

# Sault Area Middle School

Sault Ste Marie Area Public Schools

Sault Ste Marie, MI



## Safe Routes to School

**MICHIGAN STATE**  
**UNIVERSITY**

Final Report—2018



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# Preface

This report was prepared by Michigan State University as part of a technical assistance agreement with the local Safe Routes to School (SRTS) committee for Sault Area Middle School. Its purpose is to assist the local committee with developing a SRTS action plan and identify eligible projects for funding from the Michigan Department of Transportation (MDOT). Funding for this project was supported by a grant from MDOT in cooperation with the Michigan Fitness Foundation.

SRTS was created by Section 1404 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which was signed into law in August 2005. As a result, states have dedicated dollars to help with infrastructure improvements and programming to encourage and enable students to safely roll, walk and bicycle to school. Infrastructure grants cover built environment improvements such as sidewalks, crosswalks, bump-outs, etc. Non-infrastructure grants are for programming that encourages walking and biking to school.

MDOT manages Michigan's SRTS program with programmatic support from the Michigan Fitness Foundation. The purpose of Safe Routes to School programs are to:

- ◇ Enable and encourage children, including those with disabilities, to walk, bike, and roll to school;
- ◇ Make walking, biking and rolling to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; and
- ◇ Facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools.

For more information about Michigan's SRTS program, go to [saferoutesmichigan.org](http://saferoutesmichigan.org).





# Introduction



# Local Planning Team

## Michigan State University Planning Team

The Michigan State University (MSU) College of Engineering and School of Planning, Design and Construction (SPDC), in cooperation with MSU Extension, along with the Michigan Fitness Foundation and the Michigan Department of Transportation (MDOT) are responsible in assisting interested schools with developing a Safe Routes to School action plan that includes design alternatives. The College of Engineering team is led by Tim Gates, with research assistants Alex Mullen, Jacob Swanson, and Han Zheng. The SPDC team is led by Wayne Beyea with research assistants Steven Stapleton, Brandon Chaney and Doug Powers.

## Local Planning Team

Tim Talentino—City Commissioner

Timothy D. Hall, ED.D.—Superintendent

Diane Chevillot—Washington Elementary School Principal

Edward Chevillot—Lincoln Elementary School Principal

Jessica Rondeau—Sault Area Middle School Principal

Linda Basista—City Engineer

Special thanks to Jessica Rondeau for coordinating the local SRTS effort



# SRTS Planning Process

The SRTS planning process at Sault Area Middle School was initiated with a community input meeting, which gave parents, teachers and administrators an opportunity to voice their thoughts and concerns about the current conditions of walking and biking routes near the school and throughout the neighborhood. Additional input was generated through a walking audit, which assessed infrastructure and environmental issues that students may encounter on their way to school. Observations made during the audit helped to target specific areas that need immediate attention.

A series of recommendations were drafted with the intention of implementing the future vision for the school voiced at the initial community input meeting. In addition to these planning recommendations, design images and engineering drawings were created to visualize physical improvements to sidewalks and streets. These recommendations and design concepts were presented at a second community input meeting. Following the second community meeting, the team drafted a final comprehensive report, presented at a third and final meeting.

This process resulted in the creation of a finalized action plan which demonstrates the necessary requirements to seek grants for priority infrastructure improvements and to help implement programmatic recommendations.

Safe Routes to School uses guiding principles when developing a framework to increase safe walking, biking, and rolling practices as well as student health and fitness. All SRTS programmatic and infrastructural recommendations are based on the following five “E’s:”

**EDUCATION** – Providing students and the community with the skills to walk and bicycle safely, educating them about benefits of walking and bicycling, and teaching them about the broad range of transportation choices.

**ENCOURAGEMENT** – Generating enthusiasm and increased walking and bicycling for students through events, activities, and programs.

**ENFORCEMENT** – Deterring unsafe traffic behaviors and encouraging safe habits by people walking, bicycling and driving in school neighborhoods and along school routes.

**EQUITY** – Ensuring that Safe Routes to School initiatives are benefiting all demographic groups, with particular attention to ensuring safe, healthy, and fair outcomes for low-income students, students of color, students of all genders, students with disabilities, and others.

**ENGINEERING** – Creating physical improvements to streets and neighborhoods that make walking and bicycling safer, more comfortable, and more convenient.

(<https://www.saferoutespartnership.org>)



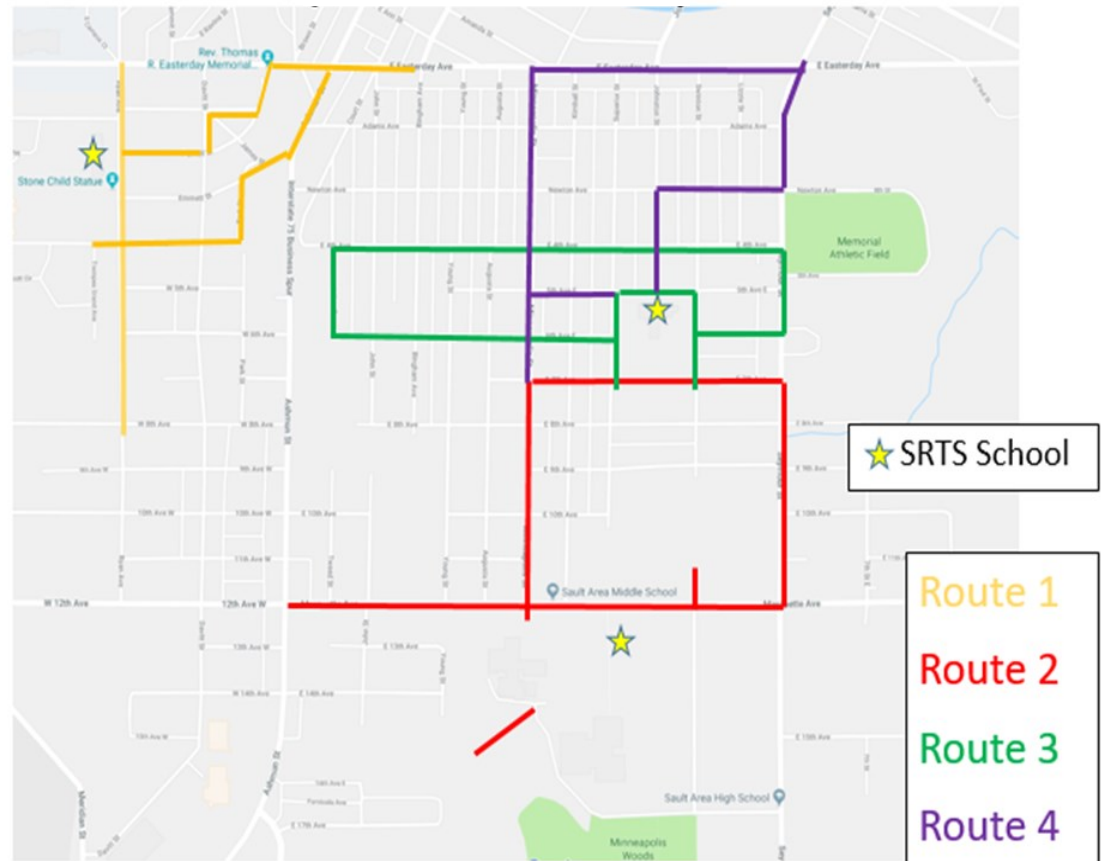
## Community Input

# Walking Audit Summary

On September 13, 2018, a group of local parents and teachers worked alongside technical assistants from Michigan State University to conduct a walking audit for Sault Ste Marie Area Public Schools. This exercise was designed to document priority routes and their conditions, and assist the schools in identifying the issues that impact students traveling to and from campus. Engineers from the MSU SRTS team analyzed the locations of current student households around the schools and determined four likely routes to the school campuses.

Walking audit participants were divided into four groups that followed designated priority routes and were tasked with recording issues they found while walking. The participants were also asked to capture the points of interest with photos illustrating the concerns. Following the walking audit, the groups reconvened in the library to discuss the most notable and serious issues encountered on their walk. Many of the comments revolved around lack of crosswalk safety, poor sidewalk maintenance, and sidewalk connectivity. The following pages chronicle some of the pictures and comments made by walking audit participants.

## Sault Ste. Marie Walking Audit Routes





# Walking Audit Observations

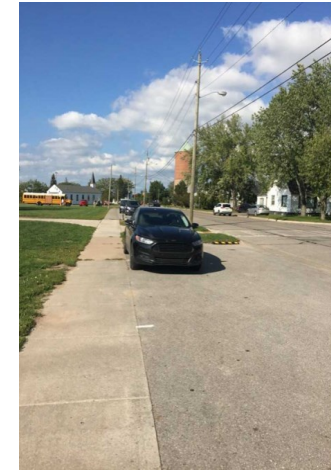
## Walking Route #1:



Concern: No crosswalk  
(Ryan)



Concern: Low hanging  
branches (Ryan)



Concern: No separation  
between pedestrians and  
motorists (Easterday)

## Walking Route #2:



Concern: Low hanging  
branches (Seymour)



Concern: Sidewalk too  
narrow (Minneapolis)



Concern: Sidewalk leads to a  
narrow footpath inaccessible  
to wheelchairs (Marquette)

# Walking Audit Observations

## Walking Route #3:



Concern: Poor sidewalk condition (6th)



Concern: Overgrown foliage (Seymour)



Concern: No crosswalk (Superior)

## Walking Route #4:



Concern: Damaged sidewalk (near 912 Seymour)



Concern: Parked vehicle/walker interference, e.g. truck hitch hazard (near 1009 Johnston)

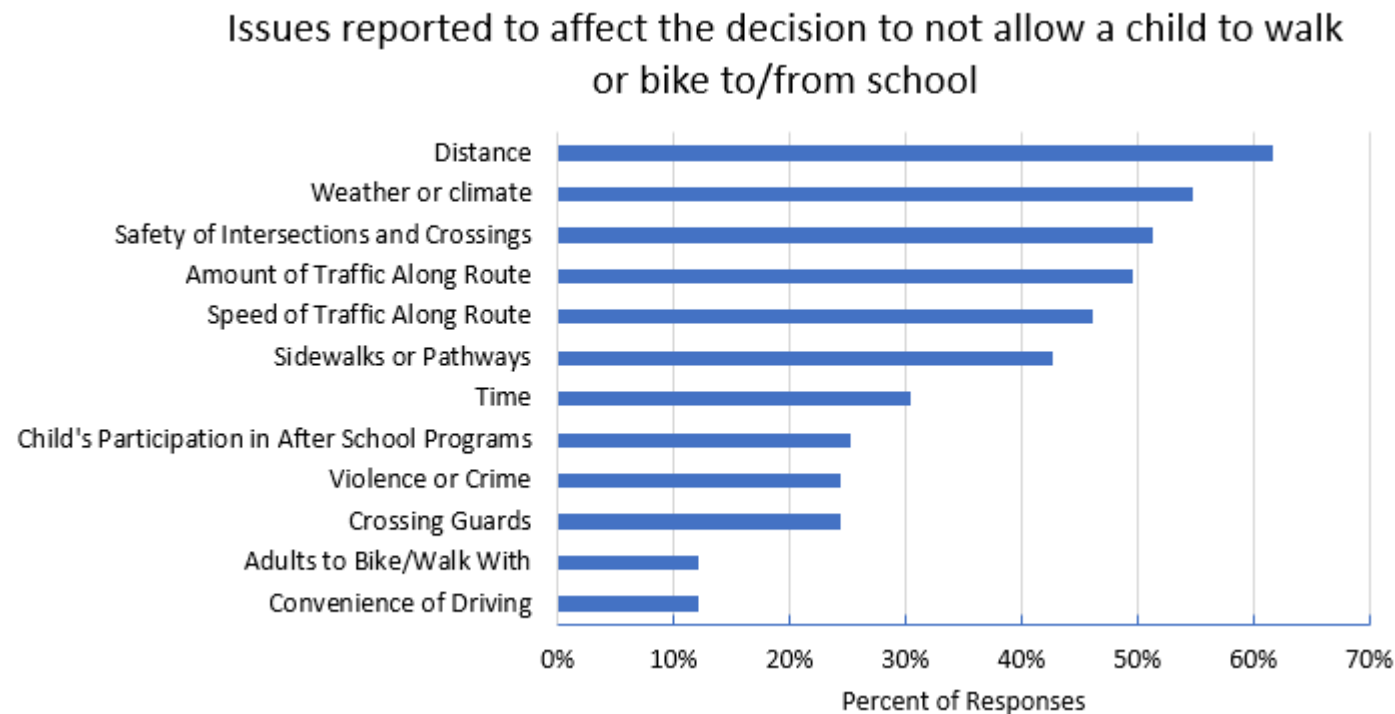


Concern: Abandoned building (Easterday)



# Sault Area Middle School Surveys

Parents of Sault Area Middle School students were surveyed about the travel behavior of their child to and from school. The survey was administered online through the National Center for SRTS and parents were able to complete the questions from home. Over 60% of parents attributed their decision to not allow their child to walk or bike to school to distance. Other concerns commonly cited were weather, safety of intersections and crossings and the amount and speed of traffic along the route.

