WISCONSIN RAPIDS

NOTICE OF PUBLIC MEETING

Public Works Committee/

Ryan Austin, Chairperson
Sheri Evanson, Secretary
Dennis Polach
Mayor Blaser

Notice is hereby given of a meeting of the Public Works Committee to be held in the **Council Chambers** at City Hall, 444 West Grand Ave, Wisconsin Rapids **5:00 pm on Thursday, July 14th, 2022**. **The public may listen to the meeting by calling 1-312-626-6799 Access code**: **814 9710 5762**. The meeting will also be streamed LIVE on the City of Wisconsin Rapids Facebook page. This meeting is also available after its conclusion on the City's Facebook page and Community Media's YouTube page, which can be accessed at www.wr-cm.org. If a member of the public wishes to submit comments to the Public Works Committee regarding an agenda item and does not wish to be present in person, please contact Committee chair Ryan Austin via email at raustin@wirapids.org before the meeting.

Agenda

1. Call to order
2. Review Engineering & Street Department Monthly Activity Report.
3. Review request from WRPS to add a mid-block crosswalk to 32nd St N at a pont 475' north of Franklin St for Washington School.
4. Review request from Town of Grand Rapids to participate in the repaving of Chestnut St from 23rd St S to 32nd St S.
5. Review the artwork proposal for the W Jackson St roundabout.
6. Review proposals for the Rail Feasibility Study.
7. Review and consider adding parking on the north side of Baker St between 5th St and 8th St.
8. Review referral list
9. Set Next Meeting Date
10. Adjourn

Ryan Austin, Chairperson

The City of Wisconsin Rapids provides access to meetings to all citizens. If access to this meeting through video or audio means is not possible due to a disability, notification to the City's IT Manager at 715-421-8288 at least 48 hours prior to the scheduled meeting is encouraged to request accommodations.

WISCONSIN RAPIDS

PUBLIC WORKS DEPARTMENT
1411 CHASE STREET
WISCONSIN RAPIDS, WI 54495
(715) 421-8218 FAX (715) 421-8281

June 2022

Refuse and Recycling

- Garbage Collection estimated 455.93 tons (2021 514 tons)
- Recycling Collection estimated 105.53 tons (2021 106 tons)

Construction

Cherry Street (Riverview Drive – 1st St North, Smith St (Railroad St – Riverview Drive)

- Installed 422' of 8" Sanitary, 8 - 4" Sanitary Services, 1-Sanitary Manholes
- Installed 288' of 12" HDPE Storm, 110' of 8" SDR 35 Storm, 2-Storm Manholes, 5- Catch basins and storm lead piping
- Installed 320' of 6" Ductile Water main, 9 - Water Services, 1- Hydrant
- Backfilled Curb and Gutter and seeded the black dirt on Cherry Street, and Smith Street from Cherry to Railroad Street
- Backfilled Curb and Gutter from Cherry Street to Riverview and prepped for concrete in driveways
- Started to prepare for Pavement on Cherry Street and Smith Street South of Cherry

Rosecrans Street (9th Ave – Dead End)

- Project completed

Lyons Park Flood Levee (1681 2nd Ave to Lyon Park)

- DOT portion of project complete minus Asphalt pavement restoration

18th Ave South (Russel Street – West Grand Ave)

- Project completed

West Jackson Street (West Riverview Expressway – Wisconsin River)

- Installed 1000' of 6" Ductile Water main and 3- Hydrants

Freemont Street (14th Street – 13th Street)

- Removed Asphalt Pavement, Curb and Gutter and Topsoil on 14th Ave North and Freemont Street

- Installed 173' of 8" Sanitary, 2-Sanitary Manholes and 3- Sanitary Services
- Installed 134' of 6" Water main and 1-Hydrant

Public works Maintenance

- String trimmed grass and weeds along highways
- Mowing grass in Street Right of Way
- Cold patch and Hot patch holes in city streets
- Provided traffic control for Cranberry Blossom Festival
- Dug out and installed small hand patches with asphalt
- Worked with Wood County to install paver patches on Sanitary repairs, and street patches equaling 1100 tons over five separate days
- Finished restoration and concrete work around Wayfinding signs
- Assisted WWLC with Water main breaks
- Completed cap maintenance on West River bank bike trail retaining wall
- Completed catch basin repairs and concrete curb patches and asphalt patches
- Sealed colored median concrete in downtown business areas
- Completed two city wide brush pickups
- Saw cut asphalt patches
- Started preparation of city street for Chip seal program
- Assisted Kafka Construction with grinding brush at the Westside Compost site

Paint and Signs

- Replaced seasonal banners in downtown area
- Painted Lane Dividers on Expressway at (Chase, 2nd Ave, 3rd St, Lincoln, 8th St, 12th St, 16th St,
- Painted Lane Dividers on STH 54 (CTH W, Chestnut St, Peach, Saratoga, Washington, Spring, Kingston
- Painted Lane Dividers on 8th St (Goodnow – Griffith)
- Painted Lane Dividers on West Grand at (9th, 10th 17th, 25th, George Road, Industrial Street)
- Painted Parking Stalls at (Zoo, Fireman's Memorial, City Hall, Johnson St Lot, Oak St Lot, 2nd St, Goggin's, 4th St, 1st St, 2nd St, Library, Robinson Park)
- Painted Lane Dividers at 8th and Baker, 16th and Baker, 16th in front of High School
- Installed Highway Banners and Downtown Banners for Cranberry Blossom Festival
- Painted Center line in downtown area, East Jackson St, 2nd St. S, Hwy 73, 2nd Ave, 8th St, CTH W, Washington St. 16th St, 1st St, Two mile Ave (8th – 7th), Riverwood Lane

- Replaced street markers at 15 intersections
- Installed Trombone Arm at 8th and Chestnut from last fall storm damage
- Repaired damaged signs from accidents
- Installed Flags for Memorial Day and July 4th
- Removed Signs for Construction Projects at Jackson St and Freemont
- Assisted with Sensor install for WWTP

Shop and Repairs

- Maintaining arms on Garbage and Recycling truck
- Multiple truck services
- Changing lawnmower blades every other day to maintain a good cut
- Rebuild Garbage Dumpsters
- Replace lift ram on multi-axle dump truck
- General Fire Truck Maintenance
- General Police Vehicle Maintenance
- Preparation for vehicles taken out of service
- Transmission and Injector issues on Garbage trucks

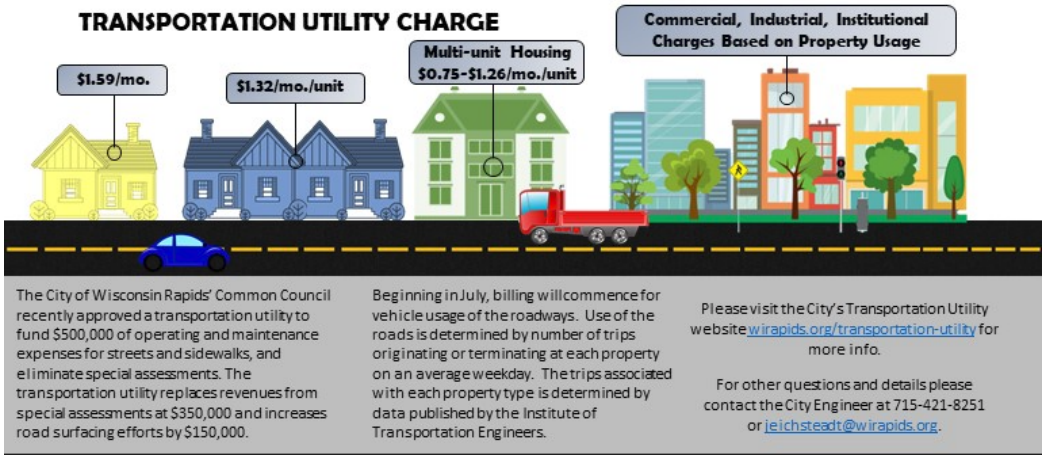
WISCONSIN RAPIDS

ENGINEERING DEPARTMENT
444 West Grand Avenue
Wisconsin Rapids, WI 54495-2780
Engineering (715) 421-8205 FAX (715) 421-8291

ENGINEERING DEPARTMENT Monthly Activity Report June 2022

Transportation Utility

- WWLC will begin billing July 27th for customers on billing cycle 2 and August 15th for customers on billing cycle 1.
- Billing insert was created



- Account data is continually being worked on.

