

**CITY OF PLYMOUTH
AGENDA
SPECIAL COUNCIL MEETING
FEBRUARY 23, 2016, 5:30 p.m.
MEDICINE LAKE CONFERENCE ROOM**

1. CALL TO ORDER

2. TOPICS

- A. Crosswalk Implementation Plan
- B. Set Future Study Sessions

3. ADJOURN

**SPECIAL
COUNCIL MEETING**

February 23, 2016

To: Dave Callister, City Manager

Prepared by: Jim Renneberg, City Engineer

Reviewed by: Doran Cote, Public Works Director

Item: **Crosswalk Improvement Implementation Plan**

1. ACTION REQUESTED:

Discuss the crosswalk improvement implementation plan.

2. BACKGROUND:

On September 8, 2015, the crosswalk improvement implementation plan was discussed at a Special Council Meeting. Staff recommended enhancing four crosswalks near schools and parks, and eliminating eight marked crosswalks on roadways with speeds higher than 40 mph and eight marked crosswalks on lower volume roadways or are near other marked crosswalks.

Based on feedback from the Council, staff developed criteria for use of the Rectangular Rapid Flashing Beacon's (RRFB). If an existing crosswalk meets six or more of the eight following criteria, then an RRFB would be considered for installation. Not having a uniform approach to installing crosswalk enhancements could result in confusion, which could result in less effective crosswalks.

1. Speed limit is greater than or equal to 40 mph
2. Multi-lane street
3. High volume street (greater than 10,000 vehicles per day)
4. Midblock crossing
5. School or park directly adjacent to crossing
6. Another crosswalk treatment does not exist
7. Street is not a pending CIP project
8. Crosswalk is located on a city maintained street

Applying the criteria and other considerations to the marked crosswalks that were presented at the previous Special Council Meeting, the same crossings were reevaluated as shown below in italics.

A. The following four marked crosswalks were originally recommended for an RRFB.

1. *Vicksburg Lane @ 41st Avenue (Plymouth Creek Elementary), Figure 1. The school crosswalk is adjacent to a trail crossing 500 feet south, item B.4 below. On Vicksburg Lane, there is a trail crossing, a school crossing and two controlled intersections within 1,900 feet in this area. Additionally, there are flashing beacons that operate when school starts and ends. Also installed are the appropriate street signs.*

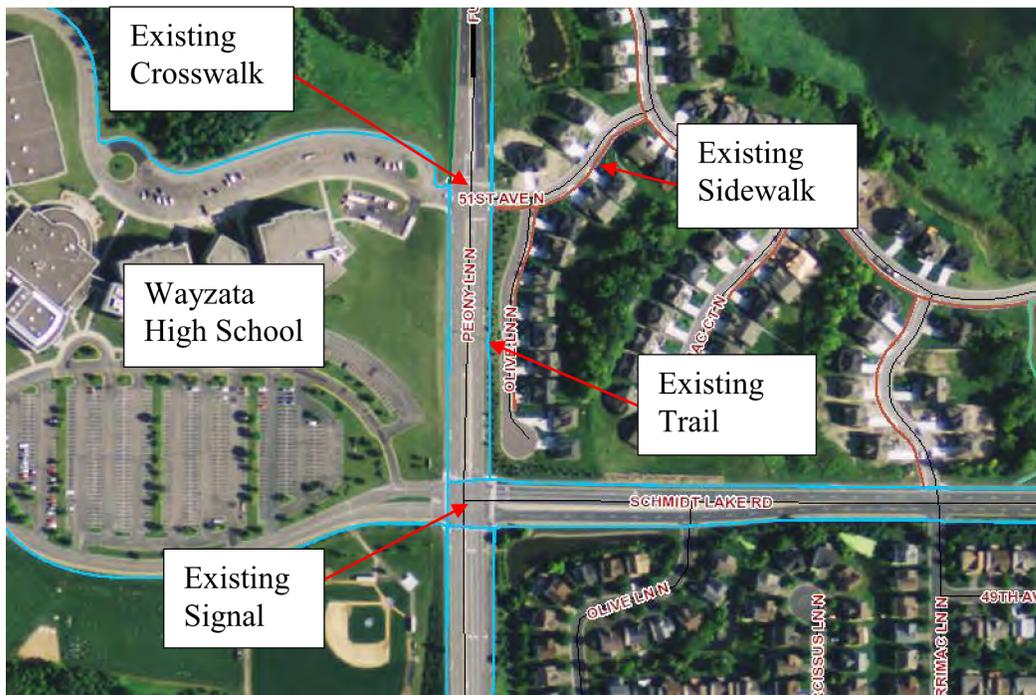


There are concerns with eliminating either crossing. The trail crossing is a higher volume crossing while the school crosswalk is used on occasion by students walking to school and during events. There is also a concern about the effectiveness of adding RRFBs within 500 feet of each other. Therefore, staff is recommending to trim trees near the trail crossing and install a street light at the trail crossing to enhance the crossing at night. The installation cost per street light is estimated at \$3,500. The crossing at 41st Avenue would remain as is.

