

CITY OF MISSOULA

PUBLIC WORKS DEPARTMENT

MASTER SIDEWALK PLAN

The Master Sidewalk Plan establishes a City of Missoula Public Works Department strategy for the systematic completion, repair, and upgrade of the City Sidewalk System.

This plan has been prepared by Douglas D. Harby, Construction Project Manager, City of Missoula Engineering Division of the Public Works Department.

Submitted By:

Douglas D. Harby: Construction Project Manager

Approved By:

Kevin Slovarp: City Engineer

Approved By:

Steve King: Public Works Director



TABLE OF CONTENTS

	Page
I. INTRODUCTION	1
MASTER SIDEWALK PLAN DEFINED	2
BENEFITS TO THE COMMUNITY	2
II. GOALS	3
III. METHODS AND PROCEDURES FOR DEVELOPING THE PLAN	
A. PEDESTRIAN ACTIVITY.....	4
Pedestrian Trip Generators	
Barriers and Crossing Points	
B. THE PRESENT SIDEWALK SYSTEM.....	5
Pedestrian Activity on the system	
Primary Network	
Secondary Network	
Priority Areas	
C. ANTICIPATED FUTURE DEVELOPMENT	7
IV. THE PLAN.....	7
A SYSTEM INVENTORY AND ASSESSMENT.....	7
B. PROJECT IDENTIFICATION.....	8
C. PROJECT CREATION	10
MAPS	
Pedestrian Trip Generators	
Pedestrian Barriers and Barrier Crossings	
Sidewalk Network System	
Priority Area One	
Priority Area Two	
Priority Area Three	
Other Areas	
Crosswalk Installation Study	
 APPENDICES	
A MISSOULA MUNICIPAL CODES for SIDEWALK INSTALLATION	
and MAINTENANCE	
B FUNDING SOURCES	
C POLICIES AND DESIGN	
D AMERICANS WITH DISABILITIES ACT REQUIREMENTS	



MASTER SIDEWALK PLAN

MASTER SIDEWALK PLAN

I. INTRODUCTION

Concerns regarding the community's air quality and the increasing growth in Missoula have spurred a rising awareness of the benefits non-motorized transportation can give our community. This new awareness has been the impetus for creating the Non-Motorized Transportation Plan, approved by both the City and the County in 1994. That plan identified the need for better non-motorized facilities -- including a complete sidewalk system:

"One of the repeated themes heard throughout the planning process was that sidewalks and pedestrian facilities are lacking or in need of repair throughout Missoula. In many areas, one must walk on the street with traffic because sidewalks or paved shoulders don't exist. Walking in these areas...is becoming increasingly difficult as traffic volumes increase. Dense commercial areas...suffer from the same problem. In other areas, a sidewalk or shoulder may exist in one block, and not in the next. This stop and start nature of sidewalk development hinders pedestrian travel."

The 2001 Nonmotorized Transportation Plan, adopted in the summer of 2001, echoes this theme in stating the ideal:

"The landscaped boulevard sidewalk network should be completely continuous throughout the community."

One of the action steps to achieve this ideal is:

"Increase the implementation of the Master Sidewalk Plan."

In addition, the 1996 Update to the Missoula Transportation Plan further accentuated the need for a complete and comprehensive sidewalk system, based on priority areas.

"The following pedestrian needs have been identified for the Missoula Urban Area:

- There is a need for a continuous pedestrian system...;
- Removal of barriers that restrict pedestrian travel is needed;
- Many existing neighborhoods need pedestrian facilities; ..."

Figure 4.1 in the Transportation Plan shows "Neighborhood sidewalks (Blockfaces with Sidewalks by percent). Some urban neighborhoods have as low as 9% of their blocks with sidewalks. Even

though other neighborhoods are higher, such as the university area with 93%, the condition and adequacy of these sidewalks may not be acceptable.

These environmental and planning concerns are coupled with the need to comply with the Americans with Disabilities Act and provide access for all residents to areas currently accessible only to the able bodied. Improved facilities will benefit not only the disabled community, but people of all ages for a variety of needs: transportation (work, school, and personal trips), recreation, and exercise.

To meet these needs, the City of Missoula Engineering Division has developed the Master Sidewalk Plan.

MASTER SIDEWALK PLAN DEFINED:

The Master Sidewalk Plan establishes a strategy for the systematic completion, repair and upgrade of the City sidewalk system.

This plan will:

- ◆ Identify areas with high pedestrian concentrations
- ◆ Identify areas with the highest need for the installation and repair of sidewalks
- ◆ Develop and select criteria for prioritization of sidewalk program
- ◆ Establish project selection criteria
- ◆ Establish criteria for sidewalk inventoring and problem identification

BENEFITS TO THE COMMUNITY

Implementation of this plan will yield significant benefits for the Missoula community:

- ◆ Increased pedestrian travel will reduce congestion and pollution associated with single-occupancy vehicles.
- ◆ Pedestrians, including commuters, elderly and the disabled community will benefit from maps showing preferred routings. These would be on sidewalk routes that are the safest and most direct routes to a particular destination for pedestrians.
- ◆ Upgrading the sidewalks to ADA standards will make the City more accessible to all residents.
- ◆ Schools will be able use the system to make routing recommendations to the students. Many school children are forced to walk in the streets to get to school.

- ◆ Enforcement of the snow removal ordinances and street plowing recommendations will assure that the most important sidewalks are passable to all users in winter.
- ◆ Identification and removal of sidewalk obstructions such as mail boxes, tree branches, shrubbery, and parked cars will improve accessibility for all.
- ◆ Recommendations will be made for pedestrian crossing safety facilities. Where appropriate, these could include traffic signal installation and upgrades, pedestrian warning lights and signing, and/or crosswalks.
- ◆ Wherever possible, curbs and sidewalks will be installed with a boulevard area between them. This will result in improvements such as landscaping, prohibition of parking, and a place to which snow can be plowed without blocking sidewalks.

This document includes GOALS for the Master Sidewalk Plan, the METHODS AND PROCEDURES involved in determining the priorities indicated in the plan, and finally, the PLAN itself, a statement with a map showing what sidewalk improvements are proposed to be made in priority order.

II. GOALS

The master sidewalk plan is intended to achieve these goals:

- ◆ Successfully provide a continuous sidewalk system throughout the community.
 - ◆ Install new sidewalks where the need is the greatest
 - ◆ Repair hazardous and deteriorated sidewalks
 - ◆ Upgrade existing sidewalks to provide safe and efficient pedestrian movement and meet the standards of The Americans with Disabilities Act
 - ◆ Identify pedestrian corridors for creating preferred routing for schools, children, disabled residents, elderly, commuting, and neighborhood trips
 - ◆ Gain community support to help achieve this plan
-

III. METHODS AND PROCEDURES FOR DEVELOPING THE PLAN

The PLAN is a proposed course of action to install, maintain, and repair particular sidewalks, with some scheduled before others. How does the City determine which to do in the first year, in the second, and so on? By collecting and analyzing a great deal of information about:

- ◆ Pedestrian activity
- ◆ The present sidewalk system.
- ◆ Anticipated future development

This will be performed in a series of steps, which result in establishing priorities for sidewalk projects. These steps are:

- ◆ Identify and rank pedestrian generators
- ◆ Identify barriers and other features that affect pedestrian movement
- ◆ Locate the above features on a map of the City
- ◆ Determine trends by mapping
- ◆ Identify pedestrian corridors
- ◆ Use a combination of pedestrian generator and corridor information to create a sidewalk network system and prioritize areas for in-fill of sidewalks

This work will be repeated periodically to incorporate new development and other changes in land use.

A. PEDESTRIAN ACTIVITY.

Pedestrian activity is understood by evaluating where pedestrians come from and go to (pedestrian trip generators), and on what routes (the sidewalk network). Information about pedestrian activity was collected from

- ◆ City Zoning Maps
- ◆ City Directory
- ◆ School District One

- ◆ Missoula Non-motorized Transportation Plan
- ◆ City of Missoula Transportation Plan
- ◆ City Pedestrian Accident Reports
- ◆ Input from City Engineering Staff
- ◆ Observation

Pedestrian Trip Generators

Definition: A Pedestrian Trip Generator is a major pedestrian trip destination or origin point.

The pedestrian trip generators are grouped into two general classifications, each of which is represented on the map by a geometric symbol. (*see attached **Pedestrian Trip Generators** map page 13*)

- ◆ Schools, Recreational Facilities, Parks, Trailheads (*public facilities*)
- ◆ Multifamily, Retirement Homes, Disabled Community Facilities, Commercial, Retail, Offices, Restaurants, Churches

These groups are further divided into sub-classifications based on estimated trips and the type of pedestrian, such as elderly, primary school children, commuters and the disabled community. The sizes of the subclasses are represented by the relative size of the symbol on the map.

Large clusters of important pedestrian generators are plotted as Area Generators, which includes such single large generators as The University of Montana.

Barriers and crossing points

Of major concern in analyzing pedestrian activity are the barriers to safe and convenient pedestrian travel, and how they can be crossed. Typical barriers include waterways (the Clark Fork River, Rattlesnake Creek), railroad tracks, and major arterials (Brooks Street, Reserve Street, I-90, West Broadway) and to a lesser degree minor arterials (Russell, South Avenue, Higgins, etc.).

