
2010
DELTA TOWNSHIP
SIDEWALK PLAN UPDATE



January 2010

2010 DELTA TOWNSHIP BOARD OF TRUSTEES

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INTRODUCTION

The use of sidewalks is becoming increasingly important for the following reasons:

- Sidewalks help make communities “cleaner and greener”. They contribute to reducing the number of single-occupant motor vehicle trips, which in turn reduces fuel consumption, improves air quality, and reduces traffic congestion.
- The continued ability of communities to devote more funds and space to additional traffic lanes on existing roadways is limited.
- Walking and jogging continues to increase in popularity as part of a healthy lifestyle for individuals of all ages.
- Sidewalks provide safe places for children to walk, run, skate, ride their bikes, and play.
- Sidewalks provide separation between motor vehicles and pedestrians.
- Sidewalks provide a safe and level walkway, especially during wet weather and for people using wheelchairs, the elderly, or people pushing a cart or stroller. For these people, it is particularly important that sidewalks have well-designed curb ramps and level driveway crossings.
- Sidewalks enhance the overall health, safety, and general welfare of the community by providing residents with safe pedestrian access to major activity centers such as schools and libraries; business, shopping and entertainment districts; churches; bus stops; and parks and recreational facilities.

As Delta Township becomes continues to urbanize, the need for sidewalks increases. This update of the Sidewalk Plan is intended to identify those sidewalk routes necessary to accommodate the growth and development in Delta Township that is anticipated to occur over the next five to seven years.

BACKGROUND

This document is the 2010 Delta Township Sidewalk Plan Update and it builds on the foundation established by the 1986 Sidewalk Plan (Delta’s first sidewalk plan) and the 2002 Update; both of which identified the Township’s existing and emerging major activity centers and the sidewalk routes necessary to link these centers with the community’s residential areas.

The activity centers identified in the 1986 Sidewalk Plan remain viable. For example, Delta Township’s central business district represents one of the largest retail hubs in central Michigan, with over 2,000,000 square feet of major retail space, a 6 screen movie theater, and an extensive array of restaurant, service, office, and commercial establishments. Extensive progress has been made in the construction of sidewalks to link this area to the Township’s residential areas. The sidewalk routes and segments identified as necessary in the 1986 Sidewalk Plan, and their current construction status, are listed in Table 1.

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**Table 1
Necessary Sidewalk Routes & Segments Identified by 1986 Sidewalk Plan & Status**

Street	Route/Segment	Status/Completed Segments
Harriet Ave.	from W. Saginaw Hwy. to Michigan Ave.	East side: Lariat Ln. to Michigan Ave.
St. Joe Hwy.	from Waverly Rd. to Kenway Dr.	North side: Harvest to Kenway & South side, Waverly to Arlington.
Snow Rd.	north from St. Joe Hwy. to existing walk	West Side: St. Joe to W. Saginaw. East side: St. Joe to Michigan. (Safe Routes to Schools grant project)
Grape Arbor Dr.	from Elmwood Rd. to existing walk	North side.
Plum Hollow Dr.	from Elmwood Rd. to Spearberry Ln.	North side: beyond Spearberry to Maycroft .
Norwick St.	from existing walks to St. Joe Hwy.	To West side of Chesley, then North to St. Joe.
Weston St.	from existing walks to St. Joe Hwy.	East side, Norwick to St. Joe.
Harvest Ln.	from existing walks to St. Joe Hwy.	Both sides, Otis to St. Joe, except 1 lot gap on East side.
Dibble Blvd.	from existing walks to St. Joe Hwy.	West side.
Dibble Blvd.	from Michigan Ave. to existing walk	West side.
Dibble Blvd.	from St. Joe Hwy. to W. Saginaw Hwy.	West side.
Michigan Ave.	from Creyts to existing walks	North side: Creyts to Waverly. South side, Cherbourg to Woodhaven, except 1 property between Windjammer & Park Meadows. (Snow to Windjammer segment was constructed in 2009 as part of Waverly Community Schools Safe Routes to School grant project)
Willow Hwy.	from Arden Rd. to Lindy Dr.	Both sides Canal to Elmwood, except 1 lot gap on south side opposite Armstrong. East side: Arden to Park Dr. South side, Robbins to Waverly.
Canal Rd.	from W. Saginaw Hwy. to St. Joe Hwy.	East side. West side: from Heritage Dr. to St. Joe. (West side, Heritage to W. Saginaw scheduled for 2010 as part of Grand Ledge Public Schools Safe Routes to School grant project)
Elmwood Rd.	from Mall Dr. West to Michigan Ave.	West side. East side: Mall Dr. East to W. Saginaw. (Sidewalks also constructed from Mall Dr. West on West side to Willow, and on East side from Mall Dr. East to Plum Hollow)
Webster Rd.	from Willow Hwy. to the Grand River	Both sides to Old River Tr. scheduled for 2010 as part of Congestion Management & Air Quality (CMAQ) grant project.
W. Saginaw Hwy.	from Waverly Rd. to Canal Rd.	Both sides.
Mall Dr. South	from W. Saginaw Hwy. to Michigan Ave.	West side. East side: from W. Saginaw to Ivan Dr.
Mall Dr. West	from W. Saginaw Hwy. to existing walk	Constructed in 2009.
Creyts Rd.	from Willow Hwy. to St. Joe Hwy.	Both sides Willow to W. Saginaw scheduled for 2010 as part of CMAQ grant.
Mall Dr. East	from Midland Dr. to W. Saginaw Hwy.	Not constructed.
St. Joe Hwy.	from Kenway Dr. to Canal Rd.	North side, except for 980' gap in front of vacant Auto-Owners owned parcel, and a 330' gap West of Creyts/St Joe intersection. South side: from 470' West of Creyts to Creyts; Creyts to Century Blvd.; from 950 East of Broken Ridge to 120' West of Broken Ridge; from 635' East of Canal to Canal.
Waverly Rd.	from St. Joe Hwy. to Willow Hwy.	West side, short segments North of Michigan Ave (240') and North of Otis (145').

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The 2002 Update identified new activity centers in Sections 9, 10, and 16 of the Township that are slated for major commercial, higher density residential, and office development. These areas of the Township are expected to be the foci of future growth, and it will be necessary to link the existing pedestrian system to these new areas, as well as complete the routes and segments to the activity centers identified in the 1986 Sidewalk Plan. Table 2 lists the additional necessary sidewalk routes and segments that were identified in the 2002 Update.