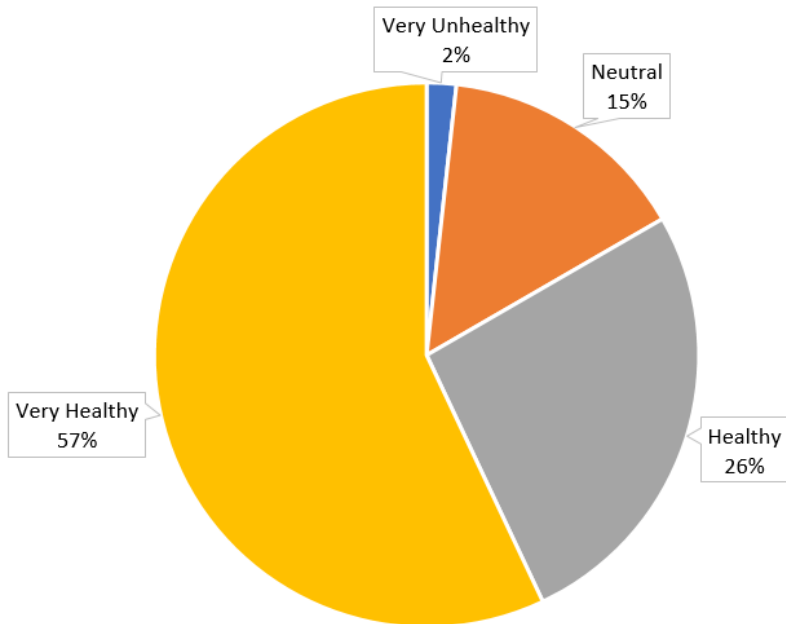


Total Responses: 115

# Sault Area Middle School Surveys

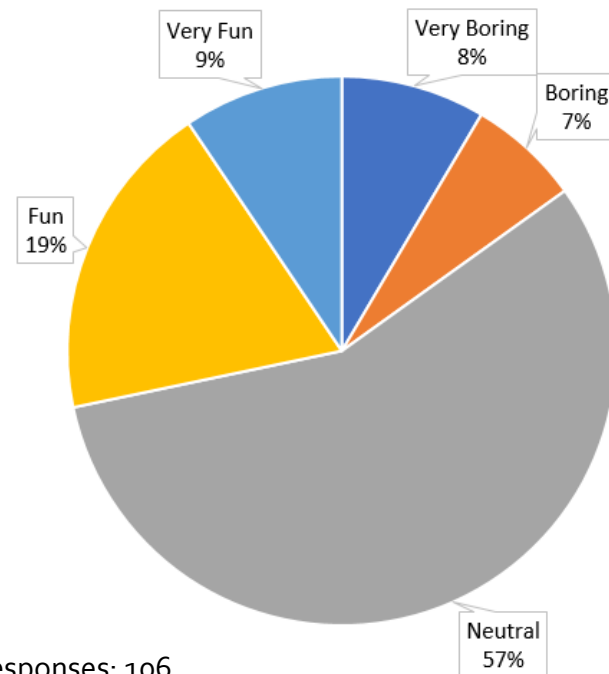
Parents were also asked about how enjoyable walking or biking was for their child. Of the surveyed parents, 28% of Sault Area Middle School parents answered “Fun” or “Very Fun.” A 57% majority, however, answered “Neutral.” When asked about how healthy walking and biking were for their child, 83% of parents agreed that it was “Healthy” or “Very Healthy.”

Parents' opinions about how healthy walking and biking to/from school is for their child



Total Responses: 114

Parents' opinions about how much fun walking and biking to/from school is for their child

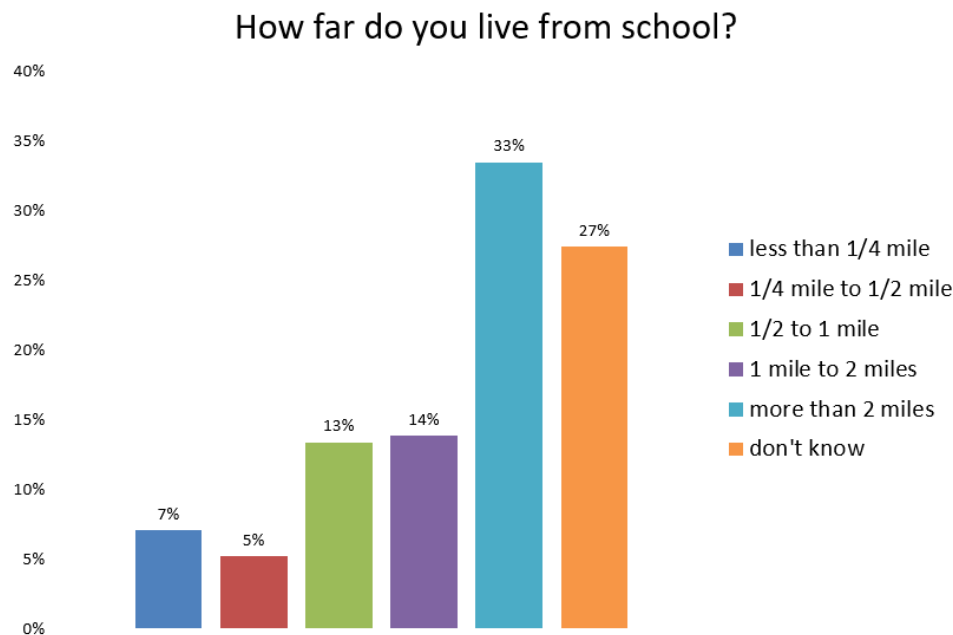


Total Responses: 106

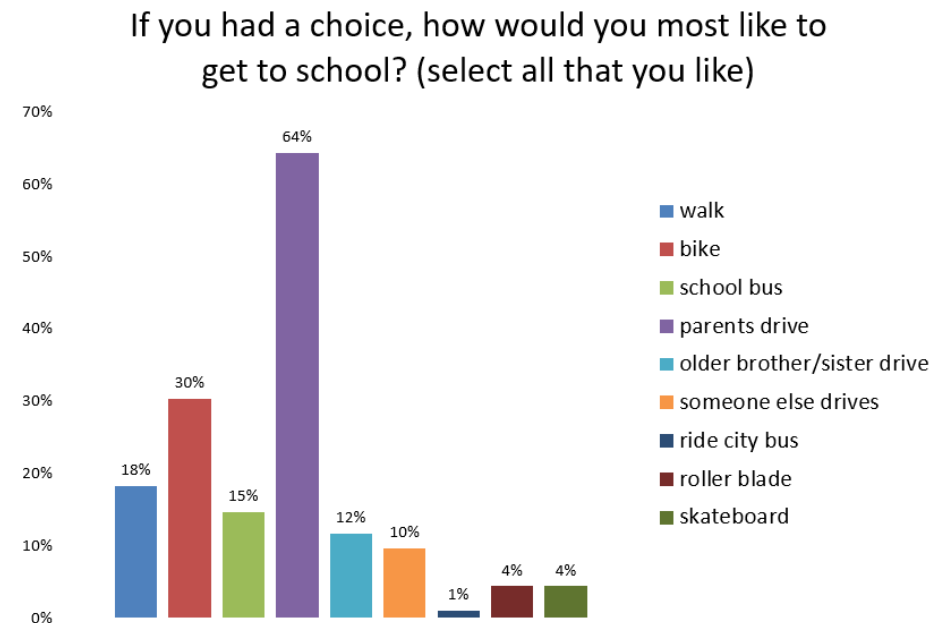
# Sault Area Middle School Surveys

Students from Sault Area Middle School were asked how far away they live from school. Approximately 33% of students surveyed live more than two miles away, while around 25% of students live one mile away or less. In addition, 27% of surveyed students did not know how far from school they live.

Students were also asked about what form of transportation to school they would prefer if they had a choice. Approximately 30% of students said they would prefer to bike, while 18% said they would prefer to walk. Another 64% of students stated they prefer their parents driving them to school.



Total Responses: 428



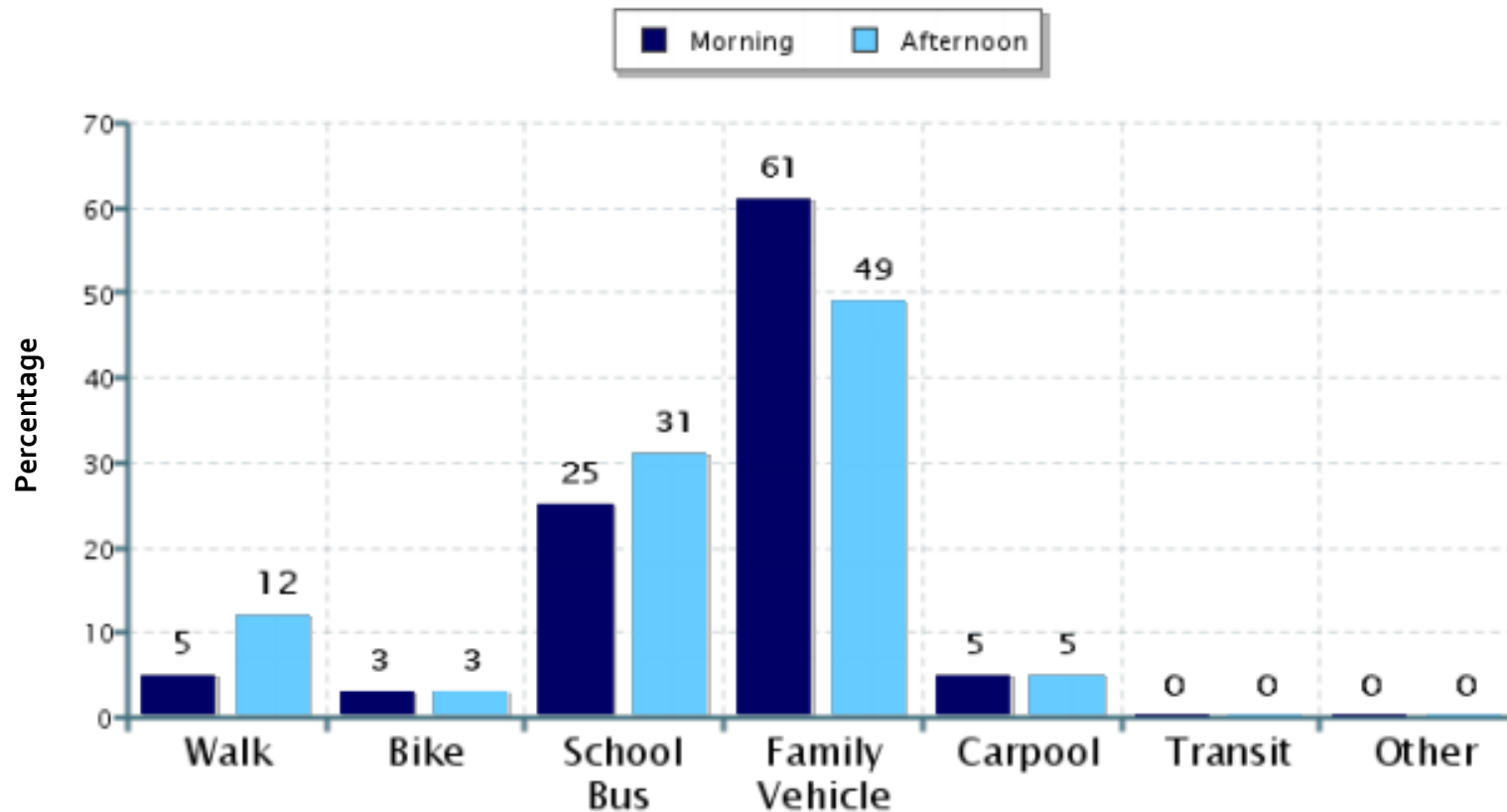
Total Participants: 439



# Sault Area Middle School Surveys

At the beginning and end of the school day, homeroom teachers were asked to keep a tally of how their students arrived to classes in the morning and departed in the afternoon. The tallies show that most students arrive and leave from school in a family vehicle, with the school bus serving as the second most popular option. However, in the afternoon, the ridership for family vehicles slightly decreases, while ridership for the school bus slightly increases.

Morning and Afternoon Travel Mode Comparison



# Sault Area Middle School Survey Summary

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By evaluating student and parent survey responses, a number of generalizations can be drawn about travel habits and preferences at Sault Area Middle School.

- Despite the acknowledgement that walking and biking to school is healthy (83%), most respondents are neutral regarding their child's enjoyment (57%), with 15% finding the activity to be boring or very boring;
- About 33% of students live two or more miles away from school, and another 27% do not know how far away they live. Promoting measures like remote drop-offs for the former, and procuring materials such as maps for the latter can help stymie non-motorized travel to school.
- Students are less likely to ride home in a family vehicle and more likely to ride a bus in the afternoon. This highlights a need for afternoon programming that emphasizes non-motorized transportation;
- A commonly-cited concern is inclement weather. Because of this, it is advisable to target walk/bike to school day early and late in the school year to help build awareness; and
- Safety concerns account for three of the top six reasons that deter parents from allowing their children to walk, bike or roll to school. Engineered improvements can help reduce these concerns.

# Meeting One Summary

At Meeting One on February 22, 2018, attendees were able to write and voice their thoughts about the current state of walking, biking and rolling to school opportunities for students at Sault Area Middle School. Participants were asked three questions for small group discussion: 1) What is working well?; 2) What is not working well?; and 3) What are some improvements you would like to see? The results of this discussion are summarized below.

