

1 Introduction



The University of Alabama Campus Master Plan was developed with a comprehensive open space, accessibility, and circulation system in mind, in order to promote the academic core of the campus as a pedestrian-oriented environment. To achieve this, all circulation systems and other modes of travel are planned and designed to serve and enhance the pedestrian experience. To minimize conflict between pedestrians and vehicles, the academic core of the campus is to be kept as vehicle-free as possible. New sidewalks and other walkways will be planned, designed and constructed to provide clearly defined routes that signal changes in use from solely pedestrian to a mix of pedestrians, bicycles and transit vehicles.

Campus walkways and their immediate environs contribute to the character of the University as a hospitable, inspirational, and engaging traditional academic setting, steeped in the beauty and culture of the South. For example, one of the hallmark experiences of the University of Alabama campus is along the tree-lined walks surrounding the Quad, looking through the majestic oaks toward Denny Chimes and the Gorgas Library. Along the Quad, sidewalks are set back from the roadway, allowing ample space between vehicles and pedestrians. Large oaks provide shade, and decorative lamps provide evening light.

Campus walkways provide comfortable, safe, and scenic paths of circulation, where students meet friends and classmates in passing, where informal gathering and conversation are happenstance, and where students, faculty and visitors participate in life outside of the classroom.



1.1 Implementing the Campus Master Plan

The University is committed to the vision expressed in the Campus Master Plan. Implementation of this plan for campus sidewalks, paths and trails will help link critical functions of the University more closely together in a system that allows students, faculty, staff, and guests to safely and conveniently walk from one place to another. The University is also committed to enhancing its physical infrastructure to encourage pedestrian activity. By encouraging walking for general accessibility, the University supports active lifestyles for students, which is essential to their full intellectual and social growth.

Following adoption of the Campus Master Plan, the campus rapidly converted from an automobile-dominated environment to one in which pedestrian accessibility and movement was granted primary importance. Removal of on-street parking and conversion of those spaces to bicycle and transit lanes and installation of a transit system occurred over a summer.

Transition to a pedestrian-dominated environment placed great demand on the existing sidewalk system. Some walks are inadequately sized, while more need to be added in key locations. Others are in need of repair. Students cross streets in random locations, often impeding the flow of transit buses and other vehicles. Corner crossings are highly congested, especially



Students cross at mid-block, causing traffic to stall.



Students need more standing room as they wait for crossing signals at highly congested corners.

along University Boulevard. The time has come to upgrade and organize the campus Pedestrian System so that it meets the functional qualities and image that the University desires as a pedestrian-oriented campus.

An improved pedestrian accessibility system will offer a denser network of routes across which pedestrian traffic may be more evenly distributed to ease congestion on heavily traveled routes. Certain walks will be widened, others repaired. Corner landings at intersections will be expanded to allow adequate space while waiting for crossing lights. Additional crosswalks also will be installed.



Some campus sidewalks are undersized for increasing pedestrian volumes.

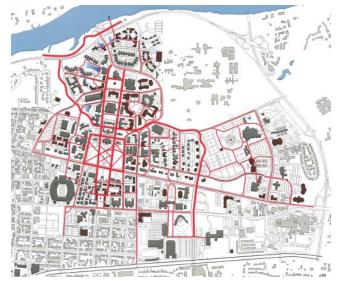
Right: This Campus Master Plan identified streets that would remain accessible to general vehicular traffic in the future.

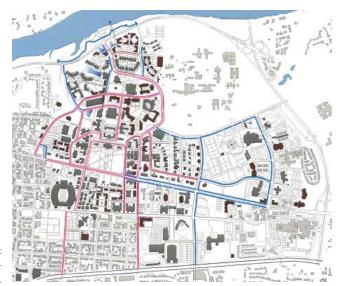
Below right: The Campus Master Plan expanded on the existing pedestrian network serving the campus.

The Pedestrian System Plan provides guidance for design and construction of a unified pedestrian system that supports implementation of the Campus Master Plan in conformance with the University's mission. The Pedestrian System Plan includes photos and diagrams of various aspects of the pedestrian circulation system, plus design guidelines that supplement those in the overall Campus Design Guide. The plan will help guide phasing and prioritization of pedestrian system investment, inform specific plans for new construction, and provide consistency in the planning, design and construction, and routine maintenance of sidewalks and other pedestrian facilities.

Campus bicycle network. On-street bicycle paths are shown in red. Shareduse paths are shown in blue.







1.2 Complete Streets

The campus pedestrian system is built on the premise that pedestrian ways are a critical component of a complete accessibility system. Consequently, pedestrian facilities along vehicular or transit streets should be designed and constructed as part of the total streetscape environment. A complete streetscape accommodates vehicular, transit, bicycle and pedestrian circulation. Complete streets also include landscaping, lighting, signage, transit stops, site furnishings, and other site elements. As an ensemble, a complete streetscape is visually compelling and environmentally comfortable for pedestrians.

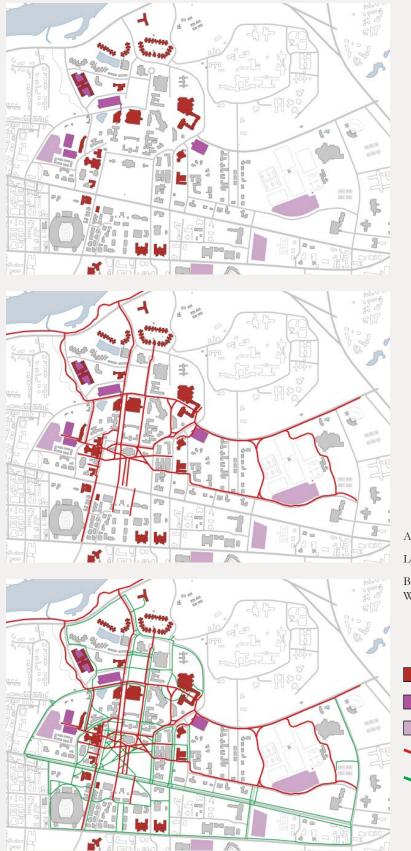
1.3 Off-Street Paths

Pedestrian paths located away from streets should also be planned and designed to include the immediate walking surface as well as the adjacent landscape and environmental surroundings. Regardless of setting, when planning, designing or building any part of the University of Alabama Pedestrian System, this plan and the following Design Guide must be considered carefully.









