               |               |               | CAUSATION                                                                           |                                                                                     | TRAFFIC CONTROL                                                                     |                                                                                     |                                                                                     | IMPROVEMENTS                                                                        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | IMPROVEMENTS                                                                        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------|----------------|-------------------------------------------------|-------------------|---------------|---------------|---------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Label & Link                                                         | Econ Loss Rank | Intersection Name                               | Traffic Control   | Entering AADT | Total Crashes | Economic Loss |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | NOTES                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                        |
|                                                                      |                |                                                 |                   |               |               |               | Failure to Yield Crashes (i.e., gap acceptance)                                     | Dis-regard Traffic Control Crashes (e.g., run-red/stop)                             | Modern Roundabout                                                                   | Traffic Signal                                                                      | All-Way Stop                                                                        | Full Traffic Signal Replacement                                                     | Partial Traffic Signal Upgrades                                                     | Retroreflective Backplates                                                          | Countdown Ped Timers                                                                | Signal Timing                                                                       | Geometric Modifications                                                             | High-Friction-Surface                                                               | Street Lighting Improvements                                                        | Pavement Marking/Signing                                                            | High-Visibility Crosswalks                                                          | Upgrade Curb Ramps                                                                  | Other                                                                               | Monitor Traffic Volumes                                                             | Traffic Study Recommended?                                                          |                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                        |
| <a href="#">A2.3</a>                                                 | 3              | STH 145/Fond du Lac Ave & CTH G/Division Rd     | Minor Street Stop | 8,600         | 40            | \$ 568,000    | 28                                                                                  | 1                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ✓                                                                                   | Converting to an all-way stop control to address the pattern of angle crashes could be considered at this intersection if warranted by a traffic study. Geometric improvements including 2 approach lanes on each leg and a westbound right-turn bypass lane could also be considered. |                                                                                                                                                                                                                                                        |
| <a href="#">A2.4</a>                                                 | 4              | Wasaukee Rd & Freistadt Rd                      | Minor Street Stop | 9,650         | 24            | \$ 546,000    | 17                                                                                  | 4                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ✓                                                                                   | NB and SB drivers have difficulty crossing intersection. Consider all-way stop control if warranted by a traffic study.                                                                                                                                                                |                                                                                                                                                                                                                                                        |
| <a href="#">A2.5</a>                                                 | 5              | STH 145/Fond du Lac Ave & Maple Rd-Holy Hill Rd | Minor Street Stop | 5,435         | 28            | \$ 499,000    | 22                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ✓                                                                                   | 6-leg intersection with stop-control on 4 legs. Consider traffic study to identify potential improvement options with suitable traffic control , safety, and operations.                                                                                                               |                                                                                                                                                                                                                                                        |
| <a href="#">A2.6</a>                                                 | 6              | Wasaukee Rd & Highland Rd                       | Minor Street Stop | 8,300         | 10            | \$ 385,000    | 3                                                                                   | 4                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                                                        | Forty percent of the crashes involved vehicles disregarding the traffic control. Consider improving stop sign visibility by adding double stop signs and add “Cross Traffic Does Not Stop” signs. Clear and grub vegetation to improve sight distance. |
| <a href="#">A2.9</a>                                                 | 9              | STH 145/Fond du Lac Ave & Freistadt Rd          | Minor Street Stop | 8,100         | 26            | \$ 308,000    | 15                                                                                  |                                                                                     |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | ✓                                                                                   | EB/WB drivers having difficulty crossing STH 145. Consider all-way stop control if warranted by a traffic study.                                                                                                                                                                       |                                                                                                                                                                                                                                                        |
| <a href="#">A2.14</a>                                                | 14             | STH 175/Appleton Ave & Willow Creek Rd          | Minor Street Stop | 9,050         | 4             | \$ 97,000     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                                                        | Consider centerline rumble strips from Willow Creek Rd to Hilltop Rd. Fatal head-on crash (NB crossed centerline).                                                                                                                                     |

## C. Remaining Intersections with Local Improvement Options

|   |                                                                    |   |                           |
|---|--------------------------------------------------------------------|---|---------------------------|
| 1 | Tier 1 - Good chance treatments would be eligible for HSIP funding |   |                           |
| 2 | Tier 2 - Maybe treatments would be eligible for HSIP funding       |   |                           |
| 3 | Tier 3 - Low chance treatments would be eligible for HSIP funding  |   |                           |
| M | Recommended to Monitor Traffic Volumes                             | ✓ | Traffic Study Recommended |

### RECOMMENDATIONS

| Label & Link          | Econ Loss Rank | Intersection Name                           | Traffic Control   | Entering AADT | Total Crashes | Economic Loss | CAUSATION |   | CHANGE IN TRAFFIC CONTROL |  |  | TRAFFIC SIGNAL IMPROVEMENTS |  |  |  |  | DESIGN IMPROVEMENTS |  |   |  |  |  | Other | Monitor Traffic Volumes | Traffic Study Recommended? | NOTES                                                                                                                                                              |
|-----------------------|----------------|---------------------------------------------|-------------------|---------------|---------------|---------------|-----------|---|---------------------------|--|--|-----------------------------|--|--|--|--|---------------------|--|---|--|--|--|-------|-------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       |                |                                             |                   |               |               |               |           |   |                           |  |  |                             |  |  |  |  |                     |  |   |  |  |  |       |                         |                            |                                                                                                                                                                    |
| <a href="#">A2.10</a> | 10             | STH 175/Appleton Ave & Meeker Hill Rd       | Minor Street Stop | 5,950         | 8             | \$ 215,000    | 1         |   |                           |  |  |                             |  |  |  |  |                     |  | 3 |  |  |  | 3     |                         |                            | Consider adding bike lanes – there was a fatal bicycle hit & run crash SB. Also, consider restriping a SB left-turn lane to address the SB rear-end crash pattern. |
| <a href="#">A2.11</a> | 11             | STH 175/Appleton Ave & Amy Belle Rd         | Minor Street Stop | 6,155         | 3             | \$ 174,000    |           |   |                           |  |  |                             |  |  |  |  |                     |  |   |  |  |  |       |                         |                            | There are no recommendations at this time. It appears the intersection geometry was changed between 2015 and 2018. The last crash at this intersection was in 2016 |
| <a href="#">A2.12</a> | 12             | Maple Rd & Mequon Rd                        | All-Way Stop      | 14,100        | 16            | \$ 145,000    | 6         | 1 |                           |  |  |                             |  |  |  |  |                     |  | 3 |  |  |  |       |                         |                            | Consider improving stop sign visibility.                                                                                                                           |
| <a href="#">A2.13</a> | 13             | Division Rd & Lilac Ln                      | Minor Street Stop | 6,500         | 2             | \$ 110,000    | 1         | 1 |                           |  |  |                             |  |  |  |  |                     |  | 3 |  |  |  |       |                         |                            | Consider improving stop sign visibility.                                                                                                                           |
| <a href="#">A2.15</a> | 15             | STH 175/Appleton Ave & Hilltop Rd           | Minor Street Stop | 6,550         | 3             | \$ 54,000     | 2         |   |                           |  |  |                             |  |  |  |  |                     |  |   |  |  |  |       |                         |                            | There are no recommendations at this time.                                                                                                                         |
| <a href="#">A2.16</a> | 16             | STH 145/Fond du Lac Ave & Main St           | Minor Street Stop | 5,600         | 5             | \$ 41,000     | 1         |   |                           |  |  |                             |  |  |  |  |                     |  |   |  |  |  |       |                         |                            | There are no recommendations at this time.                                                                                                                         |
| <a href="#">A2.17</a> | 17             | STH 145/Fond du Lac & Crusader Ct-Church St | Minor Street Stop | 5,500         | 8             | \$ 32,000     |           |   |                           |  |  |                             |  |  |  |  |                     |  |   |  |  |  |       |                         |                            | There are no recommendations at this time.                                                                                                                         |
| <a href="#">A2.18</a> | 18             | Pilgrim Rd & STH 145/Fond du Lac Ave        | All-Way Stop      | 8,250         | 7             | \$ 28,000     |           | 2 |                           |  |  |                             |  |  |  |  |                     |  |   |  |  |  |       |                         |                            | There are no recommendations at this time.                                                                                                                         |
| <a href="#">A2.19</a> | 19             | STH 145/Fond du Lac Ave & Country Aire Rd   | Minor Street Stop | 4,100         | 4             | \$ 16,000     | 1         |   |                           |  |  |                             |  |  |  |  |                     |  | 3 |  |  |  |       |                         |                            | Consider improving stop sign visibility.                                                                                                                           |
| <a href="#">A2.20</a> | 20             | Pilgrim Rd & Freistadt Rd                   | Minor Street Stop | 5,550         | 4             | \$ 16,000     |           |   |                           |  |  |                             |  |  |  |  |                     |  | 3 |  |  |  |       |                         |                            | Consider improving stop sign visibility.                                                                                                                           |
| <a href="#">A2.21</a> | 21             | Division Rd & Wendy Ln                      | Minor Street Stop | 6,850         | 3             | \$ 12,000     |           |   |                           |  |  |                             |  |  |  |  |                     |  |   |  |  |  | 3     |                         |                            | Trim trees and shrubs on north leg of Division Rd (source Google Earth).                                                                                           |
| <a href="#">A2.22</a> | 22             | Country Aire Dr & CTH M/Pioneer Rd          | All-Way Stop      | 2,610         | 3             | \$ 12,000     | 1         |   |                           |  |  |                             |  |  |  |  |                     |  | 3 |  |  |  |       |                         |                            | Consider improving stop sign visibility.                                                                                                                           |

C. Remaining Intersections with Local Improvement Options

|   |                                                                    |   |                           |
|---|--------------------------------------------------------------------|---|---------------------------|
| 1 | Tier 1 - Good chance treatments would be eligible for HSIP funding |   |                           |
| 2 | Tier 2 - Maybe treatments would be eligible for HSIP funding       |   |                           |
| 3 | Tier 3 - Low chance treatments would be eligible for HSIP funding  |   |                           |
| M | Recommended to Monitor Traffic Volumes                             | ✓ | Traffic Study Recommended |

RECOMMENDATIONS

| Label & Link          | Econ Loss Rank | Intersection Name                    | Traffic Control   | Entering AADT | Total Crashes | Economic Loss | CAUSATION                                                                           |                                                                                     | RECOMMENDATIONS                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | Other | Monitor Traffic Volumes | Traffic Study Recommended? | NOTES                                                                                                     |
|-----------------------|----------------|--------------------------------------|-------------------|---------------|---------------|---------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------|-------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------|
|                       |                |                                      |                   |               |               |               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |                         |                            |                                                                                                           |
| <a href="#">A2.23</a> | 23             | STH 145/Fond du Lac Ave & Park Ave   | Minor Street Stop | 5,250         | 3             | \$ 12,000     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 3                                                                                   |                                                                                     |                                                                                     |                                                                                     |       |                         |                            | Consider improving stop sign visibility.                                                                  |
| <a href="#">A2.24</a> | 24             | Maple Rd & Rockfield Rd              | Minor Street Stop | 3,000         | 3             | \$ 12,000     | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 3                                                                                   |                                                                                     |                                                                                     | 3                                                                                   |       |                         |                            | Consider improving stop sign visibility. Trim trees and shrubs on northeast corner (source Google Earth). |
| <a href="#">A2.25</a> | 25             | Division Rd & Cedar Ln               | Minor Street Stop | 5,250         | 2             | \$ 8,000      |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |       |                         |                            | There are no recommendations at this time.                                                                |
| <a href="#">A2.26</a> | 26             | Division Rd & Donges Bay Rd          | Minor Street Stop | 6,700         | 2             | \$ 8,000      | 1                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |       |                         |                            | There are no recommendations at this time.                                                                |
| <a href="#">A2.27</a> | 27             | Country Aire Dr & CTH F/Freistadt Rd | Minor Street Stop | 22,750        | 1             | \$ 4,000      | 1                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |       |                         |                            | There are no recommendations at this time.                                                                |
| <a href="#">A2.28</a> | 28             | Heritage Hills Pkwy & Donges Bay Rd  | Minor Street Stop | 2,450         | 1             | \$ 4,000      |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |       |                         |                            | There are no recommendations at this time.                                                                |



# APPENDIX A

## ▶ APPENDIX A - INTERSECTIONS

- ▶ A1 - Intersection Rankings
- ▶ A2 - Intersection Collision Diagrams

# APPENDIX A1

## INTERSECTION RANKINGS

- ▶ A1.1 Intersection Database
- ▶ A1.2 Economic Loss Ranking
- ▶ A1.3 Crash Frequency Ranking
- ▶ A1.4 Crash Rate Ranking
- ▶ A1.5 Night-time Crash Ranking
- ▶ A1.6 Slippery Conditions Crash Ranking
- ▶ A1.7 Pedestrian Crash Ranking
- ▶ A1.8 Bicycle Crash Ranking
- ▶ A1.9 Top Crash Types
- ▶ A1.10 Top Crash Types by Direction

## APPENDIX A1.1

### Intersection Database

Village of Germantown (2015 thru 2019)

| RANK <sup>1</sup>                | INTERSECTION                                    | TRAFFIC CONTROL   | LEGS | ENTERING AADT | COORDINATES                           | CRASH FREQ. | CRASH RATE  | ECONOMIC LOSS      |
|----------------------------------|-------------------------------------------------|-------------------|------|---------------|---------------------------------------|-------------|-------------|--------------------|
| 1                                | Maple Rd & Lannon Rd/STH 167                    | Traffic Signal    | 4    | 27,550        | <a href="#">43.217902, -88.142925</a> | 73          | 1.45        | \$865,000          |
| 2                                | Pilgrim Rd & Mequon Rd/STH 167                  | Traffic Signal    | 4    | 23,500        | <a href="#">43.220967, -88.103192</a> | 54          | 1.26        | \$771,000          |
| 3                                | STH 145/Fond du Lac Ave & CTH G/Division Rd     | Minor Street Stop | 4    | 8,600         | <a href="#">43.239753, -88.123204</a> | 40          | 2.55        | \$568,000          |
| 4                                | Wasaukee Rd & Freistadt Rd                      | Minor Street Stop | 4    | 9,650         | <a href="#">43.235634, -88.063909</a> | 24          | 1.36        | \$546,000          |
| 5                                | STH 145/Fond du Lac Ave & Maple Rd-Holy Hill Rd | Minor Street Stop | 3    | 5,435         | <a href="#">43.250044, -88.142956</a> | 28          | 2.82        | \$499,000          |
| 6                                | Wasaukee Rd & Highland Rd                       | Minor Street Stop | 4    | 8,300         | <a href="#">43.250153, -88.063882</a> | 10          | 0.66        | \$385,000          |
| 7                                | Pilgrim Rd & Sylvan Circle                      | Minor Street Stop | 4    | 10,250        | <a href="#">43.223739, -88.103199</a> | 8           | 0.43        | \$377,000          |
| 8                                | STH 145/Fond du Lac Ave & Mequon Rd             | Minor Street Stop | 4    | 13,600        | <a href="#">43.221034, -88.097062</a> | 21          | 0.85        | \$369,000          |
| 9                                | STH 145/Fond du Lac Ave & Freistadt Rd          | Minor Street Stop | 4    | 8,100         | <a href="#">43.235552, -88.116742</a> | 26          | 1.76        | \$308,000          |
| 10                               | STH 175/Appleton Ave & Meeker Hill Rd           | Minor Street Stop | 3    | 5,950         | <a href="#">43.222817, -88.175674</a> | 8           | 0.74        | \$215,000          |
| 11                               | STH 175/Appleton Ave & Amy Belle Rd             | Minor Street Stop | 3    | 6,155         | <a href="#">43.228587, -88.181937</a> | 3           | 0.27        | \$174,000          |
| 12                               | Maple Rd & Mequon Rd                            | All-Way Stop      | 4    | 14,100        | <a href="#">43.221077, -88.142354</a> | 16          | 0.62        | \$145,000          |
| 13                               | Division Rd & Lilac Ln                          | Minor Street Stop | 4    | 6,500         | <a href="#">43.213724, -88.122929</a> | 2           | 0.17        | \$110,000          |
| 14                               | STH 175/Appleton Ave & Willow Creek Rd          | Minor Street Stop | 3    | 9,050         | <a href="#">43.207155, -88.158945</a> | 4           | 0.24        | \$97,000           |
| 15                               | STH 175/Appleton Ave & Hilltop Rd               | Minor Street Stop | 3    | 6,550         | <a href="#">43.208505, -88.162486</a> | 3           | 0.25        | \$54,000           |
| 16                               | STH 145/Fond du Lac Ave & Main St               | Minor Street Stop | 3    | 5,600         | <a href="#">43.228267, -88.105097</a> | 5           | 0.49        | \$41,000           |
| 17                               | STH 145/Fond du Lac & Crusader Ct-Church St     | Minor Street Stop | 4    | 5,500         | <a href="#">43.230456, -88.108645</a> | 8           | 0.80        | \$32,000           |
| 18                               | Pilgrim Rd & STH 145/Fond du Lac Ave            | All-Way Stop      | 4    | 8,250         | <a href="#">43.227156, -88.103259</a> | 7           | 0.46        | \$28,000           |
| 19                               | STH 145/Fond du Lac Ave & Country Aire Rd       | Minor Street Stop | 3    | 4,100         | <a href="#">43.212259, -88.083575</a> | 4           | 0.53        | \$16,000           |
| 20                               | Pilgrim Rd & Freistadt Rd                       | Minor Street Stop | 3    | 5,550         | <a href="#">43.235521, -88.103323</a> | 4           | 0.39        | \$16,000           |
| 21                               | Division Rd & Wendy Ln                          | Minor Street Stop | 3    | 6,850         | <a href="#">43.195188, -88.122898</a> | 3           | 0.24        | \$12,000           |
| 22                               | Country Aire Dr & CTH M/Pioneer Rd              | All-Way Stop      | 4    | 2,610         | <a href="#">43.279248, -88.083323</a> | 3           | 0.63        | \$12,000           |
| 23                               | STH 145/Fond du Lac Ave & Park Ave              | Minor Street Stop | 4    | 5,250         | <a href="#">43.231739, -88.110593</a> | 3           | 0.31        | \$12,000           |
| 24                               | Maple Rd & Rockfield Rd                         | Minor Street Stop | 4    | 3,000         | <a href="#">43.257290, -88.143000</a> | 3           | 0.55        | \$12,000           |
| 25                               | Division Rd & Cedar Ln                          | Minor Street Stop | 3    | 5,250         | <a href="#">43.272167, -88.123075</a> | 2           | 0.21        | \$8,000            |
| 26                               | Division Rd & Donges Bay Rd                     | Minor Street Stop | 3    | 6,700         | <a href="#">43.206463, -88.122917</a> | 2           | 0.16        | \$8,000            |
| 27                               | Country Aire Dr & CTH F/Freistadt Rd            | Minor Street Stop | 3    | 22,750        | <a href="#">43.235558, -88.083939</a> | 1           | 0.02        | \$4,000            |
| 28                               | Heritage Hills Pkwy & Donges Bay Rd             | Minor Street Stop | 4    | 2,450         | <a href="#">43.206486, -88.092099</a> | 1           | 0.22        | \$4,000            |
| 29                               |                                                 |                   |      |               |                                       |             |             |                    |
| 30                               |                                                 |                   |      |               |                                       |             |             |                    |
| 31                               |                                                 |                   |      |               |                                       |             |             |                    |
| 32                               |                                                 |                   |      |               |                                       |             |             |                    |
| 33                               |                                                 |                   |      |               |                                       |             |             |                    |
| 34                               |                                                 |                   |      |               |                                       |             |             |                    |
| 35                               |                                                 |                   |      |               |                                       |             |             |                    |
| 36                               |                                                 |                   |      |               |                                       |             |             |                    |
| 37                               |                                                 |                   |      |               |                                       |             |             |                    |
| 38                               |                                                 |                   |      |               |                                       |             |             |                    |
| 39                               |                                                 |                   |      |               |                                       |             |             |                    |
| 40                               |                                                 |                   |      |               |                                       |             |             |                    |
| 41                               |                                                 |                   |      |               |                                       |             |             |                    |
| 42                               |                                                 |                   |      |               |                                       |             |             |                    |
| 43                               |                                                 |                   |      |               |                                       |             |             |                    |
| 44                               |                                                 |                   |      |               |                                       |             |             |                    |
| 45                               |                                                 |                   |      |               |                                       |             |             |                    |
| 46                               |                                                 |                   |      |               |                                       |             |             |                    |
| 47                               |                                                 |                   |      |               |                                       |             |             |                    |
| 48                               |                                                 |                   |      |               |                                       |             |             |                    |
| 49                               |                                                 |                   |      |               |                                       |             |             |                    |
| 50                               |                                                 |                   |      |               |                                       |             |             |                    |
| <b>Averages per Intersection</b> |                                                 |                   |      |               |                                       | <b>13</b>   | <b>0.73</b> | <b>\$203,143</b>   |
| <b>Totals</b>                    |                                                 |                   |      |               |                                       | <b>366</b>  |             | <b>\$5,688,000</b> |

1) Ranked by total economic loss. Economic Loss calculated by using \$85k per Fatal K-Level, \$85k per Incapacitating Injury A-Level, \$85k per Non-Incapacitating Injury B-Level, and \$25k per Possible Injury C-Level, and \$4k per Property Damage Only PD-Level.



## APPENDIX A1.2

### Economic Loss Ranking

Village of Germantown (2015 thru 2019)

| RANK <sup>1</sup> | INTERSECTION                                    | TRAFFIC CONTROL   | FATAL | A-LEVEL | B-LEVEL | C-LEVEL | PDO | CRASH FREQUENCY TOTAL | ECONOMIC LOSS (ALL CRASHES) |
|-------------------|-------------------------------------------------|-------------------|-------|---------|---------|---------|-----|-----------------------|-----------------------------|
| 1                 | Maple Rd & Lannon Rd/STH 167                    | Traffic Signal    | 0     | 2       | 3       | 8       | 60  | 73                    | \$865,000                   |
| 2                 | Pilgrim Rd & Mequon Rd/STH 167                  | Traffic Signal    | 0     | 0       | 4       | 11      | 39  | 54                    | \$771,000                   |
| 3                 | STH 145/Fond du Lac Ave & CTH G/Division Rd     | Minor Street Stop | 0     | 2       | 2       | 4       | 32  | 40                    | \$568,000                   |
| 4                 | Wasaukee Rd & Freistadt Rd                      | Minor Street Stop | 0     | 0       | 4       | 6       | 14  | 24                    | \$546,000                   |
| 5                 | STH 145/Fond du Lac Ave & Maple Rd-Holy Hill Rd | Minor Street Stop | 0     | 2       | 2       | 3       | 21  | 28                    | \$499,000                   |
| 6                 | Wasaukee Rd & Highland Rd                       | Minor Street Stop | 0     | 1       | 3       | 1       | 5   | 10                    | \$385,000                   |
| 7                 | Pilgrim Rd & Sylvan Circle                      | Minor Street Stop | 0     | 1       | 3       | 1       | 3   | 8                     | \$377,000                   |
| 8                 | STH 145/Fond du Lac Ave & Mequon Rd             | Minor Street Stop | 0     | 0       | 3       | 2       | 16  | 21                    | \$369,000                   |
| 9                 | STH 145/Fond du Lac Ave & Freistadt Rd          | Minor Street Stop | 0     | 1       | 1       | 2       | 22  | 26                    | \$308,000                   |
| 10                | STH 175/Appleton Ave & Meeker Hill Rd           | Minor Street Stop | 1     | 0       | 1       | 1       | 5   | 8                     | \$215,000                   |
| 11                | STH 175/Appleton Ave & Amy Belle Rd             | Minor Street Stop | 0     | 1       | 1       | 0       | 1   | 3                     | \$174,000                   |
| 12                | Maple Rd & Mequon Rd                            | All-Way Stop      | 0     | 0       | 1       | 0       | 15  | 16                    | \$145,000                   |
| 13                | Division Rd & Lilac Ln                          | Minor Street Stop | 0     | 0       | 1       | 1       | 0   | 2                     | \$110,000                   |
| 14                | STH 175/Appleton Ave & Willow Creek Rd          | Minor Street Stop | 1     | 0       | 0       | 0       | 3   | 4                     | \$97,000                    |
| 15                | STH 175/Appleton Ave & Hilltop Rd               | Minor Street Stop | 0     | 0       | 0       | 2       | 1   | 3                     | \$54,000                    |
| 16                | STH 145/Fond du Lac Ave & Main St               | Minor Street Stop | 0     | 0       | 0       | 1       | 4   | 5                     | \$41,000                    |
| 17                | STH 145/Fond du Lac & Crusader Ct-Church St     | Minor Street Stop | 0     | 0       | 0       | 0       | 8   | 8                     | \$32,000                    |
| 18                | Pilgrim Rd & STH 145/Fond du Lac Ave            | All-Way Stop      | 0     | 0       | 0       | 0       | 7   | 7                     | \$28,000                    |
| 19                | STH 145/Fond du Lac Ave & Country Aire Rd       | Minor Street Stop | 0     | 0       | 0       | 0       | 4   | 4                     | \$16,000                    |
| 20                | Pilgrim Rd & Freistadt Rd                       | Minor Street Stop | 0     | 0       | 0       | 0       | 4   | 4                     | \$16,000                    |
| 21                | Division Rd & Wendy Ln                          | Minor Street Stop | 0     | 0       | 0       | 0       | 3   | 3                     | \$12,000                    |
| 22                | Country Aire Dr & CTH M/Pioneer Rd              | All-Way Stop      | 0     | 0       | 0       | 0       | 3   | 3                     | \$12,000                    |
| 23                | STH 145/Fond du Lac Ave & Park Ave              | Minor Street Stop | 0     | 0       | 0       | 0       | 3   | 3                     | \$12,000                    |
| 24                | Maple Rd & Rockfield Rd                         | Minor Street Stop | 0     | 0       | 0       | 0       | 3   | 3                     | \$12,000                    |
| 25                | Division Rd & Donges Bay Rd                     | Minor Street Stop | 0     | 0       | 0       | 0       | 2   | 2                     | \$8,000                     |
| 26                | Division Rd & Cedar Ln                          | Minor Street Stop | 0     | 0       | 0       | 0       | 2   | 2                     | \$8,000                     |
| 27                | Heritage Hills Pkwy & Donges Bay Rd             | Minor Street Stop | 0     | 0       | 0       | 0       | 1   | 1                     | \$4,000                     |
| 28                | Country Aire Dr & CTH F/Freistadt Rd            | Minor Street Stop | 0     | 0       | 0       | 0       | 1   | 1                     | \$4,000                     |
| 29                |                                                 |                   |       |         |         |         |     |                       |                             |
| 30                |                                                 |                   |       |         |         |         |     |                       |                             |
| 31                |                                                 |                   |       |         |         |         |     |                       |                             |
| 32                |                                                 |                   |       |         |         |         |     |                       |                             |
| 33                |                                                 |                   |       |         |         |         |     |                       |                             |
| 34                |                                                 |                   |       |         |         |         |     |                       |                             |
| 35                |                                                 |                   |       |         |         |         |     |                       |                             |
| 36                |                                                 |                   |       |         |         |         |     |                       |                             |
| 37                |                                                 |                   |       |         |         |         |     |                       |                             |
| 38                |                                                 |                   |       |         |         |         |     |                       |                             |
| 39                |                                                 |                   |       |         |         |         |     |                       |                             |
| 40                |                                                 |                   |       |         |         |         |     |                       |                             |
| 41                |                                                 |                   |       |         |         |         |     |                       |                             |
| 42                |                                                 |                   |       |         |         |         |     |                       |                             |
| 43                |                                                 |                   |       |         |         |         |     |                       |                             |
| 44                |                                                 |                   |       |         |         |         |     |                       |                             |
| 45                |                                                 |                   |       |         |         |         |     |                       |                             |
| 46                |                                                 |                   |       |         |         |         |     |                       |                             |
| 47                |                                                 |                   |       |         |         |         |     |                       |                             |
| 48                |                                                 |                   |       |         |         |         |     |                       |                             |
| 49                |                                                 |                   |       |         |         |         |     |                       |                             |
| 50                |                                                 |                   |       |         |         |         |     |                       |                             |

|                                  |  |             |             |             |             |              |              |                  |
|----------------------------------|--|-------------|-------------|-------------|-------------|--------------|--------------|------------------|
| <b>Averages per Intersection</b> |  | <b>0.07</b> | <b>0.36</b> | <b>1.04</b> | <b>1.54</b> | <b>10.07</b> | <b>13.07</b> | <b>\$203,143</b> |
|----------------------------------|--|-------------|-------------|-------------|-------------|--------------|--------------|------------------|

|               |  |          |           |           |           |            |            |                    |
|---------------|--|----------|-----------|-----------|-----------|------------|------------|--------------------|
| <b>Totals</b> |  | <b>2</b> | <b>10</b> | <b>29</b> | <b>43</b> | <b>282</b> | <b>366</b> | <b>\$5,688,000</b> |
|---------------|--|----------|-----------|-----------|-----------|------------|------------|--------------------|

| Avg. by Traffic Control | FATAL | A-LEVEL | B-LEVEL | C-LEVEL | PDO   | CRASHES | ECONOMIC LOSS |
|-------------------------|-------|---------|---------|---------|-------|---------|---------------|
| Traffic Signal          | 0.00  | 1.00    | 3.50    | 9.50    | 49.50 | 63.50   | \$818,000     |
| All-Way Stop            | 0.00  | 0.00    | 0.33    | 0.00    | 8.33  | 8.67    | \$61,667      |
| Modern Roundabout       | ---   | ---     | ---     | ---     | ---   | ---     | ---           |
| Minor Street Stop       | 0.09  | 0.35    | 0.91    | 1.04    | 6.87  | 9.26    | \$168,130     |
| Minor Street Yield      | ---   | ---     | ---     | ---     | ---   | ---     | ---           |
| Other                   | ---   | ---     | ---     | ---     | ---   | ---     | ---           |

1) Ranked by total economic loss. Economic Loss calculated by using \$85k per Fatal K-Level, \$85k per Incapacitating Injury A-Level, \$85k per Non-Incapacitating Injury B-Level, and \$25k per Possible Injury C-Level, and \$4k per Property Damage Only PD-Level.

## APPENDIX A1.3

### Crash Frequency Ranking

Village of Germantown (2015 thru 2019)

| RANK <sup>1</sup> | INTERSECTION                                    | TRAFFIC CONTROL   | FATAL | A-LEVEL | B-LEVEL | C-LEVEL | PDO | CRASH FREQUENCY TOTAL |
|-------------------|-------------------------------------------------|-------------------|-------|---------|---------|---------|-----|-----------------------|
| 1                 | Maple Rd & Lannon Rd/STH 167                    | Traffic Signal    | 0     | 2       | 3       | 8       | 60  | 73                    |
| 2                 | Pilgrim Rd & Mequon Rd/STH 167                  | Traffic Signal    | 0     | 0       | 4       | 11      | 39  | 54                    |
| 3                 | STH 145/Fond du Lac Ave & CTH G/Division Rd     | Minor Street Stop | 0     | 2       | 2       | 4       | 32  | 40                    |
| 4                 | STH 145/Fond du Lac Ave & Maple Rd-Holy Hill Rd | Minor Street Stop | 0     | 2       | 2       | 3       | 21  | 28                    |
| 5                 | STH 145/Fond du Lac Ave & Freistadt Rd          | Minor Street Stop | 0     | 1       | 1       | 2       | 22  | 26                    |
| 6                 | Wasauke Rd & Freistadt Rd                       | Minor Street Stop | 0     | 0       | 4       | 6       | 14  | 24                    |
| 7                 | STH 145/Fond du Lac Ave & Mequon Rd             | Minor Street Stop | 0     | 0       | 3       | 2       | 16  | 21                    |
| 8                 | Maple Rd & Mequon Rd                            | All-Way Stop      | 0     | 0       | 1       | 0       | 15  | 16                    |
| 9                 | Wasauke Rd & Highland Rd                        | Minor Street Stop | 0     | 1       | 3       | 1       | 5   | 10                    |
| 10                | Pilgrim Rd & Sylvan Circle                      | Minor Street Stop | 0     | 1       | 3       | 1       | 3   | 8                     |
| 11                | STH 175/Appleton Ave & Meeker Hill Rd           | Minor Street Stop | 1     | 0       | 1       | 1       | 5   | 8                     |
| 12                | STH 145/Fond du Lac & Crusader Ct-Church St     | Minor Street Stop | 0     | 0       | 0       | 0       | 8   | 8                     |
| 13                | Pilgrim Rd & STH 145/Fond du Lac Ave            | All-Way Stop      | 0     | 0       | 0       | 0       | 7   | 7                     |
| 14                | STH 145/Fond du Lac Ave & Main St               | Minor Street Stop | 0     | 0       | 0       | 1       | 4   | 5                     |
| 15                | STH 145/Fond du Lac Ave & Country Aire Rd       | Minor Street Stop | 0     | 0       | 0       | 0       | 4   | 4                     |
| 16                | STH 175/Appleton Ave & Willow Creek Rd          | Minor Street Stop | 1     | 0       | 0       | 0       | 3   | 4                     |
| 17                | Pilgrim Rd & Freistadt Rd                       | Minor Street Stop | 0     | 0       | 0       | 0       | 4   | 4                     |
| 18                | STH 175/Appleton Ave & Hilltop Rd               | Minor Street Stop | 0     | 0       | 0       | 2       | 1   | 3                     |
| 19                | STH 175/Appleton Ave & Amy Belle Rd             | Minor Street Stop | 0     | 1       | 1       | 0       | 1   | 3                     |
| 20                | Division Rd & Wendy Ln                          | Minor Street Stop | 0     | 0       | 0       | 0       | 3   | 3                     |
| 21                | Country Aire Dr & CTH M/Pioneer Rd              | All-Way Stop      | 0     | 0       | 0       | 0       | 3   | 3                     |
| 22                | Maple Rd & Rockfield Rd                         | Minor Street Stop | 0     | 0       | 0       | 0       | 3   | 3                     |
| 23                | STH 145/Fond du Lac Ave & Park Ave              | Minor Street Stop | 0     | 0       | 0       | 0       | 3   | 3                     |
| 24                | Division Rd & Donges Bay Rd                     | Minor Street Stop | 0     | 0       | 0       | 0       | 2   | 2                     |
| 25                | Division Rd & Cedar Ln                          | Minor Street Stop | 0     | 0       | 0       | 0       | 2   | 2                     |
| 26                | Division Rd & Lilac Ln                          | Minor Street Stop | 0     | 0       | 1       | 1       | 0   | 2                     |
| 27                | Heritage Hills Pkwy & Donges Bay Rd             | Minor Street Stop | 0     | 0       | 0       | 0       | 1   | 1                     |
| 28                | Country Aire Dr & CTH F/Freistadt Rd            | Minor Street Stop | 0     | 0       | 0       | 0       | 1   | 1                     |
| 29                |                                                 |                   |       |         |         |         |     |                       |
| 30                |                                                 |                   |       |         |         |         |     |                       |
| 31                |                                                 |                   |       |         |         |         |     |                       |
| 32                |                                                 |                   |       |         |         |         |     |                       |
| 33                |                                                 |                   |       |         |         |         |     |                       |
| 34                |                                                 |                   |       |         |         |         |     |                       |
| 35                |                                                 |                   |       |         |         |         |     |                       |
| 36                |                                                 |                   |       |         |         |         |     |                       |
| 37                |                                                 |                   |       |         |         |         |     |                       |
| 38                |                                                 |                   |       |         |         |         |     |                       |
| 39                |                                                 |                   |       |         |         |         |     |                       |
| 40                |                                                 |                   |       |         |         |         |     |                       |
| 41                |                                                 |                   |       |         |         |         |     |                       |
| 42                |                                                 |                   |       |         |         |         |     |                       |
| 43                |                                                 |                   |       |         |         |         |     |                       |
| 44                |                                                 |                   |       |         |         |         |     |                       |
| 45                |                                                 |                   |       |         |         |         |     |                       |
| 46                |                                                 |                   |       |         |         |         |     |                       |
| 47                |                                                 |                   |       |         |         |         |     |                       |
| 48                |                                                 |                   |       |         |         |         |     |                       |
| 49                |                                                 |                   |       |         |         |         |     |                       |
| 50                |                                                 |                   |       |         |         |         |     |                       |

|                                  |  |             |             |             |             |              |              |
|----------------------------------|--|-------------|-------------|-------------|-------------|--------------|--------------|
| <b>Averages per Intersection</b> |  | <b>0.07</b> | <b>0.36</b> | <b>1.04</b> | <b>1.54</b> | <b>10.07</b> | <b>13.07</b> |
|----------------------------------|--|-------------|-------------|-------------|-------------|--------------|--------------|

|               |  |          |           |           |           |            |            |
|---------------|--|----------|-----------|-----------|-----------|------------|------------|
| <b>Totals</b> |  | <b>2</b> | <b>10</b> | <b>29</b> | <b>43</b> | <b>282</b> | <b>366</b> |
|---------------|--|----------|-----------|-----------|-----------|------------|------------|

| Avg. by Traffic Control | FATAL | A-LEVEL | B-LEVEL | C-LEVEL | PDO   | CRASH FREQUENCY |
|-------------------------|-------|---------|---------|---------|-------|-----------------|
| Traffic Signal          | 0.00  | 1.00    | 3.50    | 9.50    | 49.50 | 63.50           |
| All-Way Stop            | 0.00  | 0.00    | 0.33    | 0.00    | 8.33  | 8.67            |
| Modern Roundabout       | ---   | ---     | ---     | ---     | ---   | ---             |
| Minor Street Stop       | 0.09  | 0.35    | 0.91    | 1.04    | 6.87  | 9.26            |
| Minor Street Yield      | ---   | ---     | ---     | ---     | ---   | ---             |
| Other                   | ---   | ---     | ---     | ---     | ---   | ---             |

1) Ranked by total crash frequency in five-year period.

## APPENDIX A1.4

### Crash Rate Ranking

Village of Germantown (2015 thru 2019)

| RANK <sup>1</sup> | INTERSECTION                                    | TRAFFIC CONTROL   | ENTERING AADT  | CRASH FREQUENCY | CRASH RATE  |
|-------------------|-------------------------------------------------|-------------------|----------------|-----------------|-------------|
| 1                 | STH 145/Fond du Lac Ave & Maple Rd-Holy Hill Rd | Minor Street Stop | 5,435          | 28              | 2.82        |
| 2                 | STH 145/Fond du Lac Ave & CTH G/Division Rd     | Minor Street Stop | 8,600          | 40              | 2.55        |
| 3                 | STH 145/Fond du Lac Ave & Freistadt Rd          | Minor Street Stop | 8,100          | 26              | 1.76        |
| 4                 | Maple Rd & Lannon Rd/STH 167                    | Traffic Signal    | 27,550         | 73              | 1.45        |
| 5                 | Wasauke Rd & Freistadt Rd                       | Minor Street Stop | 9,650          | 24              | 1.36        |
| 6                 | Pilgrim Rd & Mequon Rd/STH 167                  | Traffic Signal    | 23,500         | 54              | 1.26        |
| 7                 | STH 145/Fond du Lac Ave & Mequon Rd             | Minor Street Stop | 13,600         | 21              | 0.85        |
| 8                 | STH 145/Fond du Lac & Crusader Ct-Church St     | Minor Street Stop | 5,500          | 8               | 0.80        |
| 9                 | STH 175/Appleton Ave & Meeker Hill Rd           | Minor Street Stop | 5,950          | 8               | 0.74        |
| 10                | Wasauke Rd & Highland Rd                        | Minor Street Stop | 8,300          | 10              | 0.66        |
| 11                | Country Aire Dr & CTH M/Pioneer Rd              | All-Way Stop      | 2,610          | 3               | 0.63        |
| 12                | Maple Rd & Mequon Rd                            | All-Way Stop      | 14,100         | 16              | 0.62        |
| 13                | Maple Rd & Rockfield Rd                         | Minor Street Stop | 3,000          | 3               | 0.55        |
| 14                | STH 145/Fond du Lac Ave & Country Aire Rd       | Minor Street Stop | 4,100          | 4               | 0.53        |
| 15                | STH 145/Fond du Lac Ave & Main St               | Minor Street Stop | 5,600          | 5               | 0.49        |
| 16                | Pilgrim Rd & STH 145/Fond du Lac Ave            | All-Way Stop      | 8,250          | 7               | 0.46        |
| 17                | Pilgrim Rd & Sylvan Circle                      | Minor Street Stop | 10,250         | 8               | 0.43        |
| 18                | Pilgrim Rd & Freistadt Rd                       | Minor Street Stop | 5,550          | 4               | 0.39        |
| 19                | STH 145/Fond du Lac Ave & Park Ave              | Minor Street Stop | 5,250          | 3               | 0.31        |
| 20                | STH 175/Appleton Ave & Amy Belle Rd             | Minor Street Stop | 6,155          | 3               | 0.27        |
| 21                | STH 175/Appleton Ave & Hilltop Rd               | Minor Street Stop | 6,550          | 3               | 0.25        |
| 22                | STH 175/Appleton Ave & Willow Creek Rd          | Minor Street Stop | 9,050          | 4               | 0.24        |
| 23                | Division Rd & Wendy Ln                          | Minor Street Stop | 6,850          | 3               | 0.24        |
| 24                | Heritage Hills Pkwy & Donges Bay Rd             | Minor Street Stop | 2,450          | 1               | 0.22        |
| 25                | Division Rd & Cedar Ln                          | Minor Street Stop | 5,250          | 2               | 0.21        |
| 26                | Division Rd & Lilac Ln                          | Minor Street Stop | 6,500          | 2               | 0.17        |
| 27                | Division Rd & Donges Bay Rd                     | Minor Street Stop | 6,700          | 2               | 0.16        |
| 28                | Country Aire Dr & CTH F/Freistadt Rd            | Minor Street Stop | 22,750         | 1               | 0.02        |
| 29                |                                                 |                   |                |                 |             |
| 30                |                                                 |                   |                |                 |             |
| 31                |                                                 |                   |                |                 |             |
| 32                |                                                 |                   |                |                 |             |
| 33                |                                                 |                   |                |                 |             |
| 34                |                                                 |                   |                |                 |             |
| 35                |                                                 |                   |                |                 |             |
| 36                |                                                 |                   |                |                 |             |
| 37                |                                                 |                   |                |                 |             |
| 38                |                                                 |                   |                |                 |             |
| 39                |                                                 |                   |                |                 |             |
| 40                |                                                 |                   |                |                 |             |
| 41                |                                                 |                   |                |                 |             |
| 42                |                                                 |                   |                |                 |             |
| 43                |                                                 |                   |                |                 |             |
| 44                |                                                 |                   |                |                 |             |
| 45                |                                                 |                   |                |                 |             |
| 46                |                                                 |                   |                |                 |             |
| 47                |                                                 |                   |                |                 |             |
| 48                |                                                 |                   |                |                 |             |
| 49                |                                                 |                   |                |                 |             |
| 50                |                                                 |                   |                |                 |             |
| <b>Totals</b>     |                                                 |                   | <b>247,150</b> | <b>366</b>      | <b>0.81</b> |

| Avg. by Traffic Control | ENTERING AADT | CRASH FREQUENCY | CRASH RATE |
|-------------------------|---------------|-----------------|------------|
| Traffic Signal          | 25,525        | 63.50           | 1.36       |
| All-Way Stop            | 8,320         | 8.67            | 0.57       |
| Modern Roundabout       | ---           | ---             | ---        |
| Minor Street Stop       | 7,441         | 9.26            | 0.68       |
| Minor Street Yield      | ---           | ---             | ---        |
| Other                   | ---           | ---             | ---        |

1) Ranked by total number of crashes per million entering vehicles in five-year period.



## APPENDIX A1.5

### Night-Time Crash Ranking

Village of Germantown (2015 thru 2019)

| RANK <sup>1</sup>         | INTERSECTION                                    | TRAFFIC CONTROL   | NIGHT-TIME CRASHES | TOTAL NUMBER OF CRASHES | PERCENT NIGHT-TIME | ECONOMIC LOSS (NIGHT-TIME) |
|---------------------------|-------------------------------------------------|-------------------|--------------------|-------------------------|--------------------|----------------------------|
| 1                         | Maple Rd & Lannon Rd/STH 167                    | Traffic Signal    | 15                 | 73                      | 21%                | \$222,000                  |
| 2                         | STH 175/Appleton Ave & Meeker Hill Rd           | Minor Street Stop | 2                  | 8                       | 25%                | \$170,000                  |
| 3                         | Pilgrim Rd & Mequon Rd/STH 167                  | Traffic Signal    | 16                 | 54                      | 30%                | \$169,000                  |
| 4                         | STH 145/Fond du Lac Ave & Maple Rd-Holy Hill Rd | Minor Street Stop | 6                  | 28                      | 21%                | \$147,000                  |
| 5                         | STH 145/Fond du Lac Ave & Mequon Rd             | Minor Street Stop | 4                  | 21                      | 19%                | \$97,000                   |
| 6                         | Wasaukee Rd & Freistadt Rd                      | Minor Street Stop | 3                  | 24                      | 13%                | \$93,000                   |
| 7                         | Pilgrim Rd & Sylvan Circle                      | Minor Street Stop | 2                  | 8                       | 25%                | \$89,000                   |
| 8                         | Division Rd & Lilac Ln                          | Minor Street Stop | 1                  | 2                       | 50%                | \$85,000                   |
| 9                         | STH 145/Fond du Lac Ave & CTH G/Division Rd     | Minor Street Stop | 5                  | 40                      | 13%                | \$20,000                   |
| 10                        | STH 145/Fond du Lac & Crusader Ct-Church St     | Minor Street Stop | 3                  | 8                       | 38%                | \$12,000                   |
| 11                        | STH 145/Fond du Lac Ave & Freistadt Rd          | Minor Street Stop | 2                  | 26                      | 8%                 | \$8,000                    |
| 12                        | Division Rd & Wendy Ln                          | Minor Street Stop | 2                  | 3                       | 67%                | \$8,000                    |
| 13                        | Heritage Hills Pkwy & Donges Bay Rd             | Minor Street Stop | 1                  | 1                       | 100%               | \$4,000                    |
| 14                        | Pilgrim Rd & STH 145/Fond du Lac Ave            | All-Way Stop      | 1                  | 7                       | 14%                | \$4,000                    |
| 15                        | STH 175/Appleton Ave & Amy Belle Rd             | Minor Street Stop | 1                  | 3                       | 33%                | \$4,000                    |
| 16                        | Maple Rd & Mequon Rd                            | All-Way Stop      | 1                  | 16                      | 6%                 | \$4,000                    |
| 17                        | STH 175/Appleton Ave & Willow Creek Rd          | Minor Street Stop | 1                  | 4                       | 25%                | \$4,000                    |
| 18                        | STH 145/Fond du Lac Ave & Park Ave              | Minor Street Stop | 1                  | 3                       | 33%                | \$4,000                    |
| 19                        | Pilgrim Rd & Freistadt Rd                       | Minor Street Stop | 1                  | 4                       | 25%                | \$4,000                    |
| 20                        | STH 145/Fond du Lac Ave & Main St               | Minor Street Stop | 1                  | 5                       | 20%                | \$4,000                    |
| 21                        | Division Rd & Cedar Ln                          | Minor Street Stop | 0                  | 2                       | 0%                 | \$0                        |
| 22                        | Division Rd & Donges Bay Rd                     | Minor Street Stop | 0                  | 2                       | 0%                 | \$0                        |
| 23                        | Country Aire Dr & CTH F/Freistadt Rd            | Minor Street Stop | 0                  | 1                       | 0%                 | \$0                        |
| 24                        | Wasaukee Rd & Highland Rd                       | Minor Street Stop | 0                  | 10                      | 0%                 | \$0                        |
| 25                        | Maple Rd & Rockfield Rd                         | Minor Street Stop | 0                  | 3                       | 0%                 | \$0                        |
| 26                        | STH 175/Appleton Ave & Hilltop Rd               | Minor Street Stop | 0                  | 3                       | 0%                 | \$0                        |
| 27                        | Country Aire Dr & CTH M/Pioneer Rd              | All-Way Stop      | 0                  | 3                       | 0%                 | \$0                        |
| 28                        | STH 145/Fond du Lac Ave & Country Aire Rd       | Minor Street Stop | 0                  | 4                       | 0%                 | \$0                        |
| 29                        |                                                 |                   |                    |                         |                    |                            |
| 30                        |                                                 |                   |                    |                         |                    |                            |
| 31                        |                                                 |                   |                    |                         |                    |                            |
| 32                        |                                                 |                   |                    |                         |                    |                            |
| 33                        |                                                 |                   |                    |                         |                    |                            |
| 34                        |                                                 |                   |                    |                         |                    |                            |
| 35                        |                                                 |                   |                    |                         |                    |                            |
| 36                        |                                                 |                   |                    |                         |                    |                            |
| 37                        |                                                 |                   |                    |                         |                    |                            |
| 38                        |                                                 |                   |                    |                         |                    |                            |
| 39                        |                                                 |                   |                    |                         |                    |                            |
| 40                        |                                                 |                   |                    |                         |                    |                            |
| 41                        |                                                 |                   |                    |                         |                    |                            |
| 42                        |                                                 |                   |                    |                         |                    |                            |
| 43                        |                                                 |                   |                    |                         |                    |                            |
| 44                        |                                                 |                   |                    |                         |                    |                            |
| 45                        |                                                 |                   |                    |                         |                    |                            |
| 46                        |                                                 |                   |                    |                         |                    |                            |
| 47                        |                                                 |                   |                    |                         |                    |                            |
| 48                        |                                                 |                   |                    |                         |                    |                            |
| 49                        |                                                 |                   |                    |                         |                    |                            |
| 50                        |                                                 |                   |                    |                         |                    |                            |
| Averages per Intersection |                                                 |                   | 2.46               | 13.07                   | 19%                | \$57,600                   |
| Totals                    |                                                 |                   | 69                 | 366                     | 19%                | \$1,152,000                |

<sup>1</sup>) Crashes ranked by economic loss of night-time crashes. Night-time includes night, or during low-light (dawn/dusk) conditions. Economic Loss calculated by using \$85k per Fatal K-Level, \$85k per Incapacitating Injury A-Level, \$85k per Non-Incapacitating Injury B-Level, \$25k per Possible Injury C-Level, and \$4k per Property Damage Only PD-Level.

