

Pedestrian Advisory Committee

November 19, 2019 3:00 p.m.
City Center Room 110

Introductions: Zach DeBoer, Jaron Dewit, Greg Boris, Clint Brown, Joe Batcheller, Koni Sims, Charles Santee, Chrissy Meyer, Jedidiah Remnitz, Wes Phillips, Sam Trebilcock, Jeff Schmitt

If you had \$9 million dollars to build a hotel, would you build it by the Pentagon, Premier Center, or Avera (69th & Louise)?

We had a really good discussion about what makes a good location, or what's a bad location from a walkability, transportation, amenities standpoint.

Topics:

- GIS Layers – Pedestrian Elements. We can continue to add data. And make available to the Committee as well as the public.
 - Aging, population unable to drive, accidents, hospital data, ped counts
 - Sidewalk plan – has other data, and will merge or coordinate
- Put together your list of 3-5 priorities
 - Consider issue, timeframe, budget, existing policy / law vs. new policy / law, ...
 - Pedestrian use of drainageways, easements
 - Maximum block size
 - Adopt NACTO standards ([Urban Street Design Guide](#))
 - Examples: What “local” streets have “NACTO” standards
 - 10' lanes
 - Curb corner radii
 - Accessibility of curb cuts – American Council Blind
 - Requirement for Accessible Pedestrian Signals When There Is the Use of Leading Pedestrian Interval (LPI) Signalization at an Intersection
 - Implement and update Complete Streets policy
 - SAFETY – Is “this” promoting pedestrian safety?
 - “hire” Urban Design Principal on staff
 - Maintenance of intersections, crosswalks
 - eliminate parking minimums
 - Ped and car crashes should be accessible for analysis
 - Better connectivity to destinations

- Street trees in improve walkability
- Improved pedestrian connectivity across interstates and rivers.
- Try interim design measures to test and pilot improved pedestrian design and traffic calming measures.

[*organized survey results – see attached chart]

- Had a detailed discussion about how to “make” these changes, priorities. There are ... reports, plans, policies, resolutions, ordinances, and standards. (as Clint stated) seems like a lot of these have been discussed before, and we need to understand where they are at; why or why haven’t they been completed?
 - Move items forward from idea... to law.
- Chrissy – Plan from before; education; move items forward. Performance Measurements.
- Sam – Long Range Transportation Plan perception survey
 - Satisfaction with peds and bikes “environment”
- Joe – Build network of advocates; America Walks;
 - The benefits of pedestrians and walkability
 - Have Jeff Speck come back to present
- Zach – “Traffic Calming” should be addressed on roadways between neighborhoods; 14th Street, 10th, 11th, in core
 - Widths, speeds, parking lanes, diagonal parking, crosswalks,
- Wes – get some direction, focus on goals or priorities that we can work to accomplish
- Greg – Work on opportunities that present themselves – Minnesota Ave is coming up
- Connie – install Zebra crosswalks, dual directional cross-walks constructed consistently, 3-D cross-walk pilot
- Charles – crosswalks, state law and insurance “law”
- Input into plan considerations

Safety	Maintenance
Accessibility	Design
Facilities	Education
Connections	

Therefore, the plan should address

With these issues / priorities through steps, guides, actions, policies

AND follow up with implementation, measurable, enforcement, regulation

[Speck - .ppt later; or share what City currently has]

Next Meeting: Thursday, January 23, p.m. 3:00-4:30 p.m.