**Table 2
Additional Necessary Sidewalk Routes & Segments Identified in 2002 Sidewalk Plan Update & Status**

Street	Route/Segment	Status/Completed Segments
Michigan Ave.	South side, Snow to Park Meadows.	Completed, except 1 property between Windjammer & Park Meadows. (Snow to Windjammer segment was constructed in 2009 as part of Waverly Community Schools Safe Routes to School grant project)
Michigan Ave.	South side, Renker/Woodhaven to Waverly.	Not constructed.
Willow Hwy.	South side, close gaps between Lindy & Canal.	Completed.
Willow Hwy.	South side, Canal to Broadbent.	Not constructed.
W. Saginaw Hwy.	South side, Canal to Amoco site.	Not constructed. (2010-2011 reconstruction of 1-96/W. Saginaw interchange will include construction of a sidewalk from Canal Road to Commercial Dr. Sidewalk segments have been constructed on south side of W. Saginaw between Commercial Dr. & Menard Dr. and Migaldi Ln. & Broadbent)
W. Saginaw Hwy.	North side, from Twp. Admin. Bldg. to Quality Dairy site.	380' segment in front of Crippen Auto Mall constructed. There are also sidewalks in front of the Quality Dairy & Art Van site. (2010-2011 reconstruction of 1-96/W. Saginaw Interchange will result in loss of the sidewalk segment in front of Township Administration Building.
Broadbent Rd.	East side, St. Joe to Barrington Woods Condos	Not constructed.
Broadbent Rd.	East side, from end of Art Van site to Willow.	Not constructed.
St. Joe Hwy.	North side, Canal to Broadbent.	Segment between Canal & Heritage Dr. constructed.
St. Joe Hwy.	South side, Century Blvd. west to existing walk.	Not constructed.
Mall Drive West	West & North sides, W. Saginaw to existing walk.	Constructed in 2009.
Old River Trail	East & South sides, Willow to Webster.	Not constructed.
Lindy Dr.	Both sides, from Willow south to existing walks (i.e., to French Creek Dr.).	Not constructed.
Gull Rd.	South sides, close gaps between Weston & Tindalaya.	Completed.
Otis Ave.	South side, Harvest Ln. to Dibble.	Not constructed.
Chesley	Both sides, Norwick St. to St. Joe.	West side. East side not constructed.
Willow Creek Dr.	East side, Willow south to existing walk (i.e., to Captiva).	Not constructed.

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Table 3 lists those sidewalk routes/segments that were identified as necessary in the 1986 Sidewalk Plan and the 2002 Update that have yet to be completed:

**Table 3
Necessary Sidewalk Routes and Segments Identified by the 1986 Sidewalk Plan and
2002 Sidewalk Plan Update that Remain to be Built**

Street	Route/Segment
Harriet Ave.	West side, W. Saginaw Hwy. to Michigan Ave.
Chesley St.	East side, Norwick to St. Joe.
Weston St.	West side, Norwick to St. Joe. East side, Meaford to Norwick.
Dibble Blvd.	East side, Michigan to W. Saginaw & St. Joe to Michigan.
Michigan Ave.	South side, Woodhaven to Waverly & Creyts to Cherbourg.
Willow Hwy.	West & South sides, Arden to Elmwood. South side, Canal to Broadbent.
Canal Rd.	East side, W. Saginaw to CASE Credit Union; Treadwell to Water's Edge; & Players Club to St. Joe. West side, Streamwood to Willow.
Webster Rd.	Both sides, Willow to the Grand River
Creyts Rd.	East side between W. Saginaw & St. Joe from Shell to Speedway. West side, Whispering Ln. to Walgreens.
Mall Dr. East	East side, Midland to W. Saginaw.
St. Joe Hwy.	North side, from Creyts east (across Auto-Owners property frontage) to existing walk and from Creyts west across Quality Dairy site frontage. South side, between Calvary Lutheran Church & Anacapri; 450' gap west of Century Blvd.; and between Broken Ridge and Trinity United Methodist Church.
Waverly Rd.	West side, St. Joe to Willow.
Broadbent Rd.	East side, St. Joe to Barrington Woods Condos & from north end of Art Van site to Willow.
Old River Trail	East & South sides, Willow to Webster.
Lindy Dr.	Both sides, from Willow south to existing walks (i.e., to French Creek Dr.).
Otis Ave.	South side, Woodhaven to Dibble.
Willow Creek Dr.	East side, Willow south to existing walk (i.e., to Captiva).

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Prior to the adoption of the Delta Township Sidewalk Plan in 1986 and the Delta Township Sidewalk Ordinance and Sidewalk Construction Standards in 1993, the construction of sidewalks in the Township was haphazard at best. Following the adoption of the Sidewalk Plan and Sidewalk Ordinance, sidewalks have been required to be installed concurrent with new construction in the Township's residential, office, and commercial zoning districts.

Also guided by the plan, was an inventory, construction, and repair program undertaken by the Delta Township Engineering Department. In 1996, the Engineering Department conducted a comprehensive inventory of the Township's sidewalk system documenting its condition and identifying those walks in need of repair, handicap ramps that needed to be installed, and gaps that needed to be closed. Approximately 25,940 lineal feet of sidewalk was inspected. In 1997, repair and construction work was commenced to fix broken walks, install ramps, and close gaps in the system. Upon completion of the project in 2002, approximately 340 feet of new walks were installed and 2,500 feet of walks were repaired. The Township has continued to repair sidewalks as necessary without levying the cost onto individual property owners.

GOALS, OBJECTIVES & POLICIES

In general, the goals established in the 1986 Delta Township Sidewalk Plan remain valid and are carried through in this update. Some goals have been revised, added, or deleted to reflect current Township practices or to add clarity. The goals are listed as follows:

- I. Provide a safe and effective pedestrian circulation system throughout the Township for its citizens.
 - A. Focus on the heavily populated sections of the Township and its major pedestrian corridors.
 - B. Provide pedestrian routes between major activity centers, such as malls, commercial and office areas, health care facilities, etc.
 - C. Establish pedestrian routes away from potential hazards and pedestrian/vehicular conflicts.
 - D. Correct existing problems within the established pedestrian system to provide more effective use of the existing walkways.
- II. Provide safe and effective pedestrian routes for users of schools, parks, churches, and other public and private institutions.
 - A. Provide sidewalks along major transportation routes connecting neighborhoods and schools, thereby reducing the need for safety busing.
 - B. Provide sidewalks along major transportation routes and scenic corridors connecting neighborhoods and parks.
 - C. Provide sidewalks along transportation routes connecting major public and private institutions.
- III. Establish methods for financing the capital improvements, repair, and maintenance of the pedestrian system.
 - A. Promote sidewalk construction by establishing a tax supported system for phasing and construction of improvements.