Designing the Pedestrian System

The Pedestrian System is designed to support the University of Alabama as a pedestrian-oriented Campus. The plan identifies the campus elements, including major residential and academic buildings, parking structures, and major parking lots that generate the highest level of pedestrian traffic on a daily basis. These areas of highest use are linked with a primary walkway system that features sufficiently wide Primary Walks. Areas with less pedestrian traffic are linked by Secondary Walks; and the areas with the lowest levels of pedestrian traffic, are linked through Tertiary Walks. Shown in the diagrams at right is the layering of major pedestrian-generating facilities, Primary Walks, and Secondary Walks.

Above Left: Major pedestrian traffic "Generators"

Left: Generators and Primary Walks

Below Left: Generators, Primary Walks, and Secondary Walks

- Academic and Residential Generators
 - Parking Structure
 - Parking Lot
 - 🖕 Primary Walks
 - 🥿 Secondary Walks

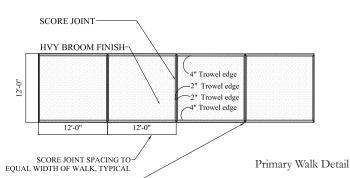
2 The Pedestrian System

The University of Alabama Pedestrian System consists of several types of pedestrian facilities. Shown and described below, each calls for its own particular planning and design considerations.

- 1. Primary Walks carry the largest volume of traffic, and link the areas of highest use on the campus. A typical primary walk is approximately 12 feet wide, and can be as wide as 20 feet or even more. It is constructed of 6-inch thick reinforced concrete, with brick edging.
 - A. For special effects in areas of primary interest, the primary walk can be modified by replacing the concrete panels with fields of brick herringbone pavers.

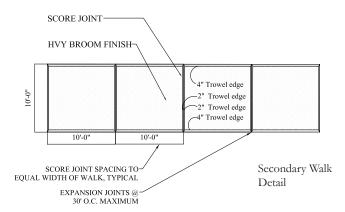


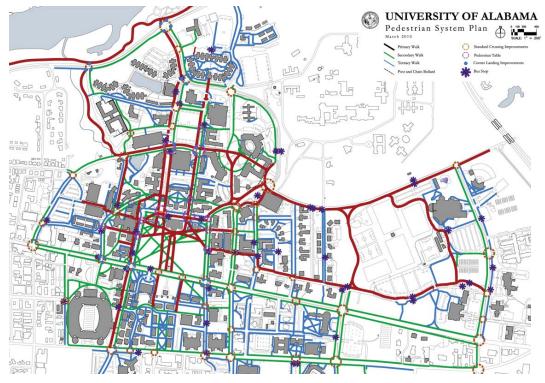
B. A primary walk that serves as a major concourse may need to be widened to as much as 20 feet. A simple variation of the primary walk allows for additional brick paving along each side to accommodate larger volumes of foot traffic. With this variation, the expanded edges may also allow for additional seating or other site furnishings.



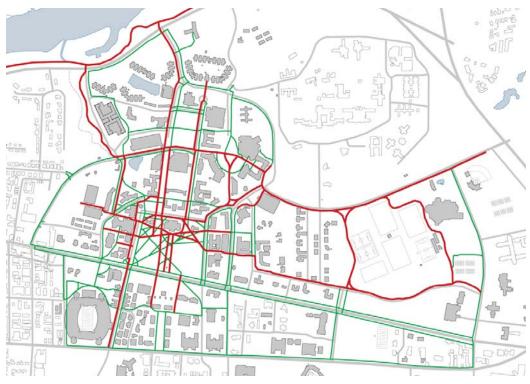
- 2. Secondary Walks generally serve medium traffic. The typical Secondary Walk is approximately 10 feet wide, and is constructed of 6-inch thick reinforced concrete, with brick edging.
 - A. Exact walkway widths should be determined on a case-by case basis.
 - B. Specific conditions such as the width of adjacent walks, site constraints, and compatibility within the site context should inform the design of each segment of walkway.







The Pedestrian System Master Plan identifies the alignments of Primary, Secondary, and Tertiary Walks; intersections and crosswalks to be upgraded or installed, and frontages where improvements are needed to control pedestrian street crossings.



Primary walks (red) and Secondary Walks (green) serve the major origins and destinations on campus. Tertiary walks support the major routes, connecting to individual buildings, between buildings, and to parking and service areas.

3. Tertiary Walks generally serve low traffic demand, provide important connections between buildings, open spaces, parking, and service areas. The typical tertiary walk is 6 feet wide minimum and constructed of 6-inch minimum thick concrete. See standard drawings.



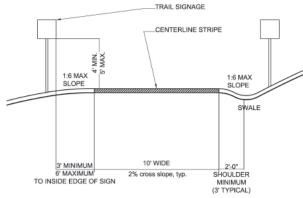
- 4. Shared-Use Paths are paved pathways that accommodate both bicycles and pedestrians. They serve as primary transportation corridors and provide an alternative to on-road facilities for less experienced cyclists. Often times, shared-use paths become favorite recreational trails. The shared-use path is at least 10 feet wide and may be constructed of concrete or asphalt.
 - A. The shared-use path should have appropriate markings or signage to notify users that the facilities are shared between bicycles and pedestrians. The pathway may be marked with a solid or dashed centerline stripe or instead marked with a Shared-use Path Restriction (R9-7) Sign. It should be noted that when using the R9-7 sign,

there is no pavement marking. The sign symbols may be switched as appropriate.

