Marystown Road Corridor

City Council Work Session
May 4, 2021

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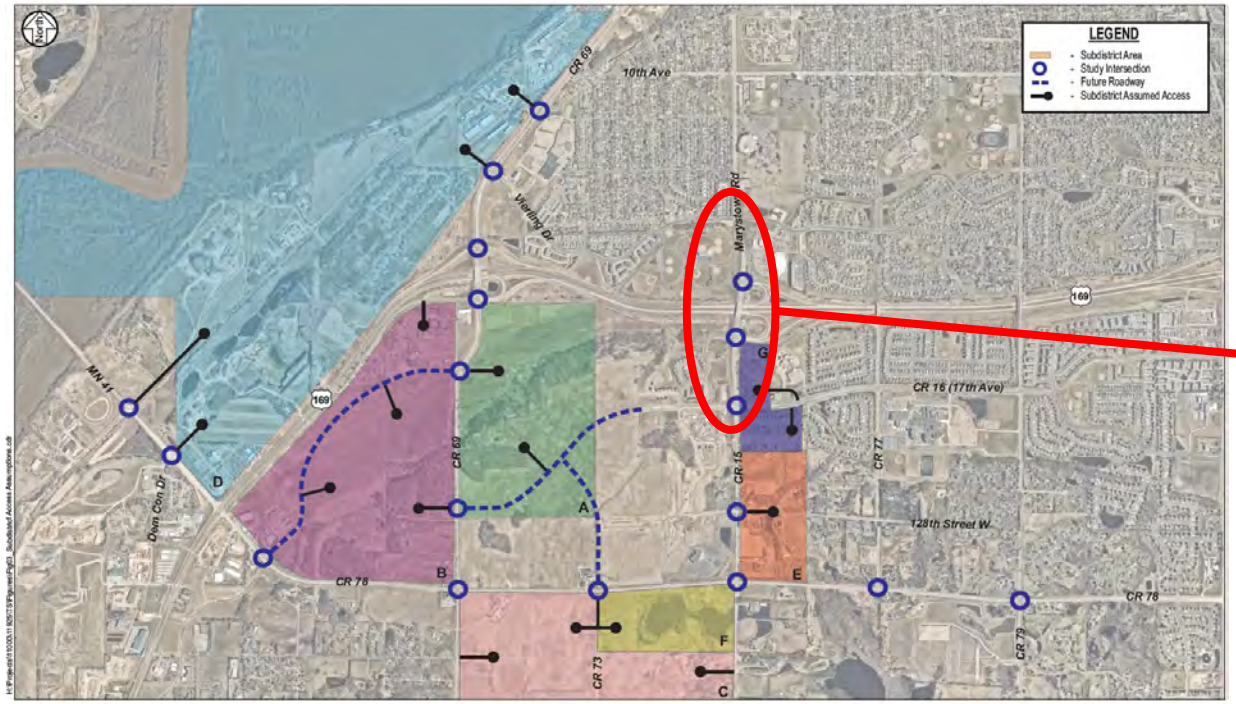
City of Shakopee | 485 Gorman St., Shakopee MN 55379 | 952-233-9300 | www.ShakopeeMN.gov

OUTLINE

- Issues – Review the issues.
- History – Past studies, plans, CIP projects (place holders),funding applications
- Marytown Road Corridor Study
- Consensus?
- Next steps

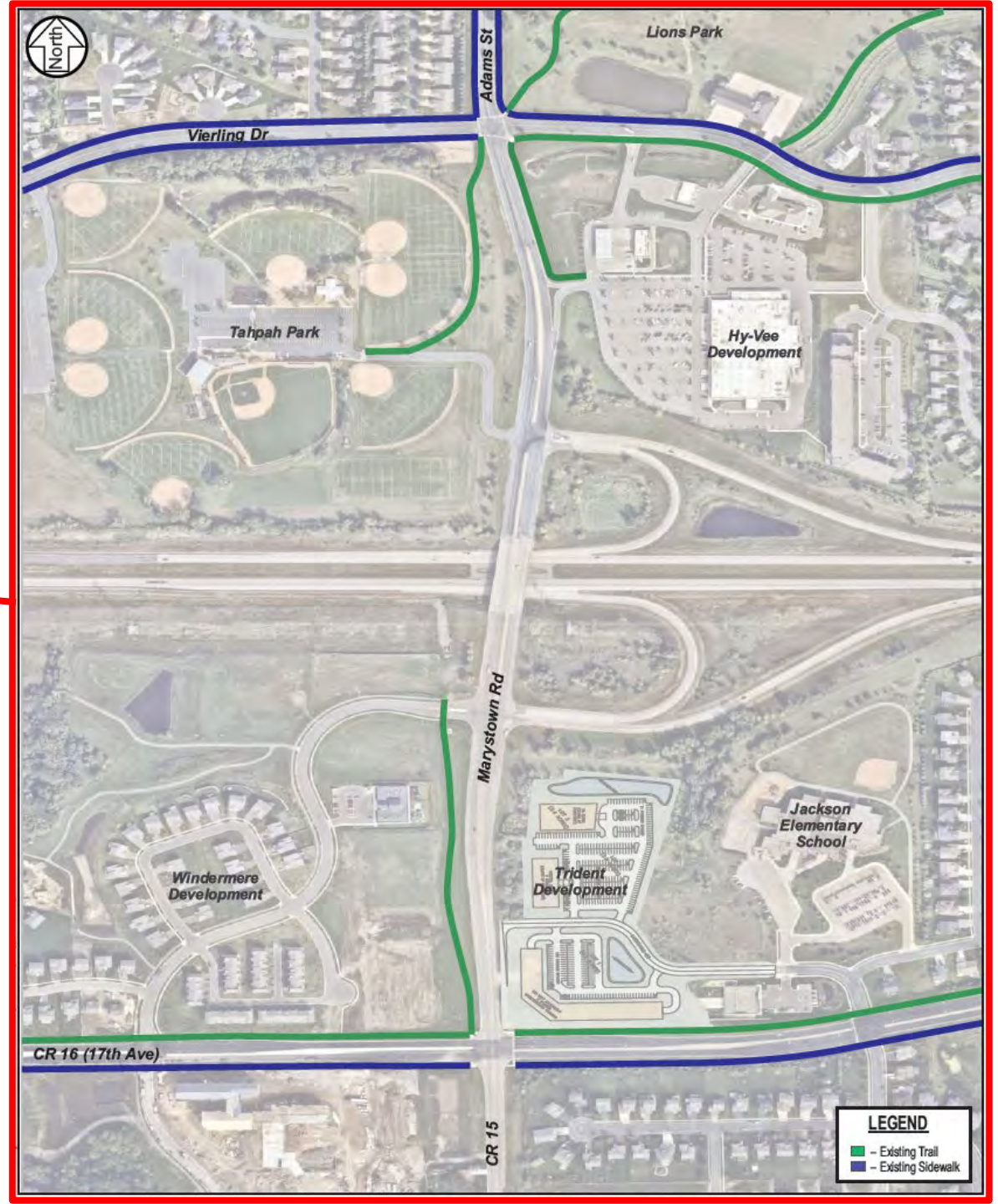
Marystown Road Corridor



SRF Consulting Group, Inc. 0011925 September 2019

Subdistrict Access Assumptions
Shakopee AUAR Transportation Analysis
City of Shakopee

Figure 3



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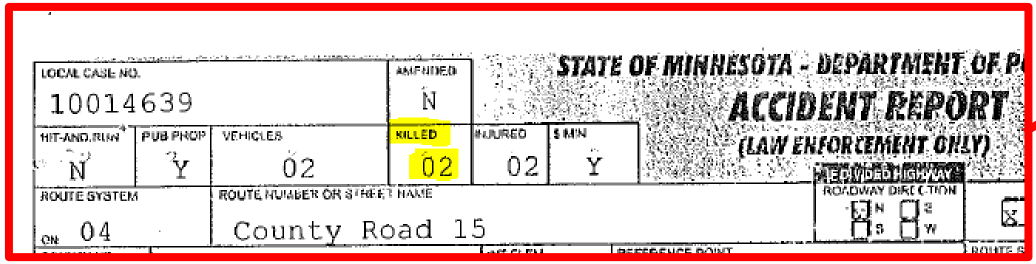
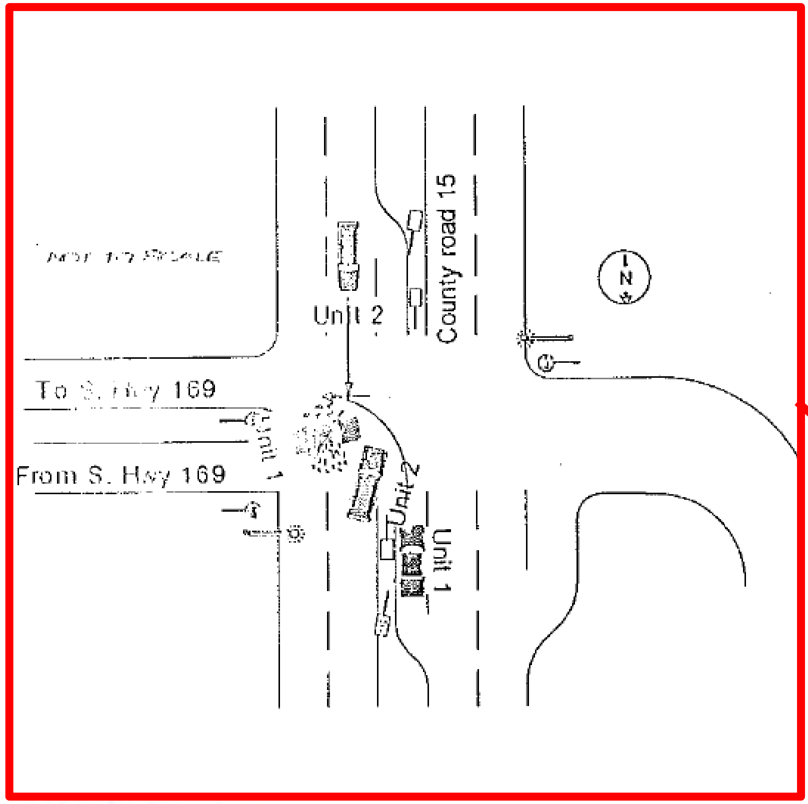
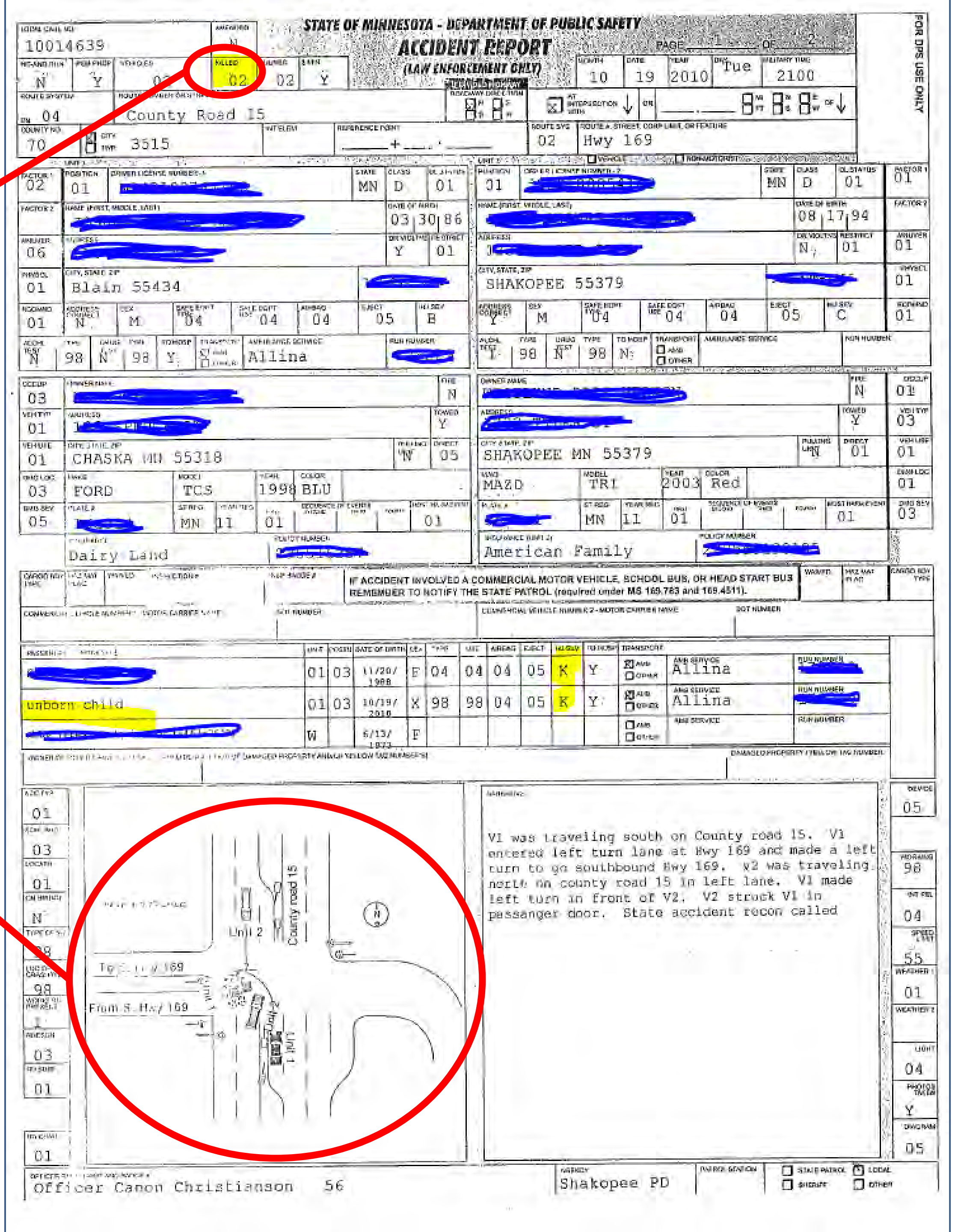
Marystown Road Corridor - ISSUES