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- B. Maintain the present policy, which requires the provision of a standard pedestrian sidewalk system within all new subdivisions and connections with other existing or proposed sidewalk locations.
 - C. Maintain the present policy requiring property owners, where feasible and when necessary, to financially participate in the development, repair, and maintenance of sidewalks fronting their property.
 - D. Develop and implement a policy requiring developers to provide financial guarantees to ensure that new developments conform to the Township's sidewalk installation standards and the overall goals of this plan.
 - E. Continue to explore other federal, state, and county grant programs which can contribute to sidewalk development.
 - F. Optimize opportunities presented by roadway construction and improvement projects to include sidewalk construction as a component of the projects.
- IV. Develop a systematic program to maintain pedestrian routes in a useable and safe condition.
- A. Develop an annual program to inventory the condition of the Township's sidewalks and identify those walks needing repair.
 - B. Determine equipment and personnel or contractors needed to effectively maintain and repair the pedestrian system.
 - C. Develop policies and directives to establish construction and maintenance priorities throughout the system.
 - D. Establish a construction priority and phasing system.
- V. Maintain administrative policies that promote the coordination and efficient management of resources directed toward planning and implementation of the pedestrian system.
- A. Maintain and update existing ordinances to regulate the development of sidewalks throughout the Township.
 - B. Delegate responsibility within the municipal authority to oversee the proper and timely development and maintenance of the pedestrian system.
 - C. Maintain and update the standard design criteria governing primary and secondary routes, barrier-free access, crossings, access, widths, etc.
 - D. Update the Township Sidewalk Plan every 5 years.
- VI. Comply with the legal requirements of the State of Michigan that impact the development of the pedestrian system.
- A. Maintain compliance with the State Motor Vehicle Codes
 - B. Maintain compliance with the State and Federal barrier-free access regulations (e.g., Americans with Disabilities Act).
- VII. Provide methods to allow public participation in developing or revising sidewalk routes/priorities.

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- A. Hold public meetings on proposed sidewalk projects of major impact.
- B. Encourage citizens to attend at regular Planning Commission and Township Board meetings.
- C. Encourage citizen participation in community opinion surveys that may from time to time be conducted.

NEW ACTIVITY CENTERS AND SIDEWALK ROUTES

The following table (Table 4) lists the sidewalk routes that are recommended. These routes are in addition to those that are listed in Table 3 that remain to be constructed.

**Table 4
Additional Necessary Sidewalk Routes and Segments Identified in 2010**

Street	Route/Segment	Comments/Issues
Thomas L. Parkway East	East side, W. Saginaw to Willow.	Links Mar-Moor & W. Saginaw.
Snow Rd.	Ease side, Aspen to Cornerstone.	May be dependent on MDOT reconstructing bridge over I-496.
Chanticleer Trail/Green Meadows Dr.	East side, St. Joe to Michigan.	Links Homestead Acres to Michigan & St. Joe and routes to Waverly Schools.
E/W Sidewalk to Library	Davenport to Maycroft.	Provides direct connection between neighborhood & library.
Anacapri Blvd.	West side, St. Joe to Montevideo.	Completes link between Creyts & St. Joe.
Marketplace Blvd.	West side, St. Joe to 600 ft. North to existing walk.	Closes final gap on Marketplace between W. Saginaw and St. Joe.
Blackberry Ln.	Barton to Plumhollow.	Links Plumhollow & Mar-Moor neighborhoods to Willow.
Elmshaven Dr.	Michigan to St. Joe.	These 3 routes/segments combine to link Park Meadows and Huntington Acres, and provide Huntington Acres residents pedestrian access to Michigan & St Joe.
Woodhaven Dr.	East side, Michigan Ave. to Gladys.	
Gladys Dr.	Elmshaven to Woodhaven.	
Park Meadows Dr.	Chesley to Elmshaven.	
Otis St.	Dibble to Waverly.	Links to existing and proposed Harvest Ln. & Dibble walks.
Meade Drive	St. Joe to Roanoke Way.	These routes would provide pedestrian routes for Gettysburg Estates residents between St. Joe & the Michigan Ave. extension.
Roanoke Way	Meade to Michigan Ave. extension.	
Williamsburg Rd.	Existing walk to Michigan Ave. extension.	Provide connection to new Michigan Ave. extension.
Armstrong Rd.	Webster to Willow.	Provide Armstrong Hills residents routes to Willow, Webster & Delta Mills Park.
Webster Rd.	The Grand River to Delta River Drive.	Continuation of the proposed Webster walks with eventual connection to Delta River Drive & Hawk Meadow.
Century Blvd.	Creyts to St. Joe.	These two segments provide a safe pedestrian system within the Century Commerce Park office park with links to Creyts and St. Joe for use by employees.
Centurion Dr.	Century Blvd. to Municipal Way.	
Barton Dr.	Waverly to Mar-Moor Dr.	Provides safe pedestrian route for Mar-Moor residents between Willow and Waverly.
Mar-Moor Dr.	Barton to Willow.	
River Ridge Dr.	Willow to existing walk West of Rockdale.	Provides safe pedestrian route through River Ridge Subdivision to Grandwoods Park.

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Table 4 (Continued)
Additional Necessary Sidewalk Routes and Segments Identified in 2010

Street	Route/Segment	Comments/Issues
Garfield Ave.	W. Saginaw to Sharp Park (i.e., E-W Collector) trail/path.	Provides safe and more direct pedestrian access to Sharp Park & access to recreational path/trail for Worthmore residents.
Maycroft Rd.	W. Saginaw to Plumhollow.	These routes are proposed to comprise a Safe Routes to Schools grant project increasing pedestrian safety to and from St. Gerard's School
Clark Rd.	Willow to W. Saginaw.	
Addison Rd.	Robbins to Maycroft.	
Theo Ave.	Michigan Ave. to W. Saginaw	Provide safe route to schools.
Delta River Drive	Webster to Hawk Meadow Park entrance.	Provides safe pedestrian access to the park.
Westshire Dr.	Canal to W. Saginaw.	Provides safe pedestrian route for office workers in Delta Downs Office Park between Canal & W. Saginaw.

GUIDELINES FOR SETTING SIDEWALK CONSTRUCTION PRIORITIES

The attached Sidewalk Map illustrates the existing sidewalks within the Township and those proposed to be constructed as listed in Table 3 and Table 4. This Sidewalk Plan Update does not attempt to set specific construction priorities for routes/segments indentified as necessary. This is done each year in the Township's annual "Sidewalk Improvement Program".