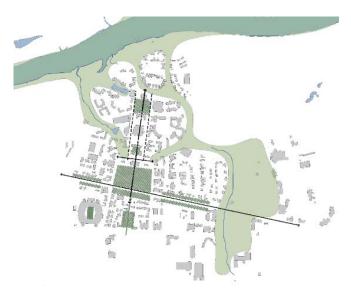
B. When two-way shared use paths are located adjacent to a roadway, wide separation is desirable to demonstrate to pedestrians, bicyclists and motorists that the path is intended to function as an independent facility for bicyclists and others. When this is not possible, and the distance between the edge of the shoulder and the shared use path is less than 5 feet, a suitable physical barrier of minimum 42 inches in height, is recommended to prevent bicyclists from toppling into the roadway.

Barriers also prevent path users from making unwanted movements between the path and the roadway and reinforce the concept that the path is an independent facility.





- 5. Walkways through Natural Settings
 - are an appropriate response to the fact that the Campus Master Plan is organized around a central open space system that includes natural areas and drainage basins such as the Marr's Spring Preserve and the Crescent. These and other natural areas offer respite from the urban environment, with places for water recharge, wildlife habitat, and sustenance of natural ecological systems.
 - A. Meandering paths should be placed carefully into campus natural areas to allow limited access while preserving natural beauty and drainage patterns.
 - B. Paths should be constructed of porous paving materials, such as crushed limestone fines, mulch, or porous paving whenever possible.

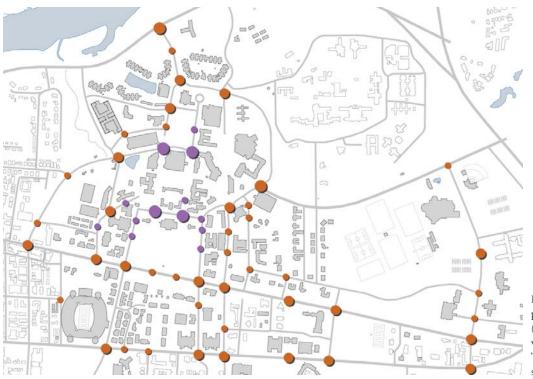


Wide swaths of mostly natural open spaces are to be maintained and enjoyed on campus. These are to the east and north edges of the campus around Marr's Spring and the Black Warrior River.



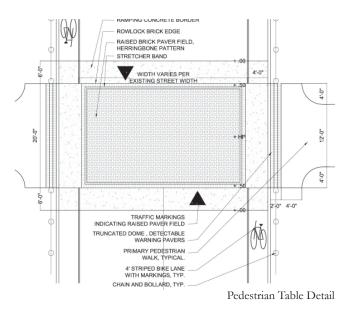
- C. Paths through areas of regular flooding or inundation where washing or scouring may occur may be constructed of nonpermeable paving as appropriate.
- D. Drainage should be diverted naturally around sidewalks and trails using environmentally sensitive design solutions such as bio-swales, tree logs, or native stones. Footbridges should be considered in lieu of culverts and pipes.

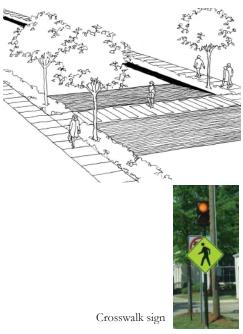




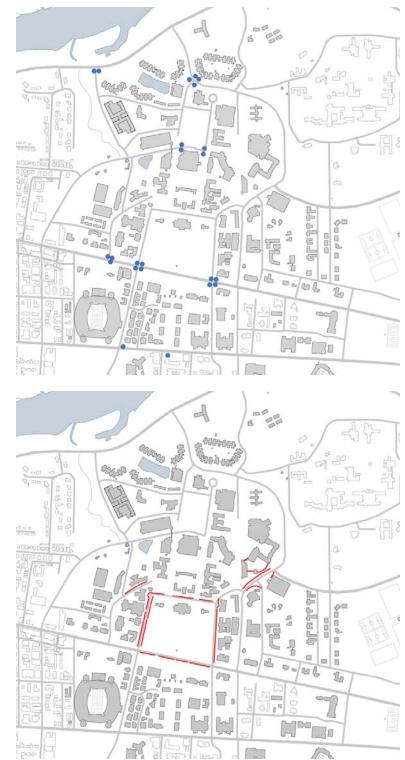
Existing crossings will be improved and new ones installed (orange). Some crossings will be raised as "Pedestrian Tables" to optimize pedestrian safety in key locations (purple).

6. Intersections and Crosswalks are another essential link in the pedestrian system. Existing intersections and crosswalks will be improved for safety and to provide adequate room for the queuing of pedestrians as they await crossing signals. Signals, special paving materials, raised "pedestrian tables," and street markings improve safety by alerting motorists and by channeling pedestrians and bicyclists to safe crossing areas. Existing crosswalks in several locations will be retrofitted with ramps and other ADA accessibility features.

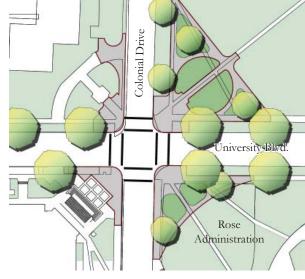




Given the increasing rate of pedestrian traffic at several major intersections, corner landing areas, indicated at right in blue, will be expanded to provide more standing area.

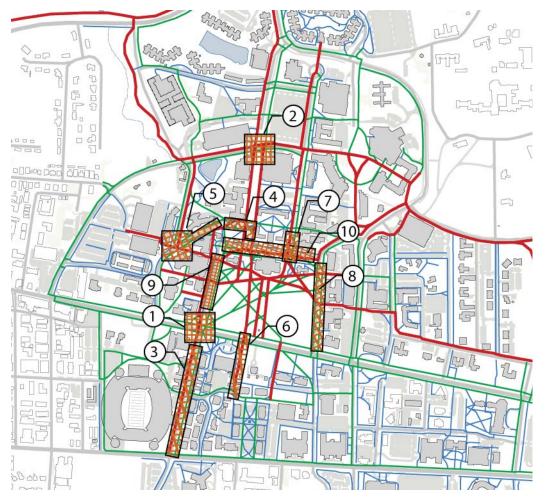






Expanding standing space at the corner landings at the intersection of University Boulevard and Colonial Drive is a high priority for the University's pedestrian improvements program.