Appendix – Comparing priorities form each plan / report / document

Shape SF	Pedestrian Plan	Survey	Complete Streets	NACTO	Walkable City
Require streets to be designed to encourage motorists to travel at desired speeds and avoid encouraging excessive speeds. The design of streets should be appropriate to their context and functional requirements.		Narrower streets. Defined Crosswalks, bump outs	Roadway design that slows motor vehicles and/or limits access to provide greater safety for bicyclists, pedestrians, and motorists.	Cities can achieve a reduction in traffic speeds using a variety of traffic calming techniques. While certain speed controls alter the configuration of a roadway, others change how people psychologically perceive and respond to a street.	Road Diets 10' lanes
All streets shall have sidewalks conforming to at least minimum ADA standards on both sides.	Street Crossings should be safe and accessible.	Heavily used crosswalks need different features than less used crosswalks	Reduce pedestrian crossing distance at intersections where high motor vehicle counts and high pedestrian counts are expected.	Crosswalks should be designed to offer as much comfort and protection to pedestrians as possible.	Neckdowns at wide intersections
Private street tree planting should be allowed in the public boulevard.		Require better landscaping between sidewalk and street	Include streetscaping along newly constructed or reconstructed roadways	Flow-through planters are hard-edged stormwater management facilities with an impermeable base.	Street trees
	Pedestrians should have convenient and attractive linkages in their neighborhood.	City investing in sidewalks and bike lanes			
	Find ways to educate the public about pedestrian safety.	Better city ordinance, improved state law requiring stopping rather than yield to peds in crosswalks			

Appendix - Overview of Policies / Ordinances / Resolutions (Standards)

Policies:

Shape Sioux Falls

Provide development incentives for direct pedestrian and bicycle access from adjacent or nearby residential areas without using major streets.

Provide development incentives when residential street patterns provide reasonably direct routes within the development and to adjacent subdivision or commercial development for all modes of transportation, including bicyclists and pedestrians.

Encourage stormwater management features to be located, designed, and managed to provide visual amenities or entryway features, or to provide opportunities for passive recreation, including retention and detention basins, swales, surface drainageways, constructed wetlands, and greenways.

A. Public open spaces should be accessible and within convenient walking distance of areas that generate demands for such facilities, such as residential neighborhoods.

Ordinarily, feasible walking distance may be defined as a one-half mile distance unimpeded by significant natural or manmade barriers that interrupt safe pathways.

B. Require neighborhood parks to have safe pedestrian and bicycle routes from most areas that they serve. Safe routes may be provided by continuous sidewalks and other pedestrian pathways, greenways, and trails.

C. Public and private open space should normally integrate pedestrian connections from most major commercial and office developments.

D. Where possible, public open spaces should be served by the City's trail system and designated bicycle routes.

Varying Boulevard Width and Sidewalk Alignment

Innovative subdivision and street designs may vary the width of the boulevard and the alignment of the sidewalk.

A. Where right-of-way width, utilities, or required design clearances make tree planting in the boulevard infeasible, encourage street trees to be planted behind the sidewalk, either in remaining public right-of-way or as part of landscaping requirements on private property. The pedestrian path should be visually and functionally separated from the back of the curb by a boulevard setback or an appropriate contrasting paving color or texture.

B. In mixed-use districts, tree wells or planters behind the curb may substitute for continuous boulevard setbacks. Such tree installations should provide adequate space for roots and should normally be irrigated.

Street Landscape Borders

A. Require most developments with street setbacks (boulevards and front yards) to provide a street landscape border on private property adjacent to the street property line—with the exception of driveways, walks, porches, and related hard-surfaced areas. The street landscape border establishes a landscaped boundary between the public and private environment and reinforces the green quality of the city's streets.

B. Require adequately sized boulevard strips to provide healthy environments for trees, a comfortable street/sidewalk separation, and an area for snow removal storage and private and public utilities. These locations define the street edge and provide a separation between the street's vehicular and pedestrian domains. Utilities and landscaping should be planned and constructed to avoid conflicts with landscaped boulevards.

Street Trees

Private street tree planting should be allowed in the public boulevard.

A. Street trees are most effectively located in an area between the curb line and the public sidewalk, typically referred to as "boulevards" in the city.

Limit Street Speeds

A. Require streets to be designed to encourage motorists to travel at desired speeds and avoid encouraging excessive speeds. The design of streets should be appropriate to their context and functional requirements.