## APPENDIX A1.6

### Slippery Conditions Crash Ranking

Village of Germantown (2015 thru 2019)

| RANK <sup>1</sup>         | INTERSECTION                                    | TRAFFIC CONTROL   | SLIPPERY CONDITIONS CRASHES | TOTAL NUMBER OF CRASHES | PERCENT SLIPPERY CONDITIONS | ECONOMIC LOSS (SLIPPERY CONDITIONS) |
|---------------------------|-------------------------------------------------|-------------------|-----------------------------|-------------------------|-----------------------------|-------------------------------------|
| 1                         | Wasaukee Rd & Freistadt Rd                      | Minor Street Stop | 6                           | 24                      | 25%                         | \$228,000                           |
| 2                         | Pilgrim Rd & Mequon Rd/STH 167                  | Traffic Signal    | 12                          | 54                      | 22%                         | \$213,000                           |
| 3                         | STH 145/Fond du Lac Ave & Freistadt Rd          | Minor Street Stop | 4                           | 26                      | 15%                         | \$178,000                           |
| 4                         | Pilgrim Rd & Sylvan Circle                      | Minor Street Stop | 3                           | 8                       | 38%                         | \$174,000                           |
| 5                         | Maple Rd & Lannon Rd/STH 167                    | Traffic Signal    | 22                          | 73                      | 30%                         | \$151,000                           |
| 6                         | Wasaukee Rd & Highland Rd                       | Minor Street Stop | 4                           | 10                      | 40%                         | \$118,000                           |
| 7                         | STH 145/Fond du Lac Ave & Mequon Rd             | Minor Street Stop | 4                           | 21                      | 19%                         | \$118,000                           |
| 8                         | STH 145/Fond du Lac Ave & Maple Rd-Holy Hill Rd | Minor Street Stop | 4                           | 28                      | 14%                         | \$97,000                            |
| 9                         | STH 145/Fond du Lac Ave & CTH G/Division Rd     | Minor Street Stop | 10                          | 40                      | 25%                         | \$61,000                            |
| 10                        | STH 145/Fond du Lac Ave & Main St               | Minor Street Stop | 1                           | 5                       | 20%                         | \$25,000                            |
| 11                        | STH 175/Appleton Ave & Hilltop Rd               | Minor Street Stop | 1                           | 3                       | 33%                         | \$25,000                            |
| 12                        | Maple Rd & Mequon Rd                            | All-Way Stop      | 4                           | 16                      | 25%                         | \$16,000                            |
| 13                        | Division Rd & Wendy Ln                          | Minor Street Stop | 3                           | 3                       | 100%                        | \$12,000                            |
| 14                        | STH 175/Appleton Ave & Meeker Hill Rd           | Minor Street Stop | 2                           | 8                       | 25%                         | \$8,000                             |
| 15                        | STH 145/Fond du Lac Ave & Country Aire Rd       | Minor Street Stop | 2                           | 4                       | 50%                         | \$8,000                             |
| 16                        | Division Rd & Cedar Ln                          | Minor Street Stop | 1                           | 2                       | 50%                         | \$4,000                             |
| 17                        | Country Aire Dr & CTH M/Pioneer Rd              | All-Way Stop      | 1                           | 3                       | 33%                         | \$4,000                             |
| 18                        | STH 145/Fond du Lac & Crusader Ct-Church St     | Minor Street Stop | 1                           | 8                       | 13%                         | \$4,000                             |
| 19                        | Maple Rd & Rockfield Rd                         | Minor Street Stop | 1                           | 3                       | 33%                         | \$4,000                             |
| 20                        | STH 145/Fond du Lac Ave & Park Ave              | Minor Street Stop | 1                           | 3                       | 33%                         | \$4,000                             |
| 21                        | Heritage Hills Pkwy & Donges Bay Rd             | Minor Street Stop | 0                           | 1                       | 0%                          | \$0                                 |
| 22                        | Division Rd & Donges Bay Rd                     | Minor Street Stop | 0                           | 2                       | 0%                          | \$0                                 |
| 23                        | STH 175/Appleton Ave & Willow Creek Rd          | Minor Street Stop | 0                           | 4                       | 0%                          | \$0                                 |
| 24                        | Pilgrim Rd & STH 145/Fond du Lac Ave            | All-Way Stop      | 0                           | 7                       | 0%                          | \$0                                 |
| 25                        | Country Aire Dr & CTH F/Freistadt Rd            | Minor Street Stop | 0                           | 1                       | 0%                          | \$0                                 |
| 26                        | Pilgrim Rd & Freistadt Rd                       | Minor Street Stop | 0                           | 4                       | 0%                          | \$0                                 |
| 27                        | STH 175/Appleton Ave & Amy Belle Rd             | Minor Street Stop | 0                           | 3                       | 0%                          | \$0                                 |
| 28                        | Division Rd & Lilac Ln                          | Minor Street Stop | 0                           | 2                       | 0%                          | \$0                                 |
| 29                        |                                                 |                   |                             |                         |                             |                                     |
| 30                        |                                                 |                   |                             |                         |                             |                                     |
| 31                        |                                                 |                   |                             |                         |                             |                                     |
| 32                        |                                                 |                   |                             |                         |                             |                                     |
| 33                        |                                                 |                   |                             |                         |                             |                                     |
| 34                        |                                                 |                   |                             |                         |                             |                                     |
| 35                        |                                                 |                   |                             |                         |                             |                                     |
| 36                        |                                                 |                   |                             |                         |                             |                                     |
| 37                        |                                                 |                   |                             |                         |                             |                                     |
| 38                        |                                                 |                   |                             |                         |                             |                                     |
| 39                        |                                                 |                   |                             |                         |                             |                                     |
| 40                        |                                                 |                   |                             |                         |                             |                                     |
| 41                        |                                                 |                   |                             |                         |                             |                                     |
| 42                        |                                                 |                   |                             |                         |                             |                                     |
| 43                        |                                                 |                   |                             |                         |                             |                                     |
| 44                        |                                                 |                   |                             |                         |                             |                                     |
| 45                        |                                                 |                   |                             |                         |                             |                                     |
| 46                        |                                                 |                   |                             |                         |                             |                                     |
| 47                        |                                                 |                   |                             |                         |                             |                                     |
| 48                        |                                                 |                   |                             |                         |                             |                                     |
| 49                        |                                                 |                   |                             |                         |                             |                                     |
| 50                        |                                                 |                   |                             |                         |                             |                                     |
| Averages per Intersection |                                                 |                   | 3                           | 13                      | 24%                         | \$72,600                            |
| Totals                    |                                                 |                   | 87                          | 366                     | 24%                         | \$1,452,000                         |

<sup>1</sup>) Crashes ranked by economic loss of slippery pavement conditions crashes. Slippery conditions includes wet, snowy, or icy. Economic Loss calculated by using \$85k per Fatal K-Level, \$85k per Incapacitating Injury A-Level, \$85k per Non-Incapacitating Injury B-Level, \$25k per Possible Injury C-Level, and \$4k per Property Damage Only PD-Level.

## APPENDIX A1.7

### Pedestrian Crash Ranking

Village of Germantown (2015 thru 2019)

| RANK <sup>1</sup>         | INTERSECTION                                    | TRAFFIC CONTROL   | FATAL | A-LEVEL | B-LEVEL | C-LEVEL | PDO  | TOTAL PEDESTRIAN CRASHES | ECONOMIC LOSS (PED CRASHES) |
|---------------------------|-------------------------------------------------|-------------------|-------|---------|---------|---------|------|--------------------------|-----------------------------|
| 1                         | Wasaukee Rd & Freistadt Rd                      | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 2                         | Division Rd & Cedar Ln                          | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 3                         | Maple Rd & Lannon Rd/STH 167                    | Traffic Signal    | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 4                         | Maple Rd & Mequon Rd                            | All-Way Stop      | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 5                         | STH 145/Fond du Lac Ave & Park Ave              | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 6                         | STH 145/Fond du Lac & Crusader Ct-Church St     | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 7                         | Division Rd & Wendy Ln                          | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 8                         | STH 175/Appleton Ave & Meeker Hill Rd           | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 9                         | STH 175/Appleton Ave & Amy Belle Rd             | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 10                        | STH 175/Appleton Ave & Willow Creek Rd          | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 11                        | Country Aire Dr & CTH F/Freistadt Rd            | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 12                        | STH 175/Appleton Ave & Hilltop Rd               | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 13                        | Division Rd & Lilac Ln                          | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 14                        | Heritage Hills Pkwy & Donges Bay Rd             | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 15                        | STH 145/Fond du Lac Ave & Country Aire Rd       | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 16                        | STH 145/Fond du Lac Ave & Main St               | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 17                        | Pilgrim Rd & STH 145/Fond du Lac Ave            | All-Way Stop      | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 18                        | Pilgrim Rd & Freistadt Rd                       | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 19                        | Pilgrim Rd & Mequon Rd/STH 167                  | Traffic Signal    | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 20                        | Country Aire Dr & CTH M/Pioneer Rd              | All-Way Stop      | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 21                        | Maple Rd & Rockfield Rd                         | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 22                        | Division Rd & Donges Bay Rd                     | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 23                        | STH 145/Fond du Lac Ave & CTH G/Division Rd     | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 24                        | STH 145/Fond du Lac Ave & Freistadt Rd          | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 25                        | STH 145/Fond du Lac Ave & Maple Rd-Holy Hill Rd | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 26                        | STH 145/Fond du Lac Ave & Mequon Rd             | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 27                        | Pilgrim Rd & Sylvan Circle                      | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 28                        | Wasaukee Rd & Highland Rd                       | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                        | \$0                         |
| 29                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 30                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 31                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 32                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 33                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 34                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 35                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 36                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 37                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 38                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 39                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 40                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 41                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 42                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 43                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 44                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 45                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 46                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 47                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 48                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 49                        |                                                 |                   |       |         |         |         |      |                          |                             |
| 50                        |                                                 |                   |       |         |         |         |      |                          |                             |
| Averages per Intersection |                                                 |                   | 0.00  | 0.00    | 0.00    | 0.00    | 0.00 | 0.00                     | \$0.00                      |
| Totals                    |                                                 |                   | 0     | 0       | 0       | 0       | 0    | 0                        | \$0.00                      |

1) Ranked by economic loss of crashes involving pedestrians. Economic Loss calculated by using \$85k per Fatal K-Level, \$85k per Incapacitating Injury A-Level, \$85k per Non-Incapacitating Injury B-Level, \$25k per Possible Injury C-Level, and \$4k per Property Damage Only PD-Level.



## APPENDIX A1.8

### Bicycle Crash Ranking

Village of Germantown (2015 thru 2019)

| RANK <sup>1</sup>         | INTERSECTION                                    | TRAFFIC CONTROL   | FATAL | A-LEVEL | B-LEVEL | C-LEVEL | PDO  | TOTAL BICYCLE CRASHES | ECONOMIC LOSS (BICYCLE CRASHES) |
|---------------------------|-------------------------------------------------|-------------------|-------|---------|---------|---------|------|-----------------------|---------------------------------|
| 1                         | STH 175/Appleton Ave & Meeker Hill Rd           | Minor Street Stop | 1     | 0       | 0       | 0       | 0    | 1                     | \$85,000                        |
| 2                         | Pilgrim Rd & Mequon Rd/STH 167                  | Traffic Signal    | 0     | 0       | 0       | 1       | 0    | 1                     | \$25,000                        |
| 3                         | Division Rd & Cedar Ln                          | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 4                         | Heritage Hills Pkwy & Donges Bay Rd             | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 5                         | Division Rd & Lilac Ln                          | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 6                         | Wasauke Rd & Freistadt Rd                       | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 7                         | Maple Rd & Lannon Rd/STH 167                    | Traffic Signal    | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 8                         | STH 145/Fond du Lac Ave & CTH G/Division Rd     | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 9                         | STH 145/Fond du Lac Ave & Mequon Rd             | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 10                        | Division Rd & Wendy Ln                          | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 11                        | STH 175/Appleton Ave & Amy Belle Rd             | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 12                        | STH 175/Appleton Ave & Willow Creek Rd          | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 13                        | Maple Rd & Mequon Rd                            | All-Way Stop      | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 14                        | Country Aire Dr & CTH F/Freistadt Rd            | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 15                        | STH 175/Appleton Ave & Hilltop Rd               | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 16                        | STH 145/Fond du Lac Ave & Country Aire Rd       | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 17                        | STH 145/Fond du Lac Ave & Main St               | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 18                        | STH 145/Fond du Lac & Crusader Ct-Church St     | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 19                        | Pilgrim Rd & STH 145/Fond du Lac Ave            | All-Way Stop      | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 20                        | Pilgrim Rd & Freistadt Rd                       | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 21                        | Country Aire Dr & CTH M/Pioneer Rd              | All-Way Stop      | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 22                        | STH 145/Fond du Lac Ave & Park Ave              | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 23                        | Maple Rd & Rockfield Rd                         | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 24                        | Division Rd & Donges Bay Rd                     | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 25                        | STH 145/Fond du Lac Ave & Freistadt Rd          | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 26                        | STH 145/Fond du Lac Ave & Maple Rd-Holy Hill Rd | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 27                        | Pilgrim Rd & Sylvan Circle                      | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 28                        | Wasauke Rd & Highland Rd                        | Minor Street Stop | 0     | 0       | 0       | 0       | 0    | 0                     | \$0                             |
| 29                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 30                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 31                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 32                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 33                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 34                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 35                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 36                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 37                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 38                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 39                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 40                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 41                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 42                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 43                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 44                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 45                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 46                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 47                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 48                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 49                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| 50                        |                                                 |                   |       |         |         |         |      |                       |                                 |
| Averages per Intersection |                                                 |                   | 0.04  | 0.00    | 0.00    | 0.04    | 0.00 | 0.07                  | \$55,000.00                     |
| Totals                    |                                                 |                   | 1     | 0       | 0       | 1       | 0    | 2                     | \$110,000.00                    |

1) Ranked by economic loss of crashes involving bicyclists. Economic Loss calculated by using \$85k per Fatal K-Level, \$85k per Incapacitating Injury A-Level, \$85k per Non-Incapacitating Injury B-Level, \$25k per Possible Injury C-Level, and \$4k per Property Damage Only PD-Level.

## APPENDIX A1.9

### Top Crash Types

Village of Germantown (2015 thru 2019)

| RANK <sup>1</sup>                    | CRASH TYPES      | INTERSECTION                                    | TRAFFIC CONTROL   | NUMBER OF CRASHES | ECONOMIC LOSS       |
|--------------------------------------|------------------|-------------------------------------------------|-------------------|-------------------|---------------------|
| 1                                    | RT-ANGLE         | Wasaukee Rd & Freistadt Rd                      | Minor Street Stop | 20                | \$530,000           |
| 2                                    | LT-ANGLE         | Pilgrim Rd & Mequon Rd/STH 167                  | Traffic Signal    | 17                | \$476,000           |
| 3                                    | RT-ANGLE         | STH 145/Fond du Lac Ave & CTH G/Division Rd     | Minor Street Stop | 26                | \$470,000           |
| 4                                    | RT-ANGLE         | STH 145/Fond du Lac Ave & Maple Rd-Holy Hill Rd | Minor Street Stop | 22                | \$433,000           |
| 5                                    | RT-ANGLE         | STH 145/Fond du Lac Ave & Mequon Rd             | Minor Street Stop | 13                | \$337,000           |
| 6                                    | RT-ANGLE         | Wasaukee Rd & Highland Rd                       | Minor Street Stop | 6                 | \$288,000           |
| 7                                    | REAR-END         | Maple Rd & Lannon Rd/STH 167                    | Traffic Signal    | 24                | \$240,000           |
| 8                                    | LT-ANGLE         | Maple Rd & Lannon Rd/STH 167                    | Traffic Signal    | 7                 | \$190,000           |
| 9                                    | MISC. OTHER      | STH 175/Appleton Ave & Amy Belle Rd             | Minor Street Stop | 3                 | \$174,000           |
| 10                                   | RT-ANGLE         | STH 145/Fond du Lac Ave & Freistadt Rd          | Minor Street Stop | 12                | \$171,000           |
| 11                                   | RT-TURN REAR-END | Maple Rd & Lannon Rd/STH 167                    | Traffic Signal    | 16                | \$148,000           |
| 12                                   | RT-ANGLE         | Maple Rd & Lannon Rd/STH 167                    | Traffic Signal    | 7                 | \$130,000           |
| 13                                   | LT-ANGLE         | Pilgrim Rd & Sylvan Circle                      | Minor Street Stop | 3                 | \$114,000           |
| 14                                   | RT-ANGLE         | Division Rd & Lilac Ln                          | Minor Street Stop | 2                 | \$110,000           |
| 15                                   | REAR-END         | Pilgrim Rd & Mequon Rd/STH 167                  | Traffic Signal    | 11                | \$107,000           |
| 16                                   | FIXED-OBJECT     | Maple Rd & Lannon Rd/STH 167                    | Traffic Signal    | 6                 | \$105,000           |
| 17                                   | RT-ANGLE         | Maple Rd & Mequon Rd                            | All-Way Stop      | 6                 | \$105,000           |
| 18                                   | LT-ANGLE         | STH 145/Fond du Lac Ave & Freistadt Rd          | Minor Street Stop | 3                 | \$93,000            |
| 19                                   | FIXED-OBJECT     | STH 175/Appleton Ave & Meeker Hill Rd           | Minor Street Stop | 2                 | \$89,000            |
| 20                                   | RT-ANGLE         | Pilgrim Rd & Sylvan Circle                      | Minor Street Stop | 2                 | \$89,000            |
| 21                                   | REAR-END         | Pilgrim Rd & Sylvan Circle                      | Minor Street Stop | 2                 | \$89,000            |
| 22                                   | BICYCLE-RELATED  | STH 175/Appleton Ave & Meeker Hill Rd           | Minor Street Stop | 1                 | \$85,000            |
| 23                                   | HEAD-ON          | STH 175/Appleton Ave & Willow Creek Rd          | Minor Street Stop | 1                 | \$85,000            |
| 24                                   | MISC. OTHER      | Pilgrim Rd & Sylvan Circle                      | Minor Street Stop | 1                 | \$85,000            |
| 25                                   | REAR-END         | Wasaukee Rd & Highland Rd                       | Minor Street Stop | 1                 | \$85,000            |
| 26                                   | RT-TURN REAR-END | Pilgrim Rd & Mequon Rd/STH 167                  | Traffic Signal    | 9                 | \$78,000            |
| 27                                   | REAR-END         | STH 145/Fond du Lac Ave & Main St               | Minor Street Stop | 4                 | \$37,000            |
| 28                                   | LT-ANGLE         | STH 145/Fond du Lac Ave & CTH G/Division Rd     | Minor Street Stop | 4                 | \$37,000            |
| 29                                   | REAR-END         | STH 175/Appleton Ave & Meeker Hill Rd           | Minor Street Stop | 3                 | \$33,000            |
| 30                                   | RT-ANGLE         | Pilgrim Rd & Mequon Rd/STH 167                  | Traffic Signal    | 3                 | \$33,000            |
| 31                                   | MISC. OTHER      | STH 145/Fond du Lac Ave & CTH G/Division Rd     | Minor Street Stop | 3                 | \$33,000            |
| 32                                   | REAR-END         | STH 145/Fond du Lac Ave & Maple Rd-Holy Hill Rd | Minor Street Stop | 3                 | \$33,000            |
| 33                                   | MISC. OTHER      | Maple Rd & Lannon Rd/STH 167                    | Traffic Signal    | 8                 | \$32,000            |
| 34                                   | RT-ANGLE         | STH 175/Appleton Ave & Hilltop Rd               | Minor Street Stop | 2                 | \$29,000            |
| 35                                   | REAR-END         | STH 175/Appleton Ave & Hilltop Rd               | Minor Street Stop | 1                 | \$25,000            |
| 36                                   | BICYCLE-RELATED  | Pilgrim Rd & Mequon Rd/STH 167                  | Traffic Signal    | 1                 | \$25,000            |
| 37                                   | LT-ANGLE         | STH 145/Fond du Lac Ave & Maple Rd-Holy Hill Rd | Minor Street Stop | 1                 | \$25,000            |
| 38                                   | FIXED-OBJECT     | Pilgrim Rd & Mequon Rd/STH 167                  | Traffic Signal    | 6                 | \$24,000            |
| 39                                   | RT-TURN REAR-END | STH 145/Fond du Lac Ave & Freistadt Rd          | Minor Street Stop | 6                 | \$24,000            |
| 40                                   | SIDE-SWIPE-SAME  | Maple Rd & Lannon Rd/STH 167                    | Traffic Signal    | 5                 | \$20,000            |
| 41                                   | MISC. OTHER      | Pilgrim Rd & Mequon Rd/STH 167                  | Traffic Signal    | 4                 | \$16,000            |
| 42                                   | REAR-END         | STH 145/Fond du Lac Ave & CTH G/Division Rd     | Minor Street Stop | 4                 | \$16,000            |
| 43                                   | MISC. OTHER      | Wasaukee Rd & Freistadt Rd                      | Minor Street Stop | 3                 | \$12,000            |
| 44                                   | REAR-END         | Maple Rd & Mequon Rd                            | All-Way Stop      | 3                 | \$12,000            |
| 45                                   | MISC. OTHER      | STH 145/Fond du Lac & Crusader Ct-Church St     | Minor Street Stop | 3                 | \$12,000            |
| 46                                   | SIDE-SWIPE-SAME  | Pilgrim Rd & Mequon Rd/STH 167                  | Traffic Signal    | 3                 | \$12,000            |
| 47                                   | LT-ANGLE         | STH 145/Fond du Lac Ave & Mequon Rd             | Minor Street Stop | 3                 | \$12,000            |
| 48                                   | DRIVEWAY-RELATED | STH 175/Appleton Ave & Meeker Hill Rd           | Minor Street Stop | 2                 | \$8,000             |
| 49                                   | FIXED-OBJECT     | Division Rd & Wendy Ln                          | Minor Street Stop | 2                 | \$8,000             |
| 50                                   | FIXED-OBJECT     | STH 175/Appleton Ave & Willow Creek Rd          | Minor Street Stop | 2                 | \$8,000             |
| <b>Totals for Top 50 Crash Types</b> |                  |                                                 |                   | <b>302</b>        | <b>\$ 5,432,000</b> |

1) Ranked by economic loss per crash type. Economic Loss calculated by using \$85k per Fatal K-Level, \$85k per Incapacitating Injury A-Level, \$85k per Non-Incapacitating Injury B-Level, \$25k per Possible Injury C-Level, and \$4k per Property Damage Only PD-Level. Most crashes within 300 feet of intersection, per the accident report form.

## APPENDIX A1.10

### Top Crash Types by Direction

Village of Germantown (2015 thru 2019)

| RANK <sup>1</sup>                       | CRASH PATTERN        | INTERSECTION                           | TRAFFIC CONTROL   | NUMBER OF CRASHES | ECONOMIC LOSS       |
|-----------------------------------------|----------------------|----------------------------------------|-------------------|-------------------|---------------------|
| 1                                       | WB/NB_RT-ANGLE       | Wasaukee Rd & Freistadt Rd             | Minor Street Stop | 8                 | \$338,000           |
| 2                                       | EB_REAR              | Maple Rd & Lannon Rd/STH 167           | Traffic Signal    | 10                | \$184,000           |
| 3                                       | EB_LT-ANGLE          | Pilgrim Rd & Mequon Rd/STH 167         | Traffic Signal    | 5                 | \$143,000           |
| 4                                       | NB_LT-ANGLE          | Pilgrim Rd & Mequon Rd/STH 167         | Traffic Signal    | 5                 | \$143,000           |
| 5                                       | SB/WB_RT-ANGLE       | Maple Rd & Lannon Rd/STH 167           | Traffic Signal    | 3                 | \$114,000           |
| 6                                       | SB_RT-TURN_REAR-END  | Maple Rd & Lannon Rd/STH 167           | Traffic Signal    | 10                | \$103,000           |
| 7                                       | WB_LT-ANGLE          | Pilgrim Rd & Mequon Rd/STH 167         | Traffic Signal    | 5                 | \$101,000           |
| 8                                       | SB/WB_RT-ANGLE       | Wasaukee Rd & Freistadt Rd             | Minor Street Stop | 4                 | \$97,000            |
| 9                                       | NB_LT-ANGLE          | Maple Rd & Lannon Rd/STH 167           | Traffic Signal    | 3                 | \$93,000            |
| 10                                      | NB_FIXED-OBJECT      | Maple Rd & Lannon Rd/STH 167           | Traffic Signal    | 2                 | \$89,000            |
| 11                                      | NB/EB_RT-ANGLE       | Maple Rd & Mequon Rd                   | All-Way Stop      | 2                 | \$89,000            |
| 12                                      | SB_LT-ANGLE          | Pilgrim Rd & Mequon Rd/STH 167         | Traffic Signal    | 2                 | \$89,000            |
| 13                                      | WB_LT-ANGLE          | Maple Rd & Lannon Rd/STH 167           | Traffic Signal    | 1                 | \$85,000            |
| 14                                      | WB_FIXED-OBJECT      | STH 175/Appleton Ave & Meeker Hill Rd  | Minor Street Stop | 1                 | \$85,000            |
| 15                                      | SB_BIKE              | STH 175/Appleton Ave & Meeker Hill Rd  | Minor Street Stop | 1                 | \$85,000            |
| 16                                      | MISC._WEST-LEG       | STH 175/Appleton Ave & Amy Belle Rd    | Minor Street Stop | 1                 | \$85,000            |
| 17                                      | MISC._NORTH-LEG      | STH 175/Appleton Ave & Amy Belle Rd    | Minor Street Stop | 1                 | \$85,000            |
| 18                                      | HEAD-ON_NORTH-LEG    | STH 175/Appleton Ave & Willow Creek Rd | Minor Street Stop | 1                 | \$85,000            |
| 19                                      | WB/NB_RT-ANGLE       | Division Rd & Lilac Ln                 | Minor Street Stop | 1                 | \$85,000            |
| 20                                      | NB/EB_RT-ANGLE       | Wasaukee Rd & Freistadt Rd             | Minor Street Stop | 6                 | \$66,000            |
| 21                                      | SB_REAR              | Pilgrim Rd & Mequon Rd/STH 167         | Traffic Signal    | 3                 | \$54,000            |
| 22                                      | WB_RT-TURN_REAR-END  | Maple Rd & Lannon Rd/STH 167           | Traffic Signal    | 6                 | \$45,000            |
| 23                                      | SB_REAR              | STH 175/Appleton Ave & Meeker Hill Rd  | Minor Street Stop | 3                 | \$33,000            |
| 24                                      | WB_RT-TURN_REAR-END  | Pilgrim Rd & Mequon Rd/STH 167         | Traffic Signal    | 3                 | \$33,000            |
| 25                                      | SB_RT-TURN_REAR-END  | Pilgrim Rd & Mequon Rd/STH 167         | Traffic Signal    | 3                 | \$33,000            |
| 26                                      | EB/SB_RT-ANGLE       | Wasaukee Rd & Freistadt Rd             | Minor Street Stop | 2                 | \$29,000            |
| 27                                      | NB_REAR              | STH 145/Fond du Lac Ave & Main St      | Minor Street Stop | 2                 | \$29,000            |
| 28                                      | EB/SB_RT-ANGLE       | Pilgrim Rd & Mequon Rd/STH 167         | Traffic Signal    | 2                 | \$29,000            |
| 29                                      | NB_REAR              | Pilgrim Rd & Mequon Rd/STH 167         | Traffic Signal    | 2                 | \$29,000            |
| 30                                      | WB_REAR              | Maple Rd & Lannon Rd/STH 167           | Traffic Signal    | 7                 | \$28,000            |
| 31                                      | SB/WB_RT-ANGLE       | STH 175/Appleton Ave & Hilltop Rd      | Minor Street Stop | 1                 | \$25,000            |
| 32                                      | SB_REAR              | STH 175/Appleton Ave & Hilltop Rd      | Minor Street Stop | 1                 | \$25,000            |
| 33                                      | EB/SB_RT-ANGLE       | Division Rd & Lilac Ln                 | Minor Street Stop | 1                 | \$25,000            |
| 34                                      | SB_BIKE              | Pilgrim Rd & Mequon Rd/STH 167         | Traffic Signal    | 1                 | \$25,000            |
| 35                                      | NB/EB_RT-ANGLE       | Maple Rd & Lannon Rd/STH 167           | Traffic Signal    | 4                 | \$16,000            |
| 36                                      | MISC._SOUTH-LEG      | Maple Rd & Lannon Rd/STH 167           | Traffic Signal    | 4                 | \$16,000            |
| 37                                      | SB_REAR              | Maple Rd & Lannon Rd/STH 167           | Traffic Signal    | 4                 | \$16,000            |
| 38                                      | EB_LT-ANGLE          | Maple Rd & Lannon Rd/STH 167           | Traffic Signal    | 3                 | \$12,000            |
| 39                                      | NB_REAR              | Maple Rd & Lannon Rd/STH 167           | Traffic Signal    | 3                 | \$12,000            |
| 40                                      | EB_REAR              | Pilgrim Rd & Mequon Rd/STH 167         | Traffic Signal    | 3                 | \$12,000            |
| 41                                      | WB_REAR              | Pilgrim Rd & Mequon Rd/STH 167         | Traffic Signal    | 3                 | \$12,000            |
| 42                                      | SB_FIXED-OBJECT      | Pilgrim Rd & Mequon Rd/STH 167         | Traffic Signal    | 3                 | \$12,000            |
| 43                                      | EB_FIXED-OBJECT      | Maple Rd & Lannon Rd/STH 167           | Traffic Signal    | 2                 | \$8,000             |
| 44                                      | WB_SSS               | Maple Rd & Lannon Rd/STH 167           | Traffic Signal    | 2                 | \$8,000             |
| 45                                      | NB_SSS               | Maple Rd & Lannon Rd/STH 167           | Traffic Signal    | 2                 | \$8,000             |
| 46                                      | SB_DRIVEWAY_NEARSIDE | STH 175/Appleton Ave & Meeker Hill Rd  | Minor Street Stop | 2                 | \$8,000             |
| 47                                      | NB_FIXED-OBJECT      | STH 175/Appleton Ave & Willow Creek Rd | Minor Street Stop | 2                 | \$8,000             |
| 48                                      | WB/NB_RT-ANGLE       | Maple Rd & Mequon Rd                   | All-Way Stop      | 2                 | \$8,000             |
| 49                                      | NB_LT-ANGLE          | Maple Rd & Mequon Rd                   | All-Way Stop      | 2                 | \$8,000             |
| 50                                      | SB_REAR              | Maple Rd & Mequon Rd                   | All-Way Stop      | 2                 | \$8,000             |
| <b>Totals for Top 50 Crash Patterns</b> |                      |                                        |                   | <b>152</b>        | <b>\$ 2,858,000</b> |

<sup>1</sup>) Ranked by economic loss per crash pattern by direction. Economic Loss calculated by using \$85k per Fatal K-Level, \$85k per Incapacitating Injury A-Level, \$85k per Non-Incapacitating Injury B-Level, \$25k per Possible Injury C-Level, and \$4k per Property Damage Only PD-Level. Most crashes within 300 feet of intersection, per the accident report form.



# APPENDIX A2

## INTERSECTION COLLISION DIAGRAMS

- ▶ A2.1 Maple Rd & Lannon Rd/STH 167
- ▶ A2.2 Pilgrim Rd & Mequon Rd/STH 167
- ▶ A2.3 STH 145/Fond du Lac Ave & CTH G/Division Rd
- ▶ A2.4 Wasaukee Rd & Freistadt Rd
- ▶ A2.5 STH 145/Fond du Lac Ave & Maple Rd-Holy Hill Rd
- ▶ A2.6 Wasaukee Rd & Highland Rd
- ▶ A2.7 Pilgrim Rd & Sylvan Circle
- ▶ A2.8 STH 145/Fond du Lac Ave & Mequon Rd
- ▶ A2.9 STH 145/Fond du Lac Ave & Freistadt Rd
- ▶ A2.10 STH 175/Appleton Ave & Meeker Hill Rd
- ▶ A2.11 STH 175/Appleton Ave & Amy Belle Rd
- ▶ A2.12 Maple Rd & Mequon Rd
- ▶ A2.13 Division Rd & Lilac Ln
- ▶ A2.14 STH 175/Appleton Ave & Willow Creek Rd
- ▶ A2.15 STH 175/Appleton Ave & Hilltop Rd
- ▶ A2.16 STH 145/Fond du Lac Ave & Main St
- ▶ A2.17 STH 145/Fond du Lac & Crusader Ct-Church St
- ▶ A2.18 Pilgrim Rd & STH 145/Fond du Lac Ave
- ▶ A2.19 STH 145/Fond du Lac Ave & Country Aire Rd
- ▶ A2.20 Pilgrim Rd & Freistadt Rd
- ▶ A2.21 Division Rd & Wendy Ln
- ▶ A2.22 Country Aire Dr & CTH M/Pioneer Rd
- ▶ A2.23 STH 145/Fond du Lac Ave & Park Ave
- ▶ A2.24 Maple Rd & Rockfield Rd
- ▶ A2.25 Division Rd & Cedar Ln
- ▶ A2.26 Division Rd & Donges Bay Rd
- ▶ A2.27 Country Aire Dr & CTH F/Freistadt Rd
- ▶ A2.28 Heritage Hills Pkwy & Donges Bay Rd

# A2.1 Intersection Collision Diagram

**Location:** Maple Rd & Lannon Rd/STH 167  
**Municipality:** Germantown  
**County:** Washington  
**Traffic Control:** Traffic Signal

**From:** 1/1/2015 **5 Years**  
**To:** 12/31/2019 **0 Months**  
**AADT:** 27,550  
**Area Type:** Urban  
**GPS Coordinates:** 43.217902, -88.142925

[MAP](#)

**TOTAL CRASHES:** 73

**AVG. CRASHES/YEAR:** 14.6

**CRASH RATE:** 1.45 per MEV

**KAB CRASH RATE:** 0.10 per MEV

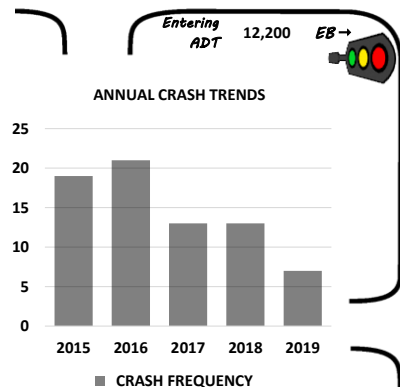
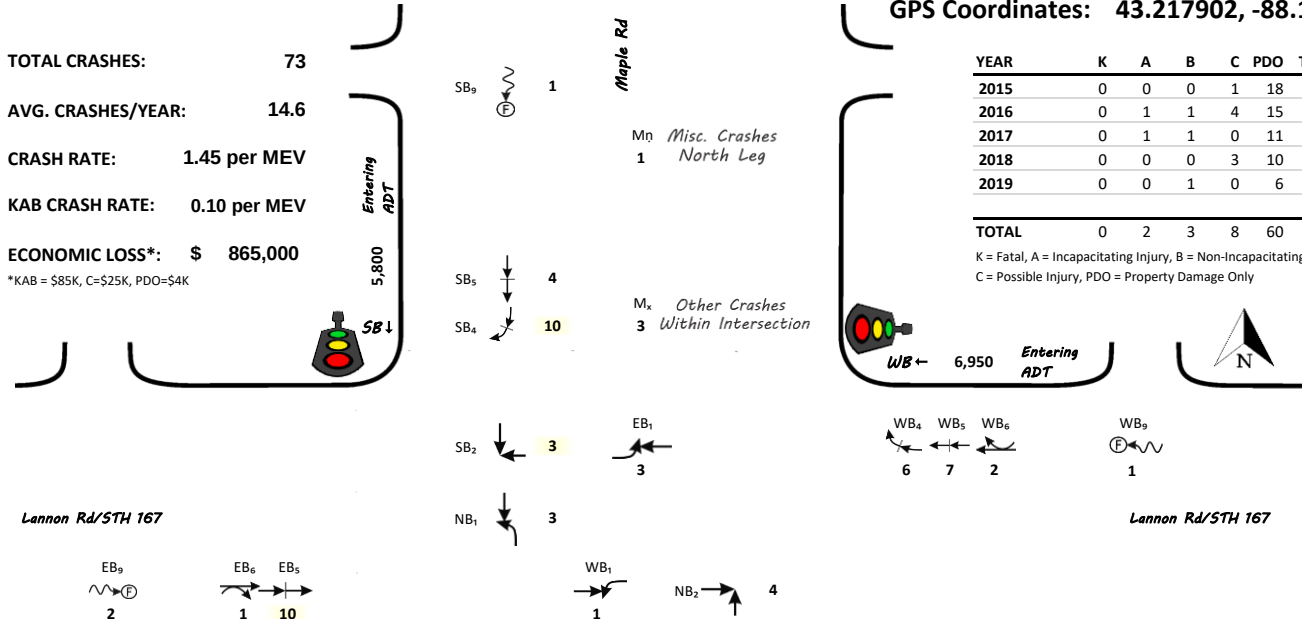
**ECONOMIC LOSS\*:** \$ 865,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 0 | 1 | 18  | 19   | \$ 97,000  |
| 2016 | 0 | 1 | 1 | 4 | 15  | 21   | \$ 330,000 |
| 2017 | 0 | 1 | 1 | 0 | 11  | 13   | \$ 214,000 |
| 2018 | 0 | 0 | 0 | 3 | 10  | 13   | \$ 115,000 |
| 2019 | 0 | 0 | 1 | 0 | 6   | 7    | \$ 109,000 |

**TOTAL** 0 2 3 8 60 73 \$ 865,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury,  
C = Possible Injury, PDO = Property Damage Only



**ROAD CONDITIONS**

|             |           |     |
|-------------|-----------|-----|
| DRY         | 51        | 70% |
| WET         | 15        | 21% |
| SNOW        | 7         | 10% |
| ICE         | 0         | 0%  |
| OTH.        | 0         | 0%  |
| <b>TOT.</b> | <b>73</b> |     |

**LIGHT CONDITIONS**

|             |           |     |
|-------------|-----------|-----|
| DAY         | 58        | 79% |
| DARK        | 15        | 21% |
| <b>TOT.</b> | <b>73</b> |     |

**DRIVER BEHAVIOR**

|         |   |    |
|---------|---|----|
| ALCOHOL | 1 | 1% |
| DRUGS   | 1 | 1% |
| SPEED   | 5 | 7% |

**SEASON**

|             |           |     |
|-------------|-----------|-----|
| SPRING      | 23        | 32% |
| SUMMER      | 10        | 14% |
| FALL        | 16        | 22% |
| WINTER      | 24        | 33% |
| <b>TOT.</b> | <b>73</b> |     |

**FAILURE TO YIELD**

|             |           |            |
|-------------|-----------|------------|
| NB          | 1         | 1%         |
| SB          | 0         | 0%         |
| EB          | 0         | 0%         |
| WB          | 0         | 0%         |
| TBD         | 9         | 12%        |
| <b>TOT.</b> | <b>10</b> | <b>14%</b> |

**DISRGRD. CONTROL**

|             |          |            |
|-------------|----------|------------|
| NB          | 0        | 0%         |
| SB          | 0        | 0%         |
| EB          | 0        | 0%         |
| WB          | 1        | 1%         |
| TBD         | 6        | 8%         |
| <b>TOT.</b> | <b>7</b> | <b>10%</b> |

**VEHICLE DAMAGE**

|                       |            |     |
|-----------------------|------------|-----|
| OTHER/UNK.            | 8          | 6%  |
| NONE                  | 8          | 6%  |
| VERY MINOR            | 13         | 9%  |
| MINOR                 | 41         | 30% |
| MODERATE              | 42         | 30% |
| SEVERE                | 26         | 19% |
| VERY SEVERE           | 0          | 0%  |
| <b>TOTAL VEHICLES</b> | <b>138</b> |     |

**NOTES:**  
Validated KAB crashes

## DAY/TIME TRENDS

|     | 12 AM |   |   |   |   |   | 1 AM |   |   | 2 AM |   |   | 3 AM |   |   | 4 AM |   |   | 5 AM |   |   | 6 AM |   |   | 7 AM |   |   | 8 AM |   |   | 9 AM |   |   | 10 PM |   |   | 11 PM |   |   | UNK |   |   |   | TOT. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----|-------|---|---|---|---|---|------|---|---|------|---|---|------|---|---|------|---|---|------|---|---|------|---|---|------|---|---|------|---|---|------|---|---|-------|---|---|-------|---|---|-----|---|---|---|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MON | 0     | 0 | 0 | 0 | 0 | 1 | 1    | 0 | 1 | 0    | 0 | 1 | 3    | 2 | 0 | 1    | 2 | 0 | 1    | 0 | 0 | 1    | 0 | 1 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0     | 0 | 0 | 0     | 0 | 0 | 0   | 0 | 0 | 0 | 0    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Corresponds to Collision Diagram**



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 27,550  
**Area Type:** Urban

Duration  
5 Years  
0 Months

[illegible]



# A2.2 Intersection Collision Diagram

**Location:** Pilgrim Rd & Mequon Rd/STH 167  
**Municipality:** Germantown  
**County:** Washington  
**Traffic Control:** Traffic Signal

**From:** 1/1/2015 **5 Years**  
**To:** 12/31/2019 **0 Months**  
**AADT:** 23,500  
**Area Type:** Urban  
**GPS Coordinates:** 43.220967, -88.103192

[MAP](#)

**TOTAL CRASHES:** 54

**AVG. CRASHES/YEAR:** 10.8

**CRASH RATE:** 1.26 per MEV

**KAB CRASH RATE:** 0.09 per MEV

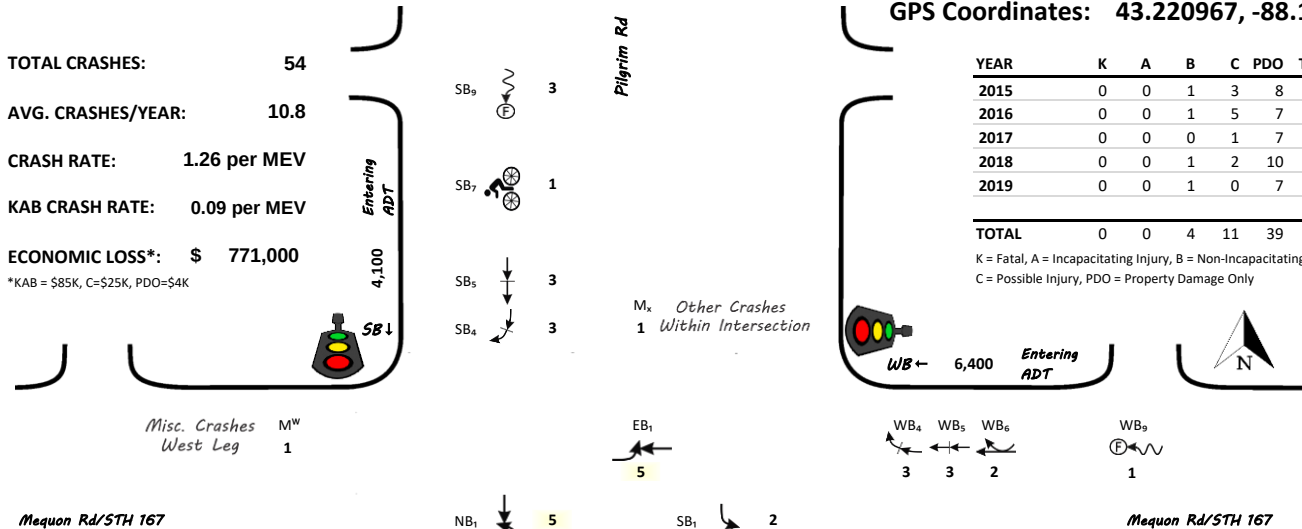
**ECONOMIC LOSS\*:** \$ 771,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 1 | 3 | 8   | 12   | \$ 192,000 |
| 2016 | 0 | 0 | 1 | 5 | 7   | 13   | \$ 238,000 |
| 2017 | 0 | 0 | 0 | 1 | 7   | 8    | \$ 53,000  |
| 2018 | 0 | 0 | 1 | 2 | 10  | 13   | \$ 175,000 |
| 2019 | 0 | 0 | 1 | 0 | 7   | 8    | \$ 113,000 |

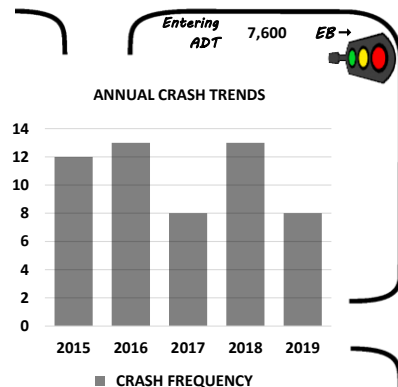
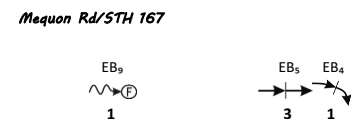
**TOTAL** 0 0 4 11 39 54 \$ 771,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury,  
C = Possible Injury, PDO = Property Damage Only



**ECON. LOSS COLOR SCALE**

|           |
|-----------|
| > \$500 K |
| > \$400 K |
| > \$300 K |
| > \$200 K |
| > \$100 K |



**ROAD CONDITIONS**

|             |           |     |
|-------------|-----------|-----|
| DRY         | 42        | 78% |
| WET         | 8         | 15% |
| SNOW        | 4         | 7%  |
| ICE         | 0         | 0%  |
| OTH.        | 0         | 0%  |
| <b>TOT.</b> | <b>54</b> |     |

**LIGHT CONDITIONS**

|             |           |     |
|-------------|-----------|-----|
| DAY         | 38        | 70% |
| DARK        | 16        | 30% |
| <b>TOT.</b> | <b>54</b> |     |

**DRIVER BEHAVIOR**

|         |   |    |
|---------|---|----|
| ALCOHOL | 3 | 6% |
| DRUGS   | 0 | 0% |
| SPEED   | 3 | 6% |

**SEASON**

|             |           |     |
|-------------|-----------|-----|
| SPRING      | 11        | 20% |
| SUMMER      | 12        | 22% |
| FALL        | 18        | 33% |
| WINTER      | 13        | 24% |
| <b>TOT.</b> | <b>54</b> |     |

**FAILURE TO YIELD**

|             |           |            |
|-------------|-----------|------------|
| NB          | 0         | 0%         |
| SB          | 2         | 4%         |
| EB          | 1         | 2%         |
| WB          | 1         | 2%         |
| TBD         | 13        | 24%        |
| <b>TOT.</b> | <b>17</b> | <b>31%</b> |

**DISRGRD. CONTROL**

|             |          |           |
|-------------|----------|-----------|
| NB          | 0        | 0%        |
| SB          | 0        | 0%        |
| EB          | 0        | 0%        |
| WB          | 0        | 0%        |
| TBD         | 3        | 6%        |
| <b>TOT.</b> | <b>3</b> | <b>6%</b> |

**VEHICLE DAMAGE**

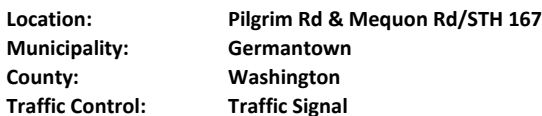
|                       |            |     |
|-----------------------|------------|-----|
| OTHER/UNK.            | 4          | 4%  |
| NONE                  | 4          | 4%  |
| VERY MINOR            | 11         | 11% |
| MINOR                 | 32         | 32% |
| MODERATE              | 30         | 30% |
| SEVERE                | 19         | 19% |
| VERY SEVERE           | 0          | 0%  |
| <b>TOTAL VEHICLES</b> | <b>100</b> |     |

**NOTES:**  
Validated KAB crashes

## DAY/TIME TRENDS

| Daily Time Schedule |       |      |      |      |      |      |      |      |      |      |       |       |       |      |      |      |      |      |      |      |      |      |       |       |     |      |      |
|---------------------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|------|
|                     | 12 AM | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
| MON                 | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0     | 1     | 1     | 0    | 0    | 0    | 0    | 2    | 1    | 1    | 0    | 0    | 0     | 0     | 0   | MON  | 7    |
| TUE                 | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 2    | 1    | 0    | 0    | 2    | 1    | 0    | 1    | 0    | 0     | 0     | 0   | TUE  | 7    |
| WED                 | 0     | 0    | 0    | 0    | 0    | 0    | 3    | 1    | 0    | 0    | 0     | 1     | 1     | 0    | 0    | 0    | 1    | 1    | 0    | 2    | 0    | 0    | 0     | 0     | 0   | WED  | 10   |
| THU                 | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 2     | 0     | 1     | 0    | 1    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | THU  | 8    |
| FRI                 | 1     | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0     | 0     | 1     | 0    | 1    | 1    | 0    | 3    | 0    | 0    | 1    | 0    | 0     | 0     | 0   | FRI  | 10   |
| SAT                 | 0     | 0    | 1    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 1     | 1     | 0     | 0    | 1    | 0    | 1    | 0    | 0    | 0    | 0    | 1    | 0     | 0     | 0   | SAT  | 7    |
| SUN                 | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 1     | 0     | 0     | 1    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0     | 0     | 0   | SUN  | 5    |
|                     | 12 AM | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
| TOT.                | 1     | 0    | 2    | 1    | 0    | 0    | 3    | 4    | 1    | 1    | 4     | 3     | 4     | 3    | 4    | 3    | 3    | 8    | 2    | 3    | 3    | 1    | 0     | 0     | 0   | TOT. | 54   |

**Corresponds to Collision Diagram**



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 23,500  
**Area Type:** Urban

Duration  
5 Years  
0 Months

[illegible]

# A2.3 Intersection Collision Diagram

**Location:** STH 145/Fond du Lac Ave & CTH G/Division Rd  
**Municipality:** Germantown  
**County:** Washington  
**Traffic Control:** Minor Street Stop

**From:** 1/1/2015 **5 Years**  
**To:** 12/31/2019 **0 Months**  
**AADT:** 8,600  
**Area Type:** Rural  
**GPS Coordinates:** 43.239753, -88.123204

Duration

[MAP](#)

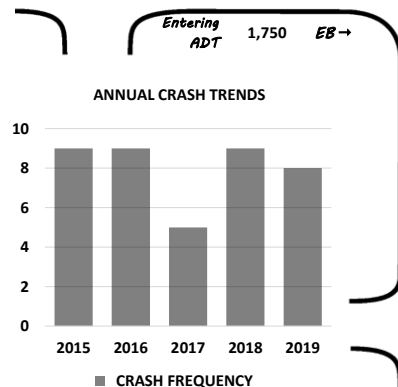
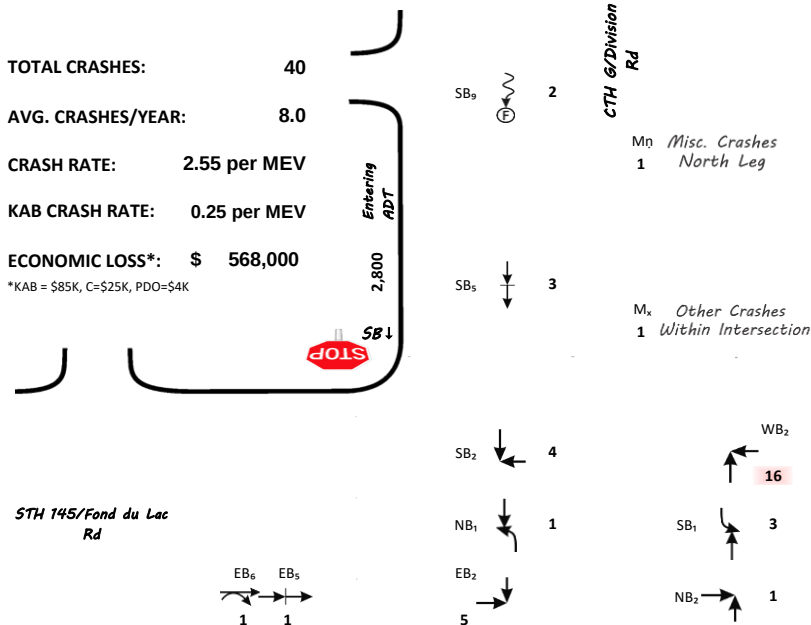
**TOTAL CRASHES:** 40  
**AVG. CRASHES/YEAR:** 8.0  
**CRASH RATE:** 2.55 per MEV  
**KAB CRASH RATE:** 0.25 per MEV  
**ECONOMIC LOSS\*:** \$ 568,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 1 | 0 | 0 | 8   | 9    | \$ 117,000 |
| 2016 | 0 | 0 | 0 | 3 | 6   | 9    | \$ 99,000  |
| 2017 | 0 | 0 | 1 | 0 | 4   | 5    | \$ 101,000 |
| 2018 | 0 | 1 | 1 | 1 | 6   | 9    | \$ 219,000 |
| 2019 | 0 | 0 | 0 | 0 | 8   | 8    | \$ 32,000  |

**TOTAL** 0 2 2 4 32 40 \$ 568,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury,  
C = Possible Injury, PDO = Property Damage Only



**ROAD CONDITIONS**

|             |           |     |
|-------------|-----------|-----|
| DRY         | 30        | 75% |
| WET         | 8         | 20% |
| SNOW        | 2         | 5%  |
| ICE         | 0         | 0%  |
| OTH.        | 0         | 0%  |
| <b>TOT.</b> | <b>40</b> |     |

**LIGHT CONDITIONS**

|             |           |     |
|-------------|-----------|-----|
| DAY         | 35        | 88% |
| DARK        | 5         | 13% |
| <b>TOT.</b> | <b>40</b> |     |

**DRIVER BEHAVIOR**

|         |   |    |
|---------|---|----|
| ALCOHOL | 0 | 0% |
| DRUGS   | 0 | 0% |
| SPEED   | 2 | 5% |

**SEASON**

|             |           |     |
|-------------|-----------|-----|
| SPRING      | 9         | 23% |
| SUMMER      | 7         | 18% |
| FALL        | 13        | 33% |
| WINTER      | 11        | 28% |
| <b>TOT.</b> | <b>40</b> |     |

**FAILURE TO YIELD**

|             |           |            |
|-------------|-----------|------------|
| NB          | 17        | 43%        |
| SB          | 10        | 25%        |
| EB          | 0         | 0%         |
| WB          | 0         | 0%         |
| TBD         | 1         | 3%         |
| <b>TOT.</b> | <b>28</b> | <b>70%</b> |

**DISRGRD. CONTROL**

|             |          |           |
|-------------|----------|-----------|
| NB          | 0        | 0%        |
| SB          | 1        | 3%        |
| EB          | 0        | 0%        |
| WB          | 0        | 0%        |
| TBD         | 0        | 0%        |
| <b>TOT.</b> | <b>1</b> | <b>3%</b> |

**VEHICLE DAMAGE**

|                       |           |     |
|-----------------------|-----------|-----|
| OTHER/UNK.            | 2         | 3%  |
| NONE                  | 3         | 4%  |
| VERY MINOR            | 4         | 5%  |
| MINOR                 | 20        | 27% |
| MODERATE              | 18        | 24% |
| SEVERE                | 27        | 36% |
| VERY SEVERE           | 1         | 1%  |
| <b>TOTAL VEHICLES</b> | <b>75</b> |     |

TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|      | 12 AM | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
|------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|------|
| MON  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 1    | 2     | 0     | 0     | 1    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0     | 0     | 0   | MON  | 7    |
| TUE  | 0     | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0     | 0     | 1     | 0    | 0    | 0    | 0    | 0    | 2    | 1    | 0    | 0    | 0     | 0     | 0   | TUE  | 6    |
| WED  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0     | 0     | 1     | 0    | 0    | 0    | 2    | 2    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | WED  | 7    |
| THU  | 0     | 1    | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 2    | 0     | 1     | 0     | 0    | 1    | 1    | 0    | 1    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | THU  | 9    |
| FRI  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 3    | 1    | 0    | 1    | 0    | 0    | 0     | 0     | 0   | FRI  | 6    |
| SAT  | 0     | 0    | 0    | 1    | 0    | 0    | 1    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | SAT  | 3    |
| SUN  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 1     | 0   | SUN  | 2    |
|      | 12 AM | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
| TOT. | 0     | 1    | 0    | 1    | 0    | 0    | 3    | 5    | 2    | 3    | 2     | 1     | 2     | 1    | 1    | 3    | 5    | 4    | 2    | 3    | 0    | 0    | 0     | 1     | 0   | TOT. | 40   |



### Corresponds to Collision Diagram

[illegible]

