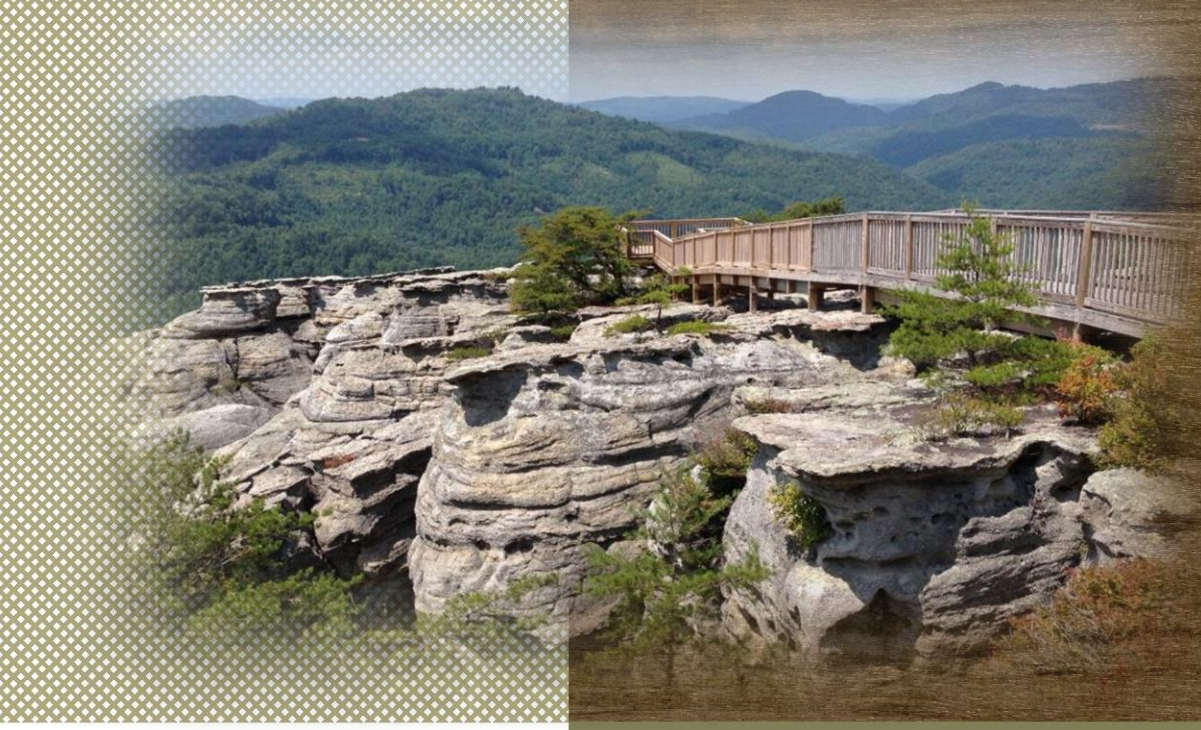
CAMPBELL COUNTY ADA TRANSITION PLAN

CCI Project # 01324-0001



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ACKNOWLEDGEMENTS

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SECTION I: EXECUTIVE SUMMARY

ADA TRANSITION PLAN

The Campbell County Government conducted an accessibility self-evaluation and an Americans with Disabilities Act (ADA) Transition Plan. The object of this action is to assess the community's state of compliance with ADA regulations, to identify needs, and to develop a plan for the transition to compliance.

In November 2017, the Campbell County Government contracted Cannon & Cannon, Inc. to provide professional consultation in an effort to ensure that transitioning to compliance was effective and efficient. Cannon & Cannon, under the supervision of the Campbell County Government, cataloged and assessed a physical inventory of the existing infrastructure, developed a transition plan to meet compliance and verified that standards, codes, policies and procedures utilized for all future projects meet or exceed the legal requirements regarding accessibility.

This effort builds upon previous work toward ADA compliance. The Campbell County Government has made the initial steps in these efforts including naming an ADA Coordinator and developing a grievance program.

PURPOSE AND NEED

The Americans with Disabilities Act (ADA), enacted on July 26, 1990, is a civil rights law prohibiting discrimination against individuals on the basis of disability. ADA consists of five titles outlining protections in the following areas: Employment, State and Local Government Services, Public Accommodations, Telecommunications, and Miscellaneous Provisions.

Title II of ADA pertains to the programs, activities, and services public entities provide. As a provider of public services and programs, the Campbell County Government must comply with this section of the Act as it specifically applies to public service agencies. Title II of ADA provides that, "...no qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any such entity." (42 USC. Sec. 12132; 28 CFR. Sec. 35.130)

As required by Title II of ADA, 28 CFR. Part 35 Sec. 35.105 and Sec. 35.150, the Campbell County Government has conducted a self-evaluation of its facilities within public rights of way and has developed this Transition Plan detailing how the organization will ensure that all of those facilities are accessible to all individuals.

SUMMARY OF FINDINGS

A self-evaluation was conducted for Campbell County. This process examined administrative practices and facility compliance with ADA requirements. During the self-evaluation ADA deficiencies were discovered. We estimate approximately $184,450 in current needs.

Administratively, Campbell County has an ADA Coordinator and has developed a grievance policy. Campbell County does not have in place many of the codes, regulations and policies often adopted by other entities. It is recommended to pass a resolution that is publicly accessible indicating that future development within Campbell County that entails public access, subdivisions with sidewalks, or other construction that may impact a Pedestrian Accessible Route should include and construct items according to the most recent ADA code. While designating a specific procedure for review and approval isn't necessary, it is recommended.

Campbell County is still in the early stage of removing barriers for accessibility to facilities. It is recommended to develop an annual budget to address these needs.

An area that would facilitate the county's ability to serve its citizens would be to develop a program to solicit their involvement. The formation of an ADA Citizens Advisory Committee would be an effective tool in discovering barriers citizen face personally on a daily basis. Additionally, the presence of the committee provides a direct connection between the county government and its citizens, thus enhancing the customer service reputation of the county while giving the citizens an active voice.

SECTION 2: ADMINISTRATIVE INFORMATION

ADA AND ITS RELATIONSHIP TO OTHER LAWS

The Campbell County Government conducted an accessibility self-evaluation and an Americans with Disabilities Act (ADA) Transition plan. The object of this action is to assess the community's state of compliance with ADA regulations, to identify needs, and to develop a plan for the transition to compliance.

This effort builds upon previous work toward ADA compliance. The Campbell County Government has made the initial steps in these efforts including naming an ADA Coordinator and developing a grievance program.

REQUIREMENTS

Under Title II, the Campbell County Government must meet these general requirements:

- Must operate their programs so that, when viewed in their entirety, the programs are accessible to and useable by individuals with disabilities 28 C.F.R. Sec. 35.150.
- May not refuse to allow a person with a disability to participate in a service, program or activity simply because the person has a disability 28 C.F.R. Sec. 35.130 (a).
- Must make reasonable modifications in policies, practices and procedures that deny equal access to individuals with disabilities unless a fundamental alteration in the program would result 28 C.F.R. Sec. 35.130(b) (7).
- May not provide services or benefits to individuals with disabilities through programs that are separate or different unless the separate or different measures are necessary to ensure that benefits and services are equally effective 28 C.F.R. Sec. 35.130(b)(iv) & (d).
- Must take appropriate steps to ensure that communications with applicants, participants and members of the public with disabilities are as effective as communications with others 29 C.F.R. Sec. 35.160(a).
- Must designate at least one responsible employee to coordinate ADA compliance 28 CFR Sec. 35.107(a). This person is often referred to as the "ADA Coordinator." The public entity must provide the ADA coordinator's name, office address, and telephone number to all interested individuals.
- Must provide notice of ADA requirements. All public entities, regardless of size, must provide information about the rights and protections of Title II to applicants, participants, beneficiaries, employees, and other interested persons 28 CFR Sec. 35,106. The notice must include the identification of the employee serving as the ADA coordinator and must provide this information on an ongoing basis 28 CFR Sec. 104.8(a)
- Must establish a grievance procedure. Public entities must adopt and publish grievance procedures providing for prompt and equitable resolution of complaints 28 CFR Sec. 35.107(b). This requirement provides for a timely resolution of all problems or conflicts related to ADA compliance before they escalate to litigation and/or the federal complaint process.

THE COMMITMENT BY CAMPBELL COUNTY

In addressing the Purpose and Need of meeting accessibility needs and fulfilling the necessary requirements, the Campbell County Government developed and is implementing an ADA Transition Plan that incorporates three primary focal points:

1. Fiscal Responsibility

The citizens of Campbell County deserve the respect that all funds used in the development and implementation of the ADA transition plan will utilize the most ethical and cost-effective means to meet the plans goals.

2. Full Accessibility

Campbell County's citizens represent a diverse group of people with different strengths and different challenges. We recognize that the community's diversity is both cherished and respected. And as such, it will be reflected in the plan's outlined improvements to accessibility.

3. "For the People" Mentality

This Transition Plan is not designed to serve as a simple checklist to document compliance. It is a sincere effort to provide better "customer service" to the people by improving accessibility. During the transition and throughout future policies and approaches, the focus will remain on seeking ways to better serve our citizens.

STATEMENT OF ACCESSIBILITY

It is a practical impossibility to ensure that every service, program, or activity can provide full accessibility for every conceivable disability. However, the Campbell County Government is committed to making reasonable modifications in policies, practices, or procedures when it's necessary to avoid discrimination on the basis of disability. However, some modifications are not feasible if it is demonstrated that by doing so it would fundamentally alter the nature of the service, program, or activity. The Campbell County Government will not place surcharges on individuals with disabilities to cover the cost involved in making programs accessible.

ADA CAPITAL IMPROVEMENT PLAN

The ADA Capital Implementation Plan describes the extent to which the County operated projects are necessary to implement the ADA Transition Plan.

Types of projects included in the ADA Capital Implementation Plan can be categorized as follows:

- Resident-requested, missing, or non-compliant curb ramps.
- Parking, access and use of public buildings for citizens with disabilities.
- Curb ramp, sidewalk and other accessibility retrofits included with other facility projects.

The pace at which ADA corrections can occur is a function of available budget. The County Facility Construction/Maintenance Department is responsible for the maintenance of county facilities. Likewise, the Campbell County Road Department is responsible for the maintenance and budgeting of roadway projects. The department's capital budget for 2019 budget is $71,000. With limited funding, it is imperative that a reasonable approach be taken to retrofit facility projects.

The ADA Capital Implementation Plan includes a detailed and prioritized list of approximately 15 facility locations and items of work, which

have been reviewed by the County. This implementation plan, which targets higher priority uses, anticipates a 15- to 20-year implementation period to achieve compliance with program accessibility requirements. This would entail a commitment of approximately $13,000 per year (adjusted for inflation). Additional ADA work, such as new construction and additional curb ramps beyond the minimum program access requirements, will continue beyond the timeframe identified above.

Each department maintains budgets for their facilities. Typically, facility expenditures are for operations and maintenance. Several facility related items were identified in the evaluation process. The implementation of ADA related improvements will need to be coordinated. For example, several locations may require like retrofits. It may be advantageous to have a single project to make retrofits for several locations. Furthermore, projects should be funded based on the repair priority. With this said, there are some low cost, lower priority, requirements that may be accelerated.

SECTION 3: SELF-EVALUATION

OVERVIEW

The Campbell County Government is required, under Title II of the Americans with Disabilities Act (ADA) and 28CFR35.105, to perform a self-evaluation of its current transportation infrastructure policies, practices, and programs. This will identify how current policies and practices impact accessibility and assess whether or not any of them adversely affect reasonable accommodation of individuals with disabilities. In addition to the policy review, field compliance assessments were conducted along roadway and around and within facilities to document the state of compliancy.

A common problem in many jurisdictions is the lack of an unimpeded path of travel, or Pedestrian Access Route (PAR), that meets accessibility standards and goals. The self-evaluation examines this route and identifies potential PAR improvements. This includes primarily parking spaces, ramps, sidewalks, doorway access, service counters, signage, and restrooms. The Transition Plan will identify existing barriers to accessibility and any necessary mitigation or re-construction to provide a compliant PAR.

This Transition Plan is a dynamic document that is updated on a regular basis charting progress until all accessibility barriers are removed. The Plan is designed to achieve the following:

a) Identify barriers that limit the accessibility of public services

b) Describe methods to make the services accessible

c) Provide a prioritized schedule for modifications

d) Identify the individuals who have been designated to oversee the implementation of the Transition Plan

e) Remove completed ADA activities from pending projects.

It should be noted that accessibility is not only for individuals with needs related to mobility disabilities, but also for individuals with needs related to speech, cognitive, vision and hearing disabilities. There are many potential barriers to accessibility of County services.

METHODOLOGY

As part of the assessment, two major components were evaluated, administrative practices and public buildings/facilities. The methodology of assessment for each component is described below. Additionally, potential solutions were determined as well as programmatic budget numbers for the type of construction.

Administrative

As part of the self-evaluation, programs, policies, and standards were evaluated. The assessment included the review of these programs and documents for coverage of basic ADA requirements. Deficiencies were noted and suggested corrective actions were noted.

Even though all designs will implement the most up-to-date codes and standards, it is equally important that the construction of these designs are constructed according to all applicable codes, ADA standards, and best practices, including PROWAG. Therefore, it is essential that for the success of an effective compliance program that construction

activities will be monitored, documented, and reported in a detailed and consistent manner.

Buildings and Facilities

A thorough evaluation was conducted for a multiple agency owned and/or used buildings and facilities. Each location was inspected based on the "ADA Checklist for Existing Facilities" produced by the Institute for Human Centered Design. The checklist was developed into a database and data collection took place in the field on table computers. Furthermore, the checklist was broken up into levels of priority including:

Priority 1: Accessible approach and entrance
Priority 2: Access to goods and services
Priority 3: Access to public toilet rooms
Priority 4: Access to other items such as water fountains and public telephones.

Right-of-ways

Campbell County does not have subdivisions with sidewalks. As a result no Right-of-Way elements were inspected with the Self-Evaluation.

Field Assessment Summary

In the summer/fall of 2018, Cannon and Cannon, Inc. conducted an inventory and compliance assessment of public facilities maintained by Campbell County consisting of the evaluation of the following 15 facilities:

- Animal Shelter
- Career Center
- County Circuit Court
- County Clerk
- County Clerk-Jacksboro
- County Clerk-Jellico
- County Clerk-LaFollette and VA
- Courthouse
- Department of Finance
- Election Commission
- Health Department
- Jail
- Library
- Recycling Center
- Sheriff's Office

A detailed evaluation of these facilities can be found in Appendix A. The list of projects will be updated periodically and will be updated with needed corrections.

SECTION 4: ADMINISTRATIVE REVIEW – CODES, POLICIES AND PRACTICES

OVERVIEW

Agency Codes, Policies, and Practices can have a significant impact on citizens with disabilities. As a result, these items have been reviewed as part of the ADA self-assessment. This section describes items reviewed, suggestions for improvement, and additional policy recommendations.

CODES, POLICIES, AND PRACTICES

A review of Codes was conducted. A primary concern was the identification of an ADA Coordinator and the existence of an ADA Grievance Policy. The objective is to ensure that new or rehabilitated construction is ADA compliant.

Additionally, documents such as Human Resources policies should contain items that specify an employee's rights and protections under the ADA regulations. They should also include the grievance procedure and the procedure for applying for accommodation as well as contact information for those issues.

While no subdivision regulations or other codes exist for parking, right-of-way access, etc. in Campbell County, a document should be drafted indicating that if/when future codes are adopted that ADA compliance will be included. Additionally, it is recommended to advise that all future development should evaluate the impact on right-of-way and public access and include a measure of ADA compliance for the protection of Campbell County citizens in the future. This will eliminate, or at least greatly reduce, retro-active compliance mitigation in the future. Properly designed and inspected developments save the respective agency from inheriting liability for non-compliant construction.

Disability Discrimination Policy and Grievance Procedure

A policy and procedure has been drafted and it should be easily found on the County's website home page.

Campbell County Government Application Accommodation Request

This accommodation request has been drafted and should be easily found on the County's website home page.

Infeasibility Evaluation Protocol

Campbell County should develop a formal infeasibility evaluation protocol. The use of this protocol should be limited to project locations in which it is technically infeasible to comply with ADA regulations. The infeasibility designation should satisfy pre-determined criteria.

Campbell County's Website and General Communication

1. The County's website should address access by citizens with visual impairment.
2. The County should provide TDD services for citizens with hearing impairment.
3. Links to the County's ADA Grievance Procedure and Application for Accommodation should be easily accessed by citizens and employees.

POLICY

The Campbell County Government's goal is to continue to provide accessible pedestrian design features as part of the capital improvement project budgets. The agency has established ADA design standards and procedures as listed in Appendix F. These standards and procedures will be kept up to date with nationwide and local best management practices.

The agency will consider and respond to all accessibility improvement requests. All accessibility improvements that have been deemed reasonable will be scheduled consistent with transportation priorities. The agency will coordinate with external agencies to ensure that all new or altered pedestrian facilities within the agency jurisdiction are ADA compliant to the maximum extent feasible.

Requests for accessibility improvements can be submitted to the ADA Coordinator for the Campbell County Government. Contact information for the ADA coordinator is located in Appendix E.

SECTION 5: IMPROVEMENT SCHEDULE

PRIORITY AREAS

The Campbell County Government has identified specific locations as priority areas for accessibility improvement projects.

Facility improvements for Campbell County Government are based on the priority ratings established with the ADA Self-Evaluation. Additionally, public input from citizens should also be a consideration in the prioritization and establishment of ADA projects.

EXTERNAL AGENCY COORDINATION

Other agencies are responsible for pedestrian facilities within the jurisdiction of the Campbell County Government. The County will coordinate with those agencies to track and assist in the facilitation of the elimination of accessibility barriers along their routes.

SCHEDULE

The Campbell County Government has set the following schedule goals for improving the accessibility of its pedestrian facilities within the County jurisdiction:

- After 5 years, 100% of accessibility features that were constructed after January 26, 1991, would be ADA compliant.
- After 10 years, 80% of accessibility features within the priority areas identified by County staff would be ADA compliant.
- After 20 years, 80% of accessibility features within the jurisdiction of County would be ADA compliant.

METHODOLOGY

The Campbell County Government will utilize the priority system developed by the Institute for Human Centered Design ADA Checklist for upgrading facilities to the current ADA standards. High priority projects will be incorporated into the Capital Improvement Program (CIP) on a case-by-case basis as determined by Campbell County Government officials. The County's CIP, which includes a schedule and budget for specific improvements, will be approved by the County elected body. A listing to accessibility needs can be found in Appendix B.