2. Fernbrook Lane @ Dallas Lane (Plymouth Creek Park).
-5 (Nos 1, 2, 5, 6, 8) out of 8 criteria met. With it being a pending CIP project, the City Council could direct staff to install an RRFB in advance of the overlay project, consider it at the time of the project or the crosswalk could be considered for removal in 2018 with the project.
 3. Schmidt Lake Road @ Orchid Lane (Providence Academy)
-5 (Nos 1, 2, 3, 6, 8) out of 8 criteria met. With it being a pending CIP project, the City Council could direct staff to install an RRFB in advance of the overlay project, consider it at the time of the project or the crosswalk could be considered for removal in 2017 with the project.
 4. Old Rockford Road @ Jewel Lane (Kimberly Lane Elementary School)
-3 (Nos 1, 5, 8) out of 8 criteria met. RRFB not recommended.
- B. The eight marked crosswalks on roadways with speeds higher than 40 mph below were originally recommended to be eliminated.
1. County Road 47 @ Yucca Lane, Figure 2.
-2 (Nos 1, 7) out of 8 criteria met. RRFB not recommended. Since it is located on a County Road, leave crosswalk as is.
 2. Fernbrook Lane @ 44th Place, Figure 3.
-4 (Nos 1, 2, 6, 8) out of criteria 8 met. With it being a pending CIP project, the City Council could direct staff to install an RRFB in advance of the overlay project, consider it at the time of the project or the crosswalk could be considered for removal in 2018 with the project.
 3. Northwest Boulevard @ 44th Avenue, Figure 4.
-5 (1, 2, 3, 6, 7) out of 8 criteria met. RRFB not recommended. Since it is located on a County Road, leave crosswalk as is.

4. Vicksburg Lane approximately 500 feet south of 41st Avenue, Figure 1. See item A.1 above.
5. Northwest Boulevard @ 37th Avenue, Figure 5.
-5 (Nos 1, 2, 3, 6, 7) out of 8 criteria met. RRFB not recommended. Since it is located on a County Road, leave crosswalk as is.
6. Niagara Lane at 23rd Avenue, Figure 6.
Since this crosswalk was likely installed for the skate park that no longer exists at the Central Treatment Plant, this crosswalk is recommended for removal.
7. Niagara Lane at 25th Avenue, Figure 6.
-6 (Nos 1, 2, 3, 6, 7, 8) out of 8 criteria met. RRFB recommended.
8. Vicksburg Lane at 25th Avenue, Figure 6.
-6 (Nos 1, 2, 4, 6, 7, 8) out of criteria 8 met. RRFB recommended.

There is one additional marked crosswalk that will meet the RRFB criteria. The Peony Lane and 51st Avenue crosswalk wasn't originally considered because it has a median island that is an enhancement itself. This crosswalk would meet 6 out of the 8 RRFB criteria, which includes the projected volumes of Peony Lane now that the expansion project is complete.



Originally, there were eight marked crosswalks that were considered for removal on low volume roadways or near other marked crosswalks. Staff is proposing to leave these as is and review all existing marked crosswalks when the street is being considered for an overlay. If a marked crosswalk is proposed to be eliminated with the project, this information will be presented to the Council when the plans are considered for approval.

In summary, staff originally recommended four RRFB's to be installed and the recommendation now is to install three. The recommendation to eliminate crosswalks on high speed roadways went from eight

originally to now one. Finally, eight crosswalks were recommended for removal on low volume roadways and all are now recommended to remain as is.

3. Budget Impact

The 2016-2020 Capital Improvement Program includes \$50,000 to upgrade crosswalk signage. The equipment cost for the RRFB is \$7,500 with an estimated installation cost of \$1,000 per crossing. Purchasing and installing three RRFB's that meet the criteria would cost an estimated \$25,500. Removal of the crosswalk paint at one crosswalk is estimated at \$800. Tree trimming (\$500) and a street light (\$3,500) at Vicksburg Lane, 500 feet south of 41st Avenue is estimated \$4,000. The total estimated cost is \$30,300 and the funding for this project would come from the Street Reconstruction Fund (funded by the Council from General Fund Surplus).

4. ATTACHMENTS:

September 8, 2015 Crosswalk Safety Memorandum
Existing Crosswalks Map
Crosswalk Figures

To: Dave Callister, City Manager

Prepared by: Jim Renneberg, P.E., City Engineer

Reviewed by: Doran Cote, P.E., Public Works Director

Item: **Crosswalk Improvement Implementation Plan**

**SPECIAL
COUNCIL MEETING**

September 8, 2015

1. ACTION REQUESTED:

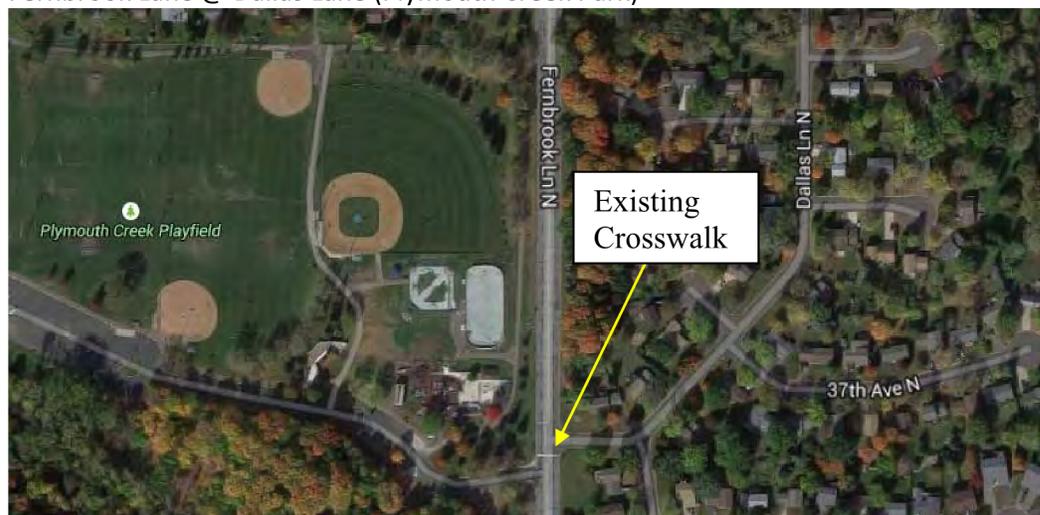
Discuss the crosswalk improvement implementation plan.

2. BACKGROUND:

On January 14, 2014, crosswalk signing and markings was discussed at a Special Council Meeting and attached is the memorandum prepared for that meeting. Discussed in the memorandum were recommendations to install facility enhancements or remove certain marked crosswalks throughout the city. Below is a summary of the existing marked crosswalks that are considered and attached are figures that show the area surrounding the crosswalks.