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Marystown Road Corridor - ISSUES

Hy-Vee Development:

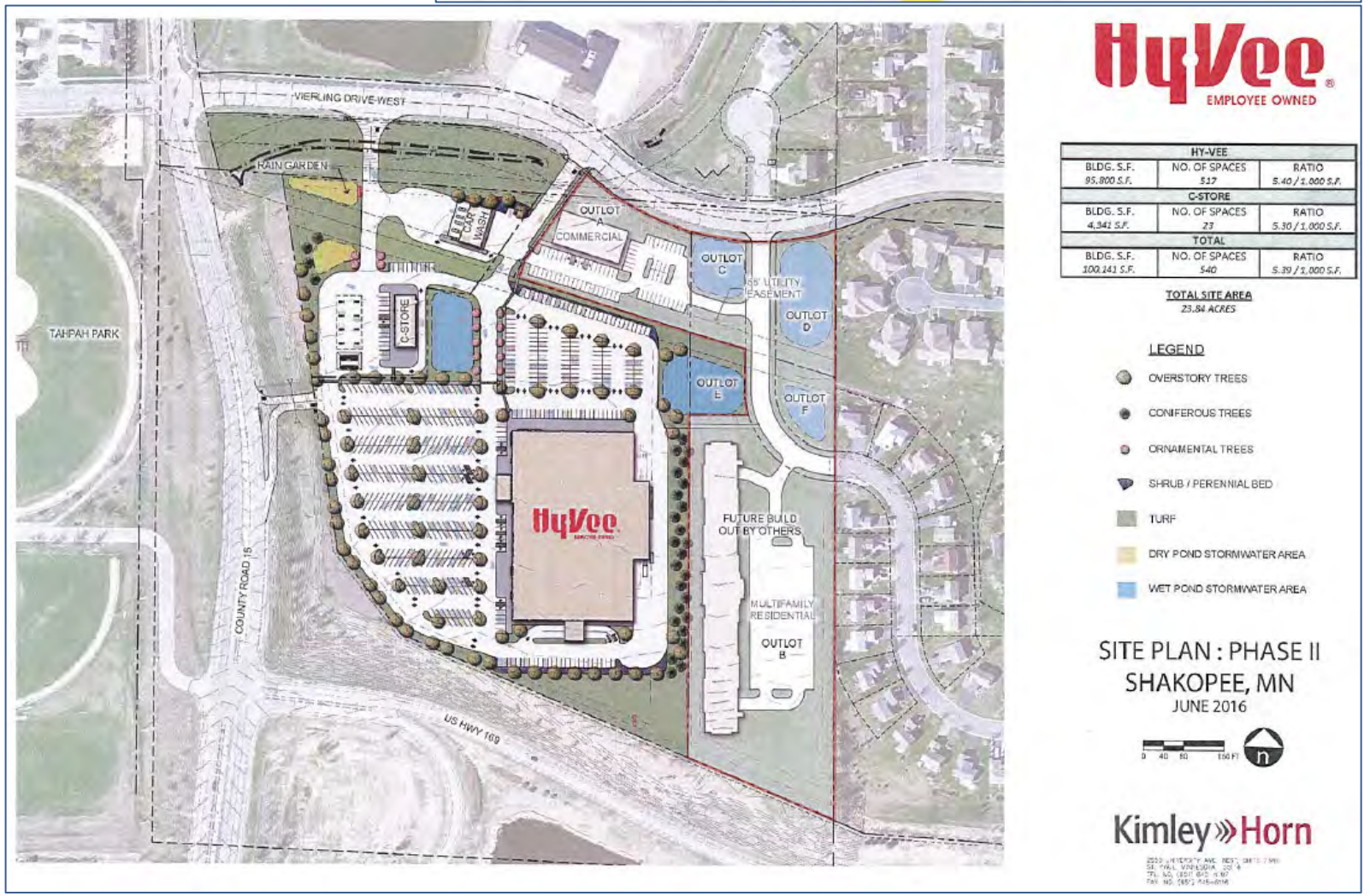
- Traffic Impact Study Recommendations and Conclusions

Current Issues:

- Illegal left turns
- U-turns
- turn around in adjacent neighborhoods

As the proposed West End development progresses, impacts from that traffic will start to cause capacity issues at the study intersections. The traffic impact analysis provided an analysis that reviewed signalization and roundabout control at the study intersections. Based on that analysis, both options will provide an acceptable level of service, with roundabouts providing overall better operations. A more thorough review of West End traffic impacts should be performed to provide more refinement to future improvements in the study area.

The proposed development is recommended to provide a dedicated northbound right-turn lane at the project access driveway on Marystown Road. The right-in/right-out driveway along Marystown Road is anticipated to operate at LOS A at build out.



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Marystown Road Corridor - ISSUES

Multi-jurisdictions:

- MnDOT at interchange with access control
- County all 4 legs of CR 15/16 intersection
- City

- Conflicting and overlapping interests between *mobility* (MnDOT and County) and *access* (City)

→ City goal: Maintain balance (between mobility and access)

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Marystown Road Corridor - ISSUES

County Road 15 – "Turnback"

SHAKOPEE

Consent Business **5. C. 2.**

TO: Mayor and City Council

FROM: Bruce Loney, Public Works Director

DATE: 08/16/2016

SUBJECT: *Approve a Turnback Agreement with Scott County for County Road 15 (D,E)

Action Sought

Authorize the appropriate city officials to execute the Scott County Turnback Agreement associated with County Highway 15 from 760 feet north of CH 16 to 6th Avenue.

Background

On March 22, 2016, the City Council of Shakopee and Scott County commissioners met on various items concerning the west end study and transportation projects. At the meeting, it was decided to turn back CH 15 from CH 16 to 6th Avenue to the city. Also, the county wants to extend CH 16 from CH 15 to CH 69 as shown in the west end study. From that meeting, the county has decided to keep CH 15 760 feet north of CSAH 16 as a county road and turn back the rest of CH 15 to 6th Avenue.

Attached to this memo is the County Turnback Agreement from County Highway No. 15. The agreement contains the conditions of the turnback with the county performing maintenance of CH 15 prior to turnback. Also, a condition on working on the extension of CH 16 through the west end study.

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CP 15-12
Turnback Agreement
County of Scott
City of Shakopee

CITY OF SHAKOPEE
SCOTT COUNTY

TURNBACK AGREEMENT
COUNTY HIGHWAY NO. 15

THIS AGREEMENT, made and entered into this 6th day of September 2016, by and between the City of Shakopee, a body politic and corporate under the laws of the State of Minnesota, hereinafter referred to as the "City" and the County of Scott, a body politic and corporate existing under the laws of the State of Minnesota, hereinafter referred to as the "County," both hereinafter collectively referred to as the "Parties."

WITNESSETH:

WHEREAS, the County seeks to reconvey to the City, County Highway (CH) 15, from 760 feet north of the north right-of-way line of CH 16 to 6th Avenue West in the City of Shakopee, including all County owned right-of-way, as shown on Attachment 1,

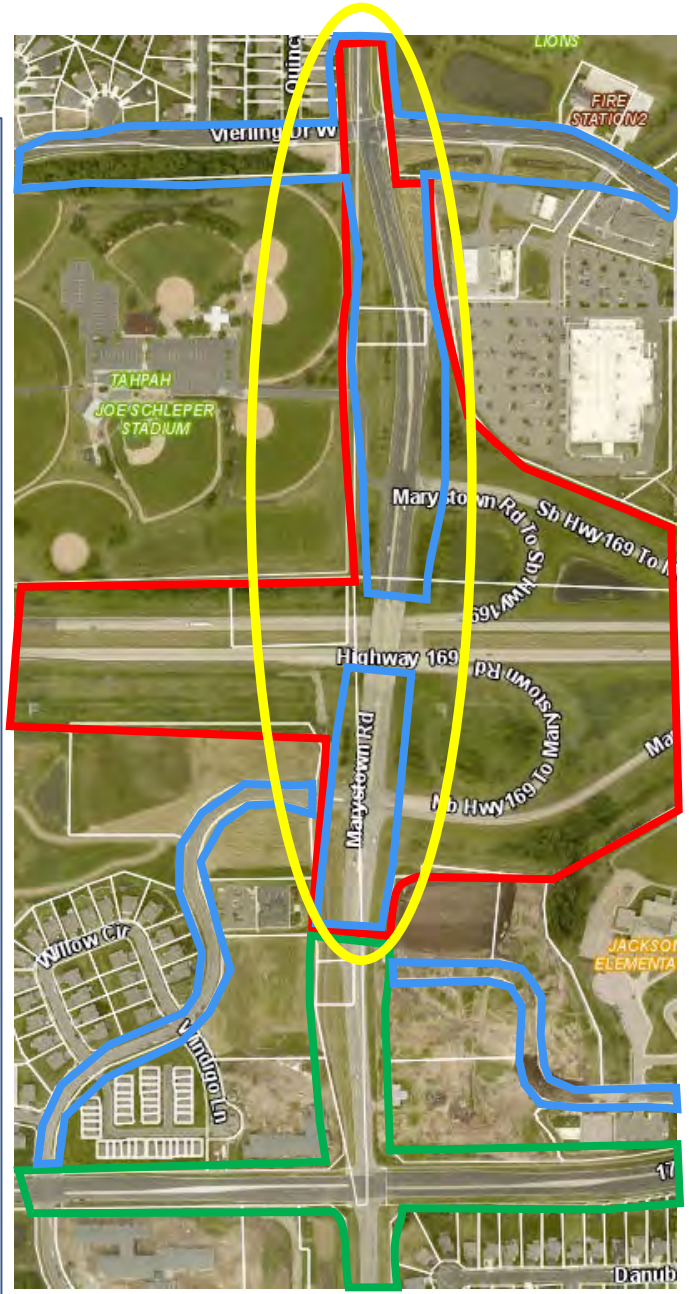
WHEREAS, the County Board of Commissioners has the authority under Minnesota Statute 163.11 to turnback County roads to Cities; and

WHEREAS, CH 15 no longer serves a County highway function north of CH 16 as discussed at the joint workshop of the City Council and County Board. The roadway primarily provides local collector and B minor arterial access within the City of Shakopee to the north of CH 16 and serves less of a mobility function and, thereby, being better suited to be on the City roadway system; and

WHEREAS, the County needs to maintain control of the influence area of the CH 16 and CH15 intersection to ensure proper function of the operations of this intersection in the future; and

WHEREAS, the Parties desire to transfer jurisdiction of a portion of CH 15 in an orderly fashion and have therefore set forth their respective obligations to accomplish this objective; and

WHEREAS, the City has prepared a West End Study and has developers considering subdivision of property which includes extending CH16 from its current termini at CH 15 to the west concluding at CH 69.