## Working Well

- ◇ Crossing guard
- ◇ Bus loops
- ◇ Bike rack at school
- ◇ Walk to School Day
- ◇ Many sidewalks
- ◇ Designated pick up/drop-off areas
- ◇ City sidewalk snow plowing
- ◇ Safe community

## Not Working Well

- ◇ Motorists not respecting road or parking rules
- ◇ Vehicle traffic
- ◇ Some sidewalks not being plowed, including drop-off locations
- ◇ Biking up hill
- ◇ Not enough crossing guards
- ◇ Connectivity/unsafe sidewalks
- ◇ Students not having proper winter clothes

## Recommendations

- ◇ Better connectivity and improved safety
- ◇ Availability of winter clothing, bikes and helmets
- ◇ More crossing guards
- ◇ Lighted paths
- ◇ Educate parents about drop-off and pick-up expectations
- ◇ More bike racks
- ◇ Plow sidewalks
- ◇ Educate students about walking paths and bicycle safety

# Meeting Two Summary

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On September 13, 2018, a second community input meeting was held with a smaller core group of Sault Ste Marie community members to review the preliminary program and design recommendations presented by the MSU team.

The participants noted that particular attention should be given to the challenge of the adjacent hill, how difficult drop-off can be at the middle school, as well as crosswalk safety concerns. Furthermore, the meeting provided an opportunity for participants to learn about projects the city is implementing that align with proposed recommendations.

These comments and concerns are reflected in the action plan recommendations which follow.





## Action Plan



This action plan will provide Sault Area Middle School with the framework necessary to facilitate its Safe Routes to School program. It lists the programmatic and engineering recommendations based on community input meetings and walking audit observations developed by MSU SPDC and the College of Engineering team with SRTS committee input. These recommendations include suggestions for the Five E's: **Education, Encouragement, Enforcement, Equity, and Engineering**, with supported design imaging.

# Education

Education strategies focus on increasing the awareness of students, parents, and drivers in the school's neighborhood about Safe Routes to School efforts and goals. Education strategies contour closely with encouragement and enforcement efforts. In this section, there are recommendations and strategies for parent, student and community education at Sault Area Middle School based on community concerns and opportunities.



Photo: Saferoutespartnership.org

## Strategy #1: Bicycle Safety Curriculum

**Concern:** Students may need assistance learning how to safely utilize non-motorized transportation.

**Solution:** Institute a bicycle safety curriculum.

**Quick Steps:** Appoint a faculty member to administer the bike safety program. Utilize the bicycle safety curriculum available on the Michigan Safe Routes website. Hold an assembly to teach the students these lessons.

**Case Study:** During the last decade, it has become safer to walk or ride a bike in the United States. Between 2002 and 2012, walking and bicycling trips increased by about 25 percent, while bicycle and pedestrian traffic fatalities declined by 6 percent and 16 percent, respectively. Studies in New York and Portland, among others, show that drivers are more attuned to increased numbers of bicyclists and pedestrians.

(<http://www.ncsl.org/research/transportation/bicycle-and-pedestrian-safety.aspx>)

# Education

## Strategy #2: Map Routes to School

**Concern:** Students are not aware of the distance and time they live from school.

**Solution:** Develop a map of the designated routes.

**Quick Steps:** List the routes as well as distances and times from school on the map. Present the map during an assembly to educate students on their ability to walk, bike or roll to school. Homeroom teachers can assist students if they have further questions about the map, or how far they live from the school.



Photo: huntfun.co



Photo: mattwilhelm.com

## Strategy #3: Student Assembly

**Concern:** Students may not be aware of the rules of the road.

**Solution:** Host an assembly.

**Quick Steps:** Engage the students to provide them with practical applications and safety tips regarding travel to and from school. Assess how many students benefited from the assembly by determining if their travel habits are safer than they were before. Parents, as well as faculty members, can report any unsafe activity so the effectiveness can be further evaluated to determine whether or not additional assemblies would be beneficial.

# Education

## Strategy #4: Publicize SRTS Through Local Media

**Concern:** Lack of community awareness of pedestrian routes near school.

**Solution:** Utilize local media outlets and social media to disseminate maps and other SRTS announcements to the public. Increased awareness could discourage reckless driving in key neighborhoods.

**Quick Steps:** Distribute visuals among school and community members. Contact local newspapers and TV stations to publicize SRTS efforts. Continue efforts with student organizations to make signs and create projects that communicate better driving habits.



Photo: communities.usc.edu/



Photo: pixshark.com

## Strategy #5: Improve Communication Between Parents and the School

**Concern:** The school is not always aware of the parents' safety concerns regarding non-motorized transit.

**Solution:** Formalize SRTS committees at each school and district-wide.

**Quick Steps:** Encourage parents to bring their concerns to the PTA and SRTS team. The team can notify the school or city of problems so they can be handled accordingly.



# Encouragement

Encouragement strategies are intended to build enthusiasm, excitement and support for Safe Routes to School efforts. Often, encouragement strategies involve organizing events and activities for children and parents. These encouragement strategies dovetail the education strategies.



Photo: Saferoutetoschoolinfor.org

## Strategy #6: Bike Train

**Concern:** Students are not getting enough opportunities to walk or bike.

**Solution:** Organize a series of Bike Train events.

**Quick Steps:** Determine the student interest in Bike Trains. Identify an event coordinator. Work out the logistical details and suitable times for the event during the year.

## Strategy #7: Remote Drop-Off Sites

**Concern:** Students may not be able to walk or bike to school because of the long distance from home.

**Solution:** Start working with parents and the community to establish and promote remote drop-off sites.

**Quick Steps:** Position bike racks in close proximity to designated locations. Students can bike or walk to school from there. Raise awareness of the drop-off and pick-up options for parents driving their children by email or take-home flyer.



Photo: carriagehouseplanswallpaper

**Tip:** Studies have shown that walking to school can positively impact academic achievement, student morning energy levels and attention, truancy, absenteeism, and can improve schools and their communities through social bonding and community building (walkbiketoschool.org).

# Encouragement

## Strategy #8: Carpool Match Program

**Concern:** Traffic congestion causing safety concerns.

**Solution:** Coordinate driving schedules of parents who have students that live in close proximity to each other.

**Quick Steps:** Designate drivers to transport students based on location. Determine who will drive on designated days. This reduces the amount of cars picking up and dropping off students.



Photo: ourladyofhopeschool



Photo: Saferoutesmichigan.org

## Strategy #9: Bike Plow

**Concern:** Students are discouraged from biking in the winter because of heavy snow on pathways.

**Solution:** Implement a bike plow system.

**Quick Steps:** Determine student interest in using bikes with attached push-broom plows to clear sidewalks. Coordinate volunteering efforts and provide equipment to do the work safely.

**Case Study:** With the assistance of Norte, a non-profit in Northern Michigan, Traverse City implemented a bike plow program to encourage students to use push-broom plows attached to bikes to plow sidewalks and paths leading to school. The plowing not only helps students, but also other bicyclists and pedestrians. (<https://saferoutesmichigan.org/2017/01/18/success-story-the-traverse-city-bike-plow/>)



# Enforcement

Enforcement strategies are aimed at identifying and discouraging unsafe driver, pedestrian and cyclist behaviors along routes to school. Successful implementation of enforcement strategies will result in safer and more conscious sharing of roadways by all.

Official routes to school should be designated so that efforts will be focused in priority areas. Enforcement strategies may often require the assistance of local or state police in the areas that Sault Area Middle School has prioritized. To this end, it is best for the school to continue their strong connection with the local police.



Photo: Saferoutestoschoolnj.org

## Strategy #10: Expanded Crossing Guard System

**Concern:** Crossing guards are limited by location and hours of operation.

**Solution:** Expand the crossing guard system.

**Quick Steps:** Determine the interest of potential crossing guards in the community. Assign crossing guards to priority points along routes that are not currently stationed. Track student pedestrian volume and participation.

## Strategy #11: Progressive Ticketing

**Concern:** Drivers are violating traffic laws along the students' routes to and from school.

**Solution:** Initiate a progressive ticketing program.

**Quick Steps:** Establish community awareness of the issue. Announce the action that will be taken and the reason why through fliers, signs and newspapers. Official warnings from officers can also serve as a reminder. After the warning time has expired, law enforcement can start issuing tickets.



Photo: dailymail.co.uk

**Tip:** When conducting speed enforcement in neighborhoods, 75-80% of the ticketed drivers live within 1 mile of the enforcement site. Police officers can contact up to 20 times as many individuals when they are not writing citations.

([http://guide.saferoutesinfo.org/enforcement/progressive\\_ticketing.cfm](http://guide.saferoutesinfo.org/enforcement/progressive_ticketing.cfm))

# Equity

Equity strategies are about making a conscious effort to understand and address the diverse needs of students. This is done by supporting safe, active and healthy opportunities in communities of all cultural backgrounds. These strategies should work to remove barriers that are often experienced by students with disabilities, low income challenges and other issues faced by a variety of demographic groups when walking or biking.

## Strategy #12: Bike Library

**Concern:** There are children who do not have the opportunity to use non-motorized transit options other than walking.

**Solution:** Create a bike library. This allows students to be able to use bikes who do not own or maintain a bike.

**Quick Steps:** Organize a bike drive. Establish a place to store the bikes. They can then be stored until someone in need wants them, or the students can be notified as bikes become available. Students can take out bikes on a loan basis so that as they grow, they can exchange it for one their size.



Photo: <http://www.bikelibrary.org/>

**Case study:** Traverse City, Michigan was able to get 47 specialized bikes ranging from 12, 16, and 20in sizes. These bikes were available for loan at their kids bike library on August 17th, 2016. This was a combined effort with the library, Norte and McLain Cycle & Fitness. The students signed up for a Norte bike library card and they were able to take a bike home with them. The student could then return the bike when they outgrew it. This was a free service, but they did accept donations at this event. ([elgruponorte.org](http://elgruponorte.org))

# Engineering

Engineering includes any updates to infrastructure or design adjustments for physical improvements. These engineering recommendations are the result of collaborative efforts of the walking audit, community meetings and analysis by the local SRTS Committee and Michigan State University. Proposed engineering improvements are included in the appendix.



## Summary of Engineering Improvements

1. ADA-compliant sidewalk ramps
2. Added crosswalk markings
3. New, connected sidewalks
4. In-street and roadside pedestrian crossing signs
5. Added stop signs



# Design Recommendations

The before and after images that follow highlight the engineering recommendations prepared as a result of community input. These images show a realistic perspective of what the engineering designs would look like if they were implemented.

Before



After



Location: Ryan and Emmett, in street looking East



Location: School crossing at Parnell and Ryan, looking East



Location: Ryan and 4th Ave looking East



# Design Recommendations

Before



After



Location: Ryan and 5th Ave, looking East



Location: John St and Marquette Ave, SW corner looking East



Location: Marquette and Ashmun, NW corner looking South



# Design Recommendations

Before



After



Location: Footpath to North East of Middle School, looking North

Location: Marquette and Augusta, looking East

Location: Middle School Entry Drive, looking North across Marquette



# Design Recommendations

Before



After



Location: Middle School Drive (SW Corner),  
looking North across Marquette

Location: Marquette and Augusta, looking East



# Design Recommendations

Before



After



Location: Marquette and Seymour, SW corner looking East

Location: Seymour and E 11th, looking North

Location: Augusta and 8th, looking South



# Design Recommendations

Before



After



Location: Kimball and 7th, NE corner  
looking South

Location: Swinton and 7th, looking North

Location: Superior and 7th, SW corner  
looking North



# Design Recommendations

Before



After



Location: John and 6th, looking North

Location: Minneapolis and 6th, SW corner  
looking North

Location: Young and 4th, looking North



# Design Recommendations

Before



After



Location: Superior and 6th, looking West



Location: Swinton and 6th, looking North



Location: Seymour and Newton, SW corner  
looking East



# Design Recommendations

Before



After



Location: Swinton and Adams, SE corner looking North



Location: John and 4th, SE corner looking North



Location: Young and Newton, looking North



# Design Recommendations

Before



After



Location: Superior and 4th, SW corner  
looking North

Location: Court and Adams looking  
Southwest

Location: John and Easterday Ave, SE  
corner looking West



# Design Recommendations

Before



After



Location: Easterday and Johnston, SE corner looking North

Location: Minneapolis and Easterday, SE corner looking West

Location: Lizzie and Adams, NE corner looking South



# Design Recommendations

Before



After



Location: Seymour and Adams, SW corner looking North





# Appendix

## Appendix A: Meeting One Tallied Feedback

What is Working Well?	Responses	What is Not Working Well	Responses	Recommended Improvements	Responses
Crossing Guard	7	Motorists not respecting the rules of the road, or parking	4	More sidewalks and safer sidewalks through improvements	6
Bus loops	5	Vehicle traffic	3	Availability of winter clothing/bikes/helmets	3
Some kids do walk/bike to school in good weather	3	Sidewalks not plowed	3	More crossing guards	3
Bike rack at school	1	Pick up/drop off in snow congestion	3	Lighted path to campus	2
Walk to school day annually	1	No sidewalks and unsafe side-walks	3	Improved crossing signals with count down screen	2
Sidewalks in place in many areas	1	Biking up hill	2	Educate parents on drop off and pick up expectations	2
Designated bus pick up/drop off areas	1	More crossing guards	2	More bike racks	1
W South Dr sidewalk leading to building avoids high traffic areas	1	Intersection of Marquette and Minneapolis	1	Plow sidewalks	1
Many students walk to school even in winter	1	Access to sidewalks, walking and riding paths to school	1	Improve drop off locations	1
City sidewalk snow plowing	1	Community/parent education/communication	1	Better lighting at designated drop-off locations	1
Safe Community	1	Students lack appropriate winter clothing	1	Reverse vehicle traffic to ease congestion	1
		Not all push button crossings working efficiently	1	Education on walking paths	1
		Parent drop off	1	Education on bike safety	1
				Security for parking lots	1