The Pedestrian System



Implementation Priorities

- Crosswalk and corner landing improvements, intersection-University Boulevard/Colonial Drive.
- Pedestrian table installation and corner landing improvements, intersection of McCorvey Drive/Campus Drive.
- Installation of primary walk (west side) and secondary walk (east side), Colonial Drive.
- 4. Extension of Crimson Promenade to Stadium Drive
- Crosswalk improvements and extension of secondary walks from Marrs Spring Road, along Stadium Drive, to the Crimson Promenade

- Installation of primary walk from parking south of Rose Administration to University Boulevard
- Closing of 7th Avenue and installation of primary and secondary walks, Woods Hall quad to Capstone Drive
- 8. Pedestrian table installation and sidewalk upgrades on 6th Avenue
- Pedestrian table installation and sidewalk improvements on Colonial Drive
- 10. Removal of parking and construction of pedestrian plaza, Capstone Drive from 6th Avenue to Colonial Drive



3 Design Guide

This plan is an addendum to the University of Alabama Campus Master Plan, which sets overarching principles and recommendations for the ongoing physical development and improvement of the University. Likewise, this Design Guide supplements the Campus Design Guide in regard to the Campus Pedestrian System. The following are general guidelines for planning and design of walkways and their immediate surroundings. They should be supplemented by applicable guidelines from the Campus Design Guide.



3.1 General Guidelines

- Recognize and enhance natural features and character of the campus and area.
- Respond to the architectural and urban design framework of the area.
- Respond to the historical context of the surroundings.
- Provide environmental comforts that promote summer shading, summer breezes and other cooling effects.
- Provide areas for seating and informal gathering.
- Minimize earthwork, clearing, and tree removal.
- Divert stormwater runoff through environmentally sensitive practices.
- Minimize vehicular and bicycle conflicts with pedestrians.
- Meet ADA accessibility guidelines.
- Minimize slope or difficult terrain whenever possible.
- Provide clear visual zones to allow scanning for potential threats.
- Provide night lighting consistent with campus environmental safety and illumination standards.
- Provide safe access to emergency call boxes.

3.2 Additional Guidelines

1. Paving Materials

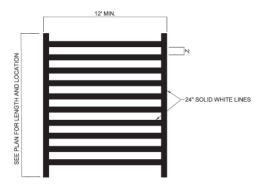
Sidewalk surfaces should be constructed of concrete and/or brick materials as appropriate to the context and sidewalk type. Concrete surfaces shall feature a light broom finish.

2. Crosswalks

 A. Primary Pedestrian Crossings.
Where primary walks cross interior campus streets, crossings shall be raised, constructed as pedestrian tables.



B. University Boulevard. Crosswalks shall include skid-proof thermoplastic tape and shall meet applicable City and State requirements.





C. Ramps. All street crossings shall include handicap ramps at curbs in accordance with Americans with Disabilities Act (ADA) Guidelines. If project area includes curb ramps, the project shall include appropriate crossings and curb ramps on opposite corners to provide a complete, safe crossing.



At curb ramps, brick pavers or other textured surfaces are used as detectable warnings for the visually impaired.

3. Shoulders

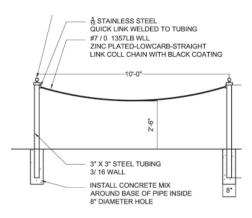
Sidewalk edges shall include shoulders at least 2 feet wide, whenever possible, to allow additional room for passing. Maintain adequate separation between walks and retaining walls and steep slopes, or provide 42-inch height barriers.

4. Grades

Sidewalk grades shall meet current ADA Guidelines regarding running slopes, cross-slopes, and other requirements for accessible routes.



- 5. Fences, Rails and Barriers
 - A. Ornamental Post-and-Chain Bollards may be used to control pedestrian movement in areas of open lawn, front lawns, or parks where a solid fence or ornamental rail would not be appropriate. A standard height post and chain type bollard shall be used.



B. Removable Bollards may be used in areas where vehicular access is limited. Bollards shall be lockable and easily removable, with sleeve coverings, rounded finial, color black. C. Handrails shall meet Universal Building Code height requirements and ADA requirements. When handrails are used along steps, rails shall fit integrally into the design of walls and columns, color black.



D. Ornamental Fencing. Shall be constructed of steel tube rail with 4 inch spacing between pickets, color black.

6. Drainage

- A. Drainage shall be diverted around or beneath walks.
- B. Curb Grates and Inlets shall be pedestrian- and bicycle-safe.Openings shall run perpendicular to the direction of bicycle traffic.





4 Standard Specifications and Drawings

Standard specifications and details for design and construction of sidewalks and supporting facilities are included in the University of Alabama Design and Construction Standards, including Section 4: Standard Drawings. These provide specific standards for construction of sidewalks and their immediate surroundings. They are to be coordinated with civil, lighting, and landscape design standards as appropriate.

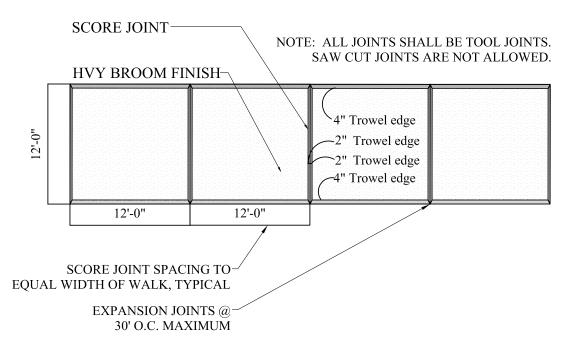
- Primary Walk
- Expanded Primary Walk
- Secondary Walk
- Tertiary Walk
- Shared-Use Path
- Heavy-Duty Reinforced Concrete Walk
- Tooled Joints
- Sidewalk Radius
- Pedestrian Table
- Primary Crosswalk
- Standard Crosswalk
- Post and Chain Bollard
- Ornamental Fence
- Bench Pad Detail
- Bike Rack Pad Detail
- Trash Receptacle Pad Detail

The Facilities Planning Department is responsible for developing and updating the University's Standard Specifications. Designers shall consult with the Department for information on standard specifications that may apply to each project.