# A2.4 Intersection Collision Diagram

**Location:** Wasaukee Rd & Freistadt Rd  
**Municipality:** Germantown  
**County:** Washington  
**Traffic Control:** Minor Street Stop

**From:** 1/1/2015 **5 Years**  
**To:** 12/31/2019 **0 Months**  
**AADT:** 9,650  
**Area Type:** Rural  
**GPS Coordinates:** 43.235634, -88.063909

Duration

[MAP](#)

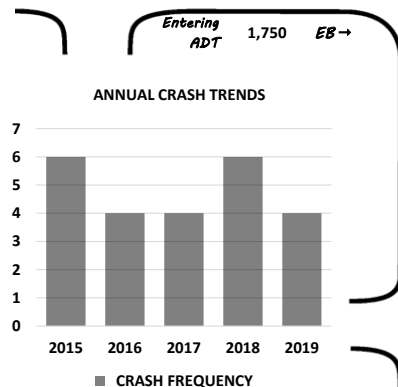
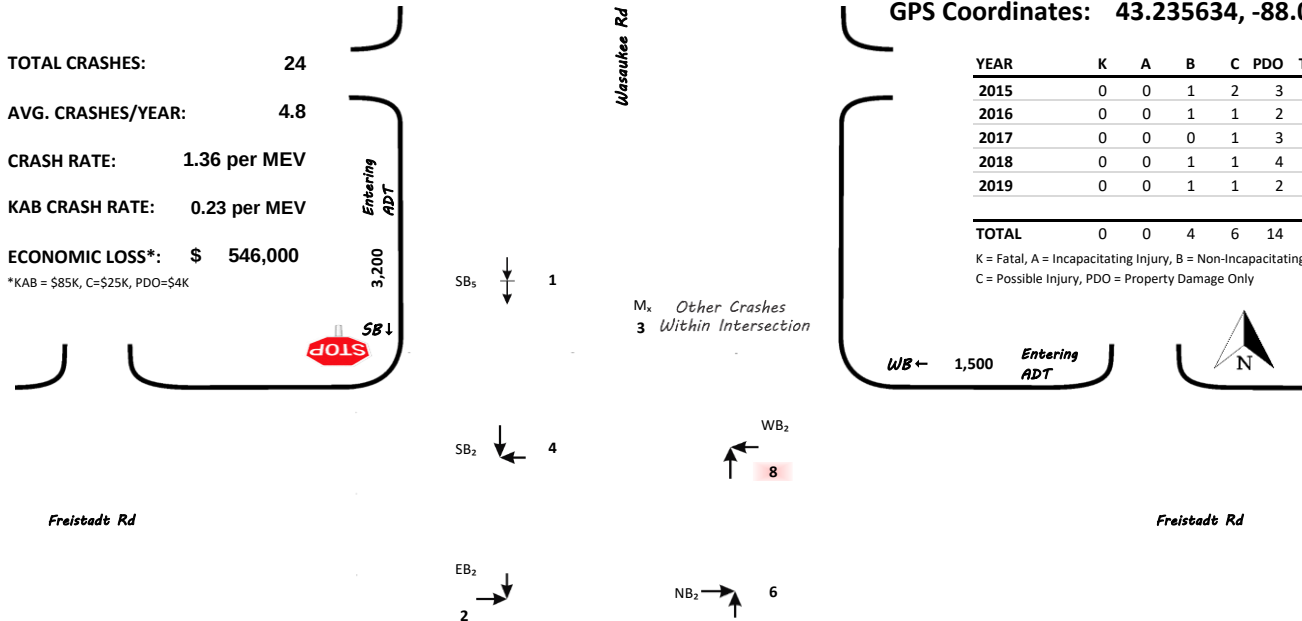
**TOTAL CRASHES:** 24  
**AVG. CRASHES/YEAR:** 4.8  
**CRASH RATE:** 1.36 per MEV  
**KAB CRASH RATE:** 0.23 per MEV  
**ECONOMIC LOSS\*:** \$ 546,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 1 | 2 | 3   | 6    | \$ 147,000 |
| 2016 | 0 | 0 | 1 | 1 | 2   | 4    | \$ 118,000 |
| 2017 | 0 | 0 | 0 | 1 | 3   | 4    | \$ 37,000  |
| 2018 | 0 | 0 | 1 | 1 | 4   | 6    | \$ 126,000 |
| 2019 | 0 | 0 | 1 | 1 | 2   | 4    | \$ 118,000 |

**TOTAL** 0 0 4 6 14 24 \$ 546,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury,  
C = Possible Injury, PDO = Property Damage Only



| CRASH TYPE       | K        | A        | B        | C        | PDO       | TOT.      | ECON. LOSS        |
|------------------|----------|----------|----------|----------|-----------|-----------|-------------------|
| LT-ANGLE         | 0        | 0        | 0        | 0        | 0         | 0         | \$ -              |
| RT-ANGLE         | 0        | 0        | 4        | 6        | 10        | 20        | \$ 530,000        |
| PEDESTRIAN       | 0        | 0        | 0        | 0        | 0         | 0         | \$ -              |
| RT-TURN REAR-END | 0        | 0        | 0        | 0        | 0         | 0         | \$ -              |
| REAR-END         | 0        | 0        | 0        | 0        | 1         | 1         | \$ 4,000          |
| SIDE-SWIPE-SAME  | 0        | 0        | 0        | 0        | 0         | 0         | \$ -              |
| BICYCLE-RELATED  | 0        | 0        | 0        | 0        | 0         | 0         | \$ -              |
| PARKED-VEHICLE   | 0        | 0        | 0        | 0        | 0         | 0         | \$ -              |
| FIXED-OBJECT     | 0        | 0        | 0        | 0        | 0         | 0         | \$ -              |
| DRIVEWAY-RELATED | 0        | 0        | 0        | 0        | 0         | 0         | \$ -              |
| HEAD-ON          | 0        | 0        | 0        | 0        | 0         | 0         | \$ -              |
| MISC. OTHER      | 0        | 0        | 0        | 0        | 3         | 3         | \$ 12,000         |
| <b>TOTAL</b>     | <b>0</b> | <b>0</b> | <b>4</b> | <b>6</b> | <b>14</b> | <b>24</b> | <b>\$ 546,000</b> |

**ROAD CONDITIONS**

|             |           |     |
|-------------|-----------|-----|
| DRY         | 18        | 75% |
| WET         | 5         | 21% |
| SNOW        | 1         | 4%  |
| ICE         | 0         | 0%  |
| OTH.        | 0         | 0%  |
| <b>TOT.</b> | <b>24</b> |     |

**LIGHT CONDITIONS**

|             |           |     |
|-------------|-----------|-----|
| DAY         | 21        | 88% |
| DARK        | 3         | 13% |
| <b>TOT.</b> | <b>24</b> |     |

**DRIVER BEHAVIOR**

|         |   |    |
|---------|---|----|
| ALCOHOL | 0 | 0% |
| DRUGS   | 0 | 0% |
| SPEED   | 0 | 0% |

**SEASON**

|             |           |     |
|-------------|-----------|-----|
| SPRING      | 5         | 21% |
| SUMMER      | 5         | 21% |
| FALL        | 8         | 33% |
| WINTER      | 6         | 25% |
| <b>TOT.</b> | <b>24</b> |     |

**FAILURE TO YIELD**

|             |           |            |
|-------------|-----------|------------|
| NB          | 3         | 13%        |
| SB          | 1         | 4%         |
| EB          | 0         | 0%         |
| WB          | 0         | 0%         |
| TBD         | 13        | 54%        |
| <b>TOT.</b> | <b>17</b> | <b>71%</b> |

**DISRGRD. CONTROL**

|             |          |            |
|-------------|----------|------------|
| NB          | 0        | 0%         |
| SB          | 0        | 0%         |
| EB          | 0        | 0%         |
| WB          | 0        | 0%         |
| TBD         | 4        | 17%        |
| <b>TOT.</b> | <b>4</b> | <b>17%</b> |

**VEHICLE DAMAGE**

|                       |           |     |
|-----------------------|-----------|-----|
| OTHER/UNK.            | 0         | 0%  |
| NONE                  | 1         | 2%  |
| VERY MINOR            | 2         | 4%  |
| MINOR                 | 2         | 4%  |
| MODERATE              | 18        | 40% |
| SEVERE                | 21        | 47% |
| VERY SEVERE           | 1         | 2%  |
| <b>TOTAL VEHICLES</b> | <b>45</b> |     |

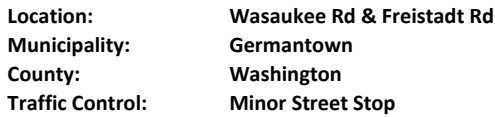
NOTES:

Validated KAB crashes

## DAY/TIME TRENDS

|     | 6 AM |   |   |   |   |   | 7 AM |   |   | 8 AM |   |   | 9 AM |   |   | 10 AM |   |   | 11 AM |   |   | 12 PM |   |   | 1 PM |   |   | 2 PM |   |   | 3 PM |   |   | 4 PM |   |   | 5 PM |   |   | 6 PM |   |   | 7 PM |   |   | 8 PM |   |   | 9 PM |   |   | 10 PM |   |   | 11 PM |   |   | UNK |   | TOT. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----|------|---|---|---|---|---|------|---|---|------|---|---|------|---|---|-------|---|---|-------|---|---|-------|---|---|------|---|---|------|---|---|------|---|---|------|---|---|------|---|---|------|---|---|------|---|---|------|---|---|------|---|---|-------|---|---|-------|---|---|-----|---|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MON | 0    | 0 | 0 | 0 | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0     | 0 | 0 | 0     | 0 | 0 | 0     | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0     | 0 | 0 | 0     | 0 | 0 | 0   | 0 | 0    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

### Corresponds to Collision Diagram



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 9,650  
**Area Type:** Rural

[illegible]33



# A2.5 Intersection Collision Diagram



**Location:** STH 145/Fond du Lac Ave & Maple Rd-Holy Hill Rd  
**Municipality:** Germantown  
**County:** Washington  
**Traffic Control:** Minor Street Stop

**From:** 1/1/2015 **5 Years**  
**To:** 12/31/2019 **0 Months**  
**AADT:** 5,435  
**Area Type:** Rural  
**GPS Coordinates:** 43.250044, -88.142956

Duration

[MAP](#)

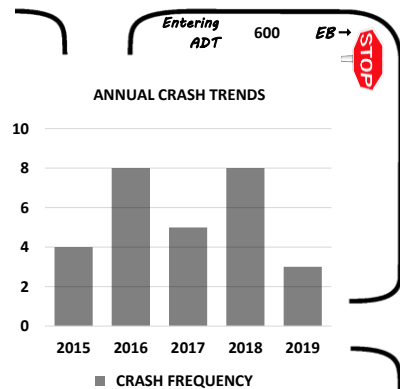
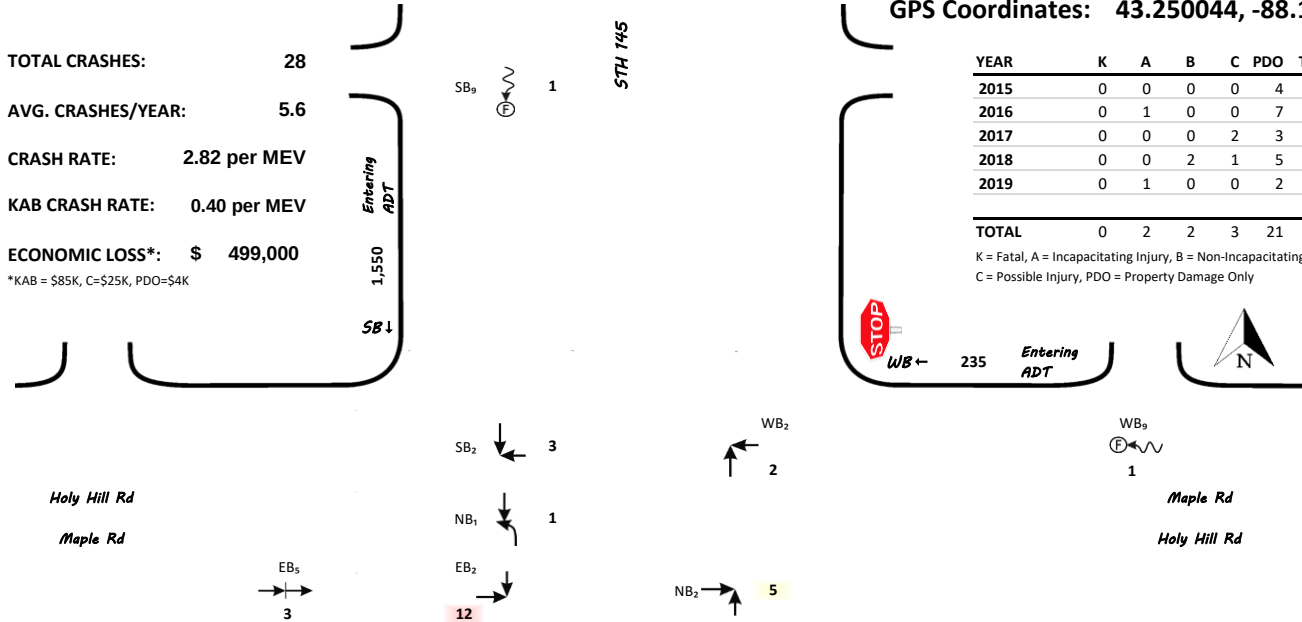
**TOTAL CRASHES:** 28  
**AVG. CRASHES/YEAR:** 5.6  
**CRASH RATE:** 2.82 per MEV  
**KAB CRASH RATE:** 0.40 per MEV  
**ECONOMIC LOSS\*:** \$ 499,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 0 | 0 | 4   | 4    | \$ 16,000  |
| 2016 | 0 | 1 | 0 | 0 | 7   | 8    | \$ 113,000 |
| 2017 | 0 | 0 | 0 | 2 | 3   | 5    | \$ 62,000  |
| 2018 | 0 | 0 | 2 | 1 | 5   | 8    | \$ 215,000 |
| 2019 | 0 | 1 | 0 | 0 | 2   | 3    | \$ 93,000  |

**TOTAL** 0 2 2 3 21 28 \$ 499,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury, C = Possible Injury, PDO = Property Damage Only



| CRASH TYPE       | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------------------|---|---|---|---|-----|------|------------|
| LT-ANGLE         | 0 | 0 | 0 | 1 | 0   | 1    | \$ 25,000  |
| RT-ANGLE         | 0 | 2 | 2 | 1 | 17  | 22   | \$ 433,000 |
| PEDESTRIAN       | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| RT-TURN REAR-END | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| REAR-END         | 0 | 0 | 0 | 1 | 2   | 3    | \$ 33,000  |
| SIDE-SWIPE-SAME  | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| BICYCLE-RELATED  | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| PARKED-VEHICLE   | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| FIXED-OBJECT     | 0 | 0 | 0 | 0 | 2   | 2    | \$ 8,000   |
| DRIVEWAY-RELATED | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| HEAD-ON          | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| MISC. OTHER      | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| <b>TOTAL</b>     | 0 | 2 | 2 | 3 | 21  | 28   | \$ 499,000 |

| ROAD CONDITIONS | Count | Percentage |
|-----------------|-------|------------|
| DRY             | 24    | 86%        |
| WET             | 1     | 4%         |
| SNOW            | 3     | 11%        |
| ICE             | 0     | 0%         |
| OTH.            | 0     | 0%         |
| <b>TOT.</b>     | 28    |            |

| LIGHT CONDITIONS | Count | Percentage |
|------------------|-------|------------|
| DAY              | 22    | 79%        |
| DARK             | 6     | 21%        |
| <b>TOT.</b>      | 28    |            |

| DRIVER BEHAVIOR | Count | Percentage |
|-----------------|-------|------------|
| ALCOHOL         | 2     | 7%         |
| DRUGS           | 0     | 0%         |
| SPEED           | 1     | 4%         |

| SEASON      | Count | Percentage |
|-------------|-------|------------|
| SPRING      | 6     | 21%        |
| SUMMER      | 7     | 25%        |
| FALL        | 9     | 32%        |
| WINTER      | 6     | 21%        |
| <b>TOT.</b> | 28    |            |

| FAILURE TO YIELD | Count | Percentage |
|------------------|-------|------------|
| NB               | 3     | 11%        |
| SB               | 0     | 0%         |
| EB               | 15    | 54%        |
| WB               | 4     | 14%        |
| TBD              | 0     | 0%         |
| <b>TOT.</b>      | 22    | 79%        |

| DISRGRD. CONTROL | Count | Percentage |
|------------------|-------|------------|
| NB               | 0     | 0%         |
| SB               | 0     | 0%         |
| EB               | 0     | 0%         |
| WB               | 0     | 0%         |
| TBD              | 0     | 0%         |
| <b>TOT.</b>      | 0     | 0%         |

| VEHICLE DAMAGE        | Count | Percentage |
|-----------------------|-------|------------|
| OTHER/UNK.            | 0     | 0%         |
| NONE                  | 0     | 0%         |
| VERY MINOR            | 2     | 4%         |
| MINOR                 | 9     | 17%        |
| MODERATE              | 22    | 42%        |
| SEVERE                | 18    | 35%        |
| VERY SEVERE           | 1     | 2%         |
| <b>TOTAL VEHICLES</b> | 52    |            |

**NOTES:**  
 6-Leg intersection: Maple Rd N-S, Holy Hill Rd E-W and STH 145 NW-SE skew  
 SEE EXHIBIT A2.5 FOR CRASH PLOT ON AERIAL MAP

## DAY/TIME TRENDS

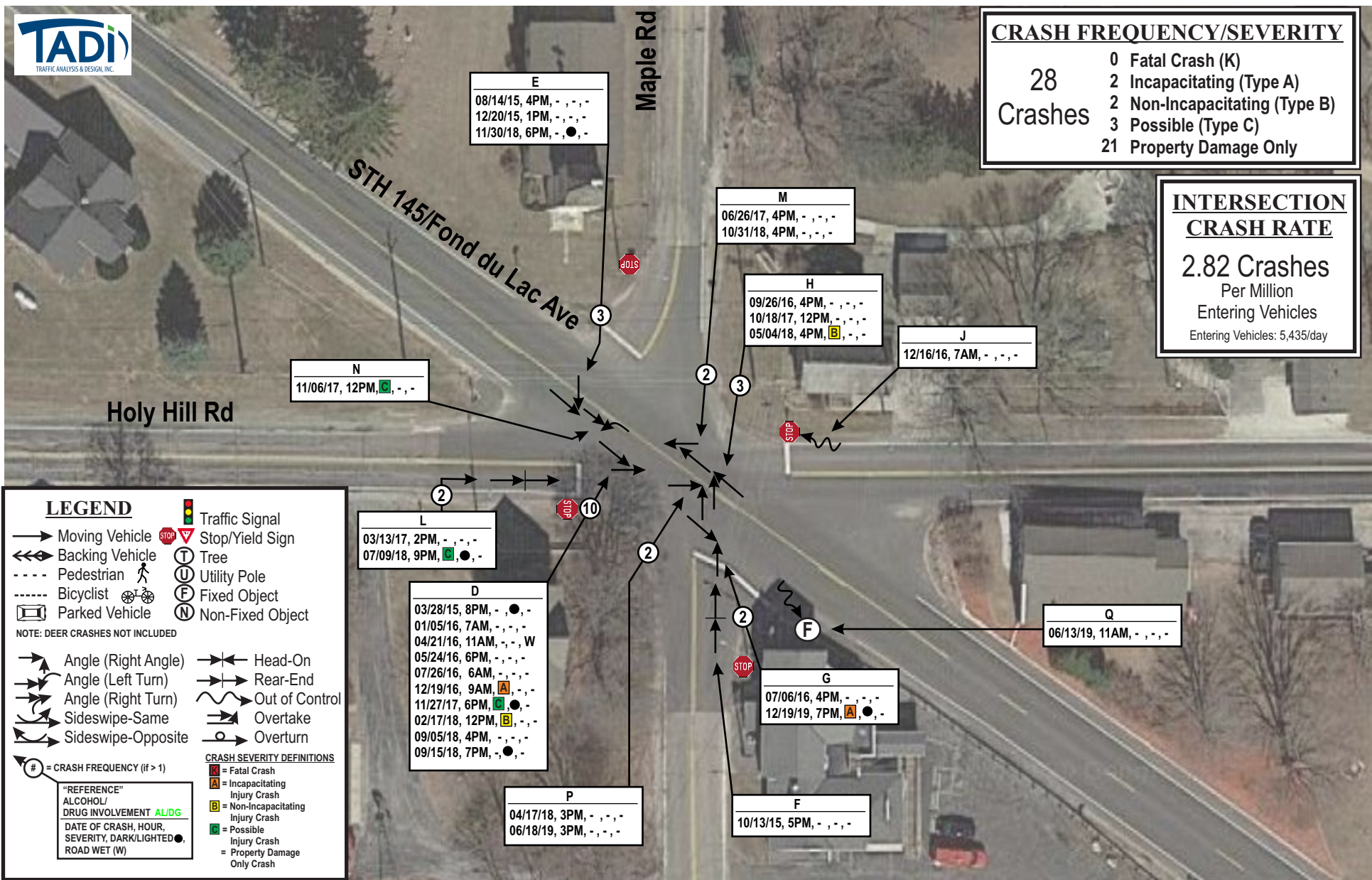
|      | 12 AM | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
|------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|------|
| MON  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0     | 0     | 1     | 0    | 1    | 0    | 1    | 0    | 1    | 0    | 0    | 1    | 0     | 0     | 0   | MON  | 6    |
| TUE  | 0     | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 2    | 0    | 1    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | TUE  | 6    |
| WED  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 1     | 0    | 0    | 0    | 3    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | WED  | 4    |
| THU  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 2     | 0     | 0    | 0    | 0    | 1    | 0    | 0    | 1    | 0    | 0    | 0     | 0     | 0   | THU  | 4    |
| FRI  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 2    | 0    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | FRI  | 4    |
| SAT  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 1     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 0    | 0     | 0     | 0   | SAT  | 3    |
| SUN  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | SUN  | 1    |
|      | 12 AM | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
| TOT. | 0     | 0    | 0    | 0    | 0    | 0    | 1    | 2    | 0    | 1    | 0     | 2     | 3     | 1    | 1    | 2    | 7    | 1    | 3    | 2    | 1    | 1    | 0     | 0     | 0   | TOT. | 28   |

### Corresponds to Collision Diagram



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 5,435  
**Area Type:** Rural

[illegible]35



# INTERSECTION OF STH 145 & MAPLE RD & HOLY HILL RD GERMANTOWN, WISCONSIN



# A2.6 Intersection Collision Diagram

**Location:** Wasaukee Rd & Highland Rd  
**Municipality:** Germantown  
**County:** Washington  
**Traffic Control:** Minor Street Stop

**From:** 1/1/2015 **5 Years**  
**To:** 12/31/2019 **0 Months**  
**AADT:** 8,300  
**Area Type:** Rural  
**GPS Coordinates:** 43.250153, -88.063882

[MAP](#)

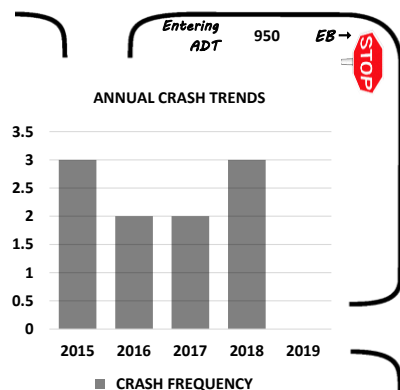
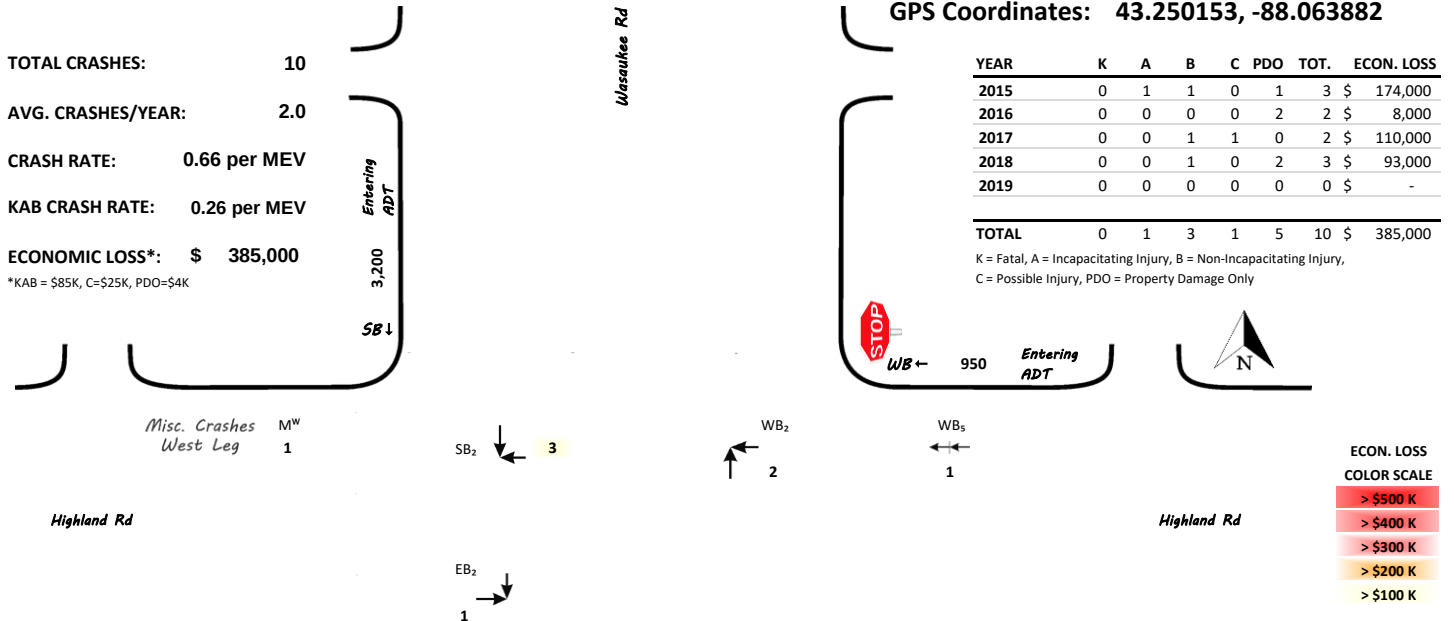
**TOTAL CRASHES:** 10  
**AVG. CRASHES/YEAR:** 2.0  
**CRASH RATE:** 0.66 per MEV  
**KAB CRASH RATE:** 0.26 per MEV  
**ECONOMIC LOSS\*:** \$ 385,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 1 | 1 | 0 | 1   | 3    | \$ 174,000 |
| 2016 | 0 | 0 | 0 | 0 | 2   | 2    | \$ 8,000   |
| 2017 | 0 | 0 | 1 | 1 | 0   | 2    | \$ 110,000 |
| 2018 | 0 | 0 | 1 | 0 | 2   | 3    | \$ 93,000  |
| 2019 | 0 | 0 | 0 | 0 | 0   | 0    | -          |

**TOTAL** 0 1 3 1 5 10 \$ 385,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury,  
C = Possible Injury, PDO = Property Damage Only



**ROAD CONDITIONS**

|             |           |     |
|-------------|-----------|-----|
| DRY         | 6         | 60% |
| WET         | 2         | 20% |
| SNOW        | 2         | 20% |
| ICE         | 0         | 0%  |
| OTH.        | 0         | 0%  |
| <b>TOT.</b> | <b>10</b> |     |

**LIGHT CONDITIONS**

|             |           |      |
|-------------|-----------|------|
| DAY         | 10        | 100% |
| DARK        | 0         | 0%   |
| <b>TOT.</b> | <b>10</b> |      |

**DRIVER BEHAVIOR**

|         |   |     |
|---------|---|-----|
| ALCOHOL | 1 | 10% |
| DRUGS   | 0 | 0%  |
| SPEED   | 5 | 50% |

**SEASON**

|             |           |     |
|-------------|-----------|-----|
| SPRING      | 2         | 20% |
| SUMMER      | 2         | 20% |
| FALL        | 2         | 20% |
| WINTER      | 4         | 40% |
| <b>TOT.</b> | <b>10</b> |     |

**FAILURE TO YIELD**

|             |          |            |
|-------------|----------|------------|
| NB          | 0        | 0%         |
| SB          | 0        | 0%         |
| EB          | 0        | 0%         |
| WB          | 3        | 30%        |
| TBD         | 0        | 0%         |
| <b>TOT.</b> | <b>3</b> | <b>30%</b> |

**DISRGRD. CONTROL**

|             |          |            |
|-------------|----------|------------|
| NB          | 0        | 0%         |
| SB          | 0        | 0%         |
| EB          | 1        | 10%        |
| WB          | 3        | 30%        |
| TBD         | 0        | 0%         |
| <b>TOT.</b> | <b>4</b> | <b>40%</b> |

**VEHICLE DAMAGE**

|                       |           |     |
|-----------------------|-----------|-----|
| OTHER/UNK.            | 0         | 0%  |
| NONE                  | 0         | 0%  |
| VERY MINOR            | 0         | 0%  |
| MINOR                 | 4         | 22% |
| MODERATE              | 3         | 17% |
| SEVERE                | 10        | 56% |
| VERY SEVERE           | 1         | 6%  |
| <b>TOTAL VEHICLES</b> | <b>18</b> |     |

TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|      | Daily Time Tables |      |      |      |      |      |      |      |      |      |       |       |       |      |      |      |      |      |      |      |      |      |       |       |     | TOT. |      |
|------|-------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|------|
|      | 12 AM             | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
| MON  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0     | 0     | 0     | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | MON  | 2    |
| TUE  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | TUE  | 1    |
| WED  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0     | 0     | 0     | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | WED  | 3    |
| THU  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 1     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | THU  | 1    |
| FRI  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | FRI  | 1    |
| SAT  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | SAT  | 1    |
| SUN  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | SUN  | 1    |
|      | 12 AM             | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
| TOT. | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 1    | 0     | 1     | 0     | 2    | 1    | 1    | 0    | 2    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | TOT. | 10   |



Duration  
5 Years  
0 Months

[illegible]

# A2.7 Intersection Collision Diagram



Location: Pilgrim Rd & Sylvan Circle  
Municipality: Germantown  
County: Washington  
Traffic Control: Minor Street Stop

From: 1/1/2015 5 Years  
To: 12/31/2019 0 Months  
AADT: 10,250  
Area Type: Urban  
GPS Coordinates: 43.223739, -88.103199

Duration

[MAP](#)

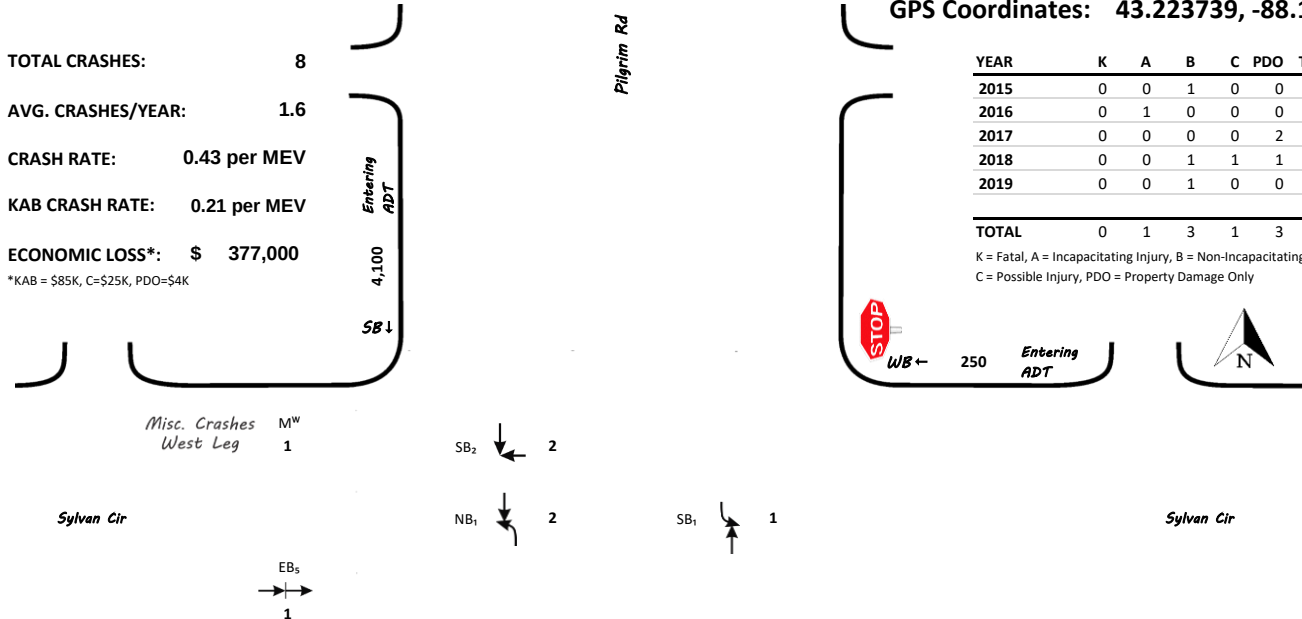
TOTAL CRASHES: 8  
AVG. CRASHES/YEAR: 1.6  
CRASH RATE: 0.43 per MEV  
KAB CRASH RATE: 0.21 per MEV  
ECONOMIC LOSS\*: \$ 377,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

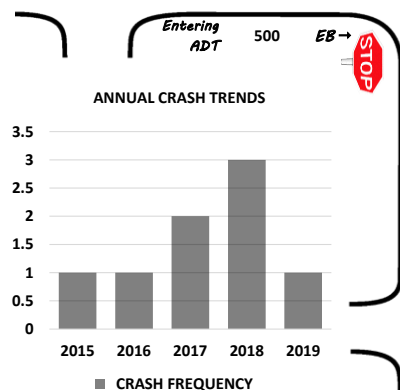
| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 1 | 0 | 0   | 1    | \$ 85,000  |
| 2016 | 0 | 1 | 0 | 0 | 0   | 1    | \$ 85,000  |
| 2017 | 0 | 0 | 0 | 0 | 2   | 2    | \$ 8,000   |
| 2018 | 0 | 0 | 1 | 1 | 1   | 3    | \$ 114,000 |
| 2019 | 0 | 0 | 1 | 0 | 0   | 1    | \$ 85,000  |

TOTAL 0 1 3 1 3 8 \$ 377,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury,  
C = Possible Injury, PDO = Property Damage Only



ECON. LOSS  
COLOR SCALE  
> \$500 K  
> \$400 K  
> \$300 K  
> \$200 K  
> \$100 K



| ROAD CONDITIONS |   |     |
|-----------------|---|-----|
| DRY             | 5 | 63% |
| WET             | 3 | 38% |
| SNOW            | 0 | 0%  |
| ICE             | 0 | 0%  |
| OTH.            | 0 | 0%  |
| TOT.            | 8 |     |

| LIGHT CONDITIONS |   |     |
|------------------|---|-----|
| DAY              | 6 | 75% |
| DARK             | 2 | 25% |
| TOT.             | 8 |     |

| DRIVER BEHAVIOR |   |    |
|-----------------|---|----|
| ALCOHOL         | 0 | 0% |
| DRUGS           | 0 | 0% |
| SPEED           | 0 | 0% |

| SEASON |   |     |
|--------|---|-----|
| SPRING | 4 | 50% |
| SUMMER | 2 | 25% |
| FALL   | 1 | 13% |
| WINTER | 1 | 13% |
| TOT.   | 8 |     |

| FAILURE TO YIELD |   |     |
|------------------|---|-----|
| NB               | 2 | 25% |
| SB               | 1 | 13% |
| EB               | 0 | 0%  |
| WB               | 2 | 25% |
| TBD              | 0 | 0%  |
| TOT.             | 5 | 63% |

| DISRGRD. CONTROL |   |    |
|------------------|---|----|
| NB               | 0 | 0% |
| SB               | 0 | 0% |
| EB               | 0 | 0% |
| WB               | 0 | 0% |
| TBD              | 0 | 0% |
| TOT.             | 0 | 0% |

| VEHICLE DAMAGE |    |     |
|----------------|----|-----|
| OTHER/UNK.     | 0  | 0%  |
| NONE           | 1  | 7%  |
| VERY MINOR     | 0  | 0%  |
| MINOR          | 4  | 27% |
| MODERATE       | 5  | 33% |
| SEVERE         | 4  | 27% |
| VERY SEVERE    | 1  | 7%  |
| TOTAL VEHICLES | 15 |     |

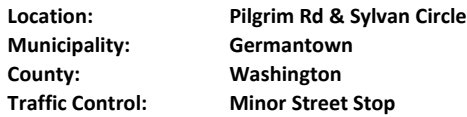
TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|      | Daily Time Tables |      |      |      |      |      |      |      |      |      |       |       |       |      |      |      |      |      |      |      |      |      |       |       |     |      |      |
|------|-------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|------|
|      | 12 AM             | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
| MON  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | MON  | 0    |
| TUE  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | TUE  | 0    |
| WED  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0     | 0     | 0     | 0    | 1    | 1    | 0    | 0    | 0    | 0    | 0    | 1    | 0     | 0     | 0   | WED  | 4    |
| THU  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 1    | 1    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | THU  | 2    |
| FRI  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | FRI  | 1    |
| SAT  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | SAT  | 1    |
| SUN  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | SUN  | 0    |
|      | 12 AM             | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
| TOT. | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 1     | 0     | 0     | 0    | 1    | 1    | 1    | 2    | 0    | 0    | 0    | 1    | 0     | 0     | 0   | TOT. | 8    |



### Corresponds to Collision Diagram



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 10,250  
**Area Type:** Urban

Duration  
5 Years  
0 Months

[illegible]

# A2.8 Intersection Collision Diagram



Location: STH 145/Fond du Lac Ave & Mequon Rd  
Municipality: Germantown  
County: Washington  
Traffic Control: Minor Street Stop

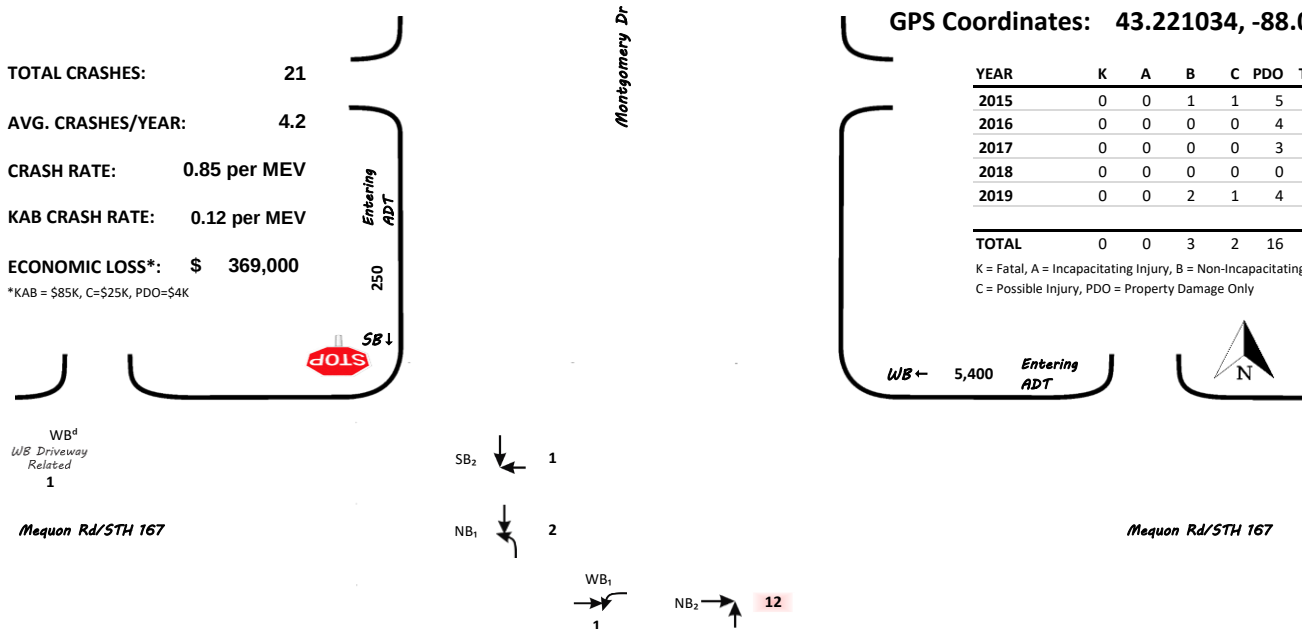
From: 1/1/2015 5 Years  
To: 12/31/2019 0 Months  
AADT: 13,600  
Area Type: Urban  
GPS Coordinates: 43.221034, -88.097062

[MAP](#)

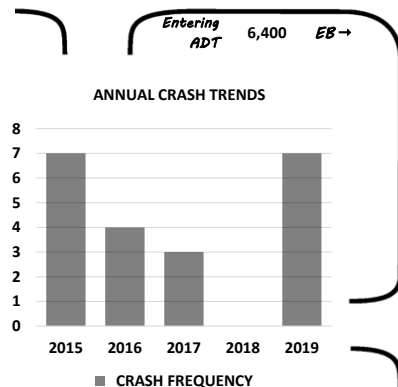
TOTAL CRASHES: 21  
AVG. CRASHES/YEAR: 4.2  
CRASH RATE: 0.85 per MEV  
KAB CRASH RATE: 0.12 per MEV  
ECONOMIC LOSS\*: \$ 369,000  
\*KAB = \$85K, C=\$25K, PDO=\$4K

| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 1 | 1 | 5   | 7    | \$ 130,000 |
| 2016 | 0 | 0 | 0 | 0 | 4   | 4    | \$ 16,000  |
| 2017 | 0 | 0 | 0 | 0 | 3   | 3    | \$ 12,000  |
| 2018 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2019 | 0 | 0 | 2 | 1 | 4   | 7    | \$ 211,000 |

TOTAL 0 0 3 2 16 21 \$ 369,000  
K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury,  
C = Possible Injury, PDO = Property Damage Only



ECON. LOSS  
COLOR SCALE  
> \$500 K  
> \$400 K  
> \$300 K  
> \$200 K  
> \$100 K



| CRASH TYPE       | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------------------|---|---|---|---|-----|------|------------|
| LT-ANGLE         | 0 | 0 | 0 | 0 | 3   | 3    | \$ 12,000  |
| RT-ANGLE         | 0 | 0 | 3 | 2 | 8   | 13   | \$ 337,000 |
| PEDESTRIAN       | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| RT-TURN REAR-END | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| REAR-END         | 0 | 0 | 0 | 0 | 2   | 2    | \$ 8,000   |
| SIDE-SWIPE-SAME  | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| BICYCLE-RELATED  | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| PARKED-VEHICLE   | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| FIXED-OBJECT     | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| DRIVEWAY-RELATED | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| HEAD-ON          | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| MISC. OTHER      | 0 | 0 | 0 | 0 | 2   | 2    | \$ 8,000   |
| TOTAL            | 0 | 0 | 3 | 2 | 16  | 21   | \$ 369,000 |

| ROAD CONDITIONS |    |     |
|-----------------|----|-----|
| DRY             | 17 | 81% |
| WET             | 4  | 19% |
| SNOW            | 0  | 0%  |
| ICE             | 0  | 0%  |
| OTH.            | 0  | 0%  |
| TOT.            | 21 |     |

| LIGHT CONDITIONS |    |     |
|------------------|----|-----|
| DAY              | 17 | 81% |
| DARK             | 4  | 19% |
| TOT.             | 21 |     |

| DRIVER BEHAVIOR |   |    |
|-----------------|---|----|
| ALCOHOL         | 1 | 5% |
| DRUGS           | 0 | 0% |
| SPEED           | 0 | 0% |

| SEASON |    |     |
|--------|----|-----|
| SPRING | 6  | 29% |
| SUMMER | 5  | 24% |
| FALL   | 6  | 29% |
| WINTER | 4  | 19% |
| TOT.   | 21 |     |

| FAILURE TO YIELD |    |     |
|------------------|----|-----|
| NB               | 14 | 67% |
| SB               | 1  | 5%  |
| EB               | 0  | 0%  |
| WB               | 1  | 5%  |
| TBD              | 0  | 0%  |
| TOT.             | 16 | 76% |

| DISRGRD. CONTROL |   |    |
|------------------|---|----|
| NB               | 0 | 0% |
| SB               | 0 | 0% |
| EB               | 0 | 0% |
| WB               | 0 | 0% |
| TBD              | 0 | 0% |
| TOT.             | 0 | 0% |

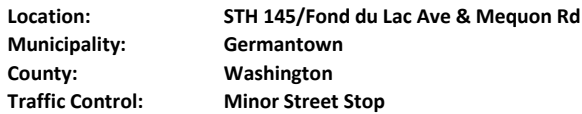
| VEHICLE DAMAGE |    |     |
|----------------|----|-----|
| OTHER/UNK.     | 0  | 0%  |
| NONE           | 1  | 3%  |
| VERY MINOR     | 1  | 3%  |
| MINOR          | 6  | 15% |
| MODERATE       | 14 | 36% |
| SEVERE         | 16 | 41% |
| VERY SEVERE    | 1  | 3%  |
| TOTAL VEHICLES | 39 |     |

TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|      | 12 AM |   |   |   |   |   | 1 AM |   |   | 2 AM |   |   | 3 AM |   |   | 4 AM |   |   | 5 AM |   |   | 6 AM |   |   | 7 AM |   |   | 8 AM |   |   | 9 AM |   |   | 10 PM |   |   | 11 PM |      |    | UNK |  | TOT. |
|------|-------|---|---|---|---|---|------|---|---|------|---|---|------|---|---|------|---|---|------|---|---|------|---|---|------|---|---|------|---|---|------|---|---|-------|---|---|-------|------|----|-----|--|------|
| MON  | 0     | 0 | 0 | 0 | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 1 | 0    | 0 | 1 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0     | 0 | 0 | 0     | MON  | 2  |     |  |      |
| TUE  | 0     | 0 | 0 | 0 | 0 | 0 | 1    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 1 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0     | 0 | 0 | 0     | TUE  | 2  |     |  |      |
| WED  | 0     | 0 | 0 | 0 | 0 | 0 | 0    | 1 | 0 | 0    | 1 | 0 | 1    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 1    | 1 | 1 | 1    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0     | 0 | 0 | 0     | WED  | 6  |     |  |      |
| THU  | 0     | 0 | 0 | 0 | 0 | 0 | 0    | 1 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 1    | 1 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0     | 0 | 0 | 0     | THU  | 3  |     |  |      |
| FRI  | 0     | 0 | 0 | 0 | 0 | 0 | 0    | 2 | 0 | 0    | 1 | 0 | 0    | 1 | 0 | 0    | 1 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0     | 0 | 0 | 0     | FRI  | 5  |     |  |      |
| SAT  | 0     | 0 | 0 | 0 | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 1 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0     | 0 | 0 | 0     | SAT  | 1  |     |  |      |
| SUN  | 0     | 0 | 0 | 1 | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 1    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0     | 0 | 0 | 0     | SUN  | 2  |     |  |      |
|      | 12 AM |   |   |   |   |   | 1 AM |   |   | 2 AM |   |   | 3 AM |   |   | 4 AM |   |   | 5 AM |   |   | 6 AM |   |   | 7 AM |   |   | 8 AM |   |   | 9 PM |   |   | 10 PM |   |   | 11 PM |      |    | UNK |  | TOT. |
| TOT. | 0     | 0 | 0 | 1 | 0 | 0 | 1    | 4 | 0 | 1    | 1 | 1 | 0    | 0 | 1 | 2    | 3 | 2 | 1    | 0 | 0 | 1    | 1 | 1 | 1    | 0 | 0 | 0    | 0 | 0 | 0    | 0 | 0 | 0     | 0 | 0 | 0     | TOT. | 21 |     |  |      |

**Corresponds to Collision Diagram**



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 13,600  
**Area Type:** Urban

Duration  
5 Years  
0 Months

[illegible]



# A2.9 Intersection Collision Diagram

**Location:** STH 145/Fond du Lac Ave & Freistadt Rd  
**Municipality:** Germantown  
**County:** Washington  
**Traffic Control:** Minor Street Stop

**From:** 1/1/2015 **5 Years**  
**To:** 12/31/2019 **0 Months**  
**AADT:** 8,100  
**Area Type:** Rural  
**GPS Coordinates:** 43.235552, -88.116742

Duration

[MAP](#)

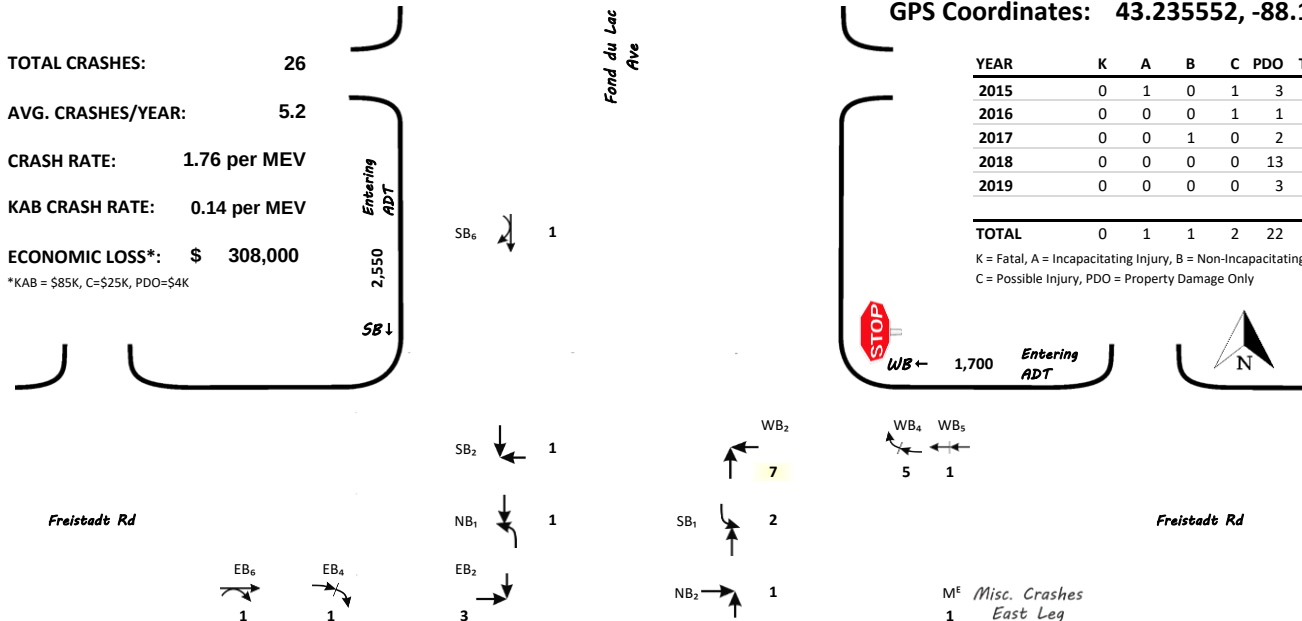
**TOTAL CRASHES:** 26  
**AVG. CRASHES/YEAR:** 5.2  
**CRASH RATE:** 1.76 per MEV  
**KAB CRASH RATE:** 0.14 per MEV  
**ECONOMIC LOSS\*:** \$ 308,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

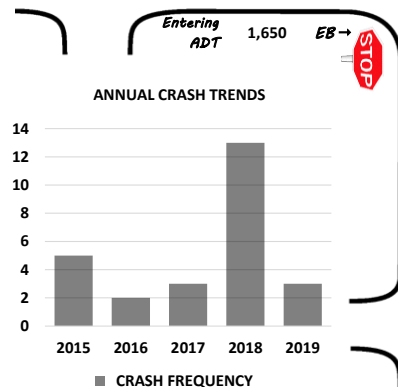
| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 1 | 0 | 1 | 3   | 5    | \$ 122,000 |
| 2016 | 0 | 0 | 0 | 1 | 1   | 2    | \$ 29,000  |
| 2017 | 0 | 0 | 1 | 0 | 2   | 3    | \$ 93,000  |
| 2018 | 0 | 0 | 0 | 0 | 13  | 13   | \$ 52,000  |
| 2019 | 0 | 0 | 0 | 0 | 3   | 3    | \$ 12,000  |

**TOTAL** 0 1 1 2 22 26 \$ 308,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury,  
C = Possible Injury, PDO = Property Damage Only



**ECON. LOSS COLOR SCALE**  
 > \$500 K  
 > \$400 K  
 > \$300 K  
 > \$200 K  
 > \$100 K



| CRASH TYPE       | K        | A        | B        | C        | PDO       | TOT.      | ECON. LOSS        |
|------------------|----------|----------|----------|----------|-----------|-----------|-------------------|
| LT-ANGLE         | 0        | 0        | 1        | 0        | 2         | 3         | \$ 93,000         |
| RT-ANGLE         | 0        | 1        | 0        | 2        | 9         | 12        | \$ 171,000        |
| PEDESTRIAN       | 0        | 0        | 0        | 0        | 0         | 0         | -                 |
| RT-TURN REAR-END | 0        | 0        | 0        | 0        | 6         | 6         | \$ 24,000         |
| REAR-END         | 0        | 0        | 0        | 0        | 1         | 1         | \$ 4,000          |
| SIDE-SWIPE-SAME  | 0        | 0        | 0        | 0        | 2         | 2         | \$ 8,000          |
| BICYCLE-RELATED  | 0        | 0        | 0        | 0        | 0         | 0         | -                 |
| PARKED-VEHICLE   | 0        | 0        | 0        | 0        | 0         | 0         | -                 |
| FIXED-OBJECT     | 0        | 0        | 0        | 0        | 1         | 1         | \$ 4,000          |
| DRIVEWAY-RELATED | 0        | 0        | 0        | 0        | 0         | 0         | -                 |
| HEAD-ON          | 0        | 0        | 0        | 0        | 0         | 0         | -                 |
| MISC. OTHER      | 0        | 0        | 0        | 0        | 1         | 1         | \$ 4,000          |
| <b>TOTAL</b>     | <b>0</b> | <b>1</b> | <b>1</b> | <b>2</b> | <b>22</b> | <b>26</b> | <b>\$ 308,000</b> |