- A. Install Rectangular Rapid Flashing Beacon (RRFB) at four locations that are at uncontrolled intersections on a 4 lane roadway with speeds 40 mph or higher that are either in school zones or directly adjacent to city parks with playground/ball fields/etc. This would be consistent with other flashing warning signs already in place in the City near Central Middle School, Zachary Elementary School and Lake Camelot Park.

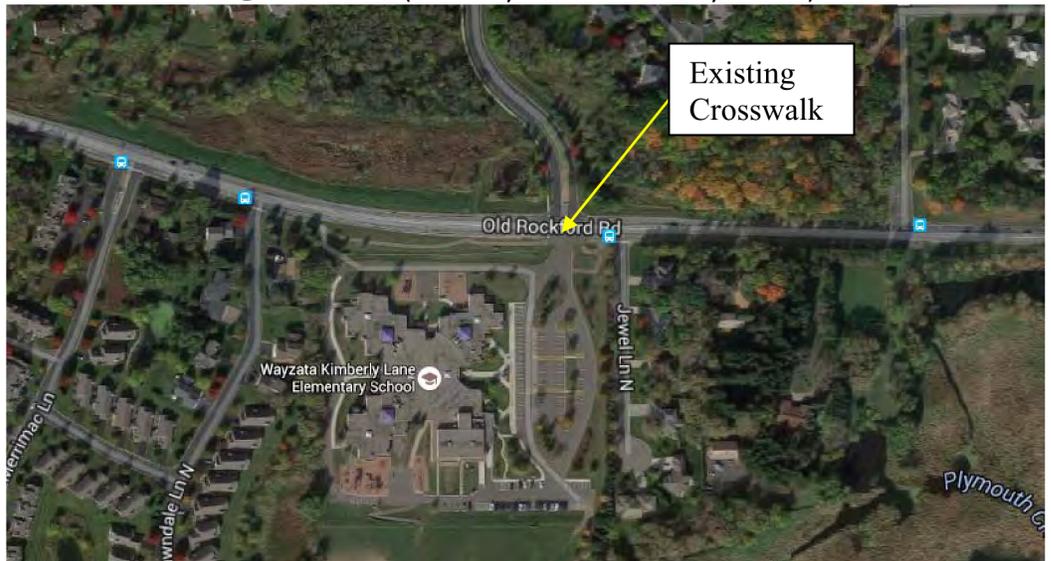
1. Vicksburg Lane @ 41st Avenue (Plymouth Creek Elementary), Figure 1.
2. Fernbrook Lane @ Dallas Lane (Plymouth Creek Park)



3. Schmidt Lake Road @ Orchid Lane (Providence Academy)



4. Old Rockford Road @ Jewel Lane (Kimberly Lane Elementary School)



The equipment for the RRF's cost \$7,500 plus installation for each crossing and attached is a brochure for the units. The units would be push-button operated.

Attached is an article from the American Public Works Association (APWA) Reporter magazine that evaluated the RRFB. The article states that when the RRFB was activated, the motorists yielding to trail traffic was 50%, compared to 32% when the RRFB was not activated. The article concluded that the RRFB had a positive effect on motorist yield rates and awareness.

- B. Eliminate paint and signage on eight crosswalks on roadways with speeds higher than 40 mph. The attached Federal Highway Administration (FHWA) guidelines state these roadways should not have marked crosswalks without a substantial crossing improvement. Pedestrians could still cross at these locations, but would likely wait for a gap between vehicles to cross safely.

- 4. County Road 47 @ Yucca Lane, Figure 2. At County Road 47 and Dallas Lane there is a push button flashing beacon for the crosswalk, which is recommended to remain.

5. Fernbrook Lane @ 44th Place, Figure 3. There is no trail or pedestrian ramps on the east side of Fernbrook Lane.
 - In the last few months, staff has received multiple requests for additional crosswalks along Fernbrook, north of County Road 9 to utilize Plymouth Metrolink. As a result of the requests, staff explored running a bus on both sides of Fernbrook Lane to eliminate the need for pedestrians to cross the road. To do so would cost an additional \$1,000 to \$2,000 a year. A recent count tallied nine people that were picked up on Fernbrook Lane between County Road 9 and Schmidt Lake Road. That said, staff does not think it is cost effective to run the bus on both sides of Fernbrook Lane.
6. Northwest Boulevard @ 44th Avenue, Figure 4. There are trails on both sides of Northwest Boulevard and signals at 42nd Place and Schmidt Lake Road. This crosswalk has not been restriped in many years and is almost completely faded.
7. Vicksburg Lane approximately 500 feet south of 41st Avenue, Figure 1. There are trails on both sides of Vicksburg Lane with signals at Rockford Road and Old Rockford Road. Additionally, a RRF is recommended at 41st Ave and Vicksburg Lane.
8. Northwest Boulevard @ 37th Avenue, Figure 5. There are trails on both sides of Northwest Boulevard with signals at County Road 9 and Medicine Lake Drive.
9. Niagara Lane at 23rd Avenue, Figure 6. This may have been installed when the skate park was located near the Central Water Treatment Plant. The skate park has been relocated to Plymouth Creek Park.
10. Niagara Lane at 25th Avenue, Figure 6. Install "Trail Crossing" sign since it connects a trail on each side of the street.
11. Vicksburg Lane at 25th Avenue, Figure 6. Install "Trail Crossing" sign since it connects a trail on each side of the street.

It is recommended to remove the paint by sandblasting at an estimated cost of \$700 per crossing. If the City Council wishes to keep any as marked crosswalks, RRFB's should be considered at each crossing due to the high speeds and/or multi-lane characteristics of the roadways.