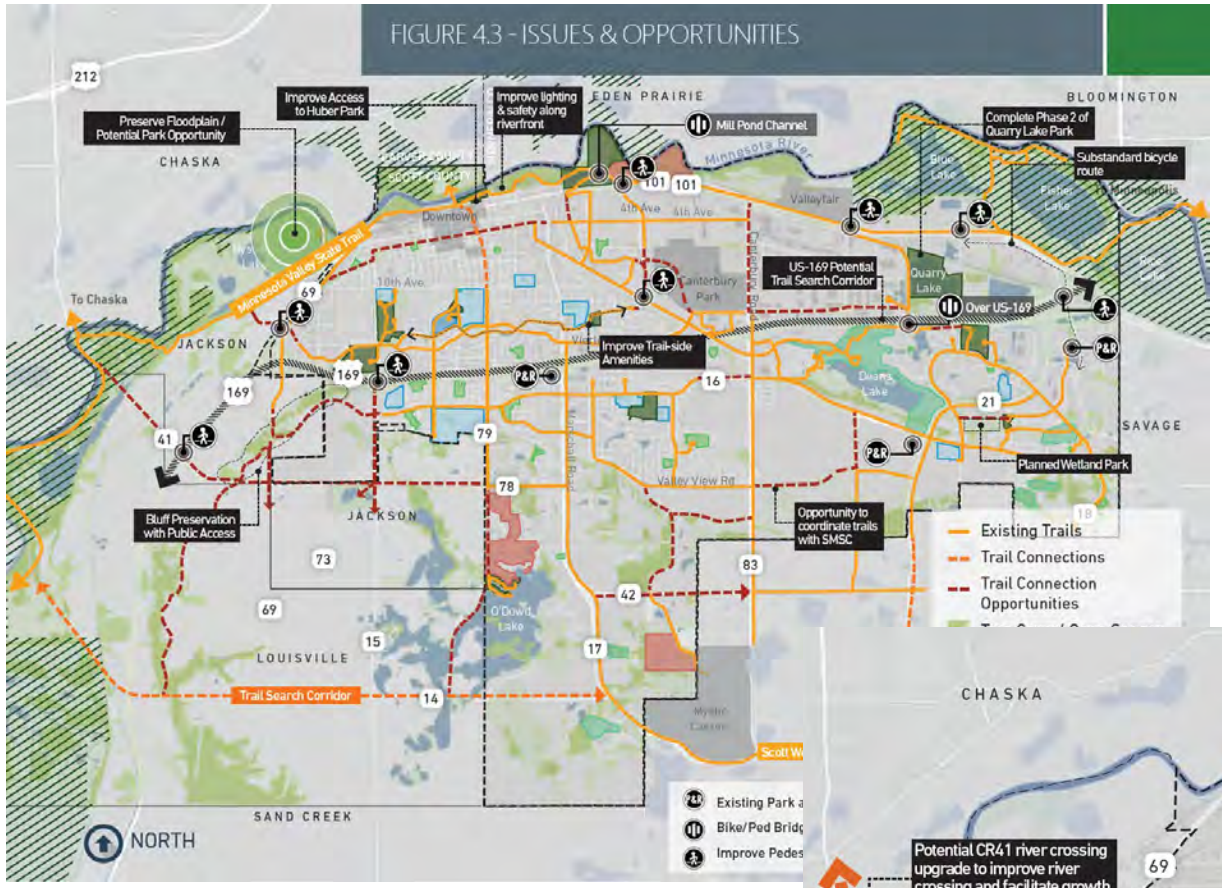


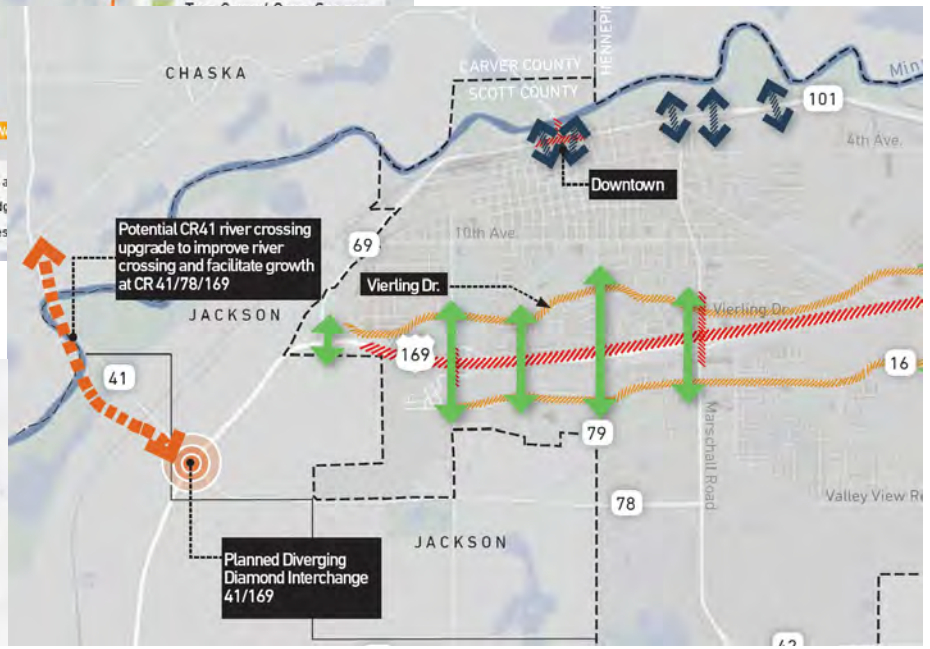
Marystown Road Corridor - ISSUES

2019 Comprehensive Plan
(Envision Shakopee)

Marystown Road:

- Identified as a “High Crash Corridor)
- TH 169 barrier identified (pedestrians)





High Crash Corridor
Barriers to Bike/Ped Travel
Bike/Ped Opportunities to Connect North-South Across US-169
Bike/Ped Opportunities to Connect North-South Across CR-101 to the Minnesota River

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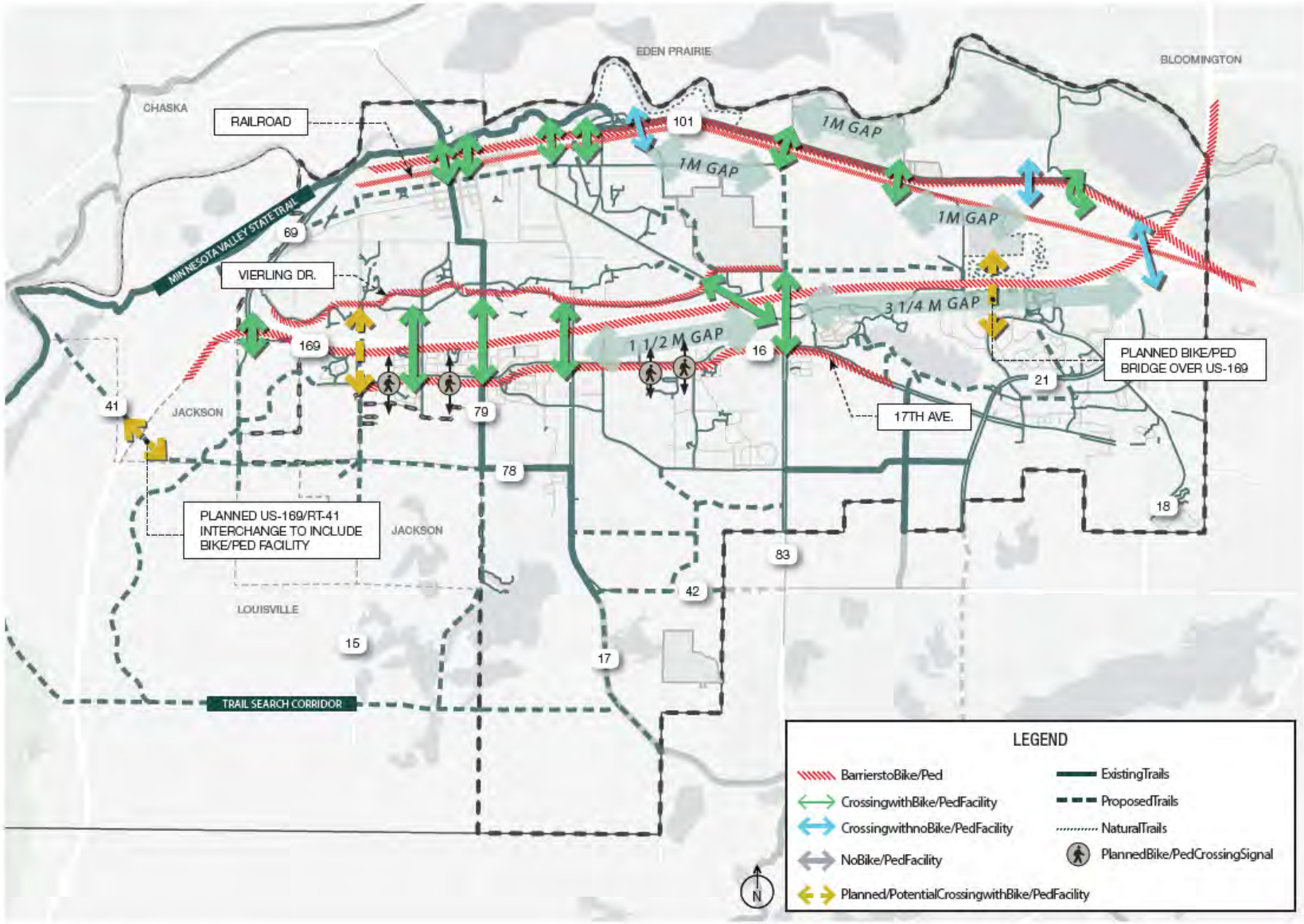
Marystown Road Corridor - ISSUES

2019 Parks/Rec Master Plan



TRAIL GAP AND CONNECTIONS MAP

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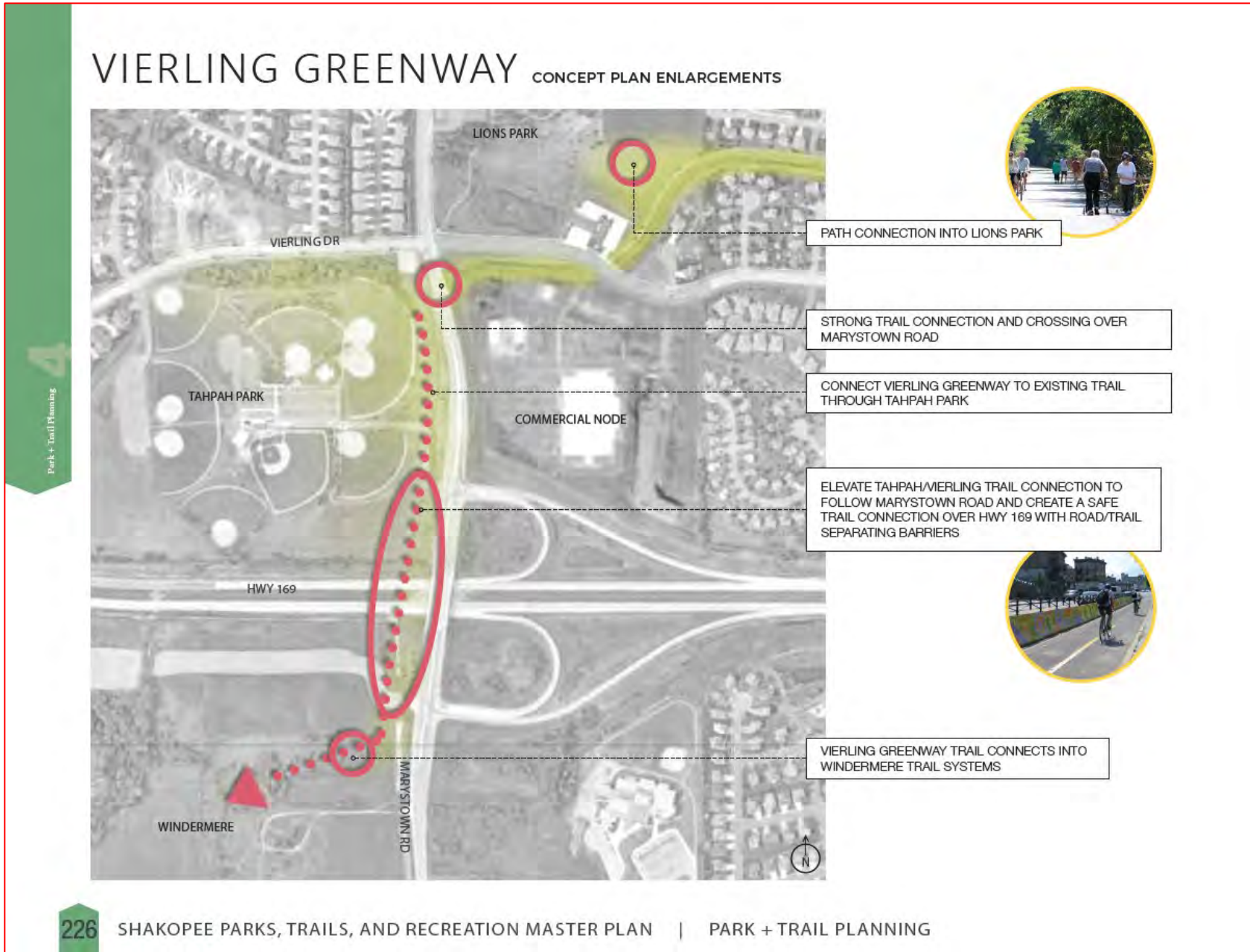
Marystown Road Corridor - ISSUES