Permits & Degradation

- 35 Permits/Applications (38 in May) for asphalt paving (5), driveway grades/concrete pour inspections (8), storm water (0), excavating (18), Street Privilege (0), storm connection (0), permit parking (0), banner (0), environmental testing well (1), contractor licenses (3)
- 276 Diggers Locates for Storm Sewer & Sanitary Sewer (255 in May)
  - 7 Emergency locates during work hours
  - 0 Emergency locates after hours
- Degradation fees - this year = $60,245.64
  - This month =$4,061.50 ($13,093.23 In May)

Traffic

- <u>Vision Triangle Complaints</u>
  - E Grand Ave and 16th St S – A letter was sent and obstruction was removed.
    - Engineering Dpt staff measured the height and location and have determined that the obstruction is in the vision triangle.
  - 4th Ave N and W Grand Ave – Southbound left – review is ongoing
- <u>Stop Sign / Yield Sign Requests</u>
  - 13th St & Peach St – 4/22 – Traffic Counts are complete. Review is being worked on as time allows.

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- 2nd St S and Davis Ave – 4/28/22
- 11th & Apple St, 11th & Peach St, 10th St & Peach St – 5/24/22
  - Counts at 11th and Apple are complete
  - Counts are still being conducted at the other locations.
- 14th Ave N and McKinley St – review is being worked on as time allows.

- <u>ITS Standalone Signal Grant</u>
  - No bids were received on June 17th at 9:00 am. The project is proposed to be rebid with a completion date in spring of 2023 and run separate from the W Jackson St project. The completion date adds flexibility for contractors if they are looking to fill their schedule at a later date and the separation from work on W Jackson St reduces the complexity and time constraints. One contractor stated they would bid if rebid with these changes. Bid results may be available in August.
  - We have updated the DOT on the changes and awaiting a response on any issues or concerns they have.
  - Rebid along with plan & spec changes will cost ~$7,000.
  - If a contractor decides to complete the work after the W Jackson St project is complete there will be additional inspection costs as MSA already has staff on the W Jackson St project.
  - Monotube supplier has been contacted for quotes and provided a 6.5 month lead time.
- <u>Signal complaints</u>
  - 8th St & Pepper Ave – vehicle detection issue on left turn arrow. - 5/24/22
    - No equipment defects have been identified. Gridsmart will be in Rapids the week of July 11th to review camera setup.
  - Lincoln St & Expressway – vehicle detection issue on left turn arrow. - 5/24/22
    - No equipment defects have been identified. Gridsmart will be in Rapids the week of July 11th to review camera setup.
  - Gridsmart and Tapco were in Rapids configuring traffic cameras on March 16th. IT has performed additional work on configuring in April. Remote monitoring connections have been restored.
  - 2/8/2022 - 8th St S and Chestnut St – Detector malfunction due to broken wire in pavement. The wires were replaced May 2nd and the signals are fully operational again.
  - 8th St sign bridge at Chestnut St – New monotube has been installed.
  - Nov. 2021 - Griffith and 8th St queuing lengths. Review is ongoing.

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Project Designs/Construction underway:

2021 Projects

- RECC Rail Spur – The Industry Track Agreement between the City and CN is signed. The Contractor performed final punch list items on May 5th and 6th. We are waiting on final paperwork from Ameritrack prior to final payment. Reimbursement requests will be submitted to the DOT immediately thereafter.

Maintenance Projects

- Sidewalk Concrete Cutting (Safe Step) – Inspections are complete. There are over 524 joints for grinding. Safestep is scheduling for this work to begin the week of July 18th. Safestep will be performing the sidewalk cutting this year in the area generally bounded by 8th St S, Plover Rd, E Riverview Expy and Chestnut St. $40,000 is budgeted in 2022.
- Sidewalk and Curb & Gutter Maintenance – Joslin Concrete will be performing the maintenance work in 2022 and has already completed curb & gutter replacements on 14th Ave between Chase St and Alton St. Additional work is scheduled the week of July 18th to replace curb & gutter in advance of chip seal operations.

2022 Reconstruction Projects

- Design for 2022 Projects – 100% Complete
- Construction for 2022 Projects
    - DOA/Lyon Park Levee – Work surrounding the DOA parking lot is nearly complete. Asphalt patching is all that remains to be done. Reimbursement from the DOA will be requested as soon as work is complete on their property. Lyon Park work is anticipated in late summer.
    - Preconstruction walk-thru meetings were held for:
        - Fremont St - 13th to 14th Ave on June 8th
        - 9th Ave N & Fremont St (7th Ave to 10th Ave) - June 16th
- 2022 Contracts
    - Sewer Lining Contract (contract awarded to Visu Sewer) – the work is complete; however, there are two items that they will come back for:
        - A spot liner on 19th St in August
        - A more recent lining need on Chestnut St in October.
    - Crushing Contract – Work began March 17th and was completed mid-April.
    - Asphalt Contract – Bids were awarded and contracts signed. American Asphalt has completed paving work on 14th Ave S, Kuhn Ave, Rosecrans St and some miscellaneous patch locations.

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- Concrete Contract – Bids were awarded and contracts signed. A preconstruction meeting was held with SD Ellenbecker. Work is ongoing with Cherry and Smith St projects.

2023 Reconstruction Projects

- Preliminary Survey for 2023/2024 Projects
  - Oak St (E Jackson St to 16th St) – 100%
  - 9th St S (Peach St to Chestnut St) – 25%
  - McKinley St (8th Ave N to 14th Ave N) – 0% (2024 Project)
  - Shorewood Terrance (1st St N to Termini) – 90%
  - Apricot St and Broadway St – 100%
- Design for 2023 Projects
  - Oak St (E Jackson St to 16th St) – 45%
  - 9th St S (Peach St to Chestnut St) – 5%
  - Shorewood Terrance (1st St N to Termini) – 60%
  - Apricot St and Broadway St – 85%; Geotech work was complete by Nov. 15th. Report has been received and reviewed.
  - McKinley St (8th Ave N to 14th Ave N) – 0% - Recommended for 2024

Storm Water Utility

- Soliciting for proposals in July (proposed for an August Public Works Agenda Item) to update the Storm Water Utility database. This work is budgeted in 2022 and is expected to be around $7500.
- Storm Utility Billing Updates –
- One Mile Cr. – Permits are still being reviewed. Easement signatures are still being secured. Dam permit applications were submitted to DNR the week of April 25th. Permanent Easement documents were updated and will be sent back to owners in May.

Other Highlights

- Continuing to search for an engineering technician to fill a vacancy.
- W Jackson St Update
  - The City completed the water main work on Stage 1 in June.
  - The contractor completed storm sewer installation July 7th and will begin with grading and base course installation on July 6th with an anticipated completion of base course and grading by July 15th. Electrical conduit will be installing conduit during the same time period. Concrete work is expected to begin shortly thereafter. Stage 1 will be complete at the end of August. Stage 2 is expected to be complete mid-October.