B. Provide development incentives to design residential streets that provide an attractive environment and discourage unsafe vehicular speeds. This may be accomplished by limiting street widths and using traffic calming devices such as roundabouts, medians, and other features that also improve the quality and safety of the streetscape.

Identify Distinctive Street Corridors

A. Ensure that the comprehensive plan defines certain corridors for special design treatment. These corridors may also include streets of community importance

that have high visibility, are traveled frequently by most city residents, and/or contribute to the overall image of the community.

B. Each identified corridor shall be a complete or multi-modal corridor that integrates a balanced transportation system which accommodates pedestrian, bicycle, and private motorized transportation, and public transit.

Establish a Streetscape Elements Manual

Sioux Falls shall complete a menu of streetscape elements that both provides a unified character and minimizes maintenance costs, while having room to reflect the diverse quality of individual neighborhoods.

Streetscape elements include the following:

benches, bike racks, bollards, bus stops, kiosks, mail collection boxes, newspaper dispensers, parking meters, public art, railings and fences, signage, utility lines, trees and other plantings, tables and chairs, drainage intakes, lighting, manhole covers, medians, waste and recycle receptacles, etc.

Fences along the Streetscape

Along the streetscape, fences should not negatively impact the traveling public—either pedestrian or vehicular.

High fences, too close to sidewalks, force pedestrians to drift toward the street.

High fences along streets limit the landscaping elements and aesthetic quality of the public right-of-way.

Sidewalks on Both Sides

All streets shall have sidewalks conforming to at least minimum ADA standards on both sides.

Identify “Complete Streets” Corridors

Sioux Falls’ long-range plans (comprehensive, policies addressing transportation, including bicycle and pedestrian modes) shall define a “complete” streets network that helps identify corridors which provide all transportation modes with direct and comfortable access to major community destinations.

- “Complete” streets should be built or retrofitted during construction or reconstruction of a street to accommodate bicycles, pedestrians, and transit.
- Bicycle accommodations include exclusive bike lanes or shoulders, shared bicycle/parking lanes or shoulders, or shared lanes marked by sharrows.

- Sidewalks should be on the edges of all streets.
- Transit accommodations include locations for bus shelters and bus pullouts.

Provide Direct Pedestrian Pathways in Nonresidential Areas From Adjacent Public Sidewalks

Require, in most cases, commercial, office, or industrial projects to provide a direct and clearly defined pedestrian pathway from the adjacent public sidewalk.

The pathway route or design should minimize conflicts or crossings of driveways or parking areas. (Also see section E. Parking.)

Provide Pedestrian and Vehicular Connections

Provide development incentives to strongly encourage all components within a horizontal mixed-use development to be connected by attractive and convenient pedestrian and vehicular circulation systems.

These systems may use a combination of public streets and internal private streets and ways. Pedestrian access to all major destinations in the project should be pleasant, safe, and secure, and should not require crossing parking lots or other obstacles.

In addition, connections should be made to adjacent single-family neighborhoods and public open space areas. (Also see sections C. Multi-Modal Access and D. Open Space).

Flexible Parking Requirements

Allow flexible parking requirements for horizontal mixed-use projects, recognizing that different components generate peak parking demands at different times.

Shape Sioux Falls – Shape Corridors

Complete Street Corridors

All roads shall accommodate multiple modes of travel. However, special attention should be paid to new arterial roadways and highways. Existing arterial roadways should be retrofitted with complete street design facilities whenever reconstruction of the roadway occurs—for example: bike lanes and sharrows, sidewalks, bus lane pullouts and shelters, and, in the long term, street car corridors. For specific design policies, see Chapter 5: “Shape Places,” section C. Multi-Modal Access, as well as the Sioux Falls Bicycle Plan and Pedestrian Plan, available at the City Planning Office and online at www.siouxfalls.org/planning.