2019 Parks/Rec Master Plan

- Regional Ped gap (Vierling Greenway connection and continuance through Windermere and the bluff and city park system to the west
- TH 169 → barrier between residential/school on the south side and the parks and HyVee on the north



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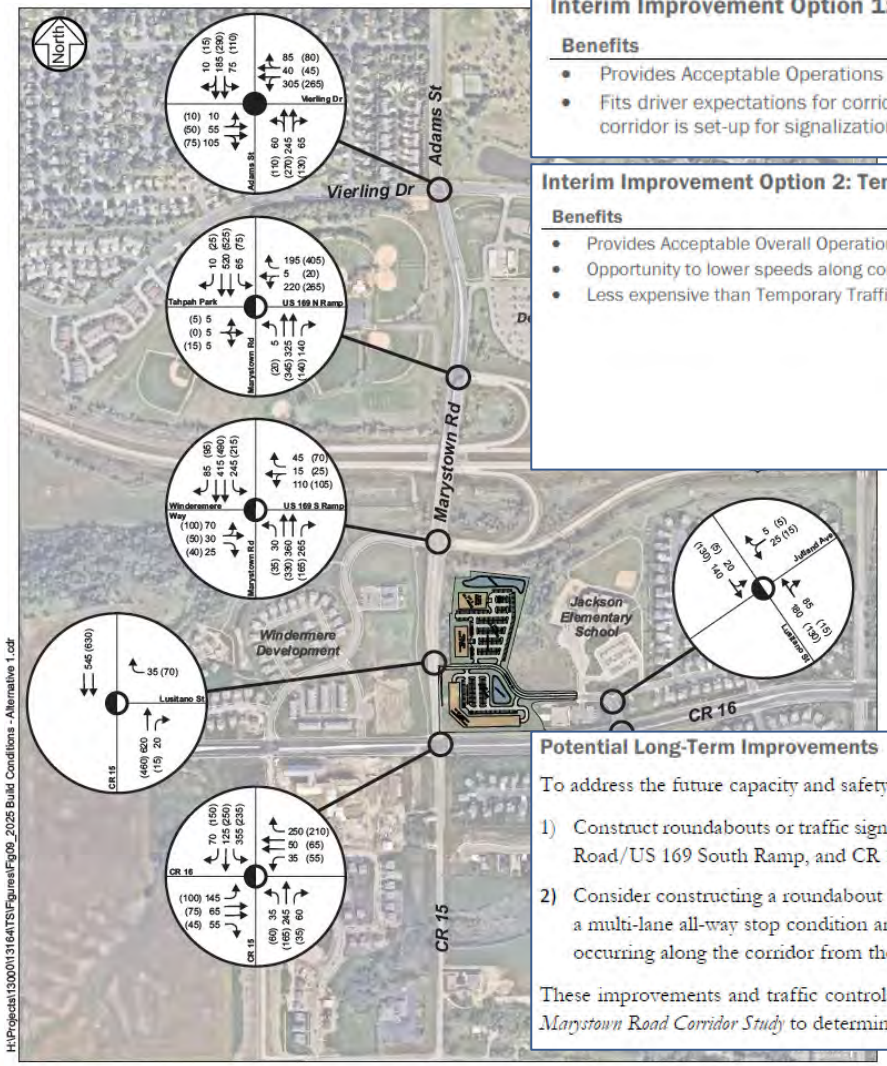
Marystown Road Corridor - ISSUES

Trident Development – traffic



H:\Projects\13000\013164\TS\Figures\Fig09_2025 Build Conditions - Alternative 1.cdr

Interim Improvement Option 1: Temporary Traffic Signal

Benefits	Potential Issues
• Provides Acceptable Operations • Fits driver expectations for corridor (i.e. the corridor is set-up for signalization)	• Cost / Maintenance • No Speed Reduction expected

Interim Improvement Option 2: Temporary All-way Stop Control

Benefits	Potential Issues
• Provides Acceptable Overall Operations • Opportunity to lower speeds along corridor • Less expensive than Temporary Traffic Signal	• Creates driver confusion – too many lanes for an AWSC – consider coning off/condensing turn lanes • Extensive ITS effort to provide notification/safety (LED Stop Signs, Traffic Control Change Warning Signs, Speed Feedback Signs) • Agency Approval (MnDOT, Scott County) • Approach operations are expected to be worse than a signal or roundabout

Potential Long-Term Improvements

To address the future capacity and safety issues identified, the following improvements are offered:

1) Construct roundabouts or traffic signals at the Marystown Road/US 169 North Ramp, Marystown Road/US 169 South Ramp, and CR 15/CR 16 intersections prior to year 2025.

2) Consider constructing a roundabout at the Adams Street/Vierling Drive intersection to eliminate a multi-lane all-way stop condition and to help reduce any potential improper maneuvers that are occurring along the corridor from the Hy-Vee Access.

These improvements and traffic controls are being evaluated in more detail as part of the on-going *Marystown Road Corridor Study* to determine the optimal design for the area.

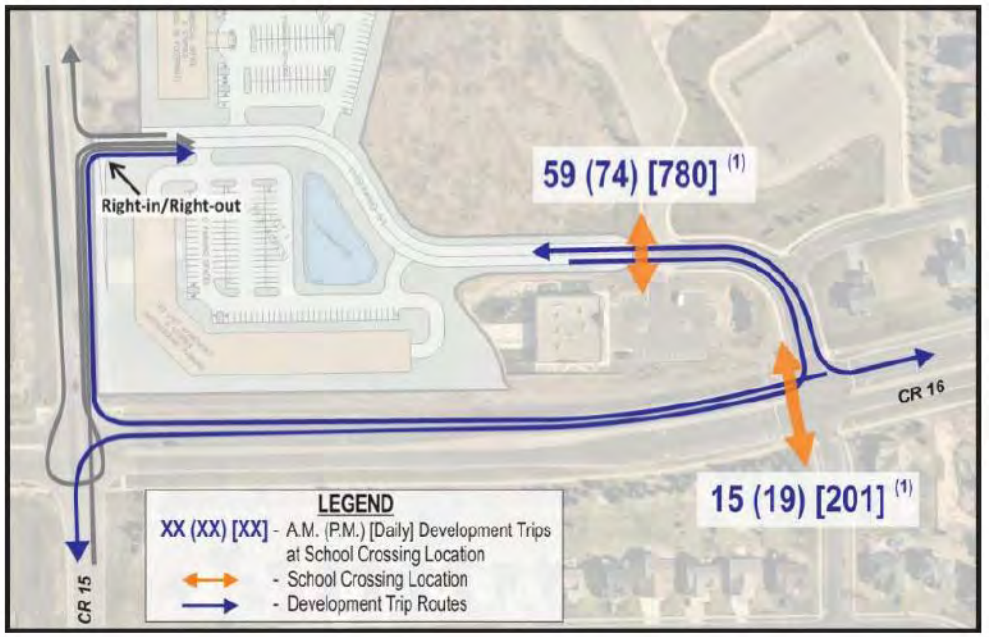
SRF Consulting Group, Inc.

2025 Build Conditions (with Access Alternative 1)

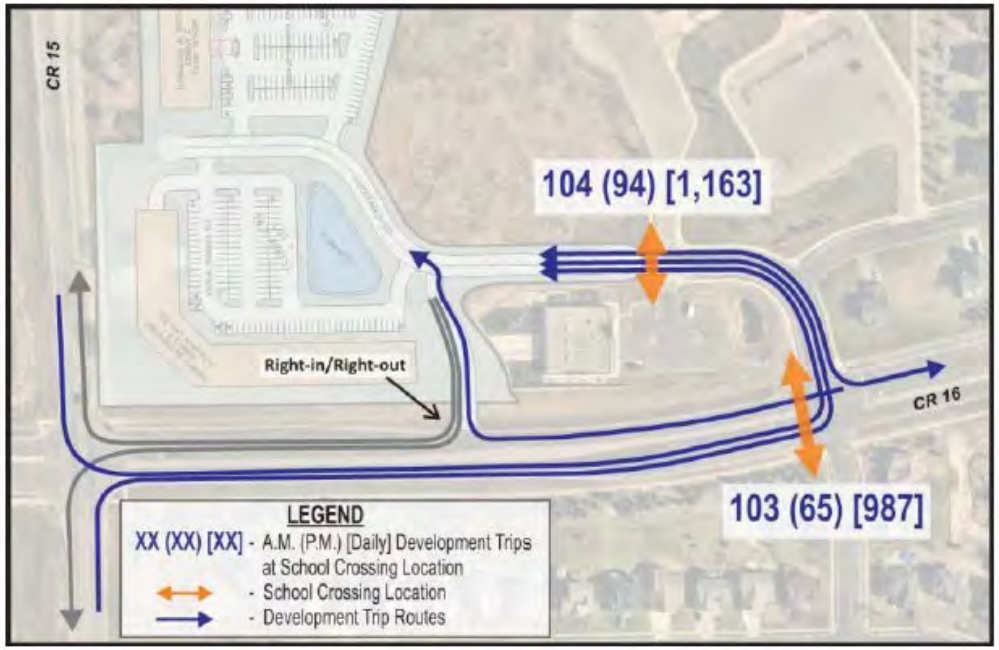
Trident Development Transportation Study
City of Shakopee

Figure 9

Access Alternative 1: Right-in/Right-out on CR 15



Access Alternative 2: Right-in/Right-out on CR 16

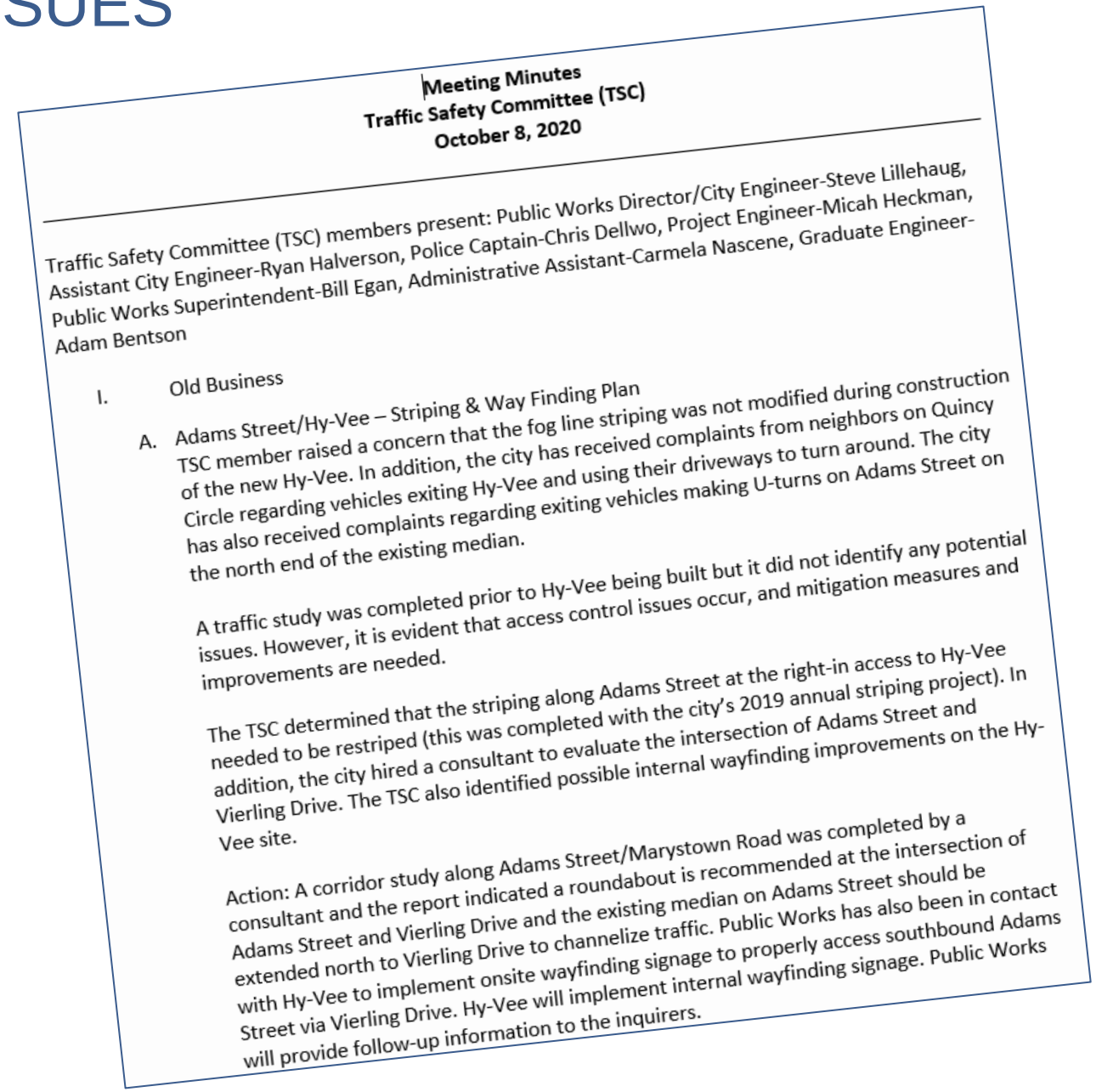


Marystown Road Corridor - ISSUES

Traffic Safety Committee:

- Since 2018, Corridor complaints consistent (10 Traffic Safety Committee "cases")

- Short-Term: Identified the issues, some interim strategies implemented
- Long-Term: Marystown Rd Corridor Implementation



Meeting Minutes
Traffic Safety Committee (TSC)
October 8, 2020

Traffic Safety Committee (TSC) members present: Public Works Director/City Engineer-Steve Lillehaug, Assistant City Engineer-Ryan Halverson, Police Captain-Chris Dellwo, Project Engineer-Micah Heckman, Public Works Superintendent-Bill Egan, Administrative Assistant-Carmela Nascene, Graduate Engineer-Adam Bentson

I. Old Business

A. Adams Street/Hy-Vee – Striping & Way Finding Plan

TSC member raised a concern that the fog line striping was not modified during construction of the new Hy-Vee. In addition, the city has received complaints from neighbors on Quincy Circle regarding vehicles exiting Hy-Vee and using their driveways to turn around. The city has also received complaints regarding exiting vehicles making U-turns on Adams Street on the north end of the existing median.