- C. Eliminate paint and signage on eight marked crosswalks. The following locations are lower volume roadways or are near other crosswalks. Additionally, like any warning traffic control sign, crosswalks may not work as effectively if they are overused or placed at locations with low pedestrian activity.
 1. Cheshire Parkway @ 52nd and 54th Avenues, Figure 7. Trails exist on both sides of the road and a marked crosswalk is recommended to remain at Cheshire Parkway @ 53rd Avenue.
 2. Valley Forge Lane 150 feet south of 48th Avenue, Figure 8. An unmarked crossing would be consistent with the other crossings in the neighborhood. Install "Trail Crossing" sign since it connects a trail on each side of the street.
 3. Old Rockford Road 500 feet west of Larch Lane, Figure 9. Crosswalk is located in a dead end street with only three driveways beyond the crosswalk.

4. 40th Avenue 150 feet west of Forestview Lane, Figure 10. An unmarked crossing would be consistent with the other crossings in the neighborhood. Install “Trail Crossing” sign since it connects a trail on each side of the street.
5. 25th Avenue 200 feet west of Walnut Grove Lane, Figure 11. An unmarked crossing would be consistent with the other crossings in the neighborhood. Has not been restriped after the recent overlay project. Install “Trail Crossing” sign since it connects a trail on each side of the street.
6. 19th Avenue 400 feet west of Shadyview Lane, Figure 12. There is no trail on the north side of 19th Avenue
7. 6th Avenue 400 feet west of Revere Lane, Figure 13. No public trails or sidewalks near this crossing. It appears that it connects two businesses.

Since these are on lower volume roadways, it is recommended to let the paint fade until they are gone and then the signs would be removed or switched. If the City Council wishes to keep any of these crosswalks, no additional enhancements would be necessary other than continuing to stripe the crosswalks and replace the signs as necessary.

On July 28, 2015, the City Council approved the Vicksburg Lane Mill and Overlay project between Gleason Lake Drive and County Road 6. Approved with the project is to restripe Vicksburg Lane south of 12th Avenue as a three lane roadway. At the Luce Line Trail crosswalk, there are yellow bollards as an enhancement to the crossing. With the three lane configuration, the shoulders and bollards would be eliminated. Since this is a higher volume roadway and trail there was a concern with the safety of the crossing and the City Council approved the installation of a RRFB. There is an existing pedestrian actuated flashing crosswalk sign on Vicksburg Lane at Central Middle School.