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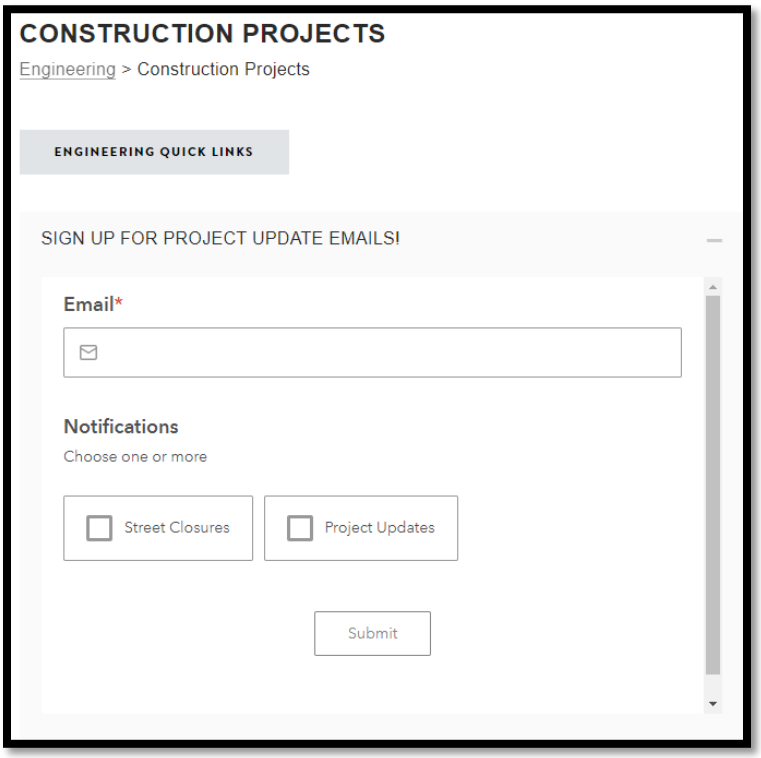
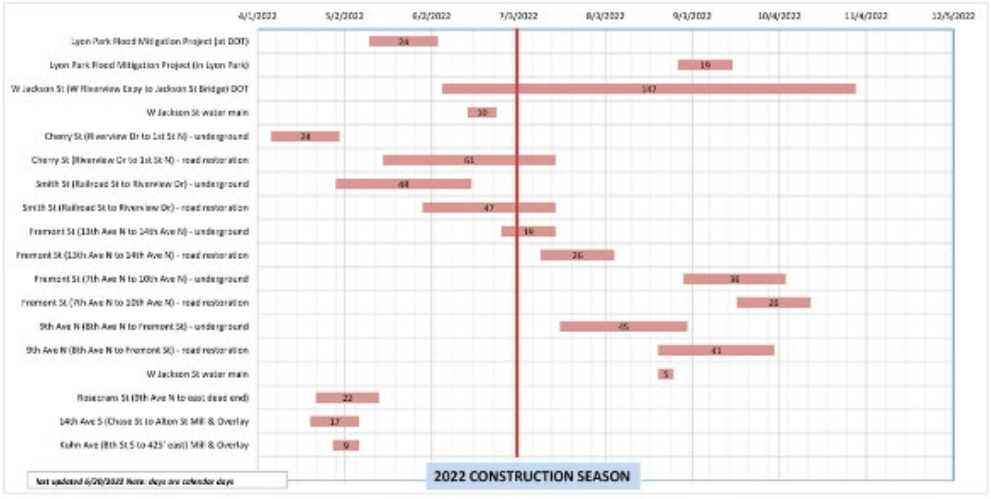
- Weekly Construction Updates
  - 

- Construction Schedule

2022 Construction Schedule (updated 6/30/2022)

  - 

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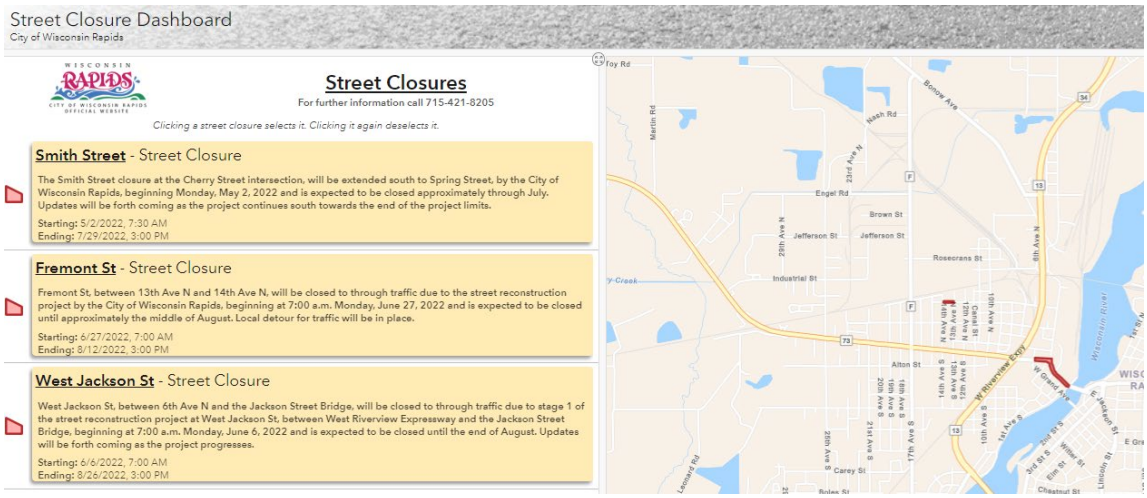
- Street Closures

- Click here to view closures on the map!



WISCONSIN RAPIDS

Public Works Committee

Date of Request: 7/6/2022

Requestor: Joe Eichsteadt, City Engineer

Request/Referral:

Review and consider installing a school crossing on 32nd Street N, 825 feet north of Washington Street.

Background information:

A need for a crosswalk has been identified on 32nd Street North approximately 825 feet north of Washington Street. Currently, a walking path begins at Washington Elementary and ends at a driveway on 32nd Street North. Wisconsin Rapids Public Schools estimates 15 to 20 students cross the street at this location on their walk to and from school. The street is a 48-foot-wide minor arterial with a posted speed limit of 35 miles per hour. The crosswalk would connect the existing walking path from Washington Elementary to the sidewalk on the east side of 32nd Street North.

In addition to school crossing signage, a no parking area on both sides of the street within 100 feet of the crossing is recommended to ensure adequate visibility.

Options available:

- Install crosswalk with curb ramp and flashing LED school crossing signs and pedestrian push buttons. This is the safest option at a mid-block crossing.
- Install crosswalk with curb ramp and standard school crossing signs.
- Do not install crosswalk

Action you are requesting the committee take:

Install crosswalk with curb ramp and flashing LED school crossing signs and pedestrian push buttons. Add the crosswalk to the list of mid-block crosswalks in municipal code chapter 340. Add the parking restrictions to municipal code chapter 27.

How will the item be financed?

The project could be funded either by WRPS or the City or cooperatively cost shared.

The estimated cost for the crossing is approximately $3000 for the standard signage or about $6000 with the LED installation.

Joe Eichsteadt
City Engineer
07/01/2022

32nd Street Pedestrian Crossing

Background

A potential location for a crosswalk has been identified on 32nd Street North approximately 825 feet north of Washington Street. Wisconsin Rapids Public Schools estimates 15 to 20 students from Washington Elementary cross this street on school days. The street is a 48-foot-wide minor arterial with a posted speed limit of 35 miles per hour. The crosswalk would connect an existing walking path from Washington Elementary to the sidewalk on the east side of 32nd Street North.

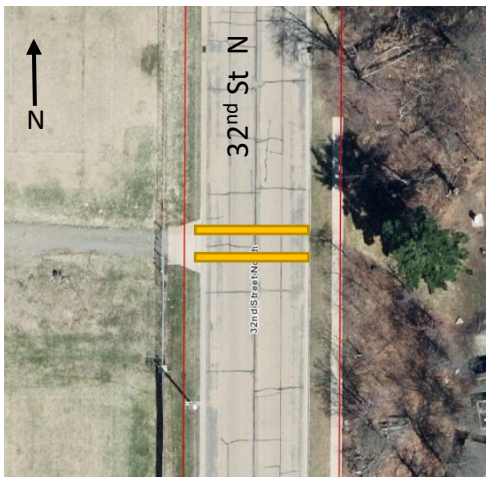


Figure 1 Proposed Pedestrian Crossing

Accidents

There have been four recorded traffic accidents on 32nd Street North in the vicinity of the proposed crosswalk since 2011. None of the accidents involved pedestrians.