A traffic study was completed prior to Hy-Vee being built but it did not identify any potential issues. However, it is evident that access control issues occur, and mitigation measures and improvements are needed.

The TSC determined that the striping along Adams Street at the right-in access to Hy-Vee needed to be restriped (this was completed with the city's 2019 annual striping project). In addition, the city hired a consultant to evaluate the intersection of Adams Street and Vierling Drive. The TSC also identified possible internal wayfinding improvements on the Hy-Vee site.

Action: A corridor study along Adams Street/Marystown Road was completed by a consultant and the report indicated a roundabout is recommended at the intersection of Adams Street and Vierling Drive and the existing median on Adams Street should be extended north to Vierling Drive to channelize traffic. Public Works has also been in contact with Hy-Vee to implement onsite wayfinding signage to properly access southbound Adams Street via Vierling Drive. Hy-Vee will implement internal wayfinding signage. Public Works will provide follow-up information to the inquirers.

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Marystown Road Corridor - ISSUES

Traffic conditions:

- existing (50 MPH +)
- uncontrolled intersections
- large/wide pavement areas at intersections
- sight line issues with vertical curvature of roadways
- transition from rural to urban
- interchange
- no ped facilities
- accidents on the rise

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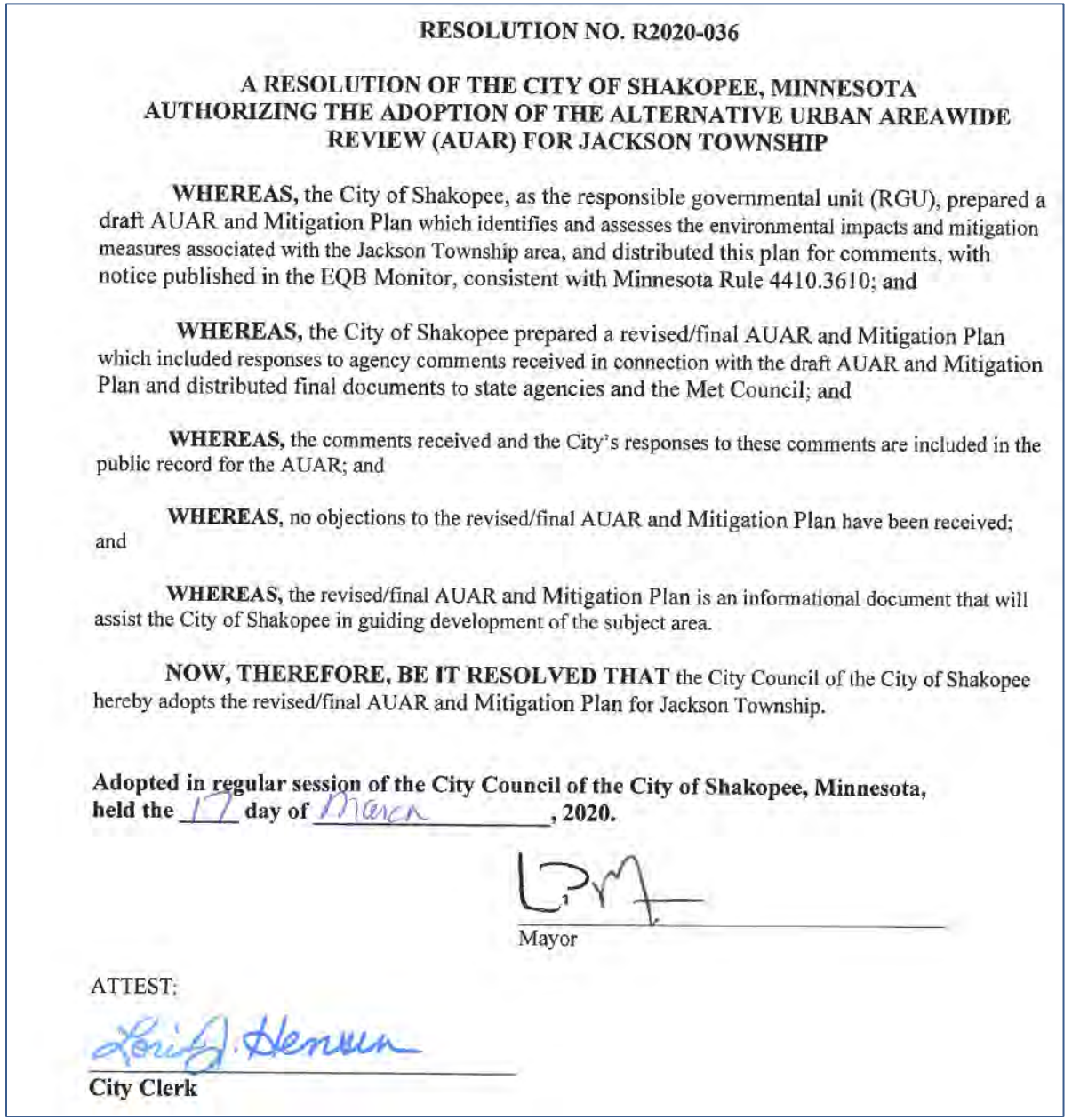
Marystown Road Corridor - HISTORY

History of studies and initiatives

- West End Study (2015)
- Hy-Vee Traffic Impact Study (2016)
- Turnback Agreement with County (2016)
- Trident Traffic Impact Study (2019)
- Jackson Township AUAR (2019-20)
- Comprehensive Plan - Transportation (2019)
- Parks and Rec Master Plan - Trails (2019)
- Marystown Road Corridor Study (2020)



RESOLUTION NO. R2020-036

A RESOLUTION OF THE CITY OF SHAKOPEE, MINNESOTA AUTHORIZING THE ADOPTION OF THE ALTERNATIVE URBAN AREAWIDE REVIEW (AUAR) FOR JACKSON TOWNSHIP

WHEREAS, the City of Shakopee, as the responsible governmental unit (RGU), prepared a draft AUAR and Mitigation Plan which identifies and assesses the environmental impacts and mitigation measures associated with the Jackson Township area, and distributed this plan for comments, with notice published in the EQB Monitor, consistent with Minnesota Rule 4410.3610; and

WHEREAS, the City of Shakopee prepared a revised/final AUAR and Mitigation Plan which included responses to agency comments received in connection with the draft AUAR and Mitigation Plan and distributed final documents to state agencies and the Met Council; and

WHEREAS, the comments received and the City's responses to these comments are included in the public record for the AUAR; and

WHEREAS, no objections to the revised/final AUAR and Mitigation Plan have been received; and

WHEREAS, the revised/final AUAR and Mitigation Plan is an informational document that will assist the City of Shakopee in guiding development of the subject area.

NOW, THEREFORE, BE IT RESOLVED THAT the City Council of the City of Shakopee hereby adopts the revised/final AUAR and Mitigation Plan for Jackson Township.

Adopted in regular session of the City Council of the City of Shakopee, Minnesota, held the 17 **day of** March **, 2020.**

Mayor

ATTEST:

Lori J. Hansen

City Clerk

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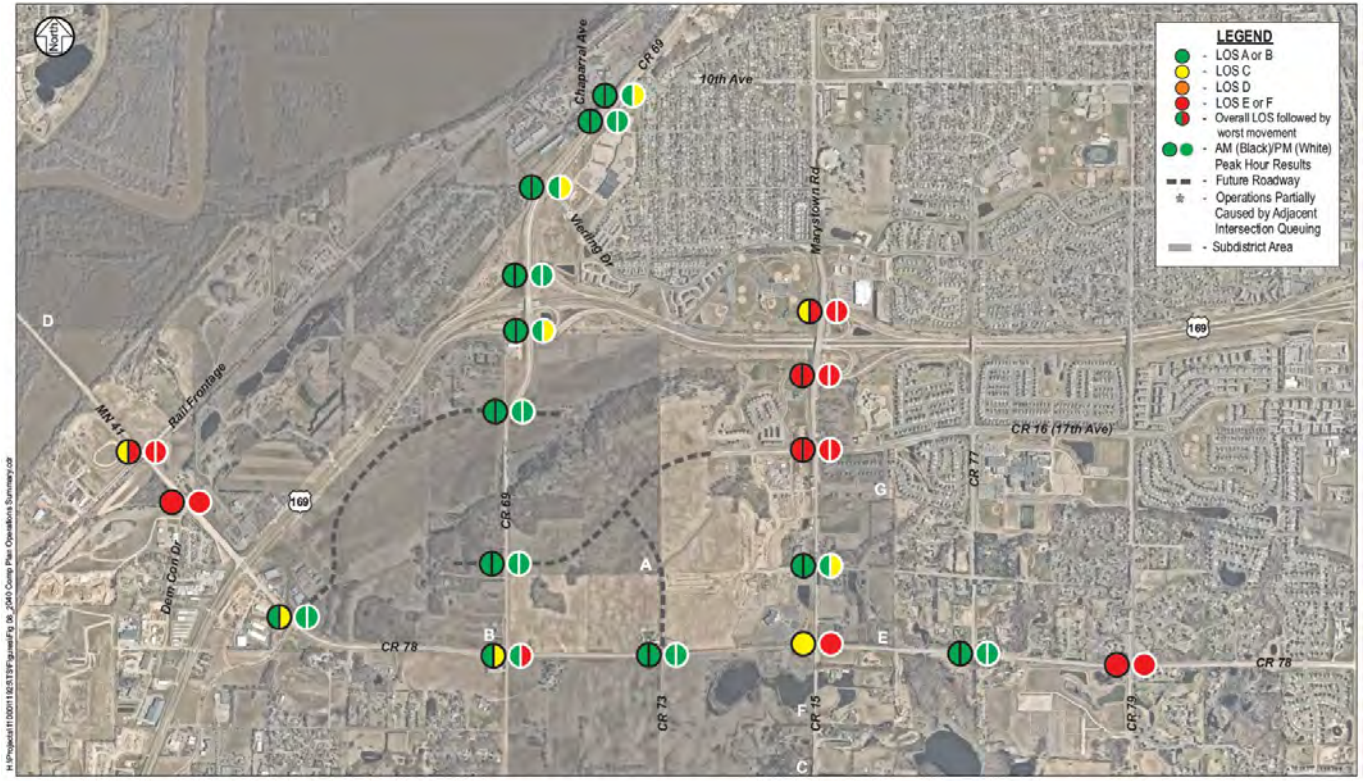
Marystown Road Corridor - HISTORY

Jackson Township AUAR (2019-20)



2040 Comp Plan Operations Summary
Shakopee AUAR Transportation Analysis

Figure 8

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Mayor

ATTEST:

City Clerk

Table 15: 2040 Comprehensive Plan Scenario – Intersection Capacity Analysis

Intersection	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay	LOS	Delay
Marystown Road/CR 15				
Marystown Road/US 169 North Ramp [1]	C/F	51 sec.	F/F	>3 min
Marystown Road/US 169 South Ramp [1]	F/F	>3 min	F/F	>3 min
CR 15/CR 16 [1]	F/F	>3 min	E/F	~2.5 min

Table 16: Max Build Scenario – Intersection Capacity Analysis

Intersection	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay	LOS	Delay
Marystown Road/CR 15 [3]				
Marystown Road/US 169 North Ramp [3]	A	6 sec.	A	10 sec.
Marystown Road/US 169 South Ramp [3]	A	9 sec.	A	10 sec.
CR 15/CR 16 [3]	C	22 sec.	B	17 sec.

