

Meeting of the:

Date/Time: Location: Members: *** All present are expected to conduct themselves in accordance with our City's Core Values ***

OFFICIAL NOTICE AND AGENDA

of a meeting of a City Board, Commission, Department Committee, Agency, Corporation, Quasi-Municipal Corporation or Sub-unit thereof.

Notice is hereby given that the CAPITAL IMPROVEMENTS AND STREET MAINTENANCE COMMITTEE of the City of Wausau, Wisconsin will hold a regular or special meeting on the date, time and location shown below.

CAPITAL IMPROVEMENTS AND STREET MAINTENANCE COMMITTEE OF THE CITY OF WAUSAU

Thursday, July 13, 2023 at 5:15 p.m. City Hall (407 Grant Street, Wausau WI 54403) - COUNCIL CHAMBERS Lou Larson (C), Doug Diny, Gary Gisselman, Chad Henke, Lisa Rasmussen

AGENDA ITEMS FOR CONSIDERATION

- 1. Approval of minutes of the June 8, 2023 meeting.
- 2. Discussion and possible action on parking restrictions on the east side of Riverview Drive from 3736 Riverview Drive north to Evergreen Road.
- 3. Discussion and possible action on State/Municipal Agreement for Grand Avenue from Lakeview Drive to Kent Street.
- 4. Discussion and possible action on Revocable Occupancy Permit for Parcel 1 (7255 Stewart Avenue) of Project ID 6999-09-02, Stewart Avenue.
- 5. Discussion and possible action on Revocable Occupancy Permit for Parcel 3 (7120 Stewart Avenue) of Project ID 6999-09-02, Stewart Avenue.
- 6. Discussion and possible action on Revocable Occupancy Permit for Parcel 12 (7019 Stewart Avenue) of Project ID 6999-09-02, Stewart Avenue.
- 7. Discussion and possible action on Revocable Occupancy Permit for Parcel 47 (5000 Stewart Avenue) of Project ID 6999-09-02, Stewart Avenue.
- 8. Discussion and possible action on Revocable Occupancy Permit for Parcel 51 (4901 Stewart Avenue) of Project ID 6999-09-02, Stewart Avenue.
- 9. Discussion and possible action on accepting the study for the rerouting of STH 52 and Business Hwy 51 in the City of Wausau.
- 10. 2022 MS4 Annual Report and Compliance Update.
- 11. Discussion on annual road maintenance/reconstruction and annual funding allocations for the same.

Adjournment

LOU LARSON - Committee Chair

Members of the public who do not wish to appear in person may view the meeting live over the internet, live by cable TV, Channel 981, and a video is available in its entirety and can be accessed at https://tinyurl.com/WausauCityCouncil. Any person wishing to offer public comment who does not appear in person to do so, may e-mail lori.wunsch@ci.wausau.wi.us with "CISM public comment" in the subject line prior to the meeting start. All public comment, either by email or in person, if agendized, will be limited to items on the agenda at this time. The messages related to agenda items received prior to the start of the meeting will be provided to the Chair.

This Notice was posted at City Hall and transmitted to the Daily Herald newsroom on 07/05/23 @ 1:00 p.m. Questions regarding this agenda may be directed to the Engineering Department at (715) 261-6740.

It is possible that members of and possibly a quorum of the Common Council and/or members of and possibly a quorum of other committees of the Common Council of the City of Wausau may be in attendance at this meeting to gather information. No action will be taken by any such groups at this meeting other than the committee specifically referred to in this notice.

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 (ADA), the City of Wausau will not discriminate against qualified individuals with disabilities on the basis of disability in its services, programs or activities. If you need assistance or reasonable accommodations in participating in this meeting or event due to a disability as defined under the ADA, please call the ADA Coordinator at (715) 261-6622 or ADAServices@ci.wausau.wi.us to discuss your accessibility needs. We ask your request be provided a minimum of 72 hours before the scheduled event or meeting. If a request is made less than 72 hours before the event the City of Wausau will make a good faith effort to accommodate your request.

Distribution List: City Website, Media, Committee Members, Mayor, Council Members, Assessor, Attorney, City Clerk, Community Development, Engineering, Finance, Inspections, Park Dept., Planning, Public Works, County Planning, Police Department, Wausau School District, Becher Hoppe Associates, REI, Judy Bayba, Scholfield Group, Clark Dietz, Inc., Brown and Caldwell.

Date of Meeting:	June 8, 2023, at 5:15 p.m. in the Council Chambers of City Hall.
Members Present:	Lou Larson, Chad Henke, Lisa Rasmussen, Gary Gisselman, Doug Diny
Also Present:	Eric Lindman, Allen Wesolowski, Jill Kurtzhals, Tara Alfonso, Lori Wunsch

In compliance with Chapter 19, Wisconsin Statutes, notice of this meeting was posted and received by the *Wausau Daily Herald* in the proper manner.

Noting the presence of a quorum, at approximately 5:15 p.m. Chair Larson called the meeting to order.

CONSENT AGENDA

- A. Approve minutes of the May 11, 2023 meeting
- **B.** Action on watermain easement to City of Wausau from Marathon County in Marathon Park

C. Action on a preliminary resolution to set a public hearing to vacate an area of right-of-way abutting 503 South 22nd Avenue, a portion of 2111 Stewart Avenue, and a portion of 2205 Stewart Avenue

D. Action on a preliminary resolution to set a public hearing to vacate a portion of the alley north of Wegner Street abutting 503 South 22nd Avenue and a portion of 514 South 21st Avenue

E. Action on a preliminary resolution to set a public hearing to vacate an area of right-of-way abutting 505 South 21st Avenue, a portion of 509 South 21st Avenue, a portion of 514 South 21st Avenue, and a portion of 2111 Stewart Avenue

F. Action on Stormwater Maintenance Agreement with Aedifix at 101 Short Street, 1214 North 3rd Street and 1201 North 2nd Street

Diny moved to approve the consent agenda items. Henke seconded and the motion passed 5-0.

2023 Alley Paving Project: Discuss public hearing results and make recommendation

Larson asked if anyone in attendance wished to speak on this item.

Liz Brodek, 814 Adams Street, submitted public comment that was included in the packet. She is against the project for several reasons. Adams Street has one house with driveway access to the alley. Of the 6 properties abutting the alley, 4 of them are fenced off and have no access to use the alley. They would be assessed for something they are not able to use. She has lived in this house for almost 2 years and had never been back there until this item came up. The alley is very narrow. There are a lot of old fences and foliage that very closely abut the alley. She is concerned about something going wrong during the paving project with all of the large machinery. Her fence is over 20 years old and having to replace a historic fence would be problematic and not budgeted for. If this were a sidewalk project or a street project where it is something that everyone can use, she would not be against this. Only a handful of people on the block utilize it. Because it is not a true public good in her opinion, she stands against the project.

Gaylene Davis, 802 Adams Street, stated there are 19 houses on the block; 2 have no alley access. Of the 17 houses that abut the alley, only 4 need it for access. The others do not but are being asked to pay for the alley. It is a long alley, crooked and it would be difficult to pave. She feels this would be a waste of money and believes there is another alley that would benefit more.

Joan Smith has lived at 1110 North 9th Street for 40 years. She has watched many projects up and down the alley. She has had all kinds of conversations over the years about a parking pad, driveways, foundation for a garage, a shed, fences, etc. The conversations are always the same in the end; what will this do to the drainage and will this hurt my land when there is no place for the water to go. The answer always was there needs to be a manhole and storm sewer. This alley is lower than the lots and was never engineered correctly. Her house is right against the alley and water drains into her basement. She likes the gravel surface as it is semi-permeable and water evaporates; a smooth surface is completely different. That block is not set up to hold water. She is afraid of what will happen to her foundation, which she expects would be further compromised. Her south wall is the only wall that is currently dry. With smooth surface run off next to it, she does not know what to expect. She was told

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water could be directed to the middle of the alley, but that does not deal with the fact that the alley is too low to begin with. There are not elevations to move water east and west for the length of the block. Her concerns are structural and feels it could mean the end of her home and secure foundation. She hopes there is another option besides pavement. She feels a smooth surface runoff is an incredibly big problem on that block. It is already a very wet block with no accommodation for drainage. Her concern is structural and financial as it risks her home. She suggested using a better grade of gravel on that block. With a cheap grade of gravel you get big stones that get kicked out and you get potholes. Using a good grade of gravel that is more compacted would provide the residents a nice surface without having to pave and create more problems.

Blaine Davis has lived at 802 Adams Street for 30 years. His driveway runs along the alley and exits onto 8th Street. He has no use for the alley. Over the years he has seen traffic come down the alley at a good speed. He has wondered how they could see oncoming traffic; one side is blind by bushes and the other is open sidewalk. He is amazed there have not been close calls over the years. He is concerned about turnover; new people coming into the neighborhood may decide the pavement is faster and easier to travel down. When he has family gatherings he places children at play signs because of that fear.

Robert Baumann is an occupant at 817 Hamilton Street and appeared on behalf of his mother who owns the house. He thought this would be a good idea and collected signatures. He apologized to any neighbor that has stressed about this. He thought it would be a good idea because gravel washes off the alley onto his mother's and her neighbor's driveway. There are also potholes and he thought this would be a solution. From his perspective there is not a lot of popularity for this. He is unsure if there is a way to fix the problem that would be good for everyone and not expensive. He suggested looking for alternative solutions that would work for everyone or if all else fails, squash it. He again apologized if this brought stress.

Diny said this is not necessarily a popularity contest and should be based on facts. He walked the alley with Smith. The challenges are real. It is too narrow for a standard paving machine. It is very flat and there is no place for the water to go. It is crooked and there are telephone poles in the alley. From the engineering challenges he believes we would be better off letting it go as it has been. Potentially there may be consideration for different types of gravel. He agrees a hard surface would make more problems than it solves.

Rasmussen agrees with Diny. Based on the public hearing results and comments today, she also has concerns for Smith's basement. Rasmussen feels this request should be denied.

Rasmussen moved to approve the 2023 Alley Paving Project. Seconded by Gisselman.

Gisselman asked if there are other alleys on East Hill that are paved. He questioned why it has taken so long for the pavement of those alleys, especially on the hill. He asked if there was a way to pave the alley without large machinery or if it would be impossible. Wesolowski said anything is possible, but this alley would be difficult. It is narrower than most. We would have to extend storm sewer. There are poles, bushes and fences close to the alley. It would be one of the more difficult and challenging alleys that we have ever paved. He noted that staff does not go out and look for alleys to pave; we wait for petitions to be submitted. Gisselman mentioned the petition and number of signatures from both sides of the alley. Some do not have access to the alley but for the good of the neighborhood they are willing to pay for this. He is sensitive to the people that signed the petition because he feels that they need and want the alley paved. He is torn on this item and asked if there was any other feedback at the public hearing in support.

Diny asked if the cost of the project would be over the estimated \$25,000 if storm sewer is extended. Wesolowski confirmed and said the project would be over budget.

In reading the minutes of the public hearing and the comments in the packet, Rasmussen feels a couple of the people that signed the petition were not aware of the assessment. A couple of them may have wanted their signatures removed once that was revealed. There are some alleys that benefit from paving, especially if they are alleys that retain water and dirt splashes on houses. In this case, it does not sound like there is a ton of traffic. Even if there are areas that are holding water, the addition of gravel and grading normally takes care of that. She thinks we should not do this one. She understands the reason for the petition, but typically when we approve

these, almost everyone on the block signs the petition. This is one of the few alley paving projects where she has seen this much opposition.

There being a motion and a second, motion to approve the 2023 Alley Paving Project failed 0-5.

Discussion and possible action on parking restrictions on South 8th Avenue between Stewart Avenue and Callon Street

Henke indicated a constituent approached him about parking in the wintertime. He advised her of the petition process, they collected signatures, and provided photos.

Alora Koval, 307 South 8th Ave, has concerns for winter parking. South 8th Avenue is very narrow; more narrow than surrounding streets. It is the first through street from Callon to Elm Street until 12th Ave. It gets steady traffic and is a steep hill. When there are cars on both sides of the street in the winter, it creates a very narrow passage for through traffic and for backing out of driveways. Plow trucks and garbage trucks have failed to get through at times. After the plow does get through there is plow wash that turns to ice chunks and steep mounds of snow that harden. Take a narrow street, add snowbanks, add cars, add plow wash, and it is almost impossible to get through. The vast majority of cars that do park on the street have driveway access. The alley between 8th and 9th is newly paved. Two driveways have access to the newly paved alley; they just do not use it. She does not suggest restricting parking on just one side of the street because it is a hill with a lot of traffic on a narrow street. She would like the committee to consider the totality of the circumstances with a winter parking ban.

Rasmussen noted the request is to restrict parking on both sides. The photos show it is really narrow when there is a full snow load. There has been the same problem in her district. In some cases it can be remedied with no parking on one side or the other, but it looks like the street parking is robust. Even with parking on one side there is not much space to get through. The request is for a seasonal band from November 1 to April 1. She would support this as she has dealt with the same in her district. Parking restrictions do help and have been found to be an effective remedy.

Larson agrees buts the pictures show a lot of cars on the street. He is concerned this may cause a problem with vehicles parking elsewhere. Koval suggested parking could take place in the unused County lot at the bottom of the hill. The vehicles all have driveways they just want quicker access. Henke indicated Callon Street was just redone. Parking on the north side of Callon is easy and pretty open. He would guess a lot of the parking would move to Callon.

Rasmussen noted the winter photo and that the driveway is not plowed at the house with 2 cars out front. If parking on the street is enabling them to not clean their driveway in a timely manner, it is no excuse. It is causing problems for other users of the street, including services that need to get through. Larson noted it looks like the cars have been parked there a while and mentioned the similar situation recently discussed on Sherman Street.

Rasmussen moved to approve parking restrictions on both sides of South 8th Avenue between Stewart Avenue and Callon Street from November 1 to April 1. Seconded by Henke.

Wesolowski received a call from Dennis Debalske of 416 South 8th Avenue. He signed the petition and supports this. He would like to have parking restricted on the east side year-round. Henke will talk to him about submitting a petition for that.

There being a motion and a second, motion to approve parking restrictions on both sides of South 8th Avenue between Stewart Avenue and Callon Street from November 1 to April 1 passed 5-0.

Discussion and possible action on easements with Wausau Opportunity Zone, Inc. for planters at 300 Forest Street (North 2nd Street and Jackson Street right-of-way)

Wesolowski explained this is the old mall site. They are asking to put some planters in the right-of-way. We looked at the street design with Becher Hoppe; this would not impact the street design.

Larson asked if this would be on the streets to be constructed or on streets that currently exist. Wesolowski indicated these are on the new streets. 2nd Street will get temporary asphalt this year. The Jackson Street planter will be on the side of the building in excess right-of-way and will not impact the roadway. There will also be some WPS transformers in the area. The planters will help to soften the transformers.

Rasmussen stated this item and the next are related to the aesthetics and some of the work they are doing on the front of HOM Furniture. Wesolowski added this will complement the façade of the Imaginarium and HOM.

Rasmussen moved to approve. Diny seconded.

Diny asked who would be responsible for maintenance and costs. Per Wesolowski the planters would be installed by WOZ and maintained by them.

There being a motion and a second, motion to approve passed 5-0.

Discussion and possible action on easements with Wausau Opportunity Zone, Inc. for pedestrian access between North 2nd Street and North 3rd Street

We solowski stated there will be a walkway in front of the Imaginarium when developed. An easement would be granted so that pedestrians could walk between 2^{nd} and 3^{rd} Streets.

Larson asked who would be paying for this. Wesolowski said there is no cost involved. WOZ would be giving an easement to the City for pedestrian access. Gisselman asked if the City would be responsible for maintaining the pedestrian walkway. Wesolowski indicated the area would be built and maintained by WOZ. Pedestrians would have the right to use the area. Henke asked if this would be public property. Wesolowski said it is private property owned by WOZ; WOZ would be granting public the right to use it.

Henke moved to approve. Diny seconded and the motion passed 5-0.

Discussion and possible action on authorization to deed Outlot 1 of CSM #19539 to Luke Stenberg

This is in Larson's district. They are proposing to put apartment buildings on the land and there is an easement glitch. This is a housekeeping item. He hopes in the future Stratz will approach the neighborhood because the people he has talked to are not in favor of an apartment complex. Rasmussen said this also serves to clean up the lot lines and would allow for an affordable housing project to take flight.

Rasmussen moved to approve. Henke seconded and the motion passed 5-0.

Adjourn

Diny moved to adjourn the meeting. Henke seconded and the motion carried 5-0. Meeting adjourned at approximately 5:50 p.m.

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AGENDA ITEM

Discussion and possible action on parking restrictions on the east side of Riverview Drive from 3736 Riverview Drive north to Evergreen Road

BACKGROUND

Over the past several years there have been annual complaints about yard waste dumping and parking of trailers/vehicles off the roadway on the east side of Riverview Drive. In the past letters have been sent out notifying the residents that dumping of yard waste in the city right of way is not allowed, that parking in the right of way outside the roadway is prohibited, and parking of trailers on the road and in right of way is prohibited. The practice of dumping yard waste and parking continues and one way to make this enforceable for parking issues is to eliminate parking on the east side of Riverview Drive in the area located on the attached map.

As an example of parking issues, attached is an aerial photo of a boat parked off the east side of Riverview Drive and is actually on RR property. The photo shows the limited amount of right of way the city owns and the rest is RR property. According to our GIS mapping there is about 6-feet of property outside of the paved roadway on the east side of the street, then the remaining property is owned by the RR. Parking for vehicles is currently allowed on the street (paved surface) but not off the street.

Dumping of yard waste on the east side of Riverview Drive is an annual issue for which we receive complaints. We have also received requests to come in and remove brush and dumped yard waste; DPW does not perform yard waste pick up since there is a yard waste drop off site and Harter's also allows for weekly yard waste pick up. We do maintain city owned property and right of way.

As you can see from the aerial photo the amount of right of way is minimal on the east side of the road and we do not maintain RR property. About 3/4-years ago we spoke with CN about removing deadfall in this area and they responded that unless it hinders their operations they would not come and do "spot area" clean up of brush. They stated if there was a formal request to remove deadfall and brush they would review the request and it would likely be denied or they would come and clear the majority of the vegetation as they would not want to be expected to do this frequently.

FISCAL IMPACT

None

STAFF RECOMMENDATION

One option for the parking issues is to eliminate parking on the east side of Riverview Drive and when we post signs we would be able to post "No Dumping". Another option is to leave parking on the east side and if cars are parked off the pavement they may be ticketed; this may not address the parking of unlicensed trailers. Addressing the no dumping of yard waste across the street may be more challenging to issue citations.

Staff contact: Eric Lindman 715-261-6745





STAFF REPORT TO CISM COMMITTEE - July 13, 2023

AGENDA ITEM

Discussion and possible action on State/Municipal Agreement for Grand Avenue from Lakeview Drive to Kent Street

BACKGROUND

This segment of Grand Avenue (Bus 51) is experiencing distress from concrete failure. The City and WDOT have met to discuss the failures. The WDOT has agreed to reconstruct this segment. As with all connecting highways, the municipality is responsible for 25% of the design costs. The WDOT will be 100% responsible for the construction costs related to the roadway. If sewer and water utility work is required, the utility would be responsible for those costs. The current schedule is for 2031 construction. The WDOT sets the schedule based on their fiscal constraints.

FISCAL IMPACT

The City cost share for the design is estimated at \$60,450.

STAFF RECOMMENDATION

Staff recommends approving the SMA.



The signatory **city of Wausau**, hereinafter called the Municipality, through its undersigned duly authorized officers or officials, hereby requests the State of Wisconsin Department of Transportation, hereinafter called the State, to initiate and affect the highway or street improvement hereinafter described.

The authority for the Municipality to enter into this agreement with the State is provided by Section 86.25(1), (2), and (3) of the Statutes.

NEEDS AND ESTIMATE SUMMARY:

Existing Facility - Describe and give reason for request: Grand Avenue is a four- lane divided urban roadway within the connecting street limits in the city of Wausau. The existing pavement has deteriorated and is reaching the end of its service life. The existing crosswalk curb ramps do not meet current Americans with Disabilities Act (ADA) Standards.

Proposed Improvement - Nature of work: The proposed improvement is a pavement replacement. Work consists of removing and replacing the existing pavement. The project will also upgrade cross walk curb ramps, complete curb and gutter replacement in spot locations, and storm sewer repairs.

Describe non-participating work included in the project and other work necessary to finish the project completely which will be undertaken independently by the municipality: A nominal amount is included to cover items in paragraph 3 (to be adjusted in the final plan).

	Total	Fe	deral/State		M	unicipal	
Phase	Est. Cost	Funds % Funds		Funds	%		
6999-02-10							
² Preliminary Engineering:	\$ 241,800	\$	181,350	75%	\$	60,450	25%
6999-02-20							
² Real Estate Acquisition:	\$ 20,000	\$	20,000	100%	\$	-	0%
6999-02-80							
¹ Construction:							
² Roadway (cat 0010)	\$ 3,350,000	\$	3,350,000	100%	\$	-	0%
Subtotal:	\$ 3,350,000	\$	3,350,000		\$	-	
Non-Participating	\$ -	\$	-	0%	\$	-	100%
Total Cost Distribution	\$ 3,611,800	\$	3,551,350		\$	60,450	

TABLE 1: SUMMARY OF COSTS

¹Estimates include construction engineering

²See number 8 of Terms and Conditions

This request shall constitute agreement between the Municipality and the State; is subject to the terms and conditions that follow (pages 2-6); is made by the undersigned under proper authority to make such request for the designated Municipality, upon signature by the State, and delivery to the Municipality. The initiation and accomplishment of the improvement will be subject to the applicable federal and state regulations. No term or provision of neither the State/Municipal Financial Agreement nor any of its attachments may be changed, waived or terminated orally but only by an instrument in writing executed by both parties to the State/Municipal Financial Agreement.