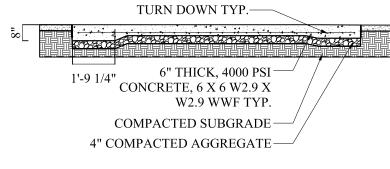


PRIMARY WALK, 12' TYPICAL



PRIMARY WALK, CONCRETE PANELS, TYPICAL PLAN DETAIL

Scale: 1/8" = 1'-0"



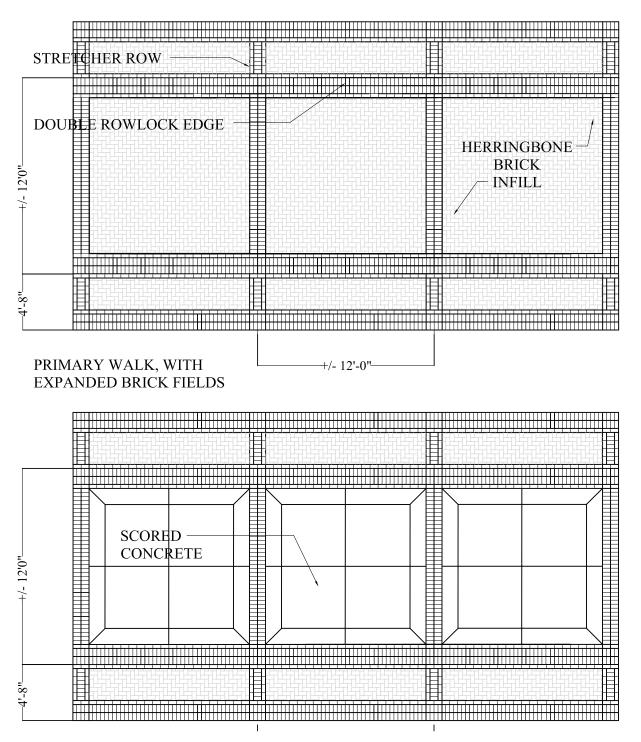
TYPICAL SECTION - Scale: 1/4" = 1'-0"

Scale: 1/8" = 1'-0"







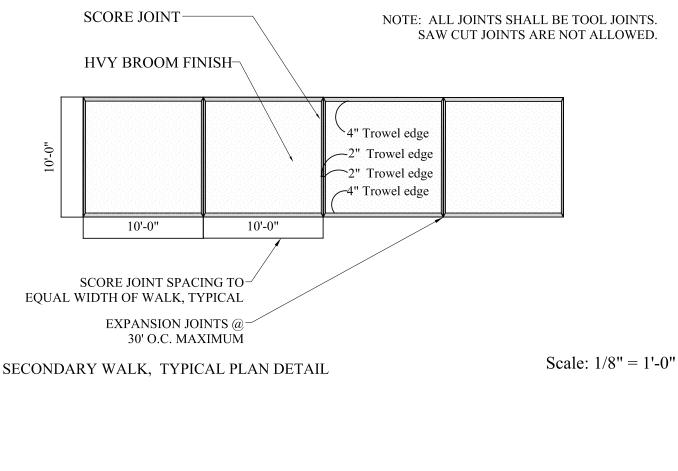


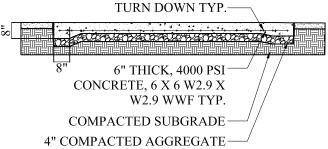
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SECONDARY WALK, 10' TYPICAL





SECONDARY WALK, TYPICAL SECTION

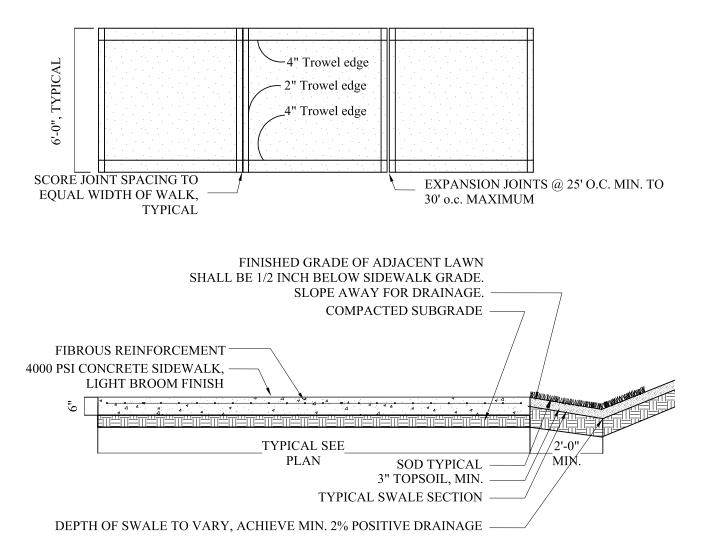
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TERTIARY WALKS, 6' TYPICAL