SECTION 6: PUBLIC PARTICIPATION AND INPUT

ADA COORDINATOR

In accordance with 28 CFR 35.107(a), the Campbell County Government has identified an ADA Title II Coordinator to oversee the policies and procedures. Contact information for this individual is located in Appendix E.

Future Public Outreach efforts need to be enacted. The recommended action items are:

1. Public Notice of Campbell County's commitment to ADA Compliance and the rights for its citizens.
2. Conduct a Public Meeting inviting its citizens to discuss concerns about ADA compliance and the specific goals of Campbell County to address them.
3. Conduct a public survey to ascertain the citizens' general opinion about accessibility and identify specific concerns. Items identified as issues on the survey and on the inventory included in this transition plan should receive more urgent resolution.
4. Form an ADA Citizens Advisory Committee to assist in the identification of issues related to accessibility.

Campbell County recognizes that public participation is an important component in an effective ADA program. Input from the community will continue to be gathered to further help define priority areas for improvements within these jurisdictions.

This document will also be available for public comment.

GRIEVANCE PROCEDURE

Under the Americans with Disabilities Act, each agency is required to publish its responsibilities in regards to the ADA. If users of Campbell County's facilities, services, and programs believes the county has not provided reasonable accommodation, they have the right to file a grievance.

In accordance with 28 CFR 35.107(b), the County has developed a grievance procedure for the purpose of the prompt and equitable resolution of citizens' complaints, concerns, comments, and other grievances. A copy of this grievance procedure is attached in Appendix D.

SECTION 7: MONITORING AND STATUS REPORTING

This document will continue to be updated as conditions within the Campbell County Government evolve. The appendices in this document will be updated periodically, while the main body of the document will be updated less frequently (within three to five years) with a future update schedule to be developed at that time. With each main body update, a public comment period will be established to continue the public outreach.

A tracking system for ADA improvements was developed. Staff should update the database as project locations receive corrective actions. By eliminating completed projects, the database will not assign corrective action to completed projects. Additionally, the County should update line item unit price estimates. We recommend the periodic data entry and cost estimate information is completed in ample time for the annual budget. Likewise, the database should be used with facility rehabilitation projects.

APPENDICES

A. Self-Evaluation Summary Results

B. Schedule / Budget Information

C. Public Outreach

D. Grievance Procedure

E. Contact Information

F. Agency ADA Design Standards and Procedures

G. Disability and Impairment Concepts and Definitions

H. Glossary of Terms

APPENDIX A: SELF-EVALUATION RESULTS

This initial self-evaluation of pedestrian facilities yielded the following results:

Campbell County

- 15 Facilities

FINDINGS SUMMARY

Campbell County Government

A total self-evaluation included:

- Priority 1 – 34 Issues
- Priority 2 – 20 Issues
- Priority 3 – 31 Issues
- Priority 4 – 5 Issues

Campbell County

Right-of-Way and Public Facility Compliance

	Right of Way	Facilities
1	$ -	$ 108,950
2	$ -	$ 54,950
3	$ -	$ 18,000
4	$ -	$ 2,550
	$ -	$ 184,450

Total Estimated Construction Cost $ 184,450

Number of Years in Transition Plan	5	10	15	20	25
Average Cost per Year	$ 36,890	$ 18,445	$ 12,297	$ 9,223	$ 7,378
Total Cost of All Construction (Adjusted for Inflation)	$ 195,854	$ 211,451	$ 228,705	$ 247,812	$ 268,996
Total of Additional Cost due to Inflation	$ 11,404	$ 27,001	$ 44,255	$ 63,362	$ 84,546
% Increase due to Inflation	6%	15%	24%	34%	46%

Average Cost per Year (Adjusted for Inflation)	$ 39,171	$ 21,145	$ 15,247	$ 12,391	$ 10,760
Approximate Number of Years to Complete Priority #1	3	6	8	11	13

Campbell County Facilities

Facility	Priority Level				Facility Total
	1	2	3	4	
Animal Shelter	$ 11,250	$ 3,000	$ 2,225	$ 150	$ 16,625
Career Center	$ 4,500	$ 9,000	$ 3,725	$ 750	$ 17,975
County Circuit Court	$ -	$ 6,475	$ -	$ -	$ 6,475
County Clerk	$ 7,125	$ 3,000	$ 4,900	$ -	$ 15,025
County Clerk-Jacksboro	$ -	$ -	$ 925	$ 750	$ 1,675
County Clerk-Jelico	$ 2,250	$ 3,000	$ -	$ -	$ 5,250
County Clerk-LaFollette and VA	$ 8,825	$ 3,000	$ -	$ -	$ 11,825
Courthouse	$ 11,250	$ -	$ 925	$ 150	$ 12,325
Department of Finance	$ 13,125	$ -	$ -	$ -	$ 13,125
Election Commission	$ 13,125	$ 9,000	$ -	$ -	$ 22,125
Health Department	$ -	$ 3,100	$ 3,250	$ 750	$ 7,100
Jail	$ 15,750	$ 6,375	$ -	$ -	$ 22,125
Library	$ -	$ 9,000	$ -	$ -	$ 9,000
Recycling Center	$ 21,750	$ -	$ -	$ -	$ 21,750
Sheriffs office	$ -	$ -	$ 2,050	$ -	$ 2,050
	$ -	$ -	$ -	$ -	$ -
	$ -	$ -	$ -	$ -	$ -
	$ -	$ -	$ -	$ -	$ -
	$ -	$ -	$ -	$ -	$ -
	$ -	$ -	$ -	$ -	$ -
Priority Total	$ 108,950	$ 54,950	$ 18,000	$ 2,550	$ 184,450

Facility	Location	Priority	Deficiency	Notes	Correction	Severity	Cost / Each	Multiplier	Cost
Health Department	Interior	2	Signs	Signs need raised characters, with braile, mounted clear of the open door, characters should be between 48" and 60" off the floor	Signage	Low	$ 100	1	$ 100
Health Department	Interior	2	Seating	Atleast one space atleast 36" wide by 48" long	Interior Construction	Low	$ 3,000	1	$ 3,000
Health Department	Bathroom	3	Signs	Sign should be on the latch side of the door, the characters should be between 48" and 60"	Signage	Low	$ 100	1	$ 100
Health Department	Bathroom	3	Toilet	Clear floor space for a wheelchair to turn around, 30"x48" clear space beyond the swing of the door, clearance around toilet of 60" from side wall and 56" from rear wall, grab bar must extend atleast 54" from rear wall, grab bar of atleast 36" on rear wall, centerline of toilet between 16" and 18" from the side wall, flush valve on the open side of the toilet	Restroom Remodel	Medium	$ 3,000	1	$ 3,000
Health Department	Bathroom	3	Sink	Insulate or cover pipes below sink to prevent contact, Soap dispensers no higher than 48"	Hardware	Low	$ 150	1	$ 150
Health Department	Drinking Fountain	4	Drinking Fountain	Bottom edge of fountain must be higher than 27" from floor	Equipment	Low	$ 750	1	$ 750
Sheriffs office	Bathroom	3	Sign	Signs need raised characters, with braile, mounted clear of the open door, characters should be between 48" and 60" off the floor	Signage	Low	$ 100	1	$ 100
Sheriffs office	Bathroom	3	Entrance	60" maneuvering clearance, door needs to be easily opened 5lbf or less	Entry Construction	Medium	$ 1,500	1	$ 1,500
Sheriffs office	Bathroom	3	Sink	Sink no higher than 48" and less than 20" deep	Relocate Items	Low	$ 75	1	$ 75
Sheriffs office	Bathroom	3	Toilet	Grab bar height to be between 33" and 36"	Hardware	Medium	$ 375	1	$ 375
Recycling Center	Parking Lot	1	Parking	Add accessible spaces with proper dimensions, grades, markings, and signage.	Pavement	High	$ 15,000	1	$ 15,000
Recycling Center	Route	1	Route	Unstable, soft, or slippery surface.	Pavement	Low	$ 3,750	1	$ 3,750
Recycling Center	Entrance	1	Entrance	Threshold should be less than 3/4" high, with top 1/2" beveled no steeper than 1:2. Door closer must take at least 5 seconds to close.	Entry Construction	High	$ 3,000	1	$ 3,000
Library	Seating	2	Seating	Knee space at least 27" high and 30" wide	Interior Construction	Low	$ 3,000	1	$ 3,000
Library	Service Counters	2	Counter	Counter should be less than 36" from the floor	Interior Construction	Medium	$ 6,000	1	$ 6,000
Jail	Parking Lot	1	Parking	Slope of spaces and aisles should be less than 1:48	Pavement	Medium	$ 7,500	1	$ 7,500
Jail	Route	1	Route	Slope less than 1:20, cross slope no steeper than 1:48	Pavement	Low	$ 3,750	1	$ 3,750
Jail	Curb ramp	1	Curb Ramp	Level landing at top atleast 36" long	Ramps	Low	$ 1,500	1	$ 1,500
Jail	Ramps	1	Ramps	Level landing at top and bottom of ramp	Ramps	Low	$ 1,500	1	$ 1,500
Jail	Entrance	1	Entrance	Level ground surface for maneuvering (Less than 1:48), door closer must take at least 5 sec to close	Entry Construction	Medium	$ 1,500	1	$ 1,500
Jail	Interior route	2	Route	Objects should not protrude more than 4" into the path. Bottom edge of object protruding should be less than 27" from the floor	Interior Construction	Low	$ 3,000	1	$ 3,000
Jail	Interior	2	Interior Doors	Door closer should take atleast 5 seconds to close	Hardware	Medium	$ 375	1	$ 375
Jail	Service Counters	2	Counters	Between 17" and 25" of clear floor space in front of the counter	Interior Construction	Low	$ 3,000	1	$ 3,000
Election Commission	Parking Lot	1	Parking	Add van accessible space, add aisles for accessible spaces and markings, slope should be less than 1:48. Accessible parking sign should be atleast 60" above the ground	Pavement	Medium	$ 7,500	1	$ 7,500
Election Commission	Route	1	Route	Slope should be no steeper than 1:20, cross slope no steeper than 1:48	Pavement	Low	$ 3,750	1	$ 3,750
Election Commission	Ramps	1	Ramps	Level surface at bottom of ramp, hand rails on both sides of the ramp at correct heights and dimensions	Ramps	Low	$ 1,500	1	$ 1,500
Election Commission	Entrance	1	Entrance	Add signage, door closer should take no less than 5 sec to close	Hardware	Medium	$ 375	1	$ 375

Facility	Location	Priority	Deficiency	Notes	Correction	Severity	Cost / Each	Multiplier	Cost
Election Commission	Interior Route	2	Interior Route	Route should be atleast 36" wide	Interior Construction	Medium	$ 6,000	1	$ 6,000
Election Commission	Seating	2	Seating	Atleast one space atleast 36" wide by 48" long, seat should be less than 36" above the floor	Interior Construction	Low	$ 3,000	1	$ 3,000
Department of Finance	Parking Lot	1	Parking	Add van accessible space, slope should be less than 1:48. Add Accessible parking sign should be atleast 60" above the ground	Pavement	Medium	$ 7,500	1	$ 7,500
Department of Finance	Route	1	Route	Cross slope no steeper than 1:48	Pavement	Low	$ 3,750	1	$ 3,750
Department of Finance	Curb ramp	1	Curb Ramp	Level landing at top of curb ramp atleast 36" long and at least as the curb ramp, curb ramp flares	Ramps	Low	$ 1,500	1	$ 1,500
Department of Finance	Entrance	1	Entrance	Door closer should take atleast 5 seconds to close	Hardware	Medium	$ 375	1	$ 375
Courthouse	Parking Lot	1	Parking	Space should be atleast 11' long X5' wide, Slope should be less than 1:48	Pavement	Medium	$ 7,500	1	$ 7,500
Courthouse	Route	1	Route	Cross slope no steeper than 1:48	Pavement	Low	$ 3,750	1	$ 3,750
Courthouse	Bathroom	3	Sink	Soap Dispenser to be less than 48" above floor, Hand Dryer or towel dispenser does not require grasping, pinching or twisting to operate, bottom edge of mirror should be no higher than 40", sinks should be between 20" and 25" deep and no higher than 44"	Hardware	Low	$ 150	1	$ 150
Courthouse	Bathroom	3	Toilet	Grab bar must extend at least 54" from rear wall, grab bar must have 12" of clearance from other mounted objects, Grab bar atleast 24" on the open side, Grab bar atleast 42" along side wall and located less than 12" from rear wall, Grab bar should be between 33" and 36" from floor, Grab bar atleast 36" along rear wall, flush control valve on open side of water closet, toilet paper dispenser between 7" and 9" from the front of the toilet	Hardware	Low	$ 150	1	$ 150
Courthouse	Bathroom	3	Sign	Sign should be on the latch side of the door	Signage	Low	$ 100	1	$ 100
Courthouse	Bathroom	3	Door	Door should be easy to open 5lbf	Hardware	Medium	$ 375	1	$ 375
Courthouse	Bathroom	3	Stall	Should be atleast 60" wide, toilet atleast 59" deep	Hardware	Low	$ 150	1	$ 150
Courthouse	Drinking Fountain	4	Drinking Fountain	Spout should be no higher than 36", bottom edge should be higher than 27"	Relocate Items	Medium	$ 150	1	$ 150
County Clerk-LaFollette and VA	Parking Lot	1	Parking	Add Signage	Signage	Medium	$ 200	1	$ 200
County Clerk-LaFollette and VA	Route	1	Route	Cross slope no steeper than 1:48	Pavement	Low	$ 3,750	1	$ 3,750
County Clerk-LaFollette and VA	Curb ramp	1	Curb Ramp	Add curb ramp	Ramps	Medium	$ 3,000	1	$ 3,000
County Clerk-LaFollette and VA	Ramps	1	Ramps	Slope no steeper than 1:12, add hand rails on both sides, hand rails should extend atleast 12" beyond ramp at top and bottom, handrail to return to wall	Ramps	Low	$ 1,500	1	$ 1,500
County Clerk-LaFollette and VA	Entrance	1	Entrance	Add signage, door closer should take no less than 5 sec to close	Hardware	Medium	$ 375	1	$ 375
County Clerk-LaFollette and VA	Service Counters	2	Counter	No higher than 36", atleast 36" long, between 17" and 25" of clear floor space extend under the length of the counter	Interior Construction	Low	$ 3,000	1	$ 3,000
County Clerk-Jelico	Curb ramps	1	Curb ramp	Add curb ramp	Ramps	Low	$ 1,500	1	$ 1,500
County Clerk-Jelico	Entrance	1	Entrance	Level surface on both sides of the door, threshold less than 1/4" high, door hardware operable with one hand and doesn't require twisting, grasping, or pinching	Entry Construction	Low	$ 750	1	$ 750
County Clerk-Jelico	Service Counters	2	Counter	Counter should be less than 36" from the floor	Interior Construction	Low	$ 3,000	1	$ 3,000
County Circuit Court	Interior route	2	Interior route	Objects should not protrude more than 4" into the path. Bottom edge of object protruding should be less than 27" from the floor	Interior Construction	Low	$ 3,000	1	$ 3,000
County Circuit Court	Interior signage	2	Interior signage	Signs need raised characters, with braile, mounted clear of the open door, characters should be between 48" and 60" off the floor, sign should be mounted beyond the swing arc of the door	Signage	Low	$ 100	1	$ 100

Facility	Location	Priority	Deficiency	Notes	Correction	Severity	Cost / Each	Multiplier	Cost
County Circuit Court	Interior Doors	2	Interior Doors	60" maneuvering clearance, door handle that doesn't require grasping, pinching, or twisting	Hardware	Medium	$ 375	1	$ 375
County Circuit Court	Service Counters	2	counters	Counter should be less than 36" from the floor	Interior Construction	Low	$ 3,000	1	$ 3,000
County Clerk-Jacksboro	Bathroom	3	Sign	Add sign with directions to accessible bathroom	Signage	Low	$ 100	1	$ 100
County Clerk-Jacksboro	Bathroom	3	Door	Must be easy to open 5lbf	Hardware	Medium	$ 375	1	$ 375
County Clerk-Jacksboro	Bathroom	3	Sink	Bottom edge of mirror must be lower than 40", sink should be no higher than 48" from floor, hand dryer or towel dispenser operable without twisting, grasping or pinching.	Relocate Items	Low	$ 75	1	$ 75
County Clerk-Jacksboro	Bathroom	3	toilet	Grab bar must extend at least 54" from rear wall, mounted between 33" and 36" from the floor, 12" of clearance between grab bar and other mounted objects, toilet paper dispenser between 7" and 9" from toilet and no located behind grab bars	Hardware	Medium	$ 375	1	$ 375
County Clerk-Jacksboro	Fire alarm	4	Fire alarm	Fire alarm should have lights and sound	Equipment	Low	$ 750	1	$ 750
County Clerk	Parking Lot	1	Parking	Add accessible spaces with proper dimensions, grades, markings, and signage.	Pavement	Low	$ 3,750	1	$ 3,750
County Clerk	Curb ramp	1	Curb Ramp	Level landing at top of curb ramp atleast 36" long and at least as the curb ramp	Ramps	Low	$ 1,500	1	$ 1,500
County Clerk	Ramps	1	Ramps	Running slope 1:12 at bottom of ramp, hand rails on both sides	Ramps	Low	$ 1,500	1	$ 1,500
County Clerk	Entrance	1	Entrance	Door must take atleast 5 sec to close	Hardware	Medium	$ 375	1	$ 375
County Clerk	Service Counters	2	Counter	Counter should be less than 36" from the floor, 36" Long	Interior Construction	Low	$ 3,000	1	$ 3,000
County Clerk	Bathroom	3	Signs	Signs need raised characters, with braile, mounted clear of the open door, characters should be between 48" and 60" off the floor, sign should be mounted beyond the swing arc of the door	Signage	Low	$ 100	1	$ 100
County Clerk	Bathroom	3	Entrance	60" manuervering room	Entry Construction	Medium	$ 1,500	1	$ 1,500
County Clerk	Bathroom	3	Bathroom	60" T pattern space for wheel chair, mirror mounted lower than 40"	Restroom Remodel	Low	$ 1,500	1	$ 1,500
County Clerk	Bathroom	3	sink	one sink has approach atleast 30" wide by 48" long, Between 17" and 25" of clear floor space extend under the sink, 9" of toe clearance, sinks between 20" and 25" deep and no higher than 44", operable parts of hand dryer and towel dispenser be operated without grasping, twisting or pinching	Relocate Items	High	$ 300	1	$ 300
County Clerk	Bathroom	3	Toilet	Centerline of toilet between 16" and 18" from side wall, clearance of 60" from side wall and 56" from rear wall around toilet, add grab bars at correct heights and dimensions.	Restroom Remodel	Low	$ 1,500	1	$ 1,500
Career Center	Route	1	Route	Slope should be no steeper than 1:20, cross slope no steeper than 1:48	Pavement	Low	$ 3,750	1	$ 3,750
Career Center	Entrance	1	Door	Door closer should take atleast 5 seconds to close	Entry Construction	Low	$ 750	1	$ 750
Career Center	Interior route	2	Interior Route	Objects should not protrude more than 4" into the path. Bottom edge of object protruding should be less than 27" from the floor	Interior Construction	Low	$ 3,000	1	$ 3,000
Career Center	Seating	2	Seating	Atleast one space atleast 36" wide by 48" long	Interior Construction	Low	$ 3,000	1	$ 3,000
Career Center	Service Counters	2	counters	No higher than 36"	Interior Construction	Low	$ 3,000	1	$ 3,000
Career Center	Bathroom	3	Signs	Signs mounted on latch side of open door, sign should be mounted beyond the swing arc of the door	Signage	Medium	$ 200	1	$ 200
Career Center	Bathroom	3	Entrance	Door easy to open 5lbf	Hardware	Medium	$ 375	1	$ 375
Career Center	Bathroom	3	Fixture	Coat hook mounted between 15" and 48" above floor	Hardware	Low	$ 150	1	$ 150
Career Center	Bathroom	3	Hand dryer	Operable parts of hand dryer or towel dispenser can be used without grasping, twisting, or pinching	Equipment	Low	$ 750	1	$ 750