Cigned for and in headly of the site of Weynery (1999 - 1999)				
Signed for and in benall of the city of Wausau (please sign in blue ink)				
Name (print)	Title			
Circanture	Data			
Signature	Date			
Signed for and in babalf of the State (places similar blue inte				
Signed for and in benall of the State (please sign in blue ink)			
Name Shannon P Riley	Litle WisDOT North Central Region Planning Chief			
	Data			
Signature	Date			

TERMS AND CONDITIONS:

- 1. The Municipality shall pay to the State all costs incurred by the State in connection with the improvement which exceeds federal/state financing commitments or are ineligible for federal/state financing. Local participation shall be limited to the items and percentages set forth in the Summary of Costs table, which shows Municipal funding participation. In order to guarantee the Municipality's foregoing agreements to pay the State, the Municipality, through its above duly authorized officers or officials, agrees and authorizes the State to set off and withhold the required reimbursement amount as determined by the State from General Transportation Aids or any moneys otherwise due and payable by the State to the Municipality.
- 2. Funding of each project phase is subject to inclusion in an approved program and per the State's Facility Development Manual (FDM) standards. Federal aid and/or state transportation fund financing will be limited to participation in the costs of the following items as specified in the Summary of Costs:
 - (a) Design engineering and state review services.
 - (b) Real Estate necessitated for the improvement.
 - (c) Compensable utility adjustment and railroad force work necessitated for the project.
 - (d) The grading, base, pavement, curb and gutter, and structure costs to State standards, excluding the cost of parking areas.
 - (e) Storm sewer mains, culverts, laterals, manholes, inlets, catch basins, and connections for surface water drainage of the improvement; including replacement and/or adjustments of existing storm sewer manhole covers and inlet grates as needed.
 - (f) Construction engineering incidental to inspection and supervision of actual construction work, except for inspection, staking, and testing of sanitary sewer and water main.
 - (g) Signing and pavement marking necessitated for the safe and efficient flow of traffic, including detour routes.

- (h) Replacement of existing sidewalks necessitated by construction and construction of new sidewalk at the time of construction. Sidewalk is considered to be new if it's constructed in a location where it has not existed before.
- (i) Replacement of existing driveways, in kind, necessitated by the project.
- (j) New installations or alteration resulting from roadway construction of standard State street lighting and traffic signals or devices. Alteration may include salvaging and replacement of existing components.
- 3. Work necessary to complete the improvement to be financed entirely by the Municipality or other utility or facility owner includes the following items:
 - (a) New installations of or alteration of sanitary sewers and connections, water, gas, electric, telephone, telegraph, fire or police alarm facilities, parking meters, and similar utilities.
 - (b) New installation or alteration of signs not necessary for the safe and efficient flow of traffic.
 - (c) Roadway and bridge width in excess of standards.
 - (d) Construction inspection, staking, and material testing and acceptance for construction of sanitary sewer and water main.
 - (e) Provide complete plans, specifications, and estimates for sanitary sewer and water main work. The Municipality assumes full responsibility for the design, installation, inspection, testing, and operation of the sanitary sewer and water system. This relieves the State and all of its employees from the liability for all suits, actions, or claims resulting from the sanitary sewer and water system construction.
 - (f) Parking lane costs.
 - (g) Coordinate, clean up, and fund any hazardous materials encountered during construction. All hazardous material cleanup work shall be performed in accordance to state and federal regulations.
 - (h) Damages to abutting property due to change in street or sidewalk widths, grades, or drainage.
 - (i) Conditioning, if required, and maintenance of detour routes.
 - (j) Repair of damages to roads or streets caused by reason of their use in hauling materials incidental to the improvement.
- 4. As the work progresses, the Municipality will be billed for work completed which is not chargeable to federal/state funds. Upon completion of the project, a final audit will be made to determine the final division of costs.
- 5. If the Municipality should withdraw the project, it shall reimburse the State for any costs incurred by the State in behalf of the project.
- 6. The work will be administered by the State and may include items not eligible for federal/state participation.
- 7. The Municipality shall assume general responsibility for all public information and public relations for the project and to make a fitting announcement to the press and such outlets as would generally alert the affected property owners and the community of the nature, extent, and timing of the project and arrangements for handling traffic within and around the projects.
- 8. Basis for local participation:
 - a) <u>Preliminary Engineering 6999-02-10</u>: In accordance with the State's Local Cost Sharing Policy of the Program Management Manual, the State is responsible for 75% and the Municipality is responsible for 25% of all design engineering costs necessary for State construction projects on a connecting highway.

b) <u>Real Estate Acquisition – 6999-02-20</u>: In accordance with the State's Local Cost Sharing Policy of the Program Management Manual, the State is responsible for all costs associated with the acquisition of necessary real estate. However, it shall be the responsibility of the Municipality to provide all of the real estate work and payments necessary to acquire the rights, interests, and/or releases for this project.

When State or Federal dollars are to be used to reimburse the Municipality for any real estate acquisition related costs, all real estate activities are subject to reviews and approvals by the State. Required State reviews and approvals are identified in the Local Public Agency manual. Examples of some review and approval items are listed in the following table.

Contract services & fee for consultant services	Nominal Value approvals	
Capability statement for consultant services	Administrative revisions	
Appraisal reviews	Revised offers	
Offering price approvals	Acquisition Stage Relocation Plan	
Relocation computations	Revised relocation computations	
Relocation claims	Sales Studies	

The Municipality will be given a direct cash reimbursement for the approved real estate costs of this project. Reimbursement will be limited to one payment request for the total real estate expenditures when all real estate activities have been completed.

In order for the Municipality to receive reimbursement for acquiring the real estate, the State must be given copies of all the related documents for review and approval. The reimbursement will be based on detailed invoices and supporting documents provided by the Municipality to the State, which show actual expenditures.

Approved real estate costs are those actual costs appropriately documented by the Municipality, and further approved by the State for reimbursement.

Real Estate Remnant Parcels: Any remnant properties created by partial acquisitions and acquired as part of this public improvement project, or any additional lands deemed unnecessary for the project, will be acquired by the Municipality. Such remnants or additional lands will not be considered for reimbursement of their acquisition costs and must be purchased with Municipal funds. Post project disposal and/or use of these remnants and additional lands will be at the sole discretion of the Municipality.

All municipal lands, owned by the Municipality being party to this agreement, required for this improvement project shall be dedicated/donated as right of way by specific resolution of the municipal governing body at no cost to the State. Exceptions to this dedication are those lands held by the Municipality under 4F and 6F Park lands.

c) <u>Participating Construction – 6999-02-80</u>:

1. <u>Roadway Items (Category 010)</u>: In accordance with the State's Local Cost Sharing Policy of the Program Management Manual, the State is responsible for 100% for the costs necessitated by the roadway project (grading, paving, etc.) unless otherwise noted in the sections below.

<u>Driveways</u>: In accordance with the State's Local Cost Sharing Policy of the Program Management Manual, the State is responsible for 100% of replacement driveways necessitated by roadway construction as follows: where there is no sidewalk, replacement in kind beyond the curb; where there is a sidewalk, concrete from curb to sidewalk and replacement in kind beyond the sidewalk. New driveways are not eligible for Federal/State funding.

<u>Replacement Sidewalks:</u> In accordance with the State's Local Cost Sharing Policy of the Program Management Manual, the State is responsible for 100% of replacement sidewalks costs, in kind, necessitated by roadway construction if the Municipality agrees to accept responsibility for sidewalk maintenance and repair per the Maintenance agreement. The Municipality is responsible for 100% of any alternate design, over and above State standards and acceptable to the State.

<u>New Sidewalks</u>: In accordance with the State's Local Cost Sharing Policy of the Program Management Manual, the State is responsible for 100% of continuous new sidewalk costs only if they are installed to WisDOT standards at the time of project construction, required through WisDOT design process and if the Municipality agrees to accept responsibility for sidewalk maintenance and repair per the Maintenance agreement.

If the new sidewalk is NOT required through WisDOT design process; the Municipality is responsible for 100% of continuous new sidewalk costs only if they are installed to WisDOT standards at the time of project construction and if the Municipality agrees to accept responsibility for sidewalk maintenance and repair per the Maintenance agreement. The Municipality is responsible for 100% of any alternate design, over and above State standards and acceptable to the State.

<u>Bicycle Accommodations</u>: In accordance with the State's Local Cost Sharing Policy of the Program Management Manual, the State is responsible for 100% of the costs for bicycle accommodations, where recommended by the State's Facility's Development Manual.

<u>Replacement Street Lighting:</u> In accordance with the State's Local Cost Sharing Policy of the Program Management Manual, the State is responsible for 100% of replacement lighting costs, in kind, necessitated by roadway construction if the Municipality agrees to accept responsibility for the energy, operation, maintenance and replacement of the lighting system per the Maintenance agreement. The Municipality is responsible for 100% of any alternate design, over and above State standards and acceptable to the State.

<u>Storm Sewers:</u> In accordance with the State's Local Cost Sharing Policy of the Program Management Manual, the State is responsible for 100% of costs necessary to construct a storm sewer system that accommodates roadway drainage, and surface water naturally flowing to the state trunk highway. The Municipality is responsible for 100% of the cost to over-size the storm sewer system to accommodate all additional local storm water caused by existing or future developments, and the Municipality agrees to pay these costs.

<u>Parking Policy</u>: In accordance with State statute 86.32(4), the Municipality is required to pay the actual construction costs and any associated costs (if applicable) of that part of the state trunk highway on which parking is permitted. The local cost share is the amount of the total project cost that represents the construction cost of the parking lane(s).

<u>Traffic Signals</u>: In accordance with the State's Local Cost Sharing Policy of the Program Management Manual, the State is responsible for 100% of traffic signals necessary and warranted for the safety and efficient flow of traffic within the construction limits.

d) <u>Non-Participating Construction Local Utilities</u>: In accordance with the State's Local Cost Sharing Policy of the Program Management Manual, the Municipality is responsible for 100% of all costs associated with Municipal owned utilities or appurtenances, including but not limited to, new installation or alteration of sanitary sewer and water, including service connections. The Municipality is also responsible for 100% of all costs caused by changes to Municipal owned utilities related to other utilities (gas, electric, telephone, fire, or police alarm facilities, parking meters, irrigation systems and similar utilities).

<u>Hazmat:</u> In accordance with the State's Local Cost Sharing Policy of the Program Management Manual, the Municipality agrees to pay 100% of the costs associated with excavating and transporting hazardous material for which the Municipality has been identified as the responsibly party. The Municipality is responsible for securing a suitable site to store the material.

<u>Comments and Clarification</u>: This agreement is an active agreement that may need to be amended as the project is designed. It is understood that these amendments may be needed as some issues have not been fully evaluated or resolved. The purpose of this agreement is to specify the local and state involvement in funding the project. A signed agreement is required before the State will prepare or participate in the preparation of detailed designs, acquire right of way, or participate in construction of a project that merits local involvement.

STAFF REPORT TO CISM COMMITTEE - July 13, 2023

AGENDA ITEM

Discussion and possible action on Revocable Occupancy Permit for Parcel 1 (7255 Stewart Avenue) of Project ID 6999-09-02, Stewart Avenue

BACKGROUND

The Stewart Avenue reconstruction project from 48th Avenue to 72nd Avenue is scheduled for 2024. During the development of the plans and real estate plat we have identified encroachments in the right-of-way. Encroachments that do not impact the construction that will be allowed to remain are granted a revocable occupancy permit. This permit is for a small portion of an existing parking lot.

FISCAL IMPACT

None

STAFF RECOMMENDATION

Staff recommends approving the permit.

REVOCABLE OCCUPANCY PERMIT

Wisconsin Department of Transportation Exempt from filing transfer form [s. 77.21(1), 77.22(1) Wis. Stats.] RE1551 04/2016 (Replaces RE1551 08/2011) Ch. 84 Wis. Stats.

Occupant name and address: Marathon County, 500 Forest Street, Wausau, WI 54403-5554 Agency name and address: City of Wausau, 407 Grant Street, Wausau, WI 54403 Highway: Stewart Avenue County: Marathon; City: Wausau

Encroachment location: Legal Description Attached

Encroachment description: Parking Lot (approximately 18 sf)

The use and occupancy of highway right of way under this permit is conditioned upon the Occupant's compliance with these provisions:

1. This permit only authorizes the described encroachment to remain temporarily within the **Stewart Avenue** right of way by **0.4 to 6.4 feet**; however, if the described encroachment is damaged from any cause whatsoever, to the extent that repair costs would be equal to or greater than 50% of the assessed or estimated value of the described encroachment at the time of said occurrence, then it cannot be repaired, re-erected and/or replaced anywhere within the existing highway right of way.

This space is reserved for recording data

Return to CORRE, Inc. Attn: Megan Munden 1802 Warden Street Eau Claire, WI 54703

Parcel Identification Number/Tax Key Number 291-2906-361-0997

- 2. In the event that the Agency deems it necessary to revoke this permit because of a need to expand capacity or improve safety, the Agency reserves the right to give notice regarding the removal of the described encroachment. The Agency may terminate this permit upon (30) days written notice to the Occupant. The Occupant shall remove the described encroachment maintained under this permit within the time specified in the notice.
- 3. If the Agency determines that the installation or use of the described encroachment authorized under this permit increases the difficulty of highway maintenance, creates conditions adverse to the best interest of the highway users, the general public, or presents a threat to highway safety, then the occupant, upon notification by the Agency shall promptly remove the encroachment from the highway right of way.
- 4. Failure by the Occupant to comply with the provisions of this permit is cause for the Agency to terminate this permit and to require the Occupant to take immediate action to clear the right of way to a safe condition.
- 5. Issuance of this permit shall not be construed as a waiver of the occupant's obligation to comply with any more restrictive requirements imposed by local ordinance.

	Date	
	State of Wisconsin)
) ss.
		County)
	On the above date, this instr named person(s).	ument was acknowledged before me by the
Signature & Date	Signature, Notary Public, State	e of Wisconsin
Print Name	Print or Type Name, Notary Po	ublic, State of Wisconsin
Title	Date Commission Expires	
Project ID:	This instrument was drafted by:	Parcel No.: 1
6999-09-02	Megan Munden, CORRE, Inc., on behalf of the City of Wausau	Encroachment No.: 1

LEGAL DESCRIPTION

Certified Survey Map No. 1159 recorded in the office of the Register of Deeds for Marathon County, Wisconsin, in Volume 5 of Certified Survey Maps on page 87; being a part of the Southeast quarter (SE¼) of the Northeast quarter (NE¼) of Section thirty-six (36), Township twenty-nine (29) North, Range six (6) East, in the City of Wausau, Marathon County, Wisconsin; excepting any part thereof used for highway purposes.

LOCATION MAP



PICTURE



STAFF REPORT TO CISM COMMITTEE - July 13, 2023

AGENDA ITEM

Discussion and possible action on Revocable Occupancy Permit for Parcel 3 (7120 Stewart Avenue) of Project ID 6999-09-02, Stewart Avenue

BACKGROUND

The Stewart Avenue reconstruction project from 48th Avenue to 72nd Avenue is scheduled for 2024. During the development of the plans and real estate plat we have identified encroachments in the right-of-way. Encroachments that do not impact the construction that will be allowed to remain are granted a revocable occupancy permit. This permit is for a business sign and landscaping.

FISCAL IMPACT

None

STAFF RECOMMENDATION

Staff recommends approving the permit.

REVOCABLE OCCUPANCY PERMIT

Wisconsin Department of Transportation Exempt from filing transfer form [s. 77.21(1), 77.22(1) Wis. Stats.] RE1551 04/2016 (Replaces RE1551 08/2011) Ch. 84 Wis. Stats.

Occupant name and address: Kingspan Light & Air, LLC, 28662 N. Ballard Drive, Lake Forest, IL 60045 Agency name and address: City of Wausau, 407 Grant Street, Wausau, WI 54403 Highway: Stewart Avenue County: Marathon; City: Wausau

Encroachment location: Legal Description Attached

Encroachment description: Business sign and landscaping

The use and occupancy of highway right of way under this permit is conditioned upon the Occupant's compliance with these provisions:

1. This permit only authorizes the described encroachment to remain temporarily within the **Stewart Avenue** right of way by **0 feet**; however, if the described encroachment is damaged from any cause whatsoever, to the extent that repair costs would be equal to or greater than 50% of the assessed or estimated value of the described encroachment at the time of said occurrence, then it cannot be repaired, re-erected and/or replaced anywhere within the existing highway right of way.

This space is reserved for recording data

Return to CORRE, Inc. Attn: Kathy Rudolph 1802 Warden Street Eau Claire, WI 54703

Parcel Identification Number/Tax Key Number 291-2907-312-0977

- 2. In the event that the Agency deems it necessary to revoke this permit because of a need to expand capacity or improve safety, the Agency reserves the right to give notice regarding the removal of the described encroachment. The Agency may terminate this permit upon (30) days written notice to the Occupant. The Occupant shall remove the described encroachment maintained under this permit within the time specified in the notice.
- 3. If the Agency determines that the installation or use of the described encroachment authorized under this permit increases the difficulty of highway maintenance, creates conditions adverse to the best interest of the highway users, the general public, or presents a threat to highway safety, then the occupant, upon notification by the Agency shall promptly remove the encroachment from the highway right of way.
- 4. Failure by the Occupant to comply with the provisions of this permit is cause for the Agency to terminate this permit and to require the Occupant to take immediate action to clear the right of way to a safe condition.
- 5. Issuance of this permit shall not be construed as a waiver of the occupant's obligation to comply with any more restrictive requirements imposed by local ordinance.

	Date	
	State of Wisconsin)
) ss.
		County)
	On the above date, this instrunce named person(s).	iment was acknowledged before me by the
Signature & Date	Signature, Notary Public, State	of Wisconsin
Print Name	Print or Type Name, Notary Pu	blic, State of Wisconsin
Title	Date Commission Expires	
Project ID:	This instrument was drafted by:	Parcel No.: 3
6999-09-02	Kathy Rudolph, CORRE, Inc. on behalf of the City of Wausau	Encroachment No.: 5
	D 1 . 62	

LEGAL DESCRIPTION

Land described in Certified Survey Map No. 4281 recorded in the office of the Register of Deeds for Marathon County, Wisconsin, in Volume 16 of Certified Survey Maps on page 49, as Document No. 862166; being a part of the North one-half (N ½) of the Northwest fractional quarter (NW fr'l ¼) of Section thirty-one (31), Township twenty-nine (29) North, Range seven (7) East, in the City of Wausau, Marathon County, Wisconsin; excepting that part thereof described in deed recorded in said Register's office in Volume 491 of Micro-Records on page 1170; subject to easements of record.

AND

Outlot one (1) of Certified Survey Map No. 12575 recorded in the office of the Register of Deeds for Marathon County, Wisconsin, in Volume 54 of Certified Survey Maps on page 83, as Document No. 1292464; being part of the North one-half (N 1/2) of the Northwest fractional quarter (NW fr'l 1/4) of Section thirty-one (31), Township twenty-nine (29) North, Range seven (7) East, in the City of Wausau, Marathon County, Wisconsin; subject to easements of record.



PICTURE



STAFF REPORT TO CISM COMMITTEE - July 13, 2023

AGENDA ITEM

Discussion and possible action on Revocable Occupancy Permit for Parcel 12 (7019 Stewart Avenue) of Project ID 6999-09-02, Stewart Avenue

BACKGROUND

The Stewart Avenue reconstruction project from 48th Avenue to 72nd Avenue is scheduled for 2024. During the development of the plans and real estate plat we have identified encroachments in the right-of-way. Encroachments that do not impact the construction that will be allowed to remain are granted a revocable occupancy permit. This permit is for a small area of an existing parking lot.

FISCAL IMPACT

None

STAFF RECOMMENDATION

Staff recommends approving the permit.

REVOCABLE OCCUPANCY PERMIT

Wisconsin Department of Transportation Exempt from filing transfer form [s. 77.21(1), 77.22(1) Wis. Stats.] RE1551 04/2016 (Replaces RE1551 08/2011) Ch. 84 Wis. Stats.

Occupant name and address: Ruth A Van Ert, LLC, 1575 Timber Ridge Drive, Kronenwetter, WI 54455-9288 Agency name and address: City of Wausau, 407 Grant Street, Wausau, WI 54403 Highway: Stewart Avenue County: Marathon; City: Wausau

Encroachment location: Legal Description Attached

Encroachment description: Parking Lot (Approximately 129 sf)

The use and occupancy of highway right of way under this permit is conditioned upon the Occupant's compliance with these provisions:

1. This permit only authorizes the described encroachment to remain temporarily within the **Stewart Avenue** right of way by **0-1.2 feet**; however, if the described encroachment is damaged from any cause whatsoever, to the extent that repair costs would be equal to or greater than 50% of the assessed or estimated value of the described encroachment at the time of said occurrence, then it cannot be repaired, re-erected and/or replaced anywhere within the existing highway right of way.

This space is reserved for recording data

Return to CORRE, Inc. Attn: Kathy Rudolph 1802 Warden Street Eau Claire, WI 54703

Parcel Identification Number/Tax Key Number 291-2907-312-0992

- 2. In the event that the Agency deems it necessary to revoke this permit because of a need to expand capacity or improve safety, the Agency reserves the right to give notice regarding the removal of the described encroachment. The Agency may terminate this permit upon (30) days written notice to the Occupant. The Occupant shall remove the described encroachment maintained under this permit within the time specified in the notice.
- 3. If the Agency determines that the installation or use of the described encroachment authorized under this permit increases the difficulty of highway maintenance, creates conditions adverse to the best interest of the highway users, the general public, or presents a threat to highway safety, then the occupant, upon notification by the Agency shall promptly remove the encroachment from the highway right of way.
- 4. Failure by the Occupant to comply with the provisions of this permit is cause for the Agency to terminate this permit and to require the Occupant to take immediate action to clear the right of way to a safe condition.
- 5. Issuance of this permit shall not be construed as a waiver of the occupant's obligation to comply with any more restrictive requirements imposed by local ordinance.

	Date			
	State	of Wisconsin)	
)	SS.
			County)	
	On the named	above date, this instrument person(s).	nt was acknowledo	led before me by the
Signature & Date		Ire, Notary Public, State of \	Wisconsin	
Print Name	Print or	Print or Type Name, Notary Public, State of Wisconsin		1
Title	Date C	ommission Expires		
Project ID:	This instrument was drafted	by:		Parcel No.: 12
6999-09-02	Kathy Rudolph, CORRE, In on behalf of the City of Wau	c., Isau	Encro	bachment No.: 6
	Page 1 of 3			

LEGAL DESCRIPTION

Lots one (1) and two (2) of Certified Survey Map No. 9120 recorded in the office of the Register of Deeds for Marathon County, Wisconsin in Volume 36 of Certified Survey Maps on page 123 as Document No. 1077237; being part of the South one-half (S 1/2) of the Northwest fractional quarter (NW fr'l 1/4) in Section thirty-one (31), Township twenty-nine (29) North, Range seven (7) East, in the City of Wausau, Marathon County, Wisconsin; subject to easements of record.



PICTURE



STAFF REPORT TO CISM COMMITTEE - July 13, 2023

AGENDA ITEM

Discussion and possible action on Revocable Occupancy Permit for Parcel 47 (5000 Stewart Avenue) of Project ID 6999-09-02, Stewart Avenue

BACKGROUND

The Stewart Avenue reconstruction project from 48th Avenue to 72nd Avenue is scheduled for 2024. During the development of the plans and real estate plat we have identified encroachments in the right-of-way. Encroachments that do not impact the construction that will be allowed to remain are granted a revocable occupancy permit. This permit is for a small retaining wall and landscaping.

FISCAL IMPACT

None

STAFF RECOMMENDATION

Staff recommends approving the permit.