Locations where facilities to cross barriers currently exist are mapped. Examples include the bridges over the river and signalized intersections on arterials. (*See attached **Pedestrian Barriers and Barrier Crossings** map page 14*)

B. THE PRESENT SIDEWALK SYSTEM

Next, the sidewalk system was evaluated, first by evaluating the trends developed by plotting the pedestrian trip generators, and second, by looking at the adequacy and completeness of the system.

Pedestrian activity on the system.

Sidewalk system description: The sidewalks in the city are a system, linking clusters of Pedestrian Trip Generators with each other along corridors.

Pedestrian Trip Generators are generally located along the major transportation corridors and appear as linear features. These linear features form a pedestrian corridor. The large area generators are bordered by pedestrian corridors as well as having corridors within them.

Pedestrian barriers and barrier crossing points tend to lie along major pedestrian corridors.

Extending these corridors to link with other corridors develops a grid pattern. This grid pattern forms a Sidewalk System. This system tends to follow the "arterial" and "collector" streets.

Primary Network

The sidewalk network that aligns with the Arterial and Collector streets is designated as a Primary Network. This network, in most cases, has pedestrian crossing signals at the grid intersections. Also the major barrier crossing points are incorporated into the primary grid.

Secondary Network

The Primary Network forms a grid pattern with $\frac{1}{4}$ to $\frac{1}{2}$ mile spacing. A Secondary Network is added to reduce the grid spacing to a maximum of 3 blocks where possible. (See attached *Sidewalk Network System map page 15*)

Priority Area Maps

In addition to the sidewalk network system, the City is further divided up into four geographical areas, which are ranked according to the number of pedestrian generators within the area. (Section IV The Plan will describe how each of the following priority areas will actually fit into the overall implementation of the plan.)

Priority Area One

This area which, lies within the core of Missoula contains the highest number of pedestrian trip generators. This area generally incorporates the large

commercial/multifamily areas, the downtown and the University area.
(See attached **Priority Area One** map page 16)

Priority Area Two

This area generally borders Priority Area One and contains some pedestrian trip generators. This area primarily consists of medium residential areas and some low-density commercial/multifamily areas.
(See attached **Priority Area Two** map page 17)

Priority Area Three

This area generally borders Priority Area Two, contains few, if any, pedestrian trip generators, and primarily consists of lower density residential areas.
(See attached **Priority Area Three** map page 18)

Other Areas to be Considered

These are the fringe areas of Missoula, which primarily consist of low density residential, or areas where sidewalk installation may not be appropriate, such as steep hillsides, narrow rights-of way or other conflicts.
(See attached **Other Areas** map page 19)

Crosswalk Installation Study

This plan combines the Sidewalk Network System with the City Street Functional Classification system to determine where the network sidewalks intersect with high volume streets. This information is used to determine the best location of crosswalks or possibly other pedestrian facilities.
(See attached **Crosswalk Installation Study** map page 20)

C. ANTICIPATED FUTURE DEVELOPMENT

To ensure that plans for pedestrian access improvements will include links to areas of future growth, Engineering Division planners shall review the long-range planning documents for outlying areas as well as developments planned for the inner city.

The planning documents adopted by Missoula City and County Governments include:

- Missoula Urban Comprehensive Plan
- The Consolidated Plan for Community Development Block Grant (CBDG) Program
- The City of Missoula Strategic Plan, FY 2000-2004

IV. THE PLAN

The plan provides information on how the sidewalk system will be evaluated and how the information contained within this document will be used to create sidewalk improvement projects.

A. SYSTEM INVENTORY AND ASSESSMENT.

Description: *The sidewalk inventory will consist of a field survey of the City right-of-way to determine the presence of sidewalks and the condition of existing sidewalks.*

All sidewalks are to be periodically assessed in terms of their physical and safety conditions. A numerical score will be assigned to describe sidewalk conditions. This assessment inventory will start with the primary and secondary network systems then proceed within the priority areas until all network systems are completed.

The physical and safety conditions of each portion of the sidewalk are assessed at the individual ownership level. Ownership can range from (inclusive of, but not limited to) single-family residences, multifamily rental units, retail stores and large professional complexes. The ownership of a property may be responsible for a portion of the cost of installation, repair, and maintenance of the curb and sidewalk abutting their property.

Each ownership will be assessed based on the following criteria:

- ◆ Type of sidewalk
 - Sidewalk with curb
 - No sidewalk but curb alone
 - Sidewalk but no curb
 - No sidewalk and no curb
- ◆ Width of sidewalk
- ◆ Presence or absence of curb ramps for ADA access
- ◆ Percent of cross slope
- ◆ Vertical displacement of the sidewalk
- ◆ Horizontal displacement of the sidewalk
- ◆ Spalling
- ◆ Cracking

All of the above characteristics will be assessed in terms of what percentage of the sidewalk section (ownership section) is affected by each of the conditions.

B. PROJECT IDENTIFICATION

Project identification for sidewalk installation and maintenance involves evaluation of information provided by the sidewalk inventory, prioritization, and engineering and construction considerations.

Prioritization of Sidewalk Improvement Projects

Sidewalk Network System

The sidewalk system's Primary Sidewalk Network has the highest priority. The Secondary Sidewalk Network will also be considered a high priority. These network sidewalks can be further ranked by their location relative to a priority area. For example the Primary Sidewalk Network within and adjacent to Priority Area One would have the highest priority.

Priority Areas improvements will generally not be considered until after the Sidewalk Network System has been addressed in that area.

Priority Area Sidewalks

As stated above the greatest emphasis will be on the completion of Primary and Secondary Sidewalk Networks with work proceeding on the remaining sidewalks within the Priority Areas as the network improvements are completed. The following information relates to sidewalk improvements in each Priority Area.

Priority Area One

- This is the core area of Missoula and has a high sidewalk usage.
- This area does require a complete sidewalk system.
- Much of this area has existing sidewalks and work will generally consist of infill, repair and replacement, and ADA upgrades.
- There are very few right-of-way or topographic problems or other conflicts which may make the installation of sidewalk difficult in this area.
- Because of the need in this area much of this work will proceed concurrently with the improvements to the Sidewalk Networks in Areas 2, 3, and 4.
- Sidewalk installation or upgrades will always be required with new development in this area.

Priority Area Two

- This area has a large number of multi and single-family residential properties close to the core areas and has a high to moderate sidewalk usage.
- This area should have a complete sidewalk system.
- Much of this area has existing sidewalks and work will generally consist of infill, repair and replacement, and ADA upgrades.
- There are very few right-of-way or topographic problems or other conflicts which may make the installation of sidewalk difficult in this area.
- Most of the work in this area would not proceed until Priority Area One is

substantially complete.

- Some of this work will proceed concurrently with the improvements to the Sidewalk Networks in Areas 3 and 4.
- Sidewalk installation or upgrades will always be required with new development in this area.

Priority Area Three

- This area consists of mostly single family residential and because it is further from the core area has moderate sidewalk usage.
- This area would benefit from a complete sidewalk system.
- There are few existing sidewalks in this area work so will generally consist of completion of the Primary and Secondary Sidewalk Networks with some infill.
- Sidewalk installation or upgrades will always be required with new development in this area.

Priority Area Four

- This area consists of mostly single-family residential in the Rattlesnake, South Hills, Linda Vista, River Road, and Grant Creek Areas with large commercial tracts along North Reserve Street.
- Linda Vista, Prospect, and the upper streets of the South Hills are the only areas with well developed sidewalk systems.
- The residential areas would benefit from a complete sidewalk system but right-of-way, topographic, low density and other conflicts may make the installation of a complete sidewalk system expensive and difficult..
- Work will be directed toward completing the Primary and Secondary Sidewalk Networks with some infill in residential areas, near schools and at parks..

Engineering and Construction Considerations

Creation and scheduling of the projects identified by this plan require review of the following considerations:

- ◆ The limited construction season plus available resources determine the size of the annual sidewalk program.
- ◆ Additional street work required for the installation of curbs limits the amount of curb construction that can be scheduled annually.
- ◆ Any proposed sidewalk project that may coincide with the City's annual Street Maintenance Program.

The sidewalk construction work generated by the Master Sidewalk Plan will be independent of the annual City of Missoula Street Maintenance Program. However, if the projects identified by the Plan coincide with the City's annual Street Maintenance

Program, the scheduling may be modified for convenience.

- ◆ Sidewalk projects that are concentrated in one area are more cost effective to construct than widely dispersed small projects.
- ◆ Combining sidewalk installation projects with repair projects.
- ◆ Installation of sidewalks in a certain area may be difficult or impossible due to right-of-way limitation, topography or the undeveloped nature of the neighborhood parcels and streets.

C. PROJECT CREATION

Once a project has been identified it must pass through the following steps before construction can begin.

Design

- ◆ Locations and type of sidewalks to be installed are recommended by the Engineering Division staff and approved by the City Council.
- ◆ Locations and method of repairs are determined by the Engineering Division staff.
- ◆ If curbs are installed, an engineering consultant will be retained for design and staking.

Funding: Sidewalks Ordered by the City Council

Wherever the cost of the sidewalk work will be borne by the adjoining property owner, the City Council orders the work for each parcel. The owner will be notified of the proposed project and of the estimated cost. The notice also will include the dates and times of an informational public meeting and when the order will be considered by the City Council. If the Council approves the order, a certified letter will be sent to the owner. This letter will inform the owner that the City Council has ordered the work done and what options he has for satisfying the order.