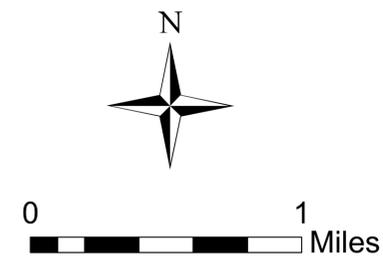
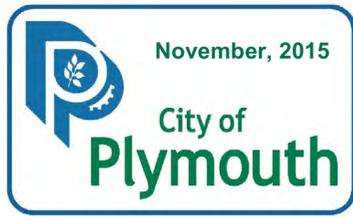
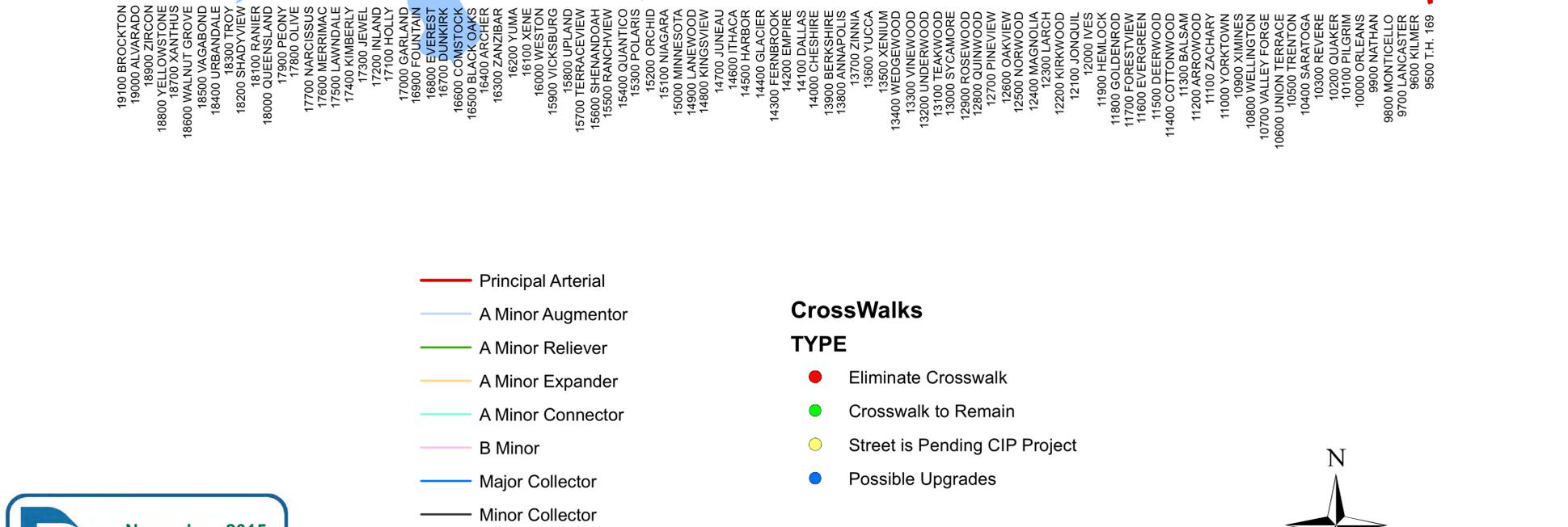
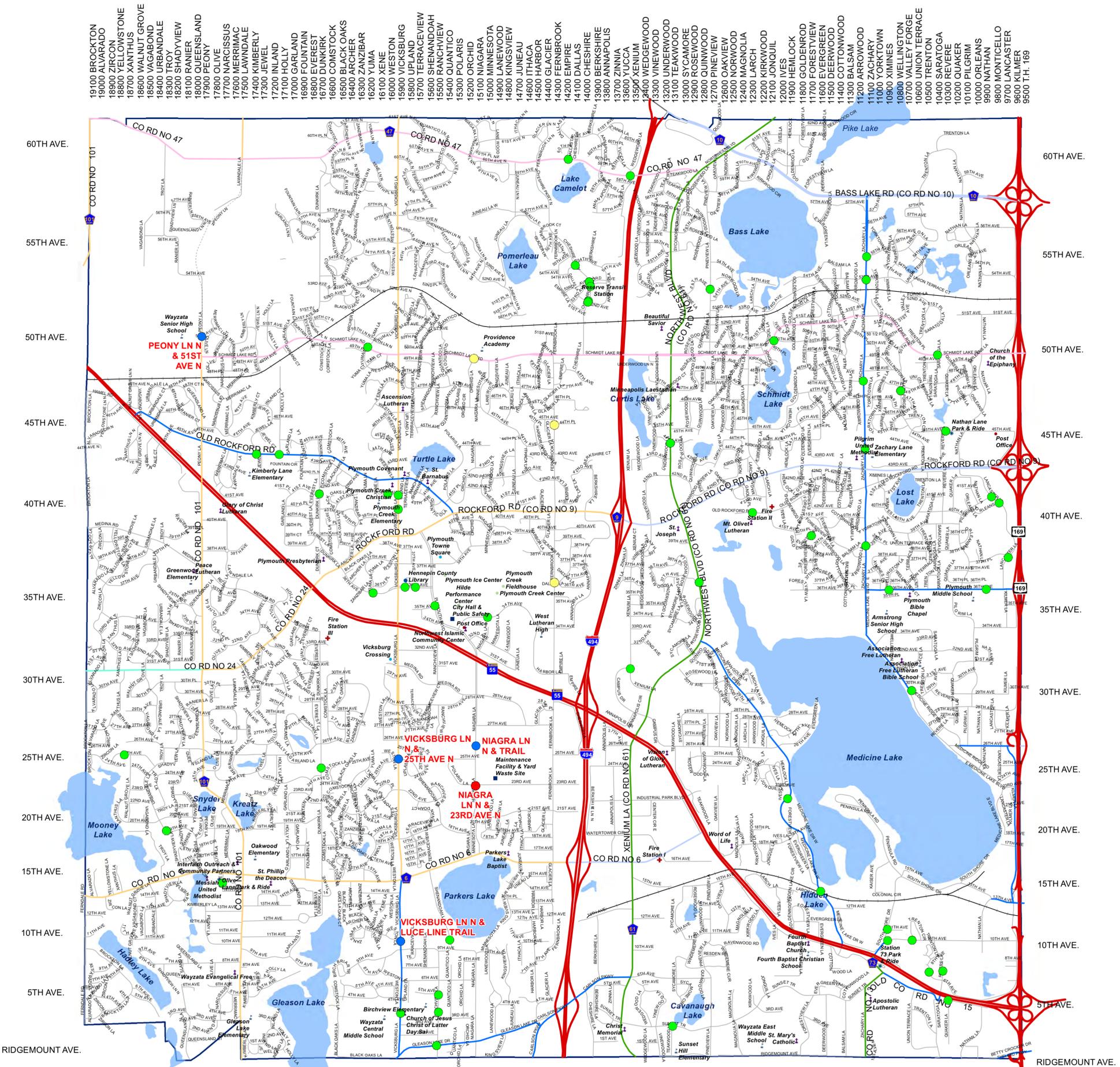
3. Budget Impact