Facility	Location	Priority	Deficiency	Notes	Correction	Severity	Cost / Each	Multiplier	Cost
Career Center	Bathroom	3	Toilet	Flush valve on open side of toilet, Tiolet paper dispenser located between 7" and 9" from centerline of toilet	Equipment	Low	$ 750	1	$ 750
Career Center	Bathroom	3	stalls	Self closing door	Entry Construction	Medium	$ 1,500	1	$ 1,500
Career Center	Drinking Fountain	4	Drinking Fountain	Higher than 27" front protrude less than 4"	Equipment	Low	$ 750	1	$ 750
Animal Shelter	Parking Lot	1	Parking	Space should be atleast 11' long X5' wide, Slope should be less than 1:48	Pavement	Medium	$ 7,500	1	$ 7,500
Animal Shelter	Curb ramps	1	Curb Ramp	slope should be no steeper than 1:12	Ramps	Medium	$ 3,000	1	$ 3,000
Animal Shelter	Entrance	1	Entrance	Door closer should take atleast 5 seconds to close	Entry Construction	Low	$ 750	1	$ 750
Animal Shelter	Service Counters	2	counters	Counter no higher than 36"	Interior Construction	Low	$ 3,000	1	$ 3,000
Animal Shelter	Bathroom	3	sign	Signs should be on latch side of the door, 60" of maneuvering clearance	Signage	Medium	$ 200	1	$ 200
Animal Shelter	Bathroom	3	Entrance	60" T pattern space for wheel chair	Entry Construction	Medium	$ 1,500	1	$ 1,500
Animal Shelter	Bathroom	3	sink	Sink no higher than 34", 9" toe clearance	Relocate Items	Medium	$ 150	1	$ 150
Animal Shelter	Bathroom	3	toilet	Grab bar atleast 36" along rear wall, grab bar atleast 24" along side wall, toilet paper dispenser between 7" and 9" from the centerline of the toilet and between 15" and 48" from floor	Hardware	Medium	$ 375	1	$ 375
Animal Shelter	Drinking Fountain	4	Drinking Fountain	Bottom edge of the fountain higher than 27" and the front must not protrude more than 4" into the route	Relocate Items	Medium	$ 150	1	$ 150

APPENDIX B: SCHEDULE / BUDGET INFORMATION

COST INFORMATION

UNIT PRICES

Construction costs for upgrading facilities can vary depending on each individual improvement and conditions of each site. Costs can also vary on the type and size of project the improvements are associated with. Listed below are estimates of costs for some typical accessibility improvements based on if the improvements are included as part of a retrofit type project, or as part of a larger comprehensive capital improvement project.

Facility Elements

Correction	Units	Low Cost	Medium Cost	High Cost
Entry Construction	Each	$750	$1,500	$3,000
Equipment	Each	$750	$1,500	$3,000
Hardware	Each	$150	$375	$750
Interior Construction	Each	$3,000	$6,000	$12,000
Pavement	Each	$3,750	$7,500	$15,000
Ramps	Each	$1,500	$3,000	$6,000
Relocate Items	Each	$75	$150	$300
Restroom Remodel	Each	$1,500	$3,000	$6,000
Sidewalk	Each	$1,500	$3,000	$6,000
Signage	Each	$100	$200	$400
Striping	Each	$375	$750	$1,500

The reader should be advised that these estimates are programmatic and based simply on field observation. Repairs should be made based on a design considering all field factors. Actual cost will be subject to material and labor price fluctuations, inflation, and other market factors. It is advised that costs are estimated annually.

PRIORITY RANKINGS

Based on the results of the self-evaluation, the estimate costs associated with eliminating accessibility barriers within the targeted priority areas is as follows:

Facilities

Each location was inspected based on the "ADA Checklist for Existing Facilities" produced by the Institute for Human Centered Design. It is advised that the County should correct the highest priority first. However, and with that in mind, some of the lower priority, lower cost corrections may be considered for earlier completion of higher priority work is already being addressed at or near the same location.

Priority 1	$108,950
Priority 2	$54,950
Priority 3	$18,000
Priority 4	$2,550

ENTIRE JURISDICTION

Campbell County Government

Based on the results of the self-evaluation, the estimate costs associated with providing ADA accessibility within the entire jurisdiction is $184,450. This amount signifies a significant investment that the Campbell County Government is committed to making in the upcoming years. A systematic approach to providing accessibility will be taken in order to absorb the cost into the annual budget for improvements to Campbell County Facilities.

APPENDIX C: PUBLIC OUTREACH

At the time of this report, no public outreach effort has been completed. However, public outreach is an immediate goal of Campbell County.

As part of communicating with the public, this Transition Plan should also be made available. As Public Outreach is performed, that section and this appendix should be updated with that information.

APPENDIX D: GRIEVANCE PROCEDURE

As part of the ADA requirements the County has posted the following notice outlining its ADA requirements:

- ADA Public Notice
- ADA Grievance Procedure
- ADA complaint form
- ADA applicant accommodation request form

APPENDIX E: CONTACT INFORMATION

CAMPBELL COUNTY ADA COORDINATOR

Name:	Keisha Howard
Address:	Campbell County Courthouse 570 Main Street, P.O. Box 435 Jacksboro, TN 37757
Phone:	423-562-2526
E-mail:	khoward@campbellcountygov.com

APPENDIX F: AGENCY ADA DESIGN STANDARDS AND PROCEDURES

Design Procedures

A vital component of an effective ADA program is to ensure that newly constructed infrastructure is compliant with ADA standards. Typically, there are a number of existing non-complaint ADA concerns facing local governments. Well established and documented construction standards is a necessity. Without established and monitored construction practices, the odds the agency accepting non-complaint construction is greatly increased. When this happens, the agencies' compliance burden is greatened.

While Campbell County doesn't currently have existing codes and regulations to review, future documents are recommended to include notes and drawings similar to what is included in this appendix.

Below are a few concepts that should be considered with revisions to existing design standards. Additionally, TDOT standard drawings is a quick way to aide in the establishment of development standards. Example standard drawings are attached in this appendix.

Intersection Corners

Curb ramps or blended transitions will attempt to be constructed or upgraded to achieve compliance within all capital improvement projects. There may be limitations which make it technically infeasible for an intersection corner to achieve full accessibility within the scope of any project. Those limitations will be noted and those intersection corners will remain on the transition plan. As future projects or opportunities arise, those intersection corners shall continue to be incorporated into future work. Regardless if full compliance can be achieved or not, each intersection corner shall be made as compliant as possible in accordance with the judgment of County staff.

Sidewalks / Trails

Sidewalks and trails will attempt to be constructed or upgraded to achieve compliance within all capital improvement projects. There may be limitations which make it technically infeasible for segments of sidewalks or trails to achieve full accessibility within the scope of any project. Those limitations will be noted and those segments will remain on the transition plan. As future projects or opportunities arise, those segments shall continue to be incorporated into future work. Regardless if full compliance can be achieved or not, every sidewalk or trail shall be made as compliant as possible in accordance with the judgment of County staff.

Traffic Control Signals

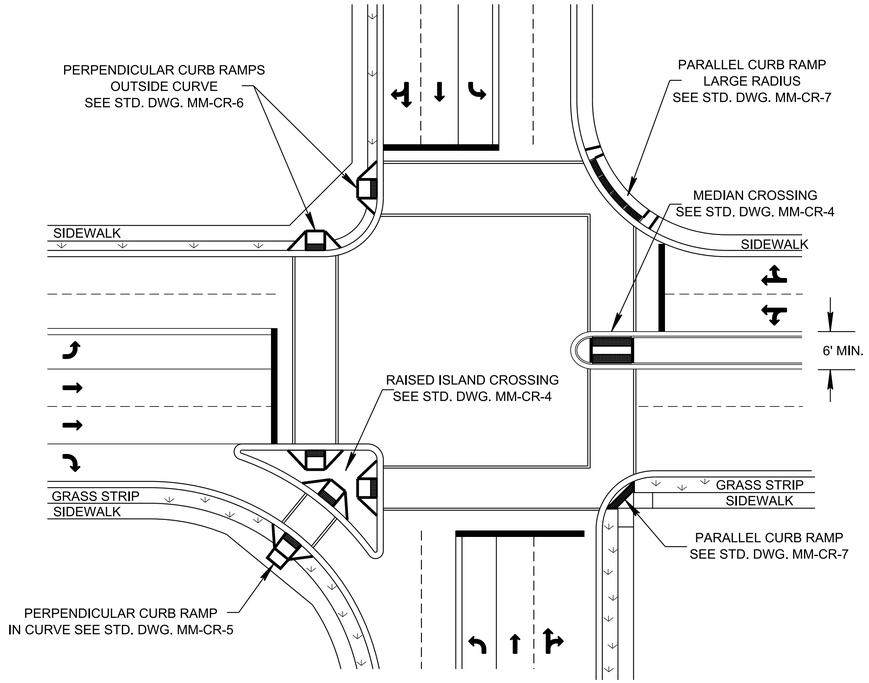
Traffic control signals will attempt to be constructed or upgraded to achieve compliance within all capital improvement projects. There may be limitations which make it technically infeasible for individual traffic control signal locations to achieve full accessibility within the scope of any project. Those limitations will be noted and those locations will remain on the transition plan. As future projects or opportunities arise, those locations shall continue to be incorporated into future work. Regardless if full compliance can be achieved or not, each traffic signal control location shall be made as compliant as possible in accordance with the judgment of County staff.

Other policies, practices and programs

Policies, practices and programs not identified in this document will follow the applicable ADA standards.

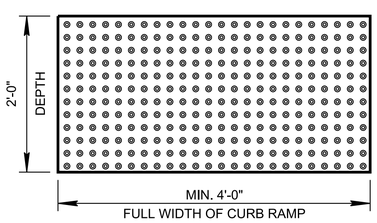
Design Standards

The Campbell County Government does not currently utilize PROWAG, as adopted by the Tennessee Department of Transportation (TDOT), as its design standard. Its adoption is recommended. A copy of this document is included in the following pages of this appendix.

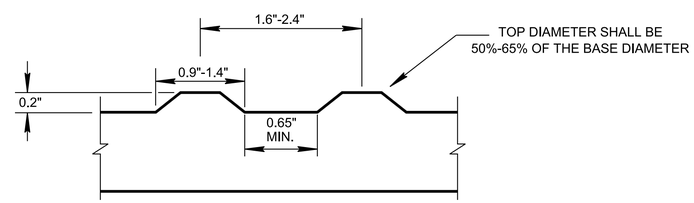


PLAN VIEW

(EXAMPLE LAYOUT SHOWING EACH RAMP TYPE; SEE REFERENCED STANDARD DRAWINGS FOR SPECIFIC ALIGNMENT INFORMATION)



DETECTABLE WARNING SURFACE DETAIL



DETECTABLE WARNING SURFACE ELEVATION VIEW (TYP.)

GENERAL NOTES

Ⓐ DETAILS SHOWN ON THIS STANDARD DRAWING APPLY TO THE CONSTRUCTION OR RECONSTRUCTION OF STREETS, CURBS, OR SIDEWALKS.

Ⓑ THE DETECTABLE WARNING SURFACES SHALL BE YELLOW. THE COLOR YELLOW IS USED BECAUSE YELLOW IS THE LAST COLOR A VISUALLY IMPAIRED PERSON CAN DETECT PRIOR TO TOTAL LOSS OF VISION. DETECTABLE WARNING SURFACES SHALL BE CONSTRUCTED USING PRODUCTS APPROVED ON THE TDOT QUALIFIED PRODUCT LIST 37.

Ⓒ THE DEPTH OF DETECTABLE WARNING SURFACES SHALL BE 2 FEET, IN THE DIRECTION OF PEDESTRIAN TRAVEL. AT CURB RAMPS AND BLENDED TRANSITIONS, DETECTABLE WARNING SURFACES SHALL EXTEND THE FULL WIDTH OF THE RAMP RUN (EXCLUDING ANY FLARED SIDES), BLENDED TRANSITION, OR TURNING SPACE.

Ⓓ THE DETECTABLE WARNING SURFACE SHALL NOT BE EXTENDED BEYOND CROSSWALK BOUNDARIES AT LOCATIONS LACKING PROPER CURB HEIGHT.

Ⓔ CURB RAMPS ARE TO BE LOCATED AS SHOWN ON THE PLANS.

Ⓕ CURB RAMPS SHALL BE PROVIDED AT ALL CORNERS OF STREET INTERSECTIONS WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB. CURB RAMPS SHALL ALSO BE PROVIDED AT MIDBLOCK CROSSWALK LOCATIONS AND ACROSS FROM CORNER RAMPS AT T-INTERSECTIONS.

Ⓖ CARE SHALL BE TAKEN TO ENSURE A UNIFORM GRADE ON THE RAMP. THE GRADE SHALL BE FREE OF SAGS AND SHORT GRADE CHANGES.

Ⓗ DRAINAGE STRUCTURES SHALL NOT BE PLACED IN LINE WITH RAMPS. INSTALL CATCH BASINS ON UPSTREAM SIDE OF RAMP FOR ROADS WITH GRADES LESS THAN 2%.

Ⓘ CROSSWALK MARKINGS, IF USED, SHALL BE LOCATED AS SHOWN ON THE APPLICABLE CURB RAMP STANDARD DRAWING. FOR CROSSWALK MARKING DETAILS, SEE STD. DWG. T-M-4.

Ⓙ FOR PERPENDICULAR CURB RAMP DESIGN DETAILS, SEE STD. DWG. MM-CR-2. FOR PARALLEL CURB RAMP DESIGN DETAILS, SEE STD. DWG. MM-CR-3.

Ⓚ PAYMENT:

ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN NEWLY CONSTRUCTED SIDEWALK AREAS, SHALL BE PAID BY ITEM NO. 701-02.03, CONCRETE CURB RAMP, PER SQUARE FOOT.

Ⓛ FOR SIGNALIZED INTERSECTIONS THAT REQUIRE PEDESTRIAN SIGNAL PUSHBUTTONS, SEE TDOT TRAFFIC DESIGN MANUAL FOR PLACEMENT DETAILS.

(Replaced Std Dwg RP-H-3)

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

DETECTABLE WARNING SURFACE PLACEMENT ON CURB RAMPS

01-07-2019 | MM-CR-1

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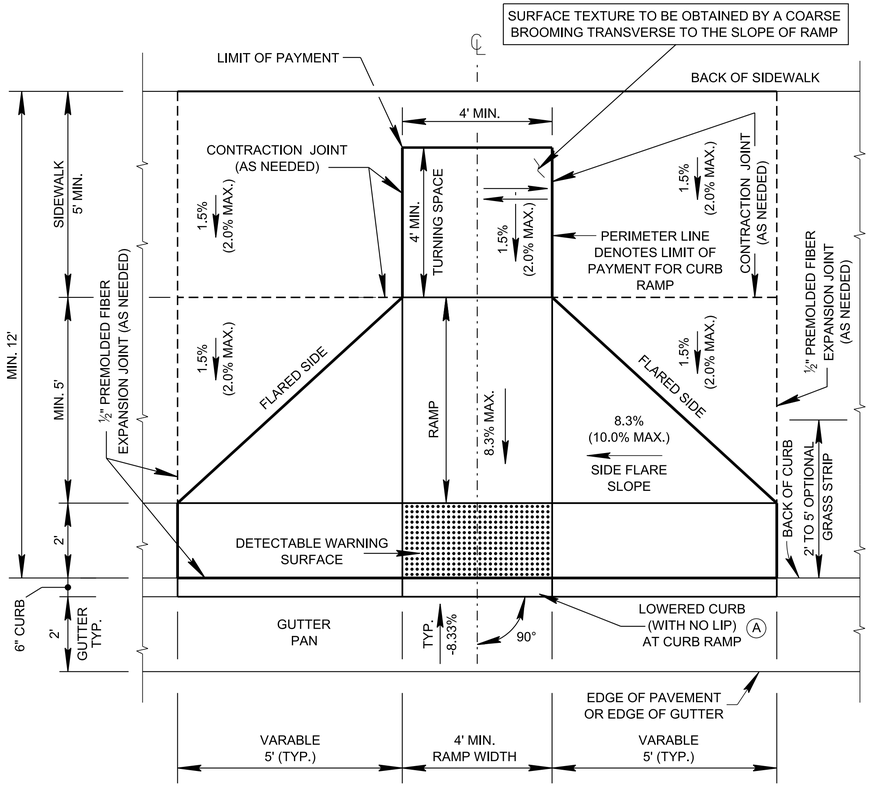
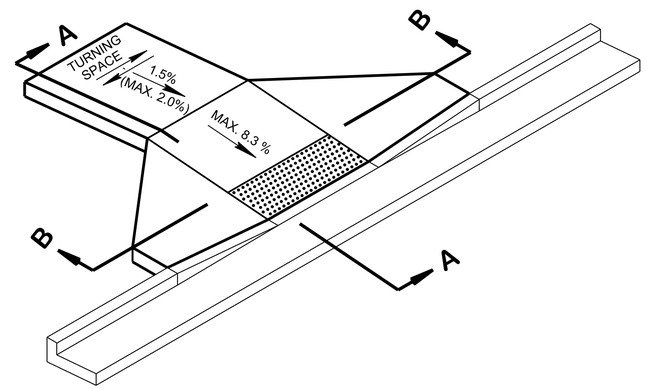
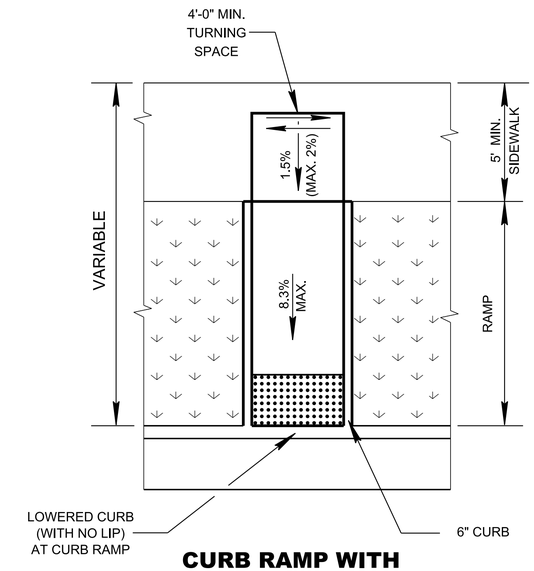