Other Funding

Other methods of funding such as, SID'S, ISTEPA, TEA 21 and Gas Tax have been used to provide partial funding for sidewalk projects. ISTEPA and TEA 21 funds have been reserved for future projects, specifically improvements to the Primary Sidewalk Network.

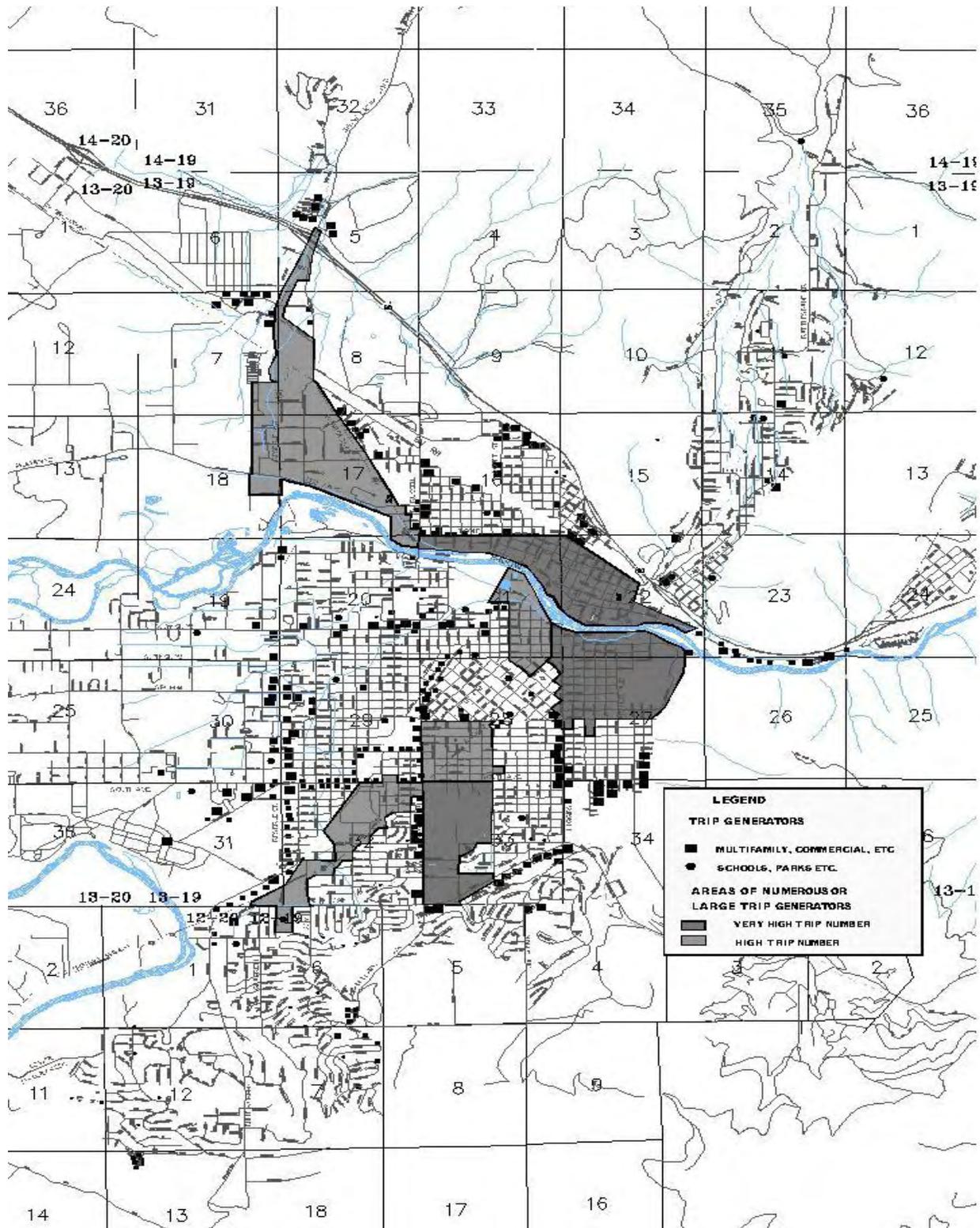
Contracting

- ◆ All construction contractors are selected through a competitive bidding process.
- ◆ The contracts are awarded by the City Council and administered by the Engineering

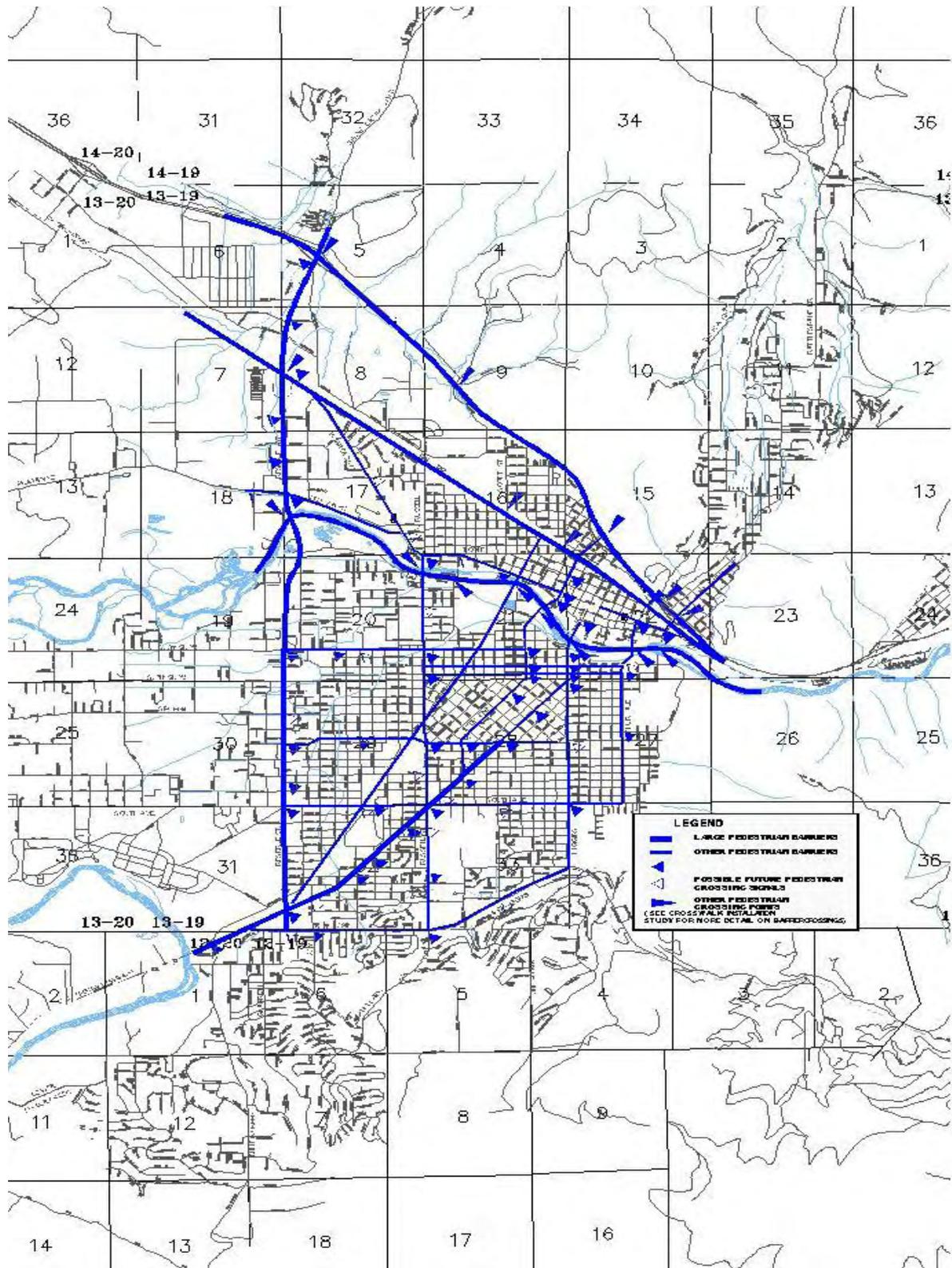
Division.