REVOCABLE OCCUPANCY PERMIT

Wisconsin Department of Transportation Exempt from filing transfer form [s. 77.21(1), 77.22(1) Wis. Stats.] RE1551 04/2016 (Replaces RE1551 08/2011) Ch. 84 Wis. Stats.

Occupant name and address: Stewart Woods 5000, LLC, 2100 Stewart Avenue, Suite 300, Wausau, WI 54401-1707 Agency name and address: City of Wausau, 407 Grant Street, Wausau, WI 54403 Highway: Stewart Avenue County: Marathon; City: Wausau

Encroachment location: Legal Description Attached

Encroachment description: Landscaping

The use and occupancy of highway right of way under this permit is conditioned upon the Occupant's compliance with these provisions:

1. This permit only authorizes the described encroachment to remain temporarily within the Stewart Avenue right of way by 0.5-10 feet; however, if the described encroachment is damaged from any cause whatsoever, to the extent that repair costs would be equal to or greater than 50% of the assessed or estimated value of the described encroachment at the time of said occurrence, then it cannot be repaired, re-erected and/or replaced anywhere within the existing highway right of way.

This space is reserved for recording data

Return to CORRE, Inc. Attn: Kathy Rudolph 1802 Warden Street Eau Claire, WI 54703

Parcel Identification Number/Tax Key Number 291-2907-321-0969

- 2. In the event that the Agency deems it necessary to revoke this permit because of a need to expand capacity or improve safety, the Agency reserves the right to give notice regarding the removal of the described encroachment. The Agency may terminate this permit upon (30) days written notice to the Occupant. The Occupant shall remove the described encroachment maintained under this permit within the time specified in the notice.
- 3. If the Agency determines that the installation or use of the described encroachment authorized under this permit increases the difficulty of highway maintenance, creates conditions adverse to the best interest of the highway users, the general public, or presents a threat to highway safety, then the occupant, upon notification by the Agency shall promptly remove the encroachment from the highway right of way.
- 4. Failure by the Occupant to comply with the provisions of this permit is cause for the Agency to terminate this permit and to require the Occupant to take immediate action to clear the right of way to a safe condition.
- 5. Issuance of this permit shall not be construed as a waiver of the occupant's obligation to comply with any more restrictive requirements imposed by local ordinance.

	Date	
	State of Wisconsin)
) ss.
	On the above date, this in named person(s).	County) istrument was acknowledged before me by the
Signature & Date	Signature, Notary Public, S	tate of Wisconsin
Print Name Print or Type Name, Notary Public, State of Wisco		Public, State of Wisconsin
Title	Date Commission Expires	
Project ID:	This instrument was drafted by:	Parcel No.:47
6999-09-02	Kathy Rudolph, CORRE, Inc., on behalf of the City of Wausau	Encroachment No.: 22

LEGAL DESCRIPTION

Lot one (1) of Certified Survey Map No. 10488, recorded in the office of the Register of Deeds for Marathon County, Wisconsin in Volume 43 of Certified Survey Maps on page 120, being a part of the Northwest quarter (NW¼) of the Northeast quarter (NE¼) of Section thirty-two (32), Township twenty-nine (29) North, Range seven (7) East, in the City of Wausau, Marathon County, Wisconsin.



PICTURE



STAFF REPORT TO CISM COMMITTEE - July 13, 2023

AGENDA ITEM

Discussion and possible action on Revocable Occupancy Permit for Parcel 51 (4901 Stewart Avenue) of Project ID 6999-09-02, Stewart Avenue

BACKGROUND

The Stewart Avenue reconstruction project from 48th Avenue to 72nd Avenue is scheduled for 2024. During the development of the plans and real estate plat we have identified encroachments in the right-of-way. Encroachments that do not impact the construction that will be allowed to remain are granted a revocable occupancy permit. This permit is for small segment of an existing parking lot.

FISCAL IMPACT

None

STAFF RECOMMENDATION

Staff recommends approving the permit.

REVOCABLE OCCUPANCY PERMIT

Wisconsin Department of Transportation Exempt from filing transfer form [s. 77.21(1), 77.22(1) Wis. Stats.] RE1551 04/2016 (Replaces RE1551 08/2011) Ch. 84 Wis. Stats.

Occupant name and address: **4901 Stewart Avenue**, **LLC**, **2100 Stewart Avenue**, **Suite 300**, **Wausau**, **WI 54401-1707** Agency name and address: **City of Wausau**, **407 Grant Street**, **Wausau**, **WI 54403** Highway: **Stewart Avenue** County: **Marathon**; City: **Wausau**

Encroachment location: Legal Description Attached

Encroachment description: Parking Lot (approximately 264 sf)

The use and occupancy of highway right of way under this permit is conditioned upon the Occupant's compliance with these provisions:

1. This permit only authorizes the described encroachment to remain temporarily within the **Stewart Avenue** right of way by **0-10 feet**; however, if the described encroachment is damaged from any cause whatsoever, to the extent that repair costs would be equal to or greater than 50% of the assessed or estimated value of the described encroachment at the time of said occurrence, then it cannot be repaired, re-erected and/or replaced anywhere within the existing highway right of way.

This space is reserved for recording data

Return to CORRE, Inc. Attn: Kathy Rudolph 1802 Warden Street Eau Claire, WI 54703

Parcel Identification Number/Tax Key Number 291-2907-321-0971

- 2. In the event that the Agency deems it necessary to revoke this permit because of a need to expand capacity or improve safety, the Agency reserves the right to give notice regarding the removal of the described encroachment. The Agency may terminate this permit upon (30) days written notice to the Occupant. The Occupant shall remove the described encroachment maintained under this permit within the time specified in the notice.
- 3. If the Agency determines that the installation or use of the described encroachment authorized under this permit increases the difficulty of highway maintenance, creates conditions adverse to the best interest of the highway users, the general public, or presents a threat to highway safety, then the occupant, upon notification by the Agency shall promptly remove the encroachment from the highway right of way.
- 4. Failure by the Occupant to comply with the provisions of this permit is cause for the Agency to terminate this permit and to require the Occupant to take immediate action to clear the right of way to a safe condition.
- 5. Issuance of this permit shall not be construed as a waiver of the occupant's obligation to comply with any more restrictive requirements imposed by local ordinance.

Date					
State of Wisconsin)				
) ss.				
	County)				
On the above date, this ins named person(s).	trument was acknowledged before me by the				
Signature, Notary Public, Sta	Signature, Notary Public, State of Wisconsin				
Print Name Print or Type Name, Notary Public, State of					
Date Commission Expires					
This instrument was drafted by:	Parcel No.: 51				
Kathy Rudolph, CORRE, Inc., on behalf of the City of Wausau	Encroachment No.: 24				
	Date State of Wisconsin On the above date, this ins named person(s). Signature, Notary Public, Sta Print or Type Name, Notary Date Commission Expires This instrument was drafted by: Kathy Rudolph, CORRE, Inc., on behalf of the City of Wausau				

LEGAL DESCRIPTION

Parcel one (1) of Certified Survey Map No. 8889 recorded in the office of the Register of Deeds for Marathon County, Wisconsin, in Volume 35 of Certified Survey Maps on page 67, as Document Mp/ 1063935; being a part of the Southwest quarter (SW ¼) of the Northeast quarter (NE ¼) of Section thirtytwo (32), Township twenty-nine (29) North, Range seven (7) East, in the Town of Stettin (now City of Wausau), Marathon County, Wisconsin; subject to easements of record.



PICTURE



AGENDA ITEM

Discussion and possible action on accepting the study for the rerouting of STH 52 and Business Hwy 51 in the City of Wausau

BACKGROUND

Business Hwy 51 and STH 52 run through the City of Wausau as connecting highways. Being designated as a connecting highway means the Wisconsin Department of Transportation (WDOT) is the controlling authority over these roadways. It also means the WDOT is responsible for the reconstruction of these roadways. The City of Wausau receives connecting highway aid on these segments of roadway to do roadway maintenance such as pothole patching and pavement marking.

Engineering and Planning have been working with the WDOT to move the connecting highways out of the downtown in an effort to convert several of the one-way streets in the downtown to two-way traffic. Converting these streets to two-way traffic would be consistent with the Toole plan adopted by Council.

See the attached map which outlines the existing STH 52 and Business Hwy 51 connecting highway routes in the City of Wausau and a proposed alternative to these connecting highway routes. From the map, STH 52 would utilize Bridge Street. Business Hwy 51 would utilize 1st and 3rd Avenues from Stewart to Thomas Street and Thomas Street from 3rd Avenue to Grand Avenue. In June of 2022 this CISM committee agreed to have the WDOT complete a traffic study to assess the rerouting of STH 52 and Business 51. The WDOT has completed the study and a copy of the study is attached.

Staff has reviewed the report with the WDOT and concurs with the major conclusions of the report. The next step in the process would be to complete an environmental report to assess any impacts of the proposed changes.

Staff will be available during the meeting to discuss the report and impacts to the City of Wausau transportation system.

FISCAL IMPACT

Fiscal impacts to the City are discussed in Chapter 8 of the report. The net result of the change if the City of Wausau would receive is approximately \$33,000 less in roadway aid per year with the proposed roadway designation changes.

STAFF RECOMMENDATION

Staff recommends accepting the study.




BUS 51/STH 52 REROUTING STUDY WAUSAU, WISCONSIN

PROJECT ID: 6999-00-12 DATE SUBMITTED: MAY 18, 2023

PREPARED FOR: Wisconsin Department of Transportation, NC Region Contact Person: Richard Handrick, P.E.

PREPARED BY: Traffic Analysis and Design, Inc. (TADI) P.O. Box 128 Cedarburg, WI 53012 Phone: (262) 377-1845 Contact Person: Daniel C. Bieberitz, P.E., PTOE

Benesch 1300 W. Canal Street, Suite 150 Milwaukee, WI 53233 Phone: (414) 308-1310 Contact Person: Amanda Zacharias, P.E., VMA





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Chapter 4

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Exhibit 4	Year 2022 Existing T	Traffic Volumes, North Map
Exhibit 5	Year 2022 Existing T	Traffic Volumes, East Map
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- Intersection Safety Intersection Lists
- Intersection Collision Diagrams

Appendix B Existing Traffic Volumes

- ADT Directional Counts
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Appendix C Origin-Destination Maps

Appendix D..... Bus 51 Volume Estimation Changes

- Bus 51 Volume Estimation Changes Peak Hours
- Bus 51 Volume Estimation Changes Worst Case Scenario
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Appendix E Year 2022 Existing Conditions Capacity Analysis Results

Appendix F..... Year 2023 Proposed Traffic Rerouted Condition Capacity Analysis Results

Appendix G..... Existing and Proposed Signing

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- Proposed Rerouting Signing Maps
- Signing Inventory Tables (Existing and Proposed)

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- Roadway Segment Analysis
- Truck Turning Movement Path Analysis
- Structure Analysis
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Appendix IHighway Aid Payments Comparison Analysis

Appendix J Neighborhood Impact Analysis



CHAPTER 1 – INTRODUCTION & STUDY EXECUTIVE SUMMARY

Part A – Purpose of Report and Study Objectives

The Wisconsin Department of Transportation (WisDOT) has requested an analysis of the feasibility of a partial rerouting of USH Business 51 (Bus 51) and State Trunk Highway 52 (STH 52) through the City of Wausau. This analysis identifies the infrastructure needs of the partial rerouting of these two highways through the City of Wausau, which includes analyzing existing and proposed traffic conditions, signing changes, pavement condition and structure analysis, at-grade railroad crossing analysis, neighborhood impact analysis, traffic safety analysis, and highway aid payments comparison analysis. The study area is limited to the roadway segments that would become part of the new Bus 51 and STH 52 designation.

Part B – Executive Summary

B1. Recommendations

Based on the Origin-Destination data collected as part of this study (see Appendix C), the amount of traffic coming from the north side of Bus 51 (Zone A) and continuing south to the south side downtown (south of Thomas Street – Zone B) is only about 13.7% of the total daily traffic, which is approximately 700 vehicles per weekday. This 13.7% of traffic takes three different routes to get to the south side of Wausau and connects back up to Bus 51. Likewise, going northbound starting just south of downtown (Zone B) on Bus 51 and continuing to the north side of Wausau on Bus 51 (just north of W. Union Avenue – Zone A) is only 5.2% of the daily traffic, or just over 600 vehicles. Knowing that most typical local commuter drivers will not reroute due to redesignation of Bus 51, the amount of vehicles that will actually reroute are likely only non-local travelers and trucks that are currently taking the existing Bus 51 route. Based on the existing truck counts at some key intersections, an estimated amount of 40 to 100 trucks (100 using the high-end analysis) may reroute to the new proposed Bus 51 route with the typical amount being closer to 40 trucks per day (includes single unit trucks, buses, and semi-trucks). This translates to about two to five trucks per peak hour being diverted using the new proposed route.

The Origin-Destination data for the STH 52 existing and proposed rerouting showed that 95% of the traffic is currently using Bridge Street as compared to using 5th Street, Scott Street, and Stewart Avenue (existing STH 52 route) to go from the northeast side of Wausau to the west side of Wausau. Vice- versa, going from west side to northeast side of Wausau using Bridge Street is 90% of the traffic as compared to 10% using the existing STH 52 route. Therefore, rerouting STH 52 onto Bridge Street will likely have no effect on traffic, including truck traffic.

Regardless of how many trip changes occur if STH 52 and/or Bus 51 is rerouted, there are several improvements that should be considered within the study corridors to reduce crashes and be within current standards. These improvements include:

- Consider removing the night-time flashing schedule at the traffic signals along Bridge Street. There are numerous crashes reported during the flashing red signal mode. Instead, have the signals in actuated mode with the "Green Recall" on Bridge Street.
- Consider revising the Coordination Action Plan 2 to start later in the morning for the traffic signals along Bridge Street from the USH 51 ramps to 10th Avenue. See Chapter 5 for more details.
- Consider adjusting the traffic signal clearance intervals (yellow and all-red) at the following intersections: Bridge Street at 1st Avenue, Bridge Street at 3rd Avenue, Bridge Street at 3rd Avenue, Bridge Street at 5th Street.



- Install "Fines Higher" and "End School Zone" signs along Bridge Street.
- There are numerous safety improvements at individual intersections that can be investigated for potential safety funding. See Chapter 1 for intersection safety improvement details.

B2. Conclusions

The City of Wausau will need to weigh the benefits and costs associated with rerouting Bus 51 and STH 52. The benefit of rerouting Bus 51 and STH 52 to the City is having more liberty to implement roadway and mobility improvements within these routes that do not need to follow WisDOT FDM standards and rerouting a relatively low amount of trucks out of the downtown area. The costs associated with rerouting of Bus 51 and STH 52 include:

- Signing changes (200 signs removed, over 150 new signs and a minimum of 13 new freeway guide signs). See Chapter 6.
- Four street segments that would become part of the rerouted connecting highway system do not meet some of the FDM 11-20, Attachment 1.1 standards. They include Segment 5 (3rd Avenue from Bridge Street to Stewart Avenue), Segment 6 (3rd Avenue from Stewart Avenue to Thomas Street), Segment 8 (1st Avenue from McCleary Street to River Drive). Potential removal of on-street parking along 1st and 3rd Avenues or roadway widening would be needed to have these sections of streets to FDM standards; however, WisDOT's current approach to Asset Management by Performance-Based Practical design does not require that every element outside of FDM "desirable standards" be automatically adjusted. Some of these components and dimensions may remain if safety and operational performance are satisfactory until future improvement projects are programmed. See Chapter 7.
- Upgrades to five railroad crossings (estimated cost of \$1,110,000). These upgrades may occur over time based on WisDOT's Asset Management by Performance-Based Practical design if safety and operational performance are satisfactory. See Chapter 7.
- Bridge infrastructure maintenance and upgrades on three bridges (estimated cost of \$99,000 for first 5 years). Thomas Street bridge is an 82.10 bridge, which means that WisDOT currently owns the bridge and when the bridge is replaced, the ownership will go back to the City. See Chapter 7.
- Widening radii at three intersections. These improvements can be addressed when roadway projects are programmed for these intersections in the future. See Chapter 7.
- A reduction in the highway aid payments. See Chapter 8.



CHAPTER 2 – STUDY AREA

Part A – Study Routes and Intersections

Bus 51 going northbound currently uses Grand Avenue, 6th Street, Scott Street, 1st Avenue (west of the river), and Union Avenue to get to Merrill Avenue on the northwest side of the City. Bus 51 south currently uses 3rd Avenue to Stewart Avenue/Slough Bridge, 1st Street, Forest Street to Grand Avenue.

The rerouting of Bus 51 North will go from Grand Avenue to Thomas Street to 1st Avenue and then north on 1st Avenue to join the existing route north of Stewart Avenue. Bus 51 South will go south on 3rd Avenue to Thomas Street and then over to Grand Avenue. (See Exhibit 1 on page 5 for map of existing and proposed routes.)

STH 52 East currently starts at the STH 29 off-ramp to the Highway 52 Parkway on the west side of Wausau and then continues east along Stewart Avenue into downtown where it goes on 1st Street, Forest Street and then onto 6th Street going north where it meets Wausau Avenue to go east on the northeast side of Wausau.

STH 52 West uses Wausau Avenue to 5th Street where it goes south to Scott Street and then turns west on Scott Street to connect to Stewart Avenue and then to the Highway 52 Parkway.

The rerouting of STH 52 will start on Bridge Street at the USH 51 interchange on the west side (southbound ramp terminal) and continue east connecting to the existing STH 52 routes at 5^{th} and 6^{th} Streets. (See Exhibit 1 on page 5.)

Bridge Street (proposed STH 52 reroute) between the USH 51 interchange and 6th Street is a four-lane divided urban east/west principal arterial that has left-turn lanes at both the signalized and unsignalized intersections. At the major intersections, such as the USH 51 ramp terminals, 17th Avenue, 3rd Avenue, 1st Avenue, and 3rd Street, separate right-turn lanes are provided. The posted speed limit on Bridge Street is 25 miles-per-hour (mph) within the limits of the study area. The WisDOT year 2019 annual average daily traffic (AADT) volumes on Bridge Street near the USH 51 interchange are 17,400 vehicle per day (vpd), at the Wisconsin River Bridge it is 22,100 vpd, and between 5th and 6th Street it is 9,900 vpd. Sidewalks are provided along both sides of Bridge Street from the USH 51 southbound ramp terminal to the Wisconsin River Bridge. The bridge over the Wisconsin River has a sidewalk on the south side only. East of 2nd Street, there are sidewalks on both sides of Bridge Street west of the Wisconsin River.

Thomas Street (proposed Bus 51 reroute) is generally a two-lane urban principal arterial that has a 25-mph speed limit. From 3rd Avenue to Cleveland Avenue, Thomas Street is divided by a center concrete median. East of Cleveland Avenue, Thomas Street has a two-way left-turn lane (TWLTL) to the Wisconsin River bridge. East of the bridge, Thomas Street widens out to a 5-lane roadway with a separate eastbound left-turn, thru lane and right-turn lane at Grand Avenue. The WisDOT year 2019 AADT volumes on Thomas Street just east of 1st Avenue is 18,000 vpd. Sidewalks are provided along both sides of Thomas Street with the exception on the Wisconsin River bridge, a sidewalk is provided on the south side.



1st Avenue south of Stewart Avenue is a one-lane one-way northbound principal arterial with a 25-mph speed limit. On-street parking is provided on the west side of 1st Avenue and on the east side there is a one-way northbound bike lane. The WisDOT year 2019 AADT volumes on 1st Avenue just north of Thomas Street is 2,500 vpd and just north of West Street is 3,100 vpd. Sidewalks are provided on the west side from Thomas Street to Stewart Avenue. On the east side, sidewalks exist from Thomas Street to West Street.

 3^{rd} Avenue between Stewart Avenue and Thomas Street is a two-lane one-way southbound principal arterial with a 25-mph speed limit. On-street parking is provided on both sides of the street. Bicycle sharrow markings are provided on west side travel lane. The WisDOT year 2019 AADT volumes on 3^{rd} Avenue just south of Stewart Avenue is 4,700 vpd and just north of Thomas Street is 4,300 vpd. Sidewalks are provided along both sides of the street between Stewart Avenue and Thomas Street.

As part of the Bus 51/STH 52 reroute, 25 intersections were analyzed for traffic conditions and safety analysis. These intersections are:

- 1. Hwy 52 Parkway with USH 51 southbound ramps (signalized, state operated/maintained)
- 2. Hwy 52 Parkway with USH 51 northbound ramps (signalized, state operated/maintained)
- 3. W. Bridge Street with USH 51 southbound ramps (signalized, state operated/maintained)
- 4. W. Bridge Street with USH 51 northbound ramps (signalized, state operated/maintained)
- 5. W. Bridge Street with N. 17th Avenue (signalized, city operated/maintained)
- 6. W. Bridge Street with N. 10th Avenue (signalized, city operated/maintained)
- 7. W. Bridge Street with N. 6th Avenue (school crossing)
- 8. W. Bridge Street with N. 3rd Avenue (signalized, city operated/maintained)
- 9. W. Bridge Street with N. 1st Avenue (signalized, city operated/maintained)
- 10. W. Bridge Street with Pick'n Save/Commercial Driveway (signalized, city operated/maintained)
- 11. W. Bridge Street with N. 2nd Street (stop-sign controlled)
- 12. W. Bridge Street with N. 3rd Street (signalized, city operated/maintained)
- 13. W. Bridge Street with N. 5th Street (signalized, city operated/maintained)
- 14. W. Bridge Street with N. 6th Street (signalized, city operated/maintained)
- 15. Stewart Avenue (Existing 51/52) with S. 3rd Avenue
- 16. Stewart Avenue (Existing 51/52) with S. 1st Avenue
- 17. S. 3rd Avenue with Garfield Avenue (stop sign controlled)
- 18. S. 1st Avenue with Garfield Avenue (stop sign controlled)
- 19. S. 3rd Avenue with West Street (stop sign controlled)
- 20. S. 1st Avenue with West Street (stop sign controlled)
- 21. S. 3rd Avenue with Sherman Street (stop sign controlled)
- 22. S. 1st Avenue with Sherman Street (stop sign controlled)
- 23. S. 3rd Avenue with W. Thomas Street (stop sign controlled)
- 24. S. 1st Avenue with W. Thomas Street (stop sign controlled)
- 25. E. Thomas Street with Grand Avenue (signalized, city operated/maintained)

The intersections are shown on the study area map on Exhibit 1. A transportation detail illustrating existing roadway through lanes, traffic control at the study intersections, and speed limits is shown on Exhibit 2 on page 6.







CHAPTER 3 – CRASH SAFETY ANALYSIS

Part A – Crash History

Crash analysis was completed for the intersections along Bridge Street, Stewart Avenue, 1st Avenue, 3rd Avenue, 5th Street, 6th Street and Scott Street within the project study area. These streets represent the existing and proposed rerouting of Bus 51 and STH 52. Crash collision diagrams were completed at signalized intersections and unsignalized intersections with five or more crashes over a five-year crash history (2017 – 2021), which resulted in 47 intersections being analyzed. Table 1 below shows the top 20 intersections listed by crash rate from highest to lowest.