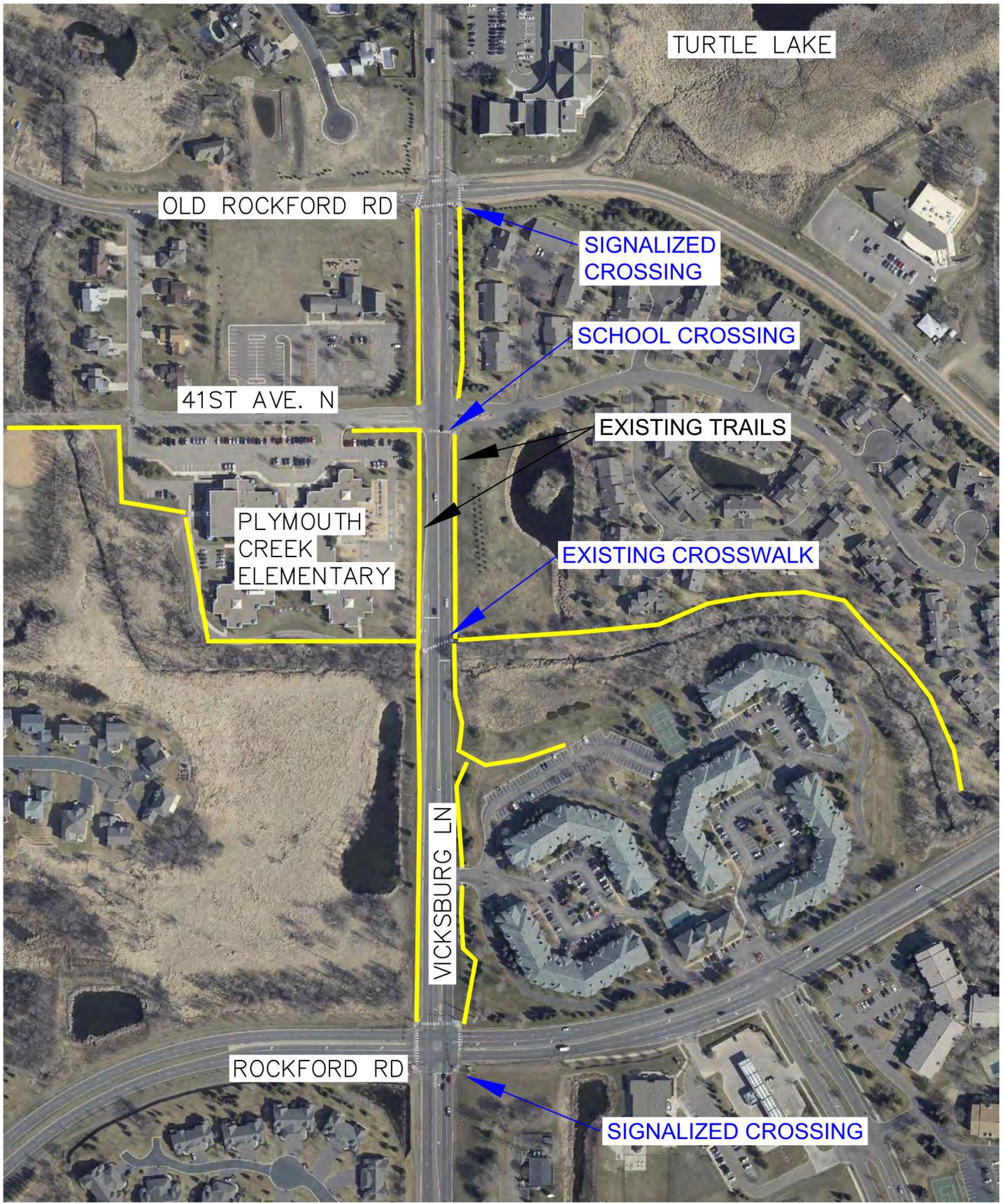
The 2015-2019 Capital Improvement Program includes \$50,000 to upgrade crosswalk signage. The equipment cost for the RRFB is \$7,500 with an estimated installation cost of \$1,000 per crossing. Purchasing and installing five RRFB’s would cost an estimated \$42,500. Removal of the crosswalk paint at seven crosswalks by sandblasting is estimated at \$5,600. The total estimated cost is \$48,100 and the funding for this project would come from the Street Replacement Fund.

4. ATTACHMENTS:

- Crosswalk Safety Memorandum
- RRFB Brochure
- FHWA Guidelines, Table 11
- Existing Crosswalks Map
- Crosswalk Figures
- APWA Reporter Article