Ordinances:

Subdivision Ordinance

157.098 PRELIMINARY SUBDIVISION PLAN STREET SYSTEM.

(g) Private streets or roads. Private streets may be allowed when serving a limited number of parcels if right-of-way constraints exist and when all maintenance responsibilities are detailed within the easement. The following standards must be met:

(1) A private street must have a minimum of 28' of paved drivable surface and shall meet Engineering Design Standards for a private street.

(2) A private street easement may share the public utility easement required within § 157.117.

(3) All private streets must be platted as a private street easement that shall be recorded with the county register of deeds. The private street easement shall not be included as part of any required lot area or setback for purposes of the zoning ordinance.

(4) Any nonresidential development that proposes private streets shall include sidewalks on both sides of the street, curb and gutter, streetlights, and driveways all to city Engineering Design Standards.

(5) Any nonresidential development that proposes private streets and that is required to do a traffic study shall include any additional design recommendations into the developer's engineering plan.

(6) An alternative pedestrian plan may be proposed for approval by the planning director and city engineer to allow alternative sidewalk connections that still provide the same pedestrian connections to proposed buildings in the development.

(7) The plat shall have the owner's certificate regarding the private street easement's private maintenance of facilities and shall have a maintenance agreement as required within § 157.116.

(1992 Code, App. A, § 15A.07.040) (Ord. 81-08, passed 7-7-2008; Ord. 8-13, passed 3-5-2013; Ord. 87-18, passed 10-2-2018)

157.099 PRELIMINARY PLAN WALKWAY/BICYCLE TRAILS.

(a) Concrete or asphalt pedestrian walks or bike trails shall be required through blocks greater than 1,320' when needed to reduce walk distances and increase access to current or future schools, playgrounds, employment centers, commercial areas, bus stops, bike trails, and other community facilities. They may also be required to provide access to greenways and common areas. The sidewalks shall be included within a ten foot easement or other acceptable area as approved by the city engineer and maintained by the adjacent property owners or other acceptable landowner as approved by the city

engineer. The sidewalks shall be paved at least six feet in width and shall be constructed before a certificate of occupancy is approved.

(b) Bicycle trails within identified drainageways or other similar open space areas are required to be dedicated to the city as a trail easement when identified as a part of the city of Sioux Falls Bicycle Plan. The trail easement shall include language that allows for the city or developer to construct a single-track, grass, gravel, or paved trail within the easement.

(Ord. 87-18, passed 10-2-2018)

157.113 DEVELOPMENT ENGINEERING PLAN STREETS SYSTEM.

(b) Traffic calming. Improving traffic flow into and through subdivisions also needs to take into consideration traffic volumes and speeds. Traffic calming is the process by which vehicular speeds and volumes on local streets are reduced to acceptable levels. This is achieved through the installation of approved devices such as traffic circles, flares, and center islands. Traffic calming serves the purpose of reducing cut-through traffic, truck traffic, excessive speeding, noise, vibration, air pollution, and accidents in an attempt to provide a safer environment for motorists and pedestrians.

(1) Approved devices shall be spaced within the right-of-way along major collectors through residential subdivisions, based upon Engineering Design Standards.

(2) Traffic calming devices may be required by the city engineer, based upon the review of a traffic impact study.

157.114 WALKWAYS.

Concrete or asphalt pedestrian walks of an appropriate width (as determined by the city engineer) shall be required through blocks where deemed necessary to provide circulation or access to schools, playgrounds, shopping centers, bus stops and other community facilities. They may also be required to provide access through greenways and common areas. The walks shall be maintained by the adjacent property owners.

(1992 Code, App. A, § 15A.08.050) (Ord. 81-08, passed 7-7-2008)

Shape Places

160.600 PARKING REDUCTION ALTERNATIVE PLANS.

A parking reduction alternative plan is eligible for BCF, RE, and WM forms only. Any other parking reductions must be granted a variance by the Zoning Board of Adjustment. When an applicant can show that the required parking amounts are in excess of what is needed for the proposed use, the applicant may submit a request with justification based on the standards below to the planning commission for off-street parking space reductions. The planning commission will consider and act on this request as a part of the full development application process (see application requirement in § 160.595).