RANK	INTERSECTION	TRAFFIC CONTROL	ENTERING AADT	CRASH FREQUENCY	CRASH RATE
1	N 5th St. and Scott St.	Traffic Signal	11,100	45	2.22
2	Bridge St and USH 51 NB Ramps	Traffic Signal	21,900	86	2.15
3	1st Ave. and Callon St	Minor Street Stop	3,100	11	1.94
4	3rd Ave. and Sherman St.	Minor Street Stop	6,950	18	1.42
5	1st Ave. and Sherman St	Minor Street Stop	3,300	8	1.33
6	Bridge St and N. 1st Ave.	Traffic Signal	25,550	59	1.27
7	N. 5th St. and Bridge St.	Traffic Signal	18,250	42	1.26
8	Scott St. and 1st St.	Traffic Signal	12,050	27	1.23
9	Scott St. and 2nd St.	Traffic Signal	6,550	14	1.17
10	Stewart Ave. and 17th Ave.	Traffic Signal	31,700	63	1.09
11	N. 6th St. and Scott St.	Minor Street Stop	10,600	21	1.09
12	Grand Ave. and Thomas St.	Traffic Signal	24,950	46	1.01
13	Bridge St and N. 17th Ave.	Traffic Signal	24,200	41	0.93
14	N. 6th Ave and Washington St	Traffic Signal	12,745	21	0.90
15	Scott St. and N. 3rd St.	Traffic Signal	7,900	13	0.90
16	N. 6th Street & Bridge Street	Traffic Signal	13,300	20	0.82
17	N. 5th St. and Franklin St.	Minor Street Stop	5,980	9	0.82
18	3rd Ave. and Stewart Ave.	Traffic Signal	27,350	41	0.82
19	N. 6th St and Grant St	Minor Street Stop	6,760	10	0.81
20	N. 6th St. and Jefferson St.	Minor Street Stop	10,450	15	0.79

Table 1: Crash Rate Ranking

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

Table 2 shows the intersection crashes listed by crash frequency for the top 20 locations, from highest to lowest. Some intersections that stand out in both the crash rate and crash frequency lists are the following intersections:

- N. 5th Street and Scott Street
- Bridge Street and USH 51 NB Ramps
- Stewart Avenue and 17th Avenue
- Bridge Street and N. 1st Avenue
- Grand Avenue and Thomas Street
- N. 5th Street and Bridge Street
- Bridge Street at 17th Avenue
- 3rd Avenue and Stewart Avenue
- Scott Street and 1st Street



								CRASH
		TRAFFIC		A-	B-	C-		FREQUENCY
RANK	INTERSECTION	CONTROL	FATAL	LEVEL	LEVEL	LEVEL	PDO	TOTAL
1	Bridge St and USH 51 NB Ramps	Traffic Signal	0	0	2	10	74	86
2	Stewart Ave. and 17th Ave.	Traffic Signal	0	0	7	6	50	63
3	Bridge St and N. 1st Ave.	Traffic Signal	1	0	5	9	44	59
4	Grand Ave. and Thomas St.	Traffic Signal	0	1	2	9	34	46
5	N 5th St. and Scott St.	Traffic Signal	0	2	2	8	33	45
6	N. 5th St. and Bridge St.	Traffic Signal	0	0	6	3	33	42
7	3rd Ave. and Stewart Ave.	Traffic Signal	0	1	7	9	24	41
8	Bridge St and N. 17th Ave.	Traffic Signal	0	1	0	5	35	41
9	Hwy 52 Parkway and 18th Ave.	Traffic Signal	0	0	5	4	25	34
10	Bridge St and N. 3rd Ave.	Traffic Signal	0	0	2	5	26	33
11	1st Ave and Stewart Ave	Traffic Signal	0	0	2	5	22	29
12	Hwy 52 Parkway and USH 51 NB Ramps	Traffic Signal	0	0	3	2	22	27
13	Scott St. and 1st St.	Traffic Signal	0	0	4	1	22	27
14	N. 3rd St. and Bridge St.	Traffic Signal	0	0	0	3	21	24
15	N. 6th Ave and Washington St	Traffic Signal	0	0	0	3	18	21
16	N. 6th St. and Scott St.	Minor Street Stop	0	0	2	2	17	21
17	N. 6th Street & Bridge Street	Traffic Signal	0	0	3	2	15	20
18	Hwy 52 Parkway at USH 51 SB Ramps	Traffic Signal	0	0	4	2	13	19
19	Bridge St at N. 2nd Ave.	Minor Street Stop	0	0	3	2	14	19
20	Bridge St. and USH 51 SB Ramps	Traffic Signal	0	1	2	3	12	18

Table 2: Crash Frequency Ranking

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

It is important to note that there were a considerable amount of crashes spread out among the Bridge Street intersections from 3rd Avenue to 3rd Street that occurred when traffic signals were in night-time flash operation.

There is currently a relatively short full lane shift (150-feet long) going westbound on Bridge Street between the Pick 'n Save Drive and 1st Avenue. Two side-swipe crashes occurred near this area of the lane shift.

Appendix A includes additional intersection lists, including the full rankings of the 47 intersections for Crash Rate, Crash Frequency, Economic Loss Ranking, Pedestrian Crash Ranking, Bicycle Crash Ranking, Night-Time Crash Ranking, Slippery Conditions Crash Ranking and Top Crash Types. Appendix A also includes collision diagrams of the 47 intersections analyzed.

Part B – Potential Safety Improvements

Intersection safety improvements/considerations were identified for 38 of the 47 intersections. Some of these intersections showed potential Highway Safety Improvement Program (HSIP) or Signals and ITS Standalone Program (SISP) potential due to proposed countermeasures that can reduce the existing crashes at these intersections. Of the 47 intersections analyzed, four intersections may be candidates for HSIP funding, and nine intersections might be able to obtain HSIP funding for minor geometric changes and/or median closures. Seven other intersections would be good candidates for SISP funding. There are also 15 other intersections that would benefit through local low-cost improvements, such as adding lane-use signs, additional pavement markings, moving signal poles to reduce vehicle hits, landscape maintenance to improve visibility, and updating vehicle clearance intervals (yellow and all-red times). See Appendix A for detailed improvements associated with each intersection.

Of the nine intersections that either had a high crash ranking or high crash frequency, eight intersections can be improved through traffic signal or geometric improvements. North 5th Street



and Scott Street were improved in 2020/2021 with traffic signal and pavement marking improvements. These top nine intersections with potential improvements are listed below.

- N. 5th Street and Scott Street (int. #33) $\blacksquare \rightarrow$ Intersection improved in 2021.
- Bridge Street and USH 51 NB Ramps (int. #7) **§** → NB right-turn improvements
- Stewart Avenue and 17th Avenue (int. #4)
 [●] → <u>HSIP Candidate, Traffic Study</u> <u>Recommended</u> – Potential traffic signal replacement & geometric improvements (realigning left-turn lanes and approach angle of right-turn lanes)
- Bridge Street and N. 1st Avenue (int. #13) → <u>SISP Candidate, Traffic Study</u> <u>Recommended</u> – Potential traffic signal replacement and increase pavement friction.
- Grand Avenue and Thomas Street (int. #36)
 [↑] SISP Candidate, Traffic Study <u>Recommended</u> – Potential traffic signal replacement.
- N. 5th Street and Bridge Street (int. #17) [●] → <u>SISP Candidate, Traffic Study</u> <u>Recommended</u> – Potential traffic signal replacement and adjust vehicle clearance intervals.
- Bridge Street at 17th Avenue (int. #8) **↓** → <u>HSIP Candidate, Traffic Study</u> Potential traffic signal improvements and realign EB/WB left-turn lanes for neutral offset.
- 3rd Avenue and Stewart Avenue (int. # 46) **§** → <u>Traffic Study</u> Minor traffic signal improvements and review signal clearance intervals (yellow and all-red intervals)
- Scott Street and 1st Street (int. #44) **§** → <u>SISP Candidate</u> Improve signal head visibility, add pedestrian countdown timers and high visibility crosswalks.



CHAPTER 4 – EXISTING AND PROJECTED TRAFFIC VOLUMES

Part A – Existing Volumes

Forty-eight hour classification counts were collected at a total of five locations from Jan. 2-6, 2023, which are listed below:

- 1st Avenue north of Elm Street
- 3rd Avenue north of Elm Street
- Scott Street west of 1st Street
- Stewart Avenue east of 1st Avenue
- Highway 52 Parkway east of USH 51 interchange

ADTs and truck percentages were calculated based on the 48-hour counts and are summarized below on Table 3.

			Truck Percentage				
					Midday		
Location	Direction	ADT	Daily	AM Peak	Peak	PM Peak	
1st Avenue north of Elm Street	NB	5,460	5%	10%	5%	4%	
3rd Avenue north of Elm Street	SB	5,870	6%	10%	5%	3%	
Scott Street west of 1 st Street (STH 52)	WB	8,750	3%	5%	6%	3%	
Stewart Ave. east of 1 st Avenue (STH 52)	EB	8,620	4%	5%	5%	3%	
Highway 52 Parkway east of USH 51	EB	5,490	2%	2%	2%	2%	
Interchange (STH 52)	WB	8,350	4%	6%	4%	3%	

Table 3: ADTs and Truck Percents

Traffic volume counts at the 25 study intersections were taken between November 28, 2022, and January 6, 2023. For simplicity in this report, the existing traffic volumes will be referred to as year 2022. The peak hours were tabulated per corridor or group of intersections that are adjacent to each other, as shown in Table 4.

Corridor	Date of Count	AM Peak	Midday Peak	PM Peak
STH 52 Parkway & USH 51 Ramps	12/1/2022	7:00 - 8:00	11:45 - 12:45	4:15 - 5:15
Bridge St. & USH 51 Ramps	11/28 - 29 & 12/1/2022	7:00 - 8:00	12:45 - 1:45	3:00 - 4:00
Bridge St: 1st Ave to Pick n' Save Dr.	11/28 - 29, 2022	7:00 - 8:00	12:00 - 1:00	3:00 - 4:00
Bridge St: 2nd St 6th St.	12/1/2022	7:00 - 8:00	11:30 - 12:30	2:45 - 3:45
Grand Ave. & Thomas St.	1/5 - 1/6, 2023	7:15 - 8:15	1:00 - 2:00	4:00 - 5:00
Thomas St. & 1st Ave 3rd Ave.	12/5-6, 2022 & 1/2/2023	7:30 - 8:30	1:00 - 2:00	3:00 - 4:00
1st Ave: West St. & Sherman St.	12/7/2022 & 1/3/2023	7:00 - 8:00	12:15 - 1:15	2:30 - 3:30
1st Ave: 2nd Ave Stewart Ave.	11/28 - 29/2022 & 1/3/2023	7:15 - 8:15	1:00 - 2:00	2:45 - 3:45
3rd Ave: Stewart Ave Garfield Ave.	11/28 - 29 & 12/7/2022	7:15 - 8:15	1:00 - 2:00	2:45 - 3:45
3rd Ave: West St Sherman St.	12/7/2022	7:30 - 8:30	1:00 - 2:00	2:45 - 3:45

Table 4: Peak Hour Summary by Corridor

The existing 2022 traffic volumes are shown in Exhibits 3 through 5. The full traffic count data collected for this study is included in Appendix B.









Part B – Origin-Destination Study

Origin-Destination (O-D) data was collected through Street Light Data for areas coming from the north side of the City along Bus 51 (Merrill Avenue just north of W. Union Avenue) to the south side of the City (Grand Avenue just south of Thomas Street) and also for areas coming from the east side of the City along STH 52 (E. Wausau Avenue just east of 6th Street) to the west side of the City (five zones either on Highway 52 Parkway, Stewart Avenue, 24th Avenue, USH 51, or STH 29), and vice versa. Below in Table 5 is a summary of the O-D data for traffic along Bus 51. As seen from the Bus 51 data, a relatively few percentage of vehicles actually come from Zone A and continue to Zone B and vice versa. When this data is further broken down to peak hours, it ranges from 31 to 63 vehicles per hour.

	Zone A to B (Southbound)	24-Hour	r Volume	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
			Percentage of		Avg. Travel		Avg. Travel		Avg. Travel
		Total Vehicles	Total Volume	Total	Time	Total	Time	Total	Time
	Route	SB	(5,056)	Volume	(min.)	Volume	(min.)	Volume	(min.)
North	Via Bridge St. & 5th St.	122	2.4%	5	7.1	8	7.6	11	7.1
Middle	Via 3rd Ave., Stewart & Forest	306	6.1%	18	9.0	12	9.6	26	7.9
South	Via 3rd Ave. & Thomas St.	267	5.3%	13	7.0	14	7.7	26	8.5
	Zone B to A (Northbound)	24-Hour	r Volume	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
			Percentage of		Avg. Travel		Avg. Travel		Avg. Travel
		Total Vehicles	Total Volume	Total	Time	Total	Time	Total	Time
	Route	NB	(11,770)	Volume	(min.)	Volume	(min.)	Volume	(min.)
North	Via 6th St. & Bridge St.	401	3.4%	24	7.2	20	7.3	28	7.5
Middle	Via 6th St., Scott St., & 1st Ave.	128	1.1%	4	6.6	7	6.7	16	9.3
South	Via Thomas St. & 1st Ave.	85	0.7%	9	7.6	4	7.8	8	6.4

Table 5:	Origin-I	Destination	Results	for	Bus	51
Table 5.	Origin-i	Jestination	ICSUITS	101	Dus	51

Bus 51 Origin-Destination Route Maps







Table 6 shows the O-D study results along STH 52. As shown in the results, very little traffic is using Stewart Avenue to get from Zone U to Zones V, X, Y and Z, and vice versa. See Appendix C for maps and further statistics of the O-D data.

Zone	e U to V, W, X, Y & Z (Westbound)	24-Hour Volume		AM Peak Hour		Midday Peak Hour		PM Pe	eak Hour
			Percentage of		Avg. Travel		Avg. Travel		Avg. Travel
		Total Vehicles	Total Volume	Total	Time	Total	Time	Total	Time
	Route	WB	(4,554)	Volume	(min.)	Volume	(min.)	Volume	(min.)
North	Via Bridge St. & USH 51	760	16.7%	77	7.9	28	7.1	71	7.8
South	Via 5th St., Scott St. & Stewart Ave.	41	0.9%	1	9 ¹	0	9 ¹	4	9 ¹
Zone	es V, W, X, Y & Z to U (Eastbound)	24-Hour Volume		AM Peak Hour		Midday Peak Hour		PM Peak Hour	
			Percentage of		Avg. Travel		Avg. Travel		Avg. Travel
		Total Vehicles	Total Volume	Total	Time	Total	Time	Total	Time
	Route	EB	(3,805)	Volume	(min.)	Volume	(min.)	Volume	(min.)
North	Via Bridge St. & USH 51	490	12.9%	20	7.2	17	6.7	60	8.0
South Via Stewart Ave., 1st St., Forest St. & 6th St.		53	1.4%	2	10 ²	2	10 ²	5	10 ²
1) Takon	from Zone U to Zone Y via Google M	an Directions							
TIAVEL	1) Taken from Zone U to Zone Y via Google Map Directions								

Table 6: Origin-Destination Results for STH 52

2) Taken from Zone Y to Zone U via Google Map Directions



Part C – Projected Volumes

Based on the results of the O-D study, little to no traffic volume rerouting is expected along Bridge Street. Nearly 100% of the traffic coming from the east side of Wausau going to west side of Wausau near the STH 29 area and vice versa, are currently using Bridge Street. For the Bus 51 rerouted traffic, if Bus 51 is rerouted onto Thomas Street and then onto 1st and 3rd Avenues, a very small percentage of traffic is expected to be rerouted based on the peak hour volumes. Local drivers within Wausau are likely not to change their travel routes based on redesignation of the state highway. Out of town travelers will likely follow their phones GPS mapping application and take the shortest economically route available, which is usually the blue middle route (3rd Avenue to Stewart Avenue to Forest Street) for the southbound direction on the Bus 51 route map depending on the time of day and congestion. Going northbound, GPS mapping applications will generally suggest either the north purple route (6th Street to Bridge Street) or the middle blue route (6th Street to Scott Street to 1st Avenue) depending on the time of day. Truck drivers may change their travel patterns slightly based on recommended truck routes and the designation of the state highways.



Estimation of the amount of trucks going from Zone A (on Merrill Avenue just north of Union Avenue) to Zone B (Grand Avenue south of Thomas Street) on Bus 51, and vice versa, per peak hour is estimated to be from two to five trucks based on the current percentage of trucks on Bus 51. A worst-case scenario (higher volume of trucks than expected) was used for the capacity analysis for the projected volumes rerouted onto the proposed Bus 51 route, which assumes that 75% of the vehicles starting at Zone A and continue to Zone B are trucks.

Based on the O-D data on Bus 51, 13.7% of the total traffic starting at Zone A will end at Zone B. For southbound traffic starting at Zone A, the existing truck volumes for each peak period were tallied from the Bridge Street and 3rd Avenue intersection. The truck volumes were then factored by 75% (worst case scenario) to figure the total amount of estimated trucks going from Zone A to Zone B via the three different routes (North, Middle, or South). For the worst-case scenario, it was assumed that 100% of the trucks going from Zone A to Zone B would take the South Route (proposed Bus 51 route). The same procedure was applied for the overall change in traffic volumes from Zone B to Zone A, except the truck volumes for each peak period were tallied from the Grand Avenue at Thomas Street intersection. Table 7 shows the projected amount of trucks rerouting onto the proposed Bus 51 route. The change in the overall traffic volumes among the three routes is shown in the "Change from Existing Volumes" column in Table 7 below.

		AM Peak Hour					Midday Peak Hour				PM Peak Hour		
			Projected	Change	Volume		Projected	Change	Volume		Projected	Change	Volume
		Exist.	A to B	from	Change in	Exist.	A to B	from	Change in	Exist.	A to B	from	Change in
		Truck	Truck	Existing	Analysis	Truck	Truck	Existing	Analysis	Truck	Truck	Existing	Analysis
Zone	A to B (Southbound) Routes	Volume ¹	Volume ²	Volumes	(rounded)	Volume ¹	Volume ²	Volumes	(rounded)	Volume ¹	Volume ²	Volumes	(rounded)
North	Via Bridge St. & 5th St.	2	2	-2	0	4	3	-3	-5	4	3	-3	-5
Middle	Via 3rd Ave & Stewart Ave.	12	9	-9	-10	2	2	-2	0	4	3	-3	-5
South	Via 3rd Ave & Thomas St.	25	19	+11	+10	12	9	+5	+5	12	9	+6	+5
1) SB L	T & Thru & EB RT truck volume	at the inter	rsection of B	ridge Street	at 3rd Avenu	ue (adjuste	d based on 2	4-hour direc	tional count	s)			
2) Wor	Worst case scenario assumes 75% of the trucks going SB at point A is going to point B.												
			AM Po	ak Hour			Midday	Poak Hour			DM Do	ak Hour	

Table 7: Bus 51 Reroute Volume Estimation Changes: Worst Case Scenario

2) 000	ist case scenario assumes 75%	2) Worst case scenario assumes 75% of the tracks going 5b at point A is going to point b.											
AM Peak Hour						Midday Peak Hour			PM Peak Hour				
			Projected	Change	Volume		Projected	Change	Volume		Projected	Change	Volume
		Exist.	B to A	from	Change in	Exist.	B to A	from	Change in	Exist.	B to A	from	Change in
		Truck	Truck	Existing	Analysis	Truck	Truck	Existing	Analysis	Truck	Truck	Existing	Analysis
Zone	B to A (Northbound) Routes	Volume ¹	Volume ²	Volumes	(rounded)	Volume ¹	Volume ²	Volumes	(rounded)	Volume ¹	Volume ²	Volumes	(rounded)
North	Via 6th St. & Bridge St.	13	10	-10	-10	12	9	-9	-10	3	2	-2	0
Middle	Via Grand, Scott & 1st Ave.	2	2	-2	0	4	3	-3	-5	2	2	-2	0
South	Via Thomas St. & 1st Ave.	8	6	+12	+10	8	6	+12	+10	5	4	+4	+5

NB LT & Thru Truck volume at the intersection of Grand Ave. & Thomas St.
 Worst case scenario assumes 75% of the trucks going NB at point B is going to point A.

From the results of the worst-case scenario in Table 7, the largest amount of trucks switching over to the new proposed Bus 51 route (South route) would be 12 trucks in the AM peak hour. For the midday and PM peak hours, it would vary between four and 12 trucks. Because this shows the worst-case scenario, the amount of trucks actually converting over to the new proposed Bus 51 route will likely be considerably less. For the 24-hour volumes, the number of trucks switching over to the new Bus 51 route is estimated to be somewhere between 40 and 100 trucks per day, depending on the assumed percentage of trucks going between Zones A and B. These include single unit trucks as well as semi-trucks.

Ten year and twenty-year growth rate analysis was not included as part of this study; however, based on past growth rates along STH 52 and Bus 51 within the study area, the growth has been relatively flat (typically less than 0.5% per year) with a maximum growth rate of 1.0% per year on Stewart Avenue near the USH 51 interchange.

The year 2023 rerouted traffic volume changes are shown in Exhibits 6 to 8. See Appendix D for truck reroute estimations and existing growth rates.









WAUSAU, WISCONSIN

CHAPTER 5 – PEAK HOUR TRAFFIC OPERATIONS

Part A – Level of Service Definitions

The study intersections were analyzed using the Synchro 11 traffic analysis model (delay/LOS outputs based on the Highway Capacity Manual, 6th Edition).

Intersection operation is defined by "level of service." Level of Service (LOS) is a quantitative measure that refers to the overall quality of flow at an intersection ranging from very good, represented by LOS 'A', to very poor, represented by LOS 'F'. For the purposes of this study, LOS D or better was used to define acceptable peak hour operating conditions. It is important to note that this study focuses on automobile travel LOS and does not analyze the pedestrian delays/LOS. Different factors come into play when balancing delays among different modes of travel (auto, pedestrian, bicyclists, and transit), such as a lower signal cycle length generally means less delay for pedestrians; however, delays for the auto traveler may increase with shorter cycle lengths depending on the amount of traffic. The automobile LOS descriptions for signalized and unsignalized intersections are shown below in Table 8.