In setting the construction priorities and allocating funds in the annual Sidewalk Improvement Program, it is recommended that the following objectives be taken into consideration. The objectives are listed in decreasing order of importance, with the most important objective being listed first, and the least important being listed last.

1. Provide sidewalks on both sides of State trunk lines and County primary roads that front schools, businesses, shopping districts, and public facilities.
2. Provide new ramps and replace existing sidewalks where necessary.
3. Connect missing minor sidewalk links.
4. Provide sidewalks on both sides of County primary and secondary roads that connect high and medium density residential areas to schools, business and shopping districts, and public facilities.
5. Provide sidewalks on at least one side of County primary and secondary roads that connect low density residential areas to schools, business and shopping districts, and public facilities.
6. Provide sidewalks on at least one side of County primary and secondary roads that connect residential areas that have sidewalks to other residential areas that have sidewalks.
7. Provide sidewalks on at least one side of the street within residential areas.
8. Provide sidewalks on both sides of the street within residential areas.
9. Provide paved shoulders or sidewalk on one side of County and secondary roads that connect isolated residential areas with other nearby isolated residential areas.

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While the ultimate goal may be to have sidewalks on both sides of all streets within the Township, this prioritization scheme will help guide construction decisions in times of limited funding availability. It should also be noted that sidewalk construction along major routes may at times be delayed in favor of smaller projects because the Township knows that it will receive financial participation from outside sources at a later date for the major project. This is especially true of sidewalks built in conjunction with primary road improvement projects. Federal, State, and County monies can often be used for sidewalk construction in these cases, which in-turn allows Township monies to be diverted to other construction projects.

ALTERNATIVE FUNDING SOURCES

The Township may wish to explore the feasibility of utilizing the one or more of the funding alternatives described below in financing sidewalk construction projects:

General Obligation Bonds: Through this method, the taxing power of the Township is pledged to pay the interest and principal to retire the debt.

Revenue Bonds: The bonds are repaid from service charges or user fees.

Special Assessment: Public works projects that benefit particular properties can be financed through this method.

State and Federal Grants & Aid: Revenue sharing and categorical grants such as the Safe Routes to Schools grant program.

Gifts and Donations: Donations to non-profit organizations such as a governmental unit are generally tax deductible and may appeal to some residents.

Private Foundations: Many foundations will provide partial limited funds for public safety improvement projects.

Millages: Increased tax revenues for a particular public improvement project approved by the voters.

County Road Commission: Certain amount of State Highway revenues may be set aside for non-motorized transportation needs on major streets.

OTHER CONSIDERATIONS

This update only addresses primary utilitarian sidewalk routes. It is not intended to be a complete non-motorized transportation plan. This was also true of the 1986 Sidewalk Plan. A conscious decision was made by the Board in 1986 to not require the wider walks through residential areas that would serve as combination bicycle/pedestrian/recreational paths. Recreational trails and pathways are independently addressed in the Township's 2005 Delta Trails Non-Motorized Transportation Study.

Additionally, the update does not recommend sidewalks in the Township's industrial tract. The 1986 plan did not recommend sidewalks in the industrial tract, and the Delta Township Sidewalk Ordinance was written and adopted such that it specifically exempts sidewalks from being installed in the Township's industrial zones. If Township Board wishes to change this policy to now require sidewalks in the Township's industrial areas, further amendments to this update would be required, as well as amendments to the Sidewalk Ordinance.

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REFERENCES

Delta Township Sidewalk Plan, Snell Environmental Group, April 1986.

2002 Delta Township Sidewalk Plan Update, Delta Township Planning Department, as adopted on April 21, 2003.

Delta Charter Township, Ordinance No. 93-9, (The Delta Township Sidewalk Ordinance), November 1, 1993, as amended through February 18, 2008.

Delta Charter Township, Delta Township Sidewalk Construction Standards, November 1, 1993.

Delta Trails Non-Motorized Transportation Study, Landscape Architects & Planners, Inc., April 2005.

Sidewalk Master Plan, Charter Township of Delhi, Gove Associates, Inc., August 1, 1985.

Missoula Non-Motorized Transportation Plan: Guidelines for Creating a Non-Motorized Travel Network in the Greater Missoula Area, Missoula, Montana, January 1994.

Creve Coeur Pedestrian Plan, Creve Couer Department of Community Development, Creve Couer, Missouri, August 2000.

Kenton County Pedestrian Plan, Northern Kentucky Area Planning Commission, June 2001.

APPENDIX

DELTA TOWNSHIP SIDEWALK ORDINANCE

DELTA TOWNSHIP SIDEWALK CONSTRUCTION STANDARDS

*SIDEWALKS REQUIRED IN SUBDIVISIONS PRIOR TO THE ADOPTION
OF THE DELTA TOWNSHIP SIDEWALK ORDINANCE*

DELTA TOWNSHIP SIDEWALK MAP

DELTA TOWNSHIP SIDEWALK & SNOW REMOVAL ORDINANCES
EXCERPTED FROM THE DELTA CHARTER TOWNSHIP CODE OF ORDINANCES
(As Amended through February 2008)

ARTICLE II. SIDEWALKS

Sec. 15.5-26. Purpose.

The purpose of this ordinance is to provide for the construction, maintenance, and repair of sidewalks for the public safety pursuant to the provisions of Public Act 359 of 1947, as amended.
(Ord. No. 93-9, 11-1-93)

Sec. 15.5-27. Definitions.

For the purpose of this chapter, the following words and phrases shall have the meanings hereinafter defined:

Alteration of existing principal building shall mean any alteration, construction, or reconstruction related to an existing principal building in the township that results in a change in said principal building of 25 percent of the floor area or more, or that results in the replacement of an existing principal building.

Abutting or adjacent property shall mean any lot or parcel of land adjoining, bordering, or touching a street as defined herein.

Adjacent sidewalk shall mean that portion of the sidewalk located within the street next to an abutting or adjacent property as defined herein.

Building shall mean an enclosed structure having a roof supported by columns, walls, arches, or other devices used for the housing, shelter, or enclosure of persons, animals, chattels, or property of any kind. Principal building shall mean a building in which is conducted the main or principal uses of the lot or parcel on which said building is located.

Private street shall mean any street, road or thoroughfare for vehicular traffic which is privately owned and maintained and which provides the principal means of access to abutting properties. A street includes the land between the street right-of-way lines, whether improved or unimproved.