Parking Restrictions

There are no parking restrictions for either side of 32nd Street North. The curb adjacent to the driveway on the west side of 32nd Street North is marked with yellow painted extending 5 feet either side. The area may experience significant on-street parking during soccer events.

Study

Method

The traffic data for this study was collected using both an automatic traffic counting device and in-person observation. A traffic counting device was installed at the intersection and collected data over a period of two weeks. Additional in-person observations were conducted to identify line-of-sight obstructions.

Observation

The area around the proposed crosswalk was examined for line-of-sight obstructions. Pedestrian and motorist visibility is especially important at mid-block crosswalks because motorists may not be expecting to stop. A chain-link fence along the west side of 32nd Street North creates a minor vision obstruction. Parked cars near the intersection could create major vision obstructions especially for children.

Figure 2 Proposed Crosswalk North

Figure 3 Proposed Crosswalk South

Figure 4 Proposed Crosswalk East

Figure 5 Proposed Crosswalk West

Results

An automatic traffic monitoring device collected data on both vehicle volumes and vehicle speeds. The device was set up on a utility pole near the proposed crosswalk location. Traffic counts are reported as the number of vehicles per hour averaged over the eight-hour interval with the highest traffic volume for the day. Vehicle speeds are reported as the 85th percentile speed which is the speed the fastest 15% of vehicles exceeded. On this section of roadway 15% of vehicles exceed speeds of 44 mph, or 9 mph over the posted 35 mph speed limit.

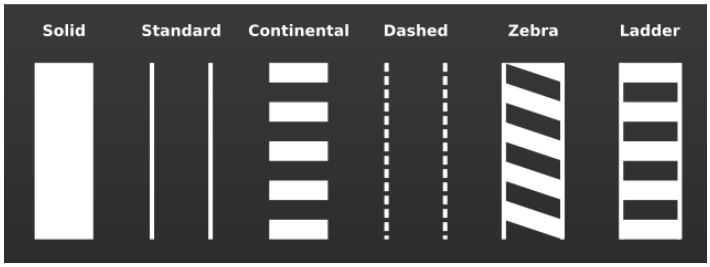
Table 1 Traffic Data (Collected Nov. 2015)

Traffic Count (Vehicles Per Day)	2,102
85th Percentile Speed (mph)	44

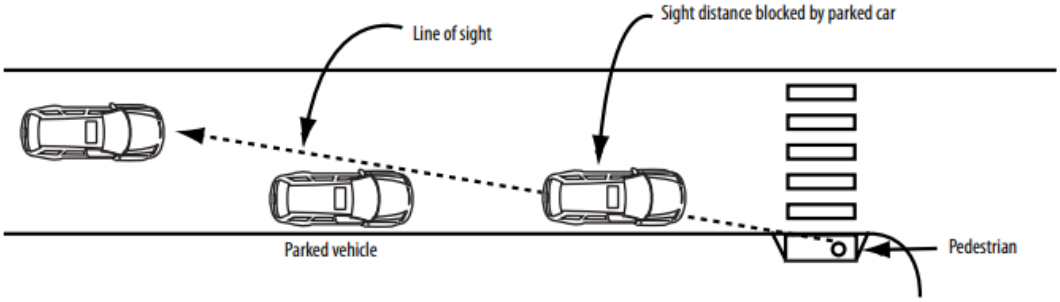
Recommendation

Unlike crosswalks at controlled intersections, motorists don not always stop at mid-block crosswalks; this makes accidents more likely. Since motorists may not be expecting to stop at these crosswalks the following safety measures should be installed to improve visibility:

- **High visibility crosswalk stripping.** Crosswalks should be marked using the continental or ladder pattern. They provide greater visibility than the standard pattern.



- **No parking zone**. Parking should be restricted around the crosswalk to improve lines of site from vehicles to pedestrians. Based on the 35 mph speed limit of 32nd Street North, no parking should be allowed on either side of the street within 100 feet of the crosswalk.



- **School Crossing Warning Sign.** The crosswalk should be marked with school crossing sign due to its proximity to Washington Elementary. Signs should be double sided LED signs with pedestrian push buttons.
- **In Street Pedestrian Crossing Sign.**

Additionally, the crosswalk should be added to the list of mid-block crosswalks in municipal code chapter 340 and the parking restrictions to municipal code chapter 27.

WISCONSIN RAPIDS

PUBLIC WORKS DEPARTMENT
1411 CHASE STREET
WISCONSIN RAPIDS, WI 54495
(715) 421-8218 FAX (715) 421-8281

Requestors Name:

Paul Vollert, Public Works Superintendent

Referral Language:

Review and approve request from the Town of Grand Rapids to participate in the repaving of Chestnut Street from 23rd St South to 32nd St South.

Background Information:

I was contacted by the Town of Grand Rapids sometime this spring about participating in a pavement replacement project on Chestnut Street from 23rd Street to 32nd Street. At that time I told them we did not have, anything budgeted so depending on the cost we would need to find funding and go to Committee to get approval. I was told they would get back to me on costs.

I was then contacted Wednesday June 28 again and said that they had approval to do the project, would we like to participate.

The estimated cost of the project is a follows:

Wood County Highway pulverize, shape and repave	$65,000.00
City of Rapids provide Road Base +/- 6" over 22' of roadway	$21,807.50
City of Rapids provide Crushed blacktop shoulder	$5,250.00
Total	**$92057.50**

In using 2022 project costs if we were to do our portion of the roadway on our own, the project would cost us $65,000. Bases on the request from the town, the city would fulfill our portion by suppling and delivering the gravel and crushed blacktop shoulders, estimated price of $27,057.50.

Options:
Tell the Town we don't have it budgeted supply them the material and they just do the portion that is in the Town of Grand Rapids, due the city portion some time in future years.

Participate as requested

Sell them the material have them provide their own trucking, not participate in project.

Cut back on some other maintenance activity to fund this project instead of using an alternate funding source.

Participate in the project using degradation fee.

Recommendation:

Participate with the Town of Grand Rapids in the pavement replacement project on Chestnut Street from 23rd Street South to 32nd Street South by providing approximately 6" of road base material over the width of the roadway, and crushed blacktop for shoulder material at an estimated cost of $27,057.50. Project to be funded by pavement degradation fees from the 2020 – 2021 season.

If financing is needed, how will it be financed?

In speaking with the Mayor and Finance Director this project would be funded using pavement degradation fees from 2020-2021.

WISCONSIN RAPIDS

Public Works Committee

Date of Request: 7/8/2022

Requestor: Joe Eichsteadt

Request/Referral:

Review the artwork proposal for the W Jackson St roundabout.

Background information:

See attached memo.

Options available:

Action you are requesting the committee take:

Item is for review and comment

How will the item be financed?

N/A

Community Development Department
City of Wisconsin Rapids
444 West Grand Avenue
Wisconsin Rapids, WI 54495
Ph: (715) 421-8228

MEMO

To: Public Works Committee
From: Carrie Edmondson, Associate Planner
Copy: Kyle Kearns, Director of Community Development
Date: June 30, 2022
RE: **Proposed public art project for Jackson Street roundabout**

This memo provides an update regarding artwork for the Jackson Street Roundabout.

Artist Selection

The Heart of Wisconsin Chamber Leadership Team drafted an RFP calling for public art proposals in cooperation with the City for the new Jackson Street roundabout. The City provided a joint support letter from the Community Development Department and Engineering Department to accompany the proposal. The group received three proposals and selected Jamie Weinfurter who is proposing a project entitled Growth Chart.

Proposed Project

In the words of the artist, the project is a permanent sculpture that reuses telephone poles as markers in a larger than life growth chart. A growth chart catalogs a child's growth during adolescence usually marked on the doorframes of houses, as indicators for a healthy and long lasting family home life. The installation of poles will highlight the growth of the area within the center of the new roundabout.