**ROAD CONDITIONS**

|             |           |     |
|-------------|-----------|-----|
| DRY         | 22        | 85% |
| WET         | 4         | 15% |
| SNOW        | 0         | 0%  |
| ICE         | 0         | 0%  |
| OTH.        | 0         | 0%  |
| <b>TOT.</b> | <b>26</b> |     |

**LIGHT CONDITIONS**

|             |           |     |
|-------------|-----------|-----|
| DAY         | 24        | 92% |
| DARK        | 2         | 8%  |
| <b>TOT.</b> | <b>26</b> |     |

**DRIVER BEHAVIOR**

|         |   |    |
|---------|---|----|
| ALCOHOL | 1 | 4% |
| DRUGS   | 1 | 4% |
| SPEED   | 1 | 4% |

**SEASON**

|             |           |     |
|-------------|-----------|-----|
| SPRING      | 8         | 31% |
| SUMMER      | 9         | 35% |
| FALL        | 2         | 8%  |
| WINTER      | 7         | 27% |
| <b>TOT.</b> | <b>26</b> |     |

**FAILURE TO YIELD**

|             |           |            |
|-------------|-----------|------------|
| NB          | 1         | 4%         |
| SB          | 1         | 4%         |
| EB          | 4         | 15%        |
| WB          | 9         | 35%        |
| TBD         | 0         | 0%         |
| <b>TOT.</b> | <b>15</b> | <b>58%</b> |

**DISRGRD. CONTROL**

|             |          |           |
|-------------|----------|-----------|
| NB          | 0        | 0%        |
| SB          | 0        | 0%        |
| EB          | 0        | 0%        |
| WB          | 0        | 0%        |
| TBD         | 0        | 0%        |
| <b>TOT.</b> | <b>0</b> | <b>0%</b> |

**VEHICLE DAMAGE**

|                       |           |     |
|-----------------------|-----------|-----|
| OTHER/UNK.            | 1         | 2%  |
| NONE                  | 4         | 8%  |
| VERY MINOR            | 2         | 4%  |
| MINOR                 | 13        | 25% |
| MODERATE              | 16        | 31% |
| SEVERE                | 15        | 29% |
| VERY SEVERE           | 0         | 0%  |
| <b>TOTAL VEHICLES</b> | <b>51</b> |     |

NOTES:

TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |   |   |   |   | 6 AM 7 AM 8 AM |   |   | 9 AM 10 AM 11 AM |   |   | 12 PM 1 PM 2 PM |   |   | 3 PM 4 PM 5 PM |   |   | 6 PM 7 PM 8 PM |   |   | 9 PM 10 PM 11 PM |   |   | UNK |      | TOT. |
|------|--------------------------------|---|---|---|---|---|----------------|---|---|------------------|---|---|-----------------|---|---|----------------|---|---|----------------|---|---|------------------|---|---|-----|------|------|
| MON  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 2 | 1               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | MON  | 3    |
| TUE  | 0                              | 0 | 1 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 1              | 0 | 0 | 0                | 0 | 0 | 0   | TUE  | 2    |
| WED  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 1 | 0               | 1 | 3 | 1              | 1 | 1 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | WED  | 8    |
| THU  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 1 | 0 | 0                | 0 | 0 | 1               | 0 | 1 | 0              | 3 | 1 | 0              | 0 | 0 | 0                | 1 | 0 | 0   | THU  | 8    |
| FRI  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 1 | 1 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 2 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | FRI  | 4    |
| SAT  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 1 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | SAT  | 1    |
| SUN  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | SUN  | 0    |
|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |   |   |   |   | 6 AM 7 AM 8 AM |   |   | 9 AM 10 AM 11 AM |   |   | 12 PM 1 PM 2 PM |   |   | 3 PM 4 PM 5 PM |   |   | 6 PM 7 PM 8 PM |   |   | 9 PM 10 PM 11 PM |   |   | UNK |      | TOT. |
| TOT. | 0                              | 0 | 1 | 0 | 0 | 0 | 0              | 2 | 1 | 0                | 0 | 3 | 2               | 1 | 5 | 3              | 4 | 3 | 0              | 0 | 0 | 0                | 1 | 0 | 0   | TOT. | 26   |

# A2.9 Crash Data

Corresponds to Collision Diagram



**Location:** STH 145/Fond du Lac Ave & Freistadt Rd  
**Municipality:** Germantown  
**County:** Washington  
**Traffic Control:** Minor Street Stop

**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 8,100  
**Area Type:** Rural

**Duration**  
**5 Years**  
**0 Months**

| Ref # | Label           | Doc. #     | Date       | Crash Type       | Time  | Severity | Road Cond. | Light Cond. | Alc. Flag | Drug Flag | Speed Flag | Notes                |
|-------|-----------------|------------|------------|------------------|-------|----------|------------|-------------|-----------|-----------|------------|----------------------|
| 1     | EB <sub>2</sub> | LLFH7BI    | 2/27/2015  | RT-ANGLE         | 8 AM  | C        |            |             |           |           |            |                      |
| 2     | EB <sub>2</sub> | LLGN1KW    | 3/7/2016   | RT-ANGLE         | 12 PM |          |            |             |           |           |            |                      |
| 3     | EB <sub>2</sub> | C9L09XQZ2G | 4/12/2018  | RT-ANGLE         | 4 PM  |          |            |             |           |           |            |                      |
| 4     | EB <sub>4</sub> | C9L09XQZ3H | 7/25/2018  | RT-TURN REAR-END | 2 PM  |          |            |             |           |           |            | Thought pulled out   |
| 5     | EB <sub>4</sub> | C9L09JDKVG | 11/3/2018  | SIDE-SWIPE-SAME  | 2 PM  |          |            |             |           |           |            | Start EBR turned EBL |
| 6     | WB <sub>2</sub> | LLFH7BN    | 3/13/2015  | RT-ANGLE         | 3 PM  |          |            |             |           |           |            |                      |
| 7     | WB <sub>2</sub> | LLG3QV6    | 7/20/2015  | RT-ANGLE         | 11 AM |          |            |             |           |           |            |                      |
| 8     | WB <sub>2</sub> | LLFPW50    | 10/15/2015 | RT-ANGLE         | 7 AM  | A        | WET        |             |           |           |            |                      |
| 9     | WB <sub>2</sub> | LLHMF6     | 6/30/2016  | RT-ANGLE         | 2 PM  | C        |            |             |           | Y         |            |                      |
| 10    | WB <sub>2</sub> | C9L09HSJN4 | 2/8/2017   | RT-ANGLE         | 11 AM |          |            |             |           |           |            |                      |
| 11    | WB <sub>2</sub> | C9L09HSJSL | 2/6/2019   | RT-ANGLE         | 5 PM  |          |            | DAY         |           |           |            |                      |
| 12    | WB <sub>2</sub> | C9L0F7HWSN | 3/13/2019  | RT-ANGLE         | 2 PM  |          |            |             |           |           |            |                      |
| 13    | WB <sub>4</sub> | C9L09XQZ1P | 2/1/2018   | RT-TURN REAR-END | 4 PM  |          |            |             |           |           |            |                      |
| 14    | WB <sub>4</sub> | C9L09KMLWP | 2/16/2018  | RT-TURN REAR-END | 3 PM  |          |            |             |           |           |            |                      |
| 15    | WB <sub>4</sub> | C9L09JDKSZ | 5/22/2018  | RT-TURN REAR-END | 5 PM  |          |            |             |           |           |            | Moved ahead, stopped |
| 16    | WB <sub>4</sub> | C9L09KMLXG | 8/29/2018  | RT-TURN REAR-END | 3 PM  |          |            |             |           |           |            | Moved ahead, stopped |
| 17    | WB <sub>4</sub> | C9L09LVN1G | 8/30/2018  | RT-TURN REAR-END | 4 PM  |          |            |             |           |           |            | Moved ahead, stopped |
| 18    | WB <sub>4</sub> | C9L09VBVS8 | 7/5/2018   | REAR-END         | 10 PM |          |            | DARK        |           |           |            |                      |
| 19    | MT              | C9L09XQZ2J | 4/17/2018  | MISC. OTHER      | 2 AM  |          | WET        | DARK        | Y         |           | Y          |                      |
| 20    | NB <sub>2</sub> | C9L09FKHK7 | 6/23/2017  | LT-ANGLE         | 7 AM  | B        | WET        |             |           |           |            | View obscured by SBL |
| 21    | NB <sub>2</sub> | C9L09CGFD6 | 2/14/2018  | RT-ANGLE         | 2 PM  |          |            |             |           |           |            |                      |
| 22    | NB <sub>4</sub> | C9L09QKR8L | 6/11/2018  | FIXED-OBJECT     | 11 AM |          |            |             |           |           |            | Avoid WB in int      |
| 23    | SB <sub>2</sub> | C9L09CGFD1 | 12/13/2017 | LT-ANGLE         | 1 PM  |          | WET        |             |           |           |            | Icy road             |
| 24    | SB <sub>2</sub> | C9L09XQZ2L | 4/26/2018  | LT-ANGLE         | 5 PM  |          |            |             |           |           |            | View obscured by NBL |
| 25    | SB <sub>2</sub> | C9L09HSJTR | 5/1/2019   | RT-ANGLE         | 4 PM  |          |            |             |           |           |            | View obscured by WBR |
| 26    | SB <sub>4</sub> | LLG3QVD    | 7/30/2015  | SIDE-SWIPE-SAME  | 12 PM |          |            |             |           |           |            |                      |

| Ref # | Label | Doc. # | Date | Crash Type | Time | Severity | Road Cond. | Light Cond. | Alc. Flag | Drug Flag | Speed Flag | Notes |
|-------|-------|--------|------|------------|------|----------|------------|-------------|-----------|-----------|------------|-------|
| 201   |       |        |      |            |      |          |            |             |           |           |            |       |
| 202   |       |        |      |            |      |          |            |             |           |           |            |       |
| 203   |       |        |      |            |      |          |            |             |           |           |            |       |
| 204   |       |        |      |            |      |          |            |             |           |           |            |       |
| 205   |       |        |      |            |      |          |            |             |           |           |            |       |
| 206   |       |        |      |            |      |          |            |             |           |           |            |       |
| 207   |       |        |      |            |      |          |            |             |           |           |            |       |
| 208   |       |        |      |            |      |          |            |             |           |           |            |       |
| 209   |       |        |      |            |      |          |            |             |           |           |            |       |
| 210   |       |        |      |            |      |          |            |             |           |           |            |       |
| 211   |       |        |      |            |      |          |            |             |           |           |            |       |
| 212   |       |        |      |            |      |          |            |             |           |           |            |       |
| 213   |       |        |      |            |      |          |            |             |           |           |            |       |
| 214   |       |        |      |            |      |          |            |             |           |           |            |       |
| 215   |       |        |      |            |      |          |            |             |           |           |            |       |
| 216   |       |        |      |            |      |          |            |             |           |           |            |       |
| 217   |       |        |      |            |      |          |            |             |           |           |            |       |
| 218   |       |        |      |            |      |          |            |             |           |           |            |       |
| 219   |       |        |      |            |      |          |            |             |           |           |            |       |
| 220   |       |        |      |            |      |          |            |             |           |           |            |       |
| 221   |       |        |      |            |      |          |            |             |           |           |            |       |
| 222   |       |        |      |            |      |          |            |             |           |           |            |       |
| 223   |       |        |      |            |      |          |            |             |           |           |            |       |
| 224   |       |        |      |            |      |          |            |             |           |           |            |       |
| 225   |       |        |      |            |      |          |            |             |           |           |            |       |
| 226   |       |        |      |            |      |          |            |             |           |           |            |       |
| 227   |       |        |      |            |      |          |            |             |           |           |            |       |
| 228   |       |        |      |            |      |          |            |             |           |           |            |       |
| 229   |       |        |      |            |      |          |            |             |           |           |            |       |
| 230   |       |        |      |            |      |          |            |             |           |           |            |       |
| 231   |       |        |      |            |      |          |            |             |           |           |            |       |
| 232   |       |        |      |            |      |          |            |             |           |           |            |       |
| 233   |       |        |      |            |      |          |            |             |           |           |            |       |
| 234   |       |        |      |            |      |          |            |             |           |           |            |       |
| 235   |       |        |      |            |      |          |            |             |           |           |            |       |
| 236   |       |        |      |            |      |          |            |             |           |           |            |       |
| 237   |       |        |      |            |      |          |            |             |           |           |            |       |
| 238   |       |        |      |            |      |          |            |             |           |           |            |       |
| 239   |       |        |      |            |      |          |            |             |           |           |            |       |
| 240   |       |        |      |            |      |          |            |             |           |           |            |       |
| 241   |       |        |      |            |      |          |            |             |           |           |            |       |
| 242   |       |        |      |            |      |          |            |             |           |           |            |       |
| 243   |       |        |      |            |      |          |            |             |           |           |            |       |
| 244   |       |        |      |            |      |          |            |             |           |           |            |       |
| 245   |       |        |      |            |      |          |            |             |           |           |            |       |
| 246   |       |        |      |            |      |          |            |             |           |           |            |       |
| 247   |       |        |      |            |      |          |            |             |           |           |            |       |
| 248   |       |        |      |            |      |          |            |             |           |           |            |       |
| 249   |       |        |      |            |      |          |            |             |           |           |            |       |
| 250   |       |        |      |            |      |          |            |             |           |           |            |       |
| 251   |       |        |      |            |      |          |            |             |           |           |            |       |
| 252   |       |        |      |            |      |          |            |             |           |           |            |       |
| 253   |       |        |      |            |      |          |            |             |           |           |            |       |
| 254   |       |        |      |            |      |          |            |             |           |           |            |       |
| 255   |       |        |      |            |      |          |            |             |           |           |            |       |
| 256   |       |        |      |            |      |          |            |             |           |           |            |       |
| 257   |       |        |      |            |      |          |            |             |           |           |            |       |
| 258   |       |        |      |            |      |          |            |             |           |           |            |       |
| 259   |       |        |      |            |      |          |            |             |           |           |            |       |
| 260   |       |        |      |            |      |          |            |             |           |           |            |       |
| 261   |       |        |      |            |      |          |            |             |           |           |            |       |
| 262   |       |        |      |            |      |          |            |             |           |           |            |       |
| 263   |       |        |      |            |      |          |            |             |           |           |            |       |
| 264   |       |        |      |            |      |          |            |             |           |           |            |       |
| 265   |       |        |      |            |      |          |            |             |           |           |            |       |
| 266   |       |        |      |            |      |          |            |             |           |           |            |       |
| 267   |       |        |      |            |      |          |            |             |           |           |            |       |
| 268   |       |        |      |            |      |          |            |             |           |           |            |       |
| 269   |       |        |      |            |      |          |            |             |           |           |            |       |
| 270   |       |        |      |            |      |          |            |             |           |           |            |       |
| 271   |       |        |      |            |      |          |            |             |           |           |            |       |
| 272   |       |        |      |            |      |          |            |             |           |           |            |       |
| 273   |       |        |      |            |      |          |            |             |           |           |            |       |
| 274   |       |        |      |            |      |          |            |             |           |           |            |       |
| 275   |       |        |      |            |      |          |            |             |           |           |            |       |
| 276   |       |        |      |            |      |          |            |             |           |           |            |       |
| 277   |       |        |      |            |      |          |            |             |           |           |            |       |
| 278   |       |        |      |            |      |          |            |             |           |           |            |       |
| 279   |       |        |      |            |      |          |            |             |           |           |            |       |
| 280   |       |        |      |            |      |          |            |             |           |           |            |       |
| 281   |       |        |      |            |      |          |            |             |           |           |            |       |
| 282   |       |        |      |            |      |          |            |             |           |           |            |       |
| 283   |       |        |      |            |      |          |            |             |           |           |            |       |
| 284   |       |        |      |            |      |          |            |             |           |           |            |       |
| 285   |       |        |      |            |      |          |            |             |           |           |            |       |
| 286   |       |        |      |            |      |          |            |             |           |           |            |       |
| 287   |       |        |      |            |      |          |            |             |           |           |            |       |
| 288   |       |        |      |            |      |          |            |             |           |           |            |       |
| 289   |       |        |      |            |      |          |            |             |           |           |            |       |
| 290   |       |        |      |            |      |          |            |             |           |           |            |       |
| 291   |       |        |      |            |      |          |            |             |           |           |            |       |
| 292   |       |        |      |            |      |          |            |             |           |           |            |       |
| 293   |       |        |      |            |      |          |            |             |           |           |            |       |
| 294   |       |        |      |            |      |          |            |             |           |           |            |       |
| 295   |       |        |      |            |      |          |            |             |           |           |            |       |
| 296   |       |        |      |            |      |          |            |             |           |           |            |       |
| 297   |       |        |      |            |      |          |            |             |           |           |            |       |
| 298   |       |        |      |            |      |          |            |             |           |           |            |       |
| 299   |       |        |      |            |      |          |            |             |           |           |            |       |
| 300   |       |        |      |            |      |          |            |             |           |           |            |       |

# A2.10 Intersection Collision Diagram

**Location:** STH 175/Appleton Ave & Meeker Hill Rd  
**Municipality:** Germantown  
**County:** Washington  
**Traffic Control:** Minor Street Stop

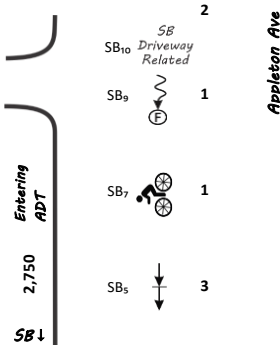
**From:** 1/1/2015 **5 Years**  
**To:** 12/31/2019 **0 Months**  
**AADT:** 5,950  
**Area Type:** Rural  
**GPS Coordinates:** 43.222817, -88.175674

Duration

[MAP](#)

**TOTAL CRASHES:** 8  
**AVG. CRASHES/YEAR:** 1.6  
**CRASH RATE:** 0.74 per MEV  
**KAB CRASH RATE:** 0.18 per MEV  
**ECONOMIC LOSS\*:** \$ 215,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

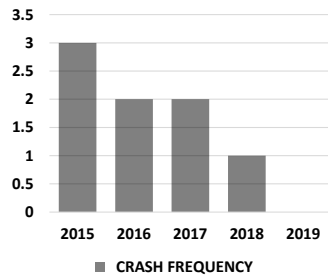


| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 1 | 0 | 0 | 1 | 1   | 3    | \$ 114,000 |
| 2016 | 0 | 0 | 0 | 0 | 2   | 2    | \$ 8,000   |
| 2017 | 0 | 0 | 1 | 0 | 1   | 2    | \$ 89,000  |
| 2018 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| 2019 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |

**TOTAL** 1 0 1 1 5 8 \$ 215,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury, C = Possible Injury, PDO = Property Damage Only

ANNUAL CRASH TRENDS



**ECON. LOSS COLOR SCALE**  
 > \$500 K  
 > \$400 K  
 > \$300 K  
 > \$200 K  
 > \$100 K

| CRASH TYPE       | K        | A        | B        | C        | PDO      | TOT.     | ECON. LOSS        |
|------------------|----------|----------|----------|----------|----------|----------|-------------------|
| LT-ANGLE         | 0        | 0        | 0        | 0        | 0        | 0        | \$ -              |
| RT-ANGLE         | 0        | 0        | 0        | 0        | 0        | 0        | \$ -              |
| PEDESTRIAN       | 0        | 0        | 0        | 0        | 0        | 0        | \$ -              |
| RT-TURN REAR-END | 0        | 0        | 0        | 0        | 0        | 0        | \$ -              |
| REAR-END         | 0        | 0        | 0        | 1        | 2        | 3        | \$ 33,000         |
| SIDE-SWIPE-SAME  | 0        | 0        | 0        | 0        | 0        | 0        | \$ -              |
| BICYCLE-RELATED  | 1        | 0        | 0        | 0        | 0        | 1        | \$ 85,000         |
| PARKED-VEHICLE   | 0        | 0        | 0        | 0        | 0        | 0        | \$ -              |
| FIXED-OBJECT     | 0        | 0        | 1        | 0        | 1        | 2        | \$ 89,000         |
| DRIVEWAY-RELATED | 0        | 0        | 0        | 0        | 2        | 2        | \$ 8,000          |
| HEAD-ON          | 0        | 0        | 0        | 0        | 0        | 0        | \$ -              |
| MISC. OTHER      | 0        | 0        | 0        | 0        | 0        | 0        | \$ -              |
| <b>TOTAL</b>     | <b>1</b> | <b>0</b> | <b>1</b> | <b>1</b> | <b>5</b> | <b>8</b> | <b>\$ 215,000</b> |

| ROAD CONDITIONS |          |     |
|-----------------|----------|-----|
| DRY             | 6        | 75% |
| WET             | 2        | 25% |
| SNOW            | 0        | 0%  |
| ICE             | 0        | 0%  |
| OTH.            | 0        | 0%  |
| <b>TOT.</b>     | <b>8</b> |     |

| LIGHT CONDITIONS |          |     |
|------------------|----------|-----|
| DAY              | 6        | 75% |
| DARK             | 2        | 25% |
| <b>TOT.</b>      | <b>8</b> |     |

| DRIVER BEHAVIOR |   |     |
|-----------------|---|-----|
| ALCOHOL         | 1 | 13% |
| DRUGS           | 0 | 0%  |
| SPEED           | 1 | 13% |

| SEASON      |          |     |
|-------------|----------|-----|
| SPRING      | 4        | 50% |
| SUMMER      | 1        | 13% |
| FALL        | 1        | 13% |
| WINTER      | 2        | 25% |
| <b>TOT.</b> | <b>8</b> |     |

| FAILURE TO YIELD |          |            |
|------------------|----------|------------|
| NB               | 0        | 0%         |
| SB               | 0        | 0%         |
| EB               | 1        | 13%        |
| WB               | 0        | 0%         |
| TBD              | 0        | 0%         |
| <b>TOT.</b>      | <b>1</b> | <b>13%</b> |

| DISRGRD. CONTROL |          |           |
|------------------|----------|-----------|
| NB               | 0        | 0%        |
| SB               | 0        | 0%        |
| EB               | 0        | 0%        |
| WB               | 0        | 0%        |
| TBD              | 0        | 0%        |
| <b>TOT.</b>      | <b>0</b> | <b>0%</b> |

| VEHICLE DAMAGE        |           |     |
|-----------------------|-----------|-----|
| OTHER/UNK.            | 0         | 0%  |
| NONE                  | 1         | 7%  |
| VERY MINOR            | 1         | 7%  |
| MINOR                 | 2         | 14% |
| MODERATE              | 6         | 43% |
| SEVERE                | 3         | 21% |
| VERY SEVERE           | 1         | 7%  |
| <b>TOTAL VEHICLES</b> | <b>14</b> |     |

**NOTES:**

Bicycle crash was Fatal hit and run

TBD = verification from crash report needed for direction

DAY/TIME TRENDS

|      | 12 AM | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
|------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|------|
| MON  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 1     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | MON  | 1    |
| TUE  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | TUE  | 1    |
| WED  | 1     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | WED  | 1    |
| THU  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 1     | 0     | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | THU  | 2    |
| FRI  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 1    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | FRI  | 2    |
| SAT  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | SAT  | 0    |
| SUN  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0     | 0     | 0   | SUN  | 1    |
|      | 12 AM | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
| TOT. | 1     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0     | 1     | 1     | 0    | 1    | 0    | 2    | 0    | 0    | 0    | 1    | 0    | 0     | 0     | 0   | TOT. | 8    |



### Corresponds to Collision Diagram

# A2.11 Intersection Collision Diagram



Location: STH 175/Appleton Ave & Amy Belle Rd  
Municipality: Germantown  
County: Washington  
Traffic Control: Minor Street Stop

From: 1/1/2015 5 Years  
To: 12/31/2019 0 Months  
AADT: 6,155  
Area Type: Rural  
GPS Coordinates: 43.228587, -88.181937

Duration

[MAP](#)

TOTAL CRASHES: 3  
AVG. CRASHES/YEAR: 0.6  
CRASH RATE: 0.27 per MEV  
KAB CRASH RATE: 0.18 per MEV  
ECONOMIC LOSS\*: \$ 174,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 1 | 1 | 0 | 0   | 2    | \$ 170,000 |
| 2016 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| 2017 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2018 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2019 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |

TOTAL 0 1 1 0 1 3 \$ 174,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury, C = Possible Injury, PDO = Property Damage Only



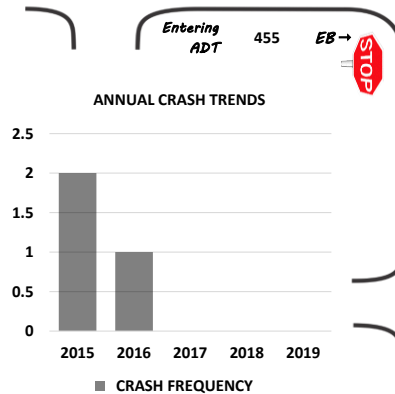
ECON. LOSS  
COLOR SCALE  
> \$500 K  
> \$400 K  
> \$300 K  
> \$200 K  
> \$100 K

Misc. Crashes M<sup>w</sup>  
West Leg 1

Appleton Ave

M<sub>n</sub> Misc. Crashes  
1 North Leg

M<sub>x</sub> Other Crashes  
1 Within Intersection



| CRASH TYPE       | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------------------|---|---|---|---|-----|------|------------|
| LT-ANGLE         | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| RT-ANGLE         | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| PEDESTRIAN       | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| RT-TURN REAR-END | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| REAR-END         | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| SIDE-SWIPE-SAME  | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| BICYCLE-RELATED  | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| PARKED-VEHICLE   | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| FIXED-OBJECT     | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| DRIVEWAY-RELATED | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| HEAD-ON          | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| MISC. OTHER      | 0 | 1 | 1 | 0 | 1   | 3    | \$ 174,000 |
| TOTAL            | 0 | 1 | 1 | 0 | 1   | 3    | \$ 174,000 |

| ROAD CONDITIONS |   |      |
|-----------------|---|------|
| DRY             | 3 | 100% |
| WET             | 0 | 0%   |
| SNOW            | 0 | 0%   |
| ICE             | 0 | 0%   |
| OTH.            | 0 | 0%   |
| TOT.            | 3 |      |

| LIGHT CONDITIONS |   |     |
|------------------|---|-----|
| DAY              | 2 | 67% |
| DARK             | 1 | 33% |
| TOT.             | 3 |     |

| DRIVER BEHAVIOR |   |     |
|-----------------|---|-----|
| ALCOHOL         | 0 | 0%  |
| DRUGS           | 0 | 0%  |
| SPEED           | 1 | 33% |

| SEASON |   |     |
|--------|---|-----|
| SPRING | 1 | 33% |
| SUMMER | 0 | 0%  |
| FALL   | 2 | 67% |
| WINTER | 0 | 0%  |
| TOT.   | 3 |     |

| FAILURE TO YIELD |   |    |
|------------------|---|----|
| NB               | 0 | 0% |
| SB               | 0 | 0% |
| EB               | 0 | 0% |
| WB               | 0 | 0% |
| TBD              | 0 | 0% |
| TOT.             | 0 | 0% |

| DISRGRD. CONTROL |   |    |
|------------------|---|----|
| NB               | 0 | 0% |
| SB               | 0 | 0% |
| EB               | 0 | 0% |
| WB               | 0 | 0% |
| TBD              | 0 | 0% |
| TOT.             | 0 | 0% |

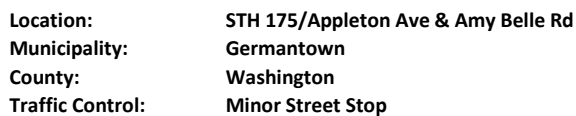
| VEHICLE DAMAGE |   |     |
|----------------|---|-----|
| OTHER/UNK.     | 0 | 0%  |
| NONE           | 1 | 25% |
| VERY MINOR     | 0 | 0%  |
| MINOR          | 1 | 25% |
| MODERATE       | 2 | 50% |
| SEVERE         | 0 | 0%  |
| VERY SEVERE    | 0 | 0%  |
| TOTAL VEHICLES | 4 |     |

TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|      | 12 AM | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
|------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|------|
| MON  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | MON  | 0    |
| TUE  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | TUE  | 1    |
| WED  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | WED  | 0    |
| THU  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | THU  | 1    |
| FRI  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | FRI  | 0    |
| SAT  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1     | 0     | 0   | SAT  | 1    |
| SUN  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | SUN  | 0    |
|      | 12 AM | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
| TOT. | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 1    | 0    | 0    | 1    | 0    | 0    | 0    | 1     | 0     | 0   | TOT. | 3    |

**Corresponds to Collision Diagram**



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 6,155  
**Area Type:** Rural

Duration  
5 Years  
0 Months

[illegible]



# A2.12 Intersection Collision Diagram

**Location:** Maple Rd & Mequon Rd  
**Municipality:** Germantown  
**County:** Washington  
**Traffic Control:** All-Way Stop

**From:** 1/1/2015 **5 Years**  
**To:** 12/31/2019 **0 Months**  
**AADT:** 14,100  
**Area Type:** Urban  
**GPS Coordinates:** 43.221077, -88.142354

[MAP](#)

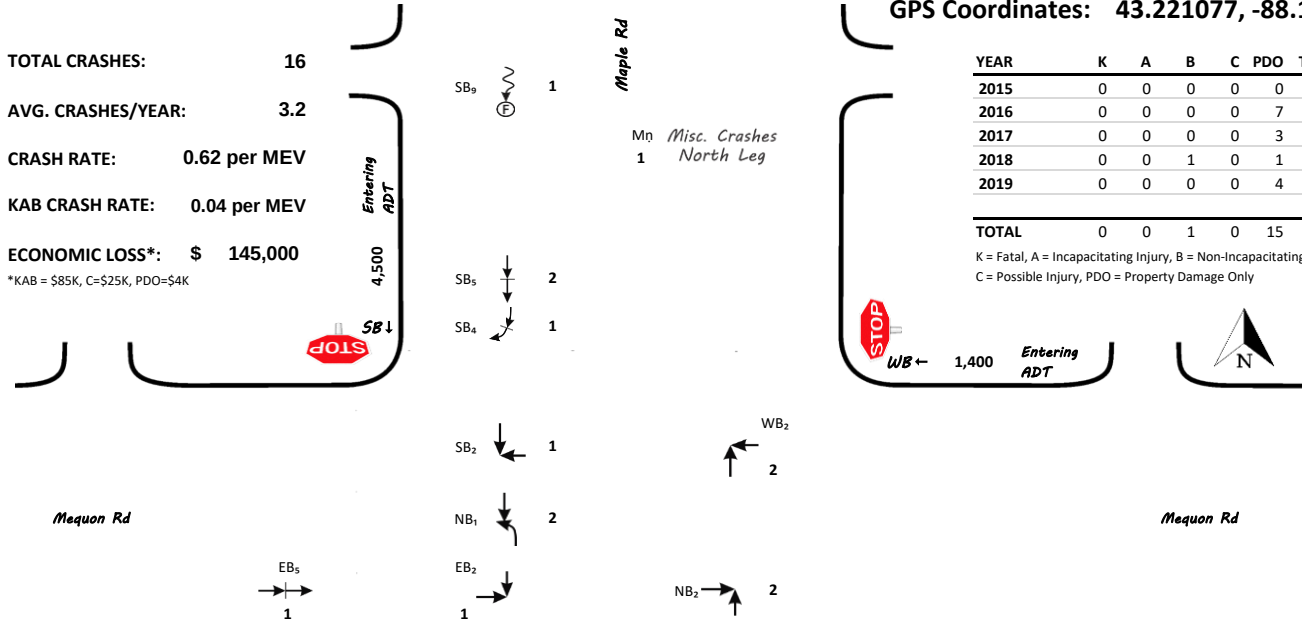
**TOTAL CRASHES:** 16  
**AVG. CRASHES/YEAR:** 3.2  
**CRASH RATE:** 0.62 per MEV  
**KAB CRASH RATE:** 0.04 per MEV  
**ECONOMIC LOSS\*:** \$ 145,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

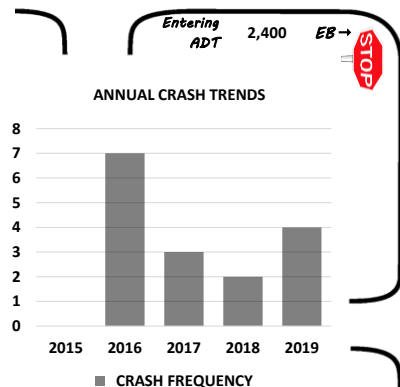
| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2016 | 0 | 0 | 0 | 0 | 7   | 7    | \$ 28,000  |
| 2017 | 0 | 0 | 0 | 0 | 3   | 3    | \$ 12,000  |
| 2018 | 0 | 0 | 1 | 0 | 1   | 2    | \$ 89,000  |
| 2019 | 0 | 0 | 0 | 0 | 4   | 4    | \$ 16,000  |

**TOTAL** 0 0 1 0 15 16 \$ 145,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury,  
C = Possible Injury, PDO = Property Damage Only



**ECON. LOSS**  
**COLOR SCALE**  
 > \$500 K  
 > \$400 K  
 > \$300 K  
 > \$200 K  
 > \$100 K



| CRASH TYPE       | K        | A        | B        | C        | PDO       | TOT.      | ECON. LOSS        |
|------------------|----------|----------|----------|----------|-----------|-----------|-------------------|
| LT-ANGLE         | 0        | 0        | 0        | 0        | 2         | 2         | \$ 8,000          |
| RT-ANGLE         | 0        | 0        | 1        | 0        | 5         | 6         | \$ 105,000        |
| PEDESTRIAN       | 0        | 0        | 0        | 0        | 0         | 0         | \$ -              |
| RT-TURN REAR-END | 0        | 0        | 0        | 0        | 1         | 1         | \$ 4,000          |
| REAR-END         | 0        | 0        | 0        | 0        | 3         | 3         | \$ 12,000         |
| SIDE-SWIPE-SAME  | 0        | 0        | 0        | 0        | 1         | 1         | \$ 4,000          |
| BICYCLE-RELATED  | 0        | 0        | 0        | 0        | 0         | 0         | \$ -              |
| PARKED-VEHICLE   | 0        | 0        | 0        | 0        | 0         | 0         | \$ -              |
| FIXED-OBJECT     | 0        | 0        | 0        | 0        | 2         | 2         | \$ 8,000          |
| DRIVEWAY-RELATED | 0        | 0        | 0        | 0        | 0         | 0         | \$ -              |
| HEAD-ON          | 0        | 0        | 0        | 0        | 0         | 0         | \$ -              |
| MISC. OTHER      | 0        | 0        | 0        | 0        | 1         | 1         | \$ 4,000          |
| <b>TOTAL</b>     | <b>0</b> | <b>0</b> | <b>1</b> | <b>0</b> | <b>15</b> | <b>16</b> | <b>\$ 145,000</b> |

**ROAD CONDITIONS**

|             |           |     |
|-------------|-----------|-----|
| DRY         | 12        | 75% |
| WET         | 2         | 13% |
| SNOW        | 2         | 13% |
| ICE         | 0         | 0%  |
| OTH.        | 0         | 0%  |
| <b>TOT.</b> | <b>16</b> |     |

**LIGHT CONDITIONS**

|             |           |     |
|-------------|-----------|-----|
| DAY         | 15        | 94% |
| DARK        | 1         | 6%  |
| <b>TOT.</b> | <b>16</b> |     |

**DRIVER BEHAVIOR**

|         |   |    |
|---------|---|----|
| ALCOHOL | 0 | 0% |
| DRUGS   | 0 | 0% |
| SPEED   | 1 | 6% |

**SEASON**

|             |           |     |
|-------------|-----------|-----|
| SPRING      | 3         | 19% |
| SUMMER      | 5         | 31% |
| FALL        | 3         | 19% |
| WINTER      | 5         | 31% |
| <b>TOT.</b> | <b>16</b> |     |

**FAILURE TO YIELD**

|             |          |            |
|-------------|----------|------------|
| NB          | 3        | 19%        |
| SB          | 2        | 13%        |
| EB          | 0        | 0%         |
| WB          | 1        | 6%         |
| TBD         | 0        | 0%         |
| <b>TOT.</b> | <b>6</b> | <b>38%</b> |

**DISRGRD. CONTROL**

|             |          |           |
|-------------|----------|-----------|
| NB          | 1        | 6%        |
| SB          | 0        | 0%        |
| EB          | 0        | 0%        |
| WB          | 0        | 0%        |
| TBD         | 0        | 0%        |
| <b>TOT.</b> | <b>1</b> | <b>6%</b> |

**VEHICLE DAMAGE**

|                       |           |     |
|-----------------------|-----------|-----|
| OTHER/UNK.            | 3         | 10% |
| NONE                  | 1         | 3%  |
| VERY MINOR            | 4         | 13% |
| MINOR                 | 10        | 33% |
| MODERATE              | 9         | 30% |
| SEVERE                | 3         | 10% |
| VERY SEVERE           | 0         | 0%  |
| <b>TOTAL VEHICLES</b> | <b>30</b> |     |

TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|  | 12 AM |   |   |   |   |   | 1 AM |   | 2 AM |   | 3 AM |   | 4 AM |   | 5 AM |   | 6 AM |   | 7 AM |   | 8 AM |   | 9 AM |   | 10 AM |   | 11 AM |   | 12 PM |   | 1 PM |   | 2 PM |   | 3 PM |   | 4 PM |   | 5 PM |   | 6 PM |   | 7 PM |   | 8 PM |   | 9 PM |   | 10 PM |   | 11 PM |   | UNK |   | TOT. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|-------|---|---|---|---|---|------|---|------|---|------|---|------|---|------|---|------|---|------|---|------|---|------|---|-------|---|-------|---|-------|---|------|---|------|---|------|---|------|---|------|---|------|---|------|---|------|---|------|---|-------|---|-------|---|-----|---|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | 0     | 1 | 0 | 0 | 0 | 0 | 0    | 0 | 0    | 0 | 0    | 0 | 0    | 0 | 0    | 0 | 0    | 0 | 0    | 0 | 0    | 0 | 0    | 0 | 0     | 0 | 0     | 0 | 0     | 0 | 0    | 0 | 0    | 0 | 0    | 0 | 0    | 0 | 0    | 0 | 0    | 0 | 0    | 0 | 0    | 0 | 0    | 0 | 0     | 0 | 0     | 0 | 0   | 0 | 0    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

### Corresponds to Collision Diagram

[illegible]

# A2.13 Intersection Collision Diagram

**Location:** Division Rd & Lilac Ln  
**Municipality:** Germantown  
**County:** Washington  
**Traffic Control:** Minor Street Stop

**From:** 1/1/2015 **5 Years**  
**To:** 12/31/2019 **0 Months**  
**AADT:** 6,500  
**Area Type:** Urban  
**GPS Coordinates:** 43.213724, -88.122929

[MAP](#)

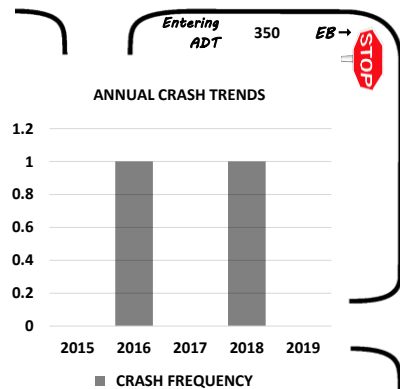
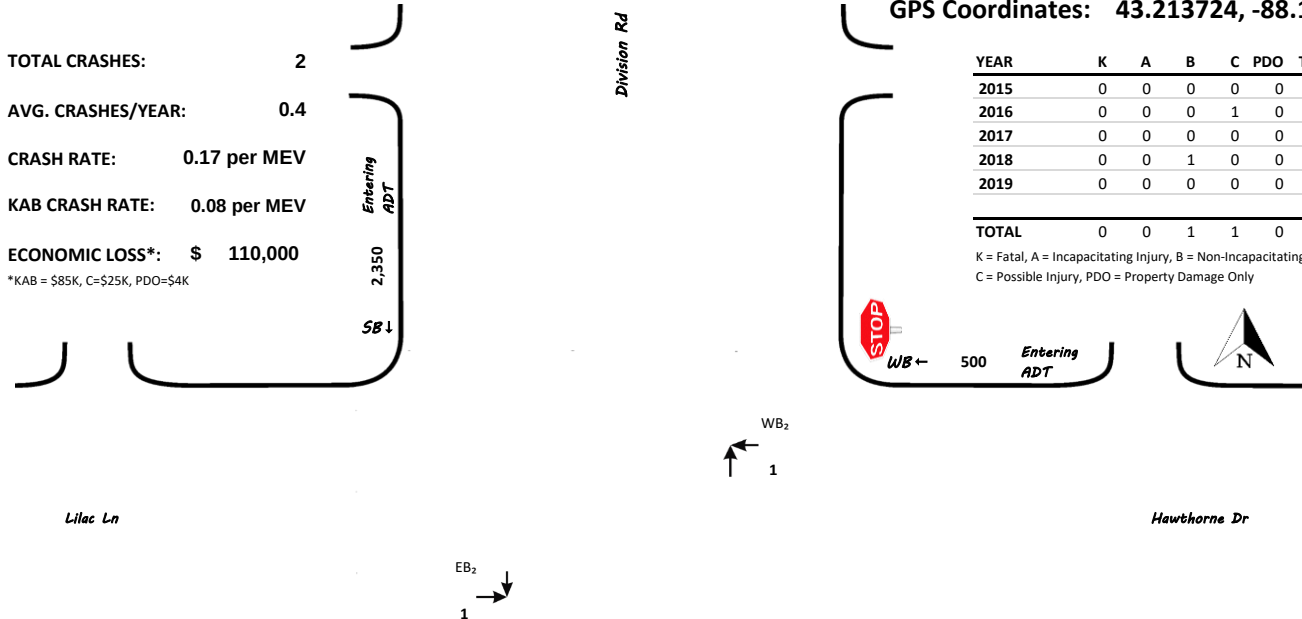
**TOTAL CRASHES:** 2  
**AVG. CRASHES/YEAR:** 0.4  
**CRASH RATE:** 0.17 per MEV  
**KAB CRASH RATE:** 0.08 per MEV  
**ECONOMIC LOSS\*:** \$ 110,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2016 | 0 | 0 | 0 | 1 | 0   | 1    | \$ 25,000  |
| 2017 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2018 | 0 | 0 | 1 | 0 | 0   | 1    | \$ 85,000  |
| 2019 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |

**TOTAL** 0 0 1 1 0 2 \$ 110,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury,  
C = Possible Injury, PDO = Property Damage Only



**ROAD CONDITIONS**

|             |          |      |
|-------------|----------|------|
| DRY         | 2        | 100% |
| WET         | 0        | 0%   |
| SNOW        | 0        | 0%   |
| ICE         | 0        | 0%   |
| OTH.        | 0        | 0%   |
| <b>TOT.</b> | <b>2</b> |      |

**LIGHT CONDITIONS**

|             |          |     |
|-------------|----------|-----|
| DAY         | 1        | 50% |
| DARK        | 1        | 50% |
| <b>TOT.</b> | <b>2</b> |     |

**DRIVER BEHAVIOR**

|         |   |    |
|---------|---|----|
| ALCOHOL | 0 | 0% |
| DRUGS   | 0 | 0% |
| SPEED   | 0 | 0% |

**SEASON**

|             |          |      |
|-------------|----------|------|
| SPRING      | 0        | 0%   |
| SUMMER      | 0        | 0%   |
| FALL        | 2        | 100% |
| WINTER      | 0        | 0%   |
| <b>TOT.</b> | <b>2</b> |      |

**FAILURE TO YIELD**

|             |          |            |
|-------------|----------|------------|
| NB          | 0        | 0%         |
| SB          | 0        | 0%         |
| EB          | 0        | 0%         |
| WB          | 1        | 50%        |
| TBD         | 0        | 0%         |
| <b>TOT.</b> | <b>1</b> | <b>50%</b> |

**DISRGRD. CONTROL**

|             |          |            |
|-------------|----------|------------|
| NB          | 0        | 0%         |
| SB          | 0        | 0%         |
| EB          | 0        | 0%         |
| WB          | 0        | 0%         |
| TBD         | 1        | 50%        |
| <b>TOT.</b> | <b>1</b> | <b>50%</b> |

**VEHICLE DAMAGE**

|                       |          |     |
|-----------------------|----------|-----|
| OTHER/UNK.            | 0        | 0%  |
| NONE                  | 0        | 0%  |
| VERY MINOR            | 0        | 0%  |
| MINOR                 | 1        | 25% |
| MODERATE              | 1        | 25% |
| SEVERE                | 2        | 50% |
| VERY SEVERE           | 0        | 0%  |
| <b>TOTAL VEHICLES</b> | <b>4</b> |     |

**NOTES:**  
Based on electronic data and not validated with hardcopies.

TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |   |   |   |   | 6 AM 7 AM 8 AM |   |   | 9 AM 10 AM 11 AM |   |   | 12 PM 1 PM 2 PM |   |   | 3 PM 4 PM 5 PM |   |   | 6 PM 7 PM 8 PM |   |   | 9 PM 10 PM 11 PM |   |   | UNK |      | TOT. |
|------|--------------------------------|---|---|---|---|---|----------------|---|---|------------------|---|---|-----------------|---|---|----------------|---|---|----------------|---|---|------------------|---|---|-----|------|------|
| MON  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | MON  | 0    |
| TUE  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | TUE  | 0    |
| WED  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | WED  | 0    |
| THU  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | THU  | 0    |
| FRI  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 1 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 1 | 0 | 0   | FRI  | 2    |
| SAT  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | SAT  | 0    |
| SUN  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | SUN  | 0    |
|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |   |   |   |   | 6 AM 7 AM 8 AM |   |   | 9 AM 10 AM 11 AM |   |   | 12 PM 1 PM 2 PM |   |   | 3 PM 4 PM 5 PM |   |   | 6 PM 7 PM 8 PM |   |   | 9 PM 10 PM 11 PM |   |   | UNK |      | TOT. |
| TOT. | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 1 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 1 | 0 | 0   | TOT. | 2    |

### Corresponds to Collision Diagram



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 6,500  
**Area Type:** Urban

[illegible][illegible]



# A2.14 Intersection Collision Diagram



Location: STH 175/Appleton Ave & Willow Creek Rd  
Municipality: Germantown  
County: Washington  
Traffic Control: Minor Street Stop

From: 1/1/2015 5 Years  
To: 12/31/2019 0 Months  
AADT: 9,050  
Area Type: Rural  
GPS Coordinates: 43.207155, -88.158945

Duration

[MAP](#)

TOTAL CRASHES: 4  
AVG. CRASHES/YEAR: 0.8  
CRASH RATE: 0.24 per MEV  
KAB CRASH RATE: 0.06 per MEV  
ECONOMIC LOSS\*: \$ 97,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2016 | 1 | 0 | 0 | 0 | 1   | 2    | \$ 89,000  |
| 2017 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| 2018 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2019 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |

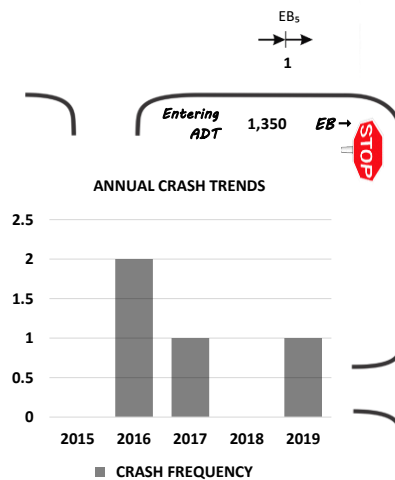
TOTAL 1 0 0 0 3 4 \$ 97,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury, C = Possible Injury, PDO = Property Damage Only



ECON. LOSS  
COLOR SCALE  
> \$500 K  
> \$400 K  
> \$300 K  
> \$200 K  
> \$100 K

Willow Creek Rd



| CRASH TYPE       | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------------------|---|---|---|---|-----|------|------------|
| LT-ANGLE         | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| RT-ANGLE         | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| PEDESTRIAN       | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| RT-TURN REAR-END | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| REAR-END         | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| SIDE-SWIPE-SAME  | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| BICYCLE-RELATED  | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| PARKED-VEHICLE   | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| FIXED-OBJECT     | 0 | 0 | 0 | 0 | 2   | 2    | \$ 8,000   |
| DRIVEWAY-RELATED | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| HEAD-ON          | 1 | 0 | 0 | 0 | 0   | 1    | \$ 85,000  |
| MISC. OTHER      | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| TOTAL            | 1 | 0 | 0 | 0 | 3   | 4    | \$ 97,000  |

| ROAD CONDITIONS |   |      |
|-----------------|---|------|
| DRY             | 4 | 100% |
| WET             | 0 | 0%   |
| SNOW            | 0 | 0%   |
| ICE             | 0 | 0%   |
| OTH.            | 0 | 0%   |
| TOT.            | 4 |      |

| LIGHT CONDITIONS |   |     |
|------------------|---|-----|
| DAY              | 3 | 75% |
| DARK             | 1 | 25% |
| TOT.             | 4 |     |

| DRIVER BEHAVIOR |   |    |
|-----------------|---|----|
| ALCOHOL         | 0 | 0% |
| DRUGS           | 0 | 0% |
| SPEED           | 0 | 0% |

| SEASON |   |     |
|--------|---|-----|
| SPRING | 0 | 0%  |
| SUMMER | 1 | 25% |
| FALL   | 1 | 25% |
| WINTER | 2 | 50% |
| TOT.   | 4 |     |

| FAILURE TO YIELD |   |    |
|------------------|---|----|
| NB               | 0 | 0% |
| SB               | 0 | 0% |
| EB               | 0 | 0% |
| WB               | 0 | 0% |
| TBD              | 0 | 0% |
| TOT.             | 0 | 0% |

| DISRGRD. CONTROL |   |    |
|------------------|---|----|
| NB               | 0 | 0% |
| SB               | 0 | 0% |
| EB               | 0 | 0% |
| WB               | 0 | 0% |
| TBD              | 0 | 0% |
| TOT.             | 0 | 0% |

| VEHICLE DAMAGE |   |     |
|----------------|---|-----|
| OTHER/UNK.     | 0 | 0%  |
| NONE           | 0 | 0%  |
| VERY MINOR     | 0 | 0%  |
| MINOR          | 0 | 0%  |
| MODERATE       | 2 | 33% |
| SEVERE         | 3 | 50% |
| VERY SEVERE    | 1 | 17% |
| TOTAL VEHICLES | 6 |     |

NOTES:

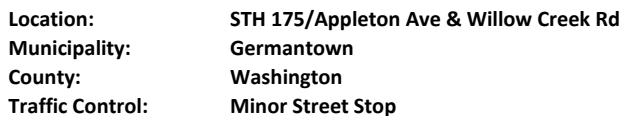
Validated KAB crashes; NB Head-On was a fatal crash. NB crossed centerline.