Construction

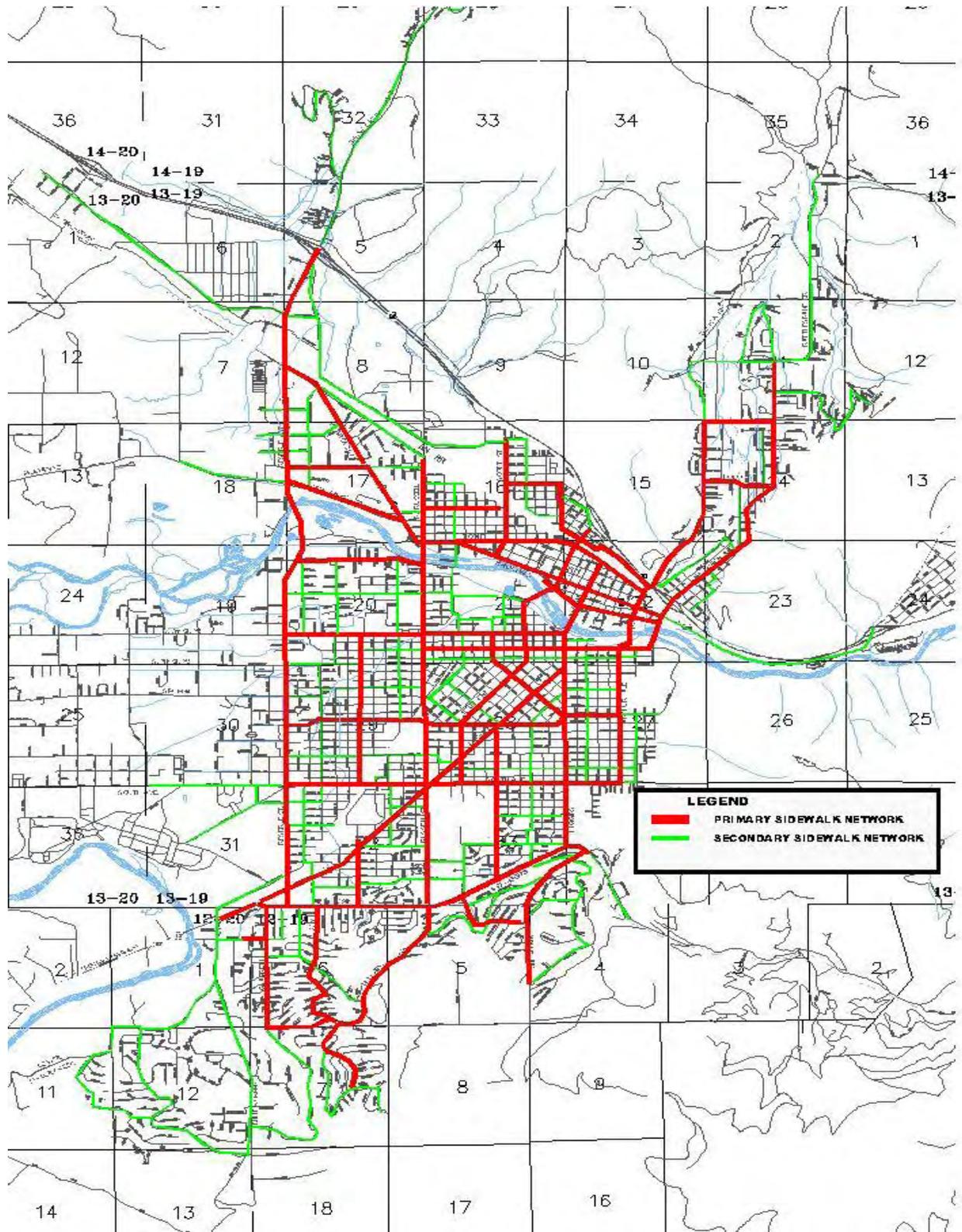
With the exception of the large ISTEAs and TEA 21 projects, the City of Missoula Engineering Division staff will be responsible for project management and construction inspection.