PERPENDICULAR CURB RAMP

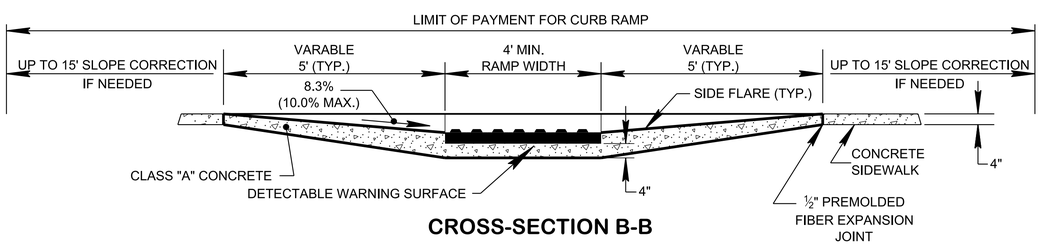
PLAN VIEW



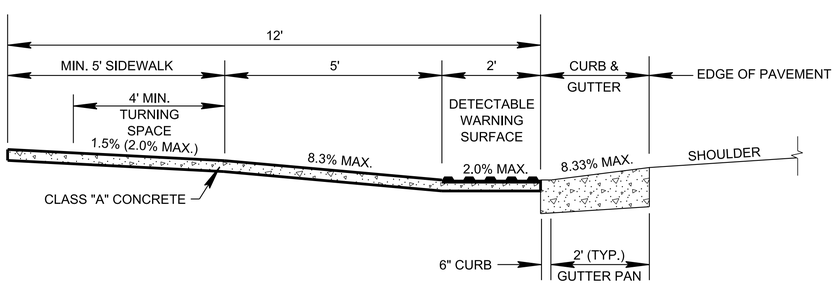
ISOMETRIC VIEW
CURB RAMP WITH GUTTER DETAIL



CURB RAMP WITH RETURNED CURB



CROSS-SECTION B-B



CROSS SECTION A-A

(SHOWN 30" CURB AND GUTTER TRANSITION)

AT LOCATIONS WHERE THE GUTTER PAN DOES NOT EXIST AND 2 FEET OF FLAT SURFACE MAY BE ELIMINATED.
THE ALGEBRAIC DIFFERENCE IN GRADE AT THE CURB RAMP/STREET INTERFACE SHALL NOT EXCEED 11%.

GENERAL NOTES

(A) PERPENDICULAR CURB RAMPS TO BE USED WHEN TOTAL SIDEWALK OR SIDEWALK AND GRASS STRIP WIDTH IS 12' OR GREATER, SEE STD. DWG. MM-CR-5 FOR PERPENDICULAR CURB RAMP IN CURVE, AND SEE STD. DWG. MM-CR-6 FOR PERPENDICULAR CURB RAMP PLACED OUTSIDE CURVE. PERPENDICULAR CURB RAMP MINIMUM DIMENSION SHOWN FOR 6" VERTICAL CURB.

(B) CURB SHALL BE FLUSH ACROSS ENTIRE WIDTH OF CURB RAMP. DETECTABLE WARNING SURFACES SHALL EXTEND 2' IN THE DIRECTION OF PEDESTRIAN TRAVEL. AT CURB RAMPS AND BLENDED TRANSITIONS, DETECTABLE WARNING SURFACES SHALL EXTEND THE FULL WIDTH OF THE RAMP RUN (EXCLUDING ANY FLARED SIDES), BLENDED TRANSITION, OR TURNING SPACE. SEE STD. DWG. MM-CR-1 FOR DETECTABLE WARNING SURFACE DETAILS.

(C) DESIGN / CONSTRUCTION MODIFICATIONS MAY BE REQUIRED FOR CURB RAMPS TO BE INSTALLED ALONG A ROADWAY WITH LONGITUDINAL GRADES EXCEEDING 5%. ENGINEER SHOULD BE NOTIFIED FOR ASSESSMENT IF THE CURB RAMP SIDE FLARES EXCEED 10' IN LENGTH DUE TO THE LONGITUDINAL GRADE.

(D) PAYMENT:

NEW:
ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN NEWLY CONSTRUCTED SIDEWALK AREAS, SHALL BE PAID BY ITEM NO. 701-02.03, CONCRETE CURB RAMP, PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR CONSTRUCTION OF THE CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

RETROFIT:
ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN EXISTING SIDEWALK AREAS, REMOVAL OF THE EXISTING SIDEWALK, AND ADJUSTMENT OF GUTTER PAN SLOPE, SHALL BE PAID BY ITEM NO. 701-02.01, CONCRETE CURB RAMP (RETROFIT), PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR INSTALLATION OF CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

COST OF CURB AND GUTTER TO BE INCLUDED IN THE PRICE OF ITEM NO. 702-01, CONCRETE CURB, PER C. Y. OR ITEM NO. 702-03, CONCRETE COMBINED CURB & GUTTER, PER C. Y.

(E) WHERE NEW CURB RAMP CONDITIONS DO NOT MEET EXISTING SIDEWALK, THE DESIGNER SHALL ADD ADDITIONAL QUANTITY FOR 15 FEET OF SIDEWALK MODIFICATION TO TIE TO THE EXISTING GRADE.

(F) SIGNALIZED INTERSECTIONS WITH SIDEWALK SHALL HAVE PEDESTRIAN SIGNAL HEADS AND PUSHBUTTONS. ALL ACCESSIBLE PEDESTRIAN SIGNAL (APS) PUSHBUTTONS SHALL BE ALIGNED WITH THE DIRECTION OF THE RAMP. SEE TDOT TRAFFIC DESIGN MANUAL FOR DETAILS.

(G) FOR ADDITIONAL SIDEWALK DETAILS AND IF MAILBOXES ARE REMOVED DURING INSTALLATION OF THE CURB RAMP, PROVIDE A 12" X 12" OPENING BEHIND THE CURB. SEE STD. DWG. MM-SW-1.

(H) IF GRASS STRIP IS INSTALLED, THE SIDE FLARES MAY BE OMITTED AND A RETURNED CURB OPTION MAY BE USED.

(I) DESIRABLE SIDEWALK CROSS SLOPE IS 1.5 %, ABSOLUTE MAXIMUM IS 2.0 %.

(J) SURFACE TEXTURE TO BE OBTAINED BY A COARSE BROOMING TRANSVERSE TO THE SLOPE OF CURB RAMP.

(K) SEE STD. DWG. T-M-4 FOR CROSSWALK MARKING DETAILS.

(Replaced Std Dwg RP-H-4)

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

PERPENDICULAR CURB RAMP

01-07-2019 | MM-CR-2

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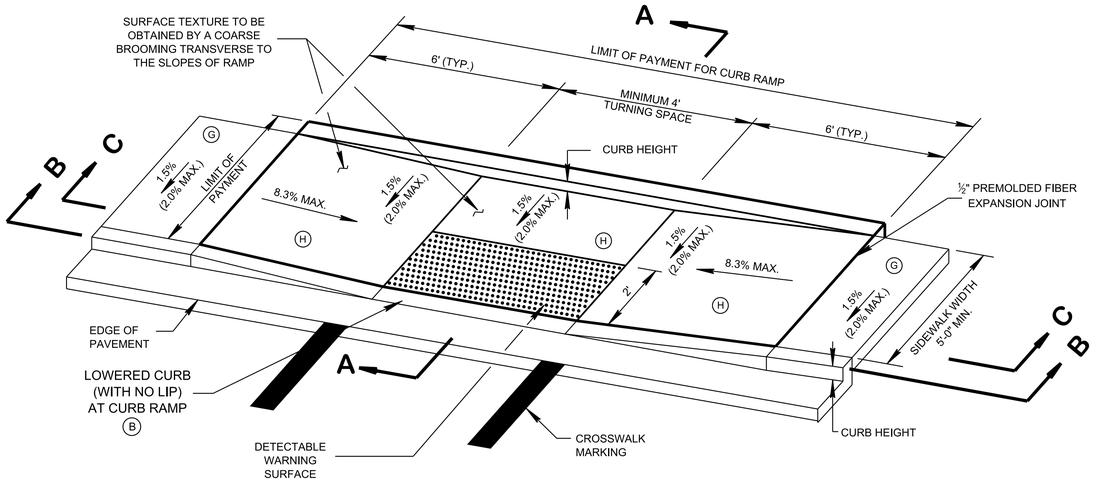
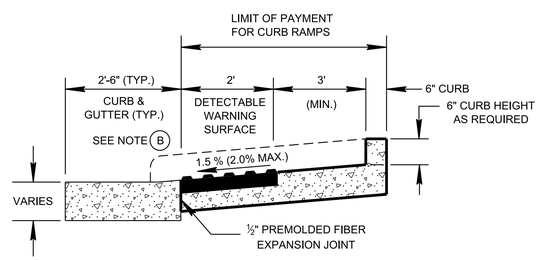
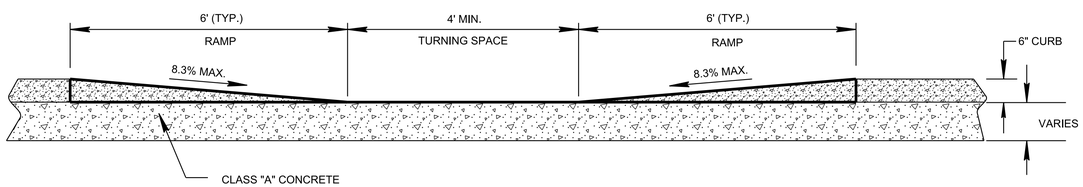


PARALLEL CURB RAMP DETAIL

DIMENSIONS SHOWN ABOVE FOR 0% LONGITUDINAL ROADWAY GRADE

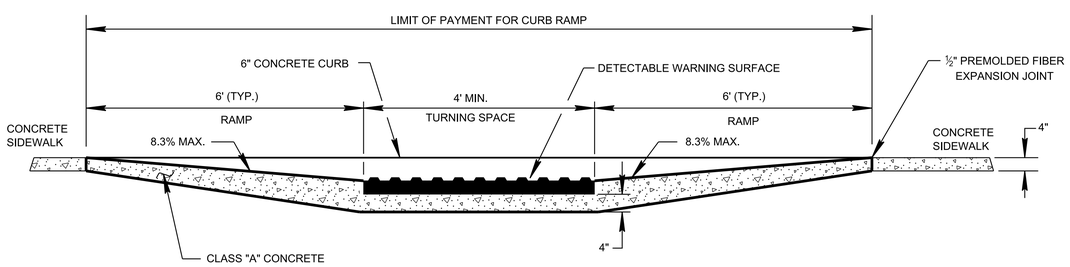


SECTION A-A



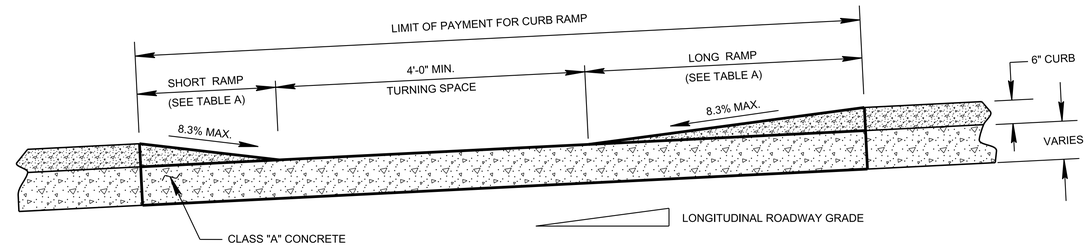
SECTION B-B

DIMENSIONS SHOWN ABOVE FOR 0% LONGITUDINAL ROADWAY GRADE



SECTION C-C

DIMENSIONS SHOWN ABOVE FOR 0% LONGITUDINAL ROADWAY GRADE



ALTERNATE SECTION B-B

PARALLEL CURB RAMP DETAIL SHOWN WITH LONGITUDINAL ROADWAY GRADE

NOTE: MODIFICATIONS MAY BE REQUIRED FOR LONGITUDINAL ROADWAY GRADES STEEPER THAN 5%. ENGINEER SHOULD BE NOTIFIED FOR ASSESSMENT IF THE CURB RAMP RUN EXCEEDS 15' IN LENGTH DUE TO THE LONGITUDINAL ROADWAY GRADE.

TABLE A

LONGITUDINAL ROADWAY GRADE	LONG RAMP	SHORT RAMP	PAY AREA S.F.
5 %	15'-0"	3'-9"	114
4 %	11'-6"	4'-1"	98
3 %	9'-5"	4'-5"	90
2 %	7'-11"	4'-10"	84
1 %	6'-10"	5'-5"	92
0 %	6'-0"	6'-0"	80

BASED ON 5' SIDEWALK WIDTH (EXCLUDING BACK CURB)

GENERAL NOTES

(A) PARALLEL CURB RAMPS MAY BE USE WHEN SIDEWALK WIDTH IS LESS THAN 12' AND CURB RAMP IS LOCATED ALONG TANGENT SIDEWALK SECTION OF ROADWAY. FOR PARALLEL CURB RAMPS INSTALLED IN CURVE SEE STD. DWG. MM-CR-7.

(B) CURB SHALL BE FLUSH ACROSS ENTIRE WIDTH OF CURB RAMP. DETECTABLE WARNING SURFACES SHALL EXTEND 2' IN THE DIRECTION OF PEDESTRIAN TRAVEL. AT CURB RAMPS AND BLENDED TRANSITIONS, DETECTABLE WARNING SURFACES SHALL EXTEND THE FULL WIDTH OF THE RAMP RUN (EXCLUDING ANY FLARED SIDES), BLENDED TRANSITION, OR TURNING SPACE. SEE STD. DWG. MM-CR-1 FOR DETECTABLE WARNING SURFACE DETAILS.

(C) DESIGN / CONSTRUCTION MODIFICATIONS MAY BE REQUIRED FOR CURB RAMPS TO BE INSTALLED ALONG A ROADWAY WITH LONGITUDINAL GRADES EXCEEDING 5%. ENGINEER SHOULD BE NOTIFIED FOR ASSESSMENT IF THE CURB RAMP SIDE FLARES EXCEED 15' IN LENGTH DUE TO THE LONGITUDINAL GRADE.

(D) PAYMENT:

NEW:
ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN NEWLY CONSTRUCTED SIDEWALK AREAS, SHALL BE PAID BY ITEM NO. 701-02.03, CONCRETE CURB RAMP, PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR CONSTRUCTION OF THE CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

RETROFIT:
ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN EXISTING SIDEWALK AREAS, REMOVAL OF THE EXISTING SIDEWALK, AND ADJUSTMENT OF GUTTER PAN SLOPE, SHALL BE PAID BY ITEM NO. 701-02.01, CONCRETE CURB RAMP (RETROFIT), PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR INSTALLATION OF CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

COST OF CURB AND GUTTER TO BE INCLUDED IN THE PRICE OF ITEM NO. 702-01, CONCRETE CURB, PER C. Y. OR ITEM NO. 702-03, CONCRETE COMBINED CURB & GUTTER, PER C. Y.

(E) FOR SIGNALIZED INTERSECTIONS THAT REQUIRE PEDESTRIAN SIGNAL PUSHBUTTONS, SEE TDOT TRAFFIC DESIGN MANUAL FOR PLACEMENT DETAILS.

(F) FOR ADDITIONAL SIDEWALK DETAILS AND IF MAILBOXES ARE REMOVED DURING INSTALLATION OF THE CURB RAMP, PROVIDE A 12" X 12" OPENING BEHIND THE CURB. SEE STD. DWG. MM-SW-1.

(G) WHERE NEW CURB RAMP CONDITIONS DO NOT MEET EXISTING SIDEWALK, THE DESIGNER SHALL ADD ADDITIONAL QUANTITY FOR UP TO 15 FEET IN EACH DIRECTION OF SIDEWALK MODIFICATION TO TIE TO THE EXISTING GRADE.

(H) SURFACE TEXTURE TO BE OBTAINED BY A COARSE BROOMING TRANSVERSE TO THE SLOPE OF CURB RAMP.

(I) SEE STD. DWG. T-M-4 FOR CROSSWALK MARKING DETAILS.