TBD = verification from crash report needed for direction

DAY/TIME TRENDS

|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |    |   |    |    | 6 AM 7 AM 8 AM |   |    | 9 AM 10 AM 11 AM |    |   | 12 PM 1 PM 2 PM |   |    | 3 PM 4 PM 5 PM |    |   | 6 PM 7 PM 8 PM |    |    | 9 PM 10 PM 11 PM |    |    | UNK |   | TOT. |   |    |   |    |   |    |   |    |   |    |   |    |   |    |   |    |    |    |    |    |     |   |      |   |
|------|--------------------------------|---|----|---|----|----|----------------|---|----|------------------|----|---|-----------------|---|----|----------------|----|---|----------------|----|----|------------------|----|----|-----|---|------|---|----|---|----|---|----|---|----|---|----|---|----|---|----|---|----|----|----|----|----|-----|---|------|---|
| MON  | 0                              | 1 | AM | 2 | AM | 3  | AM             | 4 | AM | 5                | AM | 6 | AM              | 7 | AM | 8              | AM | 9 | AM             | 10 | AM | 11               | AM | 12 | PM  | 1 | PM   | 2 | PM | 3 | PM | 4 | PM | 5 | PM | 6 | PM | 7 | PM | 8 | PM | 9 | PM | 10 | PM | 11 | PM | UNK |   | MON  | 0 |
| TUE  | 0                              | 0 | 0  | 0 | 0  | 0  | 0              | 0 | 0  | 0                | 0  | 0 | 0               | 0 | 0  | 0              | 0  | 0 | 0              | 0  | 0  | 0                | 0  | 0  | 0   | 0 | 0    | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0  | 0  | 0  | 0  | 0   | 0 | TUE  | 1 |
| WED  | 0                              | 0 | 0  | 0 | 0  | 0  | 0              | 0 | 0  | 0                | 0  | 0 | 0               | 0 | 0  | 0              | 0  | 0 | 0              | 0  | 0  | 0                | 0  | 0  | 0   | 0 | 0    | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0  | 0  | 0  | 0  | 0   | 0 | WED  | 0 |
| THU  | 0                              | 0 | 0  | 0 | 0  | 0  | 0              | 0 | 0  | 0                | 0  | 0 | 0               | 0 | 0  | 0              | 0  | 0 | 0              | 0  | 0  | 0                | 0  | 0  | 0   | 0 | 0    | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0  | 0  | 0  | 0  | 0   | 0 | THU  | 0 |
| FRI  | 0                              | 0 | 0  | 0 | 0  | 0  | 0              | 0 | 0  | 0                | 0  | 0 | 0               | 0 | 0  | 0              | 0  | 0 | 0              | 0  | 0  | 0                | 0  | 0  | 0   | 0 | 0    | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0  | 0  | 0  | 0  | 0   | 0 | FRI  | 1 |
| SAT  | 0                              | 0 | 0  | 0 | 0  | 0  | 0              | 0 | 0  | 0                | 0  | 0 | 0               | 0 | 0  | 0              | 0  | 0 | 0              | 0  | 0  | 0                | 0  | 0  | 0   | 0 | 0    | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0  | 0  | 0  | 0  | 0   | 0 | SAT  | 1 |
| SUN  | 0                              | 0 | 0  | 0 | 0  | 0  | 0              | 0 | 0  | 0                | 0  | 0 | 0               | 0 | 0  | 0              | 0  | 0 | 0              | 0  | 0  | 0                | 0  | 0  | 0   | 0 | 0    | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0  | 0  | 0  | 0  | 0   | 0 | SUN  | 1 |
|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |    |   |    |    | 6 AM 7 AM 8 AM |   |    | 9 AM 10 AM 11 AM |    |   | 12 PM 1 PM 2 PM |   |    | 3 PM 4 PM 5 PM |    |   | 6 PM 7 PM 8 PM |    |    | 9 PM 10 PM 11 PM |    |    | UNK |   | TOT. |   |    |   |    |   |    |   |    |   |    |   |    |   |    |   |    |    |    |    |    |     |   |      |   |
| TOT. | 0                              | 0 | 0  | 0 | 3  | AM | 0              | 0 | 0  | 0                | 0  | 0 | 0               | 0 | 0  | 0              | 0  | 0 | 0              | 0  | 0  | 0                | 0  | 0  | 0   | 0 | 0    | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0 | 0  | 0  | 0  | 0  | 0  | 0   | 0 | TOT. | 4 |

### Corresponds to Collision Diagram



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 9,050  
**Area Type:** Rural

Duration  
5 Years  
0 Months

[illegible]

# A2.15 Intersection Collision Diagram



Location: STH 175/Appleton Ave & Hilltop Rd  
Municipality: Germantown  
County: Washington  
Traffic Control: Minor Street Stop

From: 1/1/2015 5 Years  
To: 12/31/2019 0 Months  
AADT: 6,550  
Area Type: Rural  
GPS Coordinates: 43.208505, -88.162486

Duration

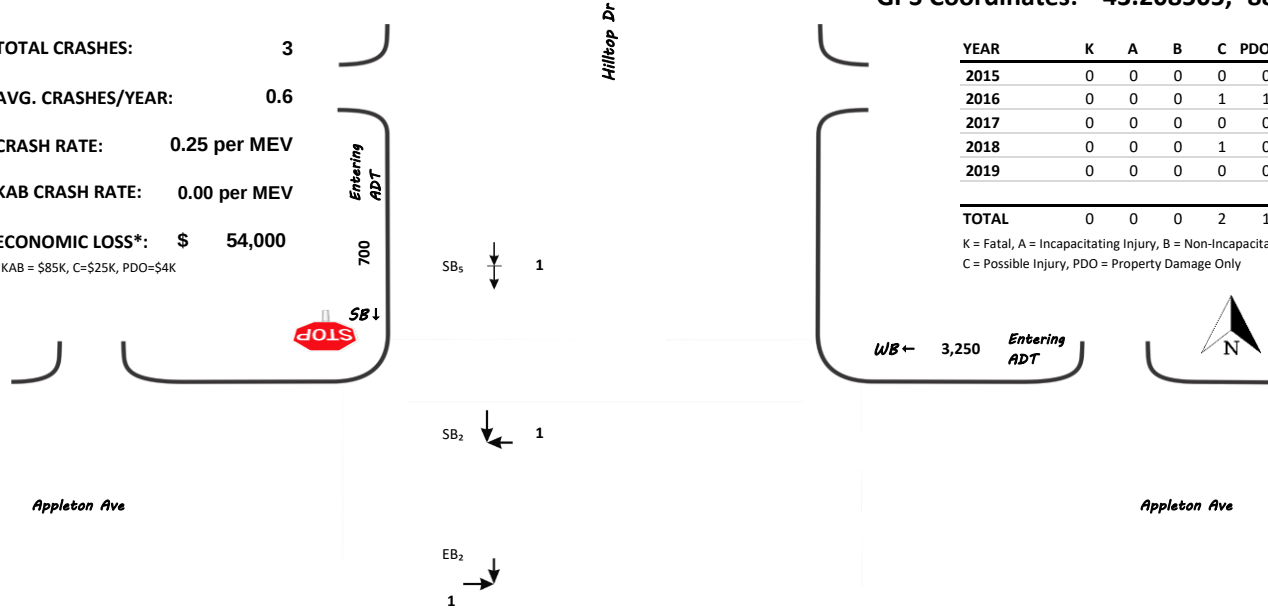
[MAP](#)

TOTAL CRASHES: 3  
AVG. CRASHES/YEAR: 0.6  
CRASH RATE: 0.25 per MEV  
KAB CRASH RATE: 0.00 per MEV  
ECONOMIC LOSS\*: \$ 54,000  
\*KAB = \$85K, C=\$25K, PDO=\$4K

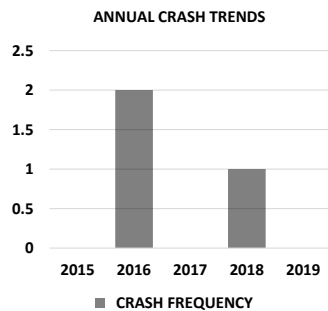
| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| 2016 | 0 | 0 | 0 | 1 | 1   | 2    | \$ 29,000  |
| 2017 | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| 2018 | 0 | 0 | 0 | 1 | 0   | 1    | \$ 25,000  |
| 2019 | 0 | 0 | 0 | 0 | 0   | 0    | -          |

| TOTAL | 0 | 0 | 0 | 2 | 1 | 3 | \$ 54,000 |
|-------|---|---|---|---|---|---|-----------|
|-------|---|---|---|---|---|---|-----------|

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury,  
C = Possible Injury, PDO = Property Damage Only



ECON. LOSS  
COLOR SCALE  
> \$500 K  
> \$400 K  
> \$300 K  
> \$200 K  
> \$100 K



| CRASH TYPE       | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------------------|---|---|---|---|-----|------|------------|
| LT-ANGLE         | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| RT-ANGLE         | 0 | 0 | 0 | 1 | 1   | 2    | \$ 29,000  |
| PEDESTRIAN       | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| RT-TURN REAR-END | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| REAR-END         | 0 | 0 | 0 | 1 | 0   | 1    | \$ 25,000  |
| SIDE-SWIPE-SAME  | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| BICYCLE-RELATED  | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| PARKED-VEHICLE   | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| FIXED-OBJECT     | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| DRIVEWAY-RELATED | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| HEAD-ON          | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| MISC. OTHER      | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| TOTAL            | 0 | 0 | 0 | 2 | 1   | 3    | \$ 54,000  |

| ROAD CONDITIONS |   |     |
|-----------------|---|-----|
| DRY             | 2 | 67% |
| WET             | 1 | 33% |
| SNOW            | 0 | 0%  |
| ICE             | 0 | 0%  |
| OTH.            | 0 | 0%  |
| TOT.            | 3 |     |

| LIGHT CONDITIONS |   |      |
|------------------|---|------|
| DAY              | 3 | 100% |
| DARK             | 0 | 0%   |
| TOT.             | 3 |      |

| DRIVER BEHAVIOR |   |    |
|-----------------|---|----|
| ALCOHOL         | 0 | 0% |
| DRUGS           | 0 | 0% |
| SPEED           | 0 | 0% |

| SEASON |   |     |
|--------|---|-----|
| SPRING | 1 | 33% |
| SUMMER | 1 | 33% |
| FALL   | 0 | 0%  |
| WINTER | 1 | 33% |
| TOT.   | 3 |     |

| FAILURE TO YIELD |   |     |
|------------------|---|-----|
| NB               | 0 | 0%  |
| SB               | 2 | 67% |
| EB               | 0 | 0%  |
| WB               | 0 | 0%  |
| TBD              | 0 | 0%  |
| TOT.             | 2 | 67% |

| DISRGRD. CONTROL |   |    |
|------------------|---|----|
| NB               | 0 | 0% |
| SB               | 0 | 0% |
| EB               | 0 | 0% |
| WB               | 0 | 0% |
| TBD              | 0 | 0% |
| TOT.             | 0 | 0% |

| VEHICLE DAMAGE |   |     |
|----------------|---|-----|
| OTHER/UNK.     | 0 | 0%  |
| NONE           | 0 | 0%  |
| VERY MINOR     | 2 | 33% |
| MINOR          | 1 | 17% |
| MODERATE       | 0 | 0%  |
| SEVERE         | 3 | 50% |
| VERY SEVERE    | 0 | 0%  |
| TOTAL VEHICLES | 6 |     |

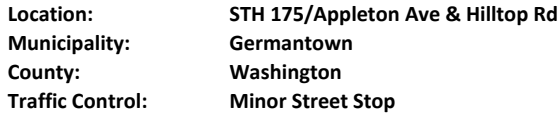
NOTES:

TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|      | 12 AM | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK  | TOT. |
|------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|
| MON  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | MON  | 1    |
| TUE  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | TUE  | 1    |
| WED  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | WED  | 0    |
| THU  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | THU  | 0    |
| FRI  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | FRI  | 1    |
| SAT  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | SAT  | 0    |
| SUN  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | SUN  | 0    |
| TOT. | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0     | 0     | 0     | 0    | 0    | 1    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | TOT. | 3    |

### Corresponds to Collision Diagram



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 6,550  
**Area Type:** Rural

| #   | Label           | Doc. #     | Date      | Crash Type | Time   | Severity | Road Cond. | Light Cond. | Alc. Flag | Drug Flag | Speed Flag | Notes |                    |
|-----|-----------------|------------|-----------|------------|--------|----------|------------|-------------|-----------|-----------|------------|-------|--------------------|
| 1   | EB <sub>2</sub> | LLHBR58    | 7/18/2016 | RT-ANGLE   | 8 AM   |          |            |             |           |           |            |       |                    |
| 2   | SB <sub>2</sub> | C9L09JDKSV | 5/1/2018  | RT-ANGLE   | 3 PM C |          |            |             |           |           |            |       |                    |
| 3   | SB <sub>3</sub> | LLH8K3L    | 1/15/2016 | REAR-END   | 4 PM   | C        | WET        |             |           |           |            |       | Thought pulled out |
| 4   |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 5   |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 6   |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 7   |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 8   |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 9   |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 10  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 11  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 12  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 13  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 14  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 15  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 16  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 17  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 18  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 19  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 20  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 21  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 22  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 23  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 24  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 25  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 26  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 27  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 28  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 29  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 30  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 31  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 32  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 33  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 34  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 35  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 36  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 37  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 38  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 39  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 40  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 41  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 42  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 43  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 44  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 45  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 46  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 47  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 48  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 49  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 50  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 51  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 52  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 53  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 54  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 55  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 56  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 57  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 58  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 59  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 60  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 61  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 62  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 63  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 64  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 65  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 66  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 67  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 68  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 69  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 70  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 71  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 72  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 73  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 74  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 75  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 76  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 77  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 78  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 79  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 80  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 81  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 82  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 83  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 84  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 85  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 86  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 87  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 88  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 89  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 90  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 91  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 92  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 93  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 94  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 95  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 96  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 97  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 98  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 99  |                 |            |           |            |        |          |            |             |           |           |            |       |                    |
| 100 |                 |            |           |            |        |          |            |             |           |           |            |       |                    |

56



# A2.16 Intersection Collision Diagram



Location: STH 145/Fond du Lac Ave & Main St  
Municipality: Germantown  
County: Washington  
Traffic Control: Minor Street Stop

From: 1/1/2015 5 Years  
To: 12/31/2019 0 Months  
AADT: 5,600  
Area Type: Rural  
GPS Coordinates: 43.228267, -88.105097

Duration

[MAP](#)

TOTAL CRASHES: 5  
AVG. CRASHES/YEAR: 1.0  
CRASH RATE: 0.49 per MEV  
KAB CRASH RATE: 0.00 per MEV  
ECONOMIC LOSS\*: \$ 41,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

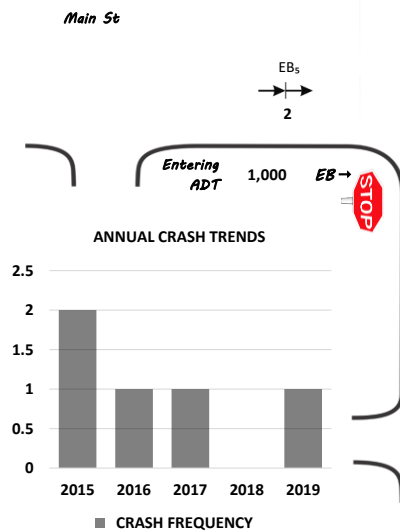
| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 0 | 0 | 2   | 2    | \$ 8,000   |
| 2016 | 0 | 0 | 0 | 1 | 0   | 1    | \$ 25,000  |
| 2017 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| 2018 | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| 2019 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |

TOTAL 0 0 0 1 4 5 \$ 41,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury, C = Possible Injury, PDO = Property Damage Only



ECON. LOSS  
COLOR SCALE  
> \$500 K  
> \$400 K  
> \$300 K  
> \$200 K  
> \$100 K



| ROAD CONDITIONS |   |     |
|-----------------|---|-----|
| DRY             | 4 | 80% |
| WET             | 0 | 0%  |
| SNOW            | 0 | 0%  |
| ICE             | 1 | 20% |
| OTH.            | 0 | 0%  |
| TOT.            | 5 |     |

| LIGHT CONDITIONS |   |     |
|------------------|---|-----|
| DAY              | 4 | 80% |
| DARK             | 1 | 20% |
| TOT.             | 5 |     |

| DRIVER BEHAVIOR |   |    |
|-----------------|---|----|
| ALCOHOL         | 0 | 0% |
| DRUGS           | 0 | 0% |
| SPEED           | 0 | 0% |

| SEASON |   |     |
|--------|---|-----|
| SPRING | 1 | 20% |
| SUMMER | 2 | 40% |
| FALL   | 1 | 20% |
| WINTER | 1 | 20% |
| TOT.   | 5 |     |

| FAILURE TO YIELD |   |     |
|------------------|---|-----|
| NB               | 0 | 0%  |
| SB               | 0 | 0%  |
| EB               | 1 | 20% |
| WB               | 0 | 0%  |
| TBD              | 0 | 0%  |
| TOT.             | 1 | 20% |

| DISRGRD. CONTROL |   |    |
|------------------|---|----|
| NB               | 0 | 0% |
| SB               | 0 | 0% |
| EB               | 0 | 0% |
| WB               | 0 | 0% |
| TBD              | 0 | 0% |
| TOT.             | 0 | 0% |

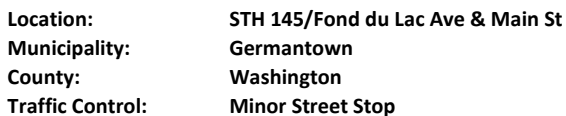
| VEHICLE DAMAGE |    |     |
|----------------|----|-----|
| OTHER/UNK.     | 0  | 0%  |
| NONE           | 0  | 0%  |
| VERY MINOR     | 2  | 20% |
| MINOR          | 4  | 40% |
| MODERATE       | 2  | 20% |
| SEVERE         | 2  | 20% |
| VERY SEVERE    | 0  | 0%  |
| TOTAL VEHICLES | 10 |     |

TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |   |   |   |   | 6 AM 7 AM 8 AM |   |   | 9 AM 10 AM 11 AM |   |   | 12 PM 1 PM 2 PM |   |   | 3 PM 4 PM 5 PM |   |   | 6 PM 7 PM 8 PM |   |   | 9 PM 10 PM 11 PM |   |   | UNK |   | TOT. |   |
|------|--------------------------------|---|---|---|---|---|----------------|---|---|------------------|---|---|-----------------|---|---|----------------|---|---|----------------|---|---|------------------|---|---|-----|---|------|---|
| MON  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 1              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | 0 | MON  | 1 |
| TUE  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | 0 | TUE  | 0 |
| WED  | 0                              | 0 | 0 | 0 | 0 | 0 | 1              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 1 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | 0 | WED  | 2 |
| THU  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | 0 | THU  | 0 |
| FRI  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | 0 | FRI  | 0 |
| SAT  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 1 | 0 | 0              | 0 | 0 | 1              | 0 | 0 | 0                | 0 | 0 | 0   | 0 | SAT  | 2 |
| SUN  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | 0 | SUN  | 0 |
|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |   |   |   |   | 6 AM 7 AM 8 AM |   |   | 9 AM 10 AM 11 AM |   |   | 12 PM 1 PM 2 PM |   |   | 3 PM 4 PM 5 PM |   |   | 6 PM 7 PM 8 PM |   |   | 9 PM 10 PM 11 PM |   |   | UNK |   | TOT. |   |
| TOT. | 0                              | 0 | 0 | 0 | 0 | 0 | 1              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 1 | 0              | 1 | 1 | 0              | 1 | 0 | 0                | 0 | 0 | 0   | 0 | TOT. | 5 |

**Corresponds to Collision Diagram**



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 5,600  
**Area Type:** Rural

Duration  
5 Years  
0 Months

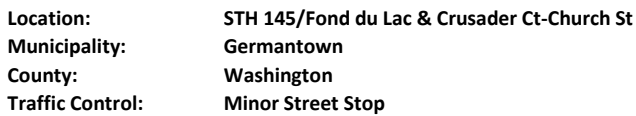
[illegible]

| Ref # | Label | Doc. # | Date | Crash Type | Time | Severity | Road Cond. | Light Cond. | Alc. Flag | Drug Flag | Speed Flag | Notes |
|-------|-------|--------|------|------------|------|----------|------------|-------------|-----------|-----------|------------|-------|
| 101   |       |        |      |            |      |          |            |             |           |           |            |       |
| 102   |       |        |      |            |      |          |            |             |           |           |            |       |
| 103   |       |        |      |            |      |          |            |             |           |           |            |       |
| 104   |       |        |      |            |      |          |            |             |           |           |            |       |
| 105   |       |        |      |            |      |          |            |             |           |           |            |       |
| 106   |       |        |      |            |      |          |            |             |           |           |            |       |
| 107   |       |        |      |            |      |          |            |             |           |           |            |       |
| 108   |       |        |      |            |      |          |            |             |           |           |            |       |
| 109   |       |        |      |            |      |          |            |             |           |           |            |       |
| 110   |       |        |      |            |      |          |            |             |           |           |            |       |
| 111   |       |        |      |            |      |          |            |             |           |           |            |       |
| 112   |       |        |      |            |      |          |            |             |           |           |            |       |
| 113   |       |        |      |            |      |          |            |             |           |           |            |       |
| 114   |       |        |      |            |      |          |            |             |           |           |            |       |
| 115   |       |        |      |            |      |          |            |             |           |           |            |       |
| 116   |       |        |      |            |      |          |            |             |           |           |            |       |
| 117   |       |        |      |            |      |          |            |             |           |           |            |       |
| 118   |       |        |      |            |      |          |            |             |           |           |            |       |
| 119   |       |        |      |            |      |          |            |             |           |           |            |       |
| 120   |       |        |      |            |      |          |            |             |           |           |            |       |
| 121   |       |        |      |            |      |          |            |             |           |           |            |       |
| 122   |       |        |      |            |      |          |            |             |           |           |            |       |
| 123   |       |        |      |            |      |          |            |             |           |           |            |       |
| 124   |       |        |      |            |      |          |            |             |           |           |            |       |
| 125   |       |        |      |            |      |          |            |             |           |           |            |       |
| 126   |       |        |      |            |      |          |            |             |           |           |            |       |
| 127   |       |        |      |            |      |          |            |             |           |           |            |       |
| 128   |       |        |      |            |      |          |            |             |           |           |            |       |
| 129   |       |        |      |            |      |          |            |             |           |           |            |       |
| 130   |       |        |      |            |      |          |            |             |           |           |            |       |
| 131   |       |        |      |            |      |          |            |             |           |           |            |       |
| 132   |       |        |      |            |      |          |            |             |           |           |            |       |
| 133   |       |        |      |            |      |          |            |             |           |           |            |       |
| 134   |       |        |      |            |      |          |            |             |           |           |            |       |
| 135   |       |        |      |            |      |          |            |             |           |           |            |       |
| 136   |       |        |      |            |      |          |            |             |           |           |            |       |
| 137   |       |        |      |            |      |          |            |             |           |           |            |       |
| 138   |       |        |      |            |      |          |            |             |           |           |            |       |
| 139   |       |        |      |            |      |          |            |             |           |           |            |       |
| 140   |       |        |      |            |      |          |            |             |           |           |            |       |
| 141   |       |        |      |            |      |          |            |             |           |           |            |       |
| 142   |       |        |      |            |      |          |            |             |           |           |            |       |
| 143   |       |        |      |            |      |          |            |             |           |           |            |       |
| 144   |       |        |      |            |      |          |            |             |           |           |            |       |
| 145   |       |        |      |            |      |          |            |             |           |           |            |       |
| 146   |       |        |      |            |      |          |            |             |           |           |            |       |
| 147   |       |        |      |            |      |          |            |             |           |           |            |       |
| 148   |       |        |      |            |      |          |            |             |           |           |            |       |
| 149   |       |        |      |            |      |          |            |             |           |           |            |       |
| 150   |       |        |      |            |      |          |            |             |           |           |            |       |
| 151   |       |        |      |            |      |          |            |             |           |           |            |       |
| 152   |       |        |      |            |      |          |            |             |           |           |            |       |
| 153   |       |        |      |            |      |          |            |             |           |           |            |       |
| 154   |       |        |      |            |      |          |            |             |           |           |            |       |
| 155   |       |        |      |            |      |          |            |             |           |           |            |       |
| 156   |       |        |      |            |      |          |            |             |           |           |            |       |
| 157   |       |        |      |            |      |          |            |             |           |           |            |       |
| 158   |       |        |      |            |      |          |            |             |           |           |            |       |
| 159   |       |        |      |            |      |          |            |             |           |           |            |       |
| 160   |       |        |      |            |      |          |            |             |           |           |            |       |
| 161   |       |        |      |            |      |          |            |             |           |           |            |       |
| 162   |       |        |      |            |      |          |            |             |           |           |            |       |
| 163   |       |        |      |            |      |          |            |             |           |           |            |       |
| 164   |       |        |      |            |      |          |            |             |           |           |            |       |
| 165   |       |        |      |            |      |          |            |             |           |           |            |       |
| 166   |       |        |      |            |      |          |            |             |           |           |            |       |
| 167   |       |        |      |            |      |          |            |             |           |           |            |       |
| 168   |       |        |      |            |      |          |            |             |           |           |            |       |
| 169   |       |        |      |            |      |          |            |             |           |           |            |       |
| 170   |       |        |      |            |      |          |            |             |           |           |            |       |
| 171   |       |        |      |            |      |          |            |             |           |           |            |       |
| 172   |       |        |      |            |      |          |            |             |           |           |            |       |
| 173   |       |        |      |            |      |          |            |             |           |           |            |       |
| 174   |       |        |      |            |      |          |            |             |           |           |            |       |
| 175   |       |        |      |            |      |          |            |             |           |           |            |       |
| 176   |       |        |      |            |      |          |            |             |           |           |            |       |
| 177   |       |        |      |            |      |          |            |             |           |           |            |       |
| 178   |       |        |      |            |      |          |            |             |           |           |            |       |
| 179   |       |        |      |            |      |          |            |             |           |           |            |       |
| 180   |       |        |      |            |      |          |            |             |           |           |            |       |
| 181   |       |        |      |            |      |          |            |             |           |           |            |       |
| 182   |       |        |      |            |      |          |            |             |           |           |            |       |
| 183   |       |        |      |            |      |          |            |             |           |           |            |       |
| 184   |       |        |      |            |      |          |            |             |           |           |            |       |
| 185   |       |        |      |            |      |          |            |             |           |           |            |       |
| 186   |       |        |      |            |      |          |            |             |           |           |            |       |
| 187   |       |        |      |            |      |          |            |             |           |           |            |       |
| 188   |       |        |      |            |      |          |            |             |           |           |            |       |
| 189   |       |        |      |            |      |          |            |             |           |           |            |       |
| 190   |       |        |      |            |      |          |            |             |           |           |            |       |
| 191   |       |        |      |            |      |          |            |             |           |           |            |       |
| 192   |       |        |      |            |      |          |            |             |           |           |            |       |
| 193   |       |        |      |            |      |          |            |             |           |           |            |       |
| 194   |       |        |      |            |      |          |            |             |           |           |            |       |
| 195   |       |        |      |            |      |          |            |             |           |           |            |       |
| 196   |       |        |      |            |      |          |            |             |           |           |            |       |
| 197   |       |        |      |            |      |          |            |             |           |           |            |       |
| 198   |       |        |      |            |      |          |            |             |           |           |            |       |
| 199   |       |        |      |            |      |          |            |             |           |           |            |       |
| 200   |       |        |      |            |      |          |            |             |           |           |            |       |



|      | 12 AM | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
|------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|------|
| MON  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | MON  | 0    |
| TUE  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0     | 0     | 0   | TUE  | 1    |
| WED  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0     | 0     | 1     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 2     | 0   | WED  | 4    |
| THU  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | THU  | 1    |
| FRI  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 1    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | FRI  | 2    |
| SAT  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | SAT  | 0    |
| SUN  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | SUN  | 0    |
|      | 12 AM | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
| TOT. | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 1    | 0     | 0     | 1     | 1    | 0    | 0    | 0    | 0    | 1    | 1    | 0    | 0    | 0     | 2     | 0   | TOT. | 8    |

### Corresponds to Collision Diagram



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 5,500  
**Area Type:** Urban

Duration  
5 Years  
0 Months

[illegible]



# A2.18 Intersection Collision Diagram

**Location:** Pilgrim Rd & STH 145/Fond du Lac Ave  
**Municipality:** Germantown  
**County:** Washington  
**Traffic Control:** All-Way Stop

**From:** 1/1/2015 **5 Years**  
**To:** 12/31/2019 **0 Months**  
**AADT:** 8,250  
**Area Type:** Urban  
**GPS Coordinates:** 43.227156, -88.103259

Duration

[MAP](#)

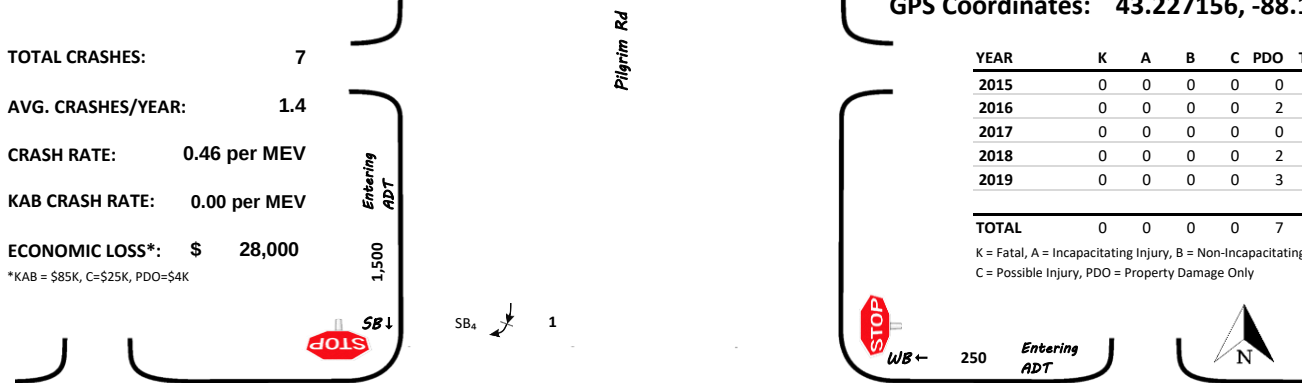
**TOTAL CRASHES:** 7  
**AVG. CRASHES/YEAR:** 1.4  
**CRASH RATE:** 0.46 per MEV  
**KAB CRASH RATE:** 0.00 per MEV  
**ECONOMIC LOSS\*:** \$ 28,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| 2016 | 0 | 0 | 0 | 0 | 2   | 2    | \$ 8,000   |
| 2017 | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| 2018 | 0 | 0 | 0 | 0 | 2   | 2    | \$ 8,000   |
| 2019 | 0 | 0 | 0 | 0 | 3   | 3    | \$ 12,000  |

**TOTAL** 0 0 0 0 7 7 \$ 28,000

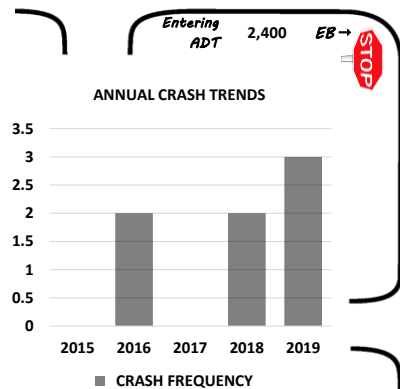
K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury,  
C = Possible Injury, PDO = Property Damage Only



**ECON. LOSS  
COLOR SCALE**  
 > \$500 K  
 > \$400 K  
 > \$300 K  
 > \$200 K  
 > \$100 K

Fond du Lac Ave

Fond du Lac Ave



| CRASH TYPE       | K        | A        | B        | C        | PDO      | TOT.     | ECON. LOSS       |
|------------------|----------|----------|----------|----------|----------|----------|------------------|
| LT-ANGLE         | 0        | 0        | 0        | 0        | 1        | 1        | \$ 4,000         |
| RT-ANGLE         | 0        | 0        | 0        | 0        | 1        | 1        | \$ 4,000         |
| PEDESTRIAN       | 0        | 0        | 0        | 0        | 0        | 0        | -                |
| RT-TURN REAR-END | 0        | 0        | 0        | 0        | 1        | 1        | \$ 4,000         |
| REAR-END         | 0        | 0        | 0        | 0        | 2        | 2        | \$ 8,000         |
| SIDE-SWIPE-SAME  | 0        | 0        | 0        | 0        | 0        | 0        | -                |
| BICYCLE-RELATED  | 0        | 0        | 0        | 0        | 0        | 0        | -                |
| PARKED-VEHICLE   | 0        | 0        | 0        | 0        | 0        | 0        | -                |
| FIXED-OBJECT     | 0        | 0        | 0        | 0        | 2        | 2        | \$ 8,000         |
| DRIVEWAY-RELATED | 0        | 0        | 0        | 0        | 0        | 0        | -                |
| HEAD-ON          | 0        | 0        | 0        | 0        | 0        | 0        | -                |
| MISC. OTHER      | 0        | 0        | 0        | 0        | 0        | 0        | -                |
| <b>TOTAL</b>     | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>7</b> | <b>7</b> | <b>\$ 28,000</b> |

**ROAD CONDITIONS**

|             |          |      |
|-------------|----------|------|
| DRY         | 7        | 100% |
| WET         | 0        | 0%   |
| SNOW        | 0        | 0%   |
| ICE         | 0        | 0%   |
| OTH.        | 0        | 0%   |
| <b>TOT.</b> | <b>7</b> |      |

**LIGHT CONDITIONS**

|             |          |     |
|-------------|----------|-----|
| DAY         | 6        | 86% |
| DARK        | 1        | 14% |
| <b>TOT.</b> | <b>7</b> |     |

**DRIVER BEHAVIOR**

|         |   |    |
|---------|---|----|
| ALCOHOL | 0 | 0% |
| DRUGS   | 0 | 0% |
| SPEED   | 0 | 0% |

**SEASON**

|             |          |     |
|-------------|----------|-----|
| SPRING      | 4        | 57% |
| SUMMER      | 0        | 0%  |
| FALL        | 2        | 29% |
| WINTER      | 1        | 14% |
| <b>TOT.</b> | <b>7</b> |     |

**FAILURE TO YIELD**

|             |          |           |
|-------------|----------|-----------|
| NB          | 0        | 0%        |
| SB          | 0        | 0%        |
| EB          | 0        | 0%        |
| WB          | 0        | 0%        |
| TBD         | 0        | 0%        |
| <b>TOT.</b> | <b>0</b> | <b>0%</b> |

**DISRGRD. CONTROL**

|             |          |            |
|-------------|----------|------------|
| NB          | 0        | 0%         |
| SB          | 1        | 14%        |
| EB          | 1        | 14%        |
| WB          | 0        | 0%         |
| TBD         | 0        | 0%         |
| <b>TOT.</b> | <b>2</b> | <b>29%</b> |

**VEHICLE DAMAGE**

|                       |           |     |
|-----------------------|-----------|-----|
| OTHER/UNK.            | 0         | 0%  |
| NONE                  | 1         | 8%  |
| VERY MINOR            | 1         | 8%  |
| MINOR                 | 4         | 33% |
| MODERATE              | 4         | 33% |
| SEVERE                | 2         | 17% |
| VERY SEVERE           | 0         | 0%  |
| <b>TOTAL VEHICLES</b> | <b>12</b> |     |

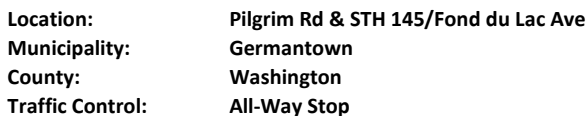
NOTES:

TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |      |      |      |      |      | 6 AM 7 AM 8 AM |      |      | 9 AM 10 AM 11 AM |       |       | 12 PM 1 PM 2 PM |      |      | 3 PM 4 PM 5 PM |      |      | 6 PM 7 PM 8 PM |      |      | 9 PM 10 PM 11 PM |       |       | UNK |      | TOT. |   |
|------|--------------------------------|------|------|------|------|------|----------------|------|------|------------------|-------|-------|-----------------|------|------|----------------|------|------|----------------|------|------|------------------|-------|-------|-----|------|------|---|
| MON  | 0                              | 0    | 0    | 0    | 0    | 0    | 0              | 0    | 0    | 0                | 0     | 0     | 0               | 0    | 0    | 0              | 0    | 0    | 1              | 0    | 0    | 0                | 0     | 0     | 0   | 0    | MON  | 1 |
| TUE  | 0                              | 0    | 0    | 0    | 0    | 0    | 0              | 0    | 0    | 0                | 0     | 0     | 0               | 0    | 0    | 0              | 0    | 0    | 0              | 0    | 0    | 0                | 0     | 0     | 0   | TUE  | 0    |   |
| WED  | 0                              | 0    | 0    | 0    | 0    | 0    | 0              | 0    | 0    | 0                | 0     | 0     | 0               | 0    | 0    | 0              | 0    | 0    | 0              | 0    | 0    | 0                | 0     | 0     | 0   | WED  | 0    |   |
| THU  | 0                              | 0    | 0    | 0    | 0    | 0    | 0              | 0    | 0    | 0                | 0     | 0     | 0               | 0    | 0    | 1              | 0    | 0    | 0              | 0    | 0    | 0                | 0     | 0     | 0   | THU  | 1    |   |
| FRI  | 0                              | 0    | 0    | 0    | 0    | 0    | 1              | 0    | 0    | 0                | 0     | 0     | 0               | 0    | 1    | 0              | 0    | 0    | 0              | 0    | 0    | 0                | 1     | 0     | 0   | FRI  | 3    |   |
| SAT  | 0                              | 0    | 0    | 0    | 0    | 0    | 0              | 1    | 0    | 0                | 0     | 0     | 0               | 0    | 0    | 0              | 0    | 0    | 0              | 0    | 0    | 0                | 0     | 0     | 0   | SAT  | 1    |   |
| SUN  | 0                              | 0    | 0    | 0    | 0    | 0    | 0              | 0    | 0    | 0                | 0     | 0     | 0               | 1    | 0    | 0              | 0    | 0    | 0              | 0    | 0    | 0                | 0     | 0     | 0   | SUN  | 1    |   |
|      | 12 AM                          | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM           | 7 AM | 8 AM | 9 AM             | 10 AM | 11 AM | 12 PM           | 1 PM | 2 PM | 3 PM           | 4 PM | 5 PM | 6 PM           | 7 PM | 8 PM | 9 PM             | 10 PM | 11 PM | UNK |      | TOT. |   |
| TOT. | 0                              | 0    | 0    | 0    | 0    | 0    | 1              | 1    | 0    | 0                | 0     | 0     | 0               | 1    | 1    | 1              | 0    | 0    | 1              | 0    | 0    | 0                | 1     | 0     | 0   | TOT. | 7    |   |

**Corresponds to Collision Diagram**



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 8,250  
**Area Type:** Urban

Duration  
5 Years  
0 Months

[illegible]

# A2.19 Intersection Collision Diagram



**Location:** STH 145/Fond du Lac Ave & Country Aire Rd  
**Municipality:** Germantown  
**County:** Washington  
**Traffic Control:** Minor Street Stop

**From:** 1/1/2015 **5 Years**  
**To:** 12/31/2019 **0 Months**  
**AADT:** 4,100  
**Area Type:** Rural  
**GPS Coordinates:** 43.212259, -88.083575

Duration

[MAP](#)

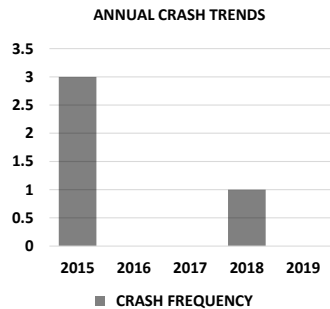
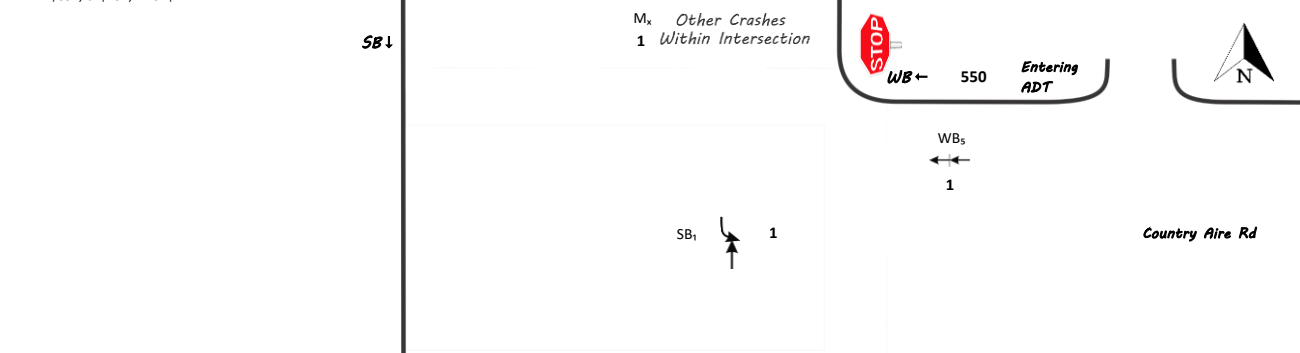
**TOTAL CRASHES:** 4  
**AVG. CRASHES/YEAR:** 0.8  
**CRASH RATE:** 0.53 per MEV  
**KAB CRASH RATE:** 0.00 per MEV  
**ECONOMIC LOSS\*:** \$ 16,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 0 | 0 | 3   | 3    | \$ 12,000  |
| 2016 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2017 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2018 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| 2019 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |

**TOTAL** 0 0 0 0 4 4 \$ 16,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury,  
C = Possible Injury, PDO = Property Damage Only



| CRASH TYPE       | K        | A        | B        | C        | PDO      | TOT.     | ECON. LOSS       |
|------------------|----------|----------|----------|----------|----------|----------|------------------|
| LT-ANGLE         | 0        | 0        | 0        | 0        | 1        | 1        | \$ 4,000         |
| RT-ANGLE         | 0        | 0        | 0        | 0        | 0        | 0        | \$ -             |
| PEDESTRIAN       | 0        | 0        | 0        | 0        | 0        | 0        | \$ -             |
| RT-TURN REAR-END | 0        | 0        | 0        | 0        | 0        | 0        | \$ -             |
| REAR-END         | 0        | 0        | 0        | 0        | 1        | 1        | \$ 4,000         |
| SIDE-SWIPE-SAME  | 0        | 0        | 0        | 0        | 0        | 0        | \$ -             |
| BICYCLE-RELATED  | 0        | 0        | 0        | 0        | 0        | 0        | \$ -             |
| PARKED-VEHICLE   | 0        | 0        | 0        | 0        | 0        | 0        | \$ -             |
| FIXED-OBJECT     | 0        | 0        | 0        | 0        | 0        | 0        | \$ -             |
| DRIVEWAY-RELATED | 0        | 0        | 0        | 0        | 1        | 1        | \$ 4,000         |
| HEAD-ON          | 0        | 0        | 0        | 0        | 0        | 0        | \$ -             |
| MISC. OTHER      | 0        | 0        | 0        | 0        | 1        | 1        | \$ 4,000         |
| <b>TOTAL</b>     | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>4</b> | <b>4</b> | <b>\$ 16,000</b> |

| ROAD CONDITIONS |          |     |
|-----------------|----------|-----|
| DRY             | 2        | 50% |
| WET             | 2        | 50% |
| SNOW            | 0        | 0%  |
| ICE             | 0        | 0%  |
| OTH.            | 0        | 0%  |
| <b>TOT.</b>     | <b>4</b> |     |

| LIGHT CONDITIONS |          |      |
|------------------|----------|------|
| DAY              | 4        | 100% |
| DARK             | 0        | 0%   |
| <b>TOT.</b>      | <b>4</b> |      |

| DRIVER BEHAVIOR |   |    |
|-----------------|---|----|
| ALCOHOL         | 0 | 0% |
| DRUGS           | 0 | 0% |
| SPEED           | 0 | 0% |

| SEASON      |          |     |
|-------------|----------|-----|
| SPRING      | 2        | 50% |
| SUMMER      | 0        | 0%  |
| FALL        | 1        | 25% |
| WINTER      | 1        | 25% |
| <b>TOT.</b> | <b>4</b> |     |

| FAILURE TO YIELD |          |            |
|------------------|----------|------------|
| NB               | 0        | 0%         |
| SB               | 0        | 0%         |
| EB               | 0        | 0%         |
| WB               | 0        | 0%         |
| TBD              | 1        | 25%        |
| <b>TOT.</b>      | <b>1</b> | <b>25%</b> |

| DISRGRD. CONTROL |          |           |
|------------------|----------|-----------|
| NB               | 0        | 0%        |
| SB               | 0        | 0%        |
| EB               | 0        | 0%        |
| WB               | 0        | 0%        |
| TBD              | 0        | 0%        |
| <b>TOT.</b>      | <b>0</b> | <b>0%</b> |

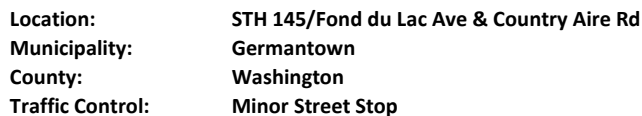
| VEHICLE DAMAGE        |          |     |
|-----------------------|----------|-----|
| OTHER/UNK.            | 0        | 0%  |
| NONE                  | 2        | 29% |
| VERY MINOR            | 0        | 0%  |
| MINOR                 | 3        | 43% |
| MODERATE              | 1        | 14% |
| SEVERE                | 1        | 14% |
| VERY SEVERE           | 0        | 0%  |
| <b>TOTAL VEHICLES</b> | <b>7</b> |     |

TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|      | 12 AM | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
|------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|------|
| MON  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | MON  | 1    |
| TUE  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | TUE  | 1    |
| WED  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | WED  | 1    |
| THU  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | THU  | 1    |
| FRI  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | FRI  | 0    |
| SAT  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | SAT  | 0    |
| SUN  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | SUN  | 0    |
|      | 12 AM | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
| TOT. | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 1    | 0    | 1    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | TOT. | 4    |

**Corresponds to Collision Diagram**



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 4,100  
**Area Type:** Rural

Duration  
5 Years  
0 Months

[illegible][illegible]



# A2.20 Intersection Collision Diagram



Location: Pilgrim Rd & Freistadt Rd  
Municipality: Germantown  
County: Washington  
Traffic Control: Minor Street Stop

From: 1/1/2015 5 Years  
To: 12/31/2019 0 Months  
AADT: 5,550  
Area Type: Rural  
GPS Coordinates: 43.235521, -88.103323

Duration

[MAP](#)

TOTAL CRASHES: 4

AVG. CRASHES/YEAR: 0.8

CRASH RATE: 0.39 per MEV

KAB CRASH RATE: 0.00 per MEV

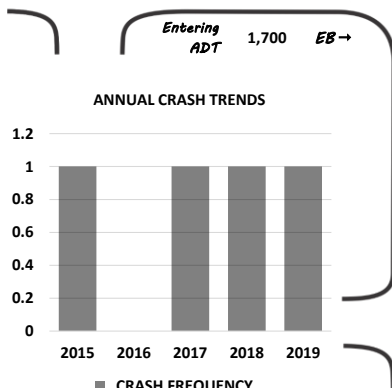
ECONOMIC LOSS\*: \$ 16,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| 2016 | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| 2017 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| 2018 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| 2019 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |

TOTAL 0 0 0 0 4 4 \$ 16,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury, C = Possible Injury, PDO = Property Damage Only



| LIGHT CONDITIONS | Count | Percentage |
|------------------|-------|------------|
| DAY              | 3     | 75%        |
| DARK             | 1     | 25%        |
| TOT.             | 4     |            |

| DRIVER BEHAVIOR | Count | Percentage |
|-----------------|-------|------------|
| ALCOHOL         | 0     | 0%         |
| DRUGS           | 0     | 0%         |
| SPEED           | 0     | 0%         |

| SEASON | Count | Percentage |
|--------|-------|------------|
| SPRING | 0     | 0%         |
| SUMMER | 2     | 50%        |
| FALL   | 1     | 25%        |
| WINTER | 1     | 25%        |
| TOT.   | 4     |            |

| FAILURE TO YIELD | Count | Percentage |
|------------------|-------|------------|
| NB               | 0     | 0%         |
| SB               | 0     | 0%         |
| EB               | 0     | 0%         |
| WB               | 0     | 0%         |
| TBD              | 0     | 0%         |
| TOT.             | 0     | 0%         |

| DISRGRD. CONTROL | Count | Percentage |
|------------------|-------|------------|
| NB               | 0     | 0%         |
| SB               | 0     | 0%         |
| EB               | 0     | 0%         |
| WB               | 0     | 0%         |
| TBD              | 0     | 0%         |
| TOT.             | 0     | 0%         |

| VEHICLE DAMAGE | Count | Percentage |
|----------------|-------|------------|
| OTHER/UNK.     | 0     | 0%         |
| NONE           | 0     | 0%         |
| VERY MINOR     | 0     | 0%         |
| MINOR          | 4     | 57%        |
| MODERATE       | 3     | 43%        |
| SEVERE         | 0     | 0%         |
| VERY SEVERE    | 0     | 0%         |
| TOTAL VEHICLES | 7     |            |

NOTES:

TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|      | Daily Time Ranges |      |      |      |      |      |      |      |      |      |       |       |       |      |      |      |      |      |      |      |      |      |       |       |     | TOT. |      |
|------|-------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|------|
|      | 12 AM             | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
| MON  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | MON  | 0    |
| TUE  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | TUE  | 1    |
| WED  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | WED  | 0    |
| THU  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | THU  | 1    |
| FRI  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | FRI  | 0    |
| SAT  | 0                 | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | SAT  | 2    |
| SUN  | 0                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | SUN  | 0    |
|      | 12 AM             | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
| TOT. | 0                 | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | TOT. | 4    |

**Corresponds to Collision Diagram**



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 5,550  
**Area Type:** Rural

[illegible][illegible]

# A2.21 Intersection Collision Diagram



Location: Division Rd & Wendy Ln  
Municipality: Germantown  
County: Washington  
Traffic Control: Minor Street Stop

From: 1/1/2015 5 Years  
To: 12/31/2019 0 Months  
AADT: 6,850  
Area Type: Urban  
GPS Coordinates: 43.195188, -88.122898

Duration

[MAP](#)

TOTAL CRASHES: 3  
AVG. CRASHES/YEAR: 0.6  
CRASH RATE: 0.24 per MEV  
KAB CRASH RATE: 0.00 per MEV  
ECONOMIC LOSS\*: \$ 12,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

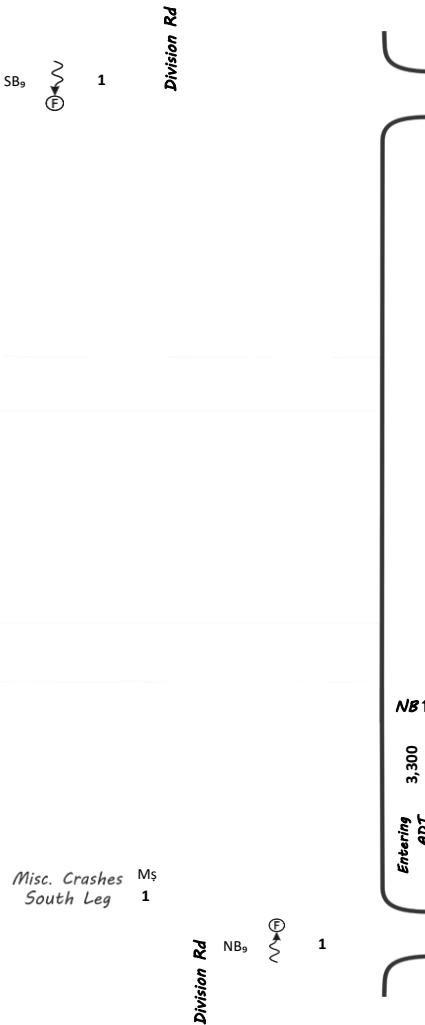
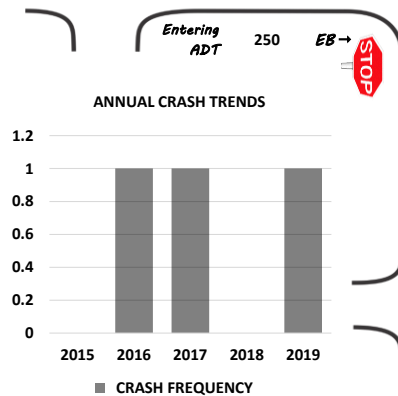
| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2016 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| 2017 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| 2018 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2019 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |

TOTAL 0 0 0 0 3 3 \$ 12,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury, C = Possible Injury, PDO = Property Damage Only



ECON. LOSS  
COLOR SCALE  
> \$500 K  
> \$400 K  
> \$300 K  
> \$200 K  
> \$100 K



| CRASH TYPE       | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------------------|---|---|---|---|-----|------|------------|
| LT-ANGLE         | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| RT-ANGLE         | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| PEDESTRIAN       | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| RT-TURN REAR-END | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| REAR-END         | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| SIDE-SWIPE-SAME  | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| BICYCLE-RELATED  | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| PARKED-VEHICLE   | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| FIXED-OBJECT     | 0 | 0 | 0 | 0 | 2   | 2    | \$ 8,000   |
| DRIVEWAY-RELATED | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| HEAD-ON          | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| MISC. OTHER      | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| TOTAL            | 0 | 0 | 0 | 0 | 3   | 3    | \$ 12,000  |

| ROAD CONDITIONS |   |     |
|-----------------|---|-----|
| DRY             | 0 | 0%  |
| WET             | 1 | 33% |
| SNOW            | 2 | 67% |
| ICE             | 0 | 0%  |
| OTH.            | 0 | 0%  |
| TOT.            | 3 |     |

| LIGHT CONDITIONS |   |     |
|------------------|---|-----|
| DAY              | 1 | 33% |
| DARK             | 2 | 67% |
| TOT.             | 3 |     |

| DRIVER BEHAVIOR |   |      |
|-----------------|---|------|
| ALCOHOL         | 0 | 0%   |
| DRUGS           | 0 | 0%   |
| SPEED           | 3 | 100% |

| SEASON |   |     |
|--------|---|-----|
| SPRING | 1 | 33% |
| SUMMER | 0 | 0%  |
| FALL   | 0 | 0%  |
| WINTER | 2 | 67% |
| TOT.   | 3 |     |

| FAILURE TO YIELD |   |    |
|------------------|---|----|
| NB               | 0 | 0% |
| SB               | 0 | 0% |
| EB               | 0 | 0% |
| WB               | 0 | 0% |
| TBD              | 0 | 0% |
| TOT.             | 0 | 0% |

| DISRGRD. CONTROL |   |    |
|------------------|---|----|
| NB               | 0 | 0% |
| SB               | 0 | 0% |
| EB               | 0 | 0% |
| WB               | 0 | 0% |
| TBD              | 0 | 0% |
| TOT.             | 0 | 0% |