Existing Crosswalks at Uncontrolled Intersections





VICKSBURG LANE
CROSSWALK
ADT on Vicksburg Lane: 11,400 VPD



FIGURE 1



CITY OF
PLYMOUTH

COUNTY ROAD 47
CROSSWALK

ADT on County Road 47: 6,200 VPD



FIGURE 2



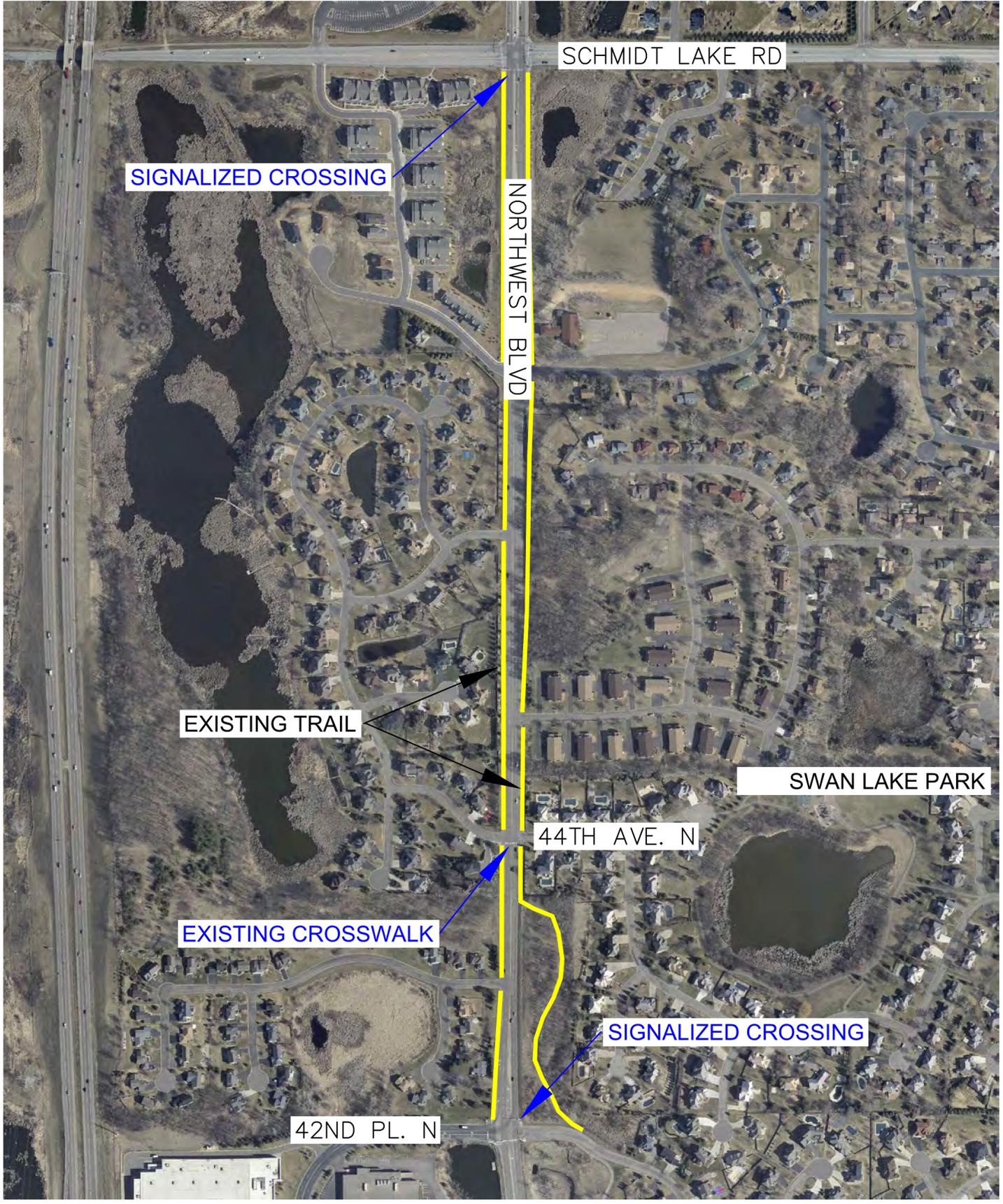
CITY OF
PLYMOUTH

FERNBROOK LANE CROSSWALK

ADT on Fernbrook Lane: 7,800 VPD



FIGURE 3

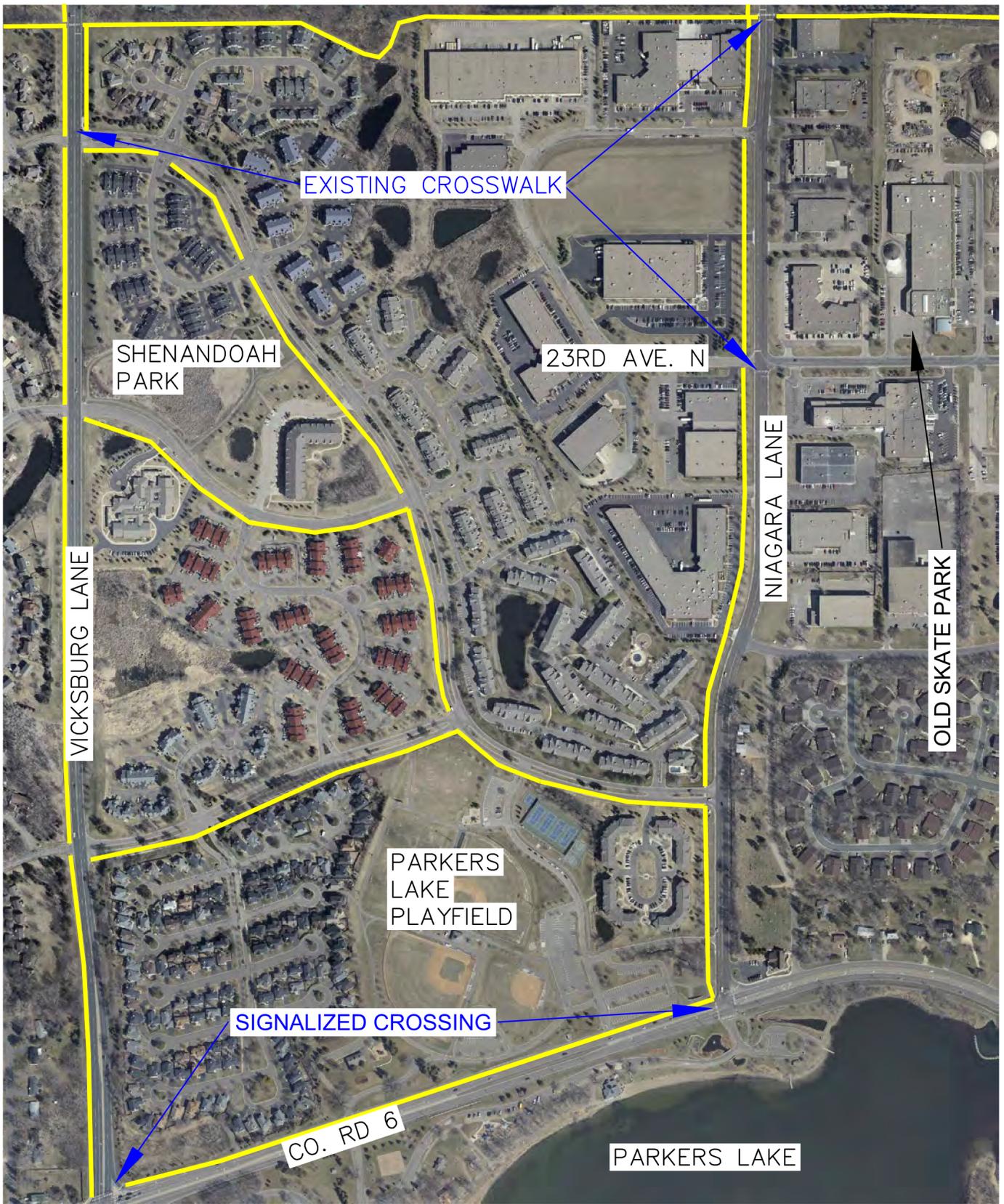


NORTHWEST BOULEVARD
 CROSSWALK
 ADT on Northwest Boulevard: 13,800 VPD



FIGURE 4





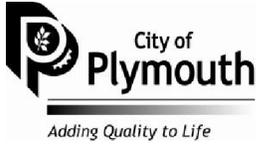
CITY OF
PLYMOUTH

VICKSBURG AND NIAGARA LANES
CROSSWALK

ADT on Vicksburg and Niagara Lanes: 17,400 VPD
ADT N of 23rd Ave: 9,000 VPD, ADT S of 23rd Ave: 7,500 VPD



FIGURE 6



Agenda
Number: **2B**

**SPECIAL
COUNCIL MEETING**

February 23, 2016

To: Mayor and Council

Prepared by: Dave Callister, City Manager

Reviewed by:

Item: Set Future Study Sessions

Currently, there are no study sessions to be scheduled. However, Councilmembers may add requests or schedule study session topics.