The abstract, free standing sculpture will use 25 repurposed and locally found telephone poles cut at different heights to create a pathway mirroring the roundabout and adjacent paper mill smokestacks. As the area is known as "The Gateway to the Pineries," the poles made from pine trees will reference this history and highlight the path made by the composition of the poles leading through the roundabout. The pole height and sizes will range from 4 feet to 16 feet depending on the ability to meet DOT safety standards. The project will include solar powered deck lights that will be affixed to each pole to create a visual affect. Furthermore, the grade will consist of medium river rock spread between the poles.

Community Development Department
City of Wisconsin Rapids
444 West Grand Avenue
Wisconsin Rapids, WI 54495
Ph: (715) 421-8228

Project Cost

The artist has already obtained grant funding and in-kind donations. The approximate project cost at this time is estimated at $5,500. This total includes the most recent artist cost estimate, landscape materials for the base, and allows for other unanticipated expenses. Funding for the project could come

from one or multiple sources, and staff are internally reviewing the ability for it to be funded solely by the City.

Materials	Individual Amount	Total Amount	Cost	Total	
Used Telephone Poles	$90 each (7" to 1' D x 20' H)	15 poles (Jason Warren - WW&LC)	Donated - $0		
Solar Deck Lights	$40 for 12 lights	10 light packs (120 lights - 8 each pole)	$400.00	($100 for replacement lights)	
Hardware	4 stainless steel screws to rig each light	10 packs	$200.00		
	Chainsaw and blades	1 saw & 1 pack of blades	$300.00		
Installation Equipment	Auger bit rental for digging	Rental for 3 days (Tweet & Garot)	Donated - $0		
	Crane	Rental for 3 days (Tweet & Garot)	Donated - $0		
Landscape Fabric	4ft x 200ft Polypropylene fabric roll and 4ft x 100ft roll	1 roll of each	$100.00		
Landscape Fabric Staples	75-pack of staples	1 pack	$15.00		
Landscape Rocks	Medium River Rock - (1 Bag/10 cu. ft./Pallet) at $500 each	1 pallet	$500.00		
	Roughly 0.51 cubic yards - 0.7 tons of river rock				
Landscape Edging	7in x 9in x 96in Creosote Treated Railroad Ties at $25 each	12 ties	$300.00		
Installation Assistance/Labor	Landscaping services		$585.00		
Artist Fee			$3,000.00		
				$5,500.00	

Timeline

The project is proposed to be installed in July and August of 2022.

WISCONSIN RAPIDS

Public Works Committee

Date of Request: 7/7/2022

Requestor: Joe Eichsteadt, City Engineer

Request/Referral: Review the proposals for the rail feasibility study to address noise and vehicle delays.

Background information: The Committee and Council approved the draft Request for Proposal (RFP) documents in April of 2022.

The RFP document was sent to the following companies:

- Mead & Hunt – no response
- Strand- declined due to lack of resume with rail
- MSA – plan to submit next week prior to the meeting
- AECOM – declined due to limited time and broad scope of work
- EMCS - declined
- CBSsquared – no response
- LinqThingz – submitted a proposal that is attached
- HNTB – no response
- Terratec Eng – no response
- Benesch – no response
- Patrick Co. – submitted a proposal that is attached

Options available:

Review and consider the proposals

Action you are requesting the committee take: Consider approving a proposal and moving forward with negotiating a contract to begin work.

How will the item be financed? This is an eligible project for the Downtown TIF.

Feasibility Study: Alternatives addressing vehicle delays and rail usage in the City of Wisconsin Rapids, WI

LinqThingz
11414 W Park Pl.,
Milwaukee, WI 53224

TAPCO
5100 W Brown Deer Rd,
Milwaukee, WI 53223

July 6, 2022.

Background

Increasing freight rail traffic has plagued communities for decades with increased congestion, delays, noise and safety consequences. Wisconsin Rapids experience s1500' backups multiple times a day, frequent complains about noise and a plethora of rail congestion related issues. There is a history of searching for solutions including a rail relocation initiative back in 2000. We plan to perform a **Comparative Study for improving sustainability, reducing congestion, reducing noise and improving safety while minimizing costs and implementation hurdles of improvements.** The study will focus on the grade crossings at Gaynor Ave, 17th Ave S, Chase St, W Grand Ave, High St and Fremont St. while also considering impacts on other relevant crossings and/or potential relocation areas. The purpose of the study will be to find the optimal solution for reducing rail congestion and noise within the City of Wisconsin Rapids. This includes:

- evaluate rail movements and operations within the study area
- identify opportunities to decrease congestion and noise due to rail traffic
- analyze potential alternatives and improvements to the existing bridge and rail alignment, and
- determine the physical and financial viability of such potential improvements.

There are other rail congestion studies and post-project lessons learned studies that will be referenced including but not limited to:

- Decatur Area Transportation Efficiency Study, by URS, 2013
- San Antonio Region Freight Study, by HNTB, 2008
- Rail Location Projects in the US: Case Studies and lessons for Texas rail planning, by Texas Transportation Institute, The Texas A&M University System, March 2007
- Highway-Rail Crossing Safety Improvements by Diverting Motorist to Alternate Routes, by Department of Civil Engineering University of Nebraska-Lincoln, 2018
- Information Provided in Previous Studies by the City of Wisconsin Rapids.

The Study will include these five major tasks:

TASK 1: Investigate, review and inventory at-grade railroad crossings, road characteristics, etc.

This will include highway and rail data. We will use WISDOT (AADT) values to assess highway traffic. We will take pictures and use GIS data to assess crossing physical characteristics. We will install temporary sensors on municipal property along CN line to measure rail traffic. These sensors will collect all blocked crossings data at 0.1 second intervals along with measurement of speed, direction and length of train traffic. This will be performed using LinqThingz's TrainLinq product at W Grand Ave and Gaynor Ave. The data will include calculated count of blocked vehicles, time of blocked vehicles, approximate noise level elevation, rail through versus rail switching delays, estimated fuel usage, estimated carbon pollution, estimated excess fuel usage, estimated citizen productivity costs, estimated logistics impacts, and estimated emergency response impacts at all crossings along that stretch of CN line. We will combine existing City of Wisconsin Rapids data with newly collected data.

TASK 2: Define concerns and issues.

Issues: We will use data collected from task 1 along with reports, calculators and guidelines regarding rail congestion and noise published by FRA, FHWA, WISDOT, CN and other standard sources to identify, list and prioritize issues regarding the at grade crossings and rail traffic in the City of Wisconsin Rapids.
Concerns: We will collect information regarding concerns from city leaders, stakeholders, businesses and citizens. This will include existing community reports and new community surveys. We will propose three types of surveys 1) Survey for city leaders 2) Survey for companies in the community 3) Survey for citizens. We propose the creation of a community online survey that could be promoted through e-mail, social media, public notice and city news letters. The survey will include questions approved by the city. The proposed survey will require identity validation. The survey is based on surveys in other cities with rail congestion problems like Decatur, IL (https://www.decaturil.gov/wp-content/uploads/2017/07/DATES-Final-Report_Dec-2013.pdf). To summarize, concerns and issues will be collected from several sources including but not limited to:

- Standard Government Publications
- Demographics of Existing and potentially rerouted areas
- Canadian National Railroad feedback
- Local Chamber of Commerce / Business Groups
- Social Surveys to various city stakeholders

TASK 3: Identify and compare alternatives to address those concerns.

1. Quiet Zone: Quiet zone solutions can help the noise problem but do little to solve current congestion and safety problem. Quiet zones introduce new safety issues. We will analyze and report the benefits, installation requirements and expected results of implementing quite zones. The quiet zone analysis will use available FRA calculators with most recent traffic information.

2. Grade Separation: Grade separation, if fully implemented, can reduce noise problem, congestion and safety problems and can make incremental improvements for partial implementation. We will analyze the requirements and expected outcomes for partial and full grade separations.

3. Rail Relocation: Rail relocation can reduce noise and congestion for one part of the city while increasing it for other parts of the city. It also requires agreement between many stakeholders including the rail company, the state and federal agencies to be part of the project. We will analyze requirements and expected outcomes.