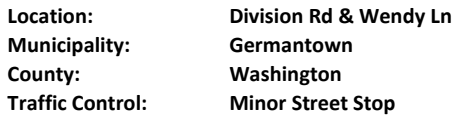
| VEHICLE DAMAGE |   |     |
|----------------|---|-----|
| OTHER/UNK.     | 1 | 25% |
| NONE           | 0 | 0%  |
| VERY MINOR     | 0 | 0%  |
| MINOR          | 2 | 50% |
| MODERATE       | 0 | 0%  |
| SEVERE         | 1 | 25% |
| VERY SEVERE    | 0 | 0%  |
| TOTAL VEHICLES | 4 |     |

TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |   |   |   |   | 6 AM 7 AM 8 AM |   |   | 9 AM 10 AM 11 AM |   |   | 12 PM 1 PM 2 PM |   |   | 3 PM 4 PM 5 PM |   |   | 6 PM 7 PM 8 PM |   |   | 9 PM 10 PM 11 PM |   |   | UNK |      | TOT. |
|------|--------------------------------|---|---|---|---|---|----------------|---|---|------------------|---|---|-----------------|---|---|----------------|---|---|----------------|---|---|------------------|---|---|-----|------|------|
| MON  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 1 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | MON  | 1    |
| TUE  | 0                              | 0 | 1 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | TUE  | 1    |
| WED  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | WED  | 0    |
| THU  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | THU  | 0    |
| FRI  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 1 | 0                | 0 | 0 | 0   | FRI  | 1    |
| SAT  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | SAT  | 0    |
| SUN  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | SUN  | 0    |
|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |   |   |   |   | 6 AM 7 AM 8 AM |   |   | 9 AM 10 AM 11 AM |   |   | 12 PM 1 PM 2 PM |   |   | 3 PM 4 PM 5 PM |   |   | 6 PM 7 PM 8 PM |   |   | 9 PM 10 PM 11 PM |   |   | UNK |      | TOT. |
| TOT. | 0                              | 0 | 1 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 1 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 1 | 0                | 0 | 0 | 0   | TOT. | 3    |

### Corresponds to Collision Diagram



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 6,850  
**Area Type:** Urban

Duration  
5 Years  
0 Months

[illegible]



# A2.22 Intersection Collision Diagram

**Location:** Country Aire Dr & CTH M/Pioneer Rd  
**Municipality:** Germantown  
**County:** Washington  
**Traffic Control:** All-Way Stop

**From:** 1/1/2015 **5 Years**  
**To:** 12/31/2019 **0 Months**  
**AADT:** 2,610  
**Area Type:** Rural  
**GPS Coordinates:** 43.279248, -88.083323

Duration

[MAP](#)

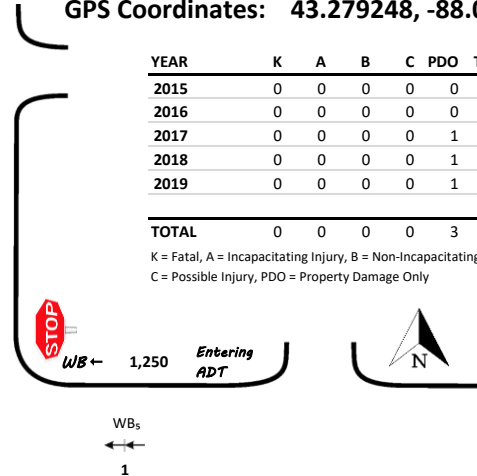
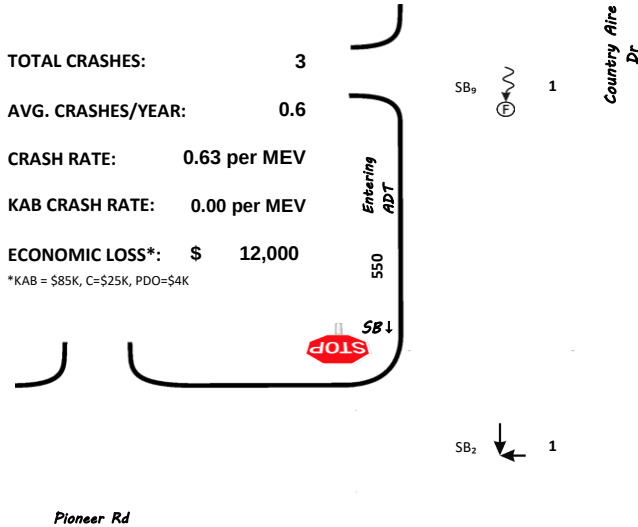
**TOTAL CRASHES:** 3  
**AVG. CRASHES/YEAR:** 0.6  
**CRASH RATE:** 0.63 per MEV  
**KAB CRASH RATE:** 0.00 per MEV  
**ECONOMIC LOSS\*:** \$ 12,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

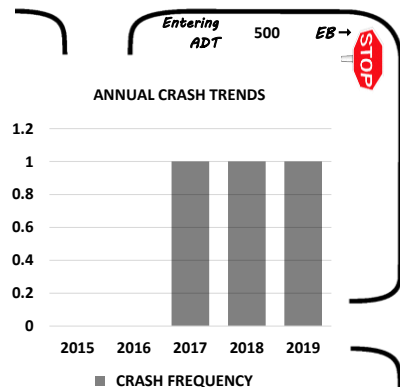
| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2016 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2017 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| 2018 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| 2019 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |

**TOTAL** 0 0 0 0 3 3 \$ 12,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury,  
C = Possible Injury, PDO = Property Damage Only



**ECON. LOSS  
COLOR SCALE**  
 > \$500 K  
 > \$400 K  
 > \$300 K  
 > \$200 K  
 > \$100 K



| CRASH TYPE       | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------------------|---|---|---|---|-----|------|------------|
| LT-ANGLE         | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| RT-ANGLE         | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| PEDESTRIAN       | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| RT-TURN REAR-END | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| REAR-END         | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| SIDE-SWIPE-SAME  | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| BICYCLE-RELATED  | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| PARKED-VEHICLE   | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| FIXED-OBJECT     | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| DRIVEWAY-RELATED | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| HEAD-ON          | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| MISC. OTHER      | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| <b>TOTAL</b>     | 0 | 0 | 0 | 0 | 3   | 3    | \$ 12,000  |

| ROAD CONDITIONS |   |     |
|-----------------|---|-----|
| DRY             | 2 | 67% |
| WET             | 1 | 33% |
| SNOW            | 0 | 0%  |
| ICE             | 0 | 0%  |
| OTH.            | 0 | 0%  |
| <b>TOT.</b>     | 3 |     |

| LIGHT CONDITIONS |   |      |
|------------------|---|------|
| DAY              | 3 | 100% |
| DARK             | 0 | 0%   |
| <b>TOT.</b>      | 3 |      |

| DRIVER BEHAVIOR |   |     |
|-----------------|---|-----|
| ALCOHOL         | 0 | 0%  |
| DRUGS           | 0 | 0%  |
| SPEED           | 1 | 33% |

| SEASON      |   |     |
|-------------|---|-----|
| SPRING      | 0 | 0%  |
| SUMMER      | 2 | 67% |
| FALL        | 1 | 33% |
| WINTER      | 0 | 0%  |
| <b>TOT.</b> | 3 |     |

| FAILURE TO YIELD |   |     |
|------------------|---|-----|
| NB               | 0 | 0%  |
| SB               | 0 | 0%  |
| EB               | 0 | 0%  |
| WB               | 0 | 0%  |
| TBD              | 1 | 33% |
| <b>TOT.</b>      | 1 | 33% |

| DISRGRD. CONTROL |   |    |
|------------------|---|----|
| NB               | 0 | 0% |
| SB               | 0 | 0% |
| EB               | 0 | 0% |
| WB               | 0 | 0% |
| TBD              | 0 | 0% |
| <b>TOT.</b>      | 0 | 0% |

| VEHICLE DAMAGE        |   |     |
|-----------------------|---|-----|
| OTHER/UNK.            | 1 | 20% |
| NONE                  | 0 | 0%  |
| VERY MINOR            | 0 | 0%  |
| MINOR                 | 0 | 0%  |
| MODERATE              | 4 | 80% |
| SEVERE                | 0 | 0%  |
| VERY SEVERE           | 0 | 0%  |
| <b>TOTAL VEHICLES</b> | 5 |     |

TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |   |   |   |   | 6 AM 7 AM 8 AM |   |   | 9 AM 10 AM 11 AM |   |   | 12 PM 1 PM 2 PM |   |   | 3 PM 4 PM 5 PM |   |   | 6 PM 7 PM 8 PM |   |   | 9 PM 10 PM 11 PM |   |   | UNK  |     | TOT. |
|------|--------------------------------|---|---|---|---|---|----------------|---|---|------------------|---|---|-----------------|---|---|----------------|---|---|----------------|---|---|------------------|---|---|------|-----|------|
| MON  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 1                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0    | MON | 1    |
| TUE  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0    | TUE | 0    |
| WED  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 1 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 1                | 0 | 0 | 0    | WED | 2    |
| THU  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0    | THU | 0    |
| FRI  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0    | FRI | 0    |
| SAT  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0    | SAT | 0    |
| SUN  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0    | SUN | 0    |
|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |   |   |   |   | 6 AM 7 AM 8 AM |   |   | 9 AM 10 AM 11 AM |   |   | 12 PM 1 PM 2 PM |   |   | 3 PM 4 PM 5 PM |   |   | 6 PM 7 PM 8 PM |   |   | 9 PM 10 PM 11 PM |   |   | UNK  |     | TOT. |
| TOT. | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 1 | 0 | 1                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 1                | 0 | 0 | TOT. | 3   |      |

### Corresponds to Collision Diagram



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 2,610  
**Area Type:** Rural

[illegible][illegible]

# A2.23 Intersection Collision Diagram

**Location:** STH 145/Fond du Lac Ave & Park Ave  
**Municipality:** Germantown  
**County:** Washington  
**Traffic Control:** Minor Street Stop

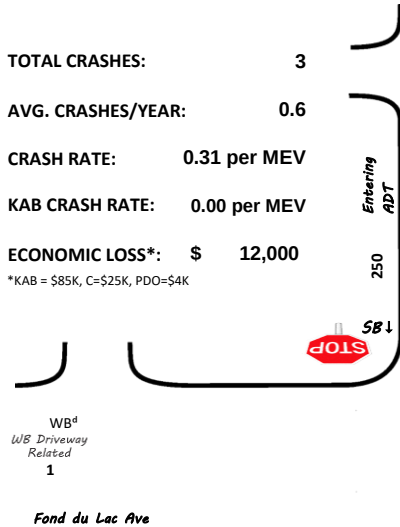
**From:** 1/1/2015 **5 Years**  
**To:** 12/31/2019 **0 Months**  
**AADT:** 5,250  
**Area Type:** Urban  
**GPS Coordinates:** 43.231739, -88.110593

Duration

[MAP](#)

**TOTAL CRASHES:** 3  
**AVG. CRASHES/YEAR:** 0.6  
**CRASH RATE:** 0.31 per MEV  
**KAB CRASH RATE:** 0.00 per MEV  
**ECONOMIC LOSS\*:** \$ 12,000

\*KAB = \$85K, C=\$25K, PDO=\$4K



| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| 2016 | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| 2017 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| 2018 | 0 | 0 | 0 | 0 | 0   | 0    | -          |
| 2019 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |

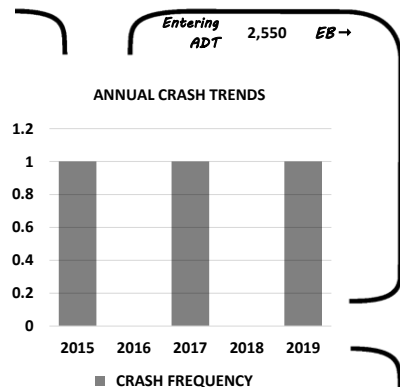
**TOTAL** 0 0 0 0 3 3 \$ 12,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury, C = Possible Injury, PDO = Property Damage Only

WB<sup>d</sup>  
WB Driveway  
Related  
1

WB<sub>6</sub>  
1

**ECON. LOSS  
COLOR SCALE**  
 > \$500 K  
 > \$400 K  
 > \$300 K  
 > \$200 K  
 > \$100 K



| ROAD CONDITIONS |          |     |
|-----------------|----------|-----|
| DRY             | 2        | 67% |
| WET             | 0        | 0%  |
| SNOW            | 1        | 33% |
| ICE             | 0        | 0%  |
| OTH.            | 0        | 0%  |
| <b>TOT.</b>     | <b>3</b> |     |

| LIGHT CONDITIONS |          |     |
|------------------|----------|-----|
| DAY              | 2        | 67% |
| DARK             | 1        | 33% |
| <b>TOT.</b>      | <b>3</b> |     |

| DRIVER BEHAVIOR |   |     |
|-----------------|---|-----|
| ALCOHOL         | 1 | 33% |
| DRUGS           | 0 | 0%  |
| SPEED           | 2 | 67% |

| SEASON      |          |     |
|-------------|----------|-----|
| SPRING      | 2        | 67% |
| SUMMER      | 0        | 0%  |
| FALL        | 0        | 0%  |
| WINTER      | 1        | 33% |
| <b>TOT.</b> | <b>3</b> |     |

| FAILURE TO YIELD |          |           |
|------------------|----------|-----------|
| NB               | 0        | 0%        |
| SB               | 0        | 0%        |
| EB               | 0        | 0%        |
| WB               | 0        | 0%        |
| TBD              | 0        | 0%        |
| <b>TOT.</b>      | <b>0</b> | <b>0%</b> |

| DISRGRD. CONTROL |          |           |
|------------------|----------|-----------|
| NB               | 0        | 0%        |
| SB               | 0        | 0%        |
| EB               | 0        | 0%        |
| WB               | 0        | 0%        |
| TBD              | 0        | 0%        |
| <b>TOT.</b>      | <b>0</b> | <b>0%</b> |

| VEHICLE DAMAGE        |          |     |
|-----------------------|----------|-----|
| OTHER/UNK.            | 0        | 0%  |
| NONE                  | 0        | 0%  |
| VERY MINOR            | 0        | 0%  |
| MINOR                 | 1        | 25% |
| MODERATE              | 2        | 50% |
| SEVERE                | 1        | 25% |
| VERY SEVERE           | 0        | 0%  |
| <b>TOTAL VEHICLES</b> | <b>4</b> |     |

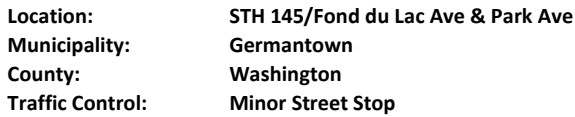
NOTES:

TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |   |   |   |   | 6 AM 7 AM 8 AM |   |   | 9 AM 10 AM 11 AM |   |   | 12 PM 1 PM 2 PM |   |   | 3 PM 4 PM 5 PM |   |   | 6 PM 7 PM 8 PM |   |   | 9 PM 10 PM 11 PM |   |   | UNK |      | TOT. |
|------|--------------------------------|---|---|---|---|---|----------------|---|---|------------------|---|---|-----------------|---|---|----------------|---|---|----------------|---|---|------------------|---|---|-----|------|------|
| MON  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 1 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | MON  | 1    |
| TUE  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | TUE  | 0    |
| WED  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 1 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | WED  | 1    |
| THU  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | THU  | 0    |
| FRI  | 0                              | 0 | 1 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | FRI  | 1    |
| SAT  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | SAT  | 0    |
| SUN  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | SUN  | 0    |
|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |   |   |   |   | 6 AM 7 AM 8 AM |   |   | 9 AM 10 AM 11 AM |   |   | 12 PM 1 PM 2 PM |   |   | 3 PM 4 PM 5 PM |   |   | 6 PM 7 PM 8 PM |   |   | 9 PM 10 PM 11 PM |   |   | UNK |      | TOT. |
| TOT. | 0                              | 0 | 1 | 0 | 0 | 0 | 0              | 1 | 0 | 0                | 0 | 1 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | TOT. | 3    |

### Corresponds to Collision Diagram



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 5,250  
**Area Type:** Urban

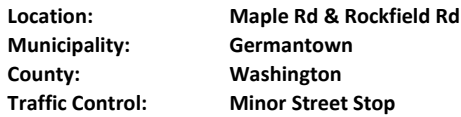
Duration  
5 Years  
0 Months

[illegible]





### Corresponds to Collision Diagram



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 3,000  
**Area Type:** Rural

Duration  
5 Years  
0 Months

[illegible]

# A2.25 Intersection Collision Diagram



Location: Division Rd & Cedar Ln  
Municipality: Germantown  
County: Washington  
Traffic Control: Minor Street Stop

From: 1/1/2015 5 Years  
To: 12/31/2019 0 Months  
AADT: 5,250  
Area Type: Rural  
GPS Coordinates: 43.272167, -88.123075

Duration

[MAP](#)

TOTAL CRASHES: 2  
AVG. CRASHES/YEAR: 0.4  
CRASH RATE: 0.21 per MEV  
KAB CRASH RATE: 0.00 per MEV  
ECONOMIC LOSS\*: \$ 8,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2016 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| 2017 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| 2018 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2019 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |

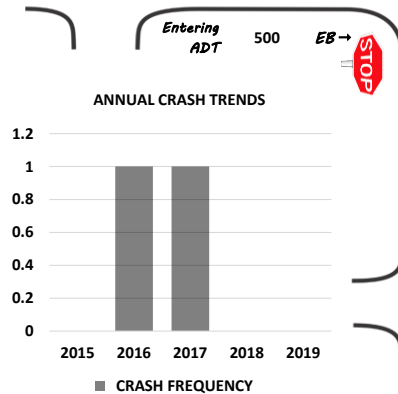
TOTAL 0 0 0 0 2 2 \$ 8,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury,  
C = Possible Injury, PDO = Property Damage Only



ECON. LOSS  
COLOR SCALE  
> \$500 K  
> \$400 K  
> \$300 K  
> \$200 K  
> \$100 K

Cedar Ln



Misc. Crashes South Leg Ms 1

| CRASH TYPE       | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------------------|---|---|---|---|-----|------|------------|
| LT-ANGLE         | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| RT-ANGLE         | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| PEDESTRIAN       | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| RT-TURN REAR-END | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| REAR-END         | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| SIDE-SWIPE-SAME  | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| BICYCLE-RELATED  | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| PARKED-VEHICLE   | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| FIXED-OBJECT     | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| DRIVEWAY-RELATED | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| HEAD-ON          | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| MISC. OTHER      | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| TOTAL            | 0 | 0 | 0 | 0 | 2   | 2    | \$ 8,000   |

| ROAD CONDITIONS |   |     |
|-----------------|---|-----|
| DRY             | 1 | 50% |
| WET             | 1 | 50% |
| SNOW            | 0 | 0%  |
| ICE             | 0 | 0%  |
| OTH.            | 0 | 0%  |
| TOT.            | 2 |     |

| LIGHT CONDITIONS |   |      |
|------------------|---|------|
| DAY              | 2 | 100% |
| DARK             | 0 | 0%   |
| TOT.             | 2 |      |

| DRIVER BEHAVIOR |   |     |
|-----------------|---|-----|
| ALCOHOL         | 1 | 50% |
| DRUGS           | 0 | 0%  |
| SPEED           | 0 | 0%  |

| SEASON |   |      |
|--------|---|------|
| SPRING | 2 | 100% |
| SUMMER | 0 | 0%   |
| FALL   | 0 | 0%   |
| WINTER | 0 | 0%   |
| TOT.   | 2 |      |

| FAILURE TO YIELD |   |    |
|------------------|---|----|
| NB               | 0 | 0% |
| SB               | 0 | 0% |
| EB               | 0 | 0% |
| WB               | 0 | 0% |
| TBD              | 0 | 0% |
| TOT.             | 0 | 0% |

| DISRGRD. CONTROL |   |    |
|------------------|---|----|
| NB               | 0 | 0% |
| SB               | 0 | 0% |
| EB               | 0 | 0% |
| WB               | 0 | 0% |
| TBD              | 0 | 0% |
| TOT.             | 0 | 0% |

| VEHICLE DAMAGE |   |     |
|----------------|---|-----|
| OTHER/UNK.     | 0 | 0%  |
| NONE           | 0 | 0%  |
| VERY MINOR     | 1 | 33% |
| MINOR          | 1 | 33% |
| MODERATE       | 0 | 0%  |
| SEVERE         | 1 | 33% |
| VERY SEVERE    | 0 | 0%  |
| TOTAL VEHICLES | 3 |     |

TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |   |   |   |   | 6 AM 7 AM 8 AM |   |   | 9 AM 10 AM 11 AM |   |   | 12 PM 1 PM 2 PM |   |   | 3 PM 4 PM 5 PM |   |   | 6 PM 7 PM 8 PM |   |   | 9 PM 10 PM 11 PM |   |   | UNK |      | TOT. |
|------|--------------------------------|---|---|---|---|---|----------------|---|---|------------------|---|---|-----------------|---|---|----------------|---|---|----------------|---|---|------------------|---|---|-----|------|------|
| MON  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | MON  | 0    |
| TUE  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | TUE  | 0    |
| WED  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 1 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | WED  | 1    |
| THU  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | THU  | 0    |
| FRI  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | FRI  | 0    |
| SAT  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | SAT  | 0    |
| SUN  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 1              | 0 | 0 | 0                | 0 | 0 | 0   | SUN  | 1    |
|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |   |   |   |   | 6 AM 7 AM 8 AM |   |   | 9 AM 10 AM 11 AM |   |   | 12 PM 1 PM 2 PM |   |   | 3 PM 4 PM 5 PM |   |   | 6 PM 7 PM 8 PM |   |   | 9 PM 10 PM 11 PM |   |   | UNK |      | TOT. |
| TOT. | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 1 | 0              | 1 | 0 | 0                | 0 | 0 | 0   | TOT. | 2    |

### Corresponds to Collision Diagram



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 5,250  
**Area Type:** Rural

[illegible][illegible]



# A2.26 Intersection Collision Diagram



Location: Division Rd & Donges Bay Rd  
Municipality: Germantown  
County: Washington  
Traffic Control: Minor Street Stop

From: 1/1/2015 5 Years  
To: 12/31/2019 0 Months  
AADT: 6,700  
Area Type: Urban  
GPS Coordinates: 43.206463, -88.122917

Duration

[MAP](#)

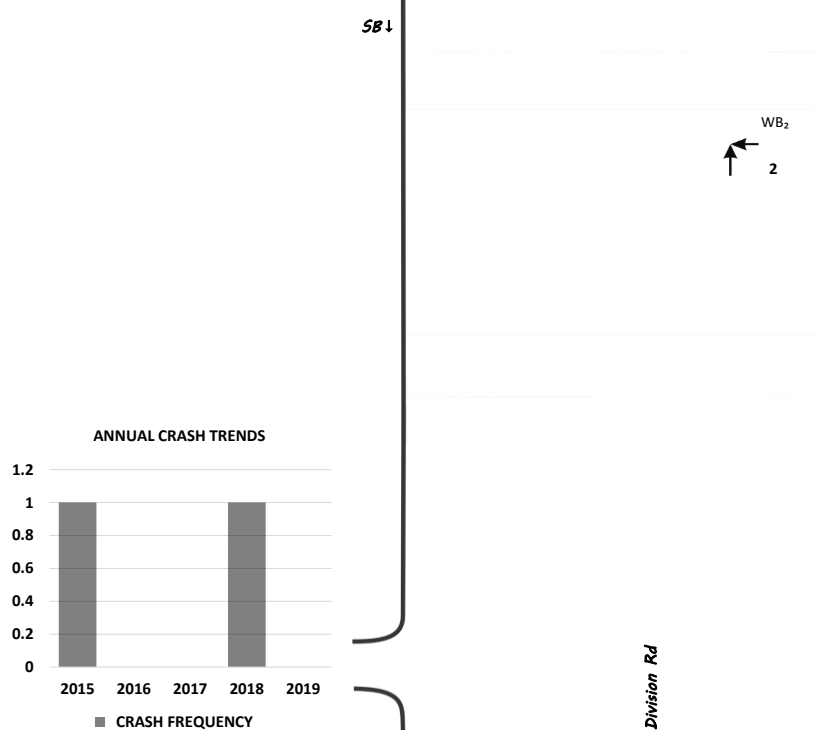
TOTAL CRASHES: 2  
AVG. CRASHES/YEAR: 0.4  
CRASH RATE: 0.16 per MEV  
KAB CRASH RATE: 0.00 per MEV  
ECONOMIC LOSS\*: \$ 8,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| 2016 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2017 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2018 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| 2019 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |

TOTAL 0 0 0 0 2 2 \$ 8,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury,  
C = Possible Injury, PDO = Property Damage Only



ECON. LOSS  
COLOR SCALE

- > \$500 K
- > \$400 K
- > \$300 K
- > \$200 K
- > \$100 K

| CRASH TYPE       | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------------------|---|---|---|---|-----|------|------------|
| LT-ANGLE         | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| RT-ANGLE         | 0 | 0 | 0 | 0 | 2   | 2    | \$ 8,000   |
| PEDESTRIAN       | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| RT-TURN REAR-END | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| REAR-END         | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| SIDE-SWIPE-SAME  | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| BICYCLE-RELATED  | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| PARKED-VEHICLE   | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| FIXED-OBJECT     | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| DRIVEWAY-RELATED | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| HEAD-ON          | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| MISC. OTHER      | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| TOTAL            | 0 | 0 | 0 | 0 | 2   | 2    | \$ 8,000   |

| ROAD CONDITIONS |   |      |
|-----------------|---|------|
| DRY             | 2 | 100% |
| WET             | 0 | 0%   |
| SNOW            | 0 | 0%   |
| ICE             | 0 | 0%   |
| OTH.            | 0 | 0%   |
| TOT.            | 2 |      |

| LIGHT CONDITIONS |   |      |
|------------------|---|------|
| DAY              | 2 | 100% |
| DARK             | 0 | 0%   |
| TOT.             | 2 |      |

| DRIVER BEHAVIOR |   |     |
|-----------------|---|-----|
| ALCOHOL         | 0 | 0%  |
| DRUGS           | 0 | 0%  |
| SPEED           | 1 | 50% |

| SEASON |   |     |
|--------|---|-----|
| SPRING | 0 | 0%  |
| SUMMER | 1 | 50% |
| FALL   | 1 | 50% |
| WINTER | 0 | 0%  |
| TOT.   | 2 |     |

| FAILURE TO YIELD |   |     |
|------------------|---|-----|
| NB               | 0 | 0%  |
| SB               | 0 | 0%  |
| EB               | 0 | 0%  |
| WB               | 0 | 0%  |
| TBD              | 1 | 50% |
| TOT.             | 1 | 50% |

| DISRGRD. CONTROL |   |    |
|------------------|---|----|
| NB               | 0 | 0% |
| SB               | 0 | 0% |
| EB               | 0 | 0% |
| WB               | 0 | 0% |
| TBD              | 0 | 0% |
| TOT.             | 0 | 0% |

| VEHICLE DAMAGE |   |     |
|----------------|---|-----|
| OTHER/UNK.     | 0 | 0%  |
| NONE           | 0 | 0%  |
| VERY MINOR     | 0 | 0%  |
| MINOR          | 2 | 50% |
| MODERATE       | 2 | 50% |
| SEVERE         | 0 | 0%  |
| VERY SEVERE    | 0 | 0%  |
| TOTAL VEHICLES | 4 |     |

NOTES:

TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|      | 12 AM | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
|------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|------|
| MON  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | MON  | 0    |
| TUE  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | TUE  | 0    |
| WED  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | WED  | 1    |
| THU  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | THU  | 0    |
| FRI  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | FRI  | 0    |
| SAT  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 1     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | SAT  | 1    |
| SUN  | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | SUN  | 0    |
|      | 12 AM | 1 AM | 2 AM | 3 AM | 4 AM | 5 AM | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | UNK |      | TOT. |
| TOT. | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0     | 1     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | TOT. | 2    |

# A2.26 Crash Data

Corresponds to Collision Diagram



Location: Division Rd & Donges Bay Rd  
Municipality: Germantown  
County: Washington  
Traffic Control: Minor Street Stop

From: 1/1/2015  
To: 12/31/2019  
AADT: 6,700  
Area Type: Urban

Duration  
5 Years  
0 Months

| Ref | #               | Label      | Doc. # | Date       | Crash Type | Time  | Severity | Road Cond. | Light Cond. | Alc. Flag | Drug Flag | Speed Flag | Notes            |
|-----|-----------------|------------|--------|------------|------------|-------|----------|------------|-------------|-----------|-----------|------------|------------------|
| 1   | WB <sub>2</sub> | LLFRCP     |        | 10/14/2015 | RT-ANGLE   | 7 AM  |          |            |             |           |           |            |                  |
| 2   | WB <sub>2</sub> | C9L09HSJRL |        | 8/11/2018  | RT-ANGLE   | 11 AM |          |            |             |           | Y         |            | NBR lost control |
| 3   |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 4   |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 5   |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 6   |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 7   |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 8   |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 9   |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 10  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 11  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 12  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 13  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 14  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 15  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 16  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 17  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 18  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 19  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 20  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 21  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 22  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 23  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 24  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 25  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 26  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 27  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 28  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 29  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 30  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 31  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 32  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 33  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 34  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 35  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 36  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 37  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 38  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 39  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 40  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 41  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 42  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 43  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 44  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 45  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 46  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 47  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 48  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 49  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 50  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 51  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 52  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 53  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 54  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 55  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 56  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 57  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 58  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 59  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 60  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 61  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 62  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 63  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 64  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 65  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 66  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 67  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 68  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 69  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 70  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 71  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 72  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 73  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 74  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 75  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 76  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 77  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 78  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 79  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 80  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 81  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 82  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 83  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 84  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 85  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 86  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 87  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 88  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 89  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 90  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 91  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 92  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 93  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 94  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 95  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 96  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 97  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 98  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 99  |                 |            |        |            |            |       |          |            |             |           |           |            |                  |
| 100 |                 |            |        |            |            |       |          |            |             |           |           |            |                  |

| #   | Label | Doc. # | Date | Crash Type | Time | Severity | Road Cond. | Light Cond. | Alc. Flag | Drug Flag | Speed Flag | Notes |
|-----|-------|--------|------|------------|------|----------|------------|-------------|-----------|-----------|------------|-------|
| 101 |       |        |      |            |      |          |            |             |           |           |            |       |
| 102 |       |        |      |            |      |          |            |             |           |           |            |       |
| 103 |       |        |      |            |      |          |            |             |           |           |            |       |
| 104 |       |        |      |            |      |          |            |             |           |           |            |       |
| 105 |       |        |      |            |      |          |            |             |           |           |            |       |
| 106 |       |        |      |            |      |          |            |             |           |           |            |       |
| 107 |       |        |      |            |      |          |            |             |           |           |            |       |
| 108 |       |        |      |            |      |          |            |             |           |           |            |       |
| 109 |       |        |      |            |      |          |            |             |           |           |            |       |
| 110 |       |        |      |            |      |          |            |             |           |           |            |       |
| 111 |       |        |      |            |      |          |            |             |           |           |            |       |
| 112 |       |        |      |            |      |          |            |             |           |           |            |       |
| 113 |       |        |      |            |      |          |            |             |           |           |            |       |
| 114 |       |        |      |            |      |          |            |             |           |           |            |       |
| 115 |       |        |      |            |      |          |            |             |           |           |            |       |
| 116 |       |        |      |            |      |          |            |             |           |           |            |       |
| 117 |       |        |      |            |      |          |            |             |           |           |            |       |
| 118 |       |        |      |            |      |          |            |             |           |           |            |       |
| 119 |       |        |      |            |      |          |            |             |           |           |            |       |
| 120 |       |        |      |            |      |          |            |             |           |           |            |       |
| 121 |       |        |      |            |      |          |            |             |           |           |            |       |
| 122 |       |        |      |            |      |          |            |             |           |           |            |       |
| 123 |       |        |      |            |      |          |            |             |           |           |            |       |
| 124 |       |        |      |            |      |          |            |             |           |           |            |       |
| 125 |       |        |      |            |      |          |            |             |           |           |            |       |
| 126 |       |        |      |            |      |          |            |             |           |           |            |       |
| 127 |       |        |      |            |      |          |            |             |           |           |            |       |
| 128 |       |        |      |            |      |          |            |             |           |           |            |       |
| 129 |       |        |      |            |      |          |            |             |           |           |            |       |
| 130 |       |        |      |            |      |          |            |             |           |           |            |       |
| 131 |       |        |      |            |      |          |            |             |           |           |            |       |
| 132 |       |        |      |            |      |          |            |             |           |           |            |       |
| 133 |       |        |      |            |      |          |            |             |           |           |            |       |
| 134 |       |        |      |            |      |          |            |             |           |           |            |       |
| 135 |       |        |      |            |      |          |            |             |           |           |            |       |
| 136 |       |        |      |            |      |          |            |             |           |           |            |       |
| 137 |       |        |      |            |      |          |            |             |           |           |            |       |
| 138 |       |        |      |            |      |          |            |             |           |           |            |       |
| 139 |       |        |      |            |      |          |            |             |           |           |            |       |
| 140 |       |        |      |            |      |          |            |             |           |           |            |       |
| 141 |       |        |      |            |      |          |            |             |           |           |            |       |
| 142 |       |        |      |            |      |          |            |             |           |           |            |       |
| 143 |       |        |      |            |      |          |            |             |           |           |            |       |
| 144 |       |        |      |            |      |          |            |             |           |           |            |       |
| 145 |       |        |      |            |      |          |            |             |           |           |            |       |
| 146 |       |        |      |            |      |          |            |             |           |           |            |       |
| 147 |       |        |      |            |      |          |            |             |           |           |            |       |
| 148 |       |        |      |            |      |          |            |             |           |           |            |       |
| 149 |       |        |      |            |      |          |            |             |           |           |            |       |
| 150 |       |        |      |            |      |          |            |             |           |           |            |       |
| 151 |       |        |      |            |      |          |            |             |           |           |            |       |
| 152 |       |        |      |            |      |          |            |             |           |           |            |       |
| 153 |       |        |      |            |      |          |            |             |           |           |            |       |
| 154 |       |        |      |            |      |          |            |             |           |           |            |       |
| 155 |       |        |      |            |      |          |            |             |           |           |            |       |
| 156 |       |        |      |            |      |          |            |             |           |           |            |       |
| 157 |       |        |      |            |      |          |            |             |           |           |            |       |
| 158 |       |        |      |            |      |          |            |             |           |           |            |       |
| 159 |       |        |      |            |      |          |            |             |           |           |            |       |
| 160 |       |        |      |            |      |          |            |             |           |           |            |       |
| 161 |       |        |      |            |      |          |            |             |           |           |            |       |
| 162 |       |        |      |            |      |          |            |             |           |           |            |       |
| 163 |       |        |      |            |      |          |            |             |           |           |            |       |
| 164 |       |        |      |            |      |          |            |             |           |           |            |       |
| 165 |       |        |      |            |      |          |            |             |           |           |            |       |
| 166 |       |        |      |            |      |          |            |             |           |           |            |       |
| 167 |       |        |      |            |      |          |            |             |           |           |            |       |
| 168 |       |        |      |            |      |          |            |             |           |           |            |       |
| 169 |       |        |      |            |      |          |            |             |           |           |            |       |
| 170 |       |        |      |            |      |          |            |             |           |           |            |       |
| 171 |       |        |      |            |      |          |            |             |           |           |            |       |
| 172 |       |        |      |            |      |          |            |             |           |           |            |       |
| 173 |       |        |      |            |      |          |            |             |           |           |            |       |
| 174 |       |        |      |            |      |          |            |             |           |           |            |       |
| 175 |       |        |      |            |      |          |            |             |           |           |            |       |
| 176 |       |        |      |            |      |          |            |             |           |           |            |       |
| 177 |       |        |      |            |      |          |            |             |           |           |            |       |
| 178 |       |        |      |            |      |          |            |             |           |           |            |       |
| 179 |       |        |      |            |      |          |            |             |           |           |            |       |
| 180 |       |        |      |            |      |          |            |             |           |           |            |       |
| 181 |       |        |      |            |      |          |            |             |           |           |            |       |
| 182 |       |        |      |            |      |          |            |             |           |           |            |       |
| 183 |       |        |      |            |      |          |            |             |           |           |            |       |
| 184 |       |        |      |            |      |          |            |             |           |           |            |       |
| 185 |       |        |      |            |      |          |            |             |           |           |            |       |
| 186 |       |        |      |            |      |          |            |             |           |           |            |       |
| 187 |       |        |      |            |      |          |            |             |           |           |            |       |
| 188 |       |        |      |            |      |          |            |             |           |           |            |       |
| 189 |       |        |      |            |      |          |            |             |           |           |            |       |
| 190 |       |        |      |            |      |          |            |             |           |           |            |       |
| 191 |       |        |      |            |      |          |            |             |           |           |            |       |
| 192 |       |        |      |            |      |          |            |             |           |           |            |       |
| 193 |       |        |      |            |      |          |            |             |           |           |            |       |
| 194 |       |        |      |            |      |          |            |             |           |           |            |       |
| 195 |       |        |      |            |      |          |            |             |           |           |            |       |
| 196 |       |        |      |            |      |          |            |             |           |           |            |       |
| 197 |       |        |      |            |      |          |            |             |           |           |            |       |
| 198 |       |        |      |            |      |          |            |             |           |           |            |       |
| 199 |       |        |      |            |      |          |            |             |           |           |            |       |
| 200 |       |        |      |            |      |          |            |             |           |           |            |       |

# A2.27 Intersection Collision Diagram



Location: Country Aire Dr & CTH F/Freistadt Rd  
Municipality: Germantown  
County: Washington  
Traffic Control: Minor Street Stop

From: 1/1/2015 5 Years  
To: 12/31/2019 0 Months  
AADT: 22,750  
Area Type: Rural  
GPS Coordinates: 43.235558, -88.083939

Duration

[MAP](#)

TOTAL CRASHES: 1

AVG. CRASHES/YEAR: 0.2

CRASH RATE: 0.02 per MEV

KAB CRASH RATE: 0.00 per MEV

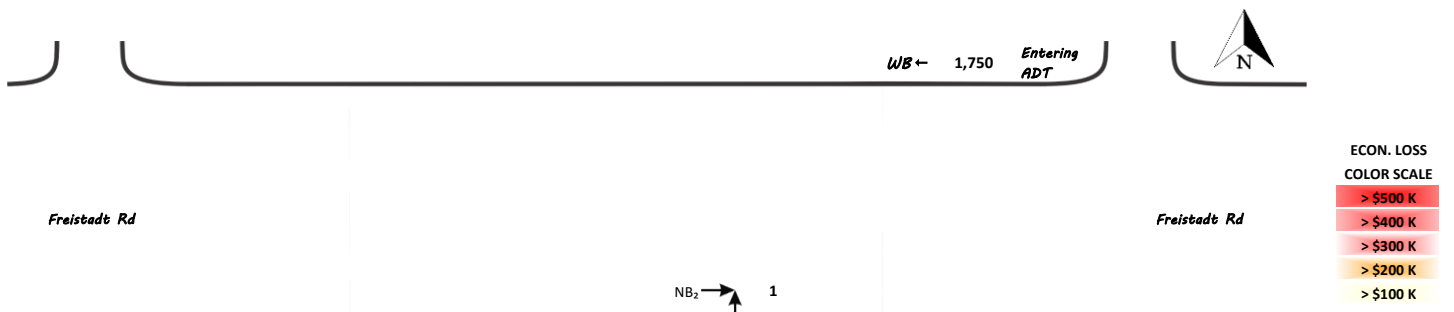
ECONOMIC LOSS\*: \$ 4,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

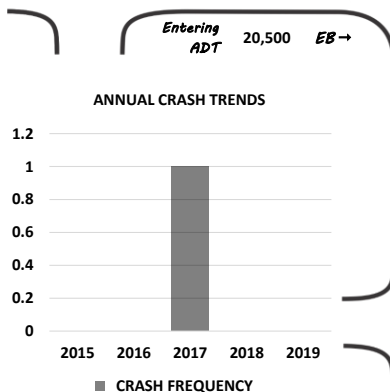
| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2016 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2017 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| 2018 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2019 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |

TOTAL 0 0 0 0 1 1 \$ 4,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury, C = Possible Injury, PDO = Property Damage Only



ECON. LOSS  
COLOR SCALE  
> \$500 K  
> \$400 K  
> \$300 K  
> \$200 K  
> \$100 K



| CRASH TYPE       | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------------------|---|---|---|---|-----|------|------------|
| LT-ANGLE         | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| RT-ANGLE         | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| PEDESTRIAN       | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| RT-TURN REAR-END | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| REAR-END         | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| SIDE-SWIPE-SAME  | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| BICYCLE-RELATED  | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| PARKED-VEHICLE   | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| FIXED-OBJECT     | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| DRIVEWAY-RELATED | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| HEAD-ON          | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| MISC. OTHER      | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| TOTAL            | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |

| ROAD CONDITIONS |   |      |
|-----------------|---|------|
| DRY             | 1 | 100% |
| WET             | 0 | 0%   |
| SNOW            | 0 | 0%   |
| ICE             | 0 | 0%   |
| OTH.            | 0 | 0%   |
| TOT.            | 1 |      |

| LIGHT CONDITIONS |   |      |
|------------------|---|------|
| DAY              | 1 | 100% |
| DARK             | 0 | 0%   |
| TOT.             | 1 |      |

| DRIVER BEHAVIOR |   |    |
|-----------------|---|----|
| ALCOHOL         | 0 | 0% |
| DRUGS           | 0 | 0% |
| SPEED           | 0 | 0% |

| SEASON |   |      |
|--------|---|------|
| SPRING | 0 | 0%   |
| SUMMER | 0 | 0%   |
| FALL   | 0 | 0%   |
| WINTER | 1 | 100% |
| TOT.   | 1 |      |

| FAILURE TO YIELD |   |      |
|------------------|---|------|
| NB               | 1 | 100% |
| SB               | 0 | 0%   |
| EB               | 0 | 0%   |
| WB               | 0 | 0%   |
| TBD              | 0 | 0%   |
| TOT.             | 1 | 100% |

| DISRGRD. CONTROL |   |    |
|------------------|---|----|
| NB               | 0 | 0% |
| SB               | 0 | 0% |
| EB               | 0 | 0% |
| WB               | 0 | 0% |
| TBD              | 0 | 0% |
| TOT.             | 0 | 0% |

| VEHICLE DAMAGE |   |     |
|----------------|---|-----|
| OTHER/UNK.     | 0 | 0%  |
| NONE           | 0 | 0%  |
| VERY MINOR     | 0 | 0%  |
| MINOR          | 0 | 0%  |
| MODERATE       | 1 | 50% |
| SEVERE         | 1 | 50% |
| VERY SEVERE    | 0 | 0%  |
| TOTAL VEHICLES | 2 |     |

NOTES:

TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |   |   |   |   | 6 AM 7 AM 8 AM |   |   | 9 AM 10 AM 11 AM |   |   | 12 PM 1 PM 2 PM |   |   | 3 PM 4 PM 5 PM |   |   | 6 PM 7 PM 8 PM |   |   | 9 PM 10 PM 11 PM |   |   | UNK |      | TOT. |
|------|--------------------------------|---|---|---|---|---|----------------|---|---|------------------|---|---|-----------------|---|---|----------------|---|---|----------------|---|---|------------------|---|---|-----|------|------|
| MON  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | MON  | 0    |
| TUE  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 1 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | TUE  | 1    |
| WED  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | WED  | 0    |
| THU  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | THU  | 0    |
| FRI  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | FRI  | 0    |
| SAT  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | SAT  | 0    |
| SUN  | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | SUN  | 0    |
|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |   |   |   |   | 6 AM 7 AM 8 AM |   |   | 9 AM 10 AM 11 AM |   |   | 12 PM 1 PM 2 PM |   |   | 3 PM 4 PM 5 PM |   |   | 6 PM 7 PM 8 PM |   |   | 9 PM 10 PM 11 PM |   |   | UNK |      | TOT. |
| TOT. | 0                              | 0 | 0 | 0 | 0 | 0 | 0              | 1 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | TOT. | 1    |

### Corresponds to Collision Diagram



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 22,750  
**Area Type:** Rural

Duration  
5 Years  
0 Months



# A2.28 Intersection Collision Diagram



Location: Heritage Hills Pkwy & Donges Bay Rd  
Municipality: Germantown  
County: Washington  
Traffic Control: Minor Street Stop

From: 1/1/2015 5 Years  
To: 12/31/2019 0 Months  
AADT: 2,450  
Area Type: Urban  
GPS Coordinates: 43.206486, -88.092099

Duration

[MAP](#)

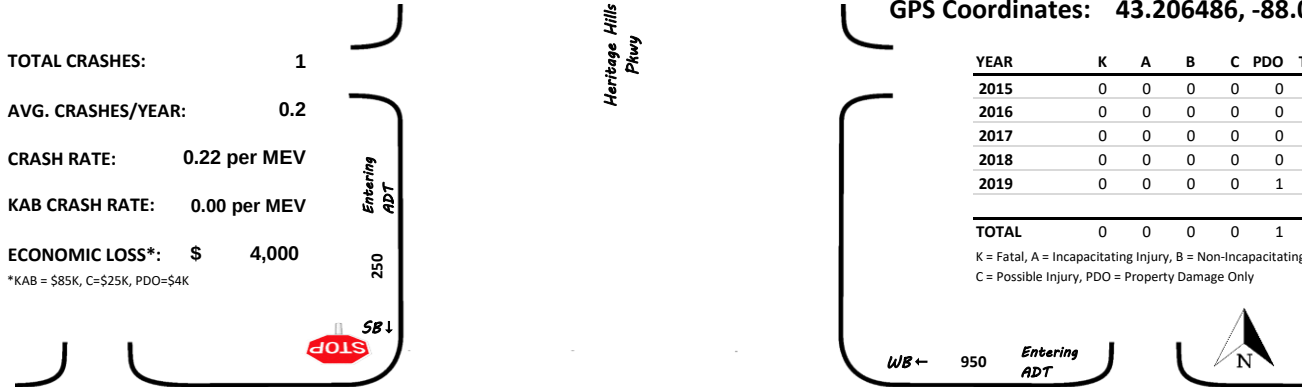
TOTAL CRASHES: 1  
AVG. CRASHES/YEAR: 0.2  
CRASH RATE: 0.22 per MEV  
KAB CRASH RATE: 0.00 per MEV  
ECONOMIC LOSS\*: \$ 4,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2016 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2017 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2018 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| 2019 | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |

TOTAL 0 0 0 0 1 1 \$ 4,000

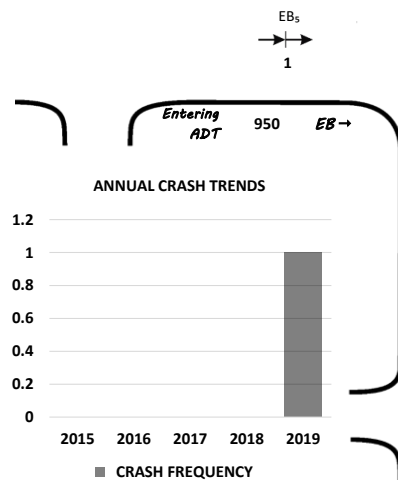
K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury, C = Possible Injury, PDO = Property Damage Only



Donges Bay Rd

Donges Bay Rd

ECON. LOSS  
COLOR SCALE  
> \$500 K  
> \$400 K  
> \$300 K  
> \$200 K  
> \$100 K



| CRASH TYPE       | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------------------|---|---|---|---|-----|------|------------|
| LT-ANGLE         | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| RT-ANGLE         | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| PEDESTRIAN       | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| RT-TURN REAR-END | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| REAR-END         | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| SIDE-SWIPE-SAME  | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| BICYCLE-RELATED  | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| PARKED-VEHICLE   | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| FIXED-OBJECT     | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| DRIVEWAY-RELATED | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| HEAD-ON          | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| MISC. OTHER      | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| TOTAL            | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |

| ROAD CONDITIONS |   |      |
|-----------------|---|------|
| DRY             | 1 | 100% |
| WET             | 0 | 0%   |
| SNOW            | 0 | 0%   |
| ICE             | 0 | 0%   |
| OTH.            | 0 | 0%   |
| TOT.            | 1 |      |

| LIGHT CONDITIONS |   |      |
|------------------|---|------|
| DAY              | 0 | 0%   |
| DARK             | 1 | 100% |
| TOT.             | 1 |      |

| DRIVER BEHAVIOR |   |    |
|-----------------|---|----|
| ALCOHOL         | 0 | 0% |
| DRUGS           | 0 | 0% |
| SPEED           | 0 | 0% |

| SEASON |   |      |
|--------|---|------|
| SPRING | 0 | 0%   |
| SUMMER | 0 | 0%   |
| FALL   | 0 | 0%   |
| WINTER | 1 | 100% |
| TOT.   | 1 |      |

| FAILURE TO YIELD |   |    |
|------------------|---|----|
| NB               | 0 | 0% |
| SB               | 0 | 0% |
| EB               | 0 | 0% |
| WB               | 0 | 0% |
| TBD              | 0 | 0% |
| TOT.             | 0 | 0% |

| DISRGRD. CONTROL |   |    |
|------------------|---|----|
| NB               | 0 | 0% |
| SB               | 0 | 0% |
| EB               | 0 | 0% |
| WB               | 0 | 0% |
| TBD              | 0 | 0% |
| TOT.             | 0 | 0% |

| VEHICLE DAMAGE |   |      |
|----------------|---|------|
| OTHER/UNK.     | 0 | 0%   |
| NONE           | 0 | 0%   |
| VERY MINOR     | 0 | 0%   |
| MINOR          | 0 | 0%   |
| MODERATE       | 0 | 0%   |
| SEVERE         | 2 | 100% |
| VERY SEVERE    | 0 | 0%   |
| TOTAL VEHICLES | 2 |      |

NOTES:

TBD = verification from crash report needed for direction

## DAY/TIME TRENDS

|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |   |   |   |   |   | 6 AM 7 AM 8 AM |   |   | 9 AM 10 AM 11 AM |   |   | 12 PM 1 PM 2 PM |   |   | 3 PM 4 PM 5 PM |   |   | 6 PM 7 PM 8 PM |   |   | 9 PM 10 PM 11 PM |   |   | UNK |      | TOT. |
|------|--------------------------------|---|---|---|---|---|---|----------------|---|---|------------------|---|---|-----------------|---|---|----------------|---|---|----------------|---|---|------------------|---|---|-----|------|------|
| MON  | 0                              | 0 | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | MON  | 0    |
| TUE  | 0                              | 0 | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | TUE  | 0    |
| WED  | 0                              | 0 | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 1 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | WED  | 1    |
| THU  | 0                              | 0 | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | THU  | 0    |
| FRI  | 0                              | 0 | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | FRI  | 0    |
| SAT  | 0                              | 0 | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | SAT  | 0    |
| SUN  | 0                              | 0 | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | SUN  | 0    |
|      | 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM |   |   |   |   |   |   | 6 AM 7 AM 8 AM |   |   | 9 AM 10 AM 11 AM |   |   | 12 PM 1 PM 2 PM |   |   | 3 PM 4 PM 5 PM |   |   | 6 PM 7 PM 8 PM |   |   | 9 PM 10 PM 11 PM |   |   | UNK |      | TOT. |
| TOT. | 0                              | 0 | 0 | 0 | 0 | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0               | 0 | 0 | 0              | 0 | 0 | 0              | 0 | 0 | 0                | 0 | 0 | 0   | TOT. | 1    |

### Corresponds to Collision Diagram



**From:** 1/1/2015  
**To:** 12/31/2019  
**AADT:** 2,450  
**Area Type:** Urban

[illegible]82

# APPENDIX B

- ▶ APPENDIX B - CORRIDORS
  - ▶ B1 - Corridor Safety Analysis

# APPENDIX B1

## CORRIDOR SAFETY ANALYSIS

- ▶ B1.1 Pilgrim Road/STH 145 (Francesse Dr to Fond du Lac Ave)



# B1.1 Corridor Safety Analysis



**Location:** Pilgrim Road (Francesse Dr to Fond du Lac Ave)  
**Municipality:** Germantown  
**County:** Washington  
**Length of Corridor:** 0.3 miles  
**GPS Coordinates (Start):** 43.222432, -88.103192

**Duration**  
**From:** 1/1/2015 **5 Years**  
**To:** 12/31/2019 **0 Months**  
**AADT:** 8,200  
**Peer Group:** Urban Streets  
**GPS Coordinates (End):** 43.226849, -88.103246

[MAP](#)

**TOTAL CRASHES** 22

**AVG. CRASHES/YEAR:** 4.4

**CRASH RATE:** 490.0 per 100MVM

Orange = Higher than average, Red = Higher than Upper Control Limit (UCL)

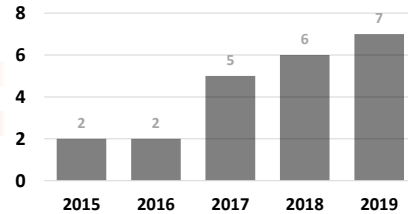
**KAB CRASH RATE:** 111.4 per 100MVM

Orange = Higher than average, Red = Higher than Upper Control Limit (UCL)

**ECONOMIC LOSS\*:** \$ 514,000

\*KAB = \$85K, C=\$25K, PDO=\$4K

ANNUAL CRASH TRENDS



■ CRASH FREQUENCY

| YEAR | K | A | B | C | PDO | TOT. | ECON. LOSS |
|------|---|---|---|---|-----|------|------------|
| 2015 | 0 | 0 | 1 | 0 | 1   | 2    | \$ 89,000  |
| 2016 | 0 | 1 | 0 | 0 | 1   | 2    | \$ 89,000  |
| 2017 | 0 | 0 | 0 | 0 | 5   | 5    | \$ 20,000  |
| 2018 | 0 | 1 | 1 | 1 | 3   | 6    | \$ 207,000 |
| 2019 | 0 | 0 | 1 | 0 | 6   | 7    | \$ 109,000 |

**TOTAL** 0 2 3 1 16 22 \$ 514,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury,

C = Possible Injury, PDO = Property Damage Only

**WI AVG. CRASH RATE & (UCL):** 349.89, (438.17)

**WI AVG. KAB CRASH RATE & (UCL):** 39.9, (69.71)



| RUN-OFF-ROAD CRASH TYPES | K | A | B | C | PDO | TOT. | ECON. LOSS |
|--------------------------|---|---|---|---|-----|------|------------|
| Fixed-Object             | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| Other                    | 0 | 0 | 0 | 0 | 1   | 1    | \$ 4,000   |
| Tree                     | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| Ditch                    | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| Overturn                 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| Guardrail                | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| Median Barrier           | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| Fence                    | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| Bridge                   | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| Immersion                | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |

| MULTI-VEHICLE CRASH TYPES | K | A | B | C | PDO | TOT. | ECON. LOSS |
|---------------------------|---|---|---|---|-----|------|------------|
| Rear-End                  | 0 | 1 | 1 | 0 | 5   | 7    | \$ 190,000 |
| Right-Angle               | 0 | 1 | 1 | 0 | 4   | 6    | \$ 186,000 |
| Left-Turn Angle           | 0 | 0 | 1 | 1 | 0   | 2    | \$ 110,000 |
| Side-Swipe-Same           | 0 | 0 | 0 | 0 | 5   | 5    | \$ 20,000  |
| Other                     | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| Head-On                   | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| Side-Swipe-Opposite       | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |

| MULTI-MODAL CRASH TYPES | K | A | B | C | PDO | TOT. | ECON. LOSS |
|-------------------------|---|---|---|---|-----|------|------------|
| Pedestrian              | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |
| Bicycle                 | 0 | 0 | 0 | 0 | 0   | 0    | \$ -       |

**ALL CRASH TYPES** 0 2 3 1 16 22 \$ 514,000

| ROAD CONDITIONS |           |     |
|-----------------|-----------|-----|
| DRY             | 18        | 82% |
| WET             | 4         | 18% |
| SNOW            | 0         | 0%  |
| ICE             | 0         | 0%  |
| OTH.            | 0         | 0%  |
| <b>TOT.</b>     | <b>22</b> |     |

| LIGHT CONDITIONS |           |     |
|------------------|-----------|-----|
| DAY              | 17        | 77% |
| DARK             | 5         | 23% |
| <b>TOT.</b>      | <b>22</b> |     |

| DRIVER BEHAVIOR |   |    |
|-----------------|---|----|
| ALCOHOL         | 0 | 0% |
| DRUGS           | 0 | 0% |
| SPEED           | 0 | 0% |

| SEASON      |           |     |
|-------------|-----------|-----|
| SPRING      | 8         | 36% |
| SUMMER      | 6         | 27% |
| FALL        | 5         | 23% |
| WINTER      | 3         | 14% |
| <b>TOT.</b> | <b>22</b> |     |

| CURVE TYPE |   |    |
|------------|---|----|
| HORZ       | 0 | 0% |
| VERT       | 0 | 0% |

| INTERSECTION |    |     |
|--------------|----|-----|
| INT          | 11 | 50% |

| CAUSATION |   |     |
|-----------|---|-----|
| ROR       | 2 | 9%  |
| FTY       | 7 | 32% |
| DTC       | 0 | 0%  |

ROR = RUN-OFF-ROAD  
 FTY = FAILURE TO YIELD  
 DTC = DISREGARDED TRAFFIC CONTROL

| VEHICLE DAMAGE        |           |  |
|-----------------------|-----------|--|
| OTHER/UNK.            | 0         |  |
| NONE                  | 2         |  |
| VERY MINOR            | 1         |  |
| MINOR                 | 13        |  |
| MODERATE              | 14        |  |
| SEVERE                | 9         |  |
| VERY SEVERE           | 1         |  |
| <b>TOTAL VEHICLES</b> | <b>40</b> |  |

## NOTES:

Based on electronic data and not validated with hardcopies. Crashes occurring at Sylvan Circle have been validated.