160.485 LANDSCAPE STANDARDS.

It is the desire of the city to encourage horticulture infrastructure and encourage development which is environmentally sensitive, socially responsive, as well as aesthetically pleasing. To assist in these objectives, a minimum standard for a landscaped setback is prescribed, and landscape features are implemented to minimize the adverse effects commonly incidental to higher density residential, commercial and industrial property improvements. Under no circumstances is the use of artificial plantings acceptable to meet the requirements of this section.

(a) Required landscaping of front yard setbacks. At least 90% of the required front yard setback in any zoning district shall be landscaped and maintained with living ground cover. The required setback may include necessary hard surfacing of driveways to reach allowable parking, loading or stacking areas. Poured or laid asphalt, concrete or similar hard surfacing shall not be used as allowable landscape material. Landscape rock, stone, or pebbles shall not be allowed for placement within the right-of-way. Front yard setback landscape areas must be capable of providing a substantially full expanse of foliage within three years after planting.

(b) Trees. Valuing the benefits provided from the use of trees in reducing heat, pollution and the loss of habitat resulting from the use of expansive areas of hard surfacing for parking purposes, the following standards regarding trees shall be met and maintained for all forms except for DD and AD types.

(1) Total number of trees required.

A. Trees shall be required at the rate of one tree per 50 feet of frontage, not including the width of perpendicular driveways, or one tree per six required parking, loading, and stacking spaces provided on the site, whichever is greater. Where fractional trees result, the number of required trees shall be rounded to the nearest whole number. If a buffer yard is also required (see § 160.488) within a front yard and trees are provided as the required buffer yard landscaping units, the required number of trees required by this section may be eliminated but for only the frontage that shares the buffer yard.

B. Exception: If parking facilities or building can utilize zero setbacks, one tree per 50 feet of frontage shall be provided within the right-of-way subject to approval by the city engineer.

(2) Placement according to size, type, and percentage allowed.

A. Trees shall be located within the front yard (yard, front).

B. Deciduous shade tree. May be utilized for 100% of the total tree requirement. Only deciduous shade trees may be utilized for required interior trees or optional right-of-way planting, and no more

than 20% of the total tree requirement may be planted in the right-of-way area. Street trees planted in the right-of-way boulevard may count towards the deciduous shade tree requirement. Trees planted in the right-of-way require a permit from the parks and recreation department. Deciduous shade trees must be a minimum caliper of 2 inches.

C. *Deciduous ornamental trees.* Up to 25% of the required trees may be deciduous ornamental trees. Deciduous ornamental trees may be utilized for 100% of the total tree requirement when the front yard setback is located beneath overhead power lines. Deciduous ornamental trees must be a minimum caliper of 1.5 inches.

D. *Evergreen or coniferous trees.* Up to 25% of the required trees may be evergreen or coniferous trees; however, they shall not be planted in a driveway or intersection safety zone nor utilized for parking lot interior trees or right-of-way plantings. Evergreen or coniferous trees must be a minimum of 6 feet in height.

E. *Required species mix.* The city of Sioux Falls encourages a diverse and vibrant urban forest. In order to avoid overplanting of one specific type of species minimum requirements have been established for the number of species based upon the total number of trees required on a site.

Required Number of Trees	Minimum Number of Species
<4	1
5-10	2
11-20	3
21-30	4
31+	5

F. *Exception: On sites with limited capacity due to existing conditions or redevelopment restrictions, alternatives to placement standards are allowed through the provisions of § 160.599 (Landscape and Buffer Yard Alternative Plans).*

160.444 INITIAL DEVELOPMENT PLAN SUBMITTAL ELEMENTS.

Upon application for an initial development plan to a planned development district, the petitioner shall present an initial development plan to the planning commission(s) for review and their approval showing the following information:

- (a) *Project name and legal description.*

(b) A scaled digital copy of the initial development plan.