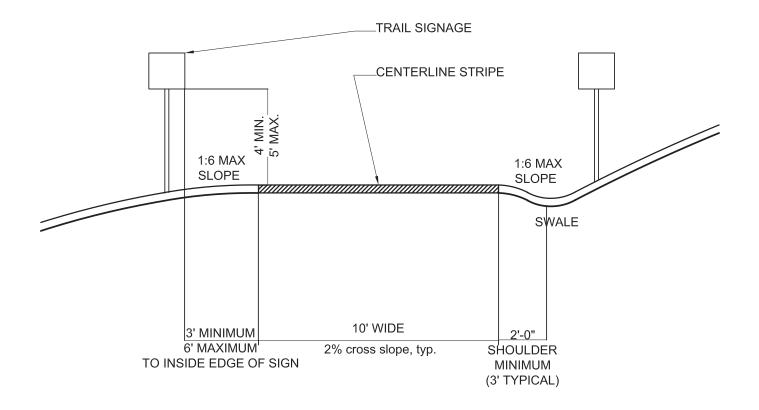








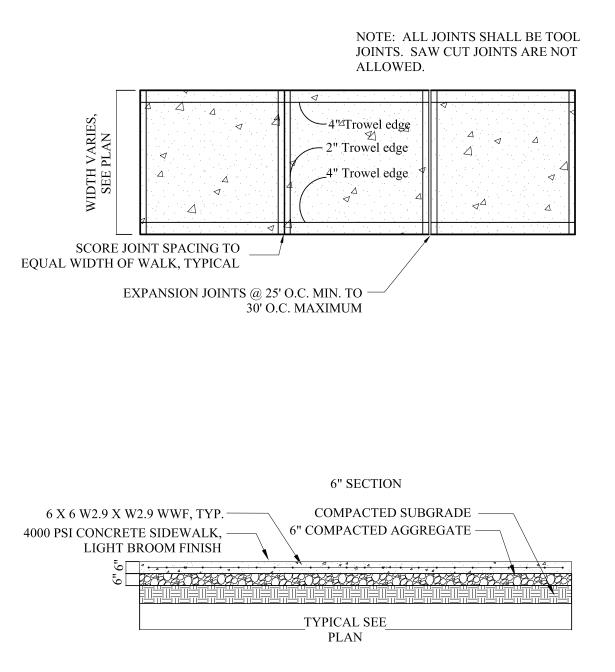
SHARED-USE PATH







TYPICAL HEAVY - DUTY SIDEWALK

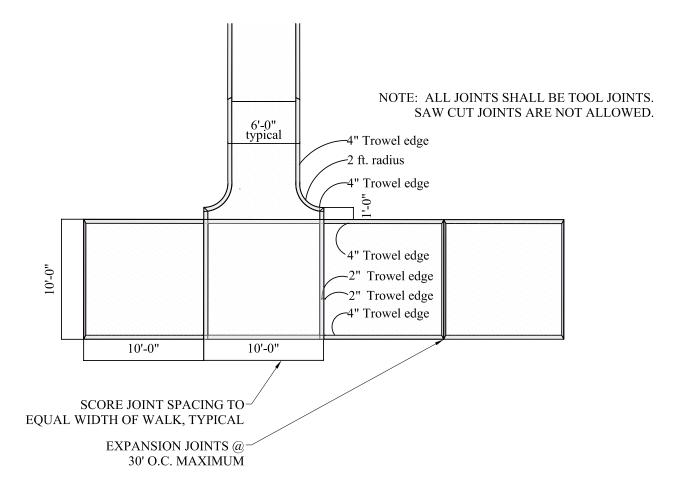


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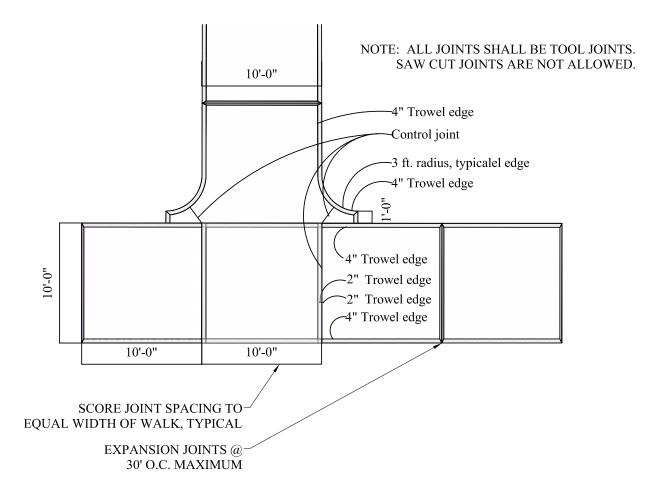
SIDEWALK RADIUS AND TOOLING, ALIGNED