Public street shall mean a dedicated public right-of-way, which is a state, county, or municipal roadway affording the principal means of access to abutting property. A street includes the land between the street right-of-way lines, whether improved or unimproved.

Sidewalk shall mean that portion of the street right-of-way improved with concrete and designed for pedestrian travel.

Street shall mean a dedicated public right-of-way which is a state, county, or municipal roadway affording the principal means of access to abutting property. A street includes the land between the street right-of-way lines, whether improved or unimproved.
(Ord. No. 93-9, 11-1-93; Ord. No. 03-03, §§ 1, 2, 2-17-03)

Sec 15.5-28. Sidewalk construction required.

- (a) All owners of lots and parcels abutting dedicated public streets shall be required to construct sidewalks at the time of construction of any new principal buildings, or at the time of alteration of existing principal buildings on such lots or parcels. Sidewalks shall also be required to be constructed within developments utilizing private streets such as planned unit developments, condominium subdivisions, condominiums, apartment complexes, etc. Sidewalks within developments utilizing private streets

shall be required along at least one side of the private streets. The required construction of sidewalks shall not apply in conjunction with the construction or alteration of principal buildings on lots or parcels located within the NR, A1, A2, RA, I1, and I2 zoning districts, or in conjunction with the construction of one and two-family dwellings on lots or parcels created prior to the effective date of this ordinance. Residential, office, or commercial-zoned lots or parcels located within subdivisions that have received final preliminary plat approval prior to the effective date of this ordinance shall have sidewalks installed as required by the township board at the time final preliminary approval of the subdivision plat was granted. Additionally, residential, office or commercial-zoned lots or parcels created prior to the effective date of this ordinance shall have sidewalks installed as required by the planning commission, township board, or zoning administrator at the time of final site plan approval for the construction of new, or alteration of existing, principal buildings on such lots or parcels. Sidewalks required to be constructed pursuant to this section shall be installed within one year of issuance of the building permit for construction or alteration of any principal buildings on said lots or parcels. All sidewalks constructed shall comply with the Delta Township Sidewalk Construction Standards referred to in section 15.5-32 herein.

- (b) The township board may, by resolution, require the owners of lots and parcels abutting public street rights-of-way, or private street rights-of-way, to construct sidewalks where the presence of sidewalks may be declared by the township board to be necessary to provide safe and convenient routes for pedestrian traffic. Such sidewalk routes may include, but shall not be limited to, routes between residential areas and activity centers such as schools, within the Township's Central Business District, and those routes identified in the Delta Township Sidewalk Plan. All sidewalks constructed shall comply with the Delta Township Sidewalk Construction Standards referred to in section 15.5-32 herein. The township board may order the construction of the sidewalks and assess all or part of the costs of sidewalk construction to the abutting property owners involved, or may permit the abutting property owners to provide for the construction of the required sidewalks on their own in accordance with the Delta Township Sidewalk Construction Standards referred to in section 15.5-32 herein, and any other specifications required by the township board. The township board may also cause sidewalks to be constructed with the cost of said construction paid out of the contingent fund of the township. A resolution requiring the construction of sidewalks shall note the time period in days in which the owners must construct the required sidewalk. The construction of any sidewalk under this section shall be in compliance with the requirements of P.A. 80 of 1989, MCLA 41.288a, as amended.
- (c) Prior to adoption of a resolution requiring sidewalks, the township board shall hold a public hearing. The township clerk shall cause notice of the time and place of the public hearing to be published within a newspaper of general circulation within the township at least ten days prior to the date of the hearing.

In addition, all abutting property owners affected by such a resolution shall be given due notice of the public hearing by the township clerk via regular mail at least ten days prior to the date of the hearing. Said notice shall be prepared and the public hearing conducted in accordance with Michigan Public Acts 64 and 65 of 1989, as amended.

(Ord. No. 93-9, 11-1-93; Ord. No. 03-03, § 3, 2-17-03)

Sec. 15.5-29. Variances.

- (a) The township board may, by resolution, authorize a variance from the requirements of section 15.5-28 of this ordinance under the following circumstances:
 - (1) The township board shall determine that the proposed variance will not impair the public health, safety, or general welfare of the inhabitants of the township.
 - (2) The township board shall determine that a strict application of such requirements would result in practical difficulties to, or undue hardship upon, the owners of such lots or parcels. Practical difficulties may include, but shall not be limited to, severe variations in topography, unsuitable soils, or difficulty in providing safe separation between pedestrian and vehicular traffic due to site

location, layout, or existing building arrangements. The cost of installing a sidewalk shall not constitute the sole basis for an undue hardship.

- (3) A variance may be granted by the board when the preponderance of lots or parcels of land on the street in question are already developed with no sidewalks existing, and accordingly that a sidewalk would not likely connect to any other walk, and thus not serve the purpose of a pedestrian system.
 - (b) A variance request shall be filed by the property owner or their designated agent. An application for a variance shall be submitted to the township clerk on a special form for that purpose. Applications shall be submitted at least two weeks in advance of a regular meeting of the township board.
 - (c) The township planning department shall have the responsibility of preparing a written report which shall be submitted to the township board prior to the meeting at which the board will consider a variance.
- (Ord. No. 93-9, 11-1-93)

Sec. 15.5-30. Reserved.

Editor's note: Ord. No. 03-03, § 4, adopted Feb. 17, 2003, repealed § 15.5-30 pertaining to ice and snow removal and deriving from Ord. No. 93-9, adopted Nov. 1, 1993. Section 5 of said ordinance set out new provisions pertaining to similar subject matter which have been included as Art. IV, §§ 15.5-86--15.5-93.

Sec. 15.5-31. Repair of sidewalks.

- (a) It shall, in all cases, be the responsibility of the owner of every lot or parcel of land in the township to keep the sidewalks adjacent to his lot or parcel in good repair. Sidewalks shall be repaired or replaced when the condition of same is detrimental to the safety of the general public. Included as conditions requiring repair, but not limited to, are the following:
 - (1) A rise or drop of more than one inch between any two sections of sidewalks.
 - (2) More than two cracks of one-quarter inch in width or more in any two lineal feet of sidewalk section.
 - (3) Any section of sidewalk which is tilted in excess of one inch per foot from inside edge to outside edge. (The outside edge being the edge of the sidewalk nearest the street line.).
 - (4) If, in any five foot lineal section of sidewalk, more than 50 percent of the surface has scaled off to a depth of 1/4 inch or greater, that section of the sidewalk shall be replaced.
 - (b) Whenever the township engineer, or the engineer's designated agent, shall determine that a sidewalk is in a state of disrepair, a notice shall be sent by regular mail to the owner of the adjacent lot or parcel to repair the Sidewalk. The notice shall specify the time period within which such work shall be commenced. In no case shall the time period allowed for repair of a sidewalk exceed 90 days.
- (Ord. No. 93-9, 11-1-93)

Sec. 15.5-32. Construction or repair by the township.