LOS	Signalized Intersections Control Delay/Vehicle (sec/veh)	Unsignalized Intersections Avg. Control Delay (sec/veh)	Relative Delay							
A	$ \leq 10 \qquad \leq 10 \\ Free-flow traffic operations at avearge travel speeds. Vehicles \\ completely unimpeded in ability to maneuver. Minimal delay at \\ \end{cases} $									
В	> 10 - 20 Reasonably unimpeded traffic opera Vehicle maneuverability slightly rest	> 10 - 15 tions at average travel speeds. tricted. Low traffic delays.	Short Delays							
С	> 20 - 35 > 15 - 25 Stable traffic operations. Lane changes becoming more restricted. Travel speeds reduced to half of average free flow travel speeds. Longer									
D	> 35 - 55 Small increases in traffic flow can ca attributable to increased traffic, redu	> 25 - 35 use increased delays. Delays likely uced signal progression, and adverse	Moderate							
Е	> 55 - 80 > 35 - 50 Significant delays. Travel speeds reduced to one-third of average free flow travel speed.									
F	> 80 Extremely low speeds. Intersection of traffic queues at intersections.	> 50 congestion. Long delays. Extensive	Long Delays							

Table 8 -	LOSD	escriptions
\mathbf{I} abit \mathbf{U}	LUDD	courptions

Source: Highway Capacity Manual, Transportation Research Board, Washington, D.C., 2010

Part B – Existing Year 2022 Traffic Conditions

Table 9 starting on page 23 shows the Year 2022 existing traffic peak hour operating conditions and queues at the study area intersections. The analysis follows the WisDOT guidelines for saturation flow rates and right-turn on red; however, there were a few intersections that were adjusted based on field observations during the peak hours. These adjustments are noted below:

• Bridge Street at the USH 51 NB Ramps – the northbound right-turn movement is currently operated under a flashing yellow right-turn arrow. A custom right-turn phase was created in Synchro and a right-turn on red (RTOR) volume was entered in the HCM



module to reflect approximately 70% of vehicles making a right-turn during the yellow flashing phase, which closely resembles what was observed in the field.

- Bridge Street at the USH 51 NB Ramps the westbound inside thru lane often backs up due to traffic getting into the westbound left-turn lane to get onto the southbound USH 51 on-ramp downstream of this intersection. As a result, the lane utilization factor in Synchro was adjusted to reflect the percentage of vehicles in this thru lane.
- Bridge Street at 10th Avenue in the HCM module, the *Opposing Right-Turn Lane Influence* was checked as "No" for the southbound approach to more reflect peak hour observations.
- Bridge Street with Pick N' Save Driveway in the HCM module, the *Opposing Right-Turn Lane Influence* was checked as "No" for the northbound approach to more reflect the peak hour observations.
- Grand Avenue at Thomas Street the eastbound right-turn movement was adjusted to allow RTOR in Synchro and the HCM module to more reflect the current queues during the peak hour observations.

For the capacity analysis, right-turns on red reflect the current conditions, with no right-turns on red at the intersection of Bridge Street and 5th Street for the eastbound approach and at the intersection of Grand Avenue and Thomas Street for the westbound approach. From the analysis of the existing conditions, the following movements are shown to operate worse than a LOS D or have longer queues:

- Westbound approach on Bridge Street at USH 51 NB Ramps shows LOS F during the AM peak hour. However, the signal coordination timing plan changes at 7:35 to allow more westbound green time. Therefore, the westbound delay is less than what is shown in the analysis. (The AM Peak Hour analysis took the coordination timing plan from 5:53 am to 7:35 am.)
- The westbound approach on Bridge Street at USH 51 NB Ramps shows a queue of 430 feet in the PM peak hour (LOS D), which would be the inside thru lane to eventually go to the WB left-turn lane at the USH 51 SB ramps. This longer queue is due to the heavy amount of traffic along Bridge Street from 3:00 to 3:30 pm when the schools get let out. There are three schools along Bridge Street from 12th Avenue to 4th Avenue (Newman Catholic High School, St. Anne Catholic School, and Grant Elementary School) plus one school just north of this segment along Wausau Avenue (Wausau West High School).
- The Northbound approach on 2nd Street at Bridge Street shows a LOS E and F in the AM and PM peak hours, respectively. This is an unsignalized intersection and the northbound volumes are very light during the peak hours (5 or less vehicles per hour).

The traffic capacity/level of service analysis output sheets of the existing conditions are in Appendix E.

Based on the analysis and review of traffic conditions and volumes as well as crash history, the following modifications or improvements are recommended:

- Remove the night-time flashing schedule for the traffic signals along Bridge Street. Have them run in "free" mode with "Recall" to the mainline green phase, assuming the side-street has stop line detection.
- Consider revising the Coordination Action Plan 2 to start later in the morning for the traffic signals along Bridge Street from the USH 51 ramps to 10th Avenue. Action Plan 2 currently starts at 7:35 am. When these coordination timing plans were completed, there



was a likely good reason to start a different timing plan at 7:35 am. The City or WisDOT should revisit these reasons to see if they are still valid.

- Consider adjusting the traffic signal clearance intervals (yellow and all-red) at the • following intersections:
 - Bridge Street at 1st Avenue

 - Bridge Street at 3rd Avenue
 Bridge Street at 3rd Street (NB/SB phases)
 Bridge Street at 5th Street (NB/SB phases)



Table 9: Year 2022 Existing Traffic Peak Hour Operating Condition	ns
With Existing Geometrics and Traffic Control	

				Le	evel o	f Servi	ice (LC	DS) pe	r Mov	emen	t by A	pproa	ch		I/S
	Peak		Ea	stbou	nd	We	estbou	Ind	No	rthbou	und	Sou	uthbo	und	LOS &
Intersection	Hour	Metric	7	\rightarrow	R	Ľ	+	R	R	↑	7	К	\downarrow	Ľ	Delay
		Lanes->	-	2	1	1	2	1	-	1	-	2	-	1	
Node 100: Hwy 52 Parkway &		LOS	-	С	С	В	В	-	-	-	-	С	-	С	С
USH 51 SB Ramps	AM	Delay	-	34.5	30.1	12.1	10.7	-	-	-	-	30.7	-	32.1	21.2
Traffic Signal Control		Queue	-	190'	65'	25'	25'	-	-	-	-	50'	-	100'	
		LOS	-	С	С	В	Α	-	-	-	-	С	-	С	С
	Midday	Delay	-	32.5	29.1	10.4	8.7	-	-	-	-	32.5	-	33	20.7
		Queue	-	145'	45'	25'	25'	•	-	•	-	60'	-	75'	
		LOS	-	С	С	В	Α	-	-	-	-	D	-	D	С
	PM	Delay	-	32.6	28.4	11.1	5.7	-	-	-	-	40.2	-	40.4	21.7
		Queue	-	235'	100'	25'	25'	-	-	-	-	80'	-	85'	

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement. Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue in Synchro, measured in feet.

		Level of Service (LOS) per Movement by Approach I/S									I/S				
	Peak		Ea	stbou	nd	W	estbou	Ind	No	rthbou	und	So	uthbo	und	LOS &
Intersection	Hour	Metric	7	l →	К	Ľ	←	R	R	↑	7	К	\downarrow	Ľ	Delay
		Lanes->	1	2	-	-	2	1	2	-	1	-	-	-	
Node 101: Hwy 52 Parkway &		LOS	В	Α	-	-	С	С	С	-	С	-	-	-	С
USH 51 NB Ramps	AM	Delay	12.3	9.6	-	-	34.5	29.7	33	-	34.5	-	-	-	25.5
Traffic Signal Control		Queue	25'	25'	-	-	230'	75'	120'	-	165'	-	-	-	
		LOS	В	Α	-	-	С	С	С	-	С	-	-	-	С
	Midday	Delay	10.6	8.5	-	-	30.1	27.6	31.9	-	33.2	-	-	-	21.9
		Queue	25'	25'	-	-	200'	105'	40'	-	85'	-	-	-	
		LOS	Α	Α	-	-	С	В	D	-	D	-	-	-	В
	PM	Delay	9.3	5.9	-	-	21.4	18.6	38.3	-	42.6	-	-	-	16.7
		Queue	25'	25'	-	-	235'	105'	40'	-	125'	-	-	-	
				Le	evel o	f Serv	ice (L	OS) pe	r Mov	emen	t by A	pproa	ch		I/S
	Peak		Ea	stbou	nd	W	estbou	ind	No	rthbou	und	So	uthbo	und	LOS &
Intersection	Hour	Metric	7	→	И	Ľ	←	Γ	R	↑	7	И	\downarrow	Ľ	Delay
		Lanes->	-	3	1	1	2	-	-	-	-		1	1	
Node 200: Bridge St. & USH 51		LOS	-	С	С	Α	Α	-	-	-	-		כ	С	В
SB Ramps	AM	Delay	-	24.4	23.8	8.9	5.3	-	-	-	-	36	6.2	32.6	13.4
Traffic Signal Control		Queue	-	60'	40'	165'	25'	-	-	-	-	1()5'	70'	
		LOS	-	С	С	Α	Α	-	-	-	-	(0	С	В
	Midday	Delay	-	24.1	24.2	7.3	4.8	-	-	-	-	31	1.7	30.6	14
	-	Queue	-	55'	50'	100'	25'	-	-	-	-	6	0'	40'	
		LOS	-	С	С	В	Α	-	-	-	-	(0	С	В
	PM	Delay	-	24.9	28.9	10.4	4.8	-	-	-	-	32	2.6	30	15.9
				75'	135	195'	25'					7	5	30'	

WB LT queue is shown from HCS as it better replicates the existing condition.

				Le	evel o	f Serv	ice (LO	OS) pe	er Mov	emen	t by A	pproa	ch		I/S
	Peak		Ea	stbou	nd	W	estbou	ınd	No	rthbou	und	So	uthbo	und	LOS &
Intersection	Hour	Metric	7	→	Ы	Ľ	←	R	R	↑	7	R	\downarrow	Ľ	Delay
		Lanes->	1	2	-	-	3	1	2	-	1	-	-	-	
Node 201: Bridge St. & USH 51		LOS	В	Α	-	-	F	С	С	-	С	-	-	-	D
NB Ramps	AM	Delay	14.3	9.8	-	-	89.9	22.8	22.8	-	30.4	-	-	-	54.9
Traffic Signal Control		Queue	25'	25'	-	-	#415	25'	70'	-	355'	-	-	-	
		LOS	Α	Α	-	-	С	В	С	-	С	-	-	-	В
	Midday	Delay	7.8	6.2	-	-	21.1	17.4	27.1	-	30.4	-	-	-	18.1
		Queue	25'	25'	-	-	90'	25'	40'	-	25'	-	-	-	1
		LOS	В	Α	-	-	D	В	С	-	D	-	-	-	С
	PM	Delay	14.6	6.5	-	-	49	17.8	26.8	-	36.8	-	-	-	34.5
		Queue	25'	25'	-	-	430'	30'	30'	-	25'	-	-	-	1

WB Delay in AM Peak Hour is less than shown due to Signal Pattern change that occurs at 7:35 am, in the middle of the peak hour. (#) indicates the queue shown is maximum after two cycles and may be longer.

				Level of Service (LOS) per Movement by Approach											I/S
	Peak		Ea	stbou	nd	Westbound			Northbound			So	und	LOS &	
Intersection	Hour	Metric	7) >	R	Ľ	÷	R	ĸ	↑	7	И	\downarrow	Ľ	Delay
		Lanes->	1	2	1	1	2	1	1	2	2	1	2	2	
Node 202: Bridge St. & 17th		LOS	С	С	В	В	D	С	С	C)	С)	С
Ave.	AM	Delay	27.1	21.7	17.1	17.8	37.8	26.2	28.8	33.9		28.2	51	.3	30.9
Traffic Signal Control		Queue	90'	155'	40'	60'	270'	45'	40'	9	90'		130'		
		LOS	Α	В	В	Α	Α	Α	С	0)	С	[)	В
	Midday	Delay	9.7	13.5	12.6	8.8	7.3	6.5	30.4	39	.3	30.8	37	' .9	19.5
		Queue	25'	95'	55'	25'	105'	25'	65'	10	0'	45'	8	5'	
		LOS	В	В	В	В	В	В	С	0)	С)	С
	PM	Delay	11.7	17.1	14.9	11.7	15.3	11.9	28.3	47	.2	29.7	38	8.8	22.6
		Queue	25'	150'	65'	25'	210'	25'	90'	135' 4		45'	11	15'	1