Calendars are attached to assist with scheduling of study sessions.

Pending Study Session Topics (at least 3 Council members have approved the following study items on the list):

Trail/sidewalk snow removal routes for 2016-2017 (JJ, MB, JWosje) *(Later in 2016)*

Other Council requests for Study Session Topics:

None at this time.

Staff requests for Study Session Topics:

None at this time.

March 2016

SUN	MON	TUES	WED	THUR	FRI	SAT
		1 PRECINCT CAUCUSES	2 CANCELED PLANNING COMMISSION MEETING Council Chambers	3	4	5 11:00 AM-2:00 PM Spring Bridal Expo Plymouth Creek Center
6	7	8 5:30 PM SPECIAL COUNCIL MEETING Group Home Licensure Medicine Lake Room 7:00 PM REGULAR COUNCIL MEETING Council Chambers	9 7:00 PM ENVIRONMENTAL QUALITY COMMITTEE (EQC) MEETING Medicine Lake Room	10	11	12
13 1:00 PM - 4:00 PM Healthy Living Fair Plymouth Creek Center Daylight Savings Time Begins	14	15	16 7:00 PM PLANNING COMMISSION MEETING Council Chambers	17	18	19
20	21	22 5:30 PM SPECIAL COUNCIL MEETING Appeal process for massage therapy licenses and Ordinance amending Section 2.07 of the City Charter concerning Council vacancies Medicine Lake Room 7:00 PM REGULAR COUNCIL MEETING Council Chambers	23	24 7:00 PM HOUSING AND REDEVELOPMENT AUTHORITY (HRA) MEETING Medicine Lake Room	25	26
27	28	29	30	31		

Modified on 02/18/16

CHANGES ARE MADE IN RED

April 2016

SUN	MON	TUES	WED	THUR	FRI	SAT
					1	2
3	4	5	6 7:00 PM PLANNING COMMISSION MEETING Council Chambers	7	8 6:00 PM - 9:00 PM PLYMOUTH HOME EXPO Plymouth Creek Center	9 9:00 AM - 1:00 PM PLYMOUTH HOME EXPO Plymouth Creek Center
10	11	12 7:00 PM REGULAR COUNCIL MEETING Council Chambers	13 7:00 PM ENVIRONMENTAL QUALITY COMMITTEE (EQC) MEETING Medicine Lake Room	14	15 Time Varies PRIMAVERA Plymouth Fine Arts Council Show Plymouth Creek Center	16 Time Varies PRIMAVERA Plymouth Fine Arts Council Show Plymouth Creek Center
17 Time Varies PRIMAVERA Plymouth Fine Arts Council Show Plymouth Creek Center	18	19 6:00 PM SPECIAL COUNCIL MEETING Economic Development Authority organization Medicine Lake Room	20 7:00 PM PLANNING COMMISSION MEETING Council Chambers 4:30 - 7:00 PM 2016 Hennepin County Open Book on Valuation Medicine Lake Room	21	22	23
24	25	26 5:30 PM SPECIAL COUNCIL MEETING Medical cannabis ordinance Medicine Lake Room 7:00 PM REGULAR COUNCIL MEETING Council Chambers	27	28 7:00 PM HOUSING AND REDEVELOPMENT AUTHORITY (HRA) MEETING Medicine Lake Room	29	30

Modified on 02/09/16

CHANGES ARE MADE IN RED

May 2016

SUN	MON	TUES	WED	THUR	FRI	SAT
1	2	3 5:30 PM SPECIAL COUNCIL MEETING Comprehensive Plan draft vision, goals, and policies Medicine Lake Room	4 7:00 PM PLANNING COMMISSION MEETING Council Chambers	5	6	7
8	9	10 7:00 PM REGULAR COUNCIL MEETING Council Chambers	11 7:00 PM ENVIRONMENTAL QUALITY COMMITTEE (EQC) MEETING Medicine Lake Room	12 7:00 PM PARK & REC ADVISORY COMMISSION (PRAC) MEETING Council Chambers	13	14
15	16	17 6:00 PM SPECIAL COUNCIL MEETING Public Safety update Medicine Lake Room	18 7:00 PM PLANNING COMMISSION MEETING Council Chambers	19	20	21 10:00 AM - 2:00 PM BARK IN THE PARK Hilde Performance Center
22	23	24 7:00 PM REGULAR COUNCIL MEETING Council Chambers	25	26 7:00 PM HOUSING AND REDEVELOPMENT AUTHORITY (HRA) MEETING Medicine Lake Room	27	28
29	30  MEMORIAL DAY Observed CITY OFFICES CLOSED	31				

Modified on 02/09/16

CHANGES ARE MADE IN RED

3400 Plymouth Boulevard
Plymouth, MN 55447

OFFICIAL CITY CALENDAR

Phone: 763-509-5000
Fax: 763-509-5060

June 2016

SUN	MON	TUES	WED	THUR	FRI	SAT
			1 7:00 PM PLANNING COMMISSION MEETING Council Chambers	2	3	4
5	6	7	8 7:00 PM ENVIRONMENTAL QUALITY COMMITTEE (EQC) MEETING Medicine Lake Room	9 7:00 PM PARK & REC ADVISORY COMMISSION (PRAC) MEETING Plymouth Creek Center	10	11
12	13	14 7:00 PM REGULAR COUNCIL MEETING Council Chambers	15 7:00 PM PLANNING COMMISSION MEETING Council Chambers	16	17	18
19	20	21	22	23 7:00 PM HOUSING AND REDEVELOPMENT AUTHORITY (HRA) MEETING Medicine Lake Room	24	25 8:00 AM Music in Plymouth 5K Fun Run
26	27	28	29 5:00 - 10:15 PM Music in Plymouth Hilde Performance Center	30		

Modified on 12/29/15

CHANGES ARE MADE IN RED