## Appendix B: Action Plan Summary

### Education

Recommendation	Quick Steps	Person(s) Responsible	Timeframe for Completion	Rank
Bicycle Safety Curriculum	<ol style="list-style-type: none"> <li>1. Appoint faculty member to administer the bike safety program.</li> <li>2. Utilize the bicycle safety curriculum available on the Michigan Safe Routes website.</li> <li>3. Initiate an assembly for the students to be given these lessons at.</li> </ol>			
Map Routes to School	<ol style="list-style-type: none"> <li>1. List the routes as well as distances and times from school on the map.</li> <li>2. Present the map during an assembly to educate students on their ability to walk, bike, or roll to school.</li> <li>3. Homeroom teachers can assist students if they have further questions about the map, or how far they live from the school.</li> </ol>			
Student Assembly	<ol style="list-style-type: none"> <li>1. Engage the students through giving them practical applications and safety for traveling to and from school.</li> <li>2. Encourage further knowledge and safety by assessing how many students benefited from the assembly by determining if the students' traveling habits are safer than they were before.</li> <li>3. The parents as well as faculty members can report any unsafe activity, so the effectiveness can be further evaluated to determine whether or not additional assemblies would be beneficiary.</li> </ol>			
Publicize SRTS Through Local Media	<ol style="list-style-type: none"> <li>1. Distribute visuals among school and community members. Contact local newspapers and TV stations to publicize SRTS efforts.</li> <li>2. Continue efforts with student organizations to make signs and create projects that communicate better driving habits.</li> </ol>			



## Appendix B: Action Plan Summary

### Education

Recommendation	Quick Steps	Person(s) Responsible	Timeframe for Completion	Rank
Improve Communication Between Parents and the School	<ol style="list-style-type: none"><li>1. Encourage parents to bring their concerns to the PTA and SRTS team.</li><li>2. Determine what the primary concerns are.</li><li>3. The team can notify the school or city of problems so they can be handled accordingly.</li></ol>			

## Appendix B: Action Plan Summary

### Encouragement

Recommendation	Quick Steps	Person(s) Responsible	Timeframe for Completion	Rank
Bike Train	<ol style="list-style-type: none"> <li>1. Determine the student interest in the Bike Trains.</li> <li>2. Identify an event coordinator.</li> <li>3. Work out the logistical details and suitable times for the event during the year.</li> </ol>			
Remote Drop-Off Sites	<ol style="list-style-type: none"> <li>1. Position bike racks within close proximity to bus stop locations.</li> <li>2. Students can ride their bike or walk to the bus stop location.</li> <li>3. The student can then ride the bus to and from school, so he or she does not need to use other motorized transit options.</li> </ol>			
Carpool Match Program	<ol style="list-style-type: none"> <li>1. Designate drivers to transport students based on location.</li> <li>2. Determine what drivers will drive on designated days.</li> <li>3. This reduces the amount of cars picking up and dropping off students.</li> </ol>			
Bike Plow	<ol style="list-style-type: none"> <li>1. Determine student interest in using bikes with attached push-broom plows to clear sidewalks.</li> <li>2. Coordinate volunteering efforts and provide safety equipment to do the work safely.</li> </ol>			



## Appendix B: Action Plan Summary

### Enforcement

Recommendation	Quick Steps	Person(s) Responsible	Timeframe for Completion	Rank
Expanded Crossing Guard System	<ol style="list-style-type: none"><li>1. Determine the interest of potential crossing guards in the community.</li><li>2. Assign crossing guards to priority points along routes that are not currently stationed.</li><li>3. Track student pedestrian volume and participation.</li></ol>			
Progressive Ticketing	<ol style="list-style-type: none"><li>1. Establish community awareness of the issue.</li><li>2. Announce the action that will be taken and why through fliers, signs, newspapers.</li><li>3. Official warnings from officers can also be served as a reminder.</li><li>4. After the warning time has expired, the law enforcement can start issuing tickets.</li></ol>			

## Appendix B: Action Plan Summary

### Equity

Recommendation	Quick Steps	Person(s) Responsible	Timeframe for Completion	Rank
Bike Library	<ol style="list-style-type: none"><li>1. Organize a bike drive.</li><li>2. Establish a place to store the bikes</li><li>3. They can be stored until someone in need wants them, or the students can be notified as bikes become available.</li><li>4. When the student has picked a bike, they can take it out on a loan basis.</li><li>5. This allows for them to return it when it is too small, so they can get a bike better suited for their needs.</li></ol>			



# Appendix C: Infrastructure Improvements

## **SAFE ROUTES TO SCHOOL INFRASTRUCTURE NEEDS SAULT AREA MIDDLE SCHOOL SAULT STE MARIE, MI CONCEPT DRAWINGS**

### INDEX OF SHEETS

1. MAP OF INTERSECTION DETAIL LOCATIONS
2. PRIORITY ROUTES TO AND FROM SCHOOL
3. STUDENT ADDRESSES
4. WASHINGTON ELEMENTARY, EAST OF RYAN AVE.
5. WASHINGTON ELEMENTARY, SOUTH OF W 4TH AVE.
6. MARQUETTE AVE AND ASHMUN AVE.
7. SAULT AREA MIDDLE SCHOOL - ALTERNATIVE 1
8. SAULT AREA MIDDLE SCHOOL - ALTERNATIVE 2
9. MARQUETTE AVE, EAST OF SAULT AREA MIDDLE SCHOOL
10. MINNEAPOLIS ST, FROM 7TH AVE TO 10TH AVE
11. SUPERIOR ST, FROM 7TH AVE TO 10TH AVE
12. MINNEAPOLIS ST, FROM 4TH AVE TO 7TH AVE
13. SUPERIOR ST, FROM 4TH AVE TO 7TH AVE
14. JOHNSTON ST, FROM ADAMS AVE TO 4TH AVE
15. AUGUSTA ST, FROM ADAMS AVE TO 4TH AVE
16. MINNEAPOLIS ST, FROM ADAMS AVE TO 4TH AVE
17. YOUNG ST, FROM EASTERDAY AVE TO NEWTON AVE
18. JOHNSTON ST, FROM EASTERDAY AVE TO NEWTON AVE
19. SEYMOUR ST, FROM EASTERDAY AVE TO NEWTON AVE
20. TRAIL CONNECTION FROM FORNICOLA TRAILER PARK TO MIDDLE SCHOOL

PREPARED BY:

**MICHIGAN STATE**  
**U N I V E R S I T Y**

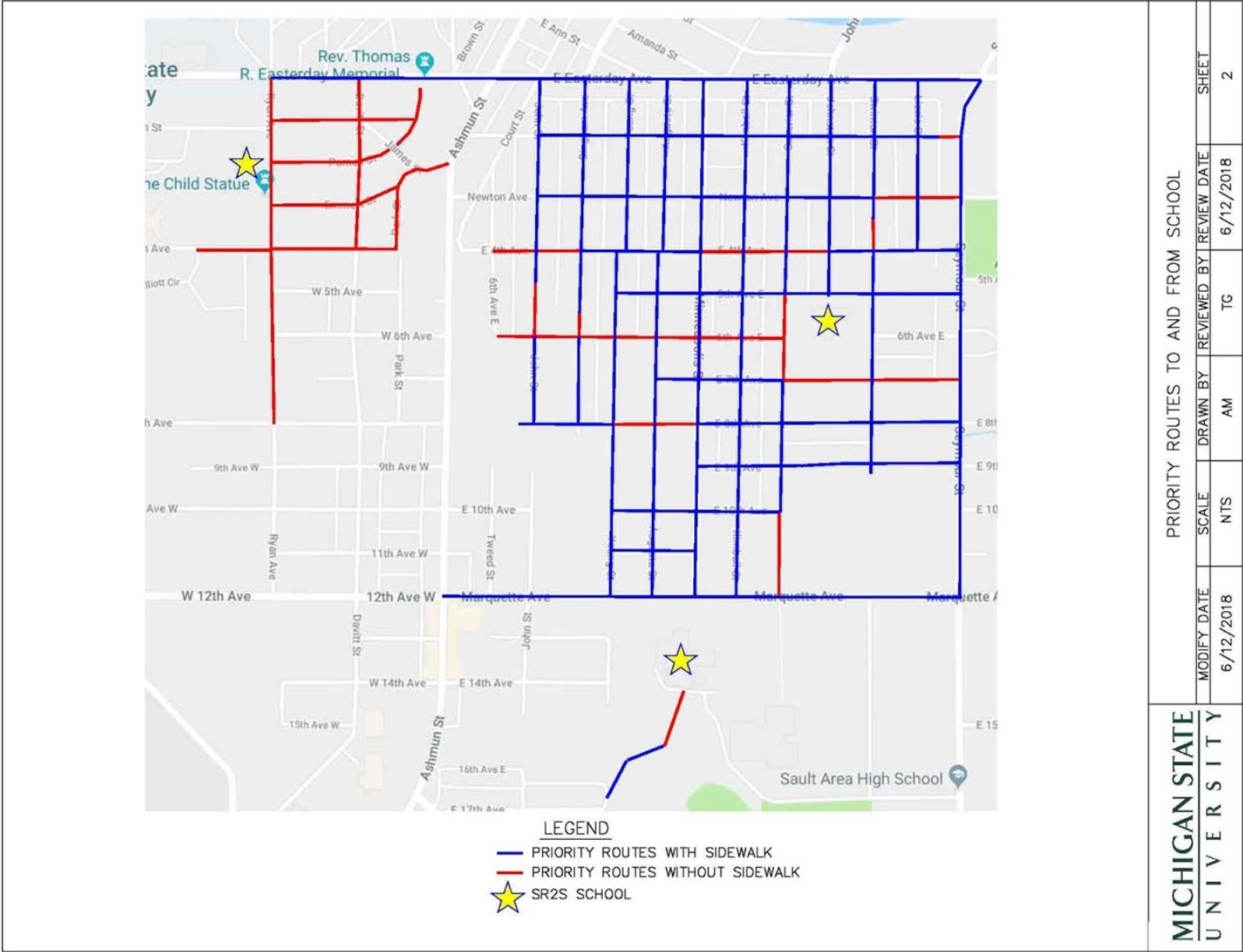
Date:  
May 15, 2019

NOTE: Non-fundable improvement may not be included.