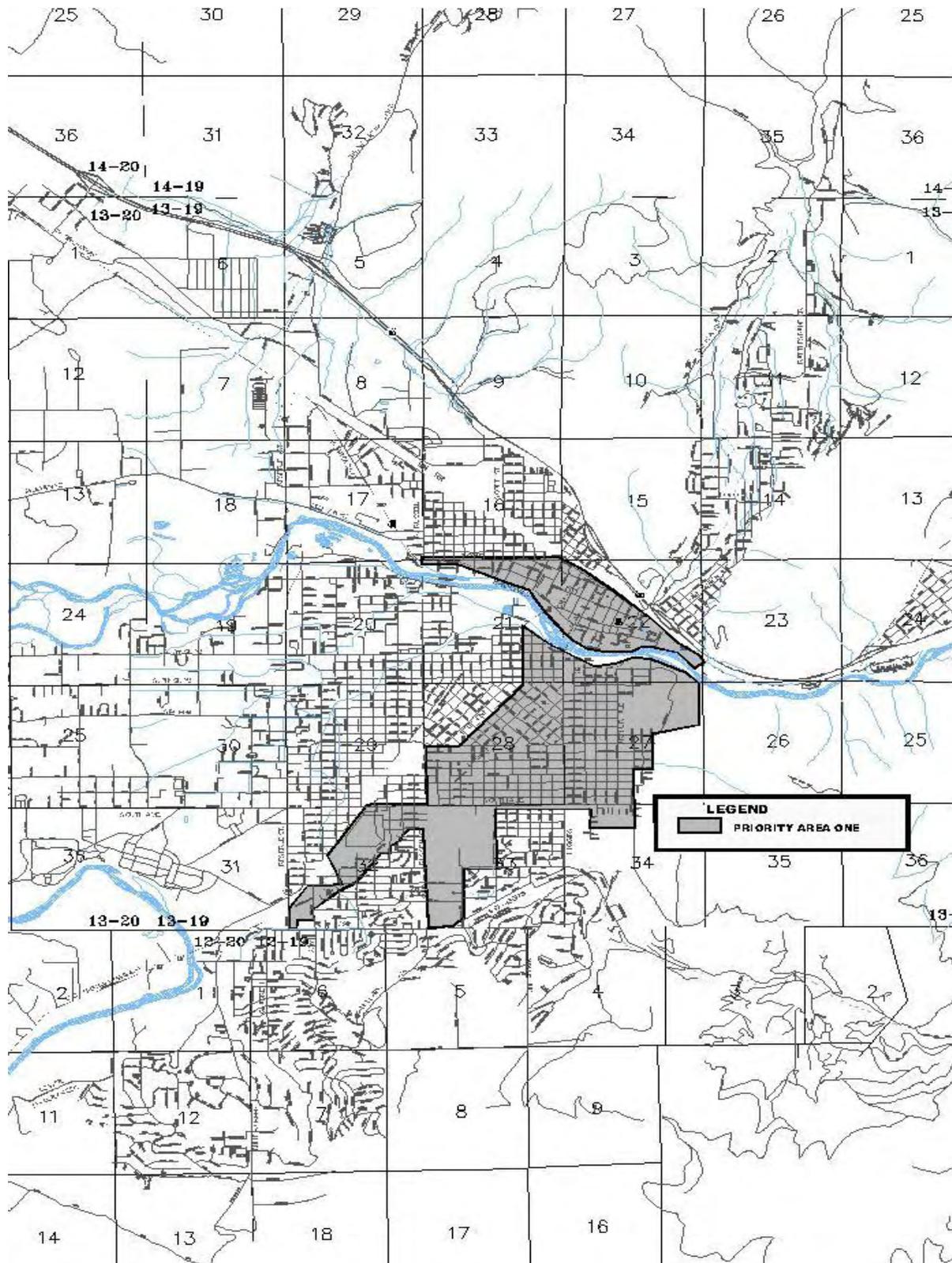
MAP 1 PEDESTRIAN GENERATORS



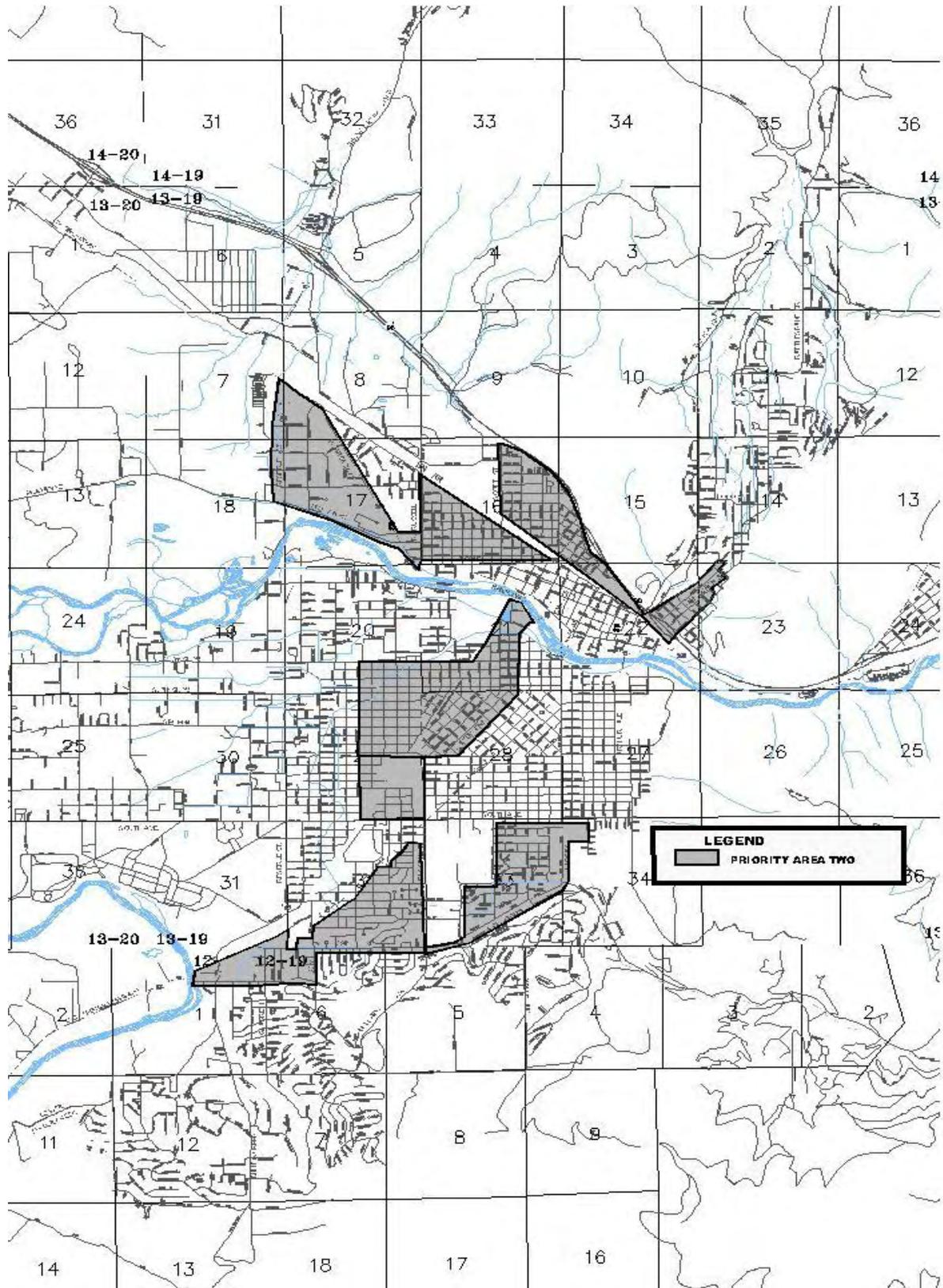
MAP 2 BARRIERS



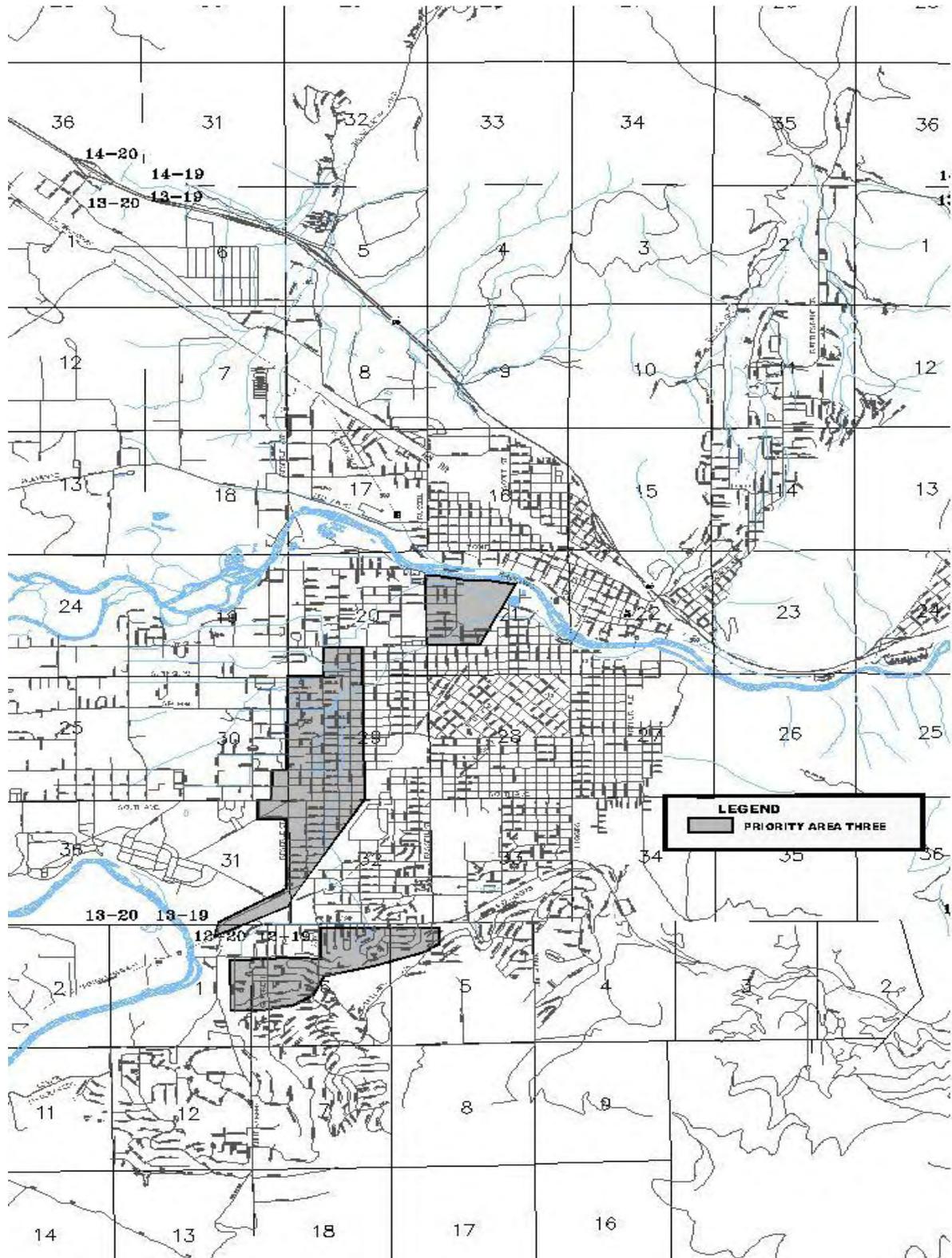
MAP 3 SIDEWALK NETWORK



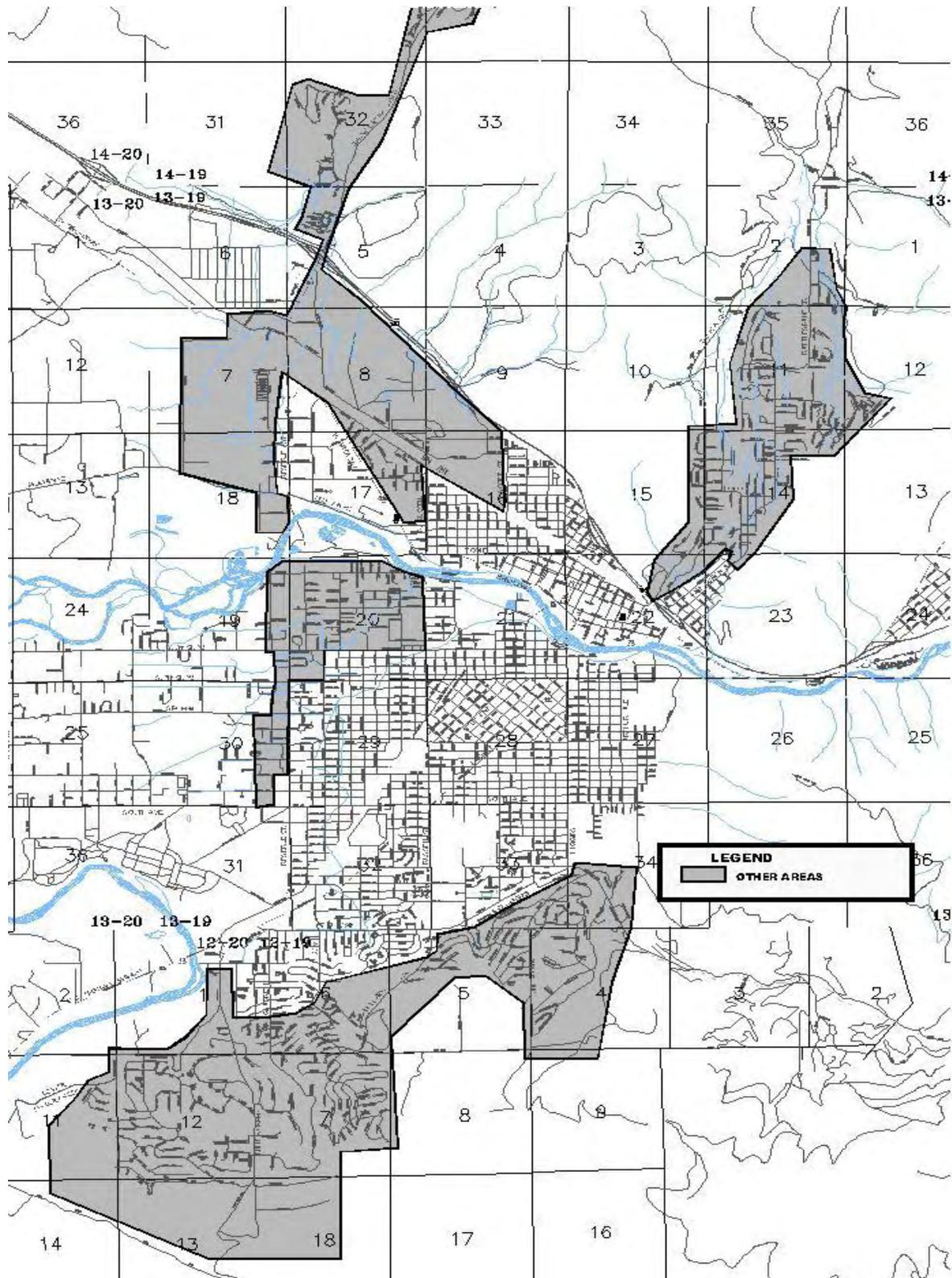
MAP 4 PRIORITY AREA 1



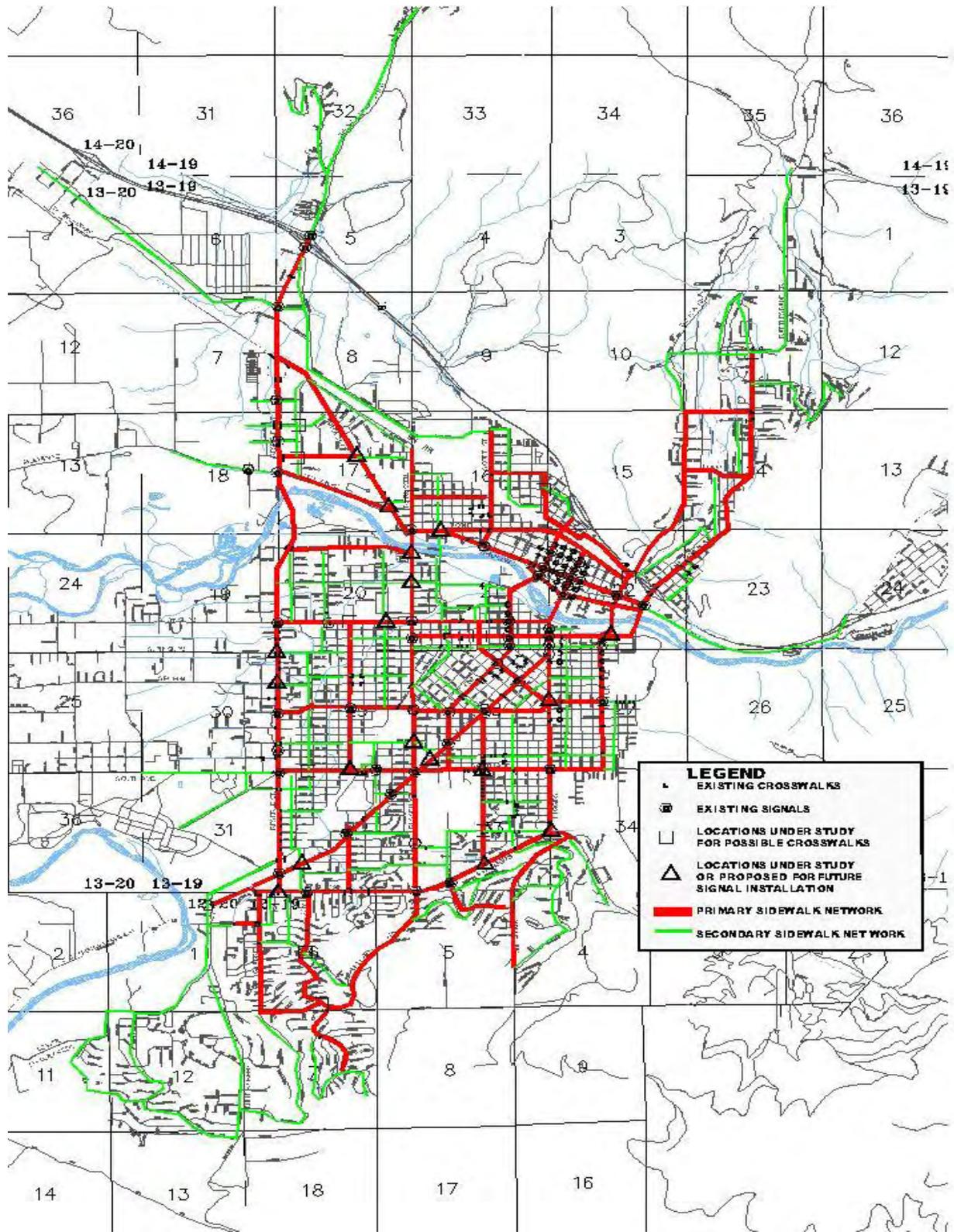
MAP 5 PRIORITY AREA 2



MAP 6 PRIORITY AREA 3



**MAP 7 OTHER AREAS WITH POTENTIAL FOR SIDEWALK
INSTALLATION**



MAP 8 IMPROVED PEDESTRIAN CROSSINGS

APPENDIX A

CITY OF MISSOULA MUNICIPAL CODES for SIDEWALK INSTALLATION AND MAINTENANCE

The following is a brief summary of the City of Missoula Municipal Codes that pertain to sidewalk construction and maintenance. A listing of the most important ordinances.

Missoula Municipal Codes authorize the Missoula City Council to order the construction of curbs and sidewalks on the City right-of-way. The adjacent property is required to install the curb and sidewalk within thirty days of the construction order. If the work is not completed within the thirty-day time limit, the City can obtain a contractor and complete the work. All resultant costs will be assessed to the property.

The property owner is responsible for the maintenance of the sidewalk and curb adjoining their property. Missoula Municipal Codes authorize the City Engineer to condemn hazardous sidewalk and ordered it repaired. The property owner is responsible for the costs, which can also be assessed to the property.

12.12.010 City council to order construction. Whenever it is deemed necessary to construct any sidewalk or curb in the city, the city council may, by an order duly made and entered upon its minutes, order the construction of such sidewalk or curb, specifying in the order the name of the street along which and the number of the lot or lots, and blocks in front of which, the sidewalk or curb is to be constructed. (Prior code §28-51).

12.12.015 Variance--Deferment of requirements.

A. The City Engineer may issue a variance for postponement of the requirement for curbs and sidewalks when any one of the following criteria is met, and the installation of the curb and sidewalk would result in a substantial design or construction burden for the property owner and the city:

1. The ultimate alignment and grade of the road has not been established. Properties with large frontage, high pedestrian need, drainage concerns, or parking and access control problems may be required to establish ultimate road alignment.
2. Where adverse conditions including lack of right-of-way, adverse topography, major utility conflicts, or irrigation ditches exist. Existing landscaping, fences, or lack of existing curbs and sidewalks are not considered adverse conditions.
3. A city curb and sidewalk construction project is scheduled and will be completed within one year.

4. Construction of a sidewalk is not warranted because pedestrian generators or destinations do not exist in the area, or other pedestrian facilities, such as trails or adjacent sidewalks are preexisting.
- B. The city council may defer the sidewalk requirement based on their judgment and review of the specific request. The city council does not give up its rights to cause sidewalks to be installed in the future when in the city council's judgment the conditions have changed.
 - C. The variance request shall be made in writing providing reasons requested for the variance. (Ord.2208, 1981; Ord. 2199 §1, 1981; Ord. 2093 (part), 1979).
 - D. The need for temporary pedestrian facilities shall be reviewed by the city engineer if the conditions from section 12.12.015 (A) have resulted in a postponement of sidewalks. Landscaping and grading in the right-of-way shall be constructed so as to permit the installation of future curbs and sidewalks with a minimum of disruption to right-of-way. The plans for temporary pedestrian facilities, landscaping and grading in the right-of-way shall be approved by the city engineer prior to construction.