(Replaced Std Dwg RP-H-5)

STATE OF TENNESSEE
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PARALLEL CURB RAMP

01-07-2019 | MM-CR-3

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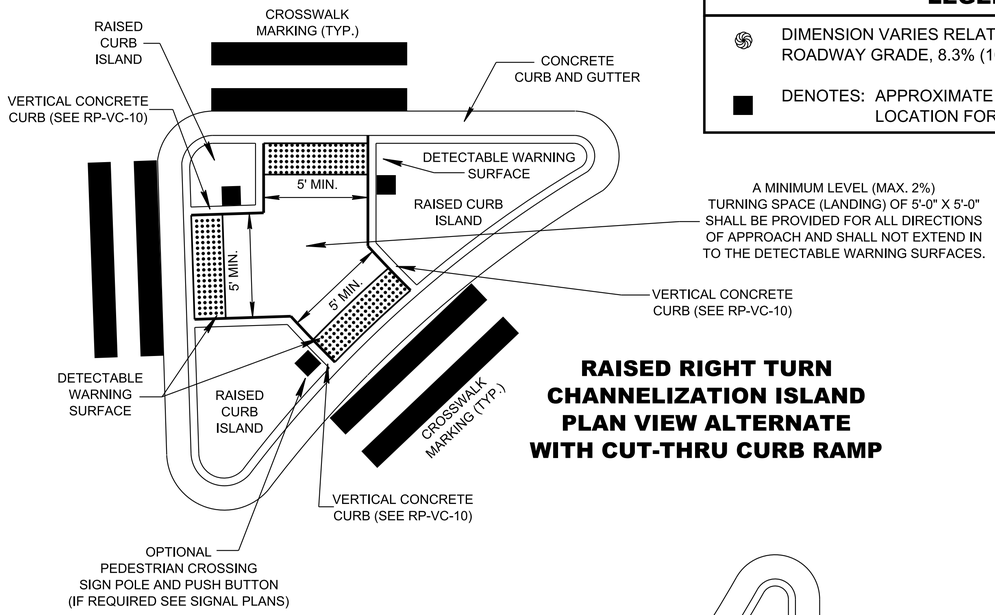
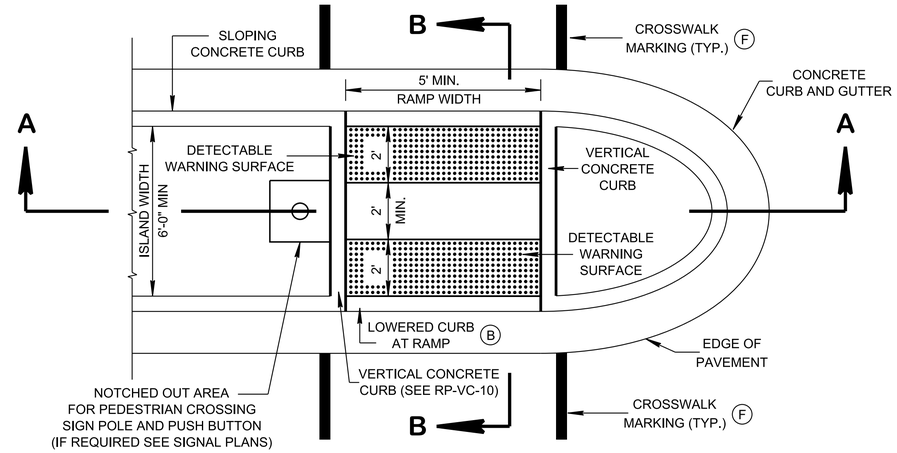
LEGEND

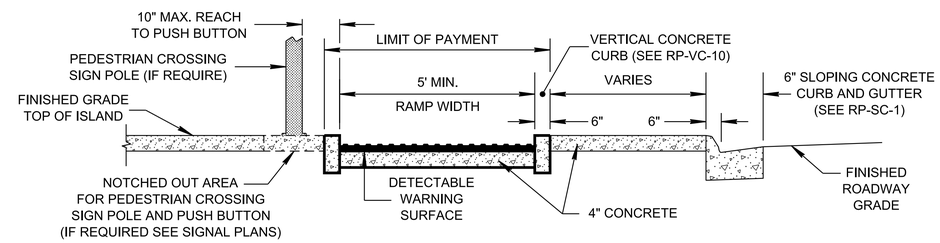
⊛	DIMENSION VARIES RELATIVE TO LONGITUDINAL ROADWAY GRADE, 8.3% (10.0% MAX.)
■	DENOTES: APPROXIMATE PEDESTRIAN PUSHBUTTON LOCATION FOR SIGNALIZED INTERSECTIONS



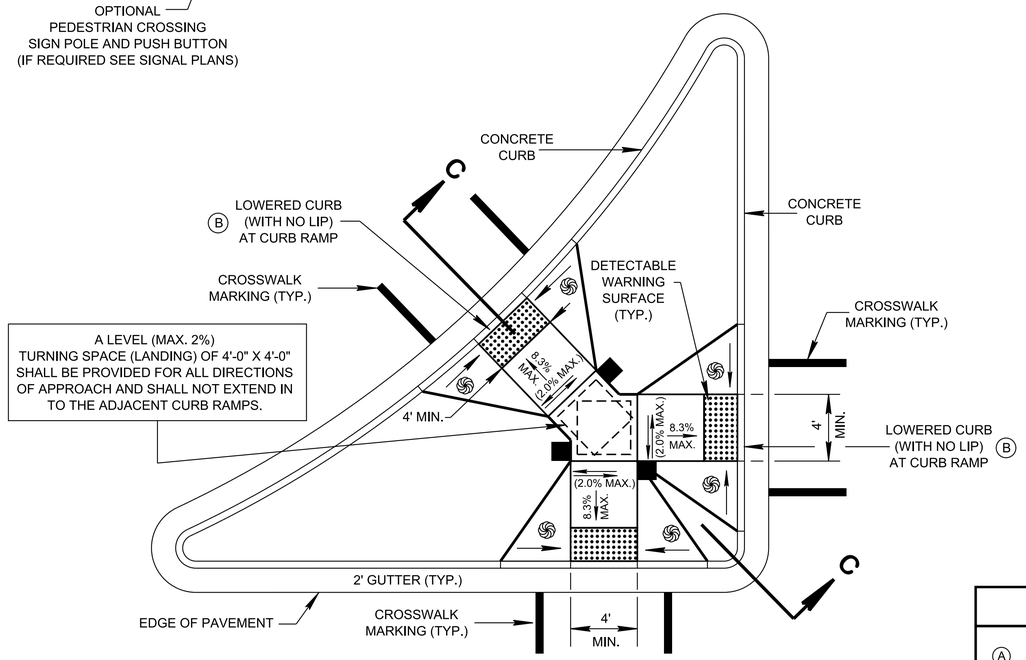
RAISED RIGHT TURN CHANNELIZATION ISLAND PLAN VIEW ALTERNATE WITH CUT-THRU CURB RAMP



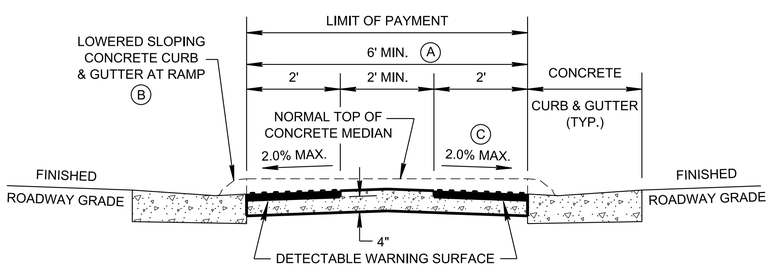
MEDIAN REFUGE PLAN VIEW



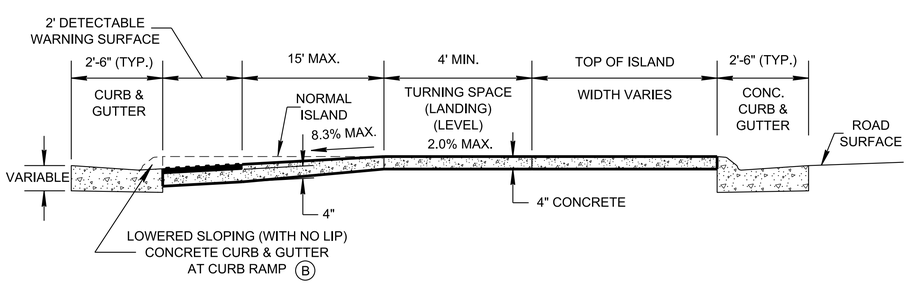
MEDIAN REFUGE SECTION A-A



RAISED RIGHT TURN CHANNELIZATION ISLAND PLAN VIEW



MEDIAN REFUGE SECTION B-B



SECTION C-C

GENERAL NOTES

(A) IF THE MEDIAN IS LESS THAN 6' WIDE, THE AREA IS NOT A PEDESTRIAN REFUGE AND NO DETECTABLE WARNING SURFACES ARE REQUIRED.

(B) CURB SHALL BE LOWERED ACROSS ENTIRE WIDTH OF RAMP.

(C) THE GRADE OF THE MEDIAN REFUGE SHOULD NOT EXCEED 5%.

(D) FOR ADDITIONAL DETAILS AND OTHER INFORMATION NOT SHOWN ON THIS DRAWING, SUCH AS LIMITS OF PAYMENT, SEE STD. DWG. MM-CR-2.

(E) FOR DETECTABLE WARNING SURFACE DETAILS, SEE STD. DWG. MM-CR-1.

(F) FOR CROSSWALK MARKING DETAILS, SEE STD. DWG. T-M-4.

(G) THE 5'-0" MIN. CURB RAMP WIDTH IS APPLICABLE FOR CUT-THRU MEDIANS AND PEDESTRIAN ISLAND REFUGES ONLY, OTHERWISE 4'-0" MIN. CURB RAMP WIDTH MAY BE USED.

(H) PAYMENT:
COST OF CURB AND GUTTER TO BE INCLUDED IN THE PRICE OF ITEM NO. 702-01, CONCRETE CURB, PER C. Y. OR ITEM NO. 702-03, CONCRETE COMBINED CURB & GUTTER, PER C. Y.

NEW CURB RAMPS:
ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING TRUNCATED DOME SURFACE(S) IN NEWLY CONSTRUCTED SIDEWALK AREAS, SHALL BE PAID BY ITEM NO. 701-02.03, CONCRETE CURB RAMP, PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR CONSTRUCTION OF THE CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

CURB RAMPS (RETROFIT):
ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING TRUNCATED DOME SURFACE(S) IN EXISTING SIDEWALK AREAS, REMOVAL OF THE EXISTING SIDEWALK, AND ADJUSTMENT OF GUTTER PAN SLOPE, SHALL BE PAID BY ITEM NO. 701-02.01, CONCRETE CURB RAMP (RETROFIT), PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR INSTALLATION OF CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

(Replaced Std Dwg RP-H-6)

STATE OF TENNESSEE
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DEPARTMENT OF TRANSPORTATION

PEDESTRIAN REFUGE

01-07-2019 | MM-CR-4

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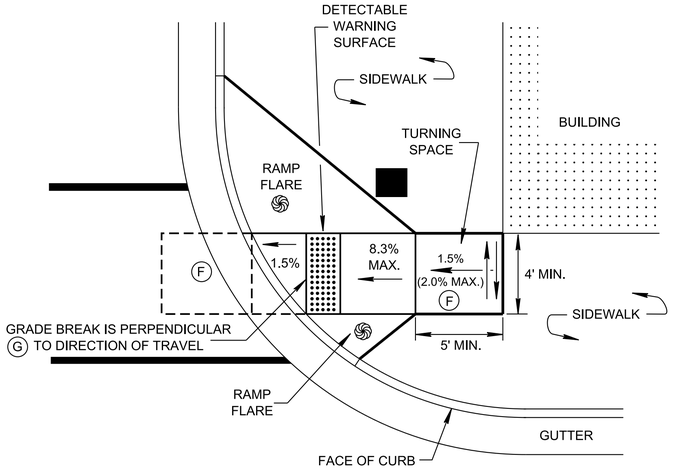
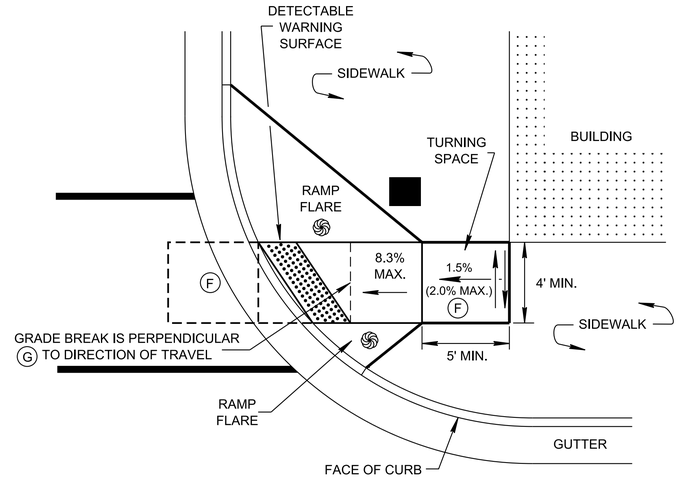
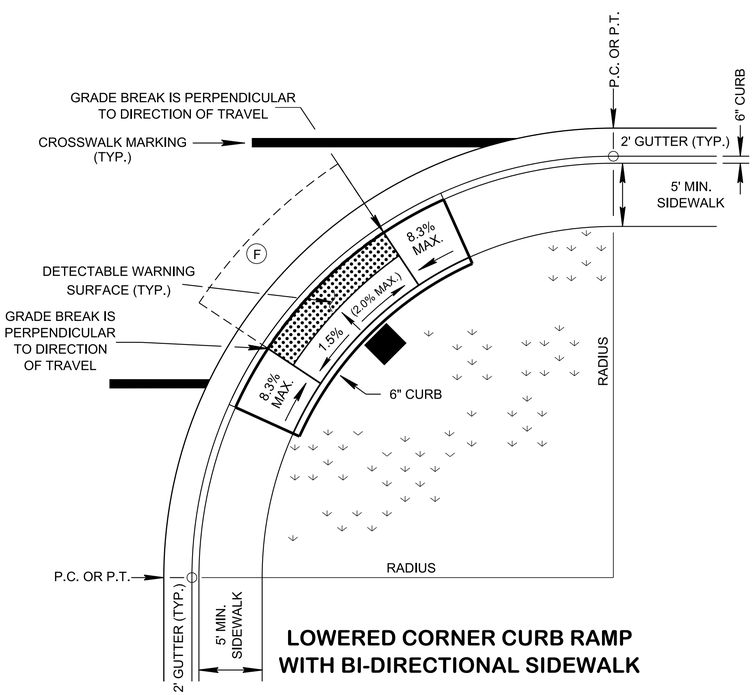


BI-DIRECTIONAL SIDEWALK

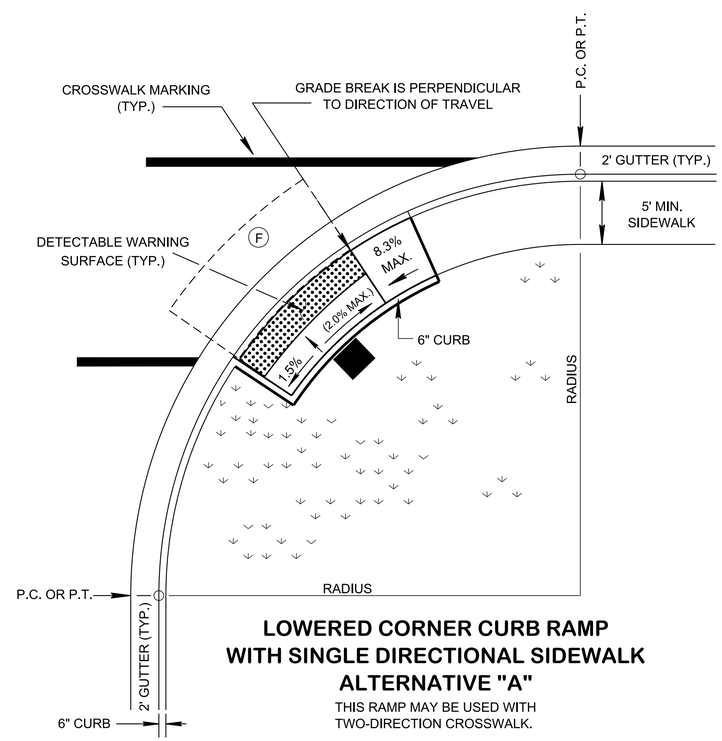


BI-DIRECTIONAL SIDEWALK ALTERNATIVE PLACEMENT

PERPENDICULAR CURB RAMPS FOR SINGLE CROSSING



LOWERED CORNER CURB RAMP WITH BI-DIRECTIONAL SIDEWALK



LOWERED CORNER CURB RAMP WITH SINGLE DIRECTIONAL SIDEWALK ALTERNATIVE "A"

THIS RAMP MAY BE USED WITH TWO-DIRECTION CROSSWALK.

PARALLEL CURB RAMPS FOR SINGLE CROSSING

LEGEND

DIMENSION VARIES RELATIVE TO LONGITUDINAL ROADWAY GRADE, 8.3% DESIRABLE (10.0% MAX.)

DENOTES: APPROXIMATE PEDESTRIAN POLE/PUSHBUTTON LOCATION FOR SIGNALIZED INTERSECTIONS

GENERAL NOTES

(A) FOR DETECTABLE WARNING SURFACE DETAILS SEE STD. DWG. MM-CR-1. FOR ADDITIONAL DETAILS AND OTHER INFORMATION FOR PERPENDICULAR CURB RAMPS NOT SHOWN ON THIS DRAWING SEE STD. DWG. MM-CR-2 AND FOR PARALLEL CURB RAMPS SEE STD. DWG. MM-CR-3. FOR CROSSWALK MARKING DETAILS SEE STD. DWG. T-M-4.

(B) IF PERPENDICULAR CURB RAMPS AND TURNING SPACE CANNOT BE CONSTRUCTED DUE TO LIMITED RIGHT-OF-WAY, USE PARALLEL CURB RAMP INSTEAD.

(C) CARE SHALL BE TAKEN ON ALL ROADWAY CURB RAMPS AT INTERSECTIONS WITH SIDEWALK AND CURB RAMPS TO ENSURE A UNIFORM GRADE AROUND THEM. THE ROADWAY CURB RAMP GRADE SHALL BE FREE OF SAGS AND SHORT GRADE CHANGES.

(D) SIDEWALK WIDTH SHALL NOT INCLUDE 6" CONCRETE CURB. THE DESIRABLE SIDEWALK CROSS SLOPE IS 1.5 %, ABSOLUTE MAXIMUM IS 2.0%.

(E) DRAINAGE STRUCTURES SHALL NOT BE PLACED IN THE CROSSWALK OR IN FRONT OF THE CURB RAMP.

(F) TURNING SPACE \ CLEAR SPACE:

CLEAR SPACE BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE 4' (MIN.) BY 4' (MIN.) SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.

TURNING SPACE MUST BE PROVIDED AT THE TOP OF PERPENDICULAR CURB RAMPS. THE TURNING SPACE MUST BE 4' (MIN.) BY 4' (MIN.), AND IS PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF THE SIDEWALK, THE TURNING SPACE MUST BE 4' (MIN.) BY 5' (MIN.), WITH THE 5' DIMENSION PROVIDED IN THE DIRECTION OF THE RAMP RUN.

FOR PARALLEL CURB RAMPS, A TURNING SPACE 4' (MIN.) BY 4' (MIN.) SHALL BE PROVIDED AT THE BOTTOM OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. IF THE TURNING SPACE IS CONSTRAINED ON 2 OR MORE SIDES, THE TURNING SPACE SHALL 4' (MIN.) BY 5' (MIN.). THE 5' DIMENSION SHALL BE PROVIDED IN THE DIRECTION OF THE PEDESTRIAN STREET CROSSING.