# Appendix C: Infrastructure Improvements

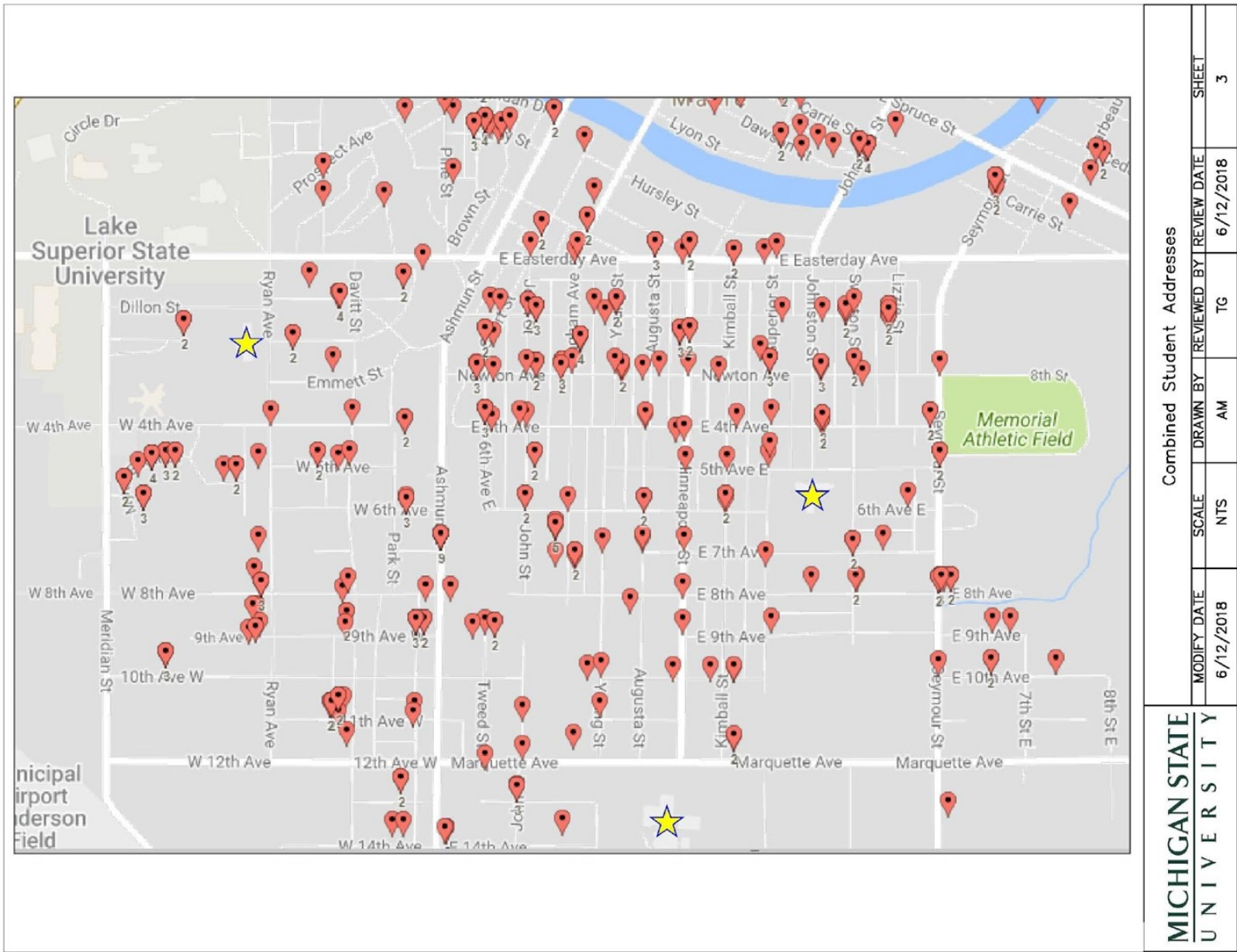


# Appendix C: Infrastructure Improvements

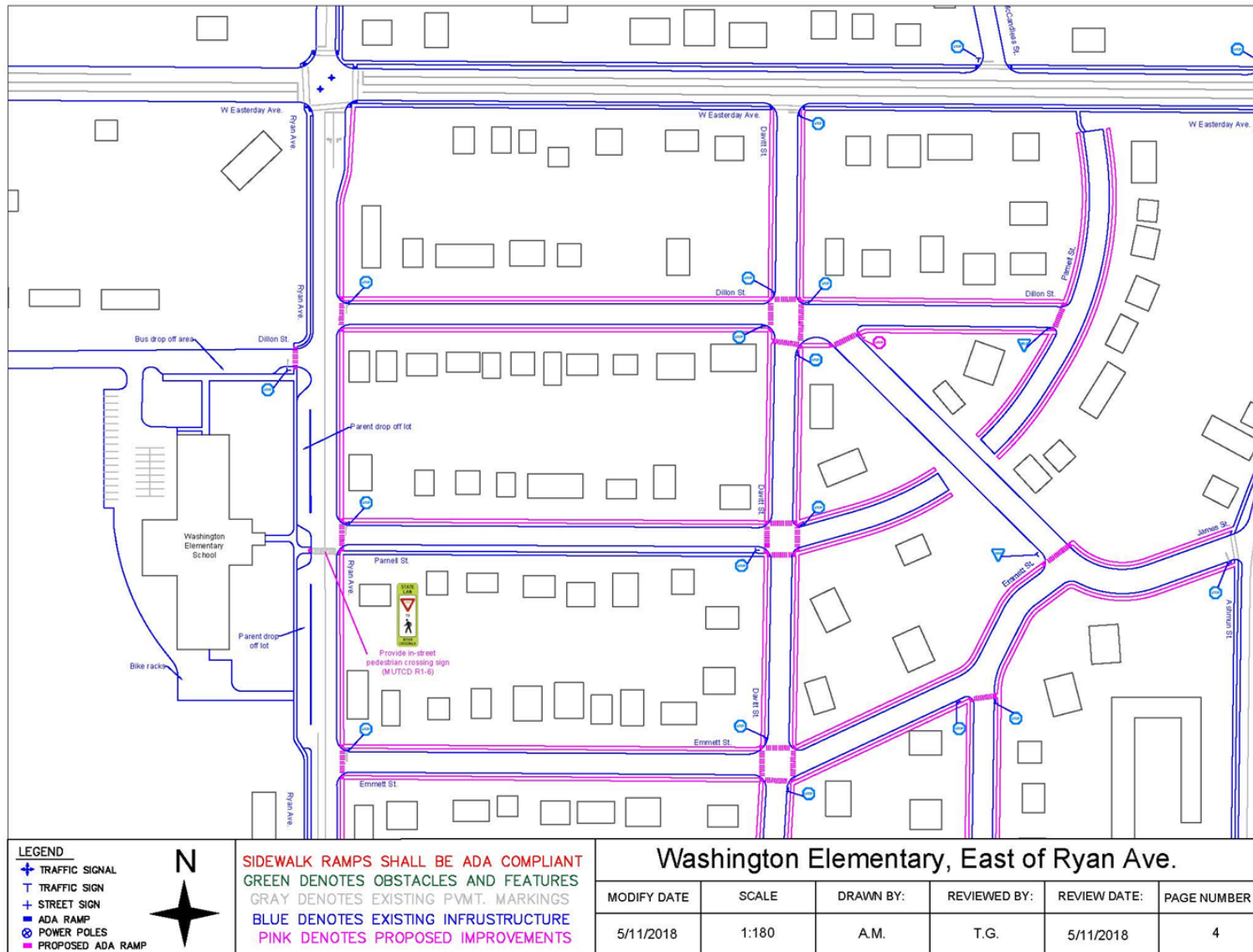




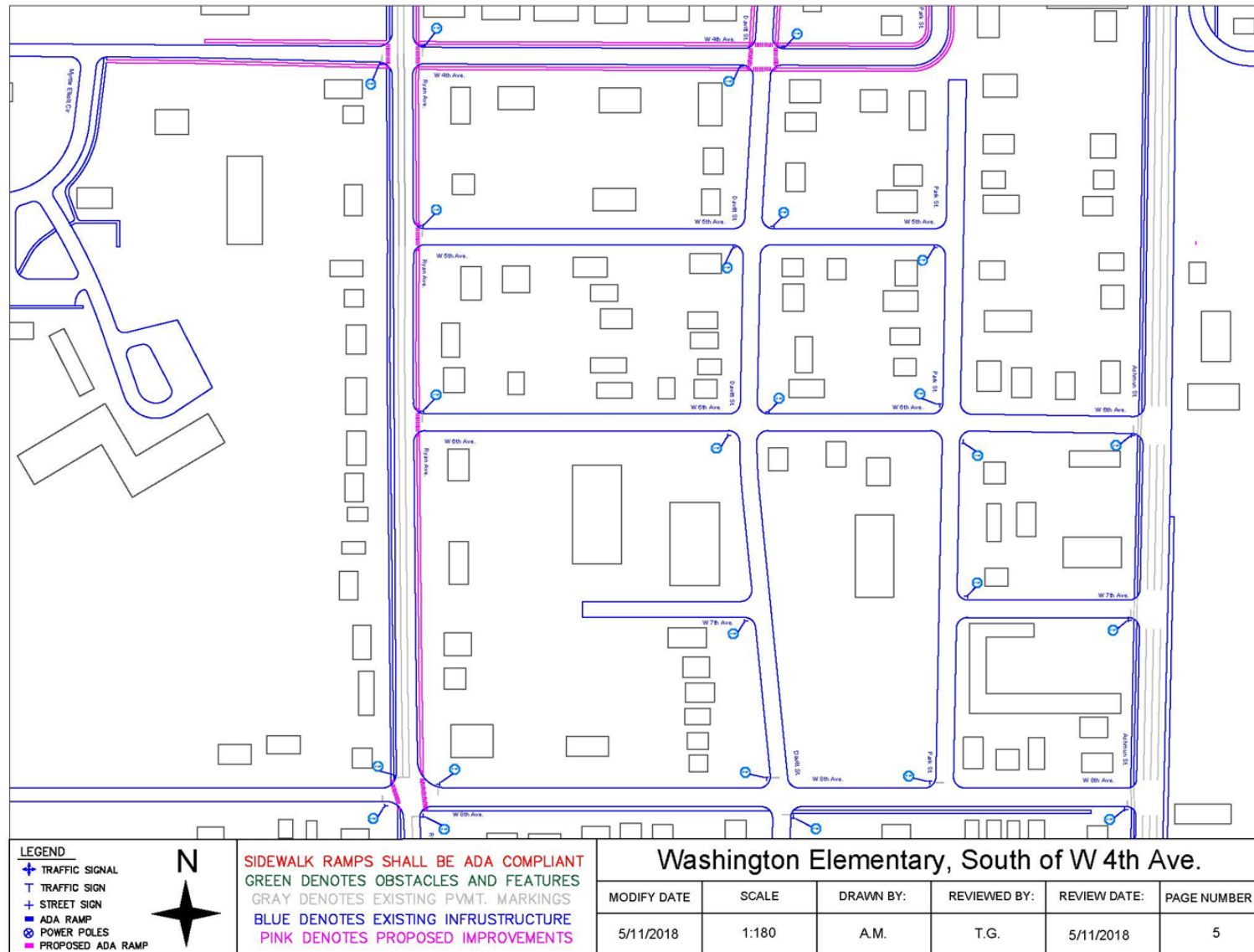
# Appendix C: Infrastructure Improvements



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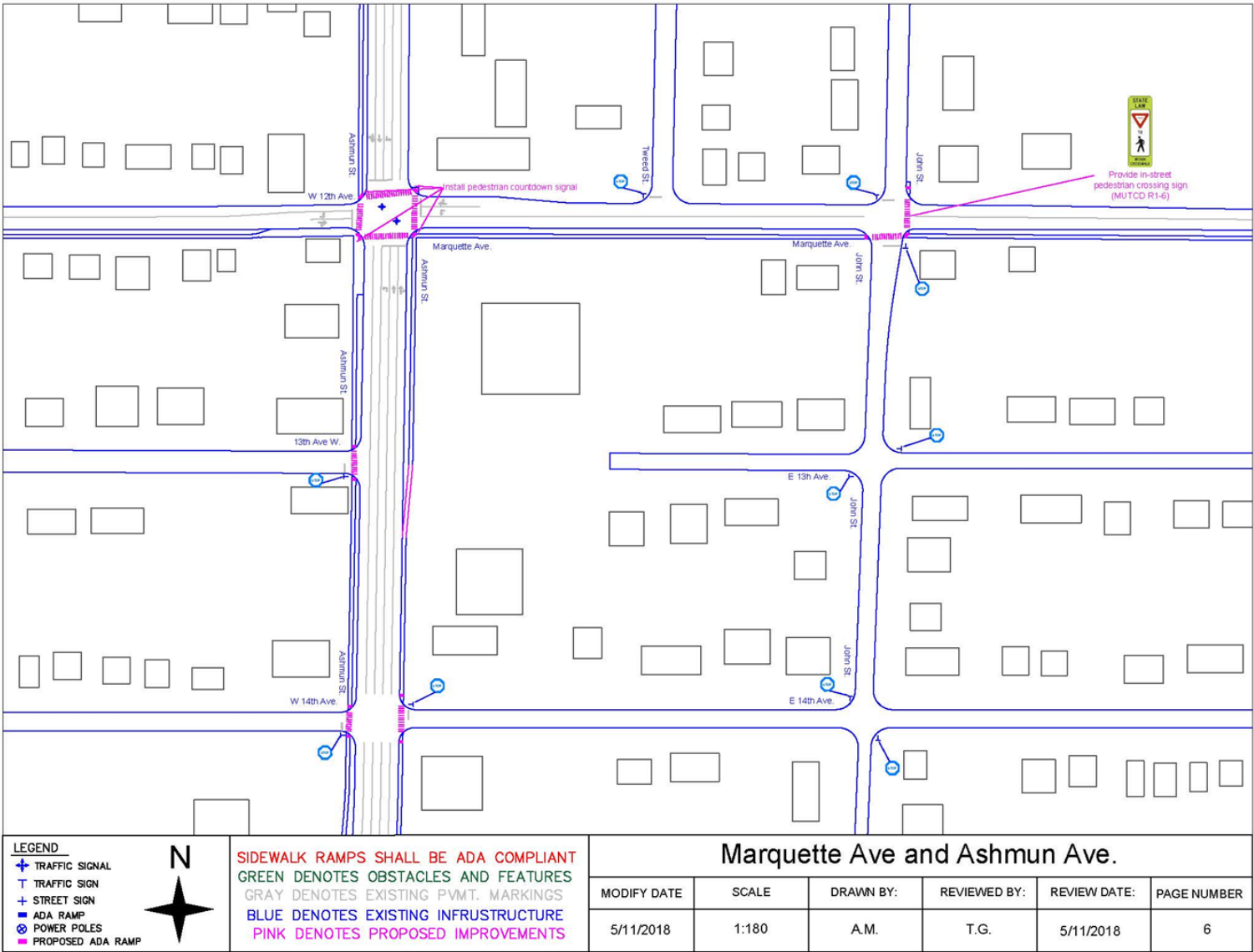