Marystown Road Corridor - Study

SRF

Memorandum

SRF No. 13195.00

To: Steve Lillehaug, PE, PTOE, Public Works Director/City Engineer
City of Shakopee

From: Brent Clark, PE, Senior Engineer
Matt Pacyna, PE, Principal

Date: June 24, 2020

Subject: Marystown Road Corridor Study

Introduction

The City of Shakopee, in partnership with Scott County and the Minnesota Department of Transportation (MnDOT), developed the future vision for County Road (CR) 15/Marystown Road/ Adams Street from Vierling Drive to CR 16 (17th Avenue W) in Shakopee, Minnesota. The development and operations along the corridor have been discussed and evaluated in the following studies that were completed in 2019:

- *Shakopee AUAR Transportation Analysis*, SRF Consulting (September 2019)
- *Trident Development Transportation Study*, SRF Consulting (December 2019)

These previous studies identified that the current traffic control along the corridor is not expected to sufficiently accommodate future growth and planned development in the area by the year 2025. In addition, there are safety concerns at the intersections, as CR 15/Marystown Road is a high-speed corridor (45 to 55 mph) and there has been a recent increase in crashes since construction of the Hy-Vee and Windermere developments (along with the addition of the west approaches at the US 169 South Ramp and CR 16 intersections to accommodate the Windermere development). The City also has a desire to repurpose the US 169 Bridge to provide a multi-use trail on both sides, thus connecting a gap in the City's trail system. Therefore, this study was completed to determine the current and future traffic control/corridor needs of CR 15/Marystown Road that will inform the anticipated reconstruction project from Vierling Drive to CR 16 planned for the year 2022. This study summarizes the technical evaluation completed for the project.

*4.D.3.

SHAKOPEE

Shakopee City Council
November 6, 2019

FROM: Steve Lillehaug, City Engineer/Public Works Director
TO: Mayor and Council Members

Subject:
Professional Services Agreement with SRF Consulting Group, Inc., for the Marystown Road/Adams Street Corridor Study

Policy/Action Requested:
Authorize the execution of a professional services agreement with SRF Consulting Group, Inc., for corridor study services for the Marystown Road/Adams Street Corridor Improvement Project CIF-TBD-007.

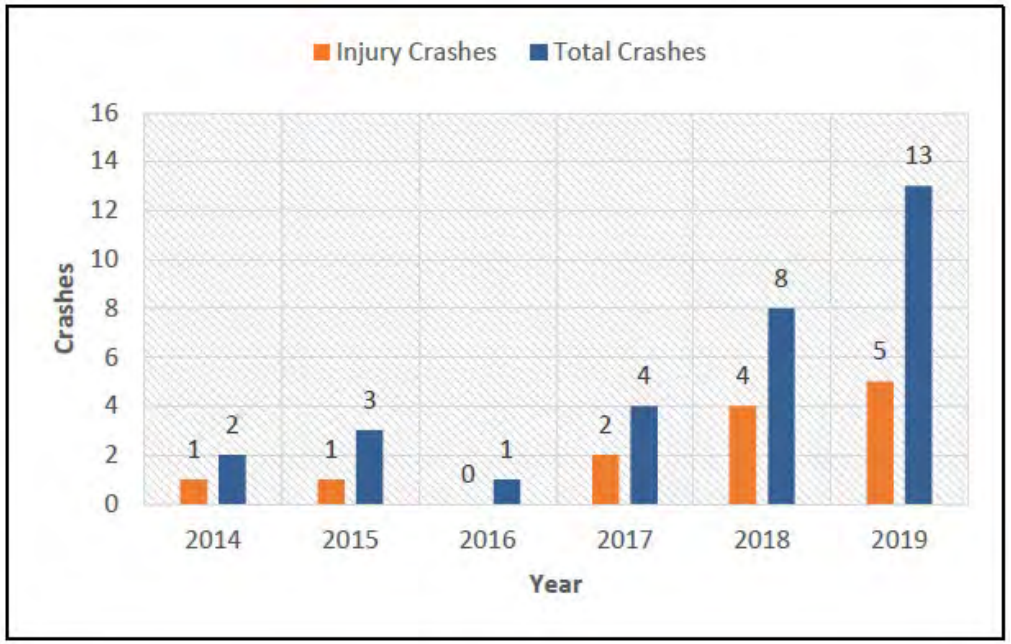
Recommendation:
Authorize execution of the agreement.

Discussion:
The Capital Improvement Plan (CIP) identifies the future Marystown Road/Adams Street Improvement Project CIF-TBD-007. The project is categorized as a "pending" project in the CIP, indicating that the priority and funding are yet to be determined. Subsequent to approving the CIP on September 17, 2019, a developer is now proceeding with the development approval process for the quadrant of land located east of Marystown Road between Trunk Highway 169 and County Road 16 (17th Avenue, located just west of the Jackson Elementary School), referenced as the Trident Development. Additionally, the traffic study portion of the Alternative Urban Areawide Review plan for the west end of Shakopee and Jackson Township that is underway identifies the four intersections included in this CIP project as needing intersection control improvements (e.g. roundabouts) in the coming future once the traffic, level of service and safety conditions warrant implementation.

Based on the current traffic conditions including the safety and access complaints surrounding the Hy-Vee development, the substantial development of the Windermere area and now the proposed Trident Development, the advancement of the Marystown Road/Adams Street Improvement Project is warranted to ensure transportation safety is maintained within the corridor. With City Council approval, city staff is prepared to immediately proceed with the preliminary design and study necessary to advance the actual design and construction of the project, which is anticipated to be advanced to a 2021-22 construction.

The project is a complex, multi-jurisdictional project that will involve key transportation planning and approval measures including substantial agency coordination, data collection, traffic analysis and reporting, four intersection control evaluations (ICE Reports), complex concept layout design that coordinates with the Trunk Highway Interchange and the existing bridge, bridge concept layout, cost estimating and a formal Interchange Revision Request. Additionally, applications for state and federal funding are included as part of the scope of work through the Highway Safety Improvement Fund and through the Regional Federal Solicitation. City staff needs assistance from a design consultant to complete the corridor study based on current and expected workload. City staff has worked with SRF Consulting Group, Inc. to develop a scope of work needed to deliver the project. SRF Consulting Group, Inc., has the experience, technical skill, and capacity to provide the needed services and is a firm in the city's approved consultant pool. The attached Professional Services Agreement authorizes and describes the scope and fee for their work on this project.

Marystown Road Corridor - Study



The latest three-year period (2017-2019) was used for the crash analysis per MnDOT ICE report guidance and is summarized below:

- 25 intersection crashes were reported at the study intersections; Approximately 70 percent of the crashes were right-angle crashes.
- No fatal or incapacitating injury crashes occurred along the corridor; there were six (6) non-incapacitating injury crashes, five (5) possible injury crashes, and 14 property damage only (PDO) crashes.
  - There was a right-angle crash that resulted in two fatalities at the Marystown Road/ US 169 North Ramp intersection in 2010.
- All four study intersections have crash rates higher than the average rate; the CR 15/CR 16 intersection has a crash rate higher than the critical crash rate.
  - All eight (8) CR 15/CR 16 intersection crashes occurred after the west leg of the intersection was constructed in 2018.
  - Six (6) of the eight (8) crashes were right-angle crashes; five (5) of which resulted in injury.

Marystown Road Corridor - Study

Analysis → Evaluations → Conclusions and Recommendations

Future Operations Analysis (Appendix E)

A year 2025 and year 2040 intersection capacity analysis was completed to evaluate how the study intersections are expected to operate in the future if no geometric or traffic control changes are made. The intersections were evaluated with the existing geometry and traffic control, with forecasted turning movements. Results of the analysis identified the following:

- Under year 2025 conditions, the CR 15/CR 16 and Marystown Road/US 169 ramp intersections are expected to have failing side-street operations during the peak hours. The US 169 ramps are expected to have queues that extend over 50 percent of the off-ramp, which may cause safety issues as vehicles coming from US 169 may not expect these queues. Furthermore, as side-street operations begin to fail, drivers will begin to accept smaller gaps, which could present additional safety risks.
- Under year 2040 conditions, the CR 15/CR 16 and Marystown Road/US 169 ramp intersections are expected to operate at an overall LOS F during the peak hours, with delays greater than three (3) minutes. These intersections had model failure, meaning the full demand at these intersections was not able to enter the network.
    - The Adams Street/Vierling Drive intersection is expected to operate at a LOS D during the p.m. peak hour, with the westbound approach operating at LOS E; the improper movements at the Hy-Vee right-in/right-out access identified under existing conditions are expected to continue.

To address operational and safety issues, the CR 15/CR 16 and Marystown Road/US 169 ramp intersections traffic controls were evaluated to be converted to a traffic signal or roundabout. A roundabout, traffic signal, and reconfigured all-way stop control was evaluated at the Adams Street/Vierling Drive intersection to eliminate the existing multi-lane all-way stop condition and reduce improper movements along the corridor.

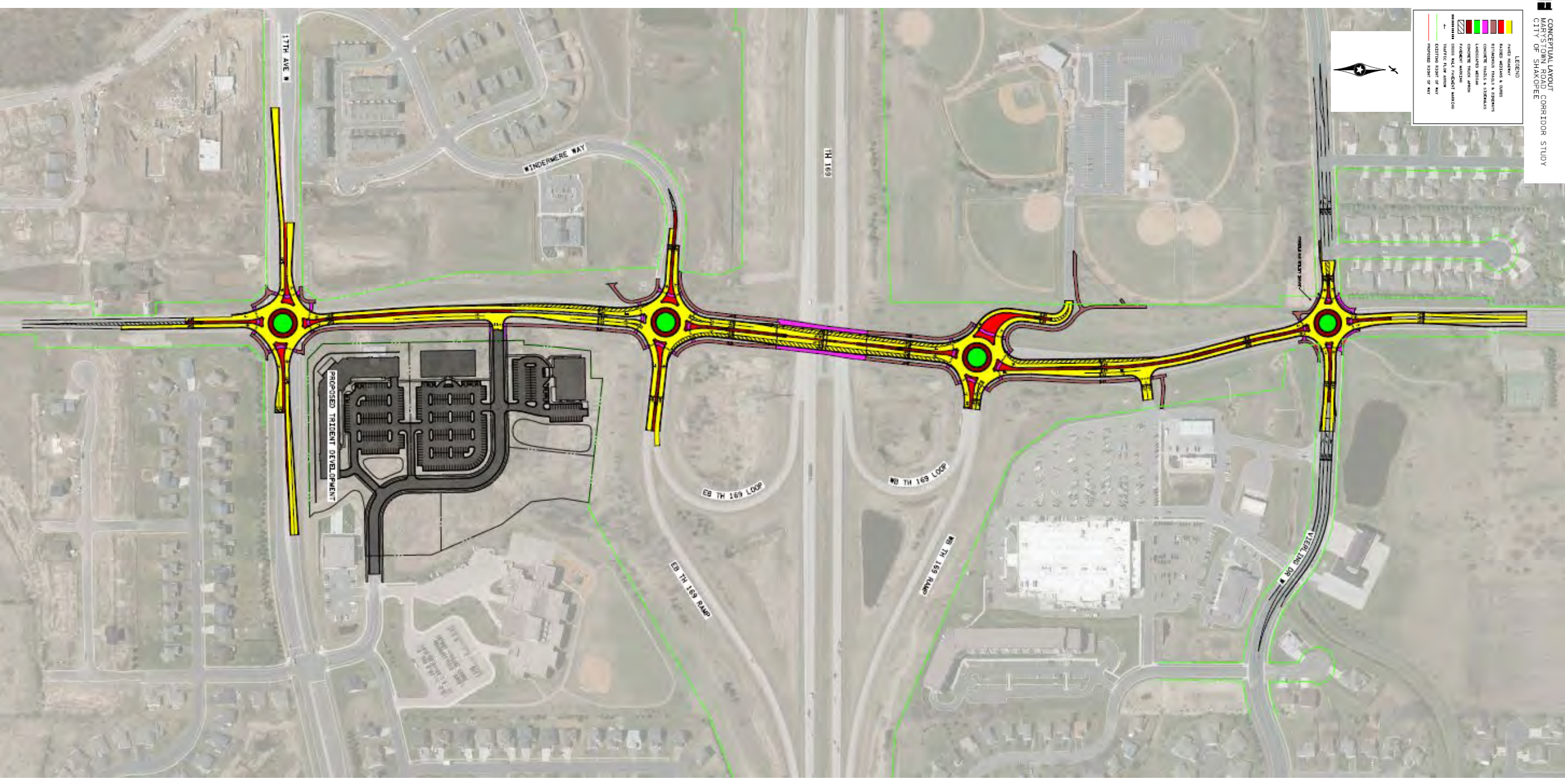
Intersection Control Evaluations (Appendix F)

As part of the Intersection Control Evaluations, the following analyses/factors were considered to determine the long-term preferred intersection control:

- **Capacity Analysis:** The future operations of the traffic control alternatives were evaluated using a combination of Synchro/SimTraffic, HCS 7, and Rodel.
- **Safety Analysis:** The *Highway Safety Manual (HSM) Predictive Method* was used to predict crash frequency and severity at the study intersections based on traffic volumes and traffic controls.
- **Pedestrian Considerations:** Pedestrian connectivity and safety were discussed for the traffic control alternatives; this was particularly important due to the corridor's close proximity to area schools and regional parks.
- **Transportation System Considerations:** Traffic control continuity was discussed along with other alternative considerations.
- **Site Access:** Traffic control alternatives and their impacts to the Hy-Vee and Trident development access were discussed.
- **Cost Analysis:** An incremental benefit-cost analysis was performed to determine the economic benefit of an alternative; construction cost estimates for recent construction improvements were also discussed.
- **Right-of-Way:** Potential impacts to right-of-way were evaluated and discussed.