(G) GRADE BREAKS:

GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMP RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE CURB RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF CURB RAMP RUNS AND TURNING SPACES. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.

WHERE THE END OF BOTTOM GRADE BREAK ARE BEHIND THE BACK OF CURB AND THE DISTANCE FROM EITHER END OF THE BOTTOM GRADE BREAK TO THE BACK OF CURB IS 5' OR LESS, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE CURB RAMP RUN WITHIN ONE DOME SPACING OF THE BOTTOM GRADE BREAK.

(H) PEDESTRIAN SIGNAL PUSHBUTTON:

WHERE PEDESTRIAN SIGNALS ARE PROVIDED AT PEDESTRIAN STREET CROSSINGS, THEY SHALL INCLUDE ACCESSIBLE PEDESTRIAN SIGNALS AND POLE\PEDESTRIAN PUSHBUTTONS COMPLYING WITH SECTIONS 4E.08 THROUGH 4E.13 OF THE MUTCD. FOR DETAILS OF THE PLACING OF PEDESTRIAN SIGNAL PUSHBUTTONS SEE TDOT TRAFFIC DESIGN MANUAL.

WHEN TWO PEDESTRIAN PUSHBUTTONS ARE ON ONE CORNER THEY WILL BE SEPARATED BY 10 FEET.

(I) PAYMENT:

COST OF CURB AND GUTTER TO BE INCLUDED IN THE PRICE OF ITEM NO. 702-01, CONCRETE CURB, PER C. Y. OR ITEM NO. 702-03, CONCRETE COMBINED CURB & GUTTER, PER C. Y.

NEW CURB RAMPS:
ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN NEWLY CONSTRUCTED SIDEWALK AREAS, SHALL BE PAID BY ITEM NO. 701-02.03, CONCRETE CURB RAMP, PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR CONSTRUCTION OF THE CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

CURB RAMPS (RETROFIT):
ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN EXISTING SIDEWALK AREAS, REMOVAL OF THE EXISTING SIDEWALK, AND ADJUSTMENT OF GUTTER PAN SLOPE, SHALL BE PAID BY ITEM NO. 701-02.01, CONCRETE CURB RAMP (RETROFIT), PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR INSTALLATION OF CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

(Replaced Std Dwg RP-H-7)

STATE OF TENNESSEE
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SINGLE CROSSING CURB RAMP IN CURVE

01-07-2019 | MM-CR-5

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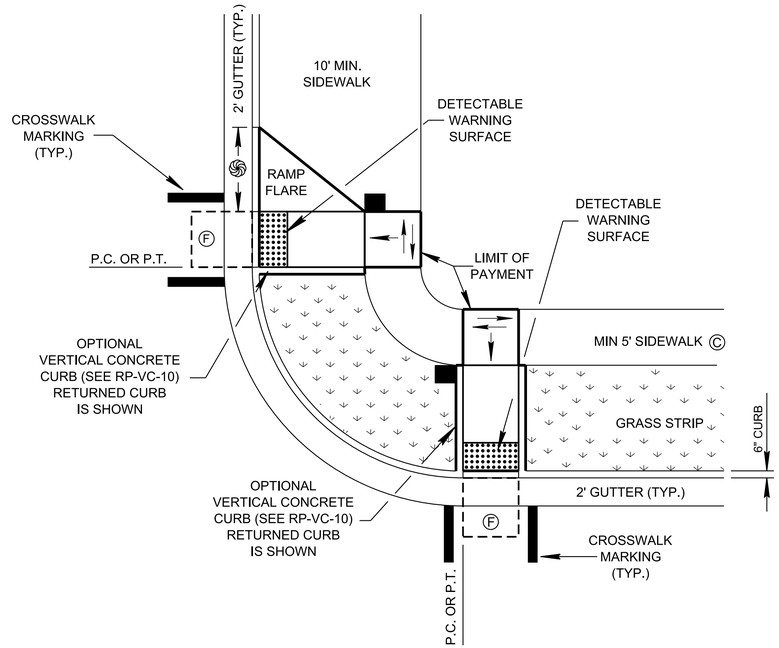
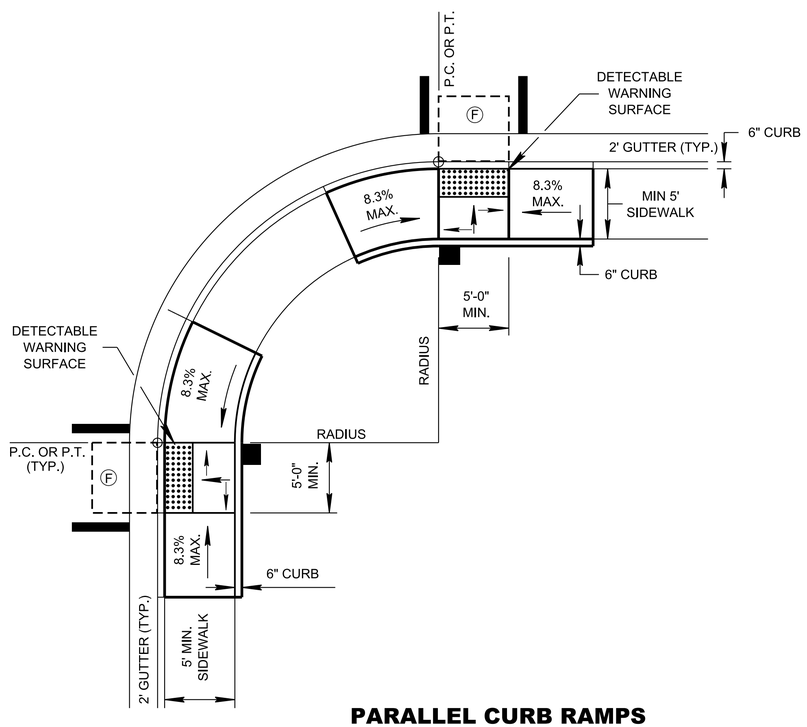


PERPENDICULAR CURB RAMP OUTSIDE RADIUS (WITH GRASS STRIP OR WIDE SIDEWALK)



PARALLEL CURB RAMPS OUTSIDE RADIUS

LEGEND

DIMENSION VARIES RELATIVE TO LONGITUDINAL ROADWAY GRADE, 8.3% DESIRABLE (10.0% MAX.)

DENOTES: APPROXIMATE PEDESTRIAN POLE/PUSHBUTTON LOCATION FOR SIGNALIZED INTERSECTIONS

1.5% (2.0% MAX.)

GENERAL NOTES

Ⓐ FOR DETECTABLE WARNING SURFACE DETAILS SEE STD. DWG. MM-CR-1. FOR ADDITIONAL DETAILS AND OTHER INFORMATION FOR PERPENDICULAR CURB RAMPS NOT SHOWN ON THIS DRAWING SEE STD. DWG. MM-CR-2 AND FOR PARALLEL CURB RAMPS SEE STD. DWG. MM-CR-3. FOR CROSSWALK MARKING DETAILS SEE STD. DWG. T-M-4.

Ⓑ IF PERPENDICULAR CURB RAMPS AND TURNING SPACE CANNOT BE CONSTRUCTED DUE TO LIMITED RIGHT-OF-WAY, USE PARALLEL CURB RAMP INSTEAD.

Ⓒ CARE SHALL BE TAKEN ON ALL ROADWAY CURB RAMPS AT INTERSECTIONS WITH SIDEWALK AND CURB RAMPS TO ENSURE A UNIFORM GRADE AROUND THEM. THE ROADWAY CURB RAMP GRADE SHALL BE FREE OF SAGS AND SHORT GRADE CHANGES.

Ⓓ SIDEWALK WIDTH SHALL NOT INCLUDE 6" CONCRETE CURB. THE DESIRABLE SIDEWALK CROSS SLOPE IS 1.5 %, ABSOLUTE MAXIMUM IS 2.0%.

Ⓔ DRAINAGE STRUCTURES SHALL NOT BE PLACED IN THE CROSSWALK OR IN FRONT OF THE CURB RAMP.

Ⓕ TURNING SPACE \ CLEAR SPACE:

CLEAR SPACE BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE 4' (MIN.) BY 4' (MIN.) SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.

TURNING SPACE MUST BE PROVIDED AT THE TOP OF PERPENDICULAR CURB RAMPS. THE TURNING SPACE MUST BE 4' (MIN.) BY 4' (MIN.), AND IS PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF THE SIDEWALK, THE TURNING SPACE MUST BE 4' (MIN.) BY 5' (MIN.), WITH THE 5' DIMENSION PROVIDED IN THE DIRECTION OF THE RAMP RUN.

FOR PARALLEL CURB RAMPS, A TURNING SPACE 4' (MIN.) BY 4' (MIN.) SHALL BE PROVIDED AT THE BOTTOM OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. IF THE TURNING SPACE IS CONSTRAINED ON 2 OR MORE SIDES, THE TURNING SPACE SHALL 4' (MIN.) BY 5' (MIN.). THE 5' DIMENSION SHALL BE PROVIDED IN THE DIRECTION OF THE PEDESTRIAN STREET CROSSING.

Ⓖ GRADE BREAKS:

GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMP RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE CURB RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF CURB RAMP RUNS AND TURNING SPACES. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.

WHERE THE END OF BOTTOM GRADE BREAK ARE BEHIND THE BACK OF CURB AND THE DISTANCE FROM EITHER END OF THE BOTTOM GRADE BREAK TO THE BACK OF CURB IS 5' OR LESS, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE CURB RAMP RUN WITHIN ONE DOME SPACING OF THE BOTTOM GRADE BREAK.

Ⓗ PEDESTRIAN SIGNAL PUSHBUTTON:

WHERE PEDESTRIAN SIGNALS ARE PROVIDED AT PEDESTRIAN STREET CROSSINGS, THEY SHALL INCLUDE ACCESSIBLE PEDESTRIAN SIGNALS AND POLE\PEDESTRIAN PUSHBUTTONS COMPLYING WITH SECTIONS 4E.08 THROUGH 4E.13 OF THE MUTCD. FOR DETAILS OF THE PLACING OF PEDESTRIAN SIGNAL PUSHBUTTONS SEE TDOT TRAFFIC DESIGN MANUAL.

WHEN TWO PEDESTRIAN PUSHBUTTONS ARE ON ONE CORNER THEY WILL BE SEPARATED BY 10 FEET.

Ⓘ PAYMENT:

COST OF CURB AND GUTTER TO BE INCLUDED IN THE PRICE OF ITEM NO. 702-01, CONCRETE CURB, PER C. Y. OR ITEM NO. 702-03, CONCRETE COMBINED CURB & GUTTER, PER C. Y.

NEW CURB RAMPS:
ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN NEWLY CONSTRUCTED SIDEWALK AREAS, SHALL BE PAID BY ITEM NO. 701-02.03, CONCRETE CURB RAMP, PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR CONSTRUCTION OF THE CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

CURB RAMPS (RETROFIT):
ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN EXISTING SIDEWALK AREAS, REMOVAL OF THE EXISTING SIDEWALK, AND ADJUSTMENT OF GUTTER PAN SLOPE, SHALL BE PAID BY ITEM NO. 701-02.01, CONCRETE CURB RAMP (RETROFIT), PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR INSTALLATION OF CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

(Replaced Std Dwg RP-H-8)

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

DUAL CROSSING CURB RAMP PLACED OUTSIDE CURVE

01-07-2019 | MM-CR-6

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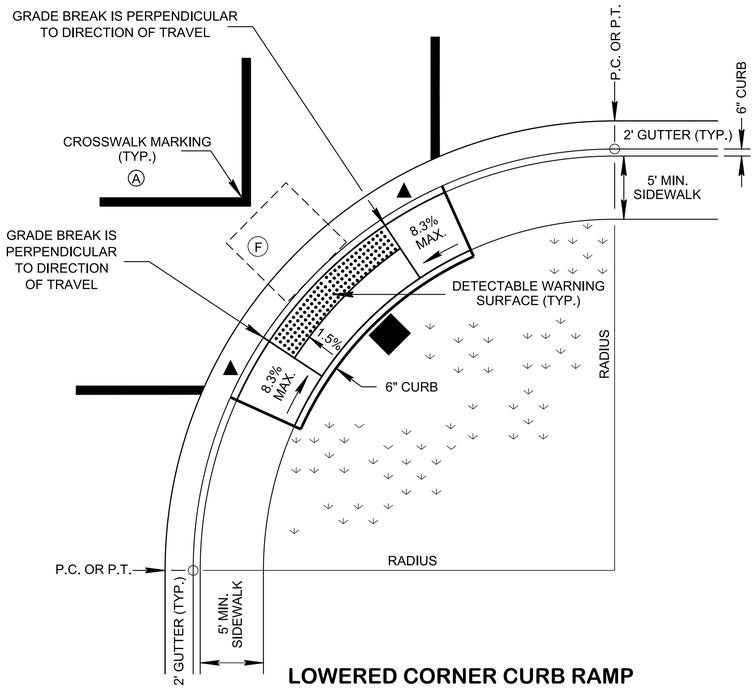
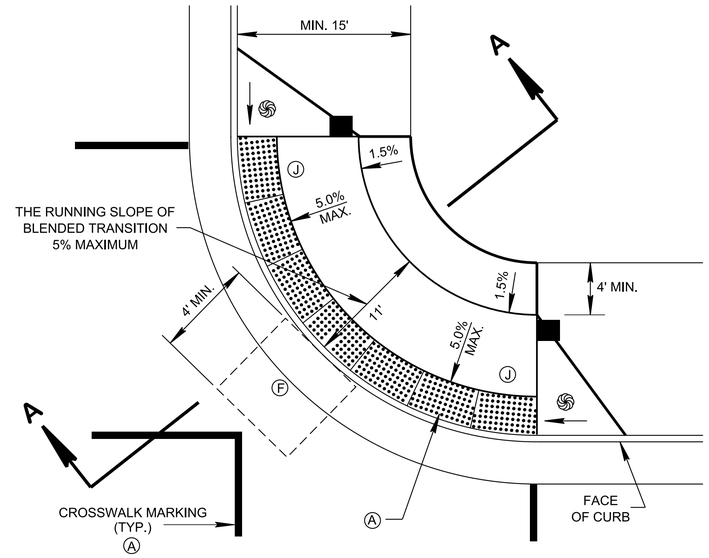


LOWERED CORNER CURB RAMP WITH BI-DIRECTIONAL SIDEWALK

LOWERED CORNER CURB RAMP TO BE USED AS AN ALTERNATE TO BLENDED TRANSITION WHEN REQUIRED DUE TO GEOMETRIC LIMITATIONS.

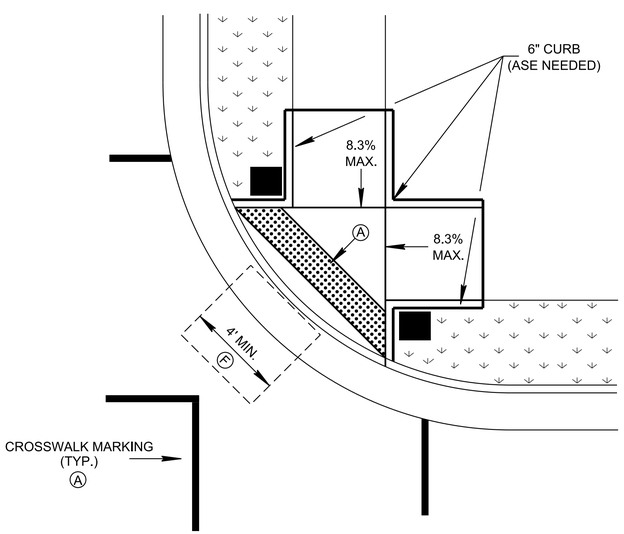
THIS DETAIL MAY BE USED WHERE SIDEWALK WIDTHS ARE LESS THAN 10" WIDE AND CURB RAMP IS LOCATED ANYWHERE WITHIN A CURVED SECTION OF SIDEWALK.



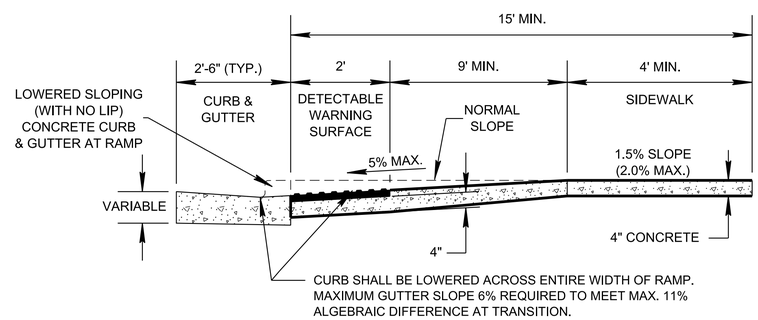
BLENDED TRANSITION

BLENDED TRANSITIONS ARE ALTERNATIVE ONLY WHEN PARALLEL, PERPENDICULAR AND COMBINATION CURB RAMPS WILL NOT WORK DUE TO GEOMETRIC CONSTRAINTS.

BLENDED TRANSITIONS ARE RAISED PEDESTRIAN STREET CROSSINGS, DEPRESSED CORNERS, OR SIMILAR CONNECTIONS BETWEEN PEDESTRIAN ACCESS ROUTES AT THE LEVEL OF THE SIDEWALK AND THE LEVEL OF THE PEDESTRIAN STREET CROSSING THAT HAVE A GRADE OF 5% OR LESS. BLENDED TRANSITIONS ARE SUITABLE FOR A RANGE OF SIDEWALK CONDITIONS.



PARALLEL CURB RAMP



SECTION A-A

LEGEND

⊛	DIMENSION VARIES RELATIVE TO LONGITUDINAL ROADWAY GRADE, 8.3% DESIRABLE (10.0% MAX.)
■	DENOTES: APPROXIMATE PEDESTRIAN POLE/PUSHBUTTON LOCATION FOR SIGNALIZED INTERSECTIONS
▲	CLEARLY MAINTAIN THE DEFINED PERIMETER OF THE RAMP AT LOCATIONS WHERE THE GRADE OF THE ROADWAY MAY MATCH THE SLOPE OF THE RAMP.

GENERAL NOTES

Ⓐ FOR DETECTABLE WARNING SURFACE DETAILS SEE STD. DWG. MM-CR-1. FOR ADDITIONAL DETAILS AND OTHER INFORMATION FOR PERPENDICULAR CURB RAMPS NOT SHOWN ON THIS DRAWING SEE STD. DWG. MM-CR-2 AND FOR PARALLEL CURB RAMPS SEE STD. DWG. MM-CR-3. FOR CROSSWALK MARKING DETAILS SEE STD. DWG. T-M-4.