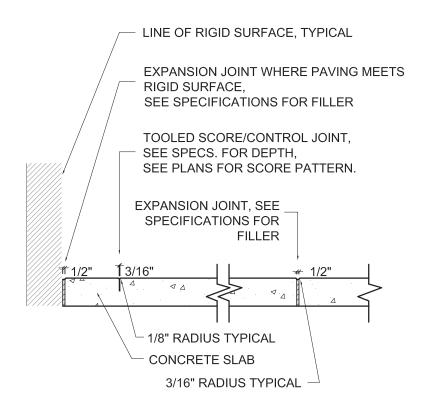
SIDEWALK RADIUS AND TOOLING, MISALIGNED







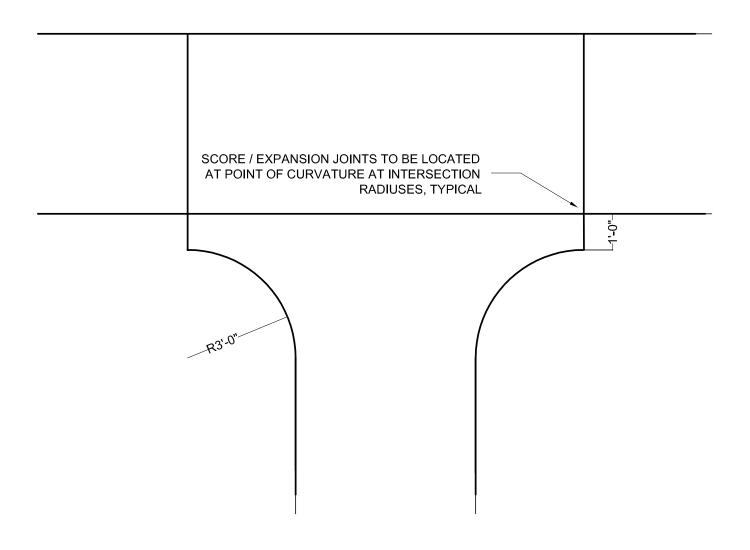
TOOLED JOINTS







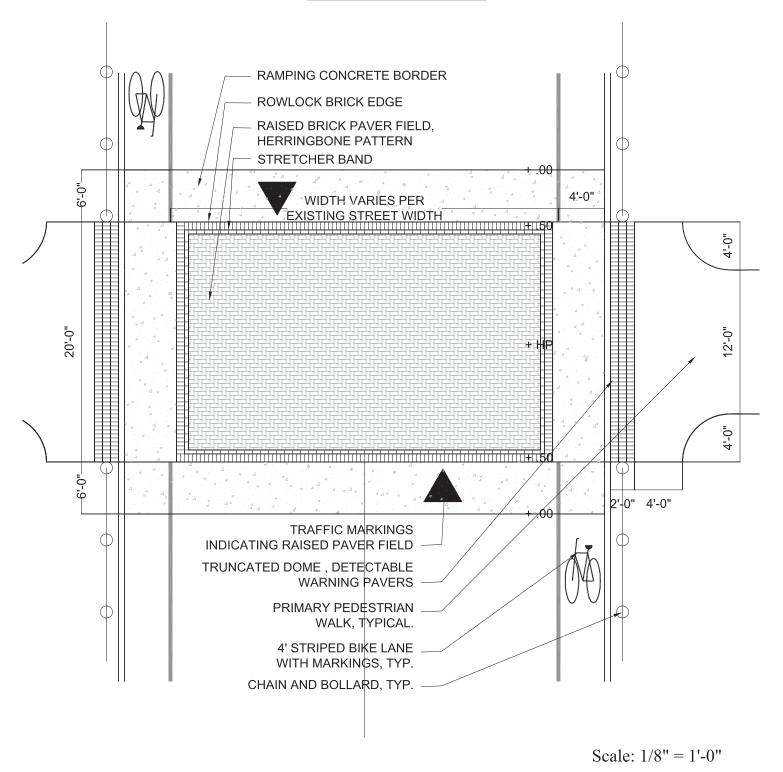
SIDEWALK RADIUS AT INTERSECTIONS







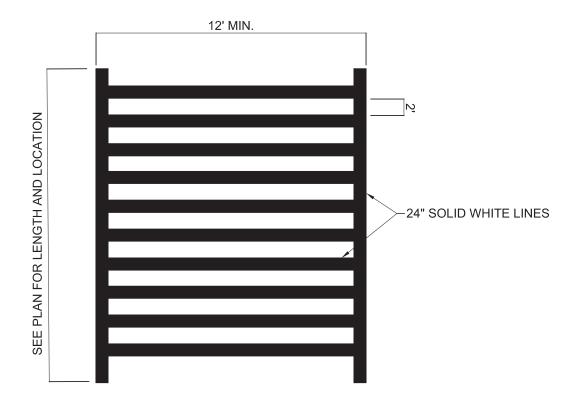
PEDESTRIAN TABLE







PRIMARY CROSSWALK



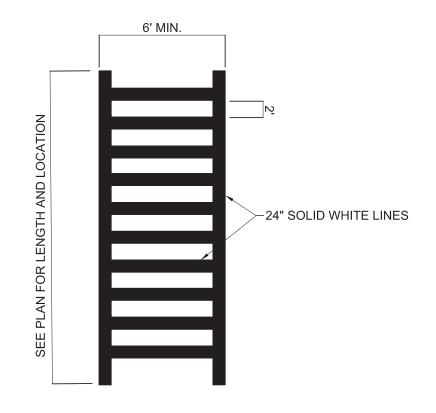
NOTE: PRIMARY CROSSWALK TO BE USED IN CONJUNCTION WITH PRIMARY WALKS

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STANDARD CROSSWALK

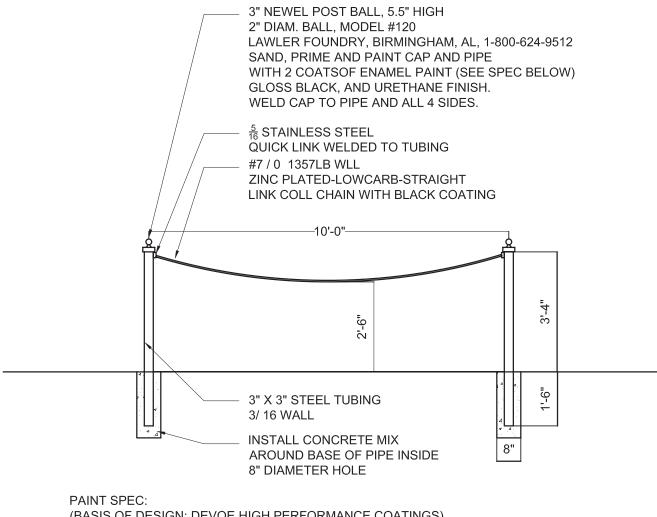


NOTE: STANDARD CROSSWALK WIDTH SHALL MATCH WIDTH OF SIDEWALK APPROACHING THE INTERSECTION

Scale: 1/4" = 1'-0"