Based on the results of the ICE, a roundabout control is recommended at the four study intersections along the corridor. This alternative performed better in all categories measured.

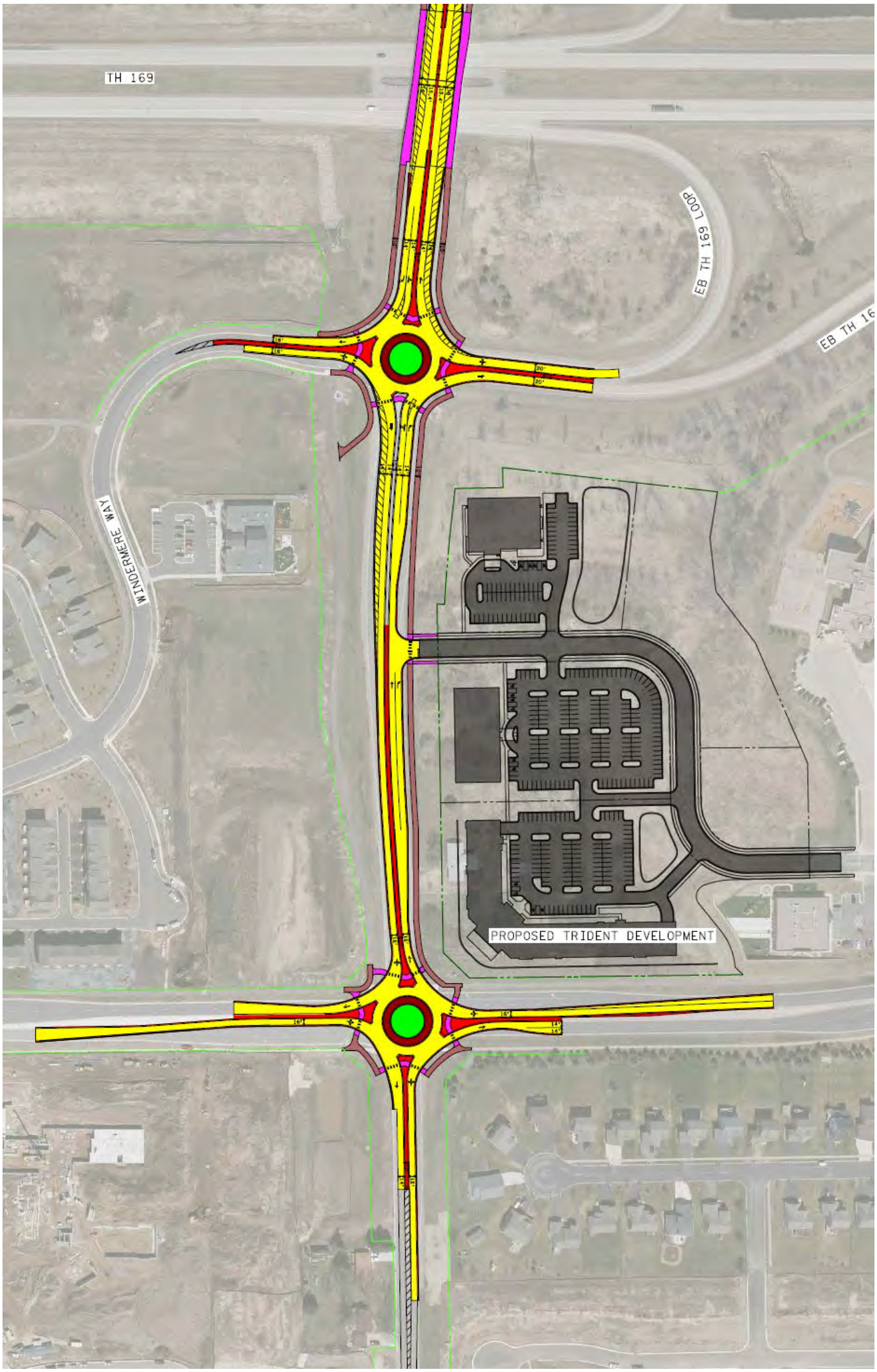
Marystown Road Corridor - Study



SRF

CONCEPTUAL LAYOUT
MARYSTOWN ROAD CORRIDOR STUDY
CITY OF SHAKOPEE

LEGEND
- PAVED ROADWAY
- RAISED MEDIANS & CURBS
- BITUMINOUS TRAILS & SIDEWAYS
- CONCRETE TRAILS & SIDEWALKS
- LANDSCAPED MEDIAN
- CONCRETE TRUCK APRON
- PAVEMENT MARKING
- CROSS WALK PAVEMENT MARKING
- TRAFFIC FLOW ARROW
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY



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MARYSTOWN ROAD CORRIDOR STUDY
CITY OF SHAKOPEE

LEGEND
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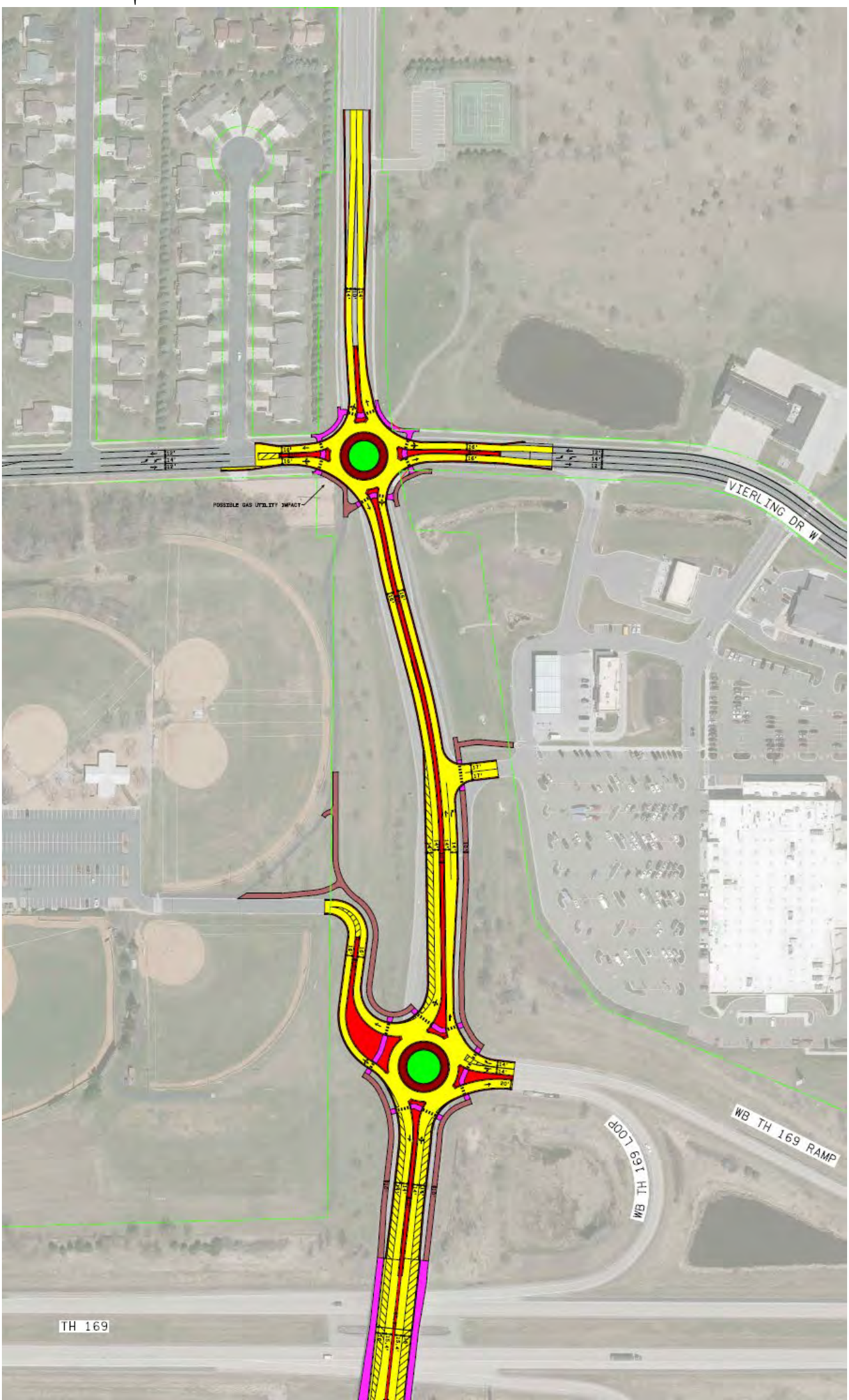

Marystown Road Corridor – CIP projects

2015 CIP

- Interchange and trail connection improvements

City of Shakopee Capital Improvement Program 2015-2019

Project Manager: Bruce Loney	Project Type: Street Construction		Project Title: CR 15 Interchange & Trail Improvements		Total Project Cost: $2,500,000	
A. Expenditure Items:	**2015**	**2016**	**2017**	**2018**	**2019**	**FUTURE**
Land & ROW						
Construction						2,200,000
Improvements						
Engineering/Admin.						300,000
Total	-	-	-	-	-	2,500,000
B. Funding Source:						
General Fund						
Capital Improvement Fund						1,000,000
Park Reserve Fund						
Grants (specify)					Federal	1,100,000
Donations (specify)					Scott County Grant	400,000
State Aid						
Assessments						
Sanitary Sewer Fund-Base						
Sanitary Sewer Fund-Trunk						
Storm Drainage Fund-Base						
Storm Drainage Fund-Trunk						
Tax Levy						
Total	-	-	-	-	-	2,500,000

PROJECT LOCATION

Description:
Interchange improvements to improve safety and construct trail connectors along CR 15 from 17th Avenue to Vierling Drive.

Justification:
Improvements to the Interchange is for safety and to provide safe pedestrian crossings of the CR 15 bridge over TH 169.

Other Comments:
Would need Federal Grant selection to receive federal funds.

Operating Costs:

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Marystown Road Corridor – CIP projects

2019 CIP

- Interchange, Roundabout, and trail connection improvements

Capital Improvement Plan 2019 *thru* 2023
City of Shakopee, Minnesota

Department	Capital Improvements Fund
Contact	Public Works Director
Type	Improvement
Useful Life	30
Category	Street Construction
Priority	2 Important-Provide Efficienc
Status	Pending
Total Project Cost:	$3,638,000

Project # CIF-TBD-007
Project Name *Marystown Rd/TH 169 Interchange & Trail Imp

Accounting Code
Fund Capital Improvement Fund

Description

Interchange improvements to improve safety and construct trail connections along Marystown Road from 17th Avenue to Vierling Drive.

Justification

Improvements to the Interchange are for vehicle safety and to provide safe pedestrian crossings of the Marystown Road bridge over TH 169. Project timing is dependent upon further need and successfully receiving state/federal funding support for the project. A 2018 funding application was unsuccessful in receiving federal Local Road Improvement Funding from the state.

Expenditures	2019	2020	2021	2022	2023	Total	Future
Construction/Maintenance					0	0	3,638,000
Total					0	0	Total

Funding Sources	2019	2020	2021	2022	2023	Total	Future
Capital Improvement Fund					0	0	3,638,000
Total					0	0	Total

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Marystown Road Corridor – CIP projects

2021 CIP

- Expanded to all 4 intersections per Corridor Study

Capital Improvement Plan 2021 *thru* 2025

City of Shakopee, Minnesota

Department Capital Improvements Fund
Contact Public Works Director

Project # CIF-23-004
Project Name Marystown Rd/TH 169 Interchange & Trail Imp

Type Improvement
Useful Life 30
Category Street Construction
Priority 1 Critical for Safety/Preservati
Status Active

Accounting Code
Fund Capital Improvement Fund

Total Project Cost: $7,380,000

Description

Interchange, intersection and access control improvements to improve safety and construct trail connections along Marystown Road/Adams Street/CSAH 15 from 17th Avenue (CSAH 16) to Vierling Drive.