12.12.020 Notice--Required. Upon the city council ordering the construction of any sidewalk or curb, the city engineer shall immediately give written notice thereof to the holder of the record title of the premises in front of or along which the sidewalk or curb has been ordered constructed. (Prior code §28-52).

12.12.030 Notice--Service. Service of the written notice provided in Section 12.12.020 must be made either by registered letter directed to the owner at his last known place of residence and deposited in the United States post office within the city, with all necessary postage and registry fees prepaid thereon, or by publication thereof once a week for two successive weeks in the official newspaper of the city. (Prior code §28-53).

12.12.040 Notice--Service by publication. If service of notice be made by publication, all sidewalks and curbs ordered constructed by the city council on the same date may be included in one notice, and the notice when published shall not be directed to any person but shall be entitled "Notice To Construct Sidewalks And Curbs." (Prior code §28-54) .

12.12.050 Notice--Contents. The notice shall refer to the order or date of the city council meeting ordering the construction of a sidewalk or curb and shall describe. the nature of work ordered constructed, designating the name of the street along which and the number of the lot or lots and blocks in front of or along which the sidewalk or curb has been ordered constructed. (Ord. 2043 §17, 1979; prior code §28-55).

12.12.060 Notice--To contain statement as to noncompliance. The notice shall further state that if the holder of the record title of the property in front of or along which the sidewalk or curb has been ordered constructed shall fail, neglect or refuse to construct such sidewalk or curb for a period of thirty days from and after the date of the mailing of such notice, if service of the notice shall be made by mail, or for a period of thirty days from and after the date of the first publication of the notice, if service thereof be made by publication, the sidewalk or curb will be constructed by the city sidewalk and curb contractor, and the cost of the construction of the same, together with all expenses connected therewith, will be assessed against the premises in front of or along which the same has been ordered constructed and will become a lien thereon. (Prior code §28-56).

12.12.070 Notice--Filing of copies to be conclusive proof of service. Copies of all notices mailed with the registry receipts attached thereto, and copies of all notices published with the publisher's affidavit of publication attached thereto shall be filed by the city engineer in his office and shall be conclusive proof of the service thereof. (Prior code §28-57).

12.12.080 Construction by city--On noncompliance with notice. If the owner of any premises, in front of or along which any sidewalk or curb has been ordered constructed in the manner provided by this chapter, shall fail, neglect or refuse to construct the same for a period of thirty days after the date of the first publication of such notice, or for a period of thirty days after the date of the mailing of the notice, the city engineer shall let a contract for the construction of all sidewalks and curbs ordered to be constructed. The cost of the construction, together with all expenses in connection therewith, shall be assessed against the premises in front of or along which the sidewalk or curb is constructed and shall be collected in the manner now or hereafter to be provided by the provisions of this code or other city ordinance. (Ord. 2043 §18, 1979; prior code §28-58) .