Ⓑ IF PERPENDICULAR CURB RAMPS AND TURNING SPACE CANNOT BE CONSTRUCTED DUE TO LIMITED RIGHT-OF-WAY, USE PARALLEL CURB RAMP INSTEAD.

Ⓒ CARE SHALL BE TAKEN ON ALL ROADWAY CURB RAMPS AT INTERSECTIONS WITH SIDEWALK AND CURB RAMPS TO ENSURE A UNIFORM GRADE AROUND THEM. THE ROADWAY CURB RAMP GRADE SHALL BE FREE OF SAGS AND SHORT GRADE CHANGES.

Ⓓ SIDEWALK WIDTH SHALL NOT INCLUDE 6" CONCRETE CURB. THE DESIRABLE SIDEWALK CROSS SLOPE IS 1.5 %, ABSOLUTE MAXIMUM IS 2.0%.

Ⓔ DRAINAGE STRUCTURES SHALL NOT BE PLACED IN THE CROSSWALK OR IN FRONT OF THE CURB RAMP.

Ⓕ TURNING SPACE \ CLEAR SPACE:

CLEAR SPACE BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE 4' (MIN.) BY 4' (MIN.) SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.

TURNING SPACE MUST BE PROVIDED AT THE TOP OF PERPENDICULAR CURB RAMPS. THE TURNING SPACE MUST BE 4' (MIN.) BY 4' (MIN.), AND IS PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF THE SIDEWALK, THE TURNING SPACE MUST BE 4' (MIN.) BY 5' (MIN.), WITH THE 5' DIMENSION PROVIDED IN THE DIRECTION OF THE RAMP RUN.

FOR PARALLEL CURB RAMPS, A TURNING SPACE 4' (MIN.) BY 4' (MIN.) SHALL BE PROVIDED AT THE BOTTOM OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. IF THE TURNING SPACE IS CONSTRAINED ON 2 OR MORE SIDES, THE TURNING SPACE SHALL 4' (MIN.) BY 5' (MIN.). THE 5' DIMENSION SHALL BE PROVIDED IN THE DIRECTION OF THE PEDESTRIAN STREET CROSSING.

Ⓖ GRADE BREAKS:

GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMP RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE CURB RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF CURB RAMP RUNS AND TURNING SPACES. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.

WHERE THE END OF BOTTOM GRADE BREAK ARE BEHIND THE BACK OF CURB AND THE DISTANCE FROM EITHER END OF THE BOTTOM GRADE BREAK TO THE BACK OF CURB IS 5' OR LESS, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE CURB RAMP RUN WITHIN ONE DOME SPACING OF THE BOTTOM GRADE BREAK.

Ⓗ PEDESTRIAN SIGNAL PUSHBUTTON:

WHERE PEDESTRIAN SIGNALS ARE PROVIDED AT PEDESTRIAN STREET CROSSINGS, THEY SHALL INCLUDE ACCESSIBLE PEDESTRIAN SIGNALS AND POLE\PEDESTRIAN PUSHBUTTONS COMPLYING WITH SECTIONS 4E.08 THROUGH 4E.13 OF THE MUTCD. FOR DETAILS OF THE PLACING OF PEDESTRIAN SIGNAL PUSHBUTTONS SEE TDOT TRAFFIC DESIGN MANUAL.

WHEN TWO PEDESTRIAN PUSHBUTTONS ARE ON ONE CORNER THEY WILL BE SEPARATED BY 10 FEET.

Ⓘ PAYMENT:

COST OF CURB AND GUTTER TO BE INCLUDED IN THE PRICE OF ITEM NO. 702-01, CONCRETE CURB, PER C. Y. OR ITEM NO. 702-03, CONCRETE COMBINED CURB & GUTTER, PER C. Y.

NEW CURB RAMPS:
ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN NEWLY CONSTRUCTED SIDEWALK AREAS, SHALL BE PAID BY ITEM NO. 701-02.03, CONCRETE CURB RAMP, PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR CONSTRUCTION OF THE CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

CURB RAMPS (RETROFIT):
ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN EXISTING SIDEWALK AREAS, REMOVAL OF THE EXISTING SIDEWALK, AND ADJUSTMENT OF GUTTER PAN SLOPE, SHALL BE PAID BY ITEM NO. 701-02.01, CONCRETE CURB RAMP (RETROFIT), PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR INSTALLATION OF CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

Ⓙ DETECTABLE WARNING SURFACE(S) SHALL COVER ENTIRE RADIUS WITHIN RAMP AND SHALL EXTEND TO THE CROSSWALK PAVEMENT MARKINGS ON EITHER SIDE.

(Replaced Std Dwg RP-H-9)

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

CURB RAMPS IN CURVE BI-DIRECTIONAL DUAL CROSSING

01-07-2019 | MM-CR-7

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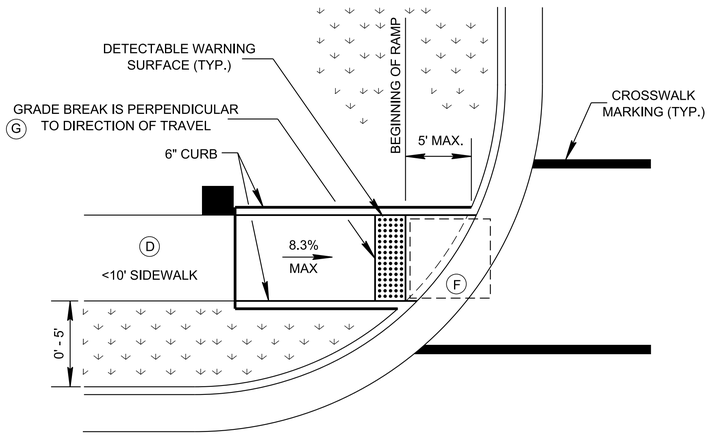
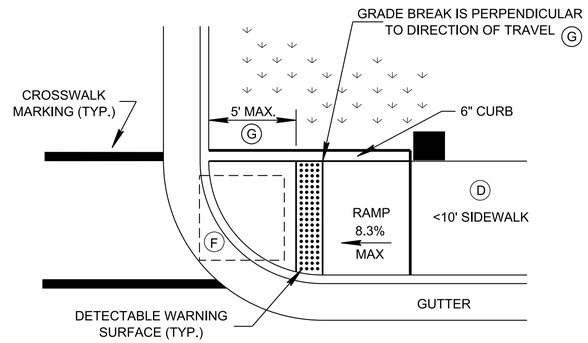
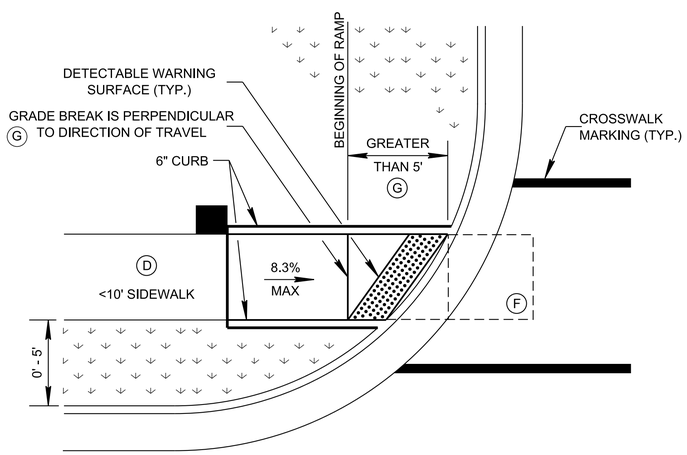


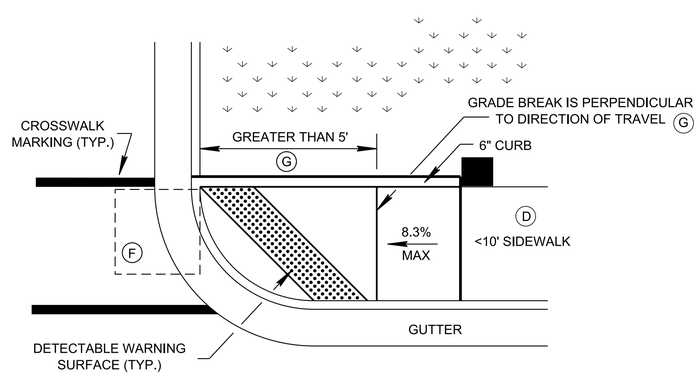
DETAIL A
MONO-DIRECTIONAL PERPENDICULAR CURB RAMP WITH GRASS STRIP



DETAIL B
MONO-DIRECTIONAL PERPENDICULAR CURB RAMP WITHOUT GRASS STRIP



DETAIL C
MONO-DIRECTIONAL PERPENDICULAR CURB RAMP WITH GRASS STRIP AND GRADE BREAK > 5'



DETAIL D
MONO-DIRECTIONAL PERPENDICULAR CURB RAMP WITH GRASS STRIP AND GRADE BREAK > 5'

LEGEND

■ DENOTES: APPROXIMATE PEDESTRIAN POLE/PUSHBUTTON LOCATION FOR SIGNALIZED INTERSECTIONS

GENERAL NOTES

(A) FOR DETECTABLE WARNING SURFACE DETAILS SEE STD. DWG. MM-CR-1. FOR ADDITIONAL DETAILS AND OTHER INFORMATION FOR PERPENDICULAR CURB RAMPS NOT SHOWN ON THIS DRAWING SEE STD. DWG. MM-CR-2 AND FOR PARALLEL CURB RAMPS SEE STD. DWG. MM-CR-3. FOR CROSSWALK MARKING DETAILS SEE STD. DWG. T-M-4.

(B) IF PERPENDICULAR CURB RAMPS AND TURNING SPACE CANNOT BE CONSTRUCTED DUE TO LIMITED RIGHT-OF-WAY, USE PARALLEL CURB RAMP INSTEAD.

(C) CARE SHALL BE TAKEN ON ALL ROADWAY CURB RAMPS AT INTERSECTIONS WITH SIDEWALK AND CURB RAMPS TO ENSURE A UNIFORM GRADE AROUND THEM. THE ROADWAY CURB RAMP GRADE SHALL BE FREE OF SAGS AND SHORT GRADE CHANGES.

(D) SIDEWALK WIDTH SHALL NOT INCLUDE 6" CONCRETE CURB. THE DESIRABLE SIDEWALK CROSS SLOPE IS 1.5 %, ABSOLUTE MAXIMUM IS 2.0%.

(E) DRAINAGE STRUCTURES SHALL NOT BE PLACED IN THE CROSSWALK OR IN FRONT OF THE CURB RAMP.

(F) TURNING SPACE \ CLEAR SPACE:

CLEAR SPACE BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE 4' (MIN.) BY 4' (MIN.) SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.

TURNING SPACE MUST BE PROVIDED AT THE TOP OF PERPENDICULAR CURB RAMPS. THE TURNING SPACE MUST BE 4' (MIN.) BY 4' (MIN.), AND IS PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF THE SIDEWALK, THE TURNING SPACE MUST BE 4' (MIN.) BY 5' (MIN.), WITH THE 5' DIMENSION PROVIDED IN THE DIRECTION OF THE RAMP RUN.

FOR PARALLEL CURB RAMPS, A TURNING SPACE 4' (MIN.) BY 4' (MIN.) SHALL BE PROVIDED AT THE BOTTOM OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. IF THE TURNING SPACE IS CONSTRAINED ON 2 OR MORE SIDES, THE TURNING SPACE SHALL 4' (MIN.) BY 5' (MIN.). THE 5' DIMENSION SHALL BE PROVIDED IN THE DIRECTION OF THE PEDESTRIAN STREET CROSSING.

(G) GRADE BREAKS:

GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMP RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE CURB RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF CURB RAMP RUNS AND TURNING SPACES. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.

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(H) PEDESTRIAN SIGNAL PUSHBUTTON:

WHERE PEDESTRIAN SIGNALS ARE PROVIDED AT PEDESTRIAN STREET CROSSINGS, THEY SHALL INCLUDE ACCESSIBLE PEDESTRIAN SIGNALS AND POLE\PEDESTRIAN PUSHBUTTONS COMPLYING WITH SECTIONS 4E.08 THROUGH 4E.13 OF THE MUTCD. FOR DETAILS OF THE PLACING OF PEDESTRIAN SIGNAL PUSHBUTTONS SEE TDOT TRAFFIC DESIGN MANUAL.

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(I) PAYMENT:

COST OF CURB AND GUTTER TO BE INCLUDED IN THE PRICE OF ITEM NO. 702-01, CONCRETE CURB, PER C. Y. OR ITEM NO. 702-03, CONCRETE COMBINED CURB & GUTTER, PER C. Y.

NEW CURB RAMPS:
ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN NEWLY CONSTRUCTED SIDEWALK AREAS, SHALL BE PAID BY ITEM NO. 701-02.03, CONCRETE CURB RAMP, PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR CONSTRUCTION OF THE CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

CURB RAMPS (RETROFIT):
ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN EXISTING SIDEWALK AREAS, REMOVAL OF THE EXISTING SIDEWALK, AND ADJUSTMENT OF GUTTER PAN SLOPE, SHALL BE PAID BY ITEM NO. 701-02.01, CONCRETE CURB RAMP (RETROFIT), PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR INSTALLATION OF CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

(J) THIS DRAWING CAN BE USED WHERE SIDEWALK WIDTHS ARE LESS THAN 10' WIDE AND RAMP IS LOCATED ANYWHERE WITHIN A CURVED SECTION OF SIDEWALK.

(Replaced Std Dwg RP-H-10)

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

MONO-DIRECTIONAL SINGLE CROSSWALK CURB RAMP DETAILS

01-07-2019 | MM-CR-8

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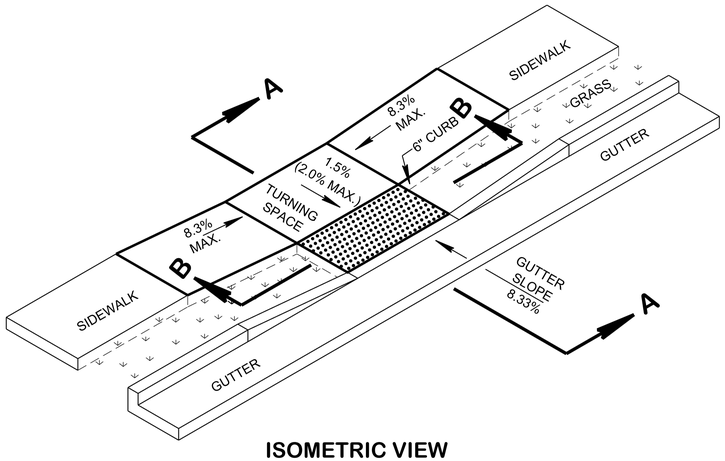

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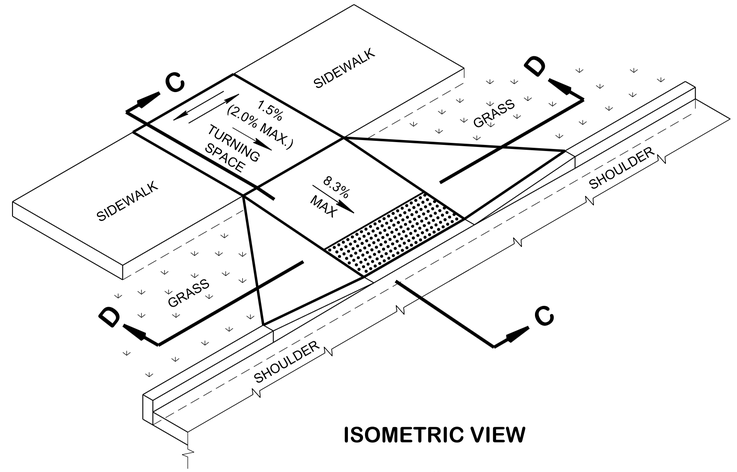
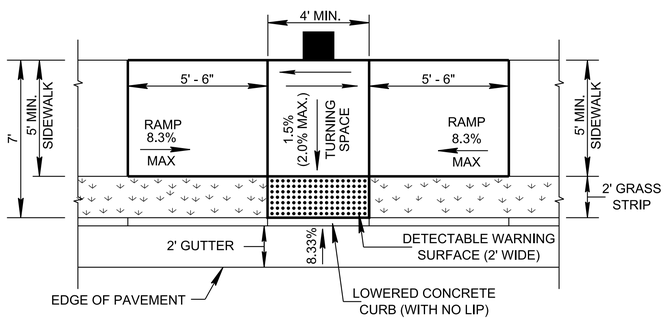
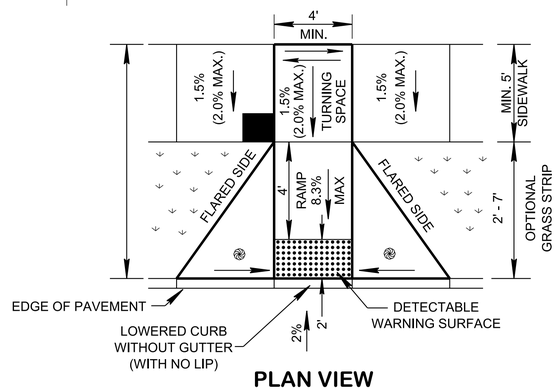


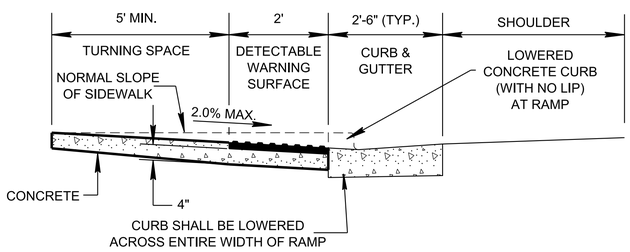
ISOMETRIC VIEW



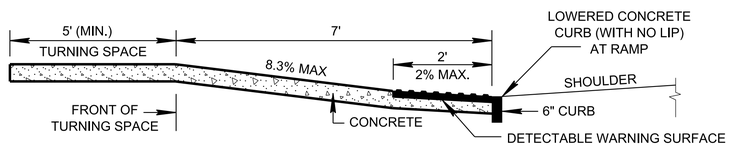
PLAN VIEW



PLAN VIEW

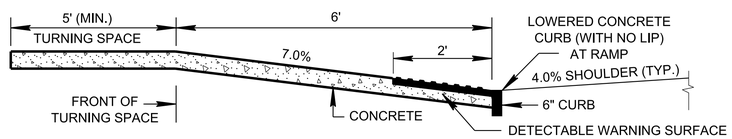


CROSS SECTION A-A



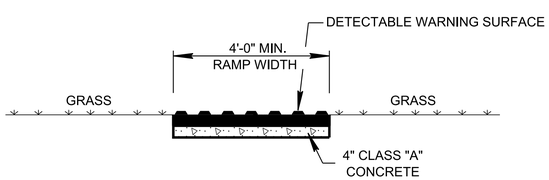
CROSS SECTION C-C

THE ALGEBRAIC DIFFERENCE IN GRADE AT THE CURB RAMP/STREET INTERFACE SHALL NOT EXCEED 11%.