(c) The proposed development scheme showing the following information.

(1) The proposed land uses of each building, including the number and type of proposed DD, AD, and MD building forms, the proposed number of dwelling units per building, and the number and type of any other proposed building form and their square footage.

(2) Circulation, including internal circulation, street design, and pedestrian and bicycle circulation and access.

(3) Open space and landscape concept plan.

(4) Freestanding signage locations and approximate sizes.

(5) The existing and proposed minimum setbacks of all buildings which may be more or less than the form setback guidelines if specified on the initial development plan and it complies with the standards of the PUD.

(6) The proposed maximum height that may be more than the form height guideline if specified on the initial development plan and it complies with the standards of the PUD.

(7) Proposed transitions including design features illustrating compatibility to the surrounding environment and neighborhood.

(8) Anticipated phasing plan.

(9) In addition the developer shall provide an 8.5" x 11" scaled rendering on paper and a digital copy in an approved format at a scale no greater than 1 to 100 feet of the approved initial development plan.

(1992 Code, App. B, § 15.45.040) (Ord. 42-83, passed 6-27-1983; Ord. 9-13, passed 3-19-2013)

160.556 MINIMUM IMPROVEMENT AND MAINTENANCE STANDARDS.

(j) NF, BCF, and RE parking lots shall be designed to separate pedestrians from vehicles to the maximum degree possible and to provide a direct and clearly defined pedestrian pathway from adjacent public sidewalk to building entrance with a private dedicated sidewalk and/or dedicated private pedestrian crosswalk through parking areas. WM forms are encouraged to provide pedestrian connections to public sidewalks if a sidewalk is required.

(k) Sidewalks and walkways in commercial developments shall link to the city's sidewalk and trail system where available.

Policy Resolution

Engineering Design Standards:

5.1.2.8 Level of Service. Level of Service (LOS) C during the peak hour will be the design objective for all new street components and intersections. Individual approaches shall be designed to at least LOS D for arterial street approaches or a LOS E for collector/local/private street approaches, with no individual movement having a volume/capacity ratio of greater than 1.00. Existing corridors with established adjacent development shall be designed to LOS D. The design year will be the MPO planning year horizon or at build-out of the area. Levels of service are defined in The Highway Capacity Manual.

8.2.3.5 Major Collector. A major collector street is a general term denoting a roadway designed or operating with the following characteristics:

- A. Defined as roadways intended to serve moderate volumes of traffic from local roads to arterials.
- B. Anticipated traffic volume generally greater than 5,000 vehicles per day.
Posted speed limit of greater than or equal to 30 miles per hour.
- C. Continuous for two or more miles and typically, but not limited to, located on the 1/2-mile location of a section. Right-of-way is 80 feet. A traffic impact study may determine if there is extra width required to handle a development's traffic.
- D. Designed to handle traffic volumes loading from and onto local, other collector, and arterial roadways.
- E. Traffic control is provided generally by signs.
- F. On-street parking may be allowed.
- G. Access locations will not be allowed within 300 feet from the intersection with an arterial street.
- H. Generally, serves predominantly multi-family residential, commercial, and/or industrial uses.
- I. Major collectors could transition into minor collectors if approved by the City Engineer.

8.3.1 Traffic Lane Widths.

8.3.1.1 The minimum traffic lane width shall be 11 feet. For arterial streets and streets with anticipated truck traffic count in excess of 3% of the total traffic count, the lane width shall be 12 feet.

8.3.6 Traffic Calming. Traffic calming is the process by which vehicular speeds and volumes on local streets are reduced to acceptable levels. This is achieved through the installation of approved devices such as traffic circles, flares, and center islands. Traffic calming serves the purpose of reducing cut-through traffic, truck traffic, excessive speeding, noise, vibration, air pollution, and accidents in an attempt to provide a safer environment for motorists and pedestrians.

Traffic calming is limited to residential streets with a posted speed limit of 25 mph and defined by the Metropolitan Area Planning Agency Major Street Plan map as "LOCAL."