12.12.090 Construction by city--Regulations generally.

A. The city shall let a contract or contracts for the construction of all sidewalks and curbs which shall be ordered constructed during the ensuing year and which the owners of the premises, in front of or along which the sidewalks curbs have been ordered constructed, shall fail, neglect or refuse to construct, or where the property owner petitions the city engineer to have the sidewalk and curb installed adjacent to their property, or where the city engineer, pursuant to Section 12.12.160, may order the repair of any sidewalk or curb.

B. All such sidewalks and curbs shall be constructed by a licensed and bonded sidewalk and curb contractor in accordance with the specifications and subject to the conditions contained in this chapter and in his contract, and all such construction shall be under the immediate supervision and control of the city engineer. (Prior code §28-60) .

12.12.120 Assessment for construction--When work done by city sidewalk and curb contractor. The total cost of all sidewalks and curbs constructed by the city sidewalk and curb contractor, or that may be repaired by the city engineer in accordance with the orders of the city council, or in the maintenance of sidewalks and curbs (which total cost shall include that of the sidewalk or curb proper, as well as that of any notice, publication, inspection, grade, fill, handrailing, manholes, manhole covers, trap doors, private crossings and all other necessary expenditures), shall be assessed as a special tax against the property in front of or along which the sidewalk or curb, or repairs, are installed lying within the street section. (Prior code §28-63) .

12.12.130 Assessment for construction--When work done by other licensed and bonded cement contractor. The cost of any sidewalks and curbs constructed by any licensed and bonded cement contractor, ordered by any property owner and not included within the provisions of Section 12.12.120, may be assessed as a special tax against the property in front of or along which any such sidewalk or curb is installed lying within the street section; provided, that such licensed and bonded cement contractor shall, within thirty days after the completion of such sidewalk or curb, file with the city engineer an itemized statement of such work, accompanied with a written request of the property owner that the cost of such sidewalk or curb be assessed as a special tax against his property. Such licensed and bonded cement contractor shall be paid as provided in Section 12.12.110. (Prior code §28-64).

12.12.140 Assessment for construction--May be paid in full. Special assessments may be paid in full at any time by the payment of the whole amount thereof remaining unpaid, together with the interest thereon to the first day of January following. (Prior code §28-66).

12.12.150 Assessment for construction—Payable in installments.

A. Each special assessment shall be payable in installments extending over a period of eight years, one eighth thereof becoming due and payable each year at the time general city taxes become due and payable.

B. Special assessments of an amount of three thousand dollars or more for each lot or parcel upon request of the property owner may be payable in installments extending over a period of twelve years, one-twelfth thereof becoming due and payable at the time general city taxes become due and payable. (Ord. 2611 §1, 1988; prior code §28-65).

12.12.160 Condemnation of dangerous sidewalks. All sidewalks or curbs which, by reason of natural deterioration or decay, or by reason of unevenness, steps, rapid slopes, or from any cause whatsoever, become dangerous to the public safety, may be condemned by the city engineer, and may be by him immediately removed, remodeled or repaired, as in his judgment may be most expedient, and the cost thereof shall be assessed against and collected as a special tax upon the lot or lots abutting upon such sidewalks. (Ord. 2043 §19, 1979; prior code §28-67).

12.16.010 Duties of property owners to keep sidewalks repaired. It is the duty of the owners or tenants of any premises within the city to keep the sidewalks in front of and adjoining their premises in good, safe and substantial condition and repair, and the owners or tenants shall see that all breaks and unsoundness of any character resulting from natural deterioration, or from any cause whatever, are repaired with all possible dispatch. (Prior code §28-1).

12.08.020 Contractor license--Requirement. It is unlawful for any person to engage in the business of installing, constructing or repairing any sidewalks, curbs, gutter or combination thereof upon any public

right-of-way within the city unless the person is the holder of a valid, unsuspended license as a bonded sidewalk and curb contractor. (Ord. 2043 §23, 1979; prior code §28-95).

12.16.020 Snow and ice removal--Generally. It is the duty of the owner or tenant of any premises within the limits of the city to keep the sidewalk in front of and adjoining his premises clean and safe for pedestrians, and with all possible dispatch to remove snow, ice, slush and other impediments to safe and convenient foot travel, and to prevent continuous accumulation of the same upon such sidewalks. In no case in the city shall the snow, ice, slush, mud or other such material removed from such §51, 1979; prior code §28-2).

12.16.030 Snow and ice removal--Time allowed--Sprinkling of sand or de-icing agents. Sidewalks must in all cases be freed from the night's accumulation of snow, ice, slush, mud or other like impediment before nine a.m. of the following morning. When from freezing of water, snow or slush thereon, or by reason of such compaction resulting from the wear of foot travel or from any cause whatever, sidewalks are rendered dangerous, unsafe or difficult to the free passage of pedestrians, it shall be the duty of the owners or tenants of premises in front of or adjoining such sidewalks to forthwith remedy such conditions by sprinkling sand or de-icing agents on the sidewalks, or chipping or by other safe and efficient means. (Ord. 2043 §2, 1979; prior code §28-3).

12.16.040 Snow and ice removal--Depositing on streets prohibited--Exception. All snow, ice, slush and other impediments that are removed from any property within the city, except that which is removed from sidewalks, by either the tenants or owners of such premises, shall not be deposited in the streets or rights-of-way of the city. (Prior code §28-3.1).

12.16.050 Defective sidewalks--Accidents--Police report. Police officers shall report to the chief of police all defective or unsafe sidewalks or crossings, as well as the particulars of any accidents that may occur by reason of any defective or unsafe sidewalk or crossing and the names of witnesses and persons injured thereby. A copy of this report shall be given to the city engineer, who will in turn notify the owners of repairs required. (Ord. 2043 §3, 1979; prior code §28-6).

12.16.060 Defective sidewalks--Failure of owner to repair. Upon the refusal or neglect of the owner or tenant of any premises to remove obstructions from, or to make necessary repairs to, the sidewalks in front of or adjoining the premises, and when, in the opinion of the city engineer, immediate repairs or the removal of obstructions are necessary to prevent accidents, the city engineer may immediately proceed with the same, and the full cost of such repairs or removal of such obstructions shall be assessed against the premises, as provided in Section 12.16.050. (Prior code §28-7).

12.16.070 Absence of notice to repair not a defense against fines or assessments. Absence of notice to owners or tenants to repair dangerous or unsafe sidewalks, or to remove obstructions therefrom, shall not constitute a valid excuse against the payment of any fine or damages or assessments by such owners or tenants; and nothing contained in any of the preceding sections shall be so construed as to release the owners or tenants of real estate from the duty of keeping the sidewalks in front of and adjoining their respective premises in a good and thorough state of repair, but such duty is hereby expressly enjoined and imposed upon all such owners or tenants. (Prior code §28-8).

APPENDIX B

**FUNDING
(SPACE RESERVED)**

APPENDIX C

POLICIES AND DESIGN

A. POLICES FOR INSTALLATION OF CURBS AND SIDEWALKS

The following policies are established as guidelines to aid in decisions regarding installation of curbs and sidewalks. Subdivision, development, and zoning requirements may supercede these guidelines.

1. LOCATION OF SIDEWALKS:

Wherever possible, sidewalks shall be located so as to form a boulevard strip (also referred to as a parkway) between the street (or curb) and sidewalk. The boulevard strip shall be a minimum of 5 feet in width.

2. INSTALLATION OF CURBS:

The decision to install Curb and gutter shall be based on the following criteria:

- a. Where existing or new sidewalk is located next to the street.
- b. Where parking control and preservation of the boulevard is necessary.
- c. All streets with a functional classification of commercial, collector or arterial.
- d. Where there are drainage problems that may inhibit pedestrian movement.
- e. Where accessibility ramps intersect the street.

3. INSTALLATION AND FUNDING OF CURB RAMPS:

See [Appendix D](#)

4. SIDEWALKS ACROSS ALLEYS AND DRIVEWAYS:

Sidewalks will be continued through all driveways including private roads. Sidewalks shall be continued across all alley intersections in the central business district.

5. SIDEWALK WIDTHS:

Sidewalk widths shall be based on the following criteria:

- a. All sidewalks located in the boulevard shall be a minimum of 5 feet in width.
- b. Primary and secondary sidewalks which are located next to the curb along arterial and

collector streets without parking lanes shall be a minimum of 7 feet in width.

- c. Primary and secondary sidewalks which are located next to the curb and contain tree planters shall be a minimum of 4 feet plus the dimension of the tree grates in width.
- d. Sidewalks located next to the street curb shall be a minimum of 5 feet in width.
- e. Subdivision and other zoning regulations or conditions may result in variation from the above.

B. POLICIES FOR REPLACEMENT/REPAIR OF CURBS AND SIDEWALKS

The following policies are established as guidelines to aid in decisions regarding replacement/repair of curbs and sidewalks.

1. HAZARDOUS SIDEWALKS--CRITERIA:

The following criteria shall be used to judge whether a sidewalk shall be considered hazardous.