ORNAMENTAL POST AND CHAIN BOLLARD



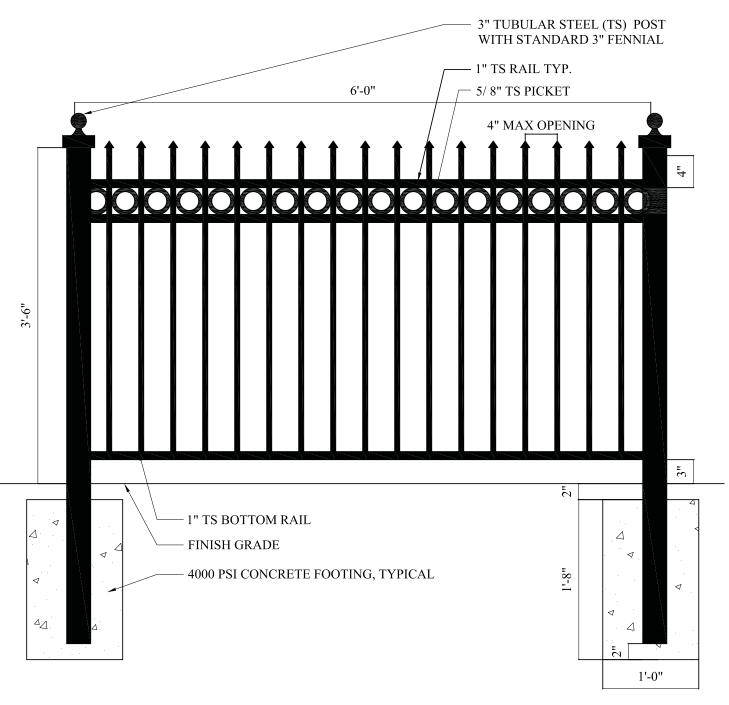
(BASIS OF DESIGN: DEVOE HIGH PERFORMANCE COATINGS) GLOSS ENAMEL: 'DEVTHANE 379 UVA' URETHANE FINISH: 'DEVTHANE 379H'

Scale: 3/8'' = 1'-0''





ORNAMENTAL FENCE

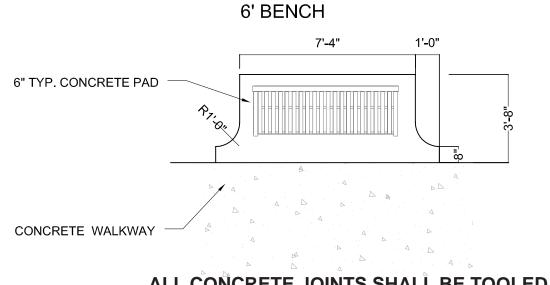


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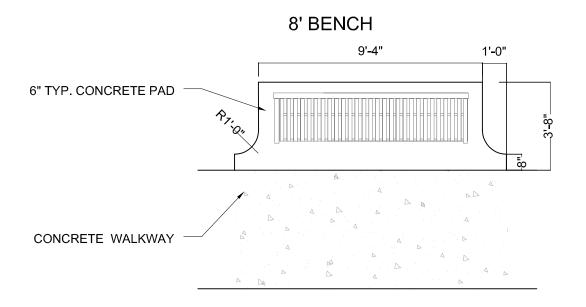


BENCH PADS



ALL CONCRETE JOINTS SHALL BE TOOLED JOINTS.

NO SAW-CUT JOINTS ALLOWED.

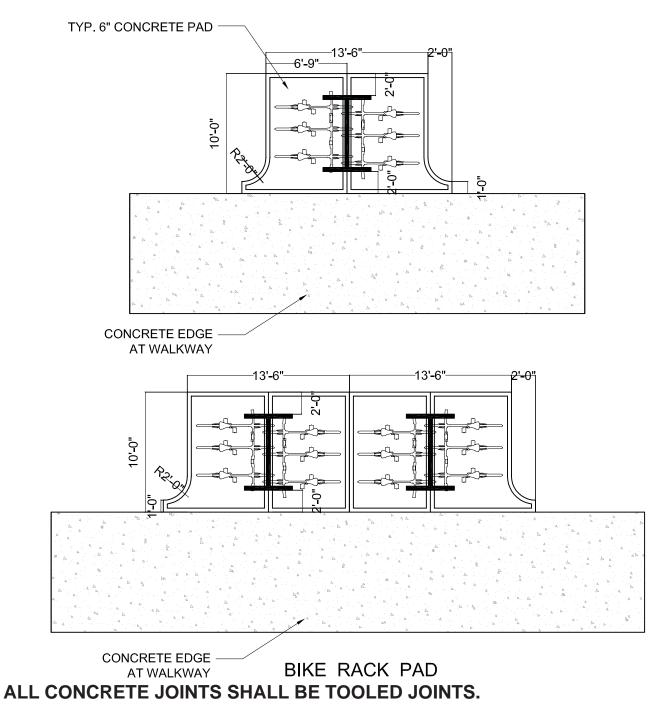


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BIKE RACK PAD



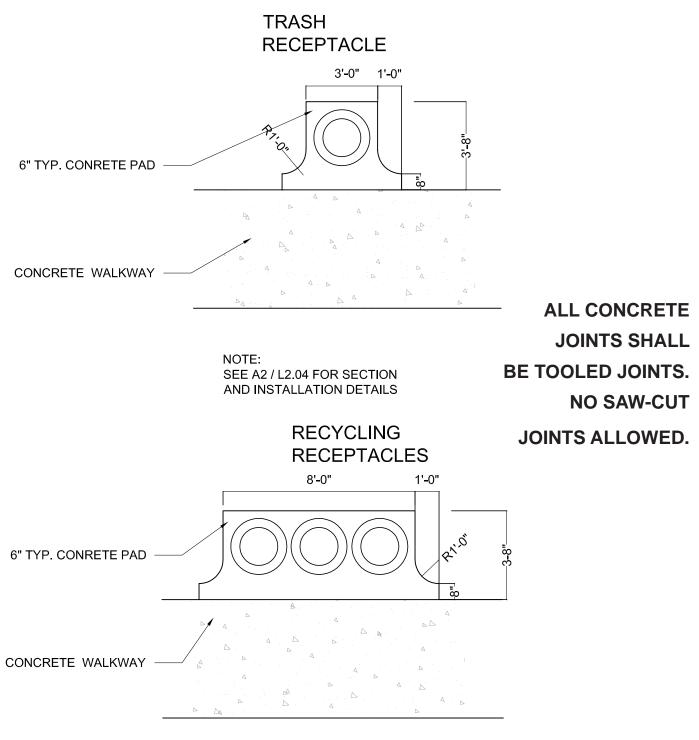
NO SAW-CUT JOINTS ALLOWED.

Scale: 1/8" = 1'-0"





TRASH RECEPTACLE PADS



Scale: 1/4'' = 1'-0''