	<u> </u>	With Ex	isting	Geon	netric	s and	Traff	ic Cor	ntrol						
		Level of Service (LOS) per Move		emen	t by A	pproa	ch		I/S						
	Peak		Ea	stbou	nd	W	estbou	ind	Northbou		und	So	uthbo	und	LOS &
Intersection	Hour	Metric	7	\rightarrow	R R	Ľ	←				7			Ľ	Delay
Node 202: Bridge St. 8 10th		Lanes->		4	2		4	2			1		1	1	
	~~~	LUS	A		6	A	10		20	26	22.6	36	5.4	24 5	<b>B</b>
Ave. Troffic Signal Control	AIVI	Delay	5.0		.0 '0'	0.0	20	0.0 00'	30	0.0	32.0	35.4		34.5	10.1
Trainic Signal Control			50		0	25	20	50	90		20		5	50	•
	Midday	Delay	4	5	2	A 1	64		36	<b>)</b> 3 1	34.6	36	<b>,</b>	35.6	7.6
	wilduay	Ouque	25'	6	5'	4.1 25'	0.4		30	5'	25'	3	0.0 1.0	25'	7.0
			23			23		2			23		0	23	
	DM	Delay	6.8	10	3	82	1	2	36	\$ 1	28.4	3/	16	31.7	14.4
	1 101		25'	1	15'	25'	15	2	6	י .י <u>ר</u> מי	20.4	10	1.0	70'	14.4
		Queue	20			f Serv	ice (I (	) )S) ne	r Mov	emen	t hv A	nnroa	ch	10	I/S
	Peak		Fa	sthou	nd		esthou	ind	No	rthhoi	ind	So	uthho	und	105.8
Intersection	Hour	Metric	7					Γ.			7	~			Delay
		Lanes->	1	1 2		1		2		1			1	-	2010.9
Node 204: Bridge St. & 6th		LOS	Α	A *		A *		*		С			С		Α
Ave.	AM	Delay	y 9.9 - 8.6		8.6		-		23.7			16.4		1.1	
Two-Way Stop Control		Queue	25'			25'				25'			25'		
		LOS	Α		*	Α		*		С			В		Α
	Midday	Delay	8.6		-	8.5		-		15.9			11.5		0.5
		Queue	25'		-	25'		-		25'			25'		
		LOS	Α		*	Α		*		D			С		Α
	PM	Delay	9.2		-	9.4	- 1			26.7			15.3		1.1
		Queue	25'		-	25'		-		25'			25'		
			Level of Se		f Serv	ice (L(	OS) pe	er Mov	emen	t by A	pproa	I/S			
	Peak		Eastbound Wes		estbou	ınd	Northbound		und	So	uthbo	und	LOS &		
Intersection	Hour	Metric	7	$\rightarrow$	И	Ľ	←	R	R	↑	7	К	$\downarrow$	Ľ	Delay
		Lanes->	-	2	1	1	2	-	-	-	-	2	2	1	
Node 205: Bridge St. & 3rd		LOS	-	С		Α	Α		-	-	-	(	0	В	В
Ave.	AM	Delay	-	28.2	23.6	0.5	0.2		-	-	-	2	2	15.8	13.2
Traffic Signal Control		Queue	Queue - 155' 40' 25		25'	65'		-	-	-	170'		25'		
		LOS	-	С		Α	Α		-	-	-	(	2	В	В
	Midday	Delay	-	31.5	26.7	1.6	0.1		-	-	-	22	2.9	18.7	16.9
		Queue	-	175'	40'	30'	60'		-			1:	50'	35'	
		LOS	-	С		Α	Α		-	-	-	(	2	С	В
	PM	Delay	-	30.2	23.3	2.5	0.2		-	-	-	32	2.3	22.2	19.5
		Queue	-	265'	60'	40'	75'		-	-   -   -		245'		50'	
	D I.			L	evelo	f Serv	ICE (LO	JS) pe	er Mov	emen	t by A	pproa	cn the base		1/5
Internetion	Реак	Matria	Ea	stbou	na	VV V	estbol	ina 		Northbol		50		una	LUS &
Intersection	Hour			$\rightarrow$	R	Ľ	←	N 1		<u>1</u> 2	1	Ы	*	Ľ	Delay
Node 206: Bridge St & 1st				2	-	-	2	^		2		-	<u> </u>	-	^
Ave	ΔМ	Delay	29	25	-		31	25	18	34	17.6		<u> </u>	-	52
Traffic Signal Control	7 (191	Queue	2.5	95'	-	-	185'	60'	7	'0'	50'	-	-	-	0.2
			Δ	Δ	-	-	B	B		R	B	-	-	-	в
	Midday	Delay	4	27	-	-	12.8	12.3	19	9.9	19.4	-	-	-	10.2
	maaay	Queue	25'	90'	-	- 1	110'	75'	8	5'	70'	-	-	-	
		LOS	A	Α	-	-	Α	Α	(	0	C	-	-	-	Α
	РМ	Delav	0.5	0.7	-	-	0.7	0.6	26	6.7	26.8	-	-	-	6.1
		Queue	25'	105'	-	-	135'	75'	12	20'	125'	-	-	-	
		-		L	evel o	f Serv	ice (L	OS) pe	r Mov	emen	t by A	pproa	ch		I/S
	Peak		Ea	stbou	nd	W	estbou	ind	No	rthboi	und	So	uthbo	und	LOS &
Intersection	Hour	Metric	7	→	L L	Ľ	<b>←</b>		~	1	7	R	4	Ľ	Delay
		Lanes->	1	2	1	1		2		1	1		1	1	
Node 207: Bridge St. & Pick n		LOS	Α	Α	Α	Α		4		D	D		o C	D	Α
Save/Commercial Dr.	AM	Delay	3.1	0.3	0	2.5	1	.2	41	.3	41.6	39	).7	39.7	1.9
Traffic Signal Control		Queue	25'	170'	25'	25'	14	45'	4	0'	30'	2	:5'	25'	
		LOS	Α	Α	Α	Α		4		D	D		C	D	Α
	Midday	Delay	5.7	0.3	0.2	4		2	47	7.2	42.3	4	10	39.4	6.9
		Queue	25'	35'	25'	30'	11	15'	1:	50'	80'	2	5'	25'	
		LOS	Α	Α	Α	Α		3		D	D		C	D	В
1	PM	Delay	6.3	0.5	0.2	3.1	19	9.7	49	9.4	51.4	44	1.4	44.2	12.4
1			25'	75'	25'	25'	16	35'	#1	45'	95'	2	5	25	

## Table 9 Continued: Year 2022 Existing Traffic Peak Hour Operating Conditions With Existing Commenties and Tauffic Control

(#) indicates the queue shown is maximum after two cycles and may be longer.



Fable 9 Continued: Y	(ear 2022 E	Existing Traffic	Peak Hour	Operating Conditions
With	h Existina (	Geometrics and	l Traffic Con	itrol

	<u> </u>		suns			s unu	110																												
		Level of Se		f Service (LOS) per Movement by Approach																															
	Peak		Ea	stbou	nd	w w	estbou	ınd	No	rthbou	und	So	uthbo	und	LOS &																				
Intersection	Hour	Metric	7	→	L L	Ľ	←	R				И	Υ	Ľ	Delay																				
		l anes->	1		2	1		2	1				1																						
				,	*	·		*		F			Ċ		^																				
Nada 200, Dridge Ct. 8 2nd Ct.		LU3				A				20.0		<u> </u>	45.0																						
Node 208: Bridge St. & Zrid St.	AM	Delay	11.8	-	-	8.9		-		39.9			15.0		1.2																				
Two-Way Stop Control		Queue	25'		-	25'		-		25'			25'																						
		LOS	Α		*	Α	*			С			В		Α																				
	Midday	Delay	9.4		-	8.9		-		21.2			14.4		1.1																				
	Í	Oueue	25' - 25'		25'	5' -			25'			25'																							
				,	*		*			E					•																				
	5.4	L03	<b>D</b>							F		-																							
	РМ	Delay	10.5		-	10.5		-		52.8			14.1		1.3																				
		Queue	25'		-	25'		-		25'			25'																						
				Le	evel o	f Serv	ice (L(	OS) pe	er Mov	emen	t by A	pproa	ch		I/S																				
	Peak		Ea	stbou	nd	l w	estbou	ind	l No	rthbou	und	So	uthbo	und	LOS &																				
Intersection	Hour	Motric			<u> </u>			5	5		7				Delay																				
mersection	noui			7	<u> </u>		~			-T.		8		L d	Delay																				
		Lanes->	1	2	1	1	-	2	1	4	2		1	1																					
		LOS	Α	Α	Α	Α		4	D	(	C		0	D	В																				
Node 209: Bridge St. & 3rd St.	AM	Delay	Delay 0.1 0.2 0		0.1	0	.7	36.5	29	9.5	30	).7	43.8	10.8																					
Traffic Signal Control		Queue	25'	95'	50'	25'	9	5'	65'	3	30'	6	5'	170'	1																				
				Δ		٨	D		n	D	<u> </u>	D	B																						
	Midday	Delay	<u>^</u>	<u> </u>		<b>^</b>	-		40		0	20.0		0.0	10.0																				
	Midday	Delay	0.3	0.2	0	4.3	5	.2	48	3	88	38.2	4	0.8	12.8																				
		Queue	25'	30'	25'	25'	6	0'	125'	5	55'	70'	1	00'																					
		LOS	Α	Α	Α	Α		4	D		D	D		D	Α																				
	РМ	Delay	0.2	04	0	01	0	4	48.3	41	14	39.5	4	71	9																				
		Oucus	0.2	45'	25'	25' 65'			115			55.0 EE'		201	Ŭ																				
		Queue	25	45	25	25		0	115	0	0	55																							
				Le	evelo	f Serv	ice (L	OS) pe	er Mov	emen	t by A	pproa	ch		I/S																				
	Peak		Ea	stbou	nd	w w	estbou	ınd	No	rthbound		So	uthbo	und	LOS &																				
Intersection	Hour	Metric	7	→	L L	Ľ	←	R	R	↑	7	И	Υ	Ľ	Delay																				
		l anes->	-		2	1	2	-	-	-	-		2	1																					
		LOS -			A		-		-				B	Ċ	D																				
Nada 010: Dridge Ct. 8 Eth Ct.							-	-	-	19.6																									
Node 210: Bridge St. & Sth St.	AM	Delay - 2.		.	12.7	14.4		-	-	-	18	19.6 2'		12.5																					
Traffic Signal Control		Queue	-	5	0'	25'	25'		-	-	-	9	0'	130'																					
		LOS	-		4	В	В		-	-	-		0	С	В																				
	Midday	Delay	-	1	.3	13.6	14.8		-	-	-	21	1.1	22.4	10.6																				
	Í	Queue	-	14	10'	25'	5' 25'		-	-	-	6	5'	100'																					
					^	0							-		P																				
		L03	-		•		124		<u> </u>	-	-			0																					
	РМ	Delay	-	2	.1	11.3 12.4			-	-	-	25	0.6	27.2	10.2																				
		Queue	-	17	75'	25'	25'		-	-	-	9	5'	130'																					
				Le	evelo	f Serv	ice (L(	OS) pe	er Mov	remen	t by A	pproa	ch		I/S																				
	Peak		Ea	stbou	nd	l w	estbou	Ind	l No	rthbou	und	So	uthbo	und	LOS &																				
Intersection	Hour	Metric	7					5	5		7	<u> </u>			Delay																				
Intersection	noui		2	7		<u> </u>		2	<u> </u>	2			¥.	E.	Delay																				
		Lanes->	2	/	-	-	4	2		3		-	-	-																					
		LOS	Α	Α	-	-		J		в		-	-	-	в																				
Node 211: Bridge St. & 6th St.	AM	Delay	7.5	5.2	-	-	40	).1		19		19		19		-	-	-	16.2																
Traffic Signal Control		Queue	65'	25'	-	-	3	5'		110'		-	-	-																					
1		LOS	В	В	-	-	1	D	1	B		В		В		В		B		B		B		B		B		B		B		- 1	-	-	В
1	Middov	Delay	12.9	12 /	<u> </u>	-	10	5.6	17.2		17.2		17.2		<u> </u>	<u> </u>	16.5																		
	windday	Delay	12.0	12.7				0.0		051		-		-	10.5																				
		Queue	105	95	-	-	3	10 ¹		95		-	-	-																					
		LOS	В	Α	-	-		D		С		-	-	-	В																				
	PM	Delay	11.7	8.5	-	-	46	6.9		22.9		-	-	-	18																				
		Queue	150'	75'	-	-	3	5'		150'		-	-	-																					
Delay regulta are from Synahre	ainaa UCS	doog no	t analy	(70 00)	l n otoni	dord N		bacing	<u> </u>																										
			i anaiy	/Ze 1101	I-Stand			nasing	J.						1/0																				
				Le	evero	T Serv	ICE (LO	JS) pe	er Mov	emen	t by A	pproa	cn		1/5																				
	Peak	ak Eastbound West		estbou	Ind	id No		Northbound		So	uthbo	und	LOS &																						
Intersection	Hour	Metric	7	$\rightarrow$	И	Ľ	←	Γ		↑	7	К	$\downarrow$	Ľ	Delay																				
		Lanes->	1	1	1	1		1	1		1	- 1		1																					
Node 300: Grand Ave &		109	Ċ	Ċ	Ċ	Ċ		<u>.</u>	Ċ		Δ	<u> </u>	-	С	<u> </u>																				
Thomas St	A 8.4	Delaw	25.0	20.4	200	24.4		-	247		0	<u> </u>	<u> </u>	<u> </u>	24 5																				
	AM	Delay	25.6	20.1	32.9	21.4		1.0	24.1	9	.0		2	9.Z	21.5																				
Traffic Signal Control		Queue	65'	50'	50'	25'	9	10'	135'	1	15'	-	1	35'																					
1		LOS	C	С	С	C		0	С		Α	-		с	С																				
1	Middav	Delay	25.2	20.2	25.6	21.2	2	21	25.7	8	.8	-	2	3.9	20.5																				
			75'	75'	65'	25'	0	0'	100'	7	'0'	-	1	45'	1																				
					55	20		- -	100		<u></u>		<u> </u>		<u> </u>																				
1		LUS					<u> </u>	<u> </u>	6	- 1	4	-			6																				
	<b>D</b> · · ·									. 7																									

Queue 95' 100' 195' 35'

100'

170'

85'



190'

-

Table 9 Continued: Year 2022 Existing Traffic Peak Hour Operating Conditi	ons
With Existing Geometrics and Traffic Control	

		Level of Service (LOS) per Movement by A						t by A	pproa	I/S					
	Peak		Ea	stbou	nd	W	estbou	ınd	No	rthbou	bound Southbound				
Intersection	Hour	Metric	7	→	К	Ľ	÷	R	R	↑	7	И	$\downarrow$	Ľ	Delay
		Lanes->	1	1	-	-	1	1		-			-		
Node 400: 1st Ave. & Thomas		LOS	Α	*	-	<u> </u>	*	*		-			-		A
St.	AM	Delay	8.7	-	-	-	-	-		-			-		0.4
Two-Way Stop Control		Queue	25'	-	-	-	-	-		-			-		
		LOS	Α	-	-	-	-	-		-			-		A
	Midday	Delay	8.6	-	-	-	-	-		-			-		0.4
		Queue	25'	-	-	-	-	-							
		LOS	В	-	-	<u> </u>	-	-		-			-		Α
	PM	Delay	10	-	-	-	-	-		-			-		0.8
		Queue	25'	<u> </u>	<u> </u>	-	-	-							
				Le	evel o	fServ	ice (Lu	OS) pe	er Mov	emen	t by A	pproa	ch		1/5
	Реак	Matria	Ea	stbou	nd	We	estbou	ind	NO	rthbou	und	50	uthbo	una	
Intersection	Hour	Metric		$\rightarrow$	Ы	Ľ	+		ĸ	1		И	↓	Ľ	Delay
Neda 401: 1st Ave & Sherman		Laries		1	-	- 		1		*		<b> </b>	-		
Node 401. ISLAVE. & Sherman	^ M	Dolay	10	<mark>5</mark> ער	-		10	<b>5</b> 1 2		*			-		
One-Way Ston Control	Alvi		Jelay 10		<u>⊢</u>	<u> </u>	2	).Z		*		┨────	<u> </u>		- 3.0
One-way Stop Control				.5	<u> </u>		-	.0		*					Δ
	Midday	Delay		<b>&gt;</b> 1 7	<u>⊢</u>	<u> </u> ∶	1	<b>-</b> 1		*		┨────			
	Midday		Dueue 25'		<u> </u>	<u> </u>	2	5		*					- 2.0
			-	.5	<u> </u>	<u>  -</u>	-	.5 •		*					
	DM	Delay	12.3			<u> </u>	11	<b>)</b>		*					$-\frac{1}{3}$
	F IVi		2	2.3	<u> </u>	<u> </u>	2	5		*			-		-
		Queue	-	.5 [ (		f Serv	- ice (I (	OS) ne	r Mov	omen	t hv A	nnroa	I/S		
	Peak		Fa	sthou	nd		esthou	ind		rthhoi	und .	So	uthbo	und	1.05 &
Intersection	Hour	Metric	7				~		5			N			Delay
Interocoulon.		Lanes->		1	-	-	-	.、	.、	1			-	-	
		LOS		B -			-			*			A		
Node 402: 1st Ave. & West St.	AM	Delay	10	<u></u> ).1	<del> </del>		-			*			-		1.3
One-Way Stop Control		Queue	2	25'	- 1		-			*			-		1
		LOS		B	<u> -</u>	<del> </del>	-			*			_		A
	Midday	Delay	10	 ).1	<u> </u>		-			*		-			1.5
	· ·	Queue	2	25'	- 1					*					1
		LOS		B	<u> </u>	<del> </del>	-			*		<u> </u>	_		A
	РМ	Delay	11	1.3	- 1	<del> </del>	-			*			-		1.3
		Queue	2	25'	<del> </del>					*					1
				Le	evelo	f Serv	ice (LO	OS) pe	er Mov	emen	t by A	pproa	ch		I/S
	Peak		Ea	stbou	nd	W	estbou	ind	No	rthbou	und	So	uthbo	ound	LOS &
Intersection	Hour	Metric	7	→	К	Ľ	<b>+</b>	R	R	↑	7	У	↓	Ľ	Delay
		Lanes->		1	-		-			1			-		1
Node 403: 1st Ave. & 2nd		LOS		в	<u>-</u>	1	-			*			-		Α
Ave./Garfield Ave.	AM	Delay	1	0	<u> </u>		-			*			-		0.6
One-Way Stop Control	l	Queue	2	:5'	<u>-</u>		-			*					1
		LOS		8	-		-			*			-		Α
	Midday	Delay	10	).1	-		-			*			-		0.1
		Queue	2	:5'	-					*					1
		LOS		В	-		-			*			-		Α
	PM	Delay	11	1.3	-		-			*			-		0.2
		Queue	2	:5'	-					*					1
				Le	evelo	f Serv	ice (LO	OS) pe	er Mov	remen	t by A	pproa	ch		I/S
	Peak		Ea	stbou	nd	W	estbou	ınd	No	rthbou	und	So	uthbo	und	LOS &
Intersection	Hour	Metric	7	→	К	Ľ	÷	R	R	↑	7	И	$\downarrow$	Ľ	Delay
		Lanes->	1	2	-	-	2	1	1	2	1		-		
Node 404: 1st Ave. & Stewart		LOS	Α	Α	-	-	В	*	С	С	С		-		В
Ave.	AM	Delay	9.1	9.6	-	-	13.4	*	26.8	27.8	27.4		-		12.9
Traffic Signal Control		Queue	40'	155'	-	-	100'	40'	30'	50'	45'		-		
		LOS	Α	Α	-	-	В	-	С	С	С		-		В
	Midday	Delay	9.2	8.1	-	-	14.1	-	23.4	24.4	23.5		-		12.8
		Queue	40'	95'	-	-	115'	50'	30'	60'	35'				
		LOS	В	Α	-	-	В	-	С	С	С		-		В
	PM	Delay	10.1	8.8	-	-	15.7	-	26.7	28.6	27.5		-		14.5
		Queue	65'	140'	-	-	155'	70'	30'	80'	50'				1



Table 9 Continued: Year 2022 Existing Traffic Peak Hour Operating Conditions
With Existing Geometrics and Traffic Control

			Level of Service (LOS) per Movement by Approach												I/S
	Peak		Eastbound			Westbound			Northbound			Southbound			LOS &
Intersection	Hour	Metric	7	$\rightarrow$	И	Ľ	←	R	R	↑	7	R	$\downarrow$	Ľ	Delay
		Lanes->	-	2	2	1	1	-	1	-	1	1	1	1	
Node 500: 3rd Ave. & Thomas		LOS	-		3	В	В	-	С	-	С	С	С	С	С
St.	AM	Delay	-	15	5.8	12.7	17.3	-	31.8	-	32.5	30.6	24.4	24.8	20.1
Traffic Signal Control		Queue	-	1'	10'	25'	215'	-	35'	-	40'	125'	35'	30'	
		LOS	-	- 1	3	В	В	-	С	-	С	С	С	С	С
	Midday	Delay	-	18	8.5	14.3	18.6	-	31.6	-	32.4	28.3	22.8	23.2	21.3
		Queue	-	16	50'	25'	205'	-	30'	-	50'	175'	30'	50'	
		LOS	-	(	<u> </u>	В	С	-	D	-	D	D	С	С	С
	PM	Delay	-	28	3.4	17.2	29.4	-	39.3	-	49	46.7	29.8	31.4	33.2
		Queue	-	22	25'	30'	375'	-	50'	-	100'	275'	50'	75'	
			Level of		f Service (LOS		OS) pe	r Movement by A		oproach			I/S		
	Peak		Ea	Eastbound		Westbound			Northbound			Southbound			LOS &
Intersection	Hour	Metric	7	$\rightarrow$	И	Ľ	←	R	R	1	7	Ы	↓	Ľ	Delay
	AM Midday PM	Lanes->	-	- 1 - <b>B</b> - 10.6 - 25'		1 B 11.5 25'		-			2				
Node 501: 3rd Ave. & Sherman		LOS	-					-		-			*		A
		Delay	-					-	-				*		3.6
One-way Stop Control		Queue	-					-			, ,				
		LOS	-	<b>B</b>		B		-				^			A
		Delay	-	- 10.8		11.8		-	-					2.8	
		Queue	-	- 25'		25'		-			*				
		LOS	-	- B		В		-	-		*			A	
		Delay	-	- 12.6		13.9		-	-			*			3.2
		Queue	- 25'		25'		-								
			Lev			f Serv	ice (L	OS) pe	er Movement by A			pproach			I/S
	Peak		Ea	stbou	nd		estbou	ind	Northbound			Southbound			LOS &
Intersection	Hour	Metric	7	$\rightarrow$	L ک	Ľ	<b>←</b>	R	R	↑	7	لا ا		Ľ	Delay
Node 502: 3rd Ave. & West St.	AM	Lanes->	-		1 1 -			-			2				
		LOS	-	- B		<b>5</b>		-				*			
		Delay	-	10.9		1 I 2E'		-	-		*		2.5		
One-way Stop Control		Queue	-	20		25		-	-		*				
	Malalata	LUS	- B - 10.6		В		-	-			*		A		
	wildday	Delay			11		-	-		<b>.</b>			1.9		
		Queue	-	- 25 - <b>B</b> - 11.9		25		-	-		*				
	514	LUS	-				B							A	
	PIN	Delay	-			12.1		-	-		*			1.9	
		Queue	-		5 	- 20 -		Movement by A			nnraach			1/0	
	Deek		Ea	Le	evel o	Westbound			I wovement by A			pproacn Southbound			1/3
Intersection	Hour	Motric	- 5		nu 							30			
mersection	Tioui		7	→	<u>ч</u>	<u> </u>	<b>←</b>			T		И		Ľ	Delay
Node 503: 3rd Ave & Garfield			-	- P			B		-		*			Δ	
	<b>Δ</b> Μ	Delay	ay - 10.1 ue - 25'		10.8		-	-		*			16		
One-Way Stop Control		Oueue			5'	2	25'		_				*		1.0
			-	A		B		-	<u> </u>				*		Δ
	Midday	Delay	_	9.8		10.8		_		_			*		15
		Oueue	-	25'		25'		<u> </u>			*			1.0	
			_	R		R		-			*			Δ	
	DM	Dolov	- 11.6		12.2		-			*					
		Oueue	-	25'		25'		-			*			2.1	
		Queue	-			f Service (I C		<u>-</u>	r Mov	omon	t by A	pproach			1/9
	Peak		Fa	Eastbound			Westbour		nd Northbound		Southbound			105.8	
Intersection	Hour	Metric	7											Delav	
interestation	nour	Lanes->	-	2	1	1	2	-		 		1	2	1	Lonay
Node 504: 3rd Ave & Stewart		105	-	R	R		Δ	<u> </u>		-		n	Ċ	Ċ	B
Ave.	АМ	Delav	-	12 6	11 2	5.5	5.3	<u> </u>		-		35.2	30.2	26.6	15.8
Traffic Signal Control		Queue	_	165'	25'	25'	50'	- 1		-		120'	100'	55'	
		LOS	- <b>B B</b>		B	B	- 1		-		C	C	C	В	
	Midday PM	Delav	-	12.3	10.6	10.4	10.4	<u> </u>		-		31.4	27 4	27.2	16 1
		Queue	-	135'	25'	55'	125'	- 1				100'	85'	65'	
		LOS	-	B	B	Δ	A	- 1		-		D	C	C	В
		Delav	-	13.8	11.9	8.9	73	-		_		37 1	31.2	27.3	17.8
		Queue	-	165'	30'	45'	95'	-				150'	130'	75'	



#### Part C – Year 2023 Proposed Traffic Rerouted Conditions

Peak hour capacity analysis was completed for the rerouted traffic volumes with the proposed Bus 51 reroute. There were no changes to the existing traffic volumes at the Stewart Avenue and USH 51 interchange intersections or the Bridge Street intersections west of 3rd Avenue. Due to the relatively small changes in volumes (at most 10 vehicles in one direction) between the existing conditions and the reroute conditions, the delays are relatively the same as the existing conditions. Most delay changes were less than half a second and a few intersections changed only by one second of delay when compared with the existing conditions analysis.

The intersection LOS and queue results are shown in Exhibits F-1 to F-4 and the capacity analysis output sheets are in Appendix F. (Only the intersections that have changes in volume from the existing conditions are shown in Appendix F.)

## **CHAPTER 6 – EXISTING AND PROPOSED SIGNING**

#### Part A – Sign Inventory & Proposed Signing

The existing Bus 51 and STH 52 route signing was inventoried during December 2022 as well as the freeway guide signs along USH 51 and STH 29. From the inventory, an estimated 200 individual signs (ex. NORTH cardinal direction, STH 52 route maker and directional arrow each counted separately) at 56 locations will need to be removed from the current Bus 51 and STH 52 routes if these routes are changed. In addition, 15 freeway guide signs will need to be modified by sign overlays and a minimum of five freeway signs will need to be replaced. With the rerouting of Bus 51 and STH 52, an estimated 150 new route marker signs (ex. M3-2 (East), M1-6 (STH 52 Route Marker), and M6-1 (arrow sign)) will be needed along these new routes. Maps of the existing and proposed signs are in Exhibits G-1 to G-12 in Appendix G. A table of existing signs and recommended removals and proposed signs are also in Appendix G.

During the field observations, it was noted that there are currently no Fines Higher or End School Zone signs along Bridge Street within the school zone, which are required per WMUTCD, Section 7B.10.

## **CHAPTER 7 – ROADWAY INFRASTRUCTURE ANALYSIS**

#### Part A – Roadway Segment Analysis

The revised routes were broken into segments and were analyzed against standards found in FDM 11-20, Attachment 1.1. The one and two-lane routes were classified as Urban Design Standard 2b and the four-lane routes were classified as Urban Design Standard 3. Although segments 5, 6, 7, and 8 are one-way roadways, they were analyzed using two-way FDM standards. Out of the 13 segments, four segments do not meet the standards of FDM 11-20, Attachment 1.1. The four segments that do not meet standards are Segment 5 (S. 3rd Avenue from Bridge Street to Stewart Avenue), Segment 6 (S. 3rd Avenue from Stewart Avenue), and Segment 12 (Thomas Street), Segment 8 (S. 1st Avenue from Thomas Street to Stewart Avenue), and Segment 12 (Thomas Street bridge from McCleary Street to River Drive). WisDOT's current approach to Asset Management by Performance-Based Practical design does not require that every element outside of FDM "desirable standards" be automatically adjusted. Some of these components and dimensions may remain if safety and operational performance are satisfactory. It is not always necessary to automatically rebuild to FDM 11-20 modernization criteria, although that is what was used for analysis purposes.



Segment 5 does not meet the roadway width standards to include parking. This segment of S. 3rd Avenue is currently 40-feet wide from face of curb to face of curb and includes parking on the west side of the roadway. For S. 3rd Avenue to retain parking and meet standards, the roadway needs to be 46 feet in width from face of curb to face of curb. If parking is removed from this segment, the current width of the roadway will meet standards. Although this segment does not meet current FDM standards, the roadway may be able to remain as-is, since it is performing satisfactory in terms of safety and operations.

Segment 6 does not meet the roadway width standards to include parking. This segment of S. 3rd Avenue is currently 40-feet wide from face of curb to face of curb and allows parking on both sides of the roadway. For S. 3rd Avenue to retain parking and meet standards, the roadway needs to be 46 feet in width from face of curb to face of curb. If parking is removed from this segment, the current width of the roadway will meet standards. Having parking designated on one side of the road would not meet standards, but would be recommended over the current situation. Although this segment does not meet current FDM standards, the roadway may be able to remain as-is, since it is performing satisfactory in terms of safety and operations.

Segment 8 does not meet the roadway width standards to maintain both parking and a bike lane (FDM 11-20, Attachment 1.1). S. 1st Avenue is currently 30-feet wide from face of curb to face of curb, it has one northbound travel lane, parking, and a bike lane from Thomas Street to Stewart Avenue. For this section of S. 1st Avenue to meet Urban Design Class 2b, it should have two traffic lanes. For S. 1st Avenue to meet standards while retaining both a bike lane and parking, the width of the roadway must be 48 feet from face of curb to face of curb. If the bike lane is removed and parking is kept, the width of the roadway must be 34 feet from face of curb to face of curb. If parking is removed and the bike lane is kept, the width of the roadway must be 46 feet from face of curb to face of curb to face of curb to face of traffic.

Segment 12 meets bridge standards (FDM 11-35, Table 1.1), but does not meet urban roadway design standards (FDM 11-20, Attachment 1.1). For a 2-lane undivided roadway with over 5,000 ADT, a bridge needs to be 28-feet wide from face of curb to face of curb. The existing clear width of the bridge is 32 feet from face of curb to face of curb. Urban design standards for a 2b call for the minimum width from face of curb to face of curb for a roadway to be 34 feet. Although this segment does not meet current FDM standards, bridge width standards hold over roadway in current situations until the bridge is replaced.

Existing dimensions, analysis and costs associated with the improvements listed above can be found in Appendix H, Roadway Infrastructure Analysis.

### Part B – Truck Turning Movement Path Analysis

The intersections along the revised routes were labeled using a letter system A-J. The design vehicle used for analysis was a WB-65 in order to meet the standards of FDM 11-25, Table 2.1. Out of the 10 intersections, two of them (F & G) did not require turning movement path analysis because turns are not required for the new routes on S. 1st Avenue and S. 3rd Avenue.

The Degree of Encroachment was analyzed with FDM 11-25, Figure 2.3. If an intersection had encroachment into oncoming lanes with a WB-65, other design vehicles were reviewed. Only intersection I had no encroachments (an A1 degree of encroachment). WisDOT's current approach to Asset Management by Performance-Based Practical design does not require that every element outside of FDM desirable standards be automatically adjusted. Some of these components and dimensions may remain if safety and operational performance are satisfactory.



**Intersection A (E. Bridge Street & N. 6th Street):** Encroachment into the adjacent lane is present when making a left turn when in the EB inside turn lane with a WB-65. Using the EB outside left-turn lane results in a WB-65 encroaching on the curb line.

**Intersection B (5th Street & E. Bridge Street):** Encroachment into the opposing lane is present with vehicles larger than WB-40 making a SB right turn when in the SB right-turn lane. In order to correct this encroachment, the NW corner of the intersection would need to be widened, which is estimated to cost \$27,000.

**Intersection C (N. 3rd Street & E. Bridge Street):** Since 3rd Street is an existing City of Wausau truck route, it was also analyzed to meet the FDM standards. Encroachment into the adjacent lane in the same direction is present with vehicles larger than WB-40 making a SB right turn when in the SB right-turn lane. Encroachment into the adjacent lane in the same direction is also present with vehicles larger than WB-40 making an EB left turn onto N. 3rd Street. In order to correct these encroachments, the NW corner of the intersection would need to be widened, which is estimated to cost \$18,000 and the NE corner of the intersection would need to be widened, which is estimated to cost \$12,000.

**Intersection D (N. 1st Avenue & W. Bridge Street):** Encroachment into the adjacent lane in the same direction is present when making a NB left turn when in the NB left-turn/thru lane with a WB-65. Encroachment into the adjacent lane in the same direction is also present when making a right turn when in the NB right-turn lane with a WB-65.

**Intersection E (N. 3rd Avenue & W. Bridge Street):** Encroachment into the adjacent lane in the same direction is present with vehicles making a WB left turn when in the WB left-turn lane with a WB-65. Encroachment into the adjacent lane in the same direction is also when making an EB right turn when in the EB right-turn lane with a WB-65.

**Intersection H (N. 3rd Avenue & W. Thomas Street):** Encroachment into the adjacent lane in the same direction is present when making a SB left turn with a WB-65.

**Intersection J (Grand Avenue & E. Thomas Street):** Encroachment into the opposing lane is present with vehicles larger than WB-40 making a right turn when in the EB right-turn lane. Encroachment into the adjacent lane in the same direction is present with vehicles making a NB left turn when in the NB left-turn lane with a WB-65. In order to correct this encroachment, the SE corner of the intersection would need to be widened, which is estimated to cost \$25,000.

The total estimated costs to improve these encroachments is \$82,000. Cost estimates were based on a WB-65 remaining within the curb line and not in opposing lanes. Encroachment analysis, turning templates and cost estimates for improvements can be found in Appendix H, Truck Turning Movement Path Analysis.