- a. A vertical displacement of 1 1/8 of an inch. (*NOTE, this number is based on a 1978 Illinois Supreme Court case, Warner v. City of Chicago*). A vertical displacement of less than 1 1/8 inch may be replaced during a repair project at the City Engineers discretion.
- b. A vertical displacement that creates a running slope greater than 12:1. (one inch per foot in the direction one walks)
- c. A side slope greater than 7%. (*NOTE, ADA specifies a maximum side slope of 2% and this specification will be incorporated into all sidewalks replaced when reasonably possible.*)
- d. Where cracking or deterioration has created an uneven surface or an unstable surface.
- e. If the surface condition such as spalling or polishing creates a hazardous condition.

2. REPLACEMENT/REPAIR OF SIDEWALKS--CRITERIA:

The following criteria shall be used to judge whether a sidewalk shall be replaced/ repaired.

- a. Where the sidewalk or a portion of it is hazardous.
- b. Where the sidewalk is in marginal condition and adjacent to hazardous sidewalk. (Marginal sidewalk is sidewalk that does not quite meet the hazardous criteria at the

time of the inventory but could meet the criteria in later years.)

- c. Where the replacement of sidewalk, that is not considered hazardous, will enhance the overall condition of the sidewalk such as improving drainage, grade, reducing damage to tree roots or for engineering continuity.
- d. Where installation of curbs or design of the street result in grade or alignment changes.
- e. Where installation of curb ramps is required. (See Appendix D)

3. CRITERIA FOR DETERMINING THE SCOPE OF A SIDEWALK REPAIR WORK:

Whenever the City receives a notice of a hazardous sidewalk, the Engineering Division staff will evaluate the specific defect and determine how best to mitigate it. It is recognized that repairing a single specific defect in a sidewalk, which contains many defects, may not be the most efficient, economic or equitable method of repairing sidewalks. A criterion was developed to determine the scope of the repairs and how to best utilize the limited resources of the City.

Sidewalk repair work can be classified based on size and how the proposed work originated.

I. Complaint-initiated Sidewalk replacement/ repair projects:

- a. If the defect is unique to the rest of the sidewalk section (usually a city block) then the property owner will be notified to repair the specific defect. If the property owner does not have the defective sidewalk repaired in a reasonable amount of time (usually 30 days) the city will hire a contractor to perform the repair with the costs assessed to the property.
- b. If the sidewalk defect is one of several in the rest of the sidewalk section (usually a city block), and the section is not scheduled for inclusion in an area-wide sidewalk repair project in the next 2 years, then the property owners will be notified to repair all the defective sidewalk noted in the sidewalk section. If the property owners do not have the sidewalk defects repaired in a reasonable amount of time (usually 30 days) the city will hire a contractor to perform the repairs with the costs assessed to the properties.
- c. If the sidewalk section which contains the defect has a large percentage (>25%) of deteriorated sidewalk, this section will be considered for inclusion in a future area wide sidewalk project based on the priorities set forth in this plan.
- d. If the defect is located on a sidewalk that is scheduled for a sidewalk upgrade project per this plan and the work is scheduled to take place within the next 2 years, the repairs may be postponed until the sidewalk upgrade project commences.

II. City-initiated Sidewalk repair projects:

- a. Area wide (10-20 blocks) sidewalk upgrade projects based on priorities set forth in this plan.
- b. In conjunction with a pedestrian improvement project where sidewalks are installed where missing and existing sidewalk upgraded.
- c. In conjunction with a street reconstruction project.
- d. In conjunction with building permits for new construction, addition or change of use.
- e. In conjunction with other site improvements.

4. REPLACEMENT OF CURBS--CRITERIA:

The following criteria shall be used to judge whether a curb shall be replaced or repaired.

- a. Where the replacement of sidewalks that are located next to the curb or curb/sidewalk combination warrants.
- b. Where sidewalk is installed and the curbs are sufficiently deteriorated and are located in areas referred to in paragraph A.2 above regarding installation of new curbs.
 - c. Where installation of curb ramps is required. (See Appendix D)
 - d. Where abandoned or nonconforming driveway openings (aprons, curb cuts and curb returns) whose use may cause obstruction to pedestrian movement and deterioration of the boulevard.
 - e. Where there are drainage problems that may inhibit pedestrian movement.

C. POLICIES FOR REMOVAL OF OBSTRUCTIONS

The following is a partial list of sidewalk obstructions that will be noted during sidewalk inventory and inspections and may result in citations or corrective action at owner's expense:

- a. Snow removal/storage and deicing, including where the sidewalk intersects the street.
- b. Parked cars on the sidewalk and/or on improved boulevards.
- c. Mail boxes.
- e. Garbage cans.
- d. Vegetation.

- e. Other obstructions.

APPENDIX D

AMERICANS WITH DISABILITIES ACT REQUIREMENTS

The Americans with Disabilities Act (ADA) has design guidelines which apply to new sidewalk construction and pedestrian system upgrades. (*Sec 14.2 ADA Accessibility Guidelines*)

GENERAL

Alterations to individual elements shall comply to the maximum extent feasible with the applicable requirements of the ADA guidelines. (*Sec. 14.3 ADA Accessibility Guidelines*)

Installation or replacement of the Curb and/or sidewalk shall increase the accessibility of the facility.

If alterations to existing sidewalks amount to a reconstruction of a block, intersection, or other substantial segment of the pedestrian network in the public right-of-way, the entire segment shall, to the greatest extent feasible, comply with provisions for new construction.

In alteration work, if site infeasibility precludes ADA compliance the work shall provide accessibility to the maximum extent feasible. Any elements or features of the public sidewalk that are being altered and can be made accessible shall be made so within the scope of the alteration.

Site Infeasibility Defined as: Existing site development conditions that prohibit the incorporation of elements, spaces, and features that are in full and strict compliance with the minimum requirements for new construction.

CURB RAMPS

1. Access ramps shall be installed with new curb and sidewalk installation in association with street construction or reconstruction projects and shall be funded from the same source as the rest of the curb/sidewalk installation (no ramps will be installed for street maintenance asphalt overlays such as area patching and re-sectioning).
2. Access ramps shall be installed in existing curbs and/or sidewalks when streets are constructed or reconstructed. Gas tax shall be used as designated in the following scenarios:
 - a) If neither the curb nor sidewalk is replaced as part of the project then the access ramps will be funded by gas tax.
 - b) If the curb is replaced as part of the project no gas tax will be used to fund replacement of sidewalk or curb for the installation of the ramp. (Sidewalk normally has to be replaced to match the new curb whether a ramp is installed or not)

- b) If the curb is to remain and the sidewalk in the area of the ramp is to be replaced, gas tax will fund the replacement of the curb only, for installation of the ramp.
3. Access ramps shall be installed at the corner of a street when curb and/or sidewalk installation or replacement has been ordered by the City, but not associated with a street reconstruction project. Gas tax shall be used as designated in the following scenarios:
- a) If the curb is replaced or installed as part of the project no gas tax will be used to fund replacement of sidewalk or curb for the installation of the ramp.
- b) If the curb is existing and sound, and the sidewalk in the area of the ramp is to be installed or replaced as part of the project, gas tax shall fund the curb replacement only, for installation of the ramp.
- c) If both curb and sidewalk adjacent to corner are existing and in good condition, then both will be funded by gas tax.
4. Access ramps may be installed on existing curb and sidewalk and partially funded by gas tax on projects that are undertaken in partnership with private property owners when the property owner contributes fifty percent of the cost.
5. Access ramps may be installed in existing curb. The replacement of the curb required for the installation of the access ramp will be funded by gas tax on projects that are undertaken in partnership with private property owners when the property owner voluntarily installs sidewalks on property frontage adjacent to a street corner.
6. New commercial, industrial and multifamily construction shall install access ramps where required as part of the development whether it be new or existing curb and sidewalk. No gas tax contribution will be made in these cases.
7. Commercial, industrial and multifamily renovation construction which results in change of primary function area shall install access ramps where required as part of the development whether it be new or existing curb and sidewalk. No gas tax contribution will be made in these cases.

SLOPES

ADA guidelines specify that the maximum cross slope (sideways slope) of an accessible sidewalk shall not exceed 2% (1/4" per foot).

New sidewalks shall not exceed this specification (2%) including curb ramps and driveways.

When site feasibility allows, existing sidewalks which are to be replaced shall be built to this

(2%) standard except that,

cross slope that exceed 2% shall not be the sole condition on which a sidewalk is slated for replacement.

The minimum feasible public sidewalk running slope (in the direction one walks) shall be consistent with the slopes established for the adjacent roadway.

SEPARATION

Public sidewalks shall be raised to curb height or separated from vehicular ways by curbs, planted parkways (also referred to as boulevards) or other barriers, which shall be continuous except at driveways, alleys or connections to other accessible elements.

WIDTHS

The minimum clear width of a passage shall be 36.” Where the public sidewalks are less than 60” in continuous width then a passing space shall be placed at intervals not to exceed 200 feet.

PROTRUDING OBJECTS

Free-standing objects on posts or pylons may overhang their mountings a maximum of 12” when located between 27” and 80” above the sidewalk provided they do not reduce the required continuous passage width to less than 36.” (a mailbox on a post is an example)

Wall mounted objects (such as signs, fixtures, telephones, etc) with their leading edges between 27” and 80” above the sidewalk shall not protrude more than 4.” Objects mounted with their leading edges less than 27” and more than 80” from the sidewalk may protrude any amount provided they do not reduce the required continuous passage width to less than 36.”