## DAY/TIME TRENDS

|             | 12 AM    | 1 AM     | 2 AM     | 3 AM     | 4 AM     | 5 AM     | 6 AM     | 7 AM     | 8 AM     | 9 AM     | 10 AM    | 11 AM    | 12 PM    | 1 PM     | 2 PM     | 3 PM     | 4 PM     | 5 PM     | 6 PM     | 7 PM     | 8 PM     | 9 PM     | 10 PM    | 11 PM    | UNK      |             | TOT.      |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------|-----------|
| MON         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 2        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | MON         | 3         |
| TUE         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | TUE         | 2         |
| WED         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 1        | 1        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        | WED         | 4         |
| THU         | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 2        | 2        | 0        | 1        | 0        | 0        | 0        | 1        | 0        | THU         | 8         |
| FRI         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 2        | 0        | 0        | 0        | 0        | 0        | 0        | FRI         | 4         |
| SAT         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | SAT         | 1         |
| SUN         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | SUN         | 0         |
| <b>TOT.</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>1</b> | <b>0</b> | <b>2</b> | <b>0</b> | <b>3</b> | <b>0</b> | <b>0</b> | <b>1</b> | <b>1</b> | <b>1</b> | <b>4</b> | <b>3</b> | <b>2</b> | <b>2</b> | <b>0</b> | <b>1</b> | <b>0</b> | <b>1</b> | <b>0</b> | <b>TOT.</b> | <b>22</b> |

## AGREEMENT FOR ENGINEERING SERVICES

THIS AGREEMENT is entered into between **Village of Germantown** (Client) and **Traffic Analysis & Design, Inc.** (Engineer), based upon Client's intention to conduct a safety screening analysis in the Village of Germantown, Wisconsin (the Project) and Client's requirement for certain engineering services in connection with the Project (the Services) which Engineer is prepared to provide.

1. Engineer shall provide the Services described in Attachment A, "Scope of Services", according to Attachment A, "Schedule".
2. Client shall pay Engineer in accordance with Attachment A, "Compensation". Invoices shall be due and payable upon receipt. Invoice amounts not paid within 30 days after receipt shall accrue interest at the rate of 1.5% per month (or the maximum rate permitted by law, if less), with payments applied first to accrued interest and then to unpaid principal.
3. The same degree of care, skill, and diligence shall be exercised in the performance of the Services as is ordinarily possessed and exercised by a member of the same profession, currently practicing, under similar circumstances. No other warranty, express or implied, is included in this Agreement or in any drawing, specification, report, opinion, or other instrument of service, in any form or media, produced in connection with the Services.
4. Engineer shall not be liable to Client for any consequential damages resulting in any way from the performance of the Services. To the fullest extent permitted by law, Engineer's liability under this Agreement shall not exceed Engineer's total compensation actually received under this Agreement.
5. Engineer and Client waive all rights against each other for damages covered by property insurance during and after the completion of the Services.
6. Notwithstanding anything to the contrary in any Attachments hereto, Engineer has no responsibility for (a) construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the Project; or (b) the failure of any contractor, subcontractor, vendor, or other Project participant, not under contract to Engineer, to fulfill contractual responsibilities to Client or to comply with federal, state, or local laws, regulations, and codes.
7. Engineer does not guarantee that proposals, bids, or actual Project costs will not vary from Engineer's cost estimates or that actual schedules will not vary from Engineer's projected schedules.
8. This Agreement may be terminated upon written notice at Client's convenience or by either party in the event of substantial failure by the other party to perform in accordance with the terms of this Agreement. Engineer shall terminate performance of Services on a schedule acceptable to Client, and Client shall pay Engineer for all Services performed and reasonable termination expenses. Paragraphs 4 and 5 shall survive any termination or completion of this Agreement.
9. All documents prepared by Engineer pursuant to this Agreement are instruments of service in respect to the Project. Any use except for the specific purpose intended by this Agreement will be at the user's sole risk and without liability or legal exposure to Engineer. Engineer shall retain its ownership in its data bases, computer software, and other proprietary property. Intellectual property developed, utilized, or modified in the performance of the Services shall remain the property of Engineer.
10. The Services provided for in this Agreement are for the sole use and benefit of Client and Engineer. Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than Client and Engineer.
11. Any notice required by this Agreement shall be made in writing to the address specified below:  
  
**Client:** Village of Germantown  
N112W17001 Mequon Road  
Germantown, WI 53022  
**Attn:** Kevin R. Driscoll, P.E., Village Engineer  
  
**Engineer:** Traffic Analysis & Design, Inc.  
PO Box 128  
Cedarburg, WI 53012  
**Attn:** John A. Bieberitz, P.E., PTOE

IN WITNESS WHEREOF, Client and Engineer have executed this Agreement, effective as of December 24, 2024.

**Village of Germantown (Client)**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Traffic Analysis & Design, Inc. (Engineer)**

By:  \_\_\_\_\_  
John A. Bieberitz, P.E., PTOE

Date: 12/24/24

# ATTACHMENT A

## SCOPE OF SERVICES

Engineer will prepare a Safety Screening Analysis technical memorandum to document the crash history of intersections within the Village of Germantown. If there are intersections that have crash histories and improvement options that may be eligible for Highway Safety Improvement Program (HSIP) funding, those locations will be identified, and safety improvement options provided. Accepted projects in the HSIP program are eligible for a 90 percent Federal contribution with a 10 percent local match.

### Task 1 – Data Retrieval and Analysis

#### *Data Retrieval*

Engineer will retrieve the last five complete years of electronic crash data (2020-2024) from the Wisconsin Department of Transportation (WisDOT) via the WisTransPortal for the Village of Germantown.

#### *Sorting and Evaluation of Crash Data*

Engineer will do an initial screening of intersections to share with the CLIENT for discussion.

#### *Crash Statistics & Analysis*

Engineer will compile crash statistics, analysis, collision diagrams, and a Google Map for up to 30 intersections and note if there are improvement options potentially eligible for the HSIP program. The analysis will be based on the electronic crash data provided through the WisTransPortal. Validation of crashes by reviewing their narratives is considered additional work and is not included in this contract.

### Task 2 – Meetings

The Engineer will participate in one virtual meeting and attend one in-person meeting as part of this contract.

1. Meet virtually with CLIENT's engineering staff and if available, a representative from law enforcement, to discuss safety issues that the CLIENT is aware of in the Village of Germantown. Engineer will provide an initial data screening to help with the discussion. Jurisdictional boundaries and ownership of intersections will be discussed as well.
2. Meet in-person to present the results of the Safety Screening Analysis to the CLIENT and discuss recommendations, if applicable, for pursuing HSIP funding. If the potential for pursuing a HSIP project exists, Engineer will work with the CLIENT to devise a strategy for pursuing HSIP funding.

### Task 3 – Technical Memorandum

Engineer will prepare a report summarizing the findings of the analysis in a technical memorandum which will include a table summarizing the potential for pursuing HSIP applications, potential improvements to consider, crash statistics, collision diagrams, and recommendations for the next steps.

## ADDITIONAL WORK

The Safety Screening Analysis is a pre-cursor to the actual preparation of a HSIP application, which would need to be covered under an additional contract or amendment. The preparation of HSIP applications is not covered in this scope.

SCHEDULE

Engineer will complete the Safety Screening Analysis within six weeks of authorization, or sooner if possible.

COMPENSATION

Compensation for the services described above, CLIENT shall pay Engineer a time and materials fee not to exceed Fourteen-Thousand Nine Hundred and Eighty-Two Dollars (\$14,982.00). The Engineers fee schedule is shown below. All services not cited in Attachment A, Scope of Services, will be conducted as additional services under an Amendment to this Agreement.

TADI 2025 Staff Rates

| Position Title                     | Hourly Rate* |
|------------------------------------|--------------|
| Project Manager                    | \$211.05     |
| Senior Planning Specialist         | \$236.25     |
| Senior Traffic Operations Engineer | \$204.75     |
| Senior Traffic Safety Engineer     | \$154.35     |
| Traffic Safety Engineer            | \$110.25     |
| Administrative Assistant           | \$121.28     |

|                     |        |                                                    |
|---------------------|--------|----------------------------------------------------|
| Mileage Rate (2024) | \$0.67 | per mile                                           |
| Mileage Rate (2025) | \$0.67 | per mile, unless updated by the Federal Government |

|                        |        |          |
|------------------------|--------|----------|
| Printing (Black/White) | \$0.10 | per page |
| Printing (Color)       | \$0.50 | per page |

\* Rates are averages that may vary depending upon the staff assigned to the project.  
Updated 12-24-24



## **BUSINESS OF THE PUBLIC WORKS & HIGHWAYS COMMITTEE**

MEETING DATE: January 8, 2025

PLACEMENT: Action Item

ITEM TITLE: Approval to purchase 2025 Highway Department patrol truck from Truck Country of Wisconsin / Burke Truck & Equipment for an amount not to exceed \$311,874.38.

SUBMITTED BY: Matthew Mortwedt, Public Works Director

### SUMMARY EXPLANATION:

While the purchase of patrol trucks have been difficult to work through over the last few years, equipment availability seems to have become more stable. Despite previous difficulties, to date, the village has maintained our current replacement cycle. A patrol truck spends 14 years as a route vehicle, before spending roughly another 6 years as a spare. Our current patrol truck replacement cycle is 20 years. While well maintained during their life cycle, these trucks operate in a difficult environment and perform under extreme working conditions. It is crucial for winter operations that the village maintain our current replacement cycle, if not improve it over time.

Staff has solicited proposals from the two local Western Star Dealers, which fit within the budgeted amount of \$295,000.00, and the results are listed below.

Truck Country of Wisconsin / Burke Truck & Equipment Inc.: \$294,235.31

I State Truck Center / Burke Truck & Equipment Inc.: \$297,133.31

Brine continues to become an industry standard, and staff is seeking to expand the use of brine within the village. Staff is offering an alternative price outlined below, which will allow the expanded use sooner rather than later. Listed below is the alternative price, which does come in higher than our original approved capital budget. Should the Public Works Committee and Village Board approve of the alternative, the funds necessary could be added to the capital borrowing for 2025.

\*Optional equipment\* Truck Country of Wisconsin / Burke Truck & Equipment Inc.: \$311,874.38

### ATTACHMENT:

1. Truck Country Spec. and pricing
2. Burke Build Quote Within Budget
3. Burke Build With Additional Anti-icing Equipment
4. I state patrol truck quote

### STAFF RECOMMENDATION:

Staff recommends the purchase of a highway patrol truck from Truck Country of Wisconsin / Burke Truck & Equipment not to exceed \$311,874.38, and to forward this request onto the Village Board with a positive recommendation. If approved, the funds shall be allocated from Highway capital account: 40562000-592200.

ACTION BY Committee:

**Prepared for:**  
Matt Kolbow  
GERMANTOWN VILLAGE OF  
N112 W17001 Mequon Road  
Germantown, WI 53022  
Phone: 262-384-0497

**Prepared by:**  
Ryan Danbrea  
TRUCK COUNTRY OF  
WISCONSIN  
9202 N. 107TH STREET  
MILWAUKEE, WI 53224  
Phone:

*A proposal for*  
**GERMANTOWN VILLAGE OF**

*Prepared by*  
**TRUCK COUNTRY OF WISCONSIN**  
*Ryan Danbrea*

*Dec 22, 2023*

**Western Star 47X**



Components shown may not reflect all spec'd options and are not to scale

**Prepared for:**  
Matt Kolbow  
GERMANTOWN VILLAGE OF  
N112 W17001 Mequon Road  
Germantown, WI 53022  
Phone: 262-384-0497

**Prepared by:**  
Ryan Danbrea  
TRUCK COUNTRY OF  
WISCONSIN  
9202 N. 107TH STREET  
MILWAUKEE, WI 53224  
Phone:

## S P E C I F I C A T I O N   P R O P O S A L

| Data Code                    | Description                                                                                                                                 | Weight<br>Front | Weight<br>Rear | Retail Price |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------|--------------|
| <b>Price Level</b>           |                                                                                                                                             |                 |                |              |
| PRL-28X                      | WST 47X/49X PRL-28X (EFF:MY25 ORDERS)                                                                                                       |                 |                | STD          |
| <b>Data Version</b>          |                                                                                                                                             |                 |                |              |
| DRL-023                      | SPECPRO21 DATA RELEASE VER 023                                                                                                              |                 |                | N/C          |
| <b>Vehicle Configuration</b> |                                                                                                                                             |                 |                |              |
| 001-470                      | WESTERN STAR 47X                                                                                                                            | 9,050           | 6,525          | \$224,378.00 |
| 004-225                      | 2025 MODEL YEAR SPECIFIED                                                                                                                   |                 |                | STD          |
| 002-003                      | SET FORWARD AXLE - TRUCK                                                                                                                    | -480            | 480            | N/C          |
| 019-004                      | STRAIGHT TRUCK PROVISION, NON-TOWING                                                                                                        |                 |                | STD          |
| 003-001                      | LH PRIMARY STEERING LOCATION                                                                                                                |                 |                | STD          |
| <b>General Service</b>       |                                                                                                                                             |                 |                |              |
| AA1-002                      | TRUCK CONFIGURATION                                                                                                                         |                 |                | STD          |
| AA6-002                      | DOMICILED, USA (EXCLUDING CALIFORNIA AND CARB OPT-IN STATES)                                                                                |                 |                | N/C          |
| 99D-027                      | EPA EMISSIONS CERTIFICATION FOR REGISTRATION OUTSIDE CARB STATES - EPA CLEAN IDLE (INCLUDES 6X4 INCH LABEL ON LOWER FORWARD OF DRIVER DOOR) |                 |                | N/C          |
| AF2-998                      | NO STATE/PROVINCE INITIAL REGISTRATION SELECTED                                                                                             |                 |                | N/C          |
| A85-010                      | UTILITY/REPAIR/MAINTENANCE SERVICE                                                                                                          |                 |                | N/C          |
| A84-1GM                      | GOVERNMENT BUSINESS SEGMENT                                                                                                                 |                 |                | N/C          |
| AA4-010                      | DIRT/SAND/ROCK COMMODITY                                                                                                                    |                 |                | STD          |
| AA5-002                      | TERRAIN/DUTY: 100% (ALL) OF THE TIME, IN TRANSIT, IS SPENT ON PAVED ROADS                                                                   |                 |                | STD          |
| AB1-008                      | MAXIMUM 8% EXPECTED GRADE                                                                                                                   |                 |                | STD          |
| AB5-001                      | SMOOTH CONCRETE OR ASPHALT PAVEMENT - MOST SEVERE IN-TRANSIT (BETWEEN SITES) ROAD SURFACE                                                   |                 |                | STD          |
| 995-1A5                      | WESTERN STAR VOCATIONAL WARRANTY                                                                                                            |                 |                | STD          |
| A66-99D                      | EXPECTED FRONT AXLE(S) LOAD : 20000.0 lbs                                                                                                   |                 |                |              |



**Prepared for:**  
Matt Kolbow  
GERMANTOWN VILLAGE OF  
N112 W17001 Mequon Road  
Germantown, WI 53022  
Phone: 262-384-0497

**Prepared by:**  
Ryan Danbrea  
TRUCK COUNTRY OF  
WISCONSIN  
9202 N. 107TH STREET  
MILWAUKEE, WI 53224  
Phone:

| Data Code                    | Description                                                                                           | Weight<br>Front | Weight<br>Rear | Retail Price |
|------------------------------|-------------------------------------------------------------------------------------------------------|-----------------|----------------|--------------|
| A68-99D                      | EXPECTED REAR DRIVE AXLE(S) LOAD :<br>23000.0 lbs                                                     |                 |                |              |
| A67-99D                      | EXPECTED PUSHER AXLE(S) LOAD : 0.0 lbs                                                                |                 |                |              |
| A63-99D                      | EXPECTED GROSS VEHICLE WEIGHT CAPACITY<br>: 43000.0 lbs                                               |                 |                |              |
| <b>Truck Service</b>         |                                                                                                       |                 |                |              |
| AA3-018                      | FRONT PLOW/END DUMP BODY                                                                              |                 |                | N/C          |
| AF3-1M6                      | CASPERS TRUCK EQUIPMENT                                                                               |                 |                | N/C          |
| <b>Engine</b>                |                                                                                                       |                 |                |              |
| 101-3CV                      | DETROIT DD13 GEN 5 12.8L 370 HP @ 1625<br>RPM, 1900 GOV RPM, 1250 LB/FT @ 975 RPM                     |                 |                | (\$570.00)   |
| <b>Electronic Parameters</b> |                                                                                                       |                 |                |              |
| 79A-065                      | 65 MPH ROAD SPEED LIMIT                                                                               |                 |                | N/C          |
| 79B-000                      | CRUISE CONTROL SPEED LIMIT SAME AS ROAD<br>SPEED LIMIT                                                |                 |                | N/C          |
| 79F-013                      | FLEET MANAGEMENT - DAILY ENGINE USAGE<br>ENABLED                                                      |                 |                | N/C          |
| 79G-012                      | 15 MINUTES IDLE SHUTDOWN WITH CLUTCH<br>AND SERVICE BRAKE OVERRIDE                                    |                 |                | N/C          |
| 79K-014                      | PTO MODE ENGINE RPM LIMIT - 1800 RPM                                                                  |                 |                | N/C          |
| 79L-022                      | PTO MODE PTO 1 THROTTLE OVERRIDE<br>ENABLED                                                           |                 |                | N/C          |
| 79P-032                      | PTO RPM CONTROL WITH STEERING WHEEL<br>SWITCHES                                                       |                 |                | N/C          |
| 79T-001                      | PTO MODE RPM INCREMENT - 25 RPM                                                                       |                 |                | N/C          |
| 79U-002                      | PTO GOVERNOR RAMP RATE - 50 RPM PER<br>SECOND                                                         |                 |                | N/C          |
| 79V-001                      | FUEL DOSING OF AFTERTREATMENT ENABLED<br>IN PTO MODE-CLEANS HYDROCARBONS AT<br>HIGH TEMPERATURES ONLY |                 |                | N/C          |
| 79W-008                      | ONE DASH MOUNTED PTO SPEED WITH PTO<br>SWITCH ENGAGEMENT                                              |                 |                | N/C          |
| 79X-005                      | PTO SPEED 1 SETTING - 900 RPM                                                                         |                 |                | N/C          |
| 80C-102                      | ENGINE BRAKES ON WITH VEHICLE SPEED<br>ABOVE RSL/CSL - 2 MPH                                          |                 |                | N/C          |
| * 80P-998                    | NO FLEET SPEC FOR PARAMETERIZATION                                                                    |                 |                | N/C          |
| 80G-001                      | PTO MINIMUM RPM - 600                                                                                 |                 |                | STD          |
| 80L-003                      | ENABLE DPF REGEN ZONE 1 WITH AUTO<br>ENGINE RPM ELEVATE FOR EXTENDED IDLE                             |                 |                | N/C          |
| 80W-001                      | MAINTENANCE SYSTEM WITH NO POP-UPS<br>AND NO MENU IN CLUSTER                                          |                 |                | STD          |

**Prepared for:**  
Matt Kolbow  
GERMANTOWN VILLAGE OF  
N112 W17001 Mequon Road  
Germantown, WI 53022  
Phone: 262-384-0497

**Prepared by:**  
Ryan Danbrea  
TRUCK COUNTRY OF  
WISCONSIN  
9202 N. 107TH STREET  
MILWAUKEE, WI 53224  
Phone:

| Data Code               | Description                                                                                                                                                              | Weight<br>Front | Weight<br>Rear | Retail Price |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------|--------------|
| 80S-004                 | PTO 1, DASH SWITCH, ENGAGE WHILE DRIVING                                                                                                                                 |                 |                | N/C          |
| <b>Engine Equipment</b> |                                                                                                                                                                          |                 |                |              |
| 99C-024                 | EPA 2010/GHG 2024 CONFIGURATION                                                                                                                                          |                 |                | STD          |
| 13E-001                 | STANDARD OIL PAN                                                                                                                                                         |                 |                | N/C          |
| 105-001                 | ENGINE MOUNTED OIL CHECK AND FILL                                                                                                                                        |                 |                | STD          |
| 014-111                 | SIDE OF HOOD AIR INTAKE WITH ENGINE<br>MOUNTED AIR CLEANER, WITH<br>INSIDE/OUTSIDE AIR AND SNOW DOOR                                                                     |                 |                | \$759.00     |
| 124-1DJ                 | DR 12V 160 AMP 36-SI BRUSHLESS<br>QUADRAMOUNT PAD ALTERNATOR WITH<br>REMOTE BATTERY VOLT SENSE                                                                           |                 |                | \$105.00     |
| 292-222                 | (3) DTNA GENUINE, HIGH TEMP AGM STARTING<br>AND CYCLING, MIN 2775CCA, 570RC,<br>THREADED STUD BATTERIES                                                                  |                 |                | STD          |
| 290-1AC                 | PASSENGER SEAT BATTERY BOX VENTED TO<br>OUTSIDE OF CAB                                                                                                                   |                 |                | STD          |
| 282-013                 | BATTERY BOX MOUNTED UNDER PASSENGER<br>SEAT                                                                                                                              |                 |                | STD          |
| 291-017                 | WIRE GROUND RETURN FOR BATTERY CABLES<br>WITH ADDITIONAL FRAME GROUND RETURN                                                                                             |                 |                | STD          |
| 289-006                 | PLASTIC BATTERY BOX COVER                                                                                                                                                |                 |                | STD          |
| 293-058                 | POSITIVE LOAD DISCONNECT WITH CAB<br>MOUNTED CONTROL SWITCH MOUNTED<br>OUTBOARD DRIVER SEAT                                                                              | 2               |                | \$261.00     |
| 295-029                 | POSITIVE AND NEGATIVE POSTS FOR<br>JUMPSTART LOCATED ON FRAME NEXT TO<br>STARTER                                                                                         | 2               |                | \$118.00     |
| 107-046                 | BW MODEL FE-921 19.0 CFM SINGLE CYLINDER<br>AIR COMPRESSOR WITH SAFETY VALVE                                                                                             |                 |                | STD          |
| 152-041                 | ELECTRONIC ENGINE INTEGRAL SHUTDOWN<br>PROTECTION SYSTEM                                                                                                                 |                 |                | STD          |
| 128-002                 | JACOBS COMPRESSION BRAKE                                                                                                                                                 |                 |                | STD          |
| 016-1C2                 | RH OUTBOARD UNDER STEP MOUNTED<br>HORIZONTAL AFTERTREATMENT SYSTEM<br>ASSEMBLY WITH RH B-PILLAR MOUNTED<br>VERTICAL TAILPIPE                                             |                 |                | STD          |
| 28F-015                 | ENGINE AFTERTREATMENT DEVICE,<br>AUTOMATIC OVER THE ROAD ACTIVE<br>REGENERATION AND VIRTUAL REGENERATION<br>REQUEST SWITCH IN CLUSTER AND DASH<br>MOUNTED INHIBIT SWITCH |                 |                | STD          |
| 239-003                 | 90 DEG STACK AND B-PILLAR PIPE WITH<br>MINIMUM STACK PROTRUSION ABOVE CAB                                                                                                |                 |                | \$12.00      |
| 237-1CR                 | RH CURVED VERTICAL TAILPIPE B-PILLAR<br>MOUNTED ROUTED FROM STEP                                                                                                         |                 |                | STD          |

**Prepared for:**  
Matt Kolbow  
GERMANTOWN VILLAGE OF  
N112 W17001 Mequon Road  
Germantown, WI 53022  
Phone: 262-384-0497

**Prepared by:**  
Ryan Danbrea  
TRUCK COUNTRY OF  
WISCONSIN  
9202 N. 107TH STREET  
MILWAUKEE, WI 53224  
Phone:

| Data Code | Description                                                                                     | Weight<br>Front | Weight<br>Rear | Retail Price |
|-----------|-------------------------------------------------------------------------------------------------|-----------------|----------------|--------------|
| 23U-027   | 8 GALLON DIESEL EXHAUST FLUID TANK                                                              |                 |                | STD          |
| 23Z-005   | UNPOLISHED ALUMINUM WST DIESEL<br>EXHAUST FLUID TANK COVER                                      |                 |                | STD          |
| 43X-001   | LH HEAVY DUTY STANDARD DIESEL EXHAUST<br>FLUID TANK LOCATION                                    |                 |                | STD          |
| 43Y-001   | STANDARD DIESEL EXHAUST FLUID TANK CAP                                                          |                 |                | STD          |
| 242-001   | STAINLESS STEEL AFTERTREATMENT<br>DEVICE/MUFFLER/TAILOPIPE SHIELD                               |                 |                | STD          |
| 273-058   | AIR POWERED ON/OFF ENGINE FAN CLUTCH                                                            |                 |                | (\$301.00)   |
| 276-002   | AUTOMATIC FAN CONTROL WITH DASH<br>SWITCH AND INDICATOR LIGHT, NON ENGINE<br>MOUNTED            |                 |                | \$10.00      |
| 110-068   | DDC SUPPLIED ENGINE MOUNTED FUEL<br>FILTER/FUEL WATER SEPARATOR WITH<br>WATER-IN-FUEL INDICATOR |                 |                | STD          |
| 118-001   | FULL FLOW OIL FILTER                                                                            |                 |                | STD          |
| 266-107   | 1400 SQUARE INCH VOCATIONAL RADIATOR                                                            |                 |                | STD          |
| 103-039   | ANTIFREEZE TO -34F, OAT (NITRITE AND<br>SILICATE FREE) EXTENDED LIFE COOLANT                    |                 |                | STD          |
| 171-002   | SILICONE COOLANT HOSES - WHERE POSSIBLE                                                         |                 |                | \$103.00     |
| 261-001   | STANDARD CHARGE AIR COOLER PLUMBING                                                             |                 |                | STD          |
| 270-023   | HDEP FIXED RATIO COOLANT PUMP AND<br>RADIATOR DRAIN VALVE                                       |                 |                | STD          |
| 168-002   | LOWER RADIATOR GUARD                                                                            |                 |                | STD          |
| 138-005   | PHILLIPS-TEMRO 1500 WATT/115 VOLT BLOCK<br>HEATER                                               | 4               |                | \$30.00      |
| 140-022   | CHROME ENGINE HEATER RECEPTACLE<br>MOUNTED UNDER LH DOOR                                        |                 |                | \$80.00      |
| 155-075   | MITSUBISHI 12V MOD 3.175-DP60 STARTER<br>WITH INTEGRATED MAGNETIC SWITCH                        |                 |                | STD          |

#### Transmission

|         |                                                               |      |      |               |
|---------|---------------------------------------------------------------|------|------|---------------|
| 342-582 | ALLISON 3000 RDS AUTOMATIC TRANSMISSION<br>WITH PTO PROVISION | -230 | -130 | (\$13,887.00) |
|---------|---------------------------------------------------------------|------|------|---------------|

#### Transmission Equipment

|         |                                                                                                                              |  |  |     |
|---------|------------------------------------------------------------------------------------------------------------------------------|--|--|-----|
| 343-339 | ALLISON VOCATIONAL PACKAGE 223 -<br>AVAILABLE ON 3000/4000 PRODUCT FAMILIES<br>WITH VOCATIONAL MODELS RDS, HS, MH AND<br>TRV |  |  | STD |
| 84B-012 | ALLISON VOCATIONAL RATING FOR ON/OFF<br>HIGHWAY APPLICATIONS AVAILABLE WITH ALL<br>PRODUCT FAMILIES                          |  |  | STD |

**Prepared for:**  
Matt Kolbow  
GERMANTOWN VILLAGE OF  
N112 W17001 Mequon Road  
Germantown, WI 53022  
Phone: 262-384-0497

**Prepared by:**  
Ryan Danbrea  
TRUCK COUNTRY OF  
WISCONSIN  
9202 N. 107TH STREET  
MILWAUKEE, WI 53224  
Phone:

| Data Code | Description                                                                                                      | Weight<br>Front | Weight<br>Rear | Retail Price |
|-----------|------------------------------------------------------------------------------------------------------------------|-----------------|----------------|--------------|
| 84C-023   | PRIMARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY   |                 |                | STD          |
| 84D-020   | SECONDARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 3, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY |                 |                | N/C          |
| 84E-013   | S1 PERFORMANCE PRIMARY SHIFT SCHEDULE, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY                             |                 |                | N/C          |
| 84F-012   | S1 PERFORMANCE SECONDARY SHIFT SCHEDULE, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY                           |                 |                | N/C          |
| 84G-009   | 1800 RPM PRIMARY MODE SHIFT SPEED                                                                                |                 |                | N/C          |
| 84H-009   | 1800 RPM SECONDARY MODE SHIFT SPEED                                                                              |                 |                | N/C          |
| 84N-200   | FUEL SENSE 2.0 DISABLED - PERFORMANCE - TABLE BASED                                                              |                 |                | N/C          |
| 85F-031   | MAXIMUM ENGINE SPEED FOR PTO OPERATION 1850 RPM                                                                  |                 |                | N/C          |
| 85G-087   | MAXIMUM OUTPUT SPEED FOR PTO ENGAGEMENT 2200 RPM                                                                 |                 |                | N/C          |
| 85H-159   | MAXIMUM OUTPUT SPEED FOR PTO OPERATION 4000 RPM - ALLISON 5TH GEN TRANSMISSIONS                                  |                 |                | N/C          |
| 353-075   | QUICKFIT BODY LIGHTING CONNECTOR AT END OF FRAME, WITH CAP                                                       |                 |                | \$200.00     |
| 34C-011   | ELECTRONIC TRANSMISSION WIRING TO CUSTOMER INTERFACE CONNECTOR                                                   |                 |                | \$84.00      |
| 362-823   | CUSTOMER INSTALLED CHELSEA 280 SERIES PTO                                                                        |                 |                | STD          |
| 363-001   | PTO MOUNTING, LH SIDE OF MAIN TRANSMISSION ALLISON                                                               |                 |                | STD          |
| 341-018   | MAGNETIC PLUGS, ENGINE DRAIN, TRANSMISSION DRAIN, AXLE(S) FILL AND DRAIN                                         |                 |                | STD          |
| 345-078   | HEAVY DUTY ELECTRONIC TRANSMISSION SHIFT CONTROL, COLUMN MOUNTED                                                 |                 |                | STD          |
| 370-006   | WATER TO OIL TRANSMISSION COOLER                                                                                 |                 |                | STD          |
| 346-003   | TRANSMISSION OIL CHECK AND FILL WITH ELECTRONIC OIL LEVEL CHECK                                                  |                 |                | STD          |
| 35T-001   | SYNTHETIC TRANSMISSION FLUID (TES-295 COMPLIANT)                                                                 |                 |                | STD          |

#### Front Axle and Equipment

|         |                                                                      |     |            |
|---------|----------------------------------------------------------------------|-----|------------|
| 400-1BB | DETROIT DA-F-20.0-5 20,000# FL1 71.0 KPI/3.74 DROP SINGLE FRONT AXLE | 190 | \$1,732.00 |
|---------|----------------------------------------------------------------------|-----|------------|



**Prepared for:**  
Matt Kolbow  
GERMANTOWN VILLAGE OF  
N112 W17001 Mequon Road  
Germantown, WI 53022  
Phone: 262-384-0497

**Prepared by:**  
Ryan Danbrea  
TRUCK COUNTRY OF  
WISCONSIN  
9202 N. 107TH STREET  
MILWAUKEE, WI 53224  
Phone:

|   | Data Code | Description                                                                     | Weight<br>Front | Weight<br>Rear | Retail Price |
|---|-----------|---------------------------------------------------------------------------------|-----------------|----------------|--------------|
|   | 418-058   | CONMET PRESET PLUS PREMIUM ALUMINUM FRONT HUBS                                  |                 |                | (\$620.00)   |
| * | 402-030   | MERITOR 16.5X6 Q+ CAST SPIDER CAM FRONT BRAKES, DOUBLE ANCHOR, FABRICATED SHOES | 10              |                | (\$278.00)   |
|   | 403-002   | NON-ASBESTOS FRONT BRAKE LINING                                                 |                 |                | STD          |
|   | 419-023   | CONMET CAST IRON FRONT BRAKE DRUMS                                              |                 |                | \$336.00     |
|   | 427-001   | FRONT BRAKE DUST SHIELDS                                                        | 5               |                | (\$3.00)     |
|   | 409-006   | FRONT OIL SEALS                                                                 |                 |                | STD          |
|   | 408-001   | VENTED FRONT HUB CAPS WITH WINDOW, CENTER AND SIDE PLUGS - OIL                  |                 |                | STD          |
|   | 405-002   | MERITOR AUTOMATIC FRONT SLACK ADJUSTERS                                         |                 |                | \$115.00     |
|   | 536-104   | DUAL POWER STEERING GEARS, BENDIX 16-20K                                        | 80              |                | \$1,542.00   |
|   | 534-003   | 4 QUART POWER STEERING RESERVOIR                                                | 5               |                | N/C          |
|   | 533-001   | OIL/AIR POWER STEERING COOLER                                                   | 5               |                | N/C          |
|   | 40T-002   | CURRENT AVAILABLE SYNTHETIC 75W-90 FRONT AXLE LUBE                              |                 |                | STD          |

#### Front Suspension

|         |                                                     |     |  |          |
|---------|-----------------------------------------------------|-----|--|----------|
| 620-025 | 20,000# TAPERLEAF FRONT SUSPENSION                  | 145 |  | \$748.00 |
| 619-005 | MAINTENANCE FREE RUBBER BUSHINGS - FRONT SUSPENSION |     |  | STD      |
| 410-001 | FRONT SHOCK ABSORBERS                               |     |  | STD      |

#### Rear Axle and Equipment

|         |                                                                          |     |        |              |
|---------|--------------------------------------------------------------------------|-----|--------|--------------|
| 420-051 | RS-23-160 23,000# R-SERIES SINGLE REAR AXLE                              |     | -2,260 | (\$6,689.00) |
| 450-060 | CONMET PRESET PLUS PREMIUM IRON REAR HUBS                                |     | 30     | (\$2,056.00) |
| 421-489 | 4.89 REAR AXLE RATIO                                                     |     |        | N/C          |
| 424-001 | IRON REAR AXLE CARRIER WITH STANDARD AXLE HOUSING                        |     |        | STD          |
| 386-073 | MXL 17T MERITOR EXTENDED LUBE MAIN DRIVELINE WITH HALF ROUND YOKES       | -60 | -60    | (\$543.00)   |
| 388-998 | NO INTERAXLE (#3) DRIVELINE                                              |     |        | (\$518.00)   |
| 452-001 | DRIVER CONTROLLED TRACTION DIFFERENTIAL - SINGLE REAR AXLE               |     | 20     | \$734.00     |
| 878-018 | (1) DRIVER CONTROLLED DIFFERENTIAL LOCK REAR VALVE FOR SINGLE DRIVE AXLE |     |        | N/C          |
| 87B-008 | INDICATOR LIGHT FOR EACH DIFFERENTIAL LOCKOUT SWITCH                     |     |        | N/C          |

**Prepared for:**  
Matt Kolbow  
GERMANTOWN VILLAGE OF  
N112 W17001 Mequon Road  
Germantown, WI 53022  
Phone: 262-384-0497

**Prepared by:**  
Ryan Danbrea  
TRUCK COUNTRY OF  
WISCONSIN  
9202 N. 107TH STREET  
MILWAUKEE, WI 53224  
Phone:

| Data Code                     | Description                                                                                      | Weight<br>Front | Weight<br>Rear | Retail Price |
|-------------------------------|--------------------------------------------------------------------------------------------------|-----------------|----------------|--------------|
| 423-019                       | MERITOR 16.5X8.62 Q+ CAST SPIDER CAM<br>REAR BRAKES, DOUBLE ANCHOR, FABRICATED<br>SHOES          |                 |                | (\$1,428.00) |
| 433-002                       | NON-ASBESTOS REAR BRAKE LINING                                                                   |                 |                | STD          |
| 434-005                       | BRAKE CAMS AND CHAMBERS ON FORWARD<br>SIDE OF DRIVE AXLE(S) WITH AUXILIARY<br>SUPPORT BRACKETS   |                 |                | N/C          |
| 451-023                       | CONMET CAST IRON REAR BRAKE DRUMS                                                                |                 |                | \$361.00     |
| 425-002                       | REAR BRAKE DUST SHIELDS                                                                          |                 | 5              | (\$25.00)    |
| 440-006                       | REAR OIL SEALS                                                                                   |                 |                | STD          |
| 426-100                       | WABCO TRISTOP D LONGSTROKE 1-DRIVE<br>AXLE SPRING PARKING CHAMBERS                               |                 | -20            | (\$322.00)   |
| 428-002                       | MERITOR AUTOMATIC REAR SLACK<br>ADJUSTERS                                                        |                 |                | \$124.00     |
| 41T-002                       | CURRENT AVAILABLE SYNTHETIC 75W-90 REAR<br>AXLE LUBE                                             |                 |                | N/C          |
| 42T-001                       | STANDARD REAR AXLE BREATHER(S)                                                                   |                 |                | STD          |
| <b>Rear Suspension</b>        |                                                                                                  |                 |                |              |
| 622-216                       | AIRLINER 23,000# REAR SUSPENSION WITH<br>CHAIN CLEARANCE                                         |                 | 100            | (\$1,569.00) |
| 621-108                       | 9.5 INCH NOMINAL RIDE HEIGHT (460MM<br>GLOBAL REFERENCE HEIGHT)                                  |                 |                | N/C          |
| 431-001                       | STANDARD AXLE SEATS IN AXLE CLAMP<br>GROUP                                                       |                 |                | N/C          |
| 888-078                       | IGNITION CONTROLLED ELECTRIC DUMP<br>SWITCH FOR AIR SUSPENSION WITH STATE<br>RETENTION AND GAUGE |                 |                | STD          |
| 87D-012                       | REAR AIR SUSPENSION DUMP VALVE AUTOFILL<br>>5 MPH WITH INDICATOR LIGHT                           |                 |                | STD          |
| 910-004                       | DUAL AIR REAR SUSPENSION LEVELING<br>VALVES                                                      |                 |                | \$137.00     |
| 623-002                       | TRANSVERSE CONTROL RODS                                                                          |                 |                | STD          |
| 439-004                       | REAR SHOCK ABSORBERS - ONE AXLE (AIR<br>RIDE SUSPENSION)                                         |                 |                | N/C          |
| <b>Pusher / Tag Equipment</b> |                                                                                                  |                 |                |              |
| 429-998                       | NO PUSHER/TAG BRAKE DUST SHIELDS                                                                 |                 |                | STD          |
| <b>Brake System</b>           |                                                                                                  |                 |                |              |
| 490-1AU                       | WABCO 4S/4M ABS WITH TRACTION CONTROL<br>WITH ATC SHUT OFF SWITCH                                |                 |                | (\$383.00)   |
| 871-001                       | REINFORCED NYLON, FABRIC BRAID AND WIRE<br>BRAID CHASSIS AIR LINES                               |                 |                | STD          |

**Prepared for:**  
Matt Kolbow  
GERMANTOWN VILLAGE OF  
N112 W17001 Mequon Road  
Germantown, WI 53022  
Phone: 262-384-0497

**Prepared by:**  
Ryan Danbrea  
TRUCK COUNTRY OF  
WISCONSIN  
9202 N. 107TH STREET  
MILWAUKEE, WI 53224  
Phone:

| Data Code                    | Description                                                                                            | Weight<br>Front | Weight<br>Rear | Retail Price |
|------------------------------|--------------------------------------------------------------------------------------------------------|-----------------|----------------|--------------|
| 432-003                      | RELAY VALVE WITH 5-8 PSI CRACK PRESSURE,<br>NO REAR PROPORTIONING VALVE                                |                 |                | STD          |
| 480-088                      | WABCO SYSTEM SAVER HP WITH INTEGRAL<br>AIR GOVERNOR AND HEATER                                         |                 |                | N/C          |
| 483-004                      | WABCO OIL COALESCING FILTER FOR AIR<br>DRYER                                                           |                 |                | STD          |
| 479-004                      | AIR DRYER MOUNTED OUTBOARD ON LH RAIL                                                                  |                 |                | N/C          |
| 460-001                      | STEEL AIR BRAKE RESERVOIRS                                                                             |                 |                | STD          |
| 477-004                      | PULL CABLES ON ALL AIR RESERVOIR(S)                                                                    |                 |                | STD          |
| <b>Wheelbase &amp; Frame</b> |                                                                                                        |                 |                |              |
| 545-098                      | 4390MM (173 INCH) WHEELBASE, SFA ONLY                                                                  |                 |                | N/C          |
| 546-1C3                      | 11.0MM X 85.0MM X 287.0MM STEEL FRAME<br>(0.43X3.35X11.30 INCH) 120 KSI                                | -100            | 240            | \$1,193.00   |
| 548-803                      | TEM TO EVALUATE AND INSTALL FRAME RAIL<br>REINFORCEMENT AS NEEDED FOR FRONT<br>FRAME MOUNTED EQUIPMENT |                 |                | N/C          |
| 552-018                      | 1625MM (64 INCH) REAR FRAME OVERHANG                                                                   |                 |                | N/C          |
| 55W-006                      | FRAME OVERHANG RANGE: 61 INCH TO 70<br>INCH                                                            | -30             | 80             | N/C          |
| 549-002                      | 24 INCH INTEGRAL FRONT FRAME EXTENSION                                                                 | 100             |                | \$187.00     |
| AC8-99D                      | CALC'D BACK OF CAB TO REAR SUSP C/L (CA) :<br>91.34 in                                                 |                 |                |              |
| AE4-99D                      | CALC'D FRAME LENGTH - OVERALL : 289.43 in                                                              |                 |                |              |
| ZF1-99D                      | FRAME HEIGHT TOP FRONT UNLADEN : 44.8 in                                                               |                 |                |              |
| ZF2-99D                      | FRAME HEIGHT TOP FRONT LADEN : 40.95 in                                                                |                 |                |              |
| ZF3-99D                      | FRAME HEIGHT TOP REAR UNLADEN : 41.84 in                                                               |                 |                |              |
| ZF4-99D                      | FRAME HEIGHT TOP REAR LADEN : 40.27 in                                                                 |                 |                |              |
| 553-001                      | SQUARE END OF FRAME                                                                                    |                 |                | STD          |
| 559-001                      | STANDARD WEIGHT ENGINE CROSSMEMBER                                                                     |                 |                | STD          |
| 561-015                      | STANDARD CAST ALUMINUM CROSSMEMBER<br>BACK OF TRANSMISSION                                             |                 |                | STD          |
| 562-063                      | STANDARD CAST ALUMINUM MIDSHIP                                                                         |                 |                | STD          |
| 572-082                      | STANDARD CAST ALUMINUM REARMOST<br>CROSSMEMBER                                                         |                 |                | STD          |
| 565-020                      | STANDARD CAST ALUMINUM FORWARD<br>CROSSMEMBER                                                          |                 |                | STD          |
| 568-012                      | CAST ALUMINUM REAR SUSPENSION<br>CROSSMEMBER                                                           |                 |                | STD          |
| <b>Chassis Equipment</b>     |                                                                                                        |                 |                |              |
| 025-001                      | UNPOLISHED ALUMINUM WST EQUIPMENT<br>COVERS                                                            |                 |                | STD          |

**Prepared for:**  
Matt Kolbow  
GERMANTOWN VILLAGE OF  
N112 W17001 Mequon Road  
Germantown, WI 53022  
Phone: 262-384-0497

**Prepared by:**  
Ryan Danbrea  
TRUCK COUNTRY OF  
WISCONSIN  
9202 N. 107TH STREET  
MILWAUKEE, WI 53224  
Phone:

|                     | Data Code | Description                                                                             | Weight<br>Front | Weight<br>Rear | Retail Price |
|---------------------|-----------|-----------------------------------------------------------------------------------------|-----------------|----------------|--------------|
| *                   | 6CF-001   | 1 MID CHASSIS COMPONENT LOCATION REQUEST                                                |                 |                | \$200.00     |
|                     |           | , , , LOCATE AIR TANKS SAME AS UZ8788 NO TES                                            |                 |                |              |
|                     | 556-800   | TEMPORARY STEEL BUMPER                                                                  | -40             |                | (\$629.00)   |
|                     | 558-998   | NO FRONT TOW HOOKS                                                                      | -15             |                | N/C          |
|                     | 574-998   | NO LICENSE PLATE MOUNTING                                                               |                 |                | N/C          |
|                     | 551-034   | CLASS 10.9 THREADED METRIC FASTENERS                                                    |                 |                | STD          |
|                     | 44Z-005   | EXTERIOR HARNESES WRAPPED IN ABRASION TAPE, SECONDARY COVERING, & CONNECTOR PROTECTION  |                 |                | \$1,103.00   |
| <b>Fuel Tanks</b>   |           |                                                                                         |                 |                |              |
|                     | 204-151   | 60 GALLON/227 LITER ALUMINUM FUEL TANK - LH                                             | -5              |                | (\$86.00)    |
|                     | 218-006   | 25 INCH DIAMETER FUEL TANK(S)                                                           |                 |                | STD          |
|                     | 215-007   | PLAIN ALUMINUM/PAINTED STEEL FUEL/HYDRAULIC TANK(S) WITH POLISHED STAINLESS STEEL BANDS |                 |                | \$155.00     |
|                     | 212-007   | FUEL TANK(S) FORWARD                                                                    |                 |                | STD          |
|                     | 664-001   | PLAIN STEP FINISH                                                                       |                 |                | STD          |
|                     | 205-001   | FUEL TANK CAP(S)                                                                        |                 |                | STD          |
|                     | 216-020   | EQUIFLO INBOARD FUEL SYSTEM                                                             |                 |                | STD          |
|                     | 202-016   | HIGH TEMPERATURE REINFORCED NYLON FUEL LINE                                             |                 |                | STD          |
| <b>Tires</b>        |           |                                                                                         |                 |                |              |
|                     | 093-1YU   | CONTINENTAL HAU 3 WT 315/80R22.5 20 PLY RADIAL FRONT TIRES                              | 100             |                | \$482.00     |
|                     | 094-12V   | CONTINENTAL HDR2+ 11R22.5 16 PLY RADIAL REAR TIRES                                      |                 | 92             | (\$300.00)   |
| <b>Wheels</b>       |           |                                                                                         |                 |                |              |
|                     | 502-664   | ALCOA ULTRA ONE 89U63X 22.5X9.00 10-HUB PILOT 3.12 INSET 10-HD ALUMINUM FRONT WHEELS    | -44             |                | \$170.00     |
|                     | 505-766   | ALCOA ULA18X 22.5X8.25 10-HUB PILOT ALUMINUM DISC REAR WHEELS                           |                 | -124           | STD          |
|                     | 496-011   | FRONT WHEEL MOUNTING NUTS                                                               |                 |                | STD          |
|                     | 497-011   | REAR WHEEL MOUNTING NUTS                                                                |                 |                | STD          |
|                     | 498-011   | NYLON WHEEL GUARDS FRONT AND REAR ALL INTERFACES                                        |                 |                | \$32.00      |
| <b>Cab Exterior</b> |           |                                                                                         |                 |                |              |
|                     | 829-053   | 111.6 INCH BBC CONVENTIONAL ALUMINUM CAB                                                |                 |                | STD          |

**Prepared for:**  
Matt Kolbow  
GERMANTOWN VILLAGE OF  
N112 W17001 Mequon Road  
Germantown, WI 53022  
Phone: 262-384-0497