### Part C – Structure Analysis

For the three structures on the project, the most recent structure inspection reports were analyzed. A field visit was also conducted to visually inspect the bridges. The bridges were reviewed for maintenance activities suggested over the next 20 years. One thing to note, the Thomas Street (B-37-971) bridge is a Wisconsin Legislature 84.10 Bridge, which means that the ownership would be transferred to the City upon replacement. See Appendix H, Structure Analysis for maintenance recommendations over the next 20 years and associated costs.

Structure costs will vary depending on maintenance and improvement schedules, however, the estimated costs within the next five years out consist of:



- Bridge B-37-232 (Bridge Street over xx Railroad) Replace and add guardrail and separate sidewalk from traffic with barrier. Estimated cost is \$95,000.
- Bridge B-37-388 (Thomas Street over CNW Railroad) Replace sidewalk approaches. Estimated cost is \$4,000.
- Bridge B-37-971 (Thomas Street over Wisconsin River) Install riprap, replace guardrail, reset bearings on East abutment, etc. Estimated cost is \$19,000.

### Part D – At-Grade Railroad Crossing Analysis

There are six at-grade railroad crossing locations that were analyzed. Out of the six crossings, five do not meet standards for pavement marking found in SDD 15C09-12a, "Signing and Pavement Marking Details for Railroad-Highway Grade Crossings". All crossings were assumed to need an electronic gate and signal. There are two additional crossings within the project limits that are grade separated, so these were not analyzed. WisDOT's current approach to Asset Management by Performance-Based Practical design does not require that every element outside of desirable standards be automatically adjusted. Some of these components and dimensions may remain if safety and operational performance are satisfactory.

**Crossing 182020M (W. Bridge Street east of 1st Avenue):** Various pavement markings need to be added or revised to meet standards. A new gate and signals must be added to meet standards. The estimated cost for this modification is \$555,000.

**Crossing 1820231A (S. 3rd Avenue south of Stewart Avenue):** Various pavement markings need to be added or revised to meet standards. A new gate and signals must be added to meet standards. The estimated cost for this modification is \$276,000.

**Crossing 182046P (S. 3rd Avenue north of Sherman Street):** Various pavement markings need to be added or revised to meet standards. A new gate and signals must be added to meet standards. The estimated cost for this modification is \$276,000.

**Crossing 182048P (N. 1st Avenue north of Sherman Street):** Various pavement markings need to be added or revised to meet standards. The estimated cost for this modification is \$184.

**Crossing 182051L (Thomas Street east of N. 1st Avenue):** Various pavement markings need to be added or revised to meet standards. The estimated cost for this modification is \$900.

Total costs to upgrade these crossings to current standards is \$1,108,000. See Appendix H, At-Grade Railroad Crossing Analysis for detailed information.

## **CHAPTER 8 – HIGHWAY AID PAYMENTS COMPARISON ANALYSIS**

The highway aid payment analysis compares the combination of Connecting Highway aid payments and General Transportation Aids (GTA) payments for all other streets the City of Wausau currently receives to what would be received should proposed partial rerouting of the connecting highway system be adopted.

Connecting Highway Aid Payments within a given municipality are the product of the net lane miles contained in the connecting highway routing and the per net lane mile aid payment determined by state statutes. Wisconsin Statute 86.32 provides additional details. A before and after reconfiguration comparison of connecting highway aid payments to the City of Wausau indicates that the partial rerouting of Bus 51 and STH 52 would have fewer gross and net lane miles of connecting highway than the existing routing. This in turn would reduce the total


connecting highway aid payments to the city, assuming the per net mile payment does not change.

A comparison of the Connecting Highway Aid Payments are based on the following route differences:

- Streets currently not part of the City's Connecting Highway System (proposed for adding to system): Proposed Bus 51 segments on Thomas Street and 1st and 3rd Avenues between Thomas Street and Stewart Avenue. Proposed STH 52 segments on Bridge Street between USH 51 and 6th Street.
- Streets currently part of the City's Connecting Highway System (proposed for removal from system): Existing Bus 51 segments on Grand Avenue between Thomas Street and Forest Street. Existing Bus 51/STH 52 segments on 6th Street from Division Street to Scott Street; on Scott Street and on Forest Street; and on 1st Street between Washington Street and Forest Street. Existing STH 52 segments on 5th and on 6th Streets between Bridge Street and Scott Street, and on Stewart Avenue and on Hwy 52 Parkway.

The factors used to calculate connecting highway aid payments include gross and net lane miles, the municipality population, and the LOS of each highway segment in both the existing and partially rerouted configurations.

Gross lane miles are the sum of length of centerline of each highway segment multiplied by the number of through lanes in each segment. Centerline lengths and the number of through lanes for the rerouted segments come from the Wisconsin Information System for Local Roads. These same details for the connecting highway segments that do not change come from a WisDOT-provided 12/31/2021 segment-by-segment summary of mileages. Actual highway aid payments paid in calendar year 2022 to Wausau were also provided by WisDOT.

Net lane miles are calculated per below:

- For two-way segments, municipalities receive the entire aid rate per mile for the two center lanes on a connecting highway, 75% of the aid rate per mile for the next two lanes and 50% of the aid rate per mile for any additional lanes. For one-way segments, they receive the entire aid rate per mile for the first lane, 75% of the aid rate per mile for the next lane and 50% of the aid rate per mile for any additional lanes. Also, continuous two-way left-turn lanes (TWLTLs) with two travel lanes are eligible for 75% of the aid rate per mile if approved by WisDOT. No payment is made for lanes in which parking is allowed or for intersection turning lanes.
- The net lane miles are reduced for segments where the full number of through lanes are not needed to attain a LOS of D or better. For example, a 4-lane segment that would operate at LOS D or better using just one lane in each direction would not qualify for the 75% aid payment for the 2nd lane in each direction.

The connecting highway aid payment per net mile is determined by state statutes and is population based. The current payment is \$9,678 per net lane mile. However, the total yearly payment to each municipality may be reduced based on funds available statewide. The 2022 proration rate was set at 88.41%, or \$8,566 per Net Lane Mile and is expected to remain at a similar rate in 2023.

A summary of connecting highway gross and net lane miles and aid payments for the existing routing and partial rerouting of Bus 51 and STH 52 in the City of Wausau were calculated and are shown on Table 10. The partial rerouting being studied would reduce the annual connecting



highway aid payment by \$49,949.37. A detailed segment by segment calculation of gross and net lane miles and LOS are found in Appendix I.

	Streets Con	Currently P nected Hwy Lane Mile	art of City's / System es	Streets Cur Conn	rrently Not ected Hwy Lane Mile	Part of City's System s	
Highway	Bus 51	STH 52	Total	Bus 51	STH 52	Total	Change
Gross Lane Miles	13.86	19.27	33.13	15.29	9.86	25.15	-24.09%
Net Lane Miles	12.34	16.31	28.65	13.90	8.78	22.69	-20.80%
2023 Aid Payment			\$242,928.42			\$192,979.05	-\$49,949.37

Table	10:	Lane	Miles	and C	Connecting	g Highv	vay Aid	Payments	Comparison	n
							•	•	1	

General Transportation Aids (GTA) are paid to the City of Wausau for their non-connecting highway streets. Based on a multi-step process by WisDOT, the City of Wausau will receive \$2.7937 million in calendar year 2023 for 214.53 certified centerline miles of city streets. The average per centerline mile is \$13,023.36. This simplified calculation was used to determine the approximate change in GTA between the two connecting street routings. An exact comparison using the WisDOT calculation process should be completed if the reroute takes place.

The lane miles summarized in Table 11 is a comparison between the streets that are currently part of the City's Connected Highway system proposed for removal and the streets proposed to be added to the Connected Highway system. As shown in Table 11, the GTA mileage for proposed connecting highway change scenario is 1.29 miles longer, increasing the GTA payment by approximately \$16.800.13.

	Streets Cu Con	urrently Not nected Hwy	t Part of City's v System	Streets C Conn	Currently Pa ected Hwy	art of City's System	
Highway	Bus 51	STH 52	GTA Total	Bus 51	STH 52	Total	Change
Centerline Miles	2.44	1.66	4.10	0.52	4.86	5.39	+31.5%
2023 Aid Payment			\$53,395.78			\$70,195.91	+\$16,800.13

Table 11: Centerline Miles and General Transportation Aid Payments Comparison

The connecting highway aid payments and GTA payments for street segments that would change from connecting to non-connecting highway segments are combined to provide the change in total WisDOT highway aid the City of Wausau would receive should the proposed partial rerouting of the Bus 51 and STH 52 connecting highway system be adopted. The existing routing connecting highway aid payments plus the GTA aid payments are approximately \$296,324.20. The proposed partial rerouting of the connecting highway system combined aid payments would be approximately \$263,174.96, or a reduction of \$33,149.14 per year.

# **CHAPTER 9 – NEIGHBORHOOD IMPACT ANALYSIS**

In Wisconsin, 12.2% of the population is classified as minority, while in Wausau, 16.3% of the population is classified as minority. The US Census Bureau considers 20.2% of families within the Wausau area to be below the poverty level, compared to 13.2% of Wisconsin's families.



The Climate and Economic Justice Screen Tool was used to analyze the communities surrounding the route into five different areas. All areas were classified as low income. One area was identified as disadvantaged. The percentage of minority population in all areas was higher than average, ranging from 14% to 39%. All data on the screening tool was gathered from the US Census Bureau. According to the US Census Bureau the poverty threshold for an average family of two adults and two children under 18, is \$26,246.

After speaking with the City of Wausau Planner, Brad Lenz, he does not believe there will be any significant neighborhood impacts by rerouting the business and state highways. The census tracts being affected by both the addition and removal of the business highway designations are essentially the same. The addition of a business highway and state highway designation is not expected to dramatically change the traffic patterns that already exist on these streets today. The removal of the designation on some road segments, however, would allow the City of Wausau to improve conditions for all modes of travel on these streets, which could be viewed as more community sensitive.

Currently on the SE corner of Sherman Street and 1st Avenue is a 3M plant. Their trucks use 1st and 3rd Avenues daily to get to a quarry on the north side of Wausau every day. Therefore, those routes are familiar with truck traffic. Dave Mack, the Director of the Wausau Metropolitan Planning Organization, stated the areas around the existing and proposed routes have a high percentage of minority population and traffic would remain within the same amount with the rerouting, so the minority population in the neighborhoods would not be negatively impacted. The downtown area of Wausau is planned to be re-developed. Overall, no significant impacts to neighborhoods abutting the rerouted segments of Bus 51 and STH 52 are anticipated.

See Appendix J for more information and demographic maps.

# **CHAPTER 10 – CONCLUSIONS AND RECOMMENDATIONS**

#### **Part A – Recommendations**

Based on the Origin-Destination data collected as part of this study (see Appendix C), the amount of traffic coming from the north side of Bus 51 (Zone A) and continuing south to the south side downtown (south of Thomas Street – Zone B) is approximately 13.7% of the total daily traffic or 700 vehicles per weekday. This 13.7% of traffic takes three different routes to get to the south side of Wausau and connects back up to Bus 51. Likewise, going northbound starting just south of downtown (Zone B) on Bus 51 and continuing to the north side of Wausau on Bus 51 (just north of W. Union Avenue – Zone A) is approximately 5.2% of the daily traffic, or just over 600 vehicles. Typically, local commuter drivers will not reroute due highway redesignation. The amount of vehicles that will reroute are likely only non-local travelers and trucks that are currently taking the existing Bus 51 route. Based on the existing truck counts at some key intersections, an estimated amount of 40 to 100 trucks (100 using the high-end analysis) may reroute to the new proposed Bus 51 route with the typical amount being closer to 40 trucks per day (includes single unit trucks, buses, and semi-trucks). This translates to about two to five trucks per peak hour being diverted using the new proposed route.

The Origin-Destination data for the STH 52 existing and proposed rerouting showed that 95% of the traffic is currently using Bridge Street as compared to using 5th Street, Scott Street, and Stewart Avenue (existing STH 52 route) to go from the northeast side of Wausau to the west side of Wausau. Vice- versa, going from west side to northeast side of Wausau using Bridge Street is 90%



of the traffic as compared to 10% using the existing STH 52 route. Therefore, rerouting STH 52 onto Bridge Street will likely have no effect on traffic, including truck traffic.

Regardless of how many trip changes occur if STH 52 and/or Bus 51 is rerouted, there are several improvements that should be considered within the study corridors to reduce crashes and be within current standards. These improvements include:

- Consider removing the night-time flashing schedule at the traffic signals along Bridge Street. There are numerous crashes reported during the flashing red signal mode. Instead, have the signals in actuated mode with the "Green Recall" on Bridge Street.
- Consider revising the Coordination Action Plan 2 to start later in the morning for the traffic signals along Bridge Street from the USH 51 ramps to 10th Avenue. See Chapter 5 for more details.
- Consider adjusting the traffic signal clearance intervals (yellow and all-red) at the following intersections: Bridge Street at 1st Avenue, Bridge Street at 3rd Avenue, Bridge Street at 3rd Avenue, Bridge Street at 5th Street.
- Install "Fines Higher" and "End School Zone" signs along Bridge Street.
- There are numerous safety improvements at individual intersections that can be investigated for potential safety funding. See Chapter 1 for intersection safety improvement details.

#### Part B – Conclusions

The City of Wausau will need to weigh the benefits and costs associated with rerouting Bus 51 and STH 52. The benefit of rerouting Bus 51 and STH 52 to the City is having more liberty to implement roadway and mobility improvements within these routes that do not need to follow WisDOT FDM standards and rerouting a relatively low amount of trucks out of the downtown area. The costs associated with rerouting of Bus 51 and STH 52 include:

- Signing changes (200 signs removed, over 150 new signs and a minimum of 13 new freeway guide signs). See Chapter 6.
- Four street segments that would become part of the rerouted connecting highway system do not meet some of the FDM 11-20, Attachment 1.1 standards. They include Segment 5 (3rd Avenue from Bridge Street to Stewart Avenue), Segment 6 (3rd Avenue from Stewart Avenue to Thomas Street), Segment 8 (1st Avenue from McCleary Street to River Drive). Potential removal of on-street parking along 1st and 3rd Avenues or roadway widening would be needed to have these sections of streets to FDM standards; however, WisDOT's current approach to Asset Management by Performance-Based Practical design does not require that every element outside of FDM "desirable standards" be automatically adjusted. Some of these components and dimensions may remain if safety and operational performance are satisfactory until future improvement projects are programmed. See Chapter 7.
- Upgrades to five railroad crossings (estimated cost of \$1,110,000). These upgrades may occur over time based on WisDOT's Asset Management by Performance-Based Practical design if safety and operational performance are satisfactory. See Chapter 7.
- Bridge infrastructure maintenance and upgrades on three bridges (estimated cost of \$99,000 for first 5 years). Thomas Street bridge is an 82.10 bridge, which means that WisDOT currently owns the bridge and when the bridge is replaced, the ownership will go back to the City. See Chapter 7.



- Widening radii at three intersections. These improvements can be addressed when roadway projects are programmed for these intersections in the future. See Chapter 7.
- A reduction in the highway aid payments. See Chapter 8.



## AGENDA ITEM

2022 MS4 Annual Report and Compliance Update

## BACKGROUND

The Municipal Separate Storm Sewer System (MS4) Annual Report is required to be submitted to the WDNR by March 31st of the following reporting year. Within the report the following items are reported:

-The status of implementing the permit requirements and meeting measurable program goals and the compliance with permit schedules.

-Fiscal analysis which includes the annual expenditures, budget for the reporting year, and the budget for the following year.

-A summary of the number and nature of inspections and enforcement actions conducted to ensure compliance with the required ordinances.

-Identification of any known water quality improvements or degradation in the receiving water to which the permittee's MS4 discharges and what actions are being taken to improve water quality. -Evaluation of program compliance, appropriateness of best management practices (BMPs) and progress towards measurable goals.

-UNPS Planning Grant Update.

#### FISCAL IMPACT

None

#### STAFF RECOMMENDATION

Stormwater compliance update and information purposes.

Staff contact: TJ Niksich 715-261-6748

# Submittal of Annual Reports and Other Compliance Documents for Municipal Separate Storm Sewer System (MS4) Permits

NOTE: Missing or incomplete fields are highlighted at the bottom of each page. You may save, close and return to your draft permit as often as necessary to complete your application. After 120 days your draft is **deleted**.

#### Form 3400-224(R8/2021)

. . ....

#### **Reporting Information :**

Will you be completing the A	Will you be completing the Annual Report or other submittal type? • Annual Report • Other				
Project Name:	2022 Annual Report				
County:	Marathon				
Municipality:	<u>Wausau, City</u>				
Permit Number:	S050075				
Facility Number:	31058				
Reporting Year:	2022				

#### Is this submittal also satisfying an Urban Nonpoint Source Grant funded deliverable? O Yes 💿 No

Under s. 283.53(3)(a), a general MS4 permittee is required to reapply for permit coverage at least 180 days prior to the expiration date of the permit.

In order to acknowledge that you are reapplying for permit coverage, please check the following box: 🔽

#### **Required Attachments and Supplemental Information**

Please complete the contents of each tab to submit your MS4 permit compliance document. The information included in this checklist is necessary for a complete submittal. A complete and detailed submittal will help us review about your MS4 permit document. To help us make a decision in the shortest amount of time possible, the following information must be submitted:

#### **Annual Report**

- Review related web site and instructions for <u>Municipal storm water permit eReporting</u> [Exit Form]
- Complete all required fields on the annual report form and upload required attachments
- Attach the following other supporting documents as appropriate using the attachments tab above
  - Public Education and Outreach Annual Report Summary
  - Public Involvement and Participation Annual Report Summary
  - Illicit Discharge Detection and Elimination Annual Report Summary
  - Construction Site Pollution Control Annual Report Summary

- Post-Construction Storm Water Management Annual Report Summary
  - Pollution Prevention Annual Report Summary
    - Leaf and Yard Waste Management
    - Municipal Facility (BMP) Inspection Report
    - Municipal Property SWPPP
    - Municipally Property Inspection Report
    - Winter Road Maintenance
- Storm Sewer Map Annual Report Attachment
- Storm Water Quality Management Annual Report Attachment
- TMDL Attachment
- Storm Water Consortium/Group Report
- Municipal Cooperation Attachment
- Other Annual Report Attachment
- Attach the following permit compliance documents as appropriate using the attachments tab above
  - Storm Water Management Program
    - Public Education and Outreach Program
    - Public Involvement and Participation Program
    - Illicit Discharge Detection and Elimination Program
    - Construction Site Pollutant Control Program
    - Post-Construction Storm Water Management Program
    - Pollution Prevention Program
      - Municipal Storm Water Management Facility (BMP) Inventory
      - Municipal Storm Water Management Facility (BMP) Inspection and Maintenance Plan
  - Total Maximum Daily Load documents (*If applicable, see permit for due dates.)
    - TMDL Mapping*
    - TMDL Modeling*
    - TMDL Implementation Plan*
    - Fecal Coliform Screening Parameter *
    - Fecal Coliform Inventory and Map (S050075-03 general permittees Appendix B B.5.2 document due to the department by March 31, 2022)
    - Fecal Coliform Source Elimination Plan (S050075-03 general permittees Appendix B document due to the department by October 31,2023)
- Sign and Submit form

#### Municipal Contact Information- Complete

**Notice:** Pursuant to s. NR 216.07(8), Wis. Adm. Code, an owner or operator of a Municipal Separate Storm Sewer System (MS4) is required to submit an annual report to the Department of Natural Resources (Department) by March 31 of each year to report on activities for the previous calendar year ("reporting year"). This form is being provided by the Department for the user's convenience for reporting on activities undertaken in each reporting year of the permit term. Personal information collected will be used for administrative purposes and may be provided to the extent required by Wisconsin's Open Records Law [ss. 19.31-19.39, Wis. Stats.]. **Note:** Compliance items must be submitted using the Attachments tab.

#### **Municipality Information**

Name of Municipality	Wausau, City
Facility ID # or (FIN):	31058
Updated Information:	Check to update mailing address information
Mailing Address:	407 Grant Street
Mailing Address 2:	
City:	Wausau, City
State:	WI
Zip Code:	54403 xxxxx or xxxxx-xxxx

#### Primary Municipal Contact Person (Authorized Representative for MS4 Permit)

The "Authorized Representative" or "Authorized Municipal Contact" includes the municipal official that was charged with compliance and oversight of the permit conditions, and has signature authority for submitting permit documents to the Department (i.e., Mayor, Municipal Administrator, Director of Public Works, City Engineer).

Select to <i>create new</i> primary contact					
First Name:	Thomas				
Last Name:	Niksich				
Select to <i>update</i> current contact infor	mation				
Title:	Title: Project Engineer				
Mailing Address:	407 Grant Street				
Mailing Address 2:					
City:	Wausau				
State:	<u>WI</u>				
Zip Code:	54403	xxxxx or xxxxx-xxxx			
Phone Number:	715-261-6748	Ext: xxx-xxx-xxxx			
Email:	thomas.niksich@ci.wausau.wi.us				

#### **Additional Contacts Information (Optional)**

- 🗌 I&E Program
- IDDE Program