4. Technological Options: GPS phone applications with routing option, etc. New technology solutions that collect information about locations of trains, identify future rail blockages and provide real-time routing

guidance through mobile applications, mapping services, computer-aided dispatch, street-mounted variable message signage, and emerging connected vehicles services can provide safety improvements, reduction in congestion and with new legislative changes could result in alternative Quiet Zone solutions in order to also reduce noise. In addition, this solution creates a dynamic, two way communication with drivers that can be used to measure and improve behaviors. We will analyze the requirements and expected results.

5. Alternate Routing: with physical improvements to aid in diverting traffic around trains.
Alternate routing through road closing, one-way road creation and moving/changing road location can improve congestion, safety and noise. These kinds of changes can benefit some members of the community why causing additional problems for other members. Alternate routing, like moving rails, requires agreement between multiple stake holders. We will analyze requirements and expected outcomes.

TASK 4: Identify costs, grant funding

The alternatives analyzed in TASK 3 can have vastly different costs and sources for funding. Quiet zone, Grade Separations, and Rail Relocation solutions impact initial and ongoing costs to both the city, state, federal government and the rail road and are typically funded through a variety of grants, local funds and rail road budgets. Alternate routing, depending on jurisdiction, impact initial and ongoing costs to both the city, state and federal government but have small requirement or impact on rail companies. Alternate routing solutions are typically funded through a variety of federal, state grants and local municipal budgets. Technology solutions have cost impacts directly to the municipality and require little responsibility from state, federal, and railroad sources. These technology solutions, however, can be funded by a variety of local, state, federal grants. The study will include grant opportunities including but not limited to:

- CMAQ - Congestion Mitigation and Air Quality Improvement Program
- ARPA America Rescue Plan Act
- Bipartisan Infrastructure Investment
- Section 130 Federal Highway Administration's (FHWA) Highway Safety Improvement Program (HSIP)
- CRISI
- Carbon Reduction-related grants
- Grants related to under served communities
- Wisconsin General Transportation Fund grants
- Alternative/Sustainable funding sources

These grants include traditional transportation grants as per alternative 1,2,3 and 5. The technology solutions also have the opportunity to be funded by communication grants (for the communication infrastructure), and inclusiveness grants (for variable message signage for community members without mobile devices). In addition, this information has the ability to be sold to citizens, logistics companies, emergency services, mapping companies, etc. and secure commercial sponsorship. Thus, the technology solution can be sustainable with only minor long-term costs to the community, state, federal and rail stakeholders. We will analyze costs and sources of support and funding for the various solution alternatives.

TASK 5: Implementation of alternatives.

The efforts and hurdles surrounding implementation of alternatives, like the costs, varies greatly. On one end of the spectrum is rerouting rails. Rerouting rails represents significant communication, negotiation and buy-in from multiple sources including the rail road; the state and federal government agencies; potential neighboring communities; and the local acceptance from community members that may/may not benefit from the movement of the rails. On the other end of the spectrum is the ease of implementing technology solutions. Technology solutions really only require the approval of the municipality. Potentially, these solution could even be

architected on private property requiring almost no cost or approvals. The time required to implement the solutions varies widely as well. Rail rerouting could take years to plan and implement. Off the shelf technology solutions could be implemented on the order of weeks for immediate benefit. We will analyze and compare the implementation requirements for the solution alternatives in TASK 3.

TASK 6: Recommendation

We will prepare a final report that summarizes the results from TASK 1, TASK 2, TASK 3, TASK 4, and TASK 5 along with a recommendation based on a cost benefit comparison matrix. Benefit metrics will be used that can be compared among all solution alternatives. Cost metrics (including price) will be used that can be compared among all solution alternatives. The cost benefit matrix will be totaled for each alternative and the totals will be compared to provide a recommended solution priority. Two drafts of the report will be provided for changes/feedback and a final report and executive summary will be provided in printed and electronic form.

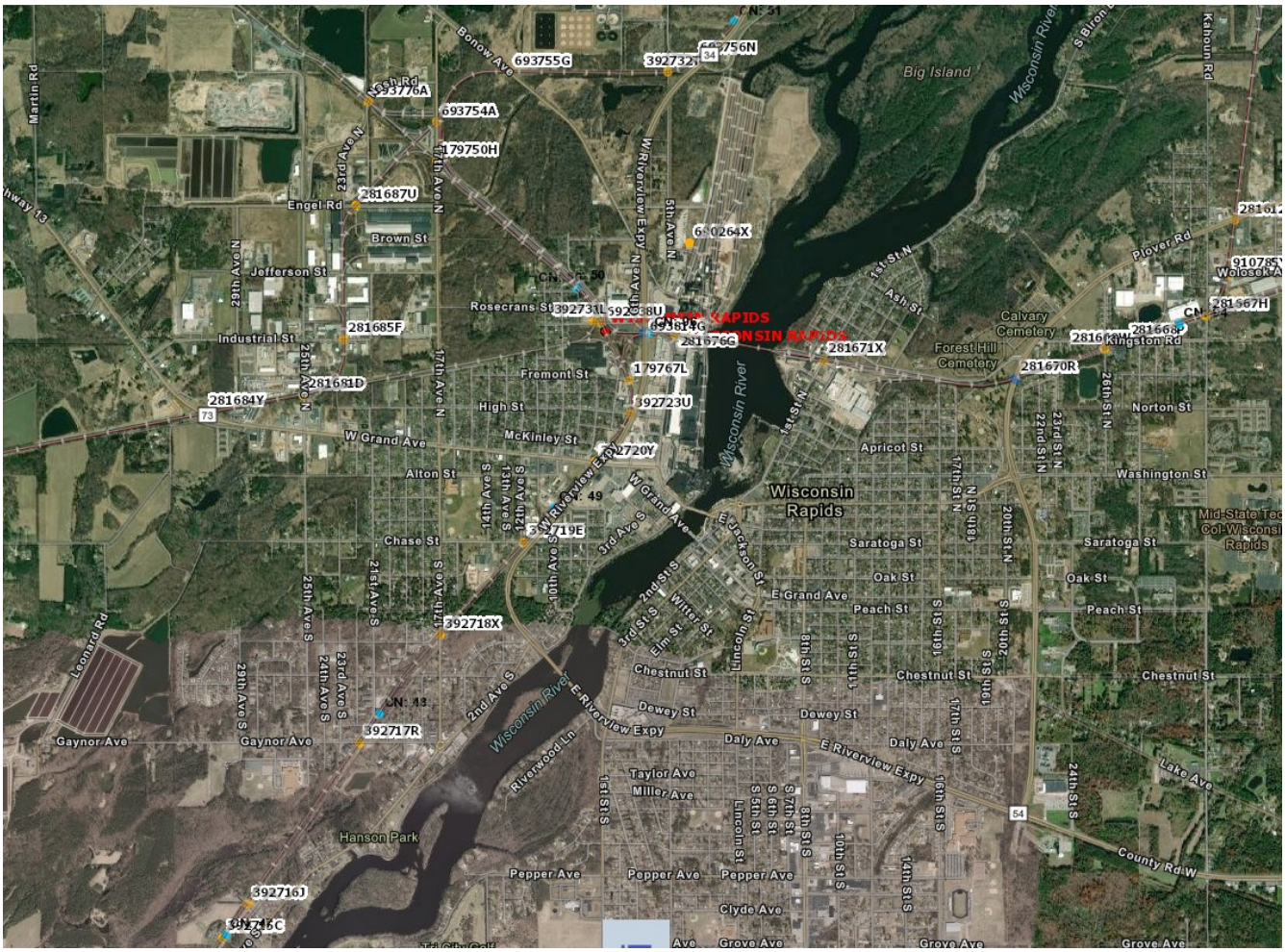


Figure 1: Map of Rail Crossings in Wisconsin Rapids

Statement of Qualifications

LinqThingz and TAPCO both have extensive experience in deploying rail, traffic and technology solutions and also work with and draw from Engineering, Design and Architectural company partners.