If any owner shall fail or neglect to construct or repair any sidewalk adjacent to their lot or parcel of land within such time as herein required, or as may be required by a resolution of the township board, the township board may cause the same to be done in accordance with the provisions of P.A. 80 of 1989, MCLA 41.288a, and the cost of said construction or repair may be paid out of the contingent fund of the township, and the township board may pursue the means necessary to recover the cost of said construction or repair from the owner.

(Ord. No. 93-9, 11-1-93)

Sec. 15.5-33. Construction standards.

All sidewalks hereafter constructed, repaired or rebuilt shall be constructed, repaired or rebuilt according to the Delta Township Sidewalk Construction Standards as adopted by resolution of the township board.
(Ord. No. 93-9, 11-1-93)

Sec. 15.5-34. Authority of township board.

The township board, or the board's designated official, shall have authority to provide for the construction or repair of sidewalks as well as the clearance of ice and snow by general contract, or in such other manner as it shall determine.
(Ord. No. 93-9, 11-1-93)

Sec. 15.5-35. Administration.

It shall be the responsibility of the township engineer, or such person as the engineer may designate, to supervise and control all sidewalks and the construction, repair, and maintenance thereof, including inspection, and the issuance of appearance tickets if so designated by the township manager, and to enforce the provisions of this ordinance.
(Ord. No. 93-9, 11-1-93)

Sec. 15.5-36. Violations.

- (a) Upon determination that a violation of the provisions of this ordinance exists, the persons believed to have committed the violation shall be notified by certified letter of the nature of the violation. The notice shall specify the time period in which the person shall come in compliance with the provisions of this ordinance. In no case shall the time period specified in the notice to come in compliance with the provisions of this ordinance exceed 90 days.
- (b) Violations of the provisions of this ordinance, or failure to comply with any of its requirements, shall constitute a misdemeanor.
- (c) Any person, firm, or corporation who violates this ordinance or fails to comply with any of its requirements shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined not more than \$500 or imprisoned for not more than 90 days, or both, and, in addition, shall pay all costs and expenses involved. Each day such violation continues shall be considered a separate offense.
- (d) The owner of record or tenant of any building, structure, premises, or part thereof, and any architect, builder, contractor, agent or person who commits, participates in, assists in, or maintains such violation may each be found guilty of a separate offense and suffer the penalties herein provided.
- (e) The imposition of any fine, or jail sentence, or both shall not exempt the violator from compliance with the provisions of this ordinance.

(Ord. No. 93-9, 11-1-93)

Sec. 15.5-37. Appearance tickets.

After a notice of violation is given to a person pursuant to section 15.5-36 herein, and compliance with the provisions of this ordinance has not been obtained, the township manager, or an official appointed by the township manager, shall be authorized to issue and serve appearance tickets on any person with respect to any violation of the Delta Charter Township Sidewalk Ordinance when there is reasonable cause to believe that the person has committed such an offense. This authority is granted pursuant to Public Act 147 of 1968, as amended.
(Ord. No. 93-9, 11-1-93)

Secs. 15.5-38--15.5-60. Reserved.

ARTICLE IV. ICE AND SNOW REMOVAL*

*Editor's note: Ord. No. 03-03, § 5, adopted Feb. 17, 2003, set out provisions intended for use as Art. IV, §§ 15.5-75--15.5-82. To preserve the style of this Code, and at the editor's discretion, these provisions have been included as Art. IV, §§ 15.5-86--15.5-93.

Sec. 15.5-86. Purpose.

This article is intended to provide the township with a means of applying reasonable regulations to require snow and ice removal from sidewalks, and to require that the removal of snow from private property shall not be deposited or placed in a manner deemed inappropriate, in order to promote public health, safety and welfare. (Ord. No. 03-03, § 5, 2-17-03)

Sec. 15.5-87. Definition.

For the purpose of this article, the following words and phrases shall have the meaning hereafter defined: Private property shall mean any area, space, lot, or parcel, whether improved or unimproved, occupied or unoccupied, which is privately owned and maintained for the purposes of snow and ice removal. (Ord. No. 03-03, § 5, 2-17-03)

Sec. 15.5-88. Removal required.

No person shall permit ice or an accumulation of more than two inches of snow to remain on any sidewalk adjacent to a lot or parcel occupied by them, or on a sidewalk adjacent to any unoccupied lot or parcel owned by them, for a longer period than 24 hours after the same has formed or fallen. (Ord. No. 03-03, § 5, 2-17-03; Ord. No. 03-12, 11-17-03)

Sec. 15.5-89. Requirements for removal.

All persons removing snow from private property, whether by use of a shovel, snow blower, plough, or any other method, shall comply with the following regulations:

- (1) Snow shall not be deposited or spread into sidewalks, alleys, streets, or highways.
- (2) Snow shall not be deposited so as to obstruct fire hydrants or fire appliances.
- (3) Snow shall not be deposited so as to create any visual obstruction which would impair the safe use of sidewalks, alleys, streets, or highways.

Sheriff department personnel and township fire department personnel shall be authorized to issue and serve citations with respect to violations of this section.

Cross references: Fire prevention and protection, Ch. 7, § 7-27. (Ord. No. 03-03, § 5, 2-17-03)

Sec. 15.5-90. Administration.

It shall be the responsibility of the township manager, or any township official so designated by the township manager, to administer the terms of this article. (Ord. No. 03-03, § 5, 2-17-03)

Sec. 15.5-91. Enforcement.

It shall be the responsibility of the county sheriff department, the township manager, and township officials as appointed by the township manager to enforce the terms of this article. Personnel as herein appointed shall be authorized to issue and serve citations with respect to violations and/or non-compliance with any of the provisions of this article.

(Ord. No. 03-03, § 5, 2-17-03)

Sec. 15.5-92. Violations.

- (a) Violations of the provisions of this article, or failure to comply with any of its requirements, shall be punishable as a civil infraction subject to a fine in the amount of \$25.00 if paid within ten days of issuance, or \$50.00 if paid after ten days of issuance.
- (b) Civil infraction citations shall be issued and served to the owner of the property upon which the violation has occurred.
- (c) The imposition of any fine shall not exempt the violator from compliance with the provisions of this article. Each day a violation remains in existence may be treated as a separate offense.
- (d) If any fines and or costs associated with this section are not paid, the civil infraction citation may be filed with the district court in accordance with subsection 2-188(g) of this Code.
- (e) The civil fine associated with this section shall be set from time to time by the township board by resolution.