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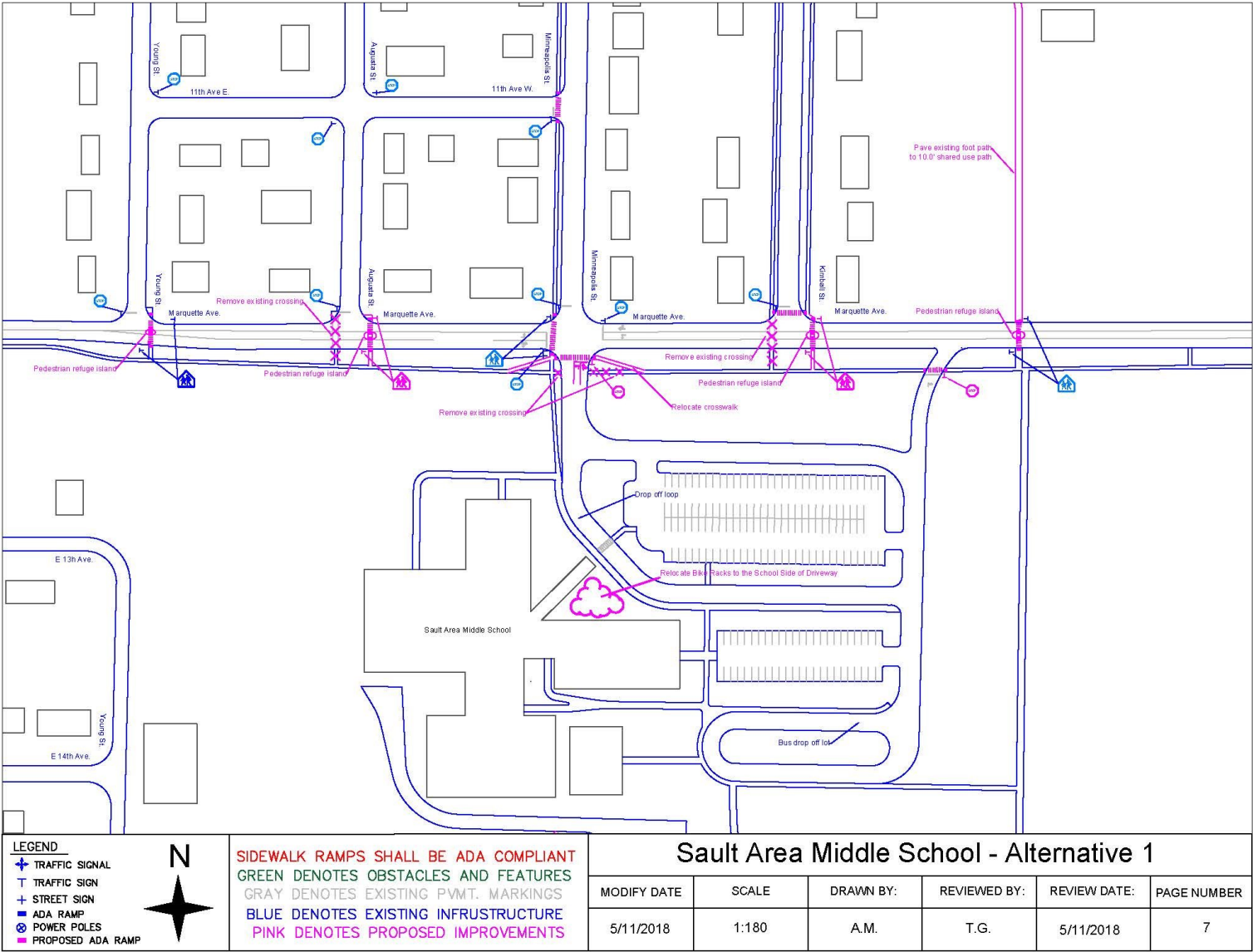




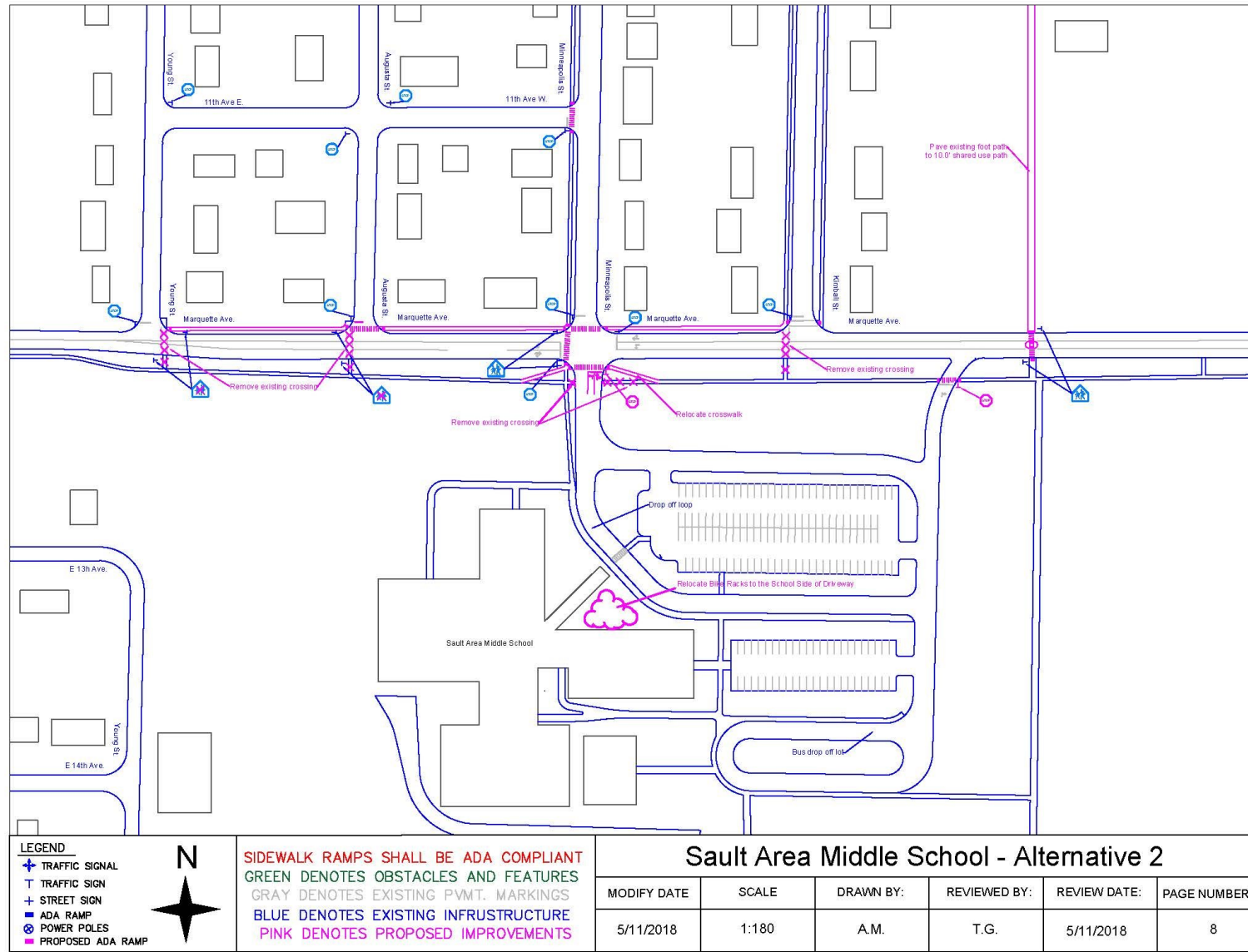
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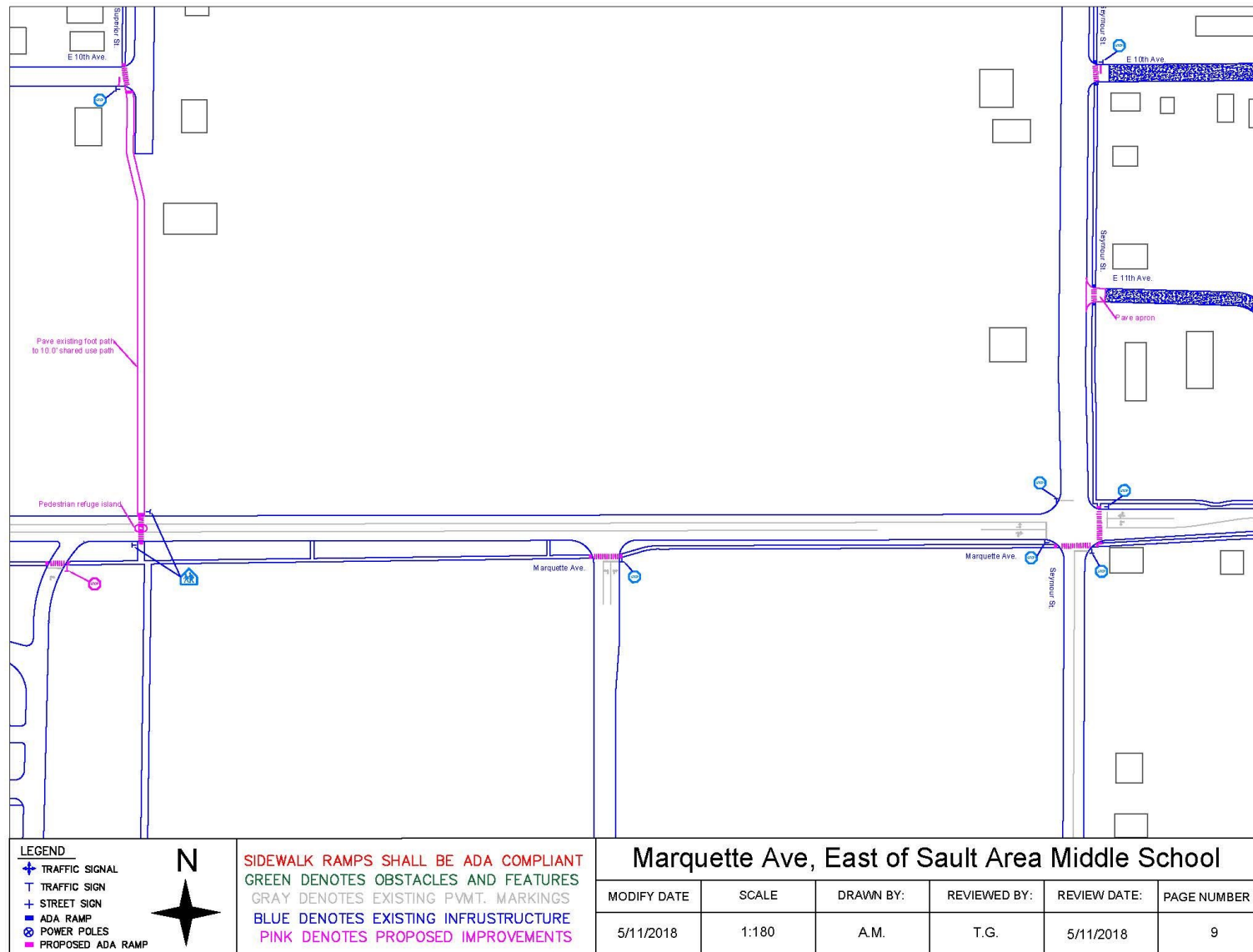


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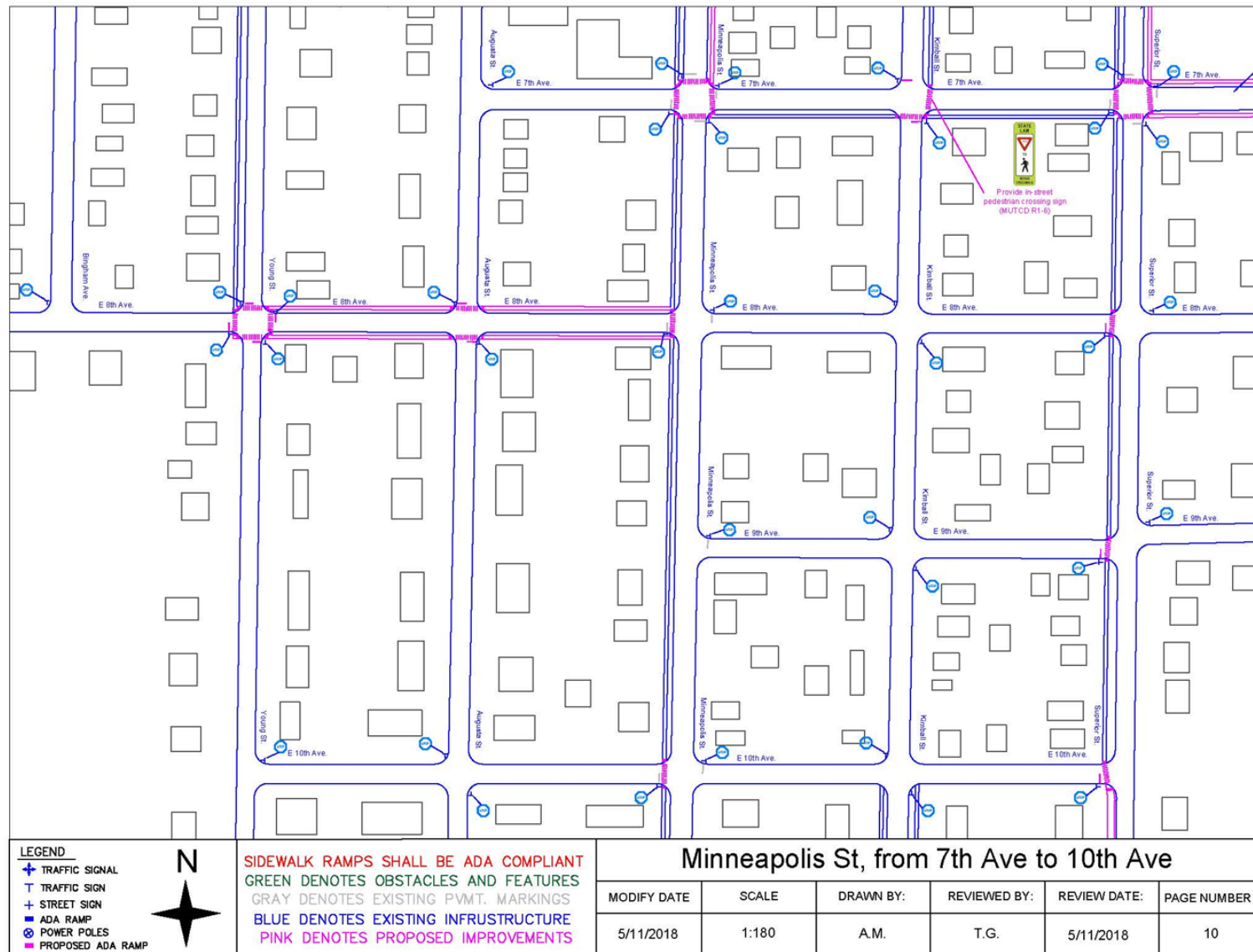