**Prepared by:**  
Ryan Danbrea  
TRUCK COUNTRY OF  
WISCONSIN  
9202 N. 107TH STREET  
MILWAUKEE, WI 53224  
Phone:

| Data Code | Description                                                                                                                                  | Weight<br>Front | Weight<br>Rear | Retail Price |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------|--------------|
| 82A-028   | STAINLESS STEEL CAB ACCENT MOLDING                                                                                                           |                 |                | STD          |
| 667-001   | FRONT FENDERS                                                                                                                                |                 |                | STD          |
| 754-017   | BOLT-ON MOLDED FLEXIBLE FENDER<br>EXTENSIONS                                                                                                 | 10              |                | \$115.00     |
| 678-066   | INTERIOR GRAB HANDLES WITH ADDED<br>LOWER LH AND RH A PILLAR GRAB HANDLES<br>AND LH AND RH EXTERIOR NON-SLIP GRAB<br>HANDLES                 |                 |                | STD          |
| 65X-010   | BRIGHT HOOD MOUNTED AIR INTAKE GRILLE,<br>BLACK SCREEN, WITH LED ACCENT LIGHTS                                                               |                 |                | STD          |
| 640-016   | X-SERIES STEEL REINFORCED ALUMINUM CAB                                                                                                       |                 |                | STD          |
| 644-048   | X-SERIES VOCATIONAL HOOD                                                                                                                     |                 |                | STD          |
| 67U-001   | HOOD OPENING ASSIST WITH LOCKING STRUT                                                                                                       |                 |                | STD          |
| 652-016   | WESTERN STAR NAMEPLATES                                                                                                                      |                 |                | STD          |
| 727-012   | DUAL HADLEY SD-978 26 INCH RECTANGULAR<br>AIR HORNS                                                                                          |                 |                | STD          |
| 726-001   | SINGLE ELECTRIC HORN                                                                                                                         |                 |                | STD          |
| 575-001   | REAR LICENSE PLATE MOUNT END OF FRAME                                                                                                        |                 |                | STD          |
| 312-095   | DUAL STAGE INTELLIGENT LED HEADLIGHTS<br>WITH HEATED LENS SYSTEM                                                                             |                 |                | STD          |
| 302-073   | VISOR MOUNTED LED MARKER LIGHTS                                                                                                              |                 |                | N/C          |
| 314-824   | WIRING AND SWITCH FOR CUSTOMER<br>FURNISHED SNOW PLOW LAMPS WITH DUAL<br>CONNECTIONS AT BUMPER                                               |                 |                | \$162.00     |
| 311-001   | DAYTIME RUNNING LIGHTS                                                                                                                       |                 |                | STD          |
| 294-1AY   | INTEGRAL LED STOP/TAIL/BACKUP LIGHTS                                                                                                         |                 |                | STD          |
| 300-043   | LED SIDE TURN SIGNAL                                                                                                                         |                 |                | STD          |
| 744-105   | C-BAR MIRROR SYSTEM WITH DUAL HEATED<br>MIRRORS WITH INTEGRAL HEATED CONVEX,<br>DUAL REMOTE, STAINLESS STEEL BACK<br>COVER, AND BRIGHT C-BAR | 20              |                | \$113.00     |
| 796-001   | 102 INCH EQUIPMENT WIDTH                                                                                                                     |                 |                | STD          |
| 743-209   | LH AND RH CONVEX MIRRORS INTEGRAL WITH<br>PRIMARY MIRRORS                                                                                    |                 |                | STD          |
| 74A-001   | RH DOWN VIEW MIRROR                                                                                                                          |                 |                | STD          |
| 64A-998   | NO HOOD MOUNTED BUG DEFLECTOR                                                                                                                |                 |                | STD          |
| 729-001   | STANDARD SIDE/REAR REFLECTORS                                                                                                                |                 |                | STD          |
| 677-098   | UNPOLISHED ALUMINUM WST<br>AFTERTREATMENT SYSTEM COVER                                                                                       |                 |                | STD          |
| 764-020   | STAINLESS STEEL EXTERIOR SUN VISOR WITH<br>INTEGRAL MARKER LIGHTS                                                                            | 16              |                | \$538.00     |
| 768-064   | SINGLE SOLAR TINTED REAR WINDOW, (1) 31<br>INCH X 20 INCH                                                                                    |                 |                | STD          |



**Prepared for:**  
Matt Kolbow  
GERMANTOWN VILLAGE OF  
N112 W17001 Mequon Road  
Germantown, WI 53022  
Phone: 262-384-0497

**Prepared by:**  
Ryan Danbrea  
TRUCK COUNTRY OF  
WISCONSIN  
9202 N. 107TH STREET  
MILWAUKEE, WI 53224  
Phone:

|   | Data Code           | Description                                                                                                                 | Weight<br>Front | Weight<br>Rear | Retail Price |
|---|---------------------|-----------------------------------------------------------------------------------------------------------------------------|-----------------|----------------|--------------|
|   | 663-019             | 1-PIECE ROPED-IN SOLAR GREEN GLASS WINDSHIELD                                                                               |                 |                | STD          |
|   | 659-006             | 8 LITER (2 GAL) WINDSHIELD WASHER RESERVOIR, CAB MOUNTED, WITH FLUID LEVEL INDICATOR                                        |                 |                | STD          |
|   | <b>Cab Interior</b> |                                                                                                                             |                 |                |              |
|   | 055-016             | X-SERIES PREMIUM INTERIOR TRIM LEVEL PACKAGE                                                                                |                 |                | N/C          |
|   | 707-1C4             | CHARCOAL BLACK VINYL UP LEVEL INTERIOR                                                                                      |                 |                | \$186.00     |
|   | 70K-017             | CARBON WITH PREMIUM TEAK ACCENT                                                                                             |                 |                | \$87.00      |
|   | 772-035             | BLACK MATS WITH ADDED FLOOR HEAT AND NOISE INSULATION                                                                       |                 |                | \$126.00     |
|   | 785-014             | (2) DASH MOUNTED POWER OUTLETS AND COIN TRAY                                                                                |                 |                | STD          |
|   | 691-001             | FORWARD ROOF MOUNTED CONSOLE                                                                                                |                 |                | STD          |
|   | 693-019             | LH AND RH DOOR STORAGE POCKETS INTEGRATED INTO MOLDED DOOR PANELS                                                           |                 |                | STD          |
|   | 741-015             | (2) COAT HOOKS ON BACKWALL OF CAB                                                                                           |                 |                | STD          |
|   | 738-021             | DIGITAL ALARM CLOCK IN DRIVER DISPLAY                                                                                       |                 |                | STD          |
| * | 720-078             | 5 LB. FIRE EXTINGUISHER SHIPPED LOOSE                                                                                       |                 |                | \$60.00      |
|   | 170-015             | STANDARD HEATER PLUMBING                                                                                                    |                 |                | STD          |
|   | 698-001             | RADIATOR MOUNTED AIR CONDITIONER CONDENSER                                                                                  |                 |                | STD          |
|   | 739-034             | PREMIUM INSULATION                                                                                                          |                 |                | \$83.00      |
|   | 324-1B2             | PREMIUM LED CAB LIGHTING                                                                                                    |                 |                | \$130.00     |
|   | 787-004             | REMOTE KEYLESS ENTRY AND 2 TRANSMITTERS                                                                                     |                 |                | STD          |
|   | 657-138             | ALL UNIT (S) KEYED ALIKE WITH CUSTOMER SPECIFIED KEY NUMBER FT1041                                                          |                 |                | \$43.00      |
|   | 78G-003             | KEY QUANTITY OF 3                                                                                                           |                 |                | \$9.00       |
|   | 655-028             | LH AND RH ELECTRIC DOOR LOCKS WITH AUTO UNLOCK FEATURE WHEN DOOR IS SET FROM OPEN TO CLOSED POSITION                        |                 |                | STD          |
|   | 64C-002             | BRIGHT DOOR HANDLES                                                                                                         |                 |                | \$11.00      |
|   | 722-028             | TRIANGULAR REFLECTORS KIT WITHOUT FLARES SHIPPED LOOSE IN CAB                                                               | 10              |                | \$24.00      |
|   | 756-1J6             | PREMIUM 2.0 HIGH BACK AIR SUSPENSION DRIVER SEAT WITH 2 AIR LUMBAR, INTEGRATED CUSHION EXTENSION, TILT AND ADJUSTABLE SHOCK | 20              |                | \$23.00      |
|   | 760-294             | BATTERY BOX MID BACK NON SUSPENSION PASSENGER SEAT                                                                          |                 |                | STD          |

**Prepared for:**  
Matt Kolbow  
GERMANTOWN VILLAGE OF  
N112 W17001 Mequon Road  
Germantown, WI 53022  
Phone: 262-384-0497

**Prepared by:**  
Ryan Danbrea  
TRUCK COUNTRY OF  
WISCONSIN  
9202 N. 107TH STREET  
MILWAUKEE, WI 53224  
Phone:

| Data Code | Description                                                                                | Weight<br>Front | Weight<br>Rear | Retail Price |
|-----------|--------------------------------------------------------------------------------------------|-----------------|----------------|--------------|
| 757-001   | BLACK SUSPENSION COVER FOR AIR DRIVER SEAT                                                 | 2               |                | \$50.00      |
| 759-007   | DUAL DRIVER SEAT ARMRESTS, NO PASSENGER SEAT ARMRESTS                                      |                 |                | STD          |
| 758-135   | BLACK MORDURA CLOTH DRIVER SEAT COVER WITH EMBROIDERED LOGO                                |                 |                | STD          |
| 761-138   | BLACK MORDURA CLOTH PASSENGER SEAT COVER WITH NO LOGO                                      |                 |                | STD          |
| 763-1AA   | 3 POINT ADJUSTABLE D-RING RETRACTOR DRIVER AND FIXED D-RING RETRACTOR PASSENGER SEAT BELTS |                 |                | STD          |
| 532-002   | ADJUSTABLE TILT AND TELESCOPING STEERING COLUMN                                            |                 |                | STD          |
| 540-070   | 4-SPOKE 18 INCH (450MM) LEATHER WRAPPED STEERING WHEEL WITH CHROME SWITCH BEZELS           |                 |                | \$129.00     |
| 765-002   | DRIVER AND PASSENGER INTERIOR SUN VISORS                                                   |                 |                | STD          |

#### Instruments & Controls

|         |                                                                                              |  |  |          |
|---------|----------------------------------------------------------------------------------------------|--|--|----------|
| 185-004 | STANDARD FOOT PEDAL SYSTEM                                                                   |  |  | STD      |
| 106-002 | ELECTRONIC ACCELERATOR CONTROL                                                               |  |  | STD      |
| 870-002 | BRIGHT ARGENT FINISH GAUGE BEZELS                                                            |  |  | \$29.00  |
| 734-018 | STANDARD CENTER INSTRUMENT PANEL                                                             |  |  | STD      |
| 840-001 | DUAL NEEDLE PRIMARY AND SECONDARY AIR PRESSURE GAUGE                                         |  |  | STD      |
| 198-035 | ELECTRONIC AIR RESTRICTION INDICATOR DISPLAYED IN DRIVER DISPLAY                             |  |  | \$32.00  |
| 149-015 | ELECTRONIC CRUISE CONTROL WITH CONTROLS ON STEERING WHEEL SPOKES                             |  |  | STD      |
| 156-007 | KEY OPERATED IGNITION SWITCH AND INTEGRAL START POSITION; 4 POSITION OFF/RUN/START/ACCESSORY |  |  | STD      |
| 811-044 | PREMIUM INSTRUMENT CLUSTER WITH 5.0 INCH TFT COLOR DISPLAY                                   |  |  | STD      |
| 81B-003 | DIGITAL PANEL LAMP DIMMER SWITCH IN DRIVER DISPLAY                                           |  |  | STD      |
| 160-045 | HEAVY DUTY ONBOARD DIAGNOSTICS INTERFACE CONNECTOR WITH DUST CAP LOCATED BELOW LH DASH       |  |  | STD      |
| 844-001 | 2 INCH ELECTRIC FUEL GAUGE                                                                   |  |  | STD      |
| 845-011 | FUEL FILTER RESTRICTION INDICATOR                                                            |  |  | STD      |
| 148-074 | ENGINE REMOTE INTERFACE NOT CONFIGURED                                                       |  |  | \$134.00 |

**Prepared for:**  
Matt Kolbow  
GERMANTOWN VILLAGE OF  
N112 W17001 Mequon Road  
Germantown, WI 53022  
Phone: 262-384-0497

**Prepared by:**  
Ryan Danbrea  
TRUCK COUNTRY OF  
WISCONSIN  
9202 N. 107TH STREET  
MILWAUKEE, WI 53224  
Phone:

| Data Code | Description                                                                                          | Weight<br>Front | Weight<br>Rear | Retail Price |
|-----------|------------------------------------------------------------------------------------------------------|-----------------|----------------|--------------|
| 856-001   | ELECTRICAL ENGINE COOLANT TEMPERATURE GAUGE                                                          |                 |                | STD          |
| 854-001   | ENGINE OIL TEMPERATURE GAUGE                                                                         |                 |                | STD          |
| 852-002   | ELECTRIC ENGINE OIL PRESSURE GAUGE                                                                   |                 |                | STD          |
| 864-001   | 2 INCH TRANSMISSION OIL TEMPERATURE GAUGE                                                            |                 |                | STD          |
| 867-004   | ELECTRONIC OUTSIDE TEMPERATURE SENSOR DISPLAY IN DRIVER MESSAGE CENTER                               |                 |                | STD          |
| 830-017   | ENGINE AND TRIP HOUR METERS INTEGRAL WITHIN DRIVER DISPLAY                                           |                 |                | STD          |
| 372-123   | PTO CONTROLS FOR ENHANCED VEHICLE ELECTRIC/ELECTRONIC ARCHITECTURE                                   |                 |                | STD          |
| 736-998   | NO OBSTACLE DETECTION SYSTEM                                                                         |                 |                | (\$4,324.00) |
| 73K-998   | NO SIDE OBJECT DETECTION SYSTEM                                                                      |                 |                | STD          |
| 72J-998   | NO DR ASSIST SYSTEM                                                                                  |                 |                | (\$32.00)    |
| 49B-998   | NO VEHICLE STABILITY ADVISOR OR CONTROL                                                              |                 |                | (\$354.00)   |
| 73B-998   | NO LANE DEPARTURE WARNING SYSTEM                                                                     |                 |                | (\$1,080.00) |
| 35M-010   | QUICKFIT PROGRAMMABLE INTERFACE MODULE                                                               | 10              |                | \$154.00     |
| 6TS-005   | TMC RP1226 ACCESSORY CONNECTOR LOCATED BEHIND PASSENGER SIDE REMOVEABLE DASH PANEL                   |                 |                | STD          |
| 746-135   | AM/FM/WB WORLD TUNER RADIO WITH SIRIUSXM, BLUETOOTH, IPOD INTERFACE, USB AND AUXILIARY INPUTS, J1939 |                 |                | N/C          |
| 747-001   | DASH MOUNTED RADIO                                                                                   |                 |                | STD          |
| 750-041   | STANDARD SPEAKER SYSTEM                                                                              |                 |                | STD          |
| 753-998   | NO AM/FM RADIO ANTENNA                                                                               |                 |                | (\$11.00)    |
| 748-006   | POWER AND GROUND WIRING PROVISION OVERHEAD                                                           |                 |                | STD          |
| 749-001   | ROOF/OVERHEAD CONSOLE CB RADIO PROVISION                                                             |                 |                | STD          |
| 751-001   | SINGLE REMOTE SPEAKER WITH LEAD FOR 2-WAY RADIO                                                      |                 |                | STD          |
| 752-004   | SINGLE FIBERGLASS LH MIRROR MOUNTED CB ANTENNA WITH BRACKET AND LEAD                                 |                 |                | STD          |
| 75W-001   | HEADLINER MULTI-BAND ANTENNA: AM/FM/WEATHERBAND, WIFI/BLUETOOTH, GNSS/GPS                            |                 |                | \$75.00      |
| 78C-003   | INTEROPERABLE SDAR ANTENNA                                                                           |                 |                | \$91.00      |

**Prepared for:**  
Matt Kolbow  
GERMANTOWN VILLAGE OF  
N112 W17001 Mequon Road  
Germantown, WI 53022  
Phone: 262-384-0497

**Prepared by:**  
Ryan Danbrea  
TRUCK COUNTRY OF  
WISCONSIN  
9202 N. 107TH STREET  
MILWAUKEE, WI 53224  
Phone:

| Data Code                         | Description                                                                                             | Weight<br>Front | Weight<br>Rear | Retail Price |
|-----------------------------------|---------------------------------------------------------------------------------------------------------|-----------------|----------------|--------------|
| 810-027                           | ELECTRONIC MPH SPEEDOMETER WITH<br>SECONDARY KPH SCALE, WITHOUT<br>ODOMETER                             |                 |                | STD          |
| 812-032                           | ELECTRONIC 2500 RPM TACHOMETER                                                                          |                 |                | STD          |
| 813-1C8                           | DETROIT CONNECT PLATFORM HARDWARE                                                                       |                 |                | STD          |
| 8D1-205                           | 5 YEARS DETROIT CONNECT BASE PACKAGE<br>(FEATURES VARY BY MODEL) DETROIT<br>CONNECT PLATFORM            |                 |                | STD          |
| 162-002                           | IGNITION SWITCH CONTROLLED ENGINE STOP                                                                  |                 |                | STD          |
| 81Y-005                           | PRE-TRIP INSPECTION FEATURE FOR<br>EXTERIOR LAMPS ONLY                                                  |                 |                | STD          |
| 842-006                           | DIGITAL TURBO AIR PRESSURE IN DRIVER<br>DISPLAY                                                         |                 |                | (\$23.00)    |
| 836-015                           | DIGITAL VOLTAGE DISPLAY INTEGRAL WITH<br>DRIVER DISPLAY                                                 |                 |                | STD          |
| 304-030                           | ROTARY HEADLAMP SWITCH, MARKER<br>LIGHTS/HEADLIGHTS SWITCH WITH PULL OUT<br>FOR OPTIONAL FOG/ROAD LAMPS |                 |                | N/C          |
| 882-018                           | ONE VALVE PARKING BRAKE SYSTEM WITH<br>DASH VALVE CONTROL AUTONEUTRAL AND<br>WARNING INDICATOR          |                 |                | \$45.00      |
| 299-020                           | SELF CANCELING TURN SIGNAL SWITCH WITH<br>DIMMER, HEADLAMP FLASH,<br>WASH/WIPE/INTERMITTENT             |                 |                | STD          |
| 4E1-013                           | PROGRAMMABLE SWITCHES/INDICATORS<br>LOCATED IN AUXILIARY PANEL                                          |                 |                | N/C          |
| 48H-001                           | QUICKFIT POWERTRAIN INTERFACE<br>CONNECTOR LOCATED BETWEEN SEATS WITH<br>CAPS                           |                 |                | \$77.00      |
| * 4CG-007                         | 7 EXTRA PROGRAMMABLE<br>SWITCHES/INDICATORS                                                             |                 |                | N/C          |
|                                   | \$A1A0230ZZ,A1B0231ZZ,A1C0191ZZ,A1D0071ZZ,A1E0154ZZ,A1F0082ZZ,A2A0069ZZ                                 |                 |                |              |
| 48C-001                           | QUICKFIT PROGRAMMABLE INTERFACE<br>CONNECTOR(S) BETWEEN SEATS WITH CAP                                  |                 |                | N/C          |
| <b>Design</b>                     |                                                                                                         |                 |                |              |
| 065-000                           | PAINT: ONE SOLID COLOR                                                                                  |                 |                | STD          |
| <b>Color</b>                      |                                                                                                         |                 |                |              |
| 980-6KK                           | CAB COLOR A: L6389EY OMAHA ORANGE ELITE<br>EY                                                           |                 |                | N/C          |
| 986-020                           | BLACK, HIGH SOLIDS POLYURETHANE CHASSIS<br>PAINT                                                        |                 |                | STD          |
| <b>Certification / Compliance</b> |                                                                                                         |                 |                |              |

**Prepared for:**  
Matt Kolbow  
GERMANTOWN VILLAGE OF  
N112 W17001 Mequon Road  
Germantown, WI 53022  
Phone: 262-384-0497

**Prepared by:**  
Ryan Danbrea  
TRUCK COUNTRY OF  
WISCONSIN  
9202 N. 107TH STREET  
MILWAUKEE, WI 53224  
Phone:

| Data Code | Description                                                    | Weight<br>Front | Weight<br>Rear | Retail Price |
|-----------|----------------------------------------------------------------|-----------------|----------------|--------------|
| 996-001   | U.S. FMVSS CERTIFICATION, EXCEPT SALES<br>CABS AND GLIDER KITS |                 |                | STD          |

### Secondary Factory Options

|   |         |                                                                                                                              |  |     |
|---|---------|------------------------------------------------------------------------------------------------------------------------------|--|-----|
|   | 999-014 | DEALER HAS BEEN ADVISED OF AND<br>ACCEPTED RESPONSIBILITY FOR<br>MODIFICATIONS DUE TO POSSIBLE<br>PTO/CHASSIS INTERFERENCE   |  | N/C |
| * | 84J-000 | ENGINE BRAKE RANGE PRESELECT<br>RECOMMENDED BY DTNA AND ALLISON, THIS<br>DEFINED BY ENGINE AND VOCATIONAL USAGE              |  | N/C |
| * | 84K-000 | ENGINE BRAKE RANGE ALTERNATE<br>PRESELECT RECOMMENDED BY DTNA AND<br>ALLISON, THIS DEFINED BY ENGINE AND<br>VOCATIONAL USAGE |  | N/C |
| * | 97G-004 | TRANSMISSION PROGNOSTICS - ENABLED 2013                                                                                      |  | N/C |
| * | 84U-000 | DRIVER SWITCH INPUT - DEFAULT - NO<br>SWITCHES                                                                               |  | N/C |

### Sales Programs

|  |         |                                 |  |     |
|--|---------|---------------------------------|--|-----|
|  | PMY-3X2 | STARQUOTE 47X/49X SALES PROGRAM |  | N/C |
|--|---------|---------------------------------|--|-----|

## TOTAL VEHICLE SUMMARY

### Adjusted List Price

Adjusted List Price \*\* \$201,886.00

### Weight Summary

|                             | Weight<br>Front | Weight<br>Rear | Total<br>Weight |
|-----------------------------|-----------------|----------------|-----------------|
| Factory Weight <sup>+</sup> | 8782 lbs        | 4978 lbs       | 13760 lbs       |
| Total Weight <sup>+</sup>   | 8782 lbs        | 4978 lbs       | 13760 lbs       |

## ITEMS NOT INCLUDED IN ADJUSTED LIST PRICE



**Prepared for:**  
 Matt Kolbow  
 GERMANTOWN VILLAGE OF  
 N112 W17001 Mequon Road  
 Germantown, WI 53022  
 Phone: 262-384-0497

**Prepared by:**  
 Ryan Danbrea  
 TRUCK COUNTRY OF  
 WISCONSIN  
 9202 N. 107TH STREET  
 MILWAUKEE, WI 53224  
 Phone:

### Other Factory Charges

|         |                                                                                  |            |
|---------|----------------------------------------------------------------------------------|------------|
| RAU-025 | MY25 ESCALATOR                                                                   | \$2,750.00 |
| RD1-205 | 5 YRS DETROIT CONNECT BASE PKG (FEATURES VARY BY MODEL) DETROIT CONNECT PLATFORM | STD        |
| RFY-022 | FRONT TIRE SURCHARGE                                                             | \$60.00    |
| RFU-022 | REAR TIRE SURCHARGE                                                              | \$120.00   |
| P73-2WS | STANDARD DESTINATION CHARGE                                                      | \$3,375.00 |

### Extended Warranty

|                                          |                                                                                   |            |
|------------------------------------------|-----------------------------------------------------------------------------------|------------|
| WAI-5HR                                  | EW4: DD13 VOC \$0 DED 7 YEARS/100,000 MILES/161,000 KM FEX APPLIES                | \$4,985.00 |
| WA2-049                                  | WIRING: HD MODERATE 5 YEAR/200,000 MILES/322,000 KM EXTENDED COVERAGE FEX APPLIES | \$800.00   |
| Currency Exchange Rate                   |                                                                                   | 1.0000     |
| Total Extended Warranty (Local Currency) |                                                                                   | \$5,785.00 |

(+) Weights shown are estimates only.

If weight is critical, contact Customer Application Engineering.

(\*\*) Prices shown do not include taxes, fees, etc... "Net Equipment Selling Price" is located on the Quotation Details Proposal Report.

(\*\*\*) All cost increases for major components (Engines, Transmissions, Axles, Front and Rear Tires) and government mandated requirements, tariffs, and raw material surcharges will be passed through and added to factory invoices.

**Prepared for:**  
 Matt Kolbow  
 GERMANTOWN VILLAGE OF  
 N112 W17001 Mequon Road  
 Germantown, WI 53022  
 Phone: 262-384-0497

**Prepared by:**  
 Ryan Danbrea  
 TRUCK COUNTRY OF  
 WISCONSIN  
 9202 N. 107TH STREET  
 MILWAUKEE, WI 53224  
 Phone:

## Q U O T A T I O N

### WESTERN STAR 47X

SET FORWARD AXLE - TRUCK  
 DETROIT DD13 GEN 5 12.8L 370 HP @ 1625 RPM, 1900  
 GOV RPM, 1250 LB/FT @ 975 RPM  
 ALLISON 3000 RDS AUTOMATIC TRANSMISSION WITH  
 PTO PROVISION  
 RS-23-160 23,000# R-SERIES SINGLE REAR AXLE  
 AIRLINER 23,000# REAR SUSPENSION WITH CHAIN  
 CLEARANCE  
 DETROIT DA-F-20.0-5 20,000# FL 1 71.0 KPI/3.74 DROP  
 SINGLE FRONT AXLE

20,000# TAPERLEAF FRONT SUSPENSION  
 111.6 INCH BBC CONVENTIONAL ALUMINUM CAB  
 4390MM (173 INCH) WHEELBASE, SFA ONLY  
 11.0MM X 85.0MM X 287.0MM STEEL FRAME  
 (0.43X3.35X11.30 INCH) 120 KSI  
 1625MM (64 INCH) REAR FRAME OVERHANG  
 TEM TO EVALUATE AND INSTALL FRAME RAIL  
 REINFORCEMENT AS NEEDED FOR FRONT  
 FRAME MOUNTED EQUIPMENT

|                                  |                      |           | PER UNIT       |           | TOTAL          |
|----------------------------------|----------------------|-----------|----------------|-----------|----------------|
| VEHICLE PRICE                    | TOTAL # OF UNITS (1) | \$        | 139,285        | \$        | 139,285        |
| EXTENDED WARRANTY                |                      | \$        | 5,785          | \$        | 5,785          |
| DEALER INSTALLED OPTIONS         |                      | \$        | 0              | \$        | 0              |
| <b>CUSTOMER PRICE BEFORE TAX</b> |                      | <b>\$</b> | <b>145,070</b> | <b>\$</b> | <b>145,070</b> |

### TAXES AND FEES

|                |    |   |    |   |
|----------------|----|---|----|---|
| TAXES AND FEES | \$ | 0 | \$ | 0 |
| OTHER CHARGES  | \$ | 0 | \$ | 0 |

### TRADE-IN

|                    |                  |    |         |    |         |
|--------------------|------------------|----|---------|----|---------|
| TRADE-IN ALLOWANCE |                  | \$ | (0)     | \$ | (0)     |
| BALANCE DUE        | (LOCAL CURRENCY) | \$ | 145.070 | \$ | 145.070 |

### COMMENTS:

Projected delivery on \_\_\_\_ / \_\_\_\_ / \_\_\_\_ provided the order is received before \_\_\_\_ / \_\_\_\_ / \_\_\_\_.

### APPROVAL:

Please indicate your acceptance of this quotation by signing below:

Customer: X \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_.

**Daimler Truck Financial**

Financing that works for you.

See your local dealer for a competitive quote from Daimler Truck Financial, or contact us at [Information@dtffoffers.com](mailto:Information@dtffoffers.com).

Daimler Truck Financial offers a variety of finance, lease and insurance solutions to fit your business needs. For more information about our products and services, visit our website at [www.daimler-truckfinancial.com](http://www.daimler-truckfinancial.com).

**Prepared for:**

Matt Kolbow  
GERMANTOWN VILLAGE OF  
N112 W17001 Mequon Road  
Germantown, WI 53022  
Phone: 262-384-0497

**Prepared by:**

Ryan Danbrea  
TRUCK COUNTRY OF  
WISCONSIN  
9202 N. 107TH STREET  
MILWAUKEE, WI 53224  
Phone:

# ***BURKE TRUCK & EQUIPMENT, INC.***

**5337 REINER RD., MADISON, WISCONSIN 53718**

**888-249-9788 / 608-249-9788 / FAX: 608-837-7530**

**Email: [sales@burketruck.com](mailto:sales@burketruck.com) / Web: [www.burketruck.com](http://www.burketruck.com)**

**12/30/24**

## **Prepared for the Village of Germantown**



2007 international pictured

## **2024 Single Axle Patrol Truck Package**

### **Accessory Equipment Summary**

- J-Craft 5-yd dump body.
- Burke Road Tamer 12-ft moldboard plow with trip moldboard.
- Burke Snow Patrol 9-ft wing.
- J-Craft tailgate spreader with 6-inch auger.
- Force America Hydraulics.
- Burke Sealed electrical system.



## ACCESSORY EQUIPMENT SPECS

---



### **J-Craft Stainless Steel Dump Body**

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Capacity   | 5-yd                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Length     | 10-ft, 24" sides, 36" head sheet, 32" tailgate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Structural | Unibody design (no cross members, very low mounting height); 8" I-beam longitudinal on underbody hoist; 12" clearance with 10' UB hoist; 4" structural channel subframe; 10-gauge sides of 201 stainless steel; one-piece 1/4" AR400 steel floor; full-height front corner post; one intermediate horizontal side brace on each side; 5-3/4" X 12" full-depth rear corner post tied to an 8" structural channel rear apron; manual double-over-center tailgate release mechanism; tailgate with full perimeter boxing and sloped horizontal brace and top rail; 4" structural channel subframe with 6" X 4" X 3/8" structural angle rear hinge; 1-1/2" diameter 303 stainless steel rear hinge pins with greaseable pivot points. |



## Burke Truck & Equipment, Inc. detailed spec list

|                       |                                                                                                                  |
|-----------------------|------------------------------------------------------------------------------------------------------------------|
| Hydraulic             | Underbody hoist                                                                                                  |
| Coating               | Body chemically cleaned with a phosphate solution before underside of body and subframe primed and painted black |
| Rear Hitch            | <b><u>Rear hitch plate only with d-rings</u></b>                                                                 |
| Plug                  | <b><u>seven pin ROUND</u></b>                                                                                    |
| Side boards           | 2x12 plastic                                                                                                     |
| Under coat            | <b>Du Pont bake on system</b>                                                                                    |
| Transmission selector | <b>Mounted on left side of consol. Contact village for location</b>                                              |

## Burke Road Tamer 2000 Plow



### **Burke Road Tamer 12-ft moldboard Plow with Trip moldboard**

|                      |                                                                                                                                               |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Plow                 | 12-ft X 42", 7-gauge broke (not rolled), with 8 vertical ribs, 5 hinge points,.                                                               |
| Table                | 1 adjustable parking stand, two 4 x 13 D.A. cylinders with 2" nitrided rods. All connecting points from table to moldboard have poly bushings |
| Hitch                | <b>Wausau 225C drop pin</b>                                                                                                                   |
| Hydraulic cylinder   | The 4" x 10" cylinder is custom-made to Burke specifications and exceeds cylinder size and capacity needed for snowplowing equipment.         |
| Hydraulic hook-up    | series 72 couplers.                                                                                                                           |
| Blades               | <b>JOMA</b>                                                                                                                                   |
| Flap                 | 12" flap mounted to top of plow moldboard                                                                                                     |
| <b>Parking stand</b> | <b>weld on round mount on wing side plate for storage.</b>                                                                                    |
| <b>Accumulator</b>   | <b>To be installed on plow hitch to cushion plow when in carry position</b><br><b>Provided by village</b>                                     |



## Burke WING



### **Burke Snow Patrol 10-ft Wing**

|                     |                                                                                                                                                                                                                                         |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wing                | 10-ft right moldboard overall with 9-ft trip cutting edge with 4 torsion springs of at least 7/8" (not double panel); wing moldboard is broke (not rolled) 10-ga; face 28" high at the toe end and 35" high at the heel. <b>3/4"x6"</b> |
| Blades              | <b>JOMA</b> grade 9 plow bolts on a standard highway punch.                                                                                                                                                                             |
| Front post          | Patented A-ARM LIFT SYSTEM and at least 18" free travel and a minimum of 15" ground clearance; toe cylinder 3 1/2" X 10" S.A. cylinder with 2" nitrided rod; heel cylinder 4" X 20" with 2" nitrided rod and De-Cell.                   |
| Rear brace tube     | <b>Burke power teletube.</b>                                                                                                                                                                                                            |
| Hydraulic cylinders | all plow cylinders are custom-made to Burke specifications and exceed cylinder size and capacity needed for snowplowing equipment. All rods are nitrided. <b>1/2" Hose to toe cylinder.</b>                                             |
| Rope light          | <b>outlining wing</b>                                                                                                                                                                                                                   |
| Timbren             | <b>Right front</b>                                                                                                                                                                                                                      |





**HI-WAY Equipment 304 Stainless Steel SA-6 Tailgate Spreader with 6 inch Auger**

|                      |                                                                                                                          |
|----------------------|--------------------------------------------------------------------------------------------------------------------------|
| Auger                | 6" auger 3/8" auger fighting, heavy-duty 2-3/8" schedule 80 pipe; easy cleanout and access to auger from top and bottom. |
| Spinner              | 18" poly spinner. <b>mounted in CENTER DROP</b>                                                                          |
| <b>Salter plates</b> | <b>designed to hold gate open and protect operator</b>                                                                   |
| Controls             | Force 6100                                                                                                               |
| Drive                | All-hydraulic direct drive.                                                                                              |
| <u>Pre-wet</u>       | 100 gallon side mount (hydraulic)                                                                                        |





### **Hydraulic System**

|                  |                                                                                                                             |
|------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Spreader control | Force 6100 With GPS <b>Floor mount</b>                                                                                      |
| Pump             | Force America load sensing                                                                                                  |
| Capacity         | 60 gallon per minute.                                                                                                       |
| Valve bank       | Force America Add-A-Stack                                                                                                   |
| Reservoir        | Stainless Steel tank and valve encloser in one                                                                              |
| Hoses            | Two (2) wire hydraulic hose used throughout entire system. Stainless steel tubing bracketed to the rear and front of truck. |



**Electrical System**

**Wiring:**

All wiring is double jacketed with ethylene-propylene rubber to seal out moisture and to protect against damage. In addition to the double jacket, all wires that are in an abrasion area are covered with vinyl tubing for additional protection. All electrical connections are sealed against moisture. All electrical junction boxes are waterproof. All lights are grounded through the wiring system, not to mounting bolts. All junction boxes are grounded to the chassis in addition to the wiring system. All bulbs and electrical plugs are coated with dielectric grease to seal out moisture. Wiring harnesses are securely fastened to prevent damage.

**Controls:**

**Force America Patrol Commander Ultra with 6100 spreader control Floor mounted. With temp sensor**

**Plow Lights:**

The plow lights are **Speaker LED** with stainless steel hardware for corrosion resistance. They include bright, sealed, halogen headlight beams with built-in parking and turn signal lights.

**Tail/Stop Lights:**

These 6-inch LED oval lights are mounted in cutouts on the rear of the dump box. These lights on the box are in addition to the standard tail/stop/turn lights that are mounted to the truck chassis.

**Side Marker Lights:** The side/marker lights are 2 ½" LED round lights that are sealed and installed in cutouts in the dump box sides.

**Identification Lights:** These are the three LED red lights below the dump box on the rear of the truck. The identification lights are 2 ½" round lights that are sealed and installed in a bracket welded to the truck chassis.

**Hot Lights:**

These are the flashing LED warning lights on the dump box cab guard. The hot lights are 6" oval alternating flashing lights that are mounted in a swinging bracket on the dump box cab guard.

**Emergency Warning Light: Dual LED lights mounted on cab shield not on light bar**

**Dash switches** use marked as follows wing, salter, beacon, strobs

**Screen** See pictures for 6100 control screen location.

Village of Germantown  
N112W17001 Mequon Rd.  
Germantown, WI 53022

Attn: Village Board

Subject: Equipment Pricing

Dear Village Board, thank you for the opportunity to quote you on the equipment listed in this specification. If there are any questions or changes that need to be addressed, please feel free to contact me.

Total equipment package.....\$145,313.00

Optional Equipment

- 1. 790 gallon wedge tank with gravity feed in lieu of side mounted pre-wet system, add.....\$23,200.00

Burke Truck is pleased to offer the Village of Germantown a 1 ½% discount if they Pay one half of equipment package at the time of order, with the balance due after delivery of the completed truck.

Total package price.....\$145,313.00  
First half payment.....\$72,656.50  
1 ½% discount.....\$2,179.69  
Second half payment.....\$70,476.81  
Total package price after discount.....\$143,133.31

Sincerely

**Burke Truck & Equipment, Inc. detailed spec list**

Jeff Smith  
Burke Truck & Equipment Inc.

# ***BURKE TRUCK & EQUIPMENT, INC.***

**5337 REINER RD., MADISON, WISCONSIN 53718**

**888-249-9788 / 608-249-9788 / FAX: 608-837-7530**

**Email: [sales@burketruck.com](mailto:sales@burketruck.com) / Web: [www.burketruck.com](http://www.burketruck.com)**

**12/30/24**

## **Prepared for the Village of Germantown**



2007 international pictured

## **2025 Single Axle Patrol Truck Package**

### **Accessory Equipment Summary**

- Burke Road Tamer 12-ft moldboard plow with trip moldboard.
- Burke Snow Patrol 9-ft wing.
- SaltDogg dual auger vee-box spreader
- Force America Hydraulics.
- Burke Sealed electrical system.



## ACCESSORY EQUIPMENT SPECS

---

|                       |                                                                                                                  |
|-----------------------|------------------------------------------------------------------------------------------------------------------|
| Coating               | Body chemically cleaned with a phosphate solution before underside of body and subframe primed and painted black |
| Rear Hitch            | <b><u>Rear hitch plate only with d-rings</u></b>                                                                 |
| Plug                  | <b><u>seven pin ROUND</u></b>                                                                                    |
| Side boards           | 2x12 plastic                                                                                                     |
| Under coat            | <b>Du Pont bake on system</b>                                                                                    |
| Transmission selector | <b>Mounted on left side of console. Contact village for location</b>                                             |

### SaltDogg Dual Auger Vee-Box Spreader

|                     |                                                                                                                                                                                                                      |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Capacity            | 7 cubic yards                                                                                                                                                                                                        |
| Spread range        | 2-30 feet                                                                                                                                                                                                            |
| Feed mechanism      | Dual 7 inch diameter, variable-pitch hard faced augers                                                                                                                                                               |
| Construction        | 304 stainless steel                                                                                                                                                                                                  |
| Spill plate         | stainless steel spill shield/cab shield                                                                                                                                                                              |
| Ladder              | folding stainless steel                                                                                                                                                                                              |
| Motors              | Two independent, direct drive hydraulic motors                                                                                                                                                                       |
| Pre-wet             | two 210 gallon (420 gallons total) poly tanks (gravity Feed)                                                                                                                                                         |
| Chute lift kit      | crank up spinner assembly                                                                                                                                                                                            |
| Light bar           | rear mounted light bar Led stop/turn, strobe and marker lights                                                                                                                                                       |
| Additional features | Adjustable height spinner chute<br>Hinged top screens with 4 inch peak, 3/8 inch bars on 2-1/2 inch openings<br>Quick release hinged chute (no tools needed)<br>Stainless steel inverted vee<br>18 inch poly spinner |

## Burke Road Tamer 2000 Plow



### **Burke Road Tamer 12-ft moldboard Plow with Trip moldboard**

|                    |                                                                                                                                               |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Plow               | 12-ft X 42", 7-gauge broke (not rolled), with 8 vertical ribs, 5 hinge points,.                                                               |
| Table              | 1 adjustable parking stand, two 4 x 13 D.A. cylinders with 2" nitrided rods. All connecting points from table to moldboard have poly bushings |
| Hitch              | <b>Wausau 225C drop pin</b>                                                                                                                   |
| Hydraulic cylinder | The 4" x 10" cylinder is custom-made to Burke specifications and exceeds cylinder size and capacity needed for snowplowing equipment.         |
| Hydraulic hook-up  | series 72 couplers.                                                                                                                           |
| Blades             | <b>JOMA</b>                                                                                                                                   |
| Flap               | 12" flap mounted to top of plow moldboard                                                                                                     |
| Parking stand      | <b>weld on round mount on wing side plate for storage.</b>                                                                                    |
| Accumulator        | <b>To be installed on plow hitch to cushion plow when in carry position</b><br><b>Provided by village</b>                                     |



## Burke WING



### **Burke Snow Patrol 10-ft Wing**

|                     |                                                                                                                                                                                                                                         |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wing                | 10-ft right moldboard overall with 9-ft trip cutting edge with 4 torsion springs of at least 7/8" (not double panel); wing moldboard is broke (not rolled) 10-ga; face 28" high at the toe end and 35" high at the heel. <b>3/4"x6"</b> |
| Blades              | <b>JOMA</b> grade 9 plow bolts on a standard highway punch.                                                                                                                                                                             |
| Front post          | Patented A-ARM LIFT SYSTEM and at least 18" free travel and a minimum of 15" ground clearance; toe cylinder 3 1/2" X 10" S.A. cylinder with 2" nitrided rod; heel cylinder 4" X 20" with 2" nitrided rod and De-Cell.                   |
| Rear brace tube     | <b>Burke power teletube.</b>                                                                                                                                                                                                            |
| Hydraulic cylinders | all plow cylinders are custom-made to Burke specifications and exceed cylinder size and capacity needed for snowplowing equipment. All rods are nitrided. 1/2" <b>Hose to toe cylinder.</b>                                             |
| Rope light          | <b>outlining wing</b>                                                                                                                                                                                                                   |
| Timbren             | <b>Right front</b>                                                                                                                                                                                                                      |



### **Hydraulic System**

|                  |                                                                                                                             |
|------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Spreader control | Force 6100 With GPS <b>Floor mount</b>                                                                                      |
| Pump             | Force America load sensing                                                                                                  |
| Capacity         | 60 gallon per minute.                                                                                                       |
| Valve bank       | Force America Add-A-Stack                                                                                                   |
| Reservoir        | Stainless Steel tank and valve encloser in one                                                                              |
| Hoses            | Two (2) wire hydraulic hose used throughout entire system. Stainless steel tubing bracketed to the rear and front of truck. |



## **Electrical System**

**Wiring:**

All wiring is double jacketed with ethylene-propylene rubber to seal out moisture and to protect against damage. In addition to the double jacket, all wires that are in an abrasion area are covered with vinyl tubing for additional protection. All electrical connections are sealed against moisture. All electrical junction boxes are waterproof. All lights are grounded through the wiring system, not to mounting bolts. All junction boxes are grounded to the chassis in addition to the wiring system. All bulbs and electrical plugs are coated with dielectric grease to seal out moisture. Wiring harnesses are securely fastened to prevent damage.

**Controls:**

**Force America Patrol Commander Ultra with 6100 spreader control Floor mounted. With temp sensor**

**Plow Lights:**

The plow lights are **Speaker LED** with stainless steel hardware for corrosion resistance. They include bright, sealed, halogen headlight beams with built-in parking and turn signal lights.

**Tail/Stop Lights:**

These 6-inch LED oval lights are mounted in cutouts on the rear of the dump box. These lights on the box are in addition to the standard tail/stop/turn lights that are mounted to the truck chassis.

**Side Marker Lights:** The side/marker lights are 2 ½" LED round lights that are sealed and installed in cutouts in the dump box sides.

**Identification Lights:** These are the three LED red lights below the dump box on the rear of the truck. The identification lights are 2 ½" round lights that are sealed and installed in a bracket welded to the truck chassis.

**Hot Lights:**

These are the flashing **Amber/Green** LED warning lights on the dump box cab guard. The hot lights are 6" oval alternating flashing lights that are mounted in a swinging bracket on the dump box cab guard.

**Emergency Warning Light: Dual LED lights mounted on cab shield not on light bar**

**Dash switches** use marked as follows wing, salter, beacon, strobs

**Screen** See pictures for 6100 control screen location.

Village of Germantown  
N112W17001 Mequon Rd.  
Germantown, WI 53022

Attn: Village Board

Subject: Equipment Pricing

Dear Village Board, thank you for the opportunity to quote you on the equipment listed in this specification. If there are any questions or changes that need to be addressed, please feel free to contact me.

Total equipment package.....\$152,975.00

Optional Equipment

- 1. Vee box Stand, add.....\$4,996.25
- 2. 150 gallon tailgate mount Pre-Wet tank with a high-capacity slurry power unit, add.....\$10,092.00

Burke Truck is pleased to offer the Village of Germantown a 1 ½% discount if they Pay one half of equipment package at the time of order, with the balance due after delivery of the completed truck.

Total package price (without option 1 or 2).....\$152,975.00  
First half payment.....\$76,487.50  
1 ½% discount.....\$2,294.62  
Second half payment.....\$74,192.88  
Total package price after discount.....\$150,680.38

Sincerely

Jeff Smith  
Burke Truck & Equipment Inc.



Matt

As per Quote / Specs dated 12-11-23 for a 2026 Western Star 47X

Current price is now \$154,000.00.

I have available slots in July- Aug time frame.

As of today, this is current but is subject to Parts availability and Allocation at time of order.

Any questions, please call.

John

**John Kotek | Local Sales Manager | Istate Truck Center, Inc.**

6303 Pepsi Way Windsor, WI 53598

C: 608-712-5773 O: 608-846-0680 F: 608-246-0682

[www.istatetruck.com](http://www.istatetruck.com)

"Pride in Service"



**John Kotek**  
Sales Manager

6303 Pepsi Way  
Windsor, WI 53598  
[john.kotek@istatetruck.com](mailto:john.kotek@istatetruck.com)  
[IStateTruck.com](http://IStateTruck.com)

Main: 608-846-0680  
Toll-Free: 608-846-0680

*Pride in Service*

**Prepared for:**  
Matt Kolbow  
GEMANTOWN VILLAGE OF  
N122 W17177 Fodd du Lac  
Germantown, WI 53022  
Phone: 262-39-0497

**Prepared by:**  
Craig Potter  
I-STATE TRUCK CENTER  
MARSHFIELD  
1505 S. CENTRAL AVE.  
MARSHFIELD, WI 54449  
Phone: 608-228-1177

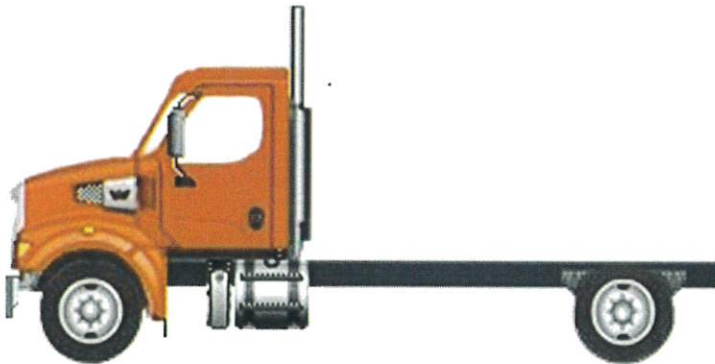
*A proposal for*  
**GEMANTOWN VILLAGE OF**

*Prepared by*  
**I-STATE TRUCK CENTER MARSHFIELD**  
*Craig Potter*

*Dec 11, 2023*

*2026*  
**2025 Western Star 47XSF**

**Price includes EW4 & Wiring Extended Warranty**



Components shown may not reflect all spec'd options and are not to scale

Application Version 11.9.305  
Data Version PRL-28X.022  
Germantown Village of

12/11/2023 12:06 PM

Page 1 of 19



## Director's Report - January 2025

### Staff Top 3 Projects

#### *Village Engineer*

|   |                                                   |                                                                |
|---|---------------------------------------------------|----------------------------------------------------------------|
| 1 | 2025 Road and sidewalk program planning           | Establishing a priority list for sidewalk improvement repairs. |
| 2 | High Point Pass Design                            | Working with raSmith on HPP Design. Ant                        |
| 3 | Rockfield Rd and Pleasant View Road ARIP Planning | Begin planning and approval for Rockfield Road reconstruction. |

#### *Civil Engineer*

|   |                      |                                                |
|---|----------------------|------------------------------------------------|
| 1 | Division Road Design | Removal plans, typical sections, locates, etc. |
|---|----------------------|------------------------------------------------|

#### *Engineering Techs*

|   |                                         |                                                              |
|---|-----------------------------------------|--------------------------------------------------------------|
| 1 | Road Program survey and data collection | Assist Civil Engineer and Village Engineer with Road Program |
| 2 | PSC CPR Inventory                       | Anticipating another effort from R-M f                       |
| 3 | 10 Year Road and 5 Year Seal Coat Plan  | Anticipate approval at 1/8                                   |

#### *Water Superintendant*

|   |                                     |                                        |
|---|-------------------------------------|----------------------------------------|
| 1 | Well 7 and 2 generator replacement. | Contract signed, awaiting p            |
| 2 | Well 12 Construction                | Work proceeding with cold weath        |
| 3 | Valve turner and vac purchase       | Research pricing on equipment for Febr |

#### *Wastewater Superintendant*

|   |                                             |                                      |
|---|---------------------------------------------|--------------------------------------|
| 1 | Preparation for the new Yard Waste Facility | The new Residential Yard Waste Fa    |
| 2 | Ruekert-Mielke Main St and Old Farm study.  | Site walkthroughs condu              |
| 3 | 2024 Cured in Place Sewer Lining            | Pre-con conducted, outreach began, a |

#### *Highway, Parks , Buildings & Grounds Superintendant*

|   |                                |                                    |
|---|--------------------------------|------------------------------------|
| 1 | Rural Tree Pruning and Removal | Project continuing. WE Energies to |
| 2 | Village Hall security project  | Project starting week of           |
| 3 | Winter operations              | Brine training and pre             |

## Director's Report - January 2025, cont.

### *Director*

|   |                           |                                     |
|---|---------------------------|-------------------------------------|
| 1 | SSSA Amendment            | Anticipate a January Utility Adviso |
| 2 | Asset Manager Hiring      | Interviews began on 1               |
| 3 | Equipment and Safety WG's | Initial meetings for each group     |

### *Richfield IGA Update*

|             |
|-------------|
| No updates. |
|-------------|

### *Work By Other Agencies*

|                                                                        |
|------------------------------------------------------------------------|
| WISDOT - Lannon & Maple Intersection - Substantial completion          |
| ATC Transmission Line - 2025                                           |
| WISDOT - Resurfacing 167/Mequon Rd from Wasaukee east (in Mequon) - 20 |
| ANR Pipeline - Reline through Village - Spring/Summer 2025             |
| WISDOT - 145 & Division Rd Roundabout - Summer 2026                    |
| WISDOT - 145 Resurfacing from Mequon Rd to Brown Deer Rd - 2028        |
| WISDOT - Resurfacing 167/Mequon Rd from Division to Pilgrim - 2028     |
| WISDOT - US 167/Lannon/Mequon- 1-41 to US 145 - 2028                   |

### *Compliance Milestones*

|   |                                                                                           |
|---|-------------------------------------------------------------------------------------------|
| 1 | PSC CPR Report Development - submitted a progress report along with an extension request. |
| 2 | DNR Storm Water Polution Prevention Plan (SWPPP) for new DPW                              |
| 3 | MS4 Draft Permit Application submitted, working through changes after DNR review.         |

### *Letters of Credit on File*

| Development                     | Bank                       |
|---------------------------------|----------------------------|
| 1 Kinderberg Estates            | Lexon Insurance            |
| 2 Wrenwood North / Wrenwood LLC | Midland States Bank        |
| 3 Murphy/Golden Pet             | Cash                       |
| 4 Heritage Park North           | United Casualty and Surety |

### *Department Update*

|   |                                                  |
|---|--------------------------------------------------|
| 1 | Asset Manager interviews conducted.              |
| 2 | Residential Yard Waste Facility opening on 1/4.  |
| 3 | Safety WG and Equipment WG starting in December. |
| 4 | Lead and copper responses and discrepancies.     |

|   |                                                                              |
|---|------------------------------------------------------------------------------|
| 5 | ARIP award for Rockfield Road and Pleasant View Rd.                          |
| 6 | Water Rate Step II Increase and Sewer Rate Increase to be effective Q1 2025. |
| 7 | Material usage report (salt, brine and fuel)                                 |
| 8 | FEMA Flood Plain Updates                                                     |

## Director's Report - January 2025, cont.

### *Complaint Log*

|                                    |    |
|------------------------------------|----|
| Garbage - Inquiry                  | 10 |
| Garbage - Missed Garbage           | 10 |
| Garbage - RequestNew Cart          | 8  |
| Other - Other Agency               | 7  |
| YW Facility - Hours check/question | 7  |
| Snow - Mailbox Down/Damaged        | 5  |
| Snow - Miscellaneous               | 5  |
| Engineering - Misc.                | 4  |
| Garbage - General Complaint        | 4  |
| Garbage - Damaged Cart             | 3  |
| Garbage - Missed Recycling         | 3  |
| Street - Street Light Out          | 2  |
| Water - Meter                      | 2  |
| YW Facility - Miscellaneous        | 2  |
| Sewer - Back-up                    | 1  |
| Snow - Plow Request                | 1  |
| Snow - Road Icy                    | 1  |
| Street - Obstruction               | 1  |
| Tree - Branch Down Blocking        | 1  |
| Tree - Miscellaneous               | 1  |
| Wasterwater - Connection           | 1  |
| Water - Hydrant                    | 1  |
| Water - Low Pressure               | 1  |
| Total                              | 81 |

|                           |
|---------------------------|
| movements/additions and   |
| icipating a January bid.  |
| ad and Pleasant View Road |

|  |
|--|
|  |
|--|

|                            |
|----------------------------|
| h data collection for 2025 |
| for additional work.       |
| PWHC.                      |

|                     |
|---------------------|
| pre-con.            |
| ner protection.     |
| uary PWHC approval. |

|                    |
|--------------------|
| ility opens 1/4.   |
| ected.             |
| awaiting schedule. |



|                   |
|-------------------|
| start in January. |
| 12/2.             |
| ep.               |

|                |
|----------------|
| ory Committee. |
| /3.            |
| took place.    |

|  |
|--|
|  |
|--|

|    |
|----|
|    |
|    |
| 25 |
|    |
|    |
|    |
|    |
|    |

|  |
|--|
|  |
|  |
|  |

| Amount       | Expiration |
|--------------|------------|
| \$40,000     | NA         |
| \$396,500    | 9/13/2025  |
| \$10,000     | NA         |
| \$174,375.25 | NA         |

|  |
|--|
|  |
|  |
|  |
|  |

|  |
|--|
|  |
|  |
|  |
|  |