LinqThingz: LinqThingz is a technology company focused on Predictive Mobility solutions. Our goal is to create safer, less congested, more sustainable solutions for traffic, including grade-level crossings. The cross-buck was patented in 1867 when roads were dirt and traffic was horses. Over 70% of accidents that occur at grade-level crossings happen when gates are down. It is time for a new solution that fits the way the modern world works. Our team has solved problems including one of the top 5 problems facing the support of the F35 fighter for Lockheed Martin and new ways to manufacture brake systems for Tier 1 automotive manufactures.

TAPCO: (Traffic and Parking Control Co., Inc.) is headquartered in Brown Deer, Wisconsin and is dedicated to manufacturing, distributing and servicing the latest innovations in roadway safety. Family owned for three generations, TAPCO is now celebrating its 65th year of providing safe travels. The company was even named a 2021 Top Workplace by the Milwaukee Journal Sentinel. Our industry experts and technical engineering team have the ability to customize any solution and quickly resolve complex problems.

Reference #1:
Company Name: TAPCO – WisDOT Southwest Region
Contact Name: Kyle Hemp, P.E.
Address: 2102 Wright Street, Madison, WI 53704
e-mail: Kyle.Hemp@DOT.WI.GOV
Contract Period: 2016-2019
Contract Cost: $4,800
Description: Installed Railroad Monitoring System at Memorial Dr @ Hwy US 51. Janesville to alert Traffic Management Center (TMC) when trains block the crossings to avoid sending detour through the crossings

Reference #2:
LinqThingz, Inc. - City of Janesville
Contact Name: Gordy La Chance
Address: 18 N Jackson St. Janesville, WI 53548
e-mail: lachanceg@ci.janesville.wi.us
Contract Period: 2019-2022
Contract Cost: $18,000
Description: Predictive Mobility system installed to monitor 6 rail lines into/out of city and 4 switching lines to provide advanced warning of blocked crossings to the municipality, companies and citizens.

Reference #3:
Company Name: LinqThingz – City of Fond du Lac
Contact Name: Kathryn Duveneck
Address: 160 S Macy St. Fond du Lac, WI 54935
e-mail: kduveneck@fld.wi.gov
Contract Period: 2018-2022
Contract Cost: $6500
Description: Predictive Mobility system installed at one crossing to monitor closed crossing for bridge repair over river and as initial test of Predictive Mobility sensors.

Cost of Services

Below is a summary of time and material costs for each TASK

TASK	TIME/MATERIALS	COST
TASK 1 INVESTIGATE	40 hours, Sensor Deployment	$7000
TASK 2 DEFINE	40 hours	$4000
TASK 3 ALTERNATIVES	20 hours	$2000
TASK 4 FUNDING	10 hours	$1000
TASK 5 IMPLEMENTATION	20 hours	$3000
TASK 6 RECOMMENDATION	20 hours	$2000
TOTAL		**$19,000**

Schedule

Item 1
Kick-off and coordination with City Stakeholders
Item 2/Task 1
1 week set up sensors,4 weeks collect data,1 week remove sensor total results
Item 3/Task 2
1 week set up/approve surveys,4 week collect surveys/identify issues , 1 week total results
Item 4/Task 3
1 WEEK collect information on alternatives and summarize results/City Update.
Item 5/Task 4
1 WEEK collect information on funding and summarize results/City Update.
Item 6/Task 5
1 WEEK collect information on implementation and summarize results.
Item 7/Task 6
1 WEEK create recommendations.
Item 8
City Update/Deliver Results

TOTAL PROJECT TIMELINE 12 weeks.

Price $19,000 USD

Contact:

Kurt Brandt, Ph.D., CEO
LinqThingz, Inc.
11414 W Park Pl
Milwaukee, WI 53224
kbrandt@linqthingz.com
office: 650-600-9677
mobile: 414-550-9549

July 6, 2022

Joe Eichsteadt, PE
City Engineer
City of Wisconsin Rapids
444 W Grand Ave
Wisconsin Rapids, WI 54495

Subject: Proposal to Provide Professional Engineering Services
Feasibility Study for Alternatives Addressing Vehicle Delays and Rail Usage
City of Wisconsin Rapids, WI

Mr. Eichsteadt,

Thank you for contacting Patrick Engineering (Patrick) regarding the feasibility study to improve congestion due to train traffic in Wisconsin Rapids. It is our understanding that the City of Wisconsin Rapids ("City") is interested in recommendations to prevent excessive delays for cars and noise from train horns through the State Highway 34 corridor. The operating railroad through the corridor is Canadian National Railroad (CN).

Patrick has successfully designed and constructed numerous projects with municipalities and CN. A key element to this success is accuracy and feasibility of the recommendations and cost estimates provided to the City for their review. It is important to know the requirements and preferences of the railroad to prevent any delays on potential alternatives the City will want to pursue. Additionally, this process helps to reduce surprises or conflicts before moving forward with additional design and committing substantial resources to the project. This letter proposal serves to outline Patrick's proposed scope of services, fee, and experience to provide a feasibility study.

EXPERIENCE

Patrick has been hired by municipalities to analyze the existing conditions or crossings, provide recommendations of improvements, and compile all the necessary forms to apply for a Quiet Zone through their towns. Patrick has also assisted the towns in their recertification applications for their existing quiet zones. A Quiet Zone Patrick recently recertified is the Vernon Hills Quiet Zone in Northern Illinois. This Quiet Zone Recertification included a group of three (3) quiet zones through over 10 towns with a total of 37 crossings.

Vernon Hills Reference:
David Brown
Village of Vernon Hills
Public Works Director / Village Engineer
847-918-3544
DaveB@vhills.org

Patrick was hired by the Lake County DOT to design a grade separation at Washington St in Lake County, Illinois. The roadway was lowered to go underneath the CN and Metra tracks. The project was split up into two phases with Patrick was involved in both. Phase I included extensive stakeholder involvement

program, including Community Advisory Group Meetings, to achieve consensus on the scope of reconstructing and adding lanes along the 1.5-mile corridor as well as a grade separation at the CN Railroad. Environment issues, utility investigations, and railroad and ICC coordination were all critical advancing the project forward. Phase II consisted of the design of a rail bridge structure, a new pump station, and a retaining wall along a bike path to lower the road below the tracks. During construction, a railroad shoofly and temporary road crossing were put in place to keep both vehicle and train traffic open during the construction process.

CN Reference:
Scott Anderson
Canadian National Railroad
Manager, Business Development
312-292-1063
Scott.anderson@cn.ca

Patrick has also worked on road construction projects in Wisconsin. Patrick currently is under contract with Wisconsin Department of Transportation (WisDOT) as the Project Lead on multiple projects including the Moorland Road Construction work between I-94 and Bluemound Road in Waukesha County currently under construction.

WisDOT Reference:
Brian Boothby
WisDOT
Southeast Project Manager
414-416-9536
Brian.boothby@dot.wi.gov

SCOPE OF SERVICES

Patrick's general scope of services under this proposal is the preparation of a report outlining multiple alternatives and our recommendations to alleviate traffic delays due to the train traffic through the City. The alternatives that will be evaluated include but are not limited to a Quiet Zone, Grade Separation, Rail Relocation, an App used to help navigate traffic around occupied crossings, and relocation and adjustment of the roadway. The intent of this is to provide the City with more than enough information for the City to make an informed decision on which alternative would be most suitable. Patrick's proposed scope of work will be:

Investigate, Review and Inventory At-Grade railroad Crossings, and Road Characteristics

1. A site visit will be performed to investigate the existing conditions of the crossings and rail traffic. A meeting will be scheduled at the same time as the site visit and can be held in the field or at City Hall. The meeting will be used to discuss local concerns and potential constraints. All additional meetings after the initial site visit will be virtual.
2. Patrick will compile additional information about the crossings for public access such as Crossing Inventory Reports, WisDOT traffic counts, and information provided directly from the City.

Define Concerns and Issues

1. Known concerns and issues include noise from train horns and traffic delays due to slow train traffic through the City.
2. Based on the site visit and meeting with the City, Patrick will compile a list and explanation of the Concerns and issues facing the City. The different Issues will be prioritized based on impacts to safety and delays.