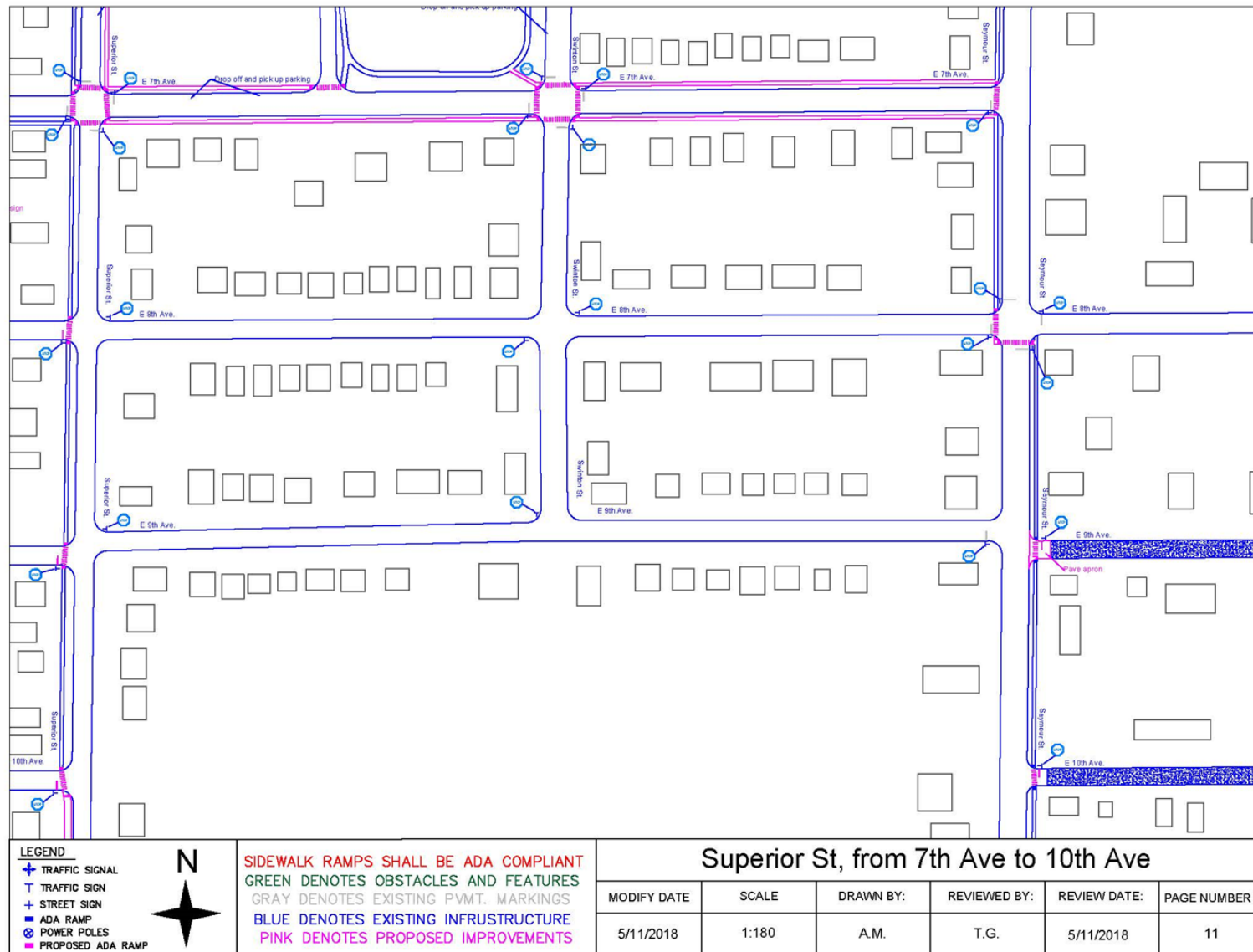
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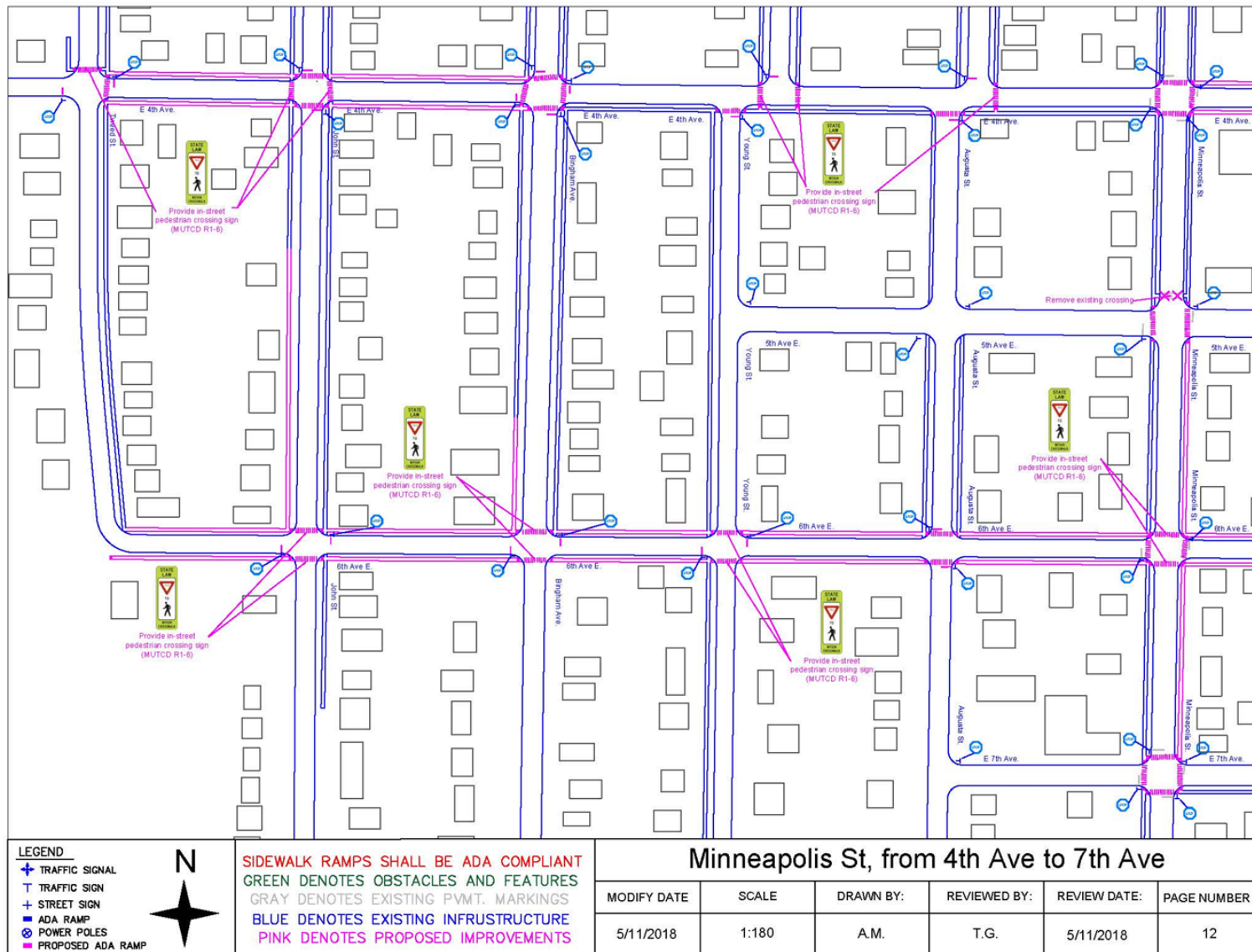


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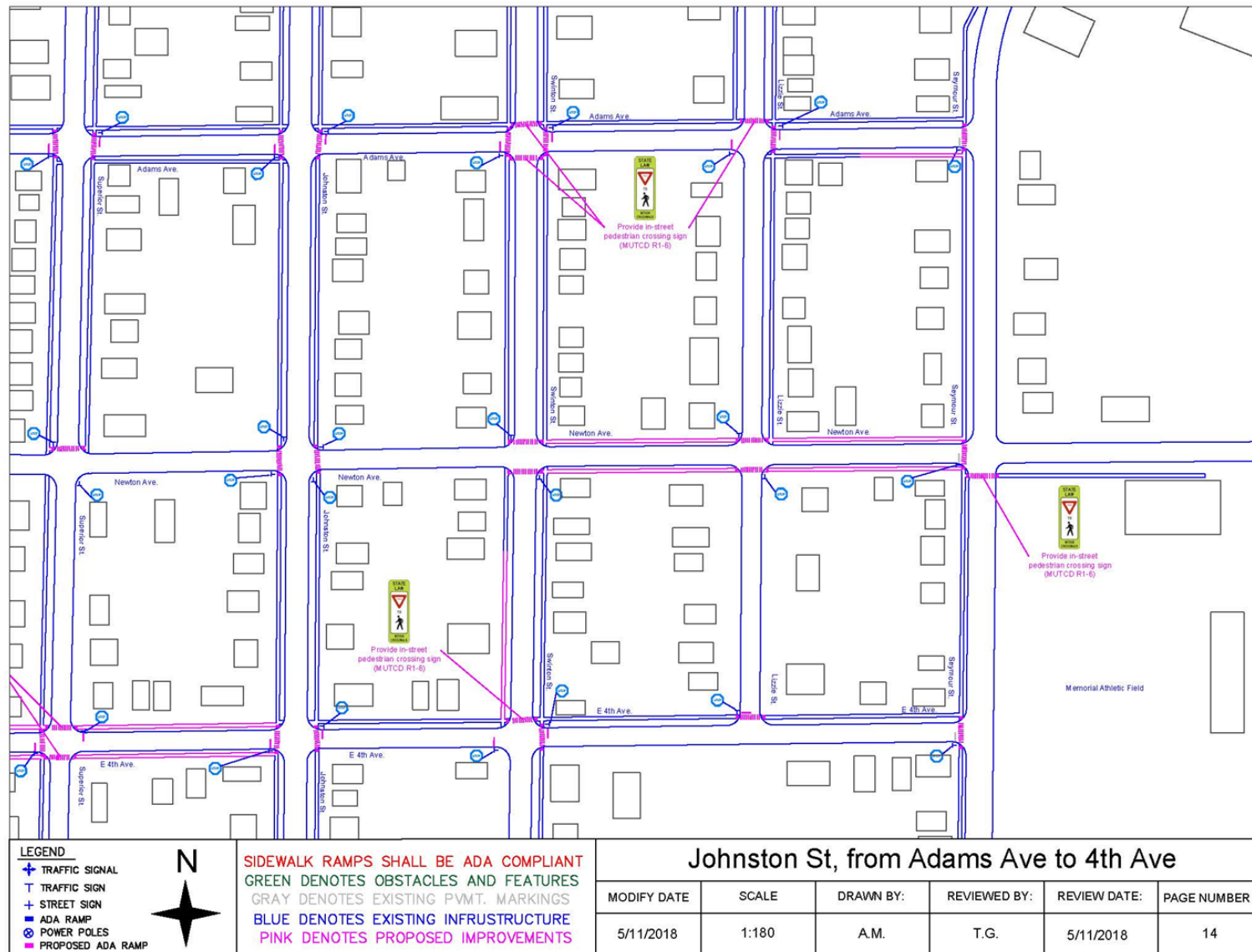