Traffic calming devices may be installed if the traffic volume exceeds, or is projected to exceed, 1,000 vehicles per day; and if the 85th percentile speed of traffic exceeds, or is reasonably expected to exceed, 30 mph.

Traffic calming devices shall be designed to accommodate emergency vehicles that may use the local street. All final construction plans are to be approved by the City Engineer.

Landscaping agreements for the continued care of vegetation within traffic circles and center islands shall be considered with adjacent property owners and determined on a case-by-case basis.

Accessible Sidewalk Requirements

16.1 Introduction

The City of Sioux Falls developed this section based on the July 26, 2011, "Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way." This section was developed in accordance with Federal regulations (23 CFR 652 and 28 CFR 35) and is considered the most current standard by the Federal Highway Administration. Acknowledgement is given to the Iowa Statewide Urban Design and Specifications (SUDAS) organization as the bulk of this chapter was written using the information listed in their accessible sidewalk requirement design manual.

Sidewalks are an integral component of the transportation system. Where sidewalks are provided, they must be constructed so they are accessible to all potential users, including those with disabilities. This section establishes the criteria necessary to make an element physically accessible to people with disabilities. This section also identifies what features need to be accessible and then provides the specific measurements, dimensions, and other technical information needed to make the feature accessible. The requirements of this section were developed based on the following documents:

...

16.6.2 Standard Sidewalk. Sidewalks solely serving private residences outside the public right-of-way are not required to follow these requirements.

16.6.2.1 Location. Sidewalks shall be constructed on both sides of all roadways unless specifically waived by the City Engineer. Sidewalk shall typically be detached and generally be located 2 feet from the property line.

16.6.2.2 Cross Slope. The maximum cross slope is 2.0% with a target value of 1.5% (R302.6).

16.6.2.3 Running Slope. Sidewalks with a running slope of 5% or less are acceptable. However, where the sidewalk is contained within the street right-of-way, the grade of the sidewalk shall not exceed the general grade of the adjacent street (R302.5). For design, consider the general grade of the adjacent street to be within approximately 2% of the profile grade of the street.

16.6.2.4 Width. Sidewalk width shall be 4 feet minimum on local streets and cul-de-sacs with residential housing. On collector and arterial streets and streets abutted by commercial, industrial, and multifamily lots, the minimum sidewalk width shall be 5 feet. When sidewalk is located back of curb, the minimum width shall be 6 feet (R302.3).

16.6.2.5 Thickness. Sidewalk thickness shall be a minimum of 4 inches. At driveway locations, it shall be the thickness of the adjacent driveway. When the sidewalk is located back of curb or when the area between the building and the back of curb is filled in with sidewalk (i.e., downtown), the thickness shall be a minimum of 6 inches.

Sidewalk thickness at ramp locations including the turning space, ramp, and flares shall be a minimum of 6 inches thick.

16.6.2.6 Passing Spaces. Where the clear width of the pedestrian access route is less than 5 feet, passing spaces are required at maximum intervals of 200 feet. The passing space shall be 5-foot minimum by 5-foot minimum.

Passing spaces may overlap with the pedestrian access route (R302.4).

Driveways may be used as passing spaces, as long as the 2.0% maximum cross slope is not exceeded. To accommodate the passing space requirement in residential areas where the sidewalk is 4 feet wide, the sidewalk width through each driveway must be 5 feet wide. The designer shall indicate passing space locations when it is anticipated the 200-foot interval will not be met by the additional width at the driveways.

16.6.3 Pedestrian Street Crossings.

16.6.3.1 Cross Slope. The longitudinal grade of a street becomes the cross slope for a pedestrian street crossing. PROWAG has maximum limits for the cross slope of pedestrian street crossings, which vary depending on the location of the crossing and the type of vehicular traffic control at the crossing. These requirements, in effect, limit the longitudinal grade of a street or require a “tabled crosswalk” at the intersection (R302.6).