Identify and Compare Alternative Methods to Address Concerns

1. Patrick will provide alternative methods to mitigate concerns and issues identified during the site visit and meetings.
2. High level concept exhibits will be included when applicable for the different alternatives. If a grade separation of a crossing is considered, a 3D exhibit using ConceptStation will be used. ConceptStation is software provided by Bentley Corporation that allows for quick and accurate renderings for both road and rail projects which will provide a true representation of the impacts of a project.

Identify Costs, Grant Funding

1. Patrick will provide a high-level cost estimate for each alternative to be used as an order of magnitude cost comparison for the City.
2. Patrick will also identify improvements that will qualify for Grant Funding such as the Federal IIJA programs for passenger and freight rail including Consolidated Rail Infrastructure and Safety Improvements (CRISI) and the Railroad Crossing Elimination Grant Program. In addition, we will look at WisDOT's programs including the Freight Railroad Infrastructure Improvement Program (FRIIP) and the Transportation Economic Assistance Program (TEA).

Implementation of Alternatives

1. Patrick will provide the City with a description of the implementation process of the alternatives discussed. The description will include an estimated schedule and cost of the process.
2. As an additional scope item and cost, Patrick will be able to assist the City in the implementation of any alternatives the City decides to pursue. The additional scope and cost will be dependent on the alternatives selected by the City.

Recommendation

1. Patrick will provide the City with a final report summarizing all the alternatives studied and provide a way to compare them.
2. Patrick will provide a recommendation of which alternative(s) that the City should implement.

<u>Anticipated Deliverables</u>:

1. Final report detailing the methods studied and our final recommendation.
2. An Executive Summary will be included with the report summarizing our recommendation.

Key assumptions and exclusions:

1. All methods recommended and reviewed are at a high-level review and will need additional study/engineering before being implemented.
2. No additional traffic study will be done during this process. All recommendations will be based on information provided by the City and that which is easily publicly available.
3. Cost estimates will be an order of magnitude estimate to give the City an idea of the cost to implement each idea.
4. Potential property, environmental, geotechnical, or permitting issues may be identified during the feasibility study process, and the design may evolve to mitigate these potential issues during the concept design process. However, investigations into property or permitting considerations (environmental, construction, or operational) are not included in this proposal.
5. Available existing information will be utilized to determine the approximate locations of buried infrastructure. This information may be provided from historical drawings or photos of surface evidence. A field investigation into the presence of utilities will not be included in the feasibility study.

Schedule

1. Initial Meeting and Site Visit with the City within 5 business days from Notice to Proceed (NTP).
2. Issue final Report and Executive Summary to the City 25 business days from Meeting and Site Visit.

FEE

Patrick proposes to perform the work outlined in this proposal based on the Time and Materials (T&M) shown in the chart below.

Base Cost Proposal		
Task	**Estimate of Hours**	**Cost, $**
Task 1 – Investigation	24	$4,000
Task 2 – Define	8	$1,000
Task 3 – Alternatives	52	$7,000
Task 4 – Funding	28	$4,000
Task 5 – Implementation	8	$1,000
Task 6 – Recommendation	15	$3,000
Total Base Cost	**135**	**$20,000**

AGREEMENT AND AUTHORIZATION

This proposal letter may only be modified in writing and is valid only when a purchase / work order is accepted and returned to Patrick Engineering Inc. within 30 days of the date of this letter.

We are excited for the opportunity to assist you with this important project. If you have any questions, please feel free to contact either of us at your earliest convenience. We are ready to begin work upon your approval and look forward to beginning our business relationship. If you would like to discuss this proposal, please do not hesitate to contact us at 630-795-7200.

Sincerely,
PATRICK ENGINEERING INC.

Earl Wacker
Director Rail & Transit

Tim O'Connor, P.E.
Project Manager

DS/ds

WISCONSIN RAPIDS

Public Works Committee

Date of Request: 7/6/2022

Requestor: Joe Eichsteadt on behalf of Sheri Evanson

Request/Referral:

Review and consider modifying parking ordinance to allow parking on Baker Street between 5th Street and 7th Street.

Background information:

Baker Street is a 44-foot wide standard arterial with two travel lanes and two bike lanes. Parking is not allowed on either side of Baker Street from Market Street to 17th Street North.

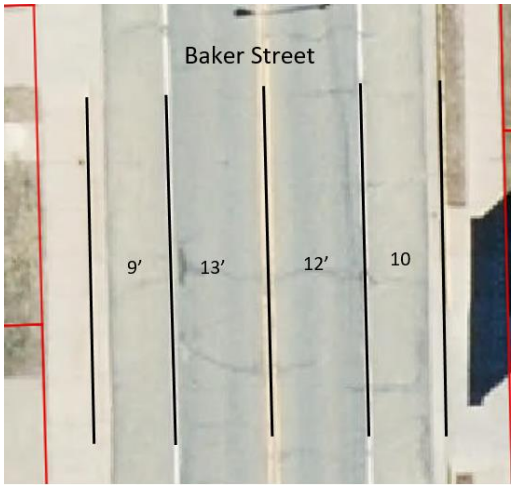


Figure 1 Existing Condition

Options available:

- Keep parking restrictions in place.
- Allow parking on both sides of Baker Street from 5th Street to 7th Street (Figure 2). All lanes will be reduced minimum widths accommodate two parking lanes. This option will use the existing road markings.
- Allow parking on the south side of Baker from 5th Street to 7th Street (Figure 3). One standard sized parking lane with two bike lanes. Option will require repainting the road. The road markings are less than 3 years old.

Figure 1 Two Parking Lane

Action you are requesting the committee take:

If parking is deemed necessary, one parking lane (Figure 3) is the preferred option.

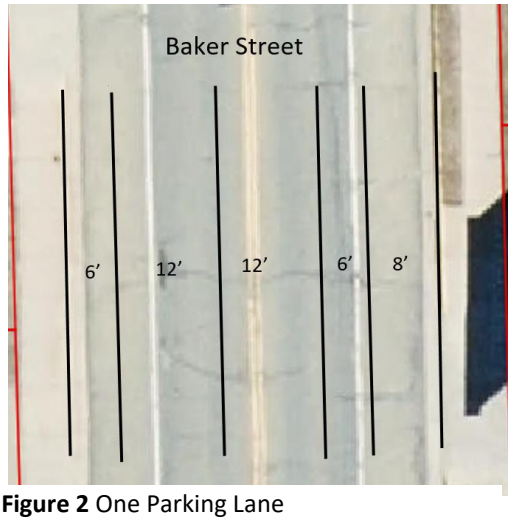


Figure 2 One Parking Lane

How will the item be financed?

PUBLIC WORKS COMMITTEE REFERRAL LIST:

2022

1. Request from Alderperson Tom Rayome to discuss the future of 8th St S. (2016)
2. Request by Alderperson Cattanach to reconsider the City's overnight parking ordinance (2021)
3. ~~Request by Alderperson Austin to consider developing a Responsible Bidder Ordinance~~
4. ~~Request by Alderperson Kellogg to study traffic speed along Chestnut from 8th Street to Hill Street and make recommendations (2020) – study was done when there were no school related activities. Will continue study when school is in session and will report back to committee.~~
5. ~~Request by Alderperson Evanson to review parking ordinance for any inconsistencies between ordinance language and signage throughout the City (2021)~~
6. ~~Request by Alderperson Bemke to perform an intersection analysis and determine sign warrants, if any, for 12th St S and Chestnut St.~~
7. Request by Alderperson Austin to consider a feasibility study for reducing noise and vehicle delays due to railroad tracks along the west side of the City at and between crossing from Gaynor Ave to High St.
8. ~~Request by residents along Smith St and Cherry St to not reinstall sidewalk along these road projects.~~
9. Review and approve the conditions for a street privilege permit for Mead Witter Foundation, Inc.
10. Review the bid results for the West Riverview Expressway Traffic Signal Improvement project and consider awarding the contract to the low, qualified bidder.
11. Request from Zacher to consider removing pavers in west boulevard of 2nd Ave S between roundabout and Lyons St and replacing with colored, stamped concrete.