(Ord. No. 03-03, § 5, 2-17-03)

Sec. 15.5-93. Municipal civil infraction.

For each violation of a provision of this article, or failure to comply with any of its requirements, a township appointed official shall be authorized to issue and serve a municipal civil infraction citation, in accordance with Article VII of Chapter 2 of this Code, on any person with respect to a violation of this article when there is reasonable cause to believe that person has committed such an offense.

(Ord. No. 03-03, § 5, 2-17-03)

DELTA TOWNSHIP SIDEWALK CONSTRUCTION STANDARDS

These standards were adopted by a resolution of the Delta Township Board of Trustees on November 1, 1993.

All sidewalks hereafter constructed, repaired or rebuilt in Delta Township shall be constructed, repaired or rebuilt according to the following specifications:

- 1) **Preparation of Subgrade:** The subgrade shall be prepared by excavating or filling to the required elevation of the bottom of the concrete. The subgrade shall be well drained and cleaned of all sod and organic material. Where necessary for the construction of ramps and drive approaches, the curb shall be cut for its full depth. Where necessary to cut or remove tree roots, adequate precautions shall be taken so as to protect exposed roots and preserve existing trees. Any material found to be unsuitable, such as muck, peat, marl, soft clay and other such materials subject to frost heaving, differential frost action, or unable to provide adequate support for surface improvements, shall be excavated and removed from the job site. Any material so removed shall be replaced with Class II granular material as specified in the current Michigan Department of Transportation Standard Specifications. All fills shall be thoroughly compacted to the required grade. The width of all cuts and fills shall be such that they conform with the final grading requirements as hereinafter stated.
- 2) **Lines, Grades, Slope, Width:** At the time of site plan and plat reviews the Township Engineer, in coordination with the Eaton County Road Commission and/or the Michigan Department of Transportation, shall establish all lines and grades. The surface of all sidewalks and subgrade shall have a slope of one-fourth (1/4) to one-half (1/2) of an inch to the foot toward the curb line. All new concrete sidewalks shall have a minimum width of five (5) feet. Those sidewalks constructed prior to the adoption of this Ordinance may be constructed to the same width as the existing sidewalk.
- 3) **Placement:** Sidewalks shall be placed one (1) foot in from the street right-of-way line, except as determined by the Township Engineer.
- 4) **Ramps:** Sidewalk ramps shall be installed at all street intersections and constructed in accordance with plan II-28G entitled "Sidewalk Ramp Details" contained in the Michigan Department of Transportation Standard Plans, as amended.
- 5) **Forms:** The forms shall be of such design of steel or wood as to insure the accurate maintenance of lines and grades. Flexible strips may be used where necessary on curves. After forms are completely set in place, the contractor shall call the Township Engineering Department to determine if a form inspection is necessary before any concrete is poured.
- 6) **Joints:**
 - (a) **Expansion Joints.** Transverse expansion joints one-half (1/2) inch thick shall be placed at every fifty (50) linear feet of sidewalk, and expansion joint material one (1) inch thick shall be placed between the backs of curbs and sidewalks or driveway approaches. Expansion joint material shall be a premolded strip of bitumen filled fibre, and shall be placed at right angles to the centerline of the sidewalk and perpendicular to the surface, and it shall extend from the surface of the concrete to the subgrade.
 - (b) **Contraction Joints.** Insofar as possible, contraction joints shall be placed at every five (5) linear feet of sidewalk. They may be formed by the use of divider strips three-sixteenths (3/16) inches in thickness or by cutting after floating to a depth of not less than one-quarter (1/4) of the thickness of the sidewalk. They shall be straight, perpendicular, and at right angles to the centerline of the sidewalk. When

the sidewalk abuts buildings or any special structures, joint details shall be approved by the Township Engineer.

7) **Depth of Slab:** All concrete sidewalk, except at driveways shall be at least four (4) inches deep. All driveway approaches shall be at least six (6) inches deep.

8) **Materials:** All materials used in sidewalks shall conform to the standard specifications of the Michigan Department of Transportation, Section 6.11 and the following sections, as amended.

Concrete, Grade 30P, 305, 35P, 35S	7.01
Granular Material Class II	8.02
Steel Reinforcement	8.05
Joint Fillers	8.16
Concrete Curing Materials	8.24

9) **Placing and Finishing:** The subgrade shall be thoroughly moistened and the concrete shall be deposited to the proper depth. The concrete along the edges of forms and joints shall be spaded and the concrete shall be struck off until all voids are removed and the surface has the required grade and cross section. The surface shall be floated and troweled just enough to produce a smooth dense surface, free from irregularities. All joints and edges shall be rounded to a radius of one-quarter (1/4) inch with an approved finishing tool.

The surface of sidewalks shall be broomed to slightly roughen the surface. The surface of sidewalk ramps shall be textured with a course broom transversely to the ramp slope.

10) **Curing and Protection:** All walk and approach surfaces shall be treated as per the Standard Specifications of the Michigan Department of Transportation, Section 6.11.7, as amended. The sidewalk shall be properly protected from the elements and travel for the first 72 hours, except that pedestrian traffic may be permitted after 48 hours. The contractor shall be responsible for the strength and quality of the concrete laid during cold weather and concrete damaged by frost action shall be removed and replaced at the contractor's expense.

11) **Final Grading and Cleanup:** After the concrete has set sufficiently, the forms shall be removed and the spaces shall be backfilled as previously specified. The area between the sidewalk and curb shall be graded and leveled as required to provide a slope of three-eighths (3/8) to one-half (1/2) inch per foot toward the curb or roadway. The area between the sidewalk and the property line shall be graded and leveled as required to meet the original ground surface. These areas shall be left free of all rocks, concrete, roots or other debris.

12) **Permits:** The contractor shall obtain any applicable permits from the Eaton County Road Commission and the Michigan Department of Transportation to work within the road right of way. A copy of said permit shall be submitted by the contractor to the Township Engineer. The contractor shall perform their work in compliance with the Michigan Manual of Uniform Traffic Control Devices, as amended.