ALTERNATIVE CROSS SECTION C-C

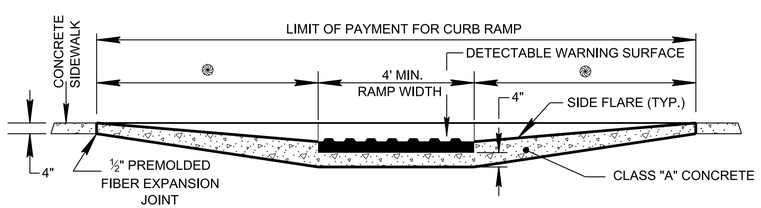
THE ALGEBRAIC DIFFERENCE IN GRADE AT THE CURB RAMP/STREET INTERFACE SHALL NOT EXCEED 11%.



CROSS-SECTION B-B

COMBINATION CURB RAMP

COMBINATION CURB RAMP COMBINE PARALLEL AND PERPENDICULAR CURB RAMPS INTO ONE.



CROSS-SECTION D-D

PERPENDICULAR CURB RAMP WITHOUT GUTTER PAN

LEGEND

DIMENSION VARIES RELATIVE TO LONGITUDINAL ROADWAY GRADE, 8.3% DESIRABLE (10.0% MAX.)

DENOTES: APPROXIMATE PEDESTRIAN POLE/PUSHBUTTON LOCATION FOR SIGNALIZED INTERSECTIONS

(A) FOR DETECTABLE WARNING SURFACE DETAILS SEE STD. DWG. MM-CR-1. FOR ADDITIONAL DETAILS AND OTHER INFORMATION FOR PERPENDICULAR CURB RAMPS NOT SHOWN ON THIS DRAWING SEE STD. DWG. MM-CR-2 AND FOR PARALLEL CURB RAMPS SEE STD. DWG. MM-CR-3. FOR CROSSWALK MARKING DETAILS SEE STD. DWG. T-M-4.

(B) IF PERPENDICULAR CURB RAMPS AND TURNING SPACE CANNOT BE CONSTRUCTED DUE TO LIMITED RIGHT-OF-WAY, USE PARALLEL OR COMBINATION CURB RAMP INSTEAD.

(C) CARE SHALL BE TAKEN ON ALL ROADWAY CURB RAMPS AT INTERSECTIONS WITH SIDEWALK AND CURB RAMPS TO ENSURE A UNIFORM GRADE AROUND THEM. THE ROADWAY CURB RAMP GRADE SHALL BE FREE OF SAGS AND SHORT GRADE CHANGES.

(D) SIDEWALK WIDTH SHALL NOT INCLUDE 6" CONCRETE CURB. THE DESIRABLE SIDEWALK CROSS SLOPE IS 1.5 %, ABSOLUTE MAXIMUM IS 2.0%.

(E) DRAINAGE STRUCTURES SHALL NOT BE PLACED IN THE CROSSWALK OR IN FRONT OF THE CURB RAMP.

(F) TURNING SPACE \ CLEAR SPACE:

CLEAR SPACE BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE 4' (MIN.) BY 4' (MIN.) SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.

TURNING SPACE MUST BE PROVIDED AT THE TOP OF PERPENDICULAR CURB RAMPS. THE TURNING SPACE MUST BE 4' (MIN.) BY 4' (MIN.), AND IS PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF THE SIDEWALK, THE TURNING SPACE MUST BE 4' (MIN.) BY 5' (MIN.), WITH THE 5' DIMENSION PROVIDED IN THE DIRECTION OF THE RAMP RUN.

FOR PARALLEL CURB RAMPS, A TURNING SPACE 4' (MIN.) BY 4' (MIN.) SHALL BE PROVIDED AT THE BOTTOM OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. IF THE TURNING SPACE IS CONSTRAINED ON 2 OR MORE SIDES, THE TURNING SPACE SHALL 4' (MIN.) BY 5' (MIN.). THE 5' DIMENSION SHALL BE PROVIDED IN THE DIRECTION OF THE PEDESTRIAN STREET CROSSING.

(G) GRADE BREAKS:

GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMP RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE CURB RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF CURB RAMP RUNS AND TURNING SPACES. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.

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(H) PEDESTRIAN SIGNAL PUSHBUTTON:

WHERE PEDESTRIAN SIGNALS ARE PROVIDED AT PEDESTRIAN STREET CROSSINGS, THEY SHALL INCLUDE ACCESSIBLE PEDESTRIAN SIGNALS AND POLE\PEDESTRIAN PUSHBUTTONS COMPLYING WITH SECTIONS 4E.08 THROUGH 4E.13 OF THE MUTCD. FOR DETAILS OF THE PLACING OF PEDESTRIAN SIGNAL PUSHBUTTONS SEE TDOT TRAFFIC DESIGN MANUAL.

WHEN TWO PEDESTRIAN PUSHBUTTONS ARE ON ONE CORNER THEY WILL BE SEPARATED BY 10 FEET.

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NEW CURB RAMPS:
ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN NEWLY CONSTRUCTED SIDEWALK AREAS, SHALL BE PAID BY ITEM NO. 701-02.03, CONCRETE CURB RAMP, PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR CONSTRUCTION OF THE CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

CURB RAMPS (RETROFIT):
ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN EXISTING SIDEWALK AREAS, REMOVAL OF THE EXISTING SIDEWALK, AND ADJUSTMENT OF GUTTER PAN SLOPE, SHALL BE PAID BY ITEM NO. 701-02.01, CONCRETE CURB RAMP (RETROFIT), PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR INSTALLATION OF CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

(J) TRANSITION GUTTER CROSS SLOPE FROM NORMAL SLOPE TO 5% SIMILAR TO SUPERELEVATION TRANSITION AREAS. MATCH GUTTER TRANSITION TO RAMP FLARES FOR PERPENDICULAR CURB RAMP (TYPICAL 5') OR RAMP AREA FOR COMBINATION CURB RAMP (TYPICAL 5'-6").

(Replaced Std Dwg RP-H-11)

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

ALTERNATIVE CURB RAMP DETAILS

01-07-2019 | MM-CR-9

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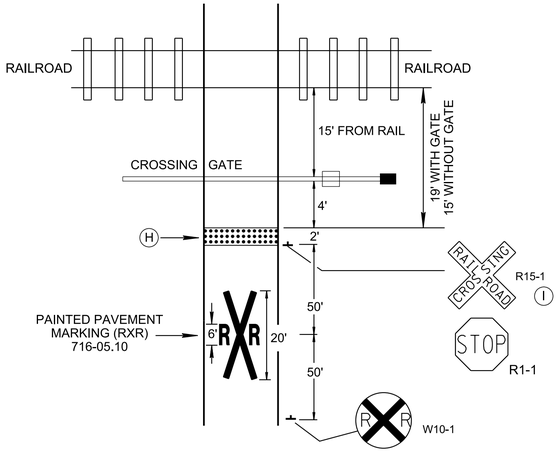
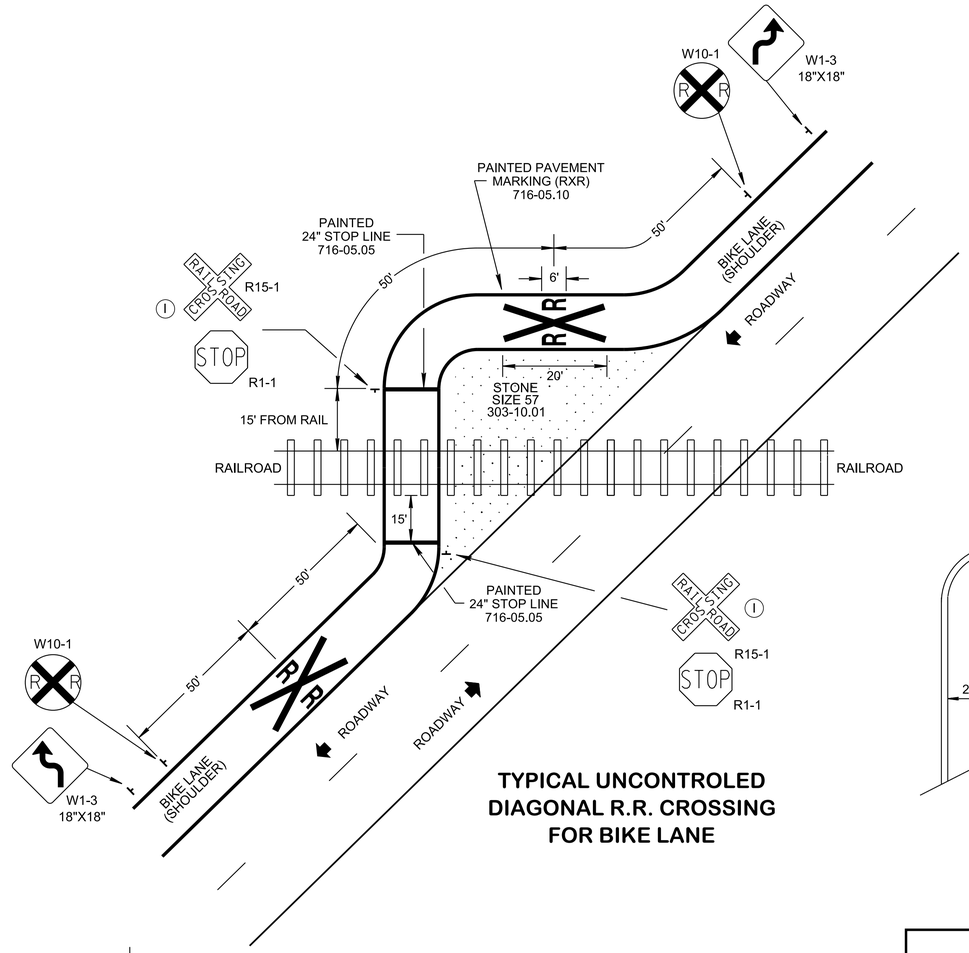
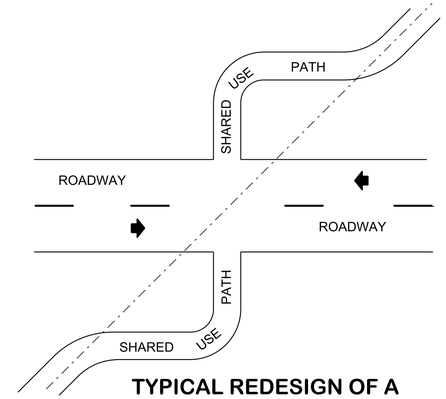


PERPENDICULAR RAILROAD CROSSING FOR SHARED-USE PATH

TYPICAL FOR BOTH SIDES

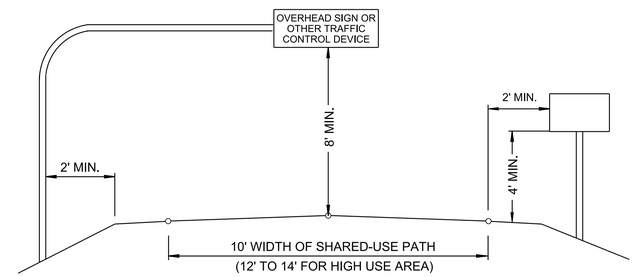


TYPICAL UNCONTROLED DIAGONAL R.R. CROSSING FOR BIKE LANE



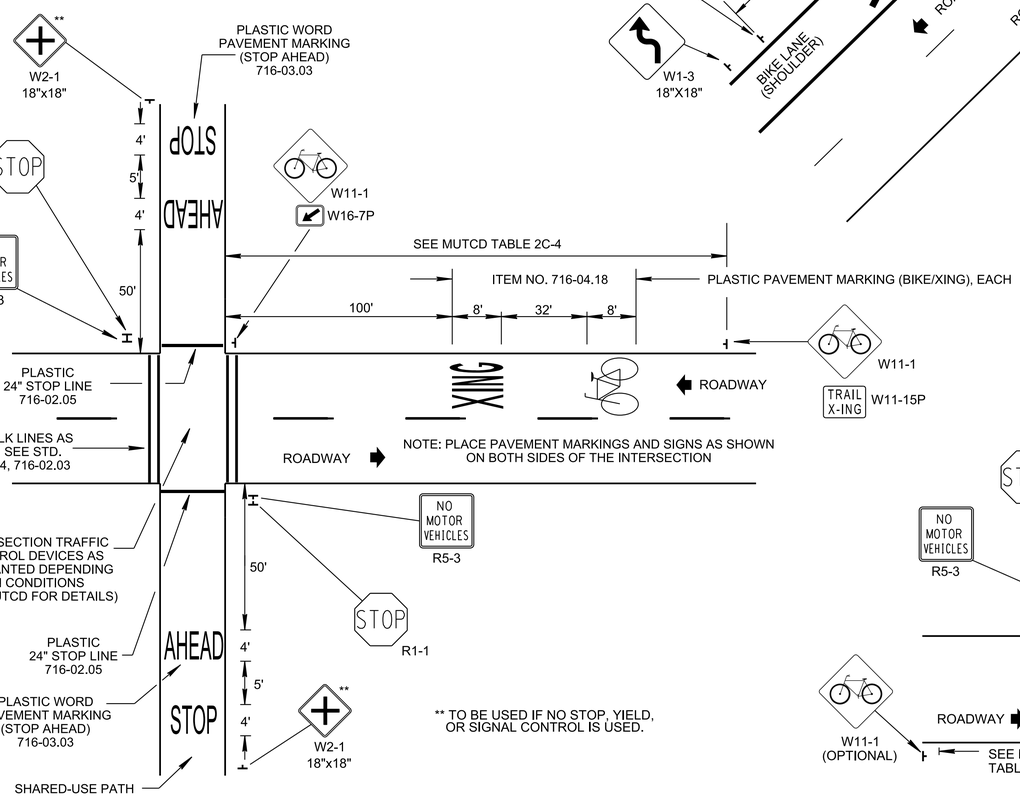
TYPICAL REDESIGN OF A DIAGONAL ROAD CROSSING

SEE BEGINNING AND END OF A DESIGNATED BICYCLE ROUTE ON A SHARED-USE PATH DETAIL FOR SIGN PLACEMENT AND PAVEMENT MARKING DETAILS.

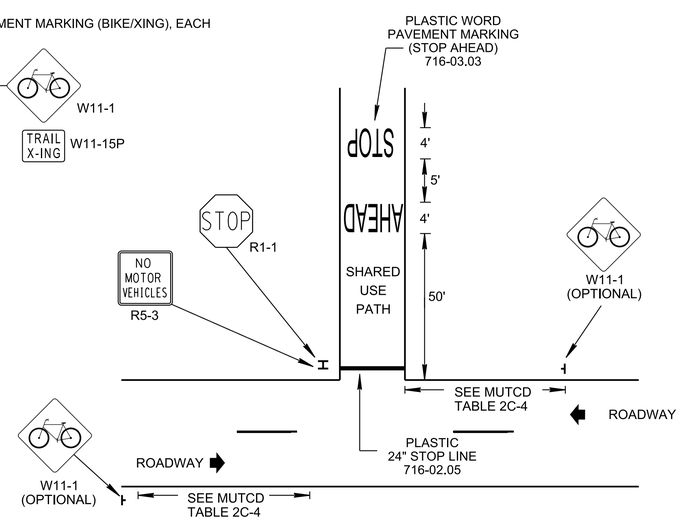


SIGN PLACEMENT ON SHARED-USE PATHS

(SEE MM-TS-3 FOR TYPICAL CROSS SECTION DETAILS)



ROADWAY CROSSING FOR SHARED-USE PATH



BEGINNING AND END OF A DESIGNATED BICYCLE ROUTE ON A SHARED-USE PATH

GENERAL NOTES

(A) WHEN OVERHEAD SIGNS ARE USED ON SHARED-USE PATHS, THE CLEARANCE FROM THE BOTTOM EDGE OF THE SIGN TO THE PATH SURFACE, DIRECTLY UNDER THE SIGN SHALL BE A MINIMUM OF 8 FEET.

(B) WHEN PLACEMENT OF STOP OR YIELD SIGNS IS CONSIDERED, PRIORITY AT SHARED-USE PATHS/ROADWAY INTERSECTION SHOULD BE ASSIGNED WITH CONSIDERATION OF THE FOLLOWING:
1. RELATIVE SPEEDS OF SHARED-USE PATH AND ROADWAY USERS;
2. RELATIVE VOLUMES OF SHARED-USE PATH AND ROADWAY TRAFFIC; AND
3. RELATIVE IMPORTANCE OF SHARED-USE PATH AND ROADWAY.

(C) WHEN ENGINEERING JUDGMENT DETERMINES THAT THE VISIBILITY OF THE INTERSECTION IS LIMITED ON THE SHARED-USE PATH APPROACH, INTERSECTION WARNING SIGNS SHOULD BE USED. INTERSECTION WARNING SIGNS SHOULD NOT BE USED WHERE THE SHARED-USE PATH APPROACH TO THE INTERSECTION IS CONTROLLED BY A STOP SIGN, YIELD SIGN, OR A TRAFFIC CONTROL SIGNAL.

(D) A SOLID WHITE LINE MAY BE USED ON SHARED-USE PATHS TO SEPARATE DIFFERENT TYPES OF USERS. THE R9-7 SIGN MAY BE USED TO SUPPLEMENT THE SOLID WHITE LINE. SMALLER SIZE LETTERS AND SYMBOLS MAY BE USED ON SHARED-USE PATHS. FIXED OBJECTS ADJACENT TO SHARED-USE PATHS MAY BE MARKED WITH OBJECT MARKERS.

(E) THE MINIMUM SIGN SIZES FOR SHARED-USE PATHS, SHALL BE THOSE SHOWN IN TABLE 9B-1 IN MUTCD, PART 9 AND SHALL BE USED ONLY FOR SIGNS INSTALLED SPECIFICALLY FOR BICYCLE TRAFFIC APPLICATIONS. THE MINIMUM SIGN SIZES FOR BICYCLE FACILITIES SHALL NOT BE USED FOR SIGNS THAT ARE PLACED IN A LOCATION THAT WOULD HAVE ANY APPLICATION TO OTHER VEHICLES.

(F) SEE STD. DWG. MM-PM-3 FOR