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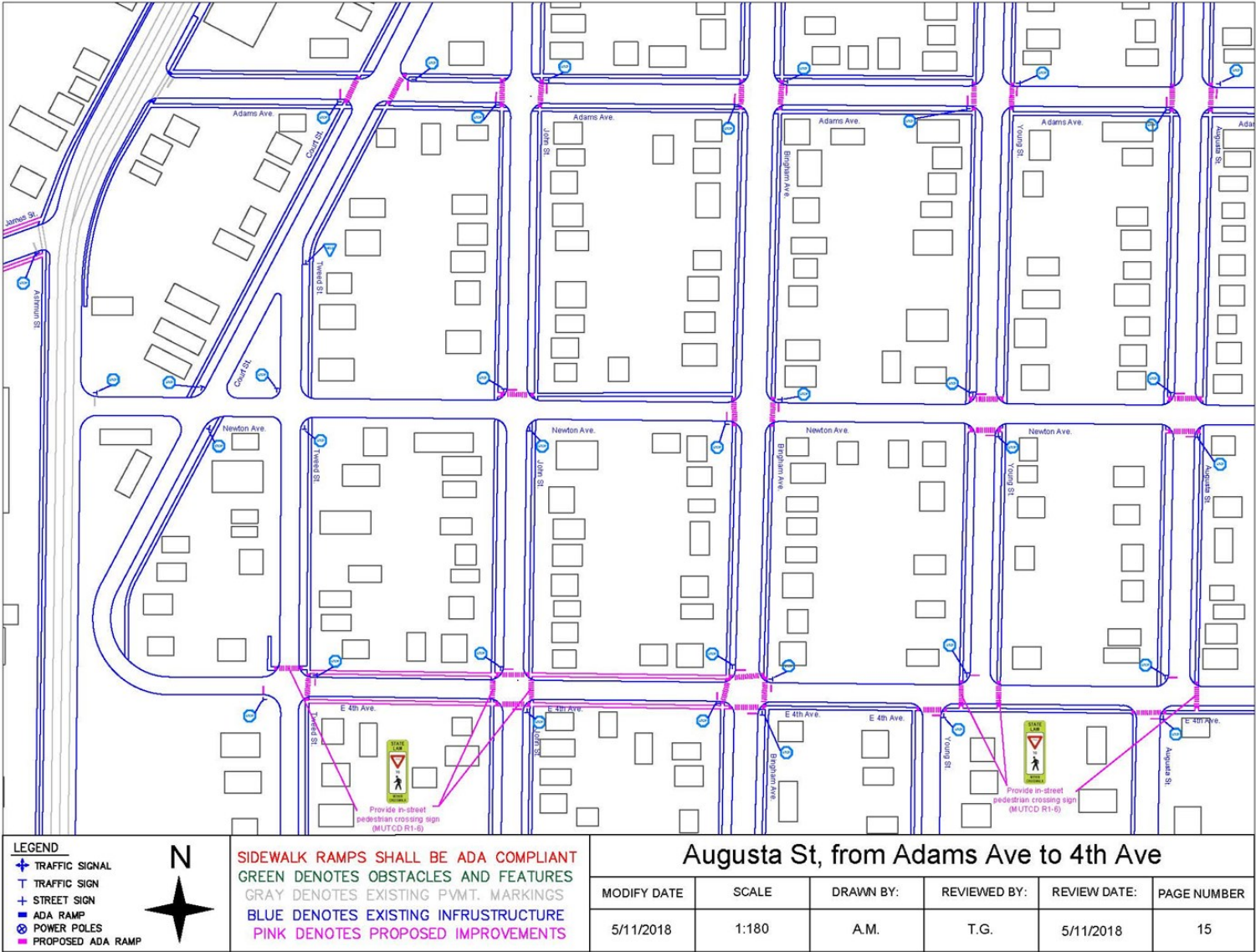
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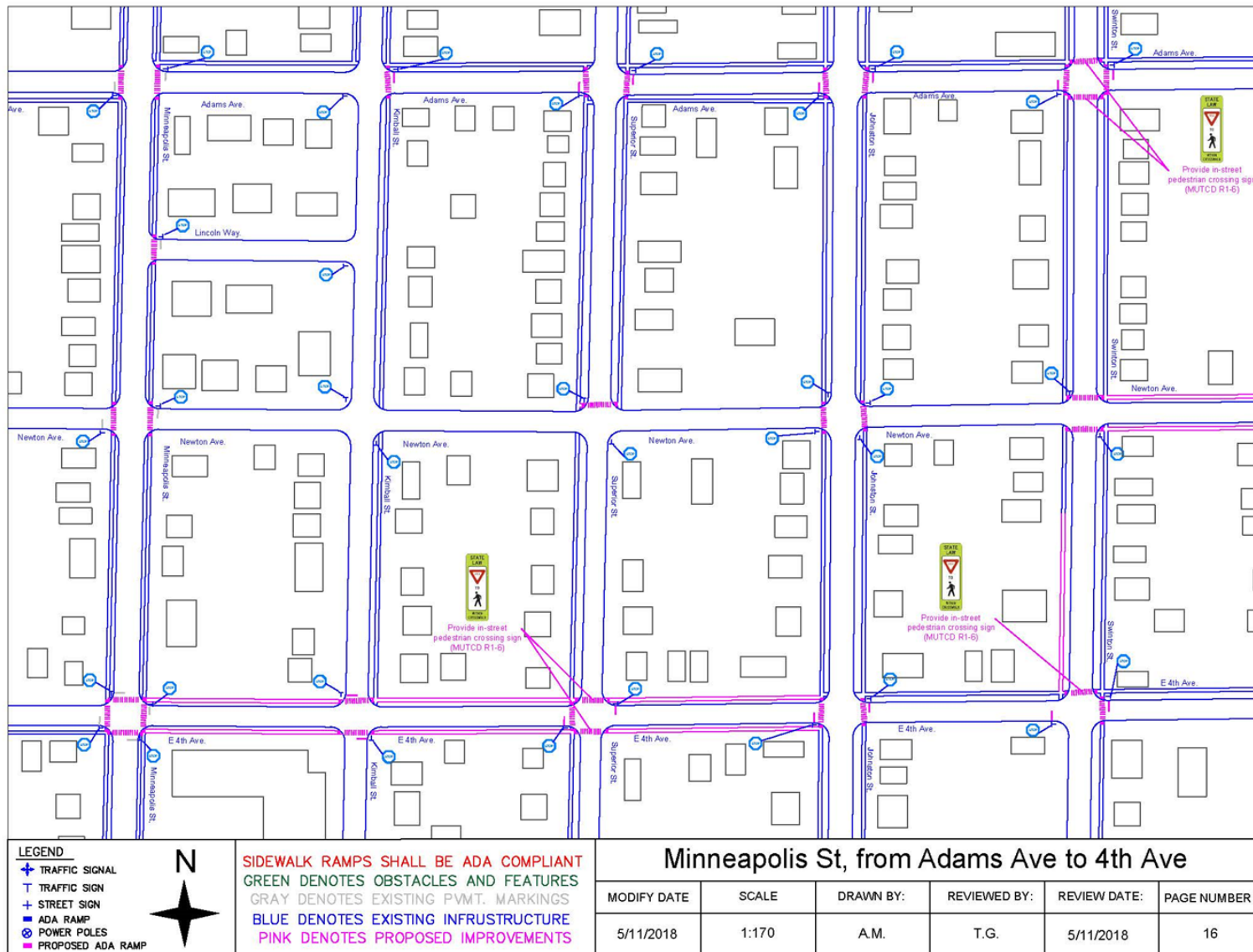




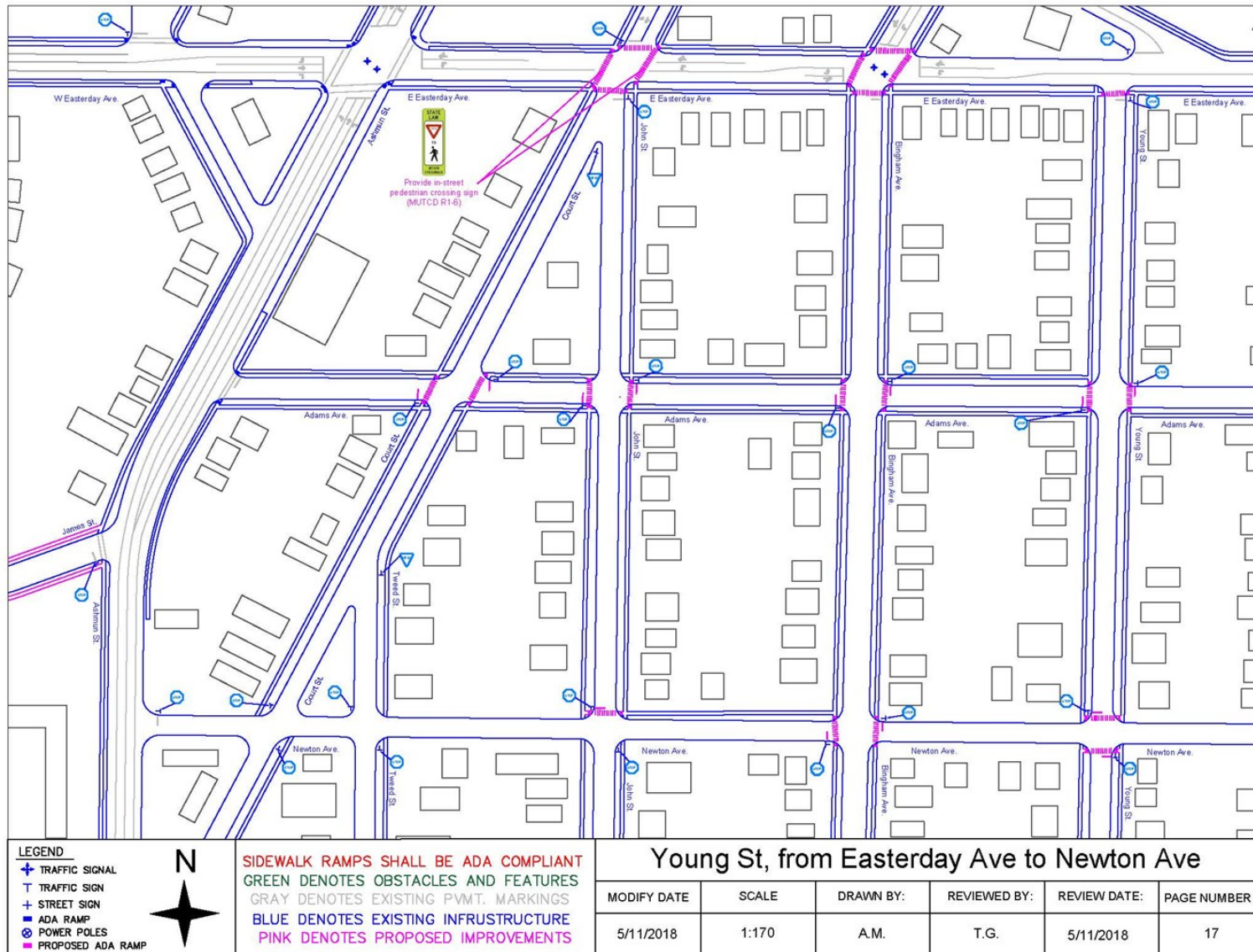
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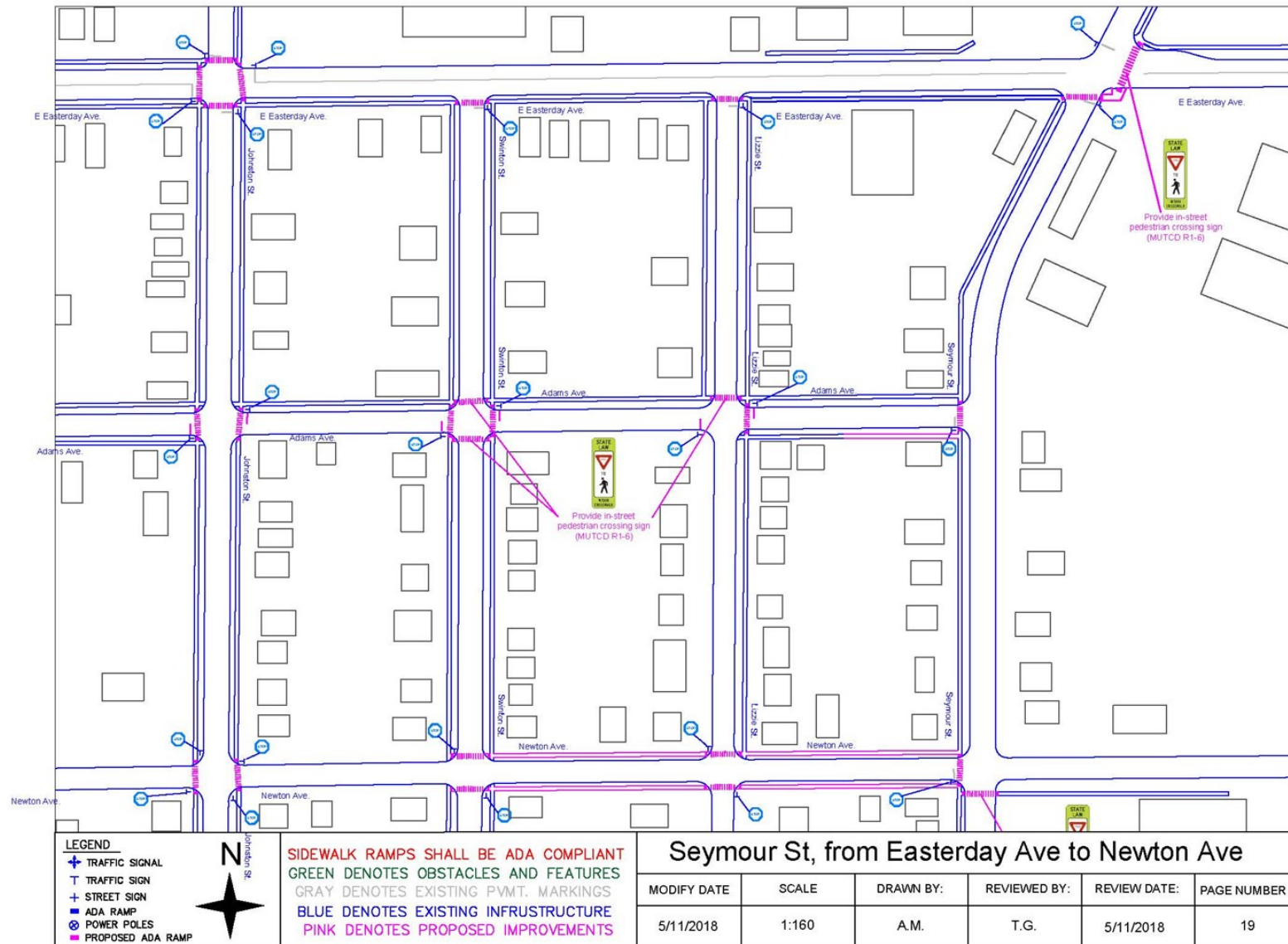




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