Brookside:	East side of Wolf Run Drive, along Lots 1-14. South side of Springtree Lane, along Lots 30, 43, and 44. South and west sides of Windsong Way, along Lots 16-29.
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Cambridge Manor:	Both sides of all streets.
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Canyon Hills:	No sidewalks.
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Delta Mills Estates No. 3:	Within the commons area. On Briarhill for Lots 117-120 on the street side.
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Gettysburg Farms No. 3:	West side of Williamsburg Road.
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Oak Ridge:	Both sides of all streets.
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Players Club:	North side of Players Club Drive, including the cul-de-sac lots from Canal Road to Red Cliffe Drive. East side of Red Cliffe Drive. West side of Portman Drive.
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Saratoga Farms:	No sidewalks.
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Shenandoah:	East side of Wolf Run Drive, including the entire cul-de-sac. South side of French Creek Drive. South side of Conestoga Drive. East side of Sleighside Drive. West side of Lindy Drive, through the Lindy Drive cul-de-sac such that a continuous sidewalk shall exist from the south side of French Creek Drive to the south boundary of the Robbins Acres Subdivision.
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Silver Ridge:	No sidewalks.
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Snow Ridge: North side of Aspen Drive.
North side of Fairbanks.
East Side of Durango
West side of Powderhorn.
South side of Otter Drive.

**Note: The Eyde Development Co. requires sidewalks on both sides of all streets within Snow Ridge.*

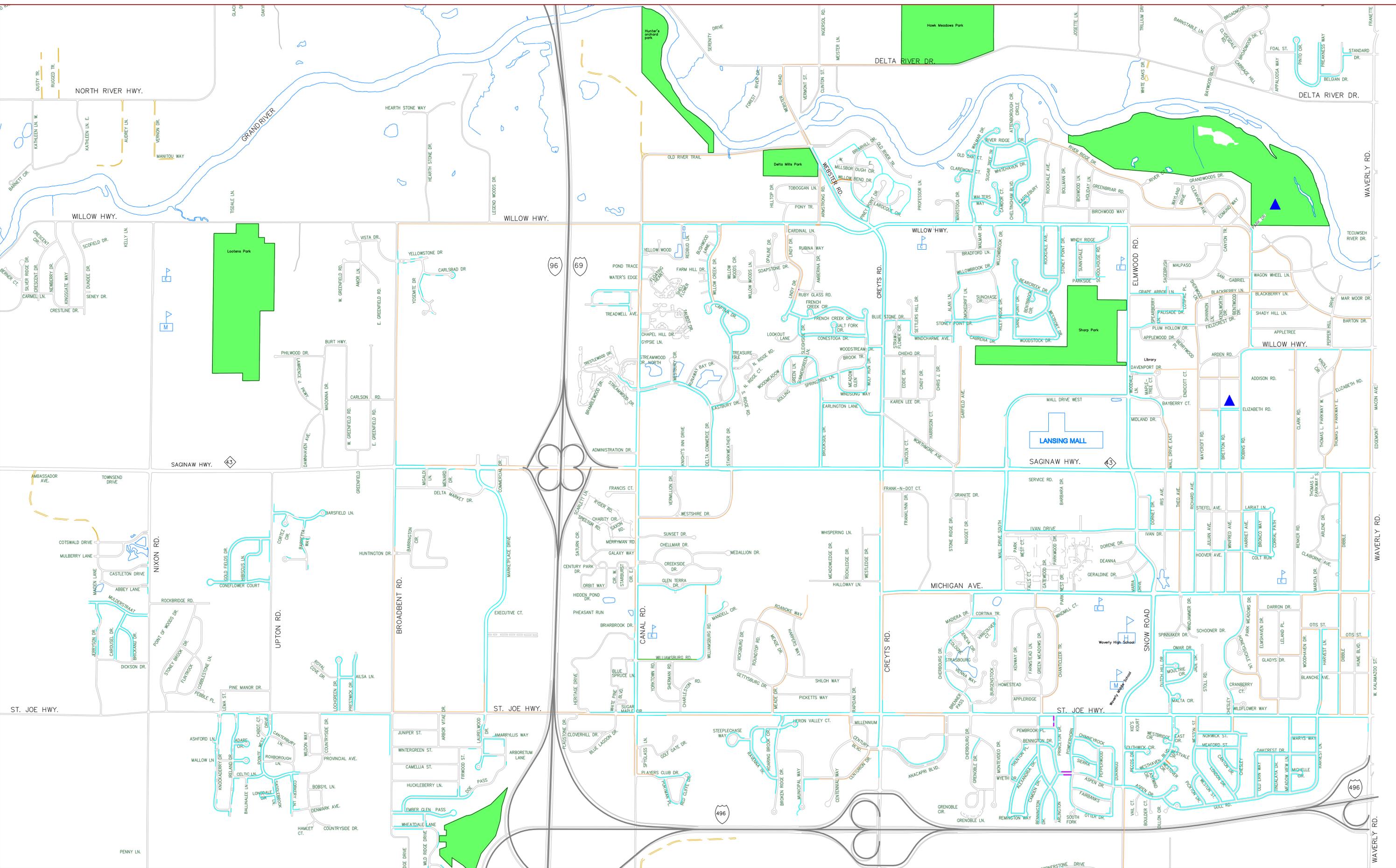
Verndale Lakes: East side of Cherbourg Drive.
Cortina Trail, in front of Lots 14-26
Monaco Trail, in front of Lots 52-67

Walmar: Both sides of all streets (four feet wide).

Westbrook No. 5: Both sides of all streets.

Windcharme Estates: South of Cabrena Drive, from Riley Ridge Drive to Smokedrift Lane.
Both sides of Stoney Pointe Drive.
East side of Alan Lane, from Woodstream Drive to the Willowbrook Subdivision boundary.
South and west sides of Windcharme Avenue, from Alan Lane to Stoney Pointe Drive.
North side of Woodstream Drive, from Creyts Road to Windcharme Avenue.
North side of Windcharme Avenue, from Woodstream Drive to Alan Lane.
East side of Riley Ridge Drive, from Cabrena Drive to the Willowbrook Subdivision boundary.
West side of Smokedrift Lane, from Cabrena Drive to Stoney Pointe Drive.

Windcharme Estates No. 4: East side of Alan Lane, from Stoney Pointe Drive to Woodstream Drive.
South side of Windcharme Avenue, from Alan Lane to Settler's Hill Drive.
West side of Settler's Hill Drive, from Windcharme Avenue to Blue Stone Drive.
South side of Bluestone Drive, from Settler's Hill Drive to Creyts Road.
No sidewalks on Strawflower Circle and Settler's Hill Drive.



Delta Charter Township
EXISTING AND PROPOSED SIDEWALKS

EXISTING SIDEWALK —
ADDITIONAL NECESSARY SIDEWALKS —



NO SCALE