Individual with responsibility for: (Check all that apply)	<ul> <li>IDDE Response Procedure Manual</li> <li>Municipal-wide Water Quality Plan</li> <li>Ordinances</li> <li>Pollution Prevention Program</li> <li>Post-Construction Program</li> <li>Winter roadway maintenance</li> </ul>			
First Name	Dustin			
	Kraago			
Last Name:	Kraege			
Title:	Superintendent			
Mailing Address:	400 Myron Street			
Mailing Address 2:				
City:	Wausau			
State:	<u>WI</u>			
Zip Code:	54401 xxxxx or xxxxx-xxxx			
Phone Number:	715-261-6963 Ext: xxx-xxx-xxxx			
Email:	dustin.kraege@ci.wausau.wi.us			

## Municipal Billing Contact Person (Authorized Representative for MS4 Permit)

Select to <i>create new</i> Billing contact					
First Name:	Thomas				
Last Name:	Niksich				
Select to update current contact information					
Title:	Project Engineer				
Mailing Address:	407 Grant Street				
Mailing Address 2:					
City:	Wausau				
State:	WI				
Zip Code:	54403 xxxxx or xxxxx-xxxx				
Phone Number:	715-261-6748 Ext: xxx-xxx				
Email:	thomas.niksich@ci.wausau.wi.us				

#### 1. Does the municipality rely on another entity to satisfy some of the permit requirements? ● Yes ○ No

✓ Public Education and Outreach North Central Wisconsin Stormwater Coalition

✓ Public Involvement and Participation North Central Wisconsin Stormwater Coalition

Illicit Discharge Detection and Elimination

Construction Site Pollutant Control

Dest-Construction Storm Water Management

Pollution Prevention

2. Has there been any changes to the municipality's participation in group efforts towards permit compliances (i.e., the municipality has added or dropped consortium membership)?

 $\bigcirc$  Yes  $\odot$  No

#### Minimum Control Measures- Section 1: Complete

## 1. Public Education and Outreach

- a. Does MS4 conduct any educational efforts or events independently (not with a group) Yes ○ No
- b. How many total educational events were held during the reporting year: ²³
- c. The permit requires that both passive and interactive mechanisms are utilized. How many interactive mechanisms were used during the reporting year? ⁶

Topics Covered	Target Audience
✓ Illicit discharge detection and elimination	General Public
✓ Household hazardous waste disposal/pet waste management/vehicle	✓ Public Employees
washing	Residents
✓ Yard waste management/pesticide and fertilizer application	Businesses
Stream and shoreline management	✓ Contractors
Residential infiltration	
✓ Construction sites and post-construction storm water management	☐ Industries
✓ Pollution prevention	✓ Public Officials
✓ Green infrastructure/low impact development	□ Other
Other:	

**d.** Will additional information/summary of education events be attached to the annual report? ● Yes ○ No

If no, please provide additional comment in the brief explanation box below. *Limit response to 250 characters and/or attach supplemental information on the attachments page.* 

Form 3400-224 (R8/2021)

## Minimum Control Measures - Section 2 : Complete

#### 2. Public Involvement and Participation

**a**. <u>Permit Activities</u>. Complete the following information on Public Involvement and Participation Activities related to storm water. Select the Delivery Mechanism that best describes how the permit activities were conveyed to your population. Use the Add Event to add additional entries.

Event Start Date	5/12/2022			
Project/Event Name	Presentation to Capita	l Improvei	ments and Streets Mai	intenance Committee
Delivery Mechanism	Government Event (Pu	blic Hearin	g, Council Meeting, et	<u>c)</u>
Topics Covered	Target Audier	ice	Estimated People Reached (Optional)	Regional Effort (Optional)

🗹 MS4 Annual Report	🗹 General Public 🗌	<u>101 +</u>	🔿 Yes 🖲 No
🗹 Storm Water Management	Public Employees		
Program	Residents		
Storm Water related ordinance	Businesses		
🗌 Other:	Contractors		
	Developers		
	Industries		
	Public Officials		
	🗌 Other		

**b**. <u>Volunteer Activities</u>. Complete the following information on Public Involvement and Participation Activities related to storm water. Select the Delivery Mechanism that best describes how volunteer activities were conveyed to your population. Use the Add Event to add additional entries.

Event Start Date	4/29/2022 🗌 NA (Individual Permittee).				
Project/Event Name	Presentation to Local Middle School and Inlet Stenciling.				
Delivery Mechanism	Storm drain stenciling				
Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)		
Volunteer Opportunity	✓ General Public	<u>51-100</u>	⊖Yes ●No		
	Public Employees				
	Residents				
	Businesses				
	Contractors				
	Industries				
	Public Officials				
	🗌 Other				

**c**. Brief explanation on Public Involvement and Participation reporting. *Limit response* 

to 250 characters and/or attach supplemental information on the attachments page.

See attached supplemental information.

			Form 3400-224 (R8/2021)					
Ν	Minimum Control Measures - Section 3 : Complete							
3	. Illicit Discharge Detection and Elimination							
a.	How many total outfalls does the municipality have?	49						
b.	How many outfalls did the municipality evaluate as part of their routine ongoing field screening program?	1						
c.	From the municipality's routine screening, how many were confirmed illicit discharges?	0						
d.	How many illicit discharge complaints did the municipality receive?	1						

e.	From the complaints received, how many were 1 confirmed illicit discharges?		1			
f.	How many of the identified illicit discharges of municipality eliminate in the reporting year ( routine screening and complaints)? (If the sum of 3.c. and 3.e. does not equal 3.f., please explain below.)	lid the from both	1	Unsure		
g.	How many of the following enforcement med use to enforce its illicit discharge ordinance? enter the number of each used in the reporti Verbal Warning	chanisms did Check all tha ng year.	the municip t apply and	ality 🗌 Unsure		
	✓ Written Warning (including email)	1				
	□ Notice of Violation					
	Civil Penalty/ Citation					
	Additional Information:					
h.	Brief explanation on Illicit Discharge Detectio marked Unsure for any questions above, justi 250 characters and/or attach supplemental in	n and Elimina fy the reason nformation o	ation reporti ing. Limit re n the attach	ng. If you esponse to ments page.		
Se	ee attached supplemental information.					
				Form 3400-224 (R8/20	)21)	
N 4	Ainimum Control Measures - Section 4 : Com . Construction Site Pollutant Control	plete				
a.	How many total construction sites with one a of land disturbing construction activity were point in the reporting year?	acre or more active at any	14	Unsure		
<ul> <li>b. How many construction sites with one acre or more of land disturbing construction activity did the municipality issue permits for in the reporting year?</li> </ul>				Unsure		
c.	<ul> <li>^{c.} How many erosion control inspections did the municipality 41</li> <li>^{c.} Unsure complete in the reporting year (at sites with one acre or more of land disturbing construction activity)?</li> </ul>					
<ul> <li>d. What types of enforcement actions does the municipality have available Unsure to compel compliance with the regulatory mechanism? Check all that apply and enter the number of each used in the reporting year.</li> <li>No Authority</li> </ul>						
	✓ Verbal Warning	30				
	<ul> <li>Written Warning (including email)</li> </ul>	8				
	□ Notice of Violation					
	Civil Penalty/ Citation					
	🗌 Stop Work Order					

Other - Describe below

e. Brief explanation on Construction Site Pollutant Control reporting . *If you marked Unsure for any questions above, justify the reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page*.

See attached supplemental information.

	Ainimum Control Massures Costion F. Comm			Form 3400-224 (R8/2021)
5	. Post-Construction Storm Water Management	t		
a.	How many sites with new structural storm wat management Best Management Practice (BMF received local approval ? *Engineered and constructed systems that are designed to pro quality control such as wet detention ponds, constructed wetla basins, grassed swales, permeable pavement,	ter P) have ovide storm water ands, infiltration	2	Unsure 🗌
b.	Does the MS4 have procedures for inspecting maintaining private storm water facilities?	and	⊖ Yes ● No	🗌 Unsure
c.	If Yes, how many privately owned storm water management facilities were inspected in the re Inspections completed by private landowners should be includ number.	r eporting year ? ed in the reported		Unsure Unsure
d.	Does the municipality utilize privately owned s management BMP in its pollutant reduction ar	storm water nalysis?	● Yes ○ No	🗌 Unsure
e.	If yes, does MS4 have maintenance authority of privately owned BMPs?	on these	0	Unsure
f.	How many municipally owned storm water ma BMPs were inspected in the reporting year?	anagement	73	Unsure
g.	What types of enforcement actions does the n to compel compliance with the regulatory med apply and enter the number of each used in th No Authority	e available k all that ır.	Unsure Unsure	
	✓ Verbal Warning	0		
	Written Warning (including email)	0		
	Notice of Violation	0		
	Civil Penalty/ Citation			
	Forfeiture of Deposit			
	Complete Maintenance			

✓	Bill	<b>Responsible Party</b>	
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□ Other - Describe below

e.	Brief explanation on Post-Construction Storm Water Management reporting . If
	marked 'Unsure' on any questions above, justify your reasoning. Limit your response to
	250 characters and/or attach supplemental information on the attachments page.

0

See attached supplemental information.

			Form 340	00-224 (R8/2021)			
Ν	Ainimum Control Measures - Section 6 : Complete						
6	. Pollution Prevention						
S	torm Water Management Best Management Practice Inspections	Not /	Applicable				
a.	Enter the total number of municipally owned or operated structural storm water management best management practices.	73	Unsure				
b.	How many new municipally owned storm water management best management practices were installed in the reporting year?	2	Unsure				
c.	How many municipally owned storm water management best management practices were inspected in the reporting year?	71	Unsure				
d.	What elements are looked at during inspections (250 character limit)?						
	See attached supplemental information.						
e.	How many of these facilities required maintenance?	10	Unsure				
t.	Brief explanation on Storm Water Management Best Management Practice inspection reporting. If you marked Unsure for any questions above, justify the reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page.						
	See attached supplemental information.						
Ρ	ublic Works Yards & Other Municipally Owned Properties (SWPPP Pl	an Rev	iew) 🗌 Not	Applicable			
g.	How many municipal properties require a SWPPP?	3	Unsure				
h.	How many inspections of municipal properties have been conducted in the reporting year?	1	Unsure				
i.	Have amendments to the SWPPPs been made? • Yes • No • Unsure						
j.	If yes, describe what changes have been made. Limit response to 25 and/or attach supplemental information on the attachment page:	50 char	acters				
	N/A						
k.	Brief explanation on Storm Water Pollution Prevention Plan reporti Unsure for any questions above, justify the reasoning. Limit response	ng. If y se to 25	ou marked 50				

	characters and/or attach supplemental information on the attachments page.
	See attached supplemental information.
С	ollection Services - Street Sweeping / Cleaning Program 🗌 Not Applicable
I.	<ul> <li>Did the municipality conduct street sweeping/cleaning during the reporting year?</li> <li>● Yes ○ No ○ Unsure</li> </ul>
m.	If known, how many tons of material was removed? 6,527 Unsure
n.	Does the municipality have a low hazard exemption for this • Yes O No material?
0.	If street cleaning is identified as a storm water best management practice in the pollutant loading analysis, was street cleaning completed at the assumed frequency
	Yes - Explain frequency The city clean priority streets on a weekly basis.
	O No - Explain
	○ Not Applicable
С	ollection Services - Catch Basin Sump Cleaning Program 🗌 Not Applicable
p.	Did the municipality conduct catch basin sump cleaning during the reporting year?
q.	How many catch basin sumps were cleaned in the reporting year? 812 $\Box$ Unsure
r.	If known, how many tons of material was collected? 101 Unsure
s.	Does the municipality have a low hazard exemption for this • Yes O No material?
t.	If catch basin sump cleaning is identified as a storm water best management practic in the pollutant loading analysis, was cleaning completed at the assumed frequency
	• Yes- Explain frequency Each basin every other year.
	O No - Explain
	O Not Applicable
С	ollection Services - <i>Leaf Collection Program</i> 🗌 Not Applicable
u.	Does the municipality conduct curbside leaf collection? $\odot$ Yes $\bigcirc$ No $\bigcirc$ Unsur
v.	Does the municipality notify homeowners about pickup? $\odot$ Yes $\bigcirc$ No $\bigcirc$ Unsur
w.	Where are the residents directed to store the leaves for collection? ☑ Pile on terrace □ Pile in street □ Bags on terrace □ Unsure
	Other - Describe
x.	What is the frequency of collection? 2x per year and additional if time permits.
y.	Is collection followed by street sweeping/cleaning?  • Yes O No O Unsur
z.	Brief explanation on Collection Services reporting. If you marked Unsure for any questions above, justify the

reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page

See attached supplemental information.

Winter Road Management 
Not Applicable

*Note: We are requesting information that goes beyond the reporting year, answer the best you can.

520

Unsure

- ^{aa.} How many lane-miles of roadway is the municipality responsible for doing snow and ice control? (*One mile of a two-way road equals two lane miles*.)
- ^{ab.} Provide amount of de-icing products used by month last winter season? Solids (tons) (ex. sand, or salt-sand)

Product	Oct	Nov	Dec	Jan	Feb	Mar
<u>Salt</u>	0	425	648	363	517	471
Salt/sand mix	0	132	371	243	184	202
None						

#### Liquids (gallons) (ex. brine)

	Oct	Nov	Dec	Jan	Feb	Mar
Brine	21255	30133	18283	18258	26439	8200

- ^{ac.} Was salt applying machinery calibrated in the reporting Yes No Unsure year?
- ^{ad.} Have municipal personnel attended salt reduction strategy Yes No Unsure training in the reporting year?

Training Date	Training Name	# Attendance	
4/10/2022	APWA Winter Maintenance Certification	3	
9/20/2022	APWA Winter Maintenance Certification	3	

^{ae.} Brief explanation on Winter Road Management reporting. *If you marked Unsure for any questions above, justify the reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page* See attached supplemental information.

#### Internal (Staff) Education & Communication

af. Has the municipality provided an opportunity for internal 

Yes
No
Unsure training or education to staff implementing the municipality's procedures for each of the pollution prevention program element ?
If yes, describe what training was provided (250 character limit):
See attached supplemental information.

When: 10/5/2022

How many attended: 6

^{ag.} Describe how the municipality has kept the following local officials and municipal staff aware of the municipal storm water discharge permit programs, procedures and pollution prevention program requirements.

### **Elected Officials**

See attached supplemental information.

**Municipal Officials** 

See attached supplemental information.

Appropriate Staff (such as operators, Department heads, and those that interact with public)

See attached supplemental information.

^{ah.} Brief explanation on Internal Education reporting. *If you marked Unsure for any questions above, justify the reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page.* 

See attached supplemental information.

Form 3400-224 (R8/2021)

## Minimum Control Measures - Section 7: Complete

#### 7. Storm Sewer System Map

- ^{a.} Did the municipality update their storm sewer map this year?
  - $\odot$  Yes  $\bigcirc$  No  $\bigcirc$  Unsure

If yes, check the areas the map items that got updated or changed:

- ✓ Storm water treatment facilities
- Storm pipes
- Vegetated swales
- Outfalls
- Other Describe below
- ^{b.} Brief explanation on Storm Sewer System Map reporting. *If you marked Unsure for an question for any questions above, justify the reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page.*

Updates to the stormwater system are tracked by engineering and given to the GIS department to update at the end of the year.

## **Final Evaluation - Complete**

#### **Fiscal Analysis**

Complete the fiscal analysis table provided below. For municipalities that do not break out funding into permit program elements, please enter the monetary amount to your best estimate of what funding may be going towards these programs.

Annual Expenditure Reporting Year	<b>Budget</b> Reporting Year	<b>Budget</b> Upcoming Year	Source of Funds
Element: Public Edu	cation and Outr	each	
625	1250	1250	General revenue fund
Element: Public Invo	lvement and Pa	articipation	
625	1250	1250	General revenue fund
Element: Illicit Disch	arge Detection	and Elimination	
2000	5000	11000	General revenue fund
Element: Construction	on Site Pollutan	t Control	
6000	17000	36500	General revenue fund
Element: Post-Cons	truction Storm	Water Managem	ient
680000	323000	1648500	General revenue fund
0	0	150000	Tax Incremental Finance District.
Element: Pollution F	Prevention		
1261000	1250000	1250000	General revenue fund
<b>Other</b> (describe)			
			<u>Select</u>

Please provide a justification for a "0" entered in the Fiscal Analysis. *Limit response to 250 characters*.

#### Water Quality

a: Were there any known water quality improvements in the receiving waters to which the municipality's storm sewer system directly discharges to?
Yes 

No
Unsure
If Yes, explain below:

**b**: Were there any known water quality degradation in the receiving waters to which the municipality's storm sewer system directly discharges to?

 $\bigcirc$  Yes  $\bigcirc$  No  $\bigcirc$  Unsure If Yes, explain below:

**c**: Have any of the receiving waters that the municipality discharges to been added to the impaired waters list during the reporting year?

 $\bigcirc$  Yes  $\bigcirc$  No  $\bigcirc$  Unsure

d: Has the municipality evaluated their storm water practices to reduce the pollutants of concern?
● Yes ○ No ○ Unsure

#### **Storm Water Quality Management**

**a**. Has the municipality completed or updated modeling in the reporting year (relating to developed urban area performance standards of s. NR 151.13(2)(b)1., Wis. Adm. Code)? ○ Yes ● No

**b**. If yes, enter percent reduction in the annual average mass discharging from the entire MS4 to surface waters of the state as compared to implementing no storm water management controls:

Total suspended solids (TSS)

Total phosphorus (TP)

#### **Additional Information**

Based on the municipality's storm water program evaluation, describe any proposed changes to the municipality's storm water program. *If your response exceeds the 250 character limit, attach supplemental information on the attachments page.* 

#### **Requests for Assistance on Understanding Permit Programs**

Would the municipality like the Department to contact them about providing more information on understanding any of the Municipal Separate Storm Sewer Permit programs?

- Please select all that apply:
- □ Public Education and Outreach
- Public Involvement and Participation
- □ Illicit Discharge Detection and Elimination
- Construction Site Pollutant Control
- □ Post-Construction Storm Water Management
- □ Pollution Prevention
- □ Storm Water Quality Management
- □ Storm Sewer System Map
- □ Water Quality Concerns
- □ Compliance Schedule Items Due
- □ MS4 Program Evaluation

#### Form 3400-224(R8/2021)

#### **Required Attachments and Supplemental Information**

Any other MS4 program information for inclusion in the Annual Report may be attached on here. Use the Add Additional Attachments to add multiple documents.

Upload Required Attachments (15 MB per file limit) - <u>Help reduce file size and trouble shoot file uploads</u> *Required Item

Note: To replace an existing file, use the 'Click here to attach file ' link or press the to delete an item.

Storm Sewer System Map			
I File Attachment	StormSewerMap.pdf		

<b>Attach - Other</b>	Supporting	Documents
-----------------------	------------	-----------

#### AR Other

🎚 File Attachment

2022AnnualStormwaterReportSupplementalInformation.pdf

(To remove items, use your cursor to hover over the attachment section. When the drop down arrow appears, select remove item)

#### **Attach - Permit Compliance Documents**

(To remove items, use your cursor to hover over the attachment section. When the drop down arrow appears, select remove item)

## Sign and Submit Your Application

# Steps to Complete the signature process

- 1. Read and Accept the Terms and Conditions
- 2. Press the Submit and Send to the DNR button

**NOTE:** For security purposes all email correspondence will be sent to the address you used when registering your WAMS ID. This may be a different email than that provided in the application. For information on your WAMS account click <u>HERE</u>.

# **Terms and Conditions**

**Certification:** I hereby certify that I am an authorized representative of the municipality covered under Wausau, City MS4 Permit for which this annual report or other compliance document is being submitted, and that the information contained in this submittal and all attachments were gathered and prepared under my direction or supervision. Based on my inquiry of the person or persons under my direction or supervision involved in the preparation of this document, to the best of my knowledge, the information is true, accurate, and complete. I further certify that the municipality's governing body or delegated representatives have reviewed or been apprised of the contents of this annual report. I understand that Wisconsin law provides severe penalties for submitting false information.

Signee (must check current role prior to accepting terms and conditions)

• Authorized municipal contact using WAMS ID.

 $\odot\,$  Delegation of Signature Authority ( Form 3400-220 ) for agent signing on the behalf of the authorized municipal contact.

○ Agent seeking to share this item with authorized municipal contact (authorized municipal contact must get WAMS id and complete signature).

Name:		Thomas Niksich
	Title:	Project Engineer
Authorized Signature. ✓ I accept the above terms and conditions.		Signed by : i:0#.f wamsmembership tniksich on 2023-03-31T10:32:47 You have already signed and submitted this application to the DNR. Please <u>contact</u> the Wisconsin DNR for assistance.

After providing the final authorized signature, the system will send an email to the authorized party and any agents. This email will include a copy to the final read only version of this application.

## AGENDA ITEM

Discussion on annual road maintenance/reconstruction and annual funding allocations for the same

## BACKGROUND

This item was brought forward to discuss possible CISM priorities and potential ideas for increasing annual street budgets as well as get an understanding what budgets fund our street projects. To begin I thought it would be good to see our previous 5-year budgets and fund sources for you to review.

2023				
Project	<b>Total Request</b>	TID Funding	2023 Levy Budget	
Street Reconstruction with Storm Sewer	\$6,529,300.00	\$4,600,000.00	\$1,929,300.00	
Asphalt Overlay	\$350,000.00	\$0.00	\$350,000.00	
Concrete Pavement Repair	\$650,000.00	\$350,000.00	\$300,000.00	

2022				
Project	<b>Total Request</b>	TID Funding	2023 Levy Budget	
Street Reconstruction with Storm Sewer	\$1,586,300.00	\$0.00	\$1,586,300.00	
Asphalt Overlay	\$275,000.00	\$0.00	\$275,000.00	
Concrete Pavement Repair	\$250,000.00	\$0.00	\$250,000.00	

2021				
Project	Total Request	TID Funding	2023 Levy Budget	
Street Reconstruction with Storm Sewer	\$1,785,000.00	\$0.00	\$1,785,000.00	
Asphalt Overlay	\$250,000.00	\$0.00	\$250,000.00	
Concrete Pavement Repair	\$250,000.00	\$0.00	\$250,000.00	

2020				
Project	<b>Total Request</b>	TID Funding	2023 Levy Budget	
Street Reconstruction with Storm Sewer	\$3,555,000.00	\$2,631,000.00	\$924,000.00	
Asphalt Overlay	\$250,000.00	\$0.00	\$250,000.00	
Concrete Pavement Repair	\$250,000.00	\$0.00	\$250,000.00	

2019				
Project	<b>Total Request</b>	TID Funding	2023 Levy Budget	
Street Reconstruction with Storm Sewer	\$5,780,900.00	\$4,105,400.00	\$1,675,500.00	
Asphalt Overlay	\$100,000.00	\$0.00	\$100,000.00	
Concrete Pavement Repair	\$340,000.00	\$0.00	\$340,000.00	

One of the most important items to note is how beneficial TID's are to the street and infrastructure budget process. TID's are often scrutinized as bad but the increment they generate allows us to invest millions into our infrastructure which would otherwise be put 100% on the taxpayer. By using the TID we are able to leverage the funding that would normally be sent to other tax entities like the school district, NTC, etc. Having successful TID's and supporting development within the TID's has a very positive impact on infrastructure improvements and also allows us to leverage other funding sources.

#### FISCAL IMPACT

None

#### STAFF RECOMMENDATION

Discussion on past and possible future budget considerations for street reconstruction and improvements.

Staff contact: Eric Lindman 715-261-6745