Justification

Improvements to the Interchange are for vehicle safety and to provide safe pedestrian crossings of the Marystown Road bridge over TH 169. Intersection and access control improvements are needed to address increased traffic issues and existing access control issues at HyVee. Project timing is dependent upon further need and successfully receiving state/federal/Municipal COOP funding support for the project. A 2018 funding application was unsuccessful in receiving federal Local Road Improvement Funding from the state.

Prior	Expenditures	2021	2022	2023	2024	2025	Total
120,000	Construction/Maintenance			6,147,000			6,147,000
	Engineering/Administration		557,000	556,000			1,113,000
Total	Total		**557,000**	**6,703,000**			**7,260,000**

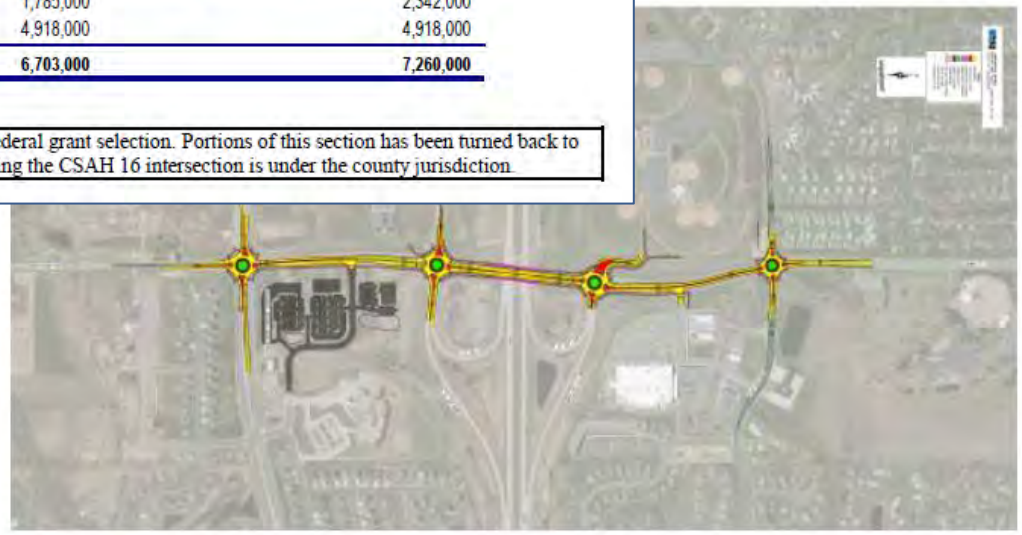
Prior	Funding Sources	2021	2022	2023	2024	2025	Total
120,000	Capital Improvement Fund		557,000	1,785,000			2,342,000
	Cost Sharing, MnDOT/Federal			4,918,000			4,918,000
Total	Total		**557,000**	**6,703,000**			**7,260,000**

Budget Impact/Other

It is anticipated that this project would be prioritized once successful state/federal grant selection. Portions of this section has been turned back to the City by the County; the southerly section south of the south ramp including the CSAH 16 intersection is under the county jurisdiction.

1 *thru* 2025

Department Capital Improvements Fund
Contact Public Works Director



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Marystown Road Corridor – Funding Need

H:\Projects\13000\13195\Design\Cost Estimates\Conceptual Cost Estimate\SRF-Cost-Est-Tool_13195ConceptCostEst_SpecYr_2018.xlsx

PRINTED: 4/30/2020 8:47 AM

SRF Engineers Planners Designers

PROJECT: MARYSTOWN CORRIDOR STUDY

Concept Cost Estimate

Prepared By: SRF Consulting Group, Inc., 04/30/2020

				ROUNDABOUT #1 - ADAMS STREET/VIERLING DRIVE		ROUNDABOUT #2 - MARYSTOWN ROAD/US 169 NORTH RAMP		ROUNDABOUT #3 - MARYSTOWN ROAD/US 169 SOUTH RAMP		ROUNDABOUT #4 - CR 15/CR 16		TRIDENT DEVELOPMENT TURN LANE		TOTAL	
	ITEM DESCRIPTION	UNIT	UNIT PRICE	EST. QUANTITY	EST. AMOUNT	EST. QUANTITY	EST. AMOUNT	EST. QUANTITY	EST. AMOUNT	EST. QUANTITY	EST. AMOUNT	EST. QUANTITY	EST. AMOUNT	EST. QUANTITY	EST. AMOUNT
PAVING AND GRADING COSTS															
GrP 1a	2105 Excavation - common & subgrade	cu. yd.	$8.00	3,300	$26,400	4,000	$32,000	3,750	$30,000	4,850	$37,200	350	$2,800	16,050	$128,400
GrP 1d	2106 Subgrade Preparation	road sta.	$500.00	20.72	$10,360	28.27	$14,135	25.58	$12,790	30.23	$15,115	1.20	$600	106	$53,000
GrP 2e	2211 Aggregate Base Class 5 (CV)	cu. yd.	$15.00	1,800	$27,000	2,580	$38,400	2,300	$34,500	2,250	$33,750	190	$2,850	9,100	$136,500
GrP 3a	Mainline Pavement - 5" HMA	sq. yd.	$21.00	6,450	$135,450	7,525	$158,025	7,250	$152,250	7,650	$160,650	800	$16,800	29,675	$623,175
GrP 3b	Mainline - Truck Apron - 10" Concrete	sq. yd.	$100.00	350	$35,000	375	$37,500	375	$37,500	375	$37,500			1,475	$147,500
GrP 4a	Concrete Walk / Trail / Median	sq. yd.	$125.00	1,140	$142,500	1,760	$220,000	1,325	$165,625	1,775	$221,875	55	$6,875	6,055	$756,875
GrP 4b	Bituminous Walk / Trail	sq. yd.	$75.00			2,415	$85,375	1,780	$44,500	755	$18,875			4,750	$118,750
GrP 4c	ADA Pedestrian Curb Ramp - Truncated Domes	sq. ft.	$60.00	130	$7,800	144	$8,640	120	$7,200	130	$7,800	16	$960	540	$32,400
GrP 5	Concrete Curb and Gutter	lin. ft.	$21.00	5,177	$108,717	3,870	$81,270	3,553	$74,613	5,240	$110,040	110	$2,310	17,950	$376,950
GrP 8a	Removals - Pavement (Bituminous)	sq. yd.	$4.00	10,700	$42,800	11,850	$47,400	11,300	$45,200	15,850	$62,600			49,500	$198,000
GrP 8d	Removals - Pavement (Concrete)	sq. yd.	$18.00			300	$5,400	1,300	$23,400					1,600	$28,800
GrP 8e	Removals - Curb & Gutter	lin. ft.	$3.50	3,430	$12,005	2,300	$8,050	350	$1,225	2,420	$8,470			8,500	$29,750
GrP 8f	Removals - Concrete Walk	sq. ft.	$1.50	2,200	$3,300			150	$225	1,850	$2,475			4,000	$6,000
GrP 8g	Removals - Concrete Median	sq. ft.	$5.00	1,150	$5,750	12,525	$62,625	8,675	$43,375	5,350	$26,750			27,700	$138,500
GrP 8h	Removals - Bituminous Walk	sq. ft.	$1.00	1,575	$1,575			200	$200			1,125	$1,125	2,900	$2,900
	SUBTOTAL PAVING AND GRADING COSTS:				**$558,657**		**$768,820**		**$672,603**		**$743,100**		**$34,320**		**$2,777,500**
DRAINAGE, UTILITIES AND EROSION CONTROL															
Dr 5	Drainage - urban	lump sum	$476,000		$93,041		$126,974		$114,866		$135,724		$5,395	1	$476,000
Dr 7	Turf Establishment & Erosion Control	lump sum	$250,000		$48,866		$66,688		$60,329		$71,283		$2,834	1	$250,000
	SUBTOTAL DRAINAGE, UTILITIES AND EROSION CONTROL				**$141,907.000**		**$193,662.000**		**$175,195.000**		**$207,007.000**		**$8,229.000**		**$726,000**
BRIDGE COSTS															
Br 1	Bridge - No. 70011 Modification	lump sum	$900,000				$450,000		$450,000					1	$900,000
	SUBTOTAL BRIDGE COSTS:						**$450,000**		**$450,000**						**$900,000**
SIGNAL AND LIGHTING COSTS															
SGL 4	Mainline Lighting (permanent)	lump sum	$125,000		$24,433		$33,344		$30,164		$35,642		$1,417	1	$125,000
	SUBTOTAL SIGNAL AND LIGHTING COSTS:				**$24,433**		**$33,344**		**$30,164**		**$35,642**		**$1,417**		**$125,000**
SIGNING & STRIPING COSTS															
SGN 1	Mainline Signing (C&D)	lump sum													
SGN 2	Mainline Striping	lump sum	$84,000		$16,419		$22,407		$20,270		$23,952		$952	1	$84,000
	SUBTOTAL SIGNING & STRIPING COSTS:				**$16,419**		**$22,407**		**$20,270**		**$23,952**		**$952**		**$84,000**
	SUBTOTAL CONSTRUCTION COSTS:				**$741,416**		**$1,468,233**		**$1,348,232**		**$1,009,701**		**$44,918**		**$4,612,500**
MISCELLANEOUS COSTS															
M 1	Mobilization	4%	$190,000		$37,138		$50,683		$45,850		$54,176		$2,154	1	$190,000
M 2	Non Quantified Minor Items	20%	$700,000		$136,824		$186,726		$168,921		$199,594		$7,935	1	$700,000
M 8	Traffic Control	3%	$84,000		$16,419		$22,407		$20,270		$23,951		$952	1	$84,000
	SUBTOTAL MISCELLANEOUS COSTS:				**$190,381**		**$259,816**		**$235,041**		**$277,721**		**$11,041**		**$974,000**
ESTIMATED TOTAL CONSTRUCTION COSTS without Contingency:					**$931,797**		**$1,728,049**		**$1,583,273**		**$1,287,422**		**$55,959**		**$5,586,500**
1	Contingency or "risk"	10%			$94,000		$173,000		$159,000		$129,000		$6,000		$561,000
ESTIMATED TOTAL CONSTRUCTION COSTS PLUS CONTINGENCY:					**$1,025,797**		**$1,901,049**		**$1,742,273**		**$1,416,422**		**$61,959**		**$6,147,500**
	OTHER PROJECT COSTS:														
	DESIGN ENG. & CONSTRUCTION ADMIN.	Lump Sum	20%		$206,000		$381,000		$349,000		$284,000		$13,000		$1,233,000
	SUBTOTAL OTHER PROJECT COSTS				**$206,000**		**$381,000**		**$349,000**		**$284,000**		**$13,000**		**$1,233,000**
	TOTAL PROJECT COST				**$1,231,797**		**$2,282,049**		**$2,091,273**		**$1,700,422**		**$74,959**		**$7,380,500**

NOTES No right of way costs assumed.
Minimal impacts assumed to the the gas facility in the SW quadrant of the Adams St/Vierling Dr roundabout, therefore no cost estimate was included.
Assumed existing subbase would be able to be reused with minimal modifications. Assumed 5" of HMA to match as-built plans for the corridor.

Marystown Road Corridor – Funding Need

Funding Requests:

- 2017 LRIP (MnDOT)
- 2020 Federal Regional Solicitation (Federal)
- 2020 Highway Safety Improvement Program (Federal/State)
- 2020 Local Partnership Program (MnDOT)
- 2020 Local Road Improvement Program (MnDOT) - **TBD**
- 2021 Local Trail Connections (Mn DNR) – **TBD**

Marystown Road Corridor – WHAT, WHO, HOW and WHEN

Strategy and Approach Consensus?

1. Agree on issues.
2. Agreement on on Needed Improvements
    1. Interim (possible temp/wood pole traffic signal system at CR 16/15)
    2. Ultimate (Corridor Study layout with roundabouts and trail)
3. City lead the charge
4. Funding and partner seeking
5. Keep working on delivering the project **now – keep priority**…

Marystown Road Corridor – WHAT, WHO, HOW and WHEN

Next Steps:

1. Short Term (2021-22)
   a) Public Outreach – Marystown Road Corridor Study Concept (4 roundabouts/trails)
   b) CIP – Prioritize this project in CIP as “1” (safety issue, must have)
   c) County Outreach – City to present Corridor Study directly to County Commission
   d) County Road 15/16 intersection
      - Request County to perform Traffic Signal Warrant Analysis
      - If warrants met, install temporary wood-pole traffic signal system (interim only)
2. Long Term (+1 years…)
   a) Continue funding seeking
   b) Turnback Agreement Amendment – City vs. County jurisdictional termini of Marystown vs. CR 15. Revise to interchange location OR to CR 16.
   c) Promote and keep this project high priority

Marystown Road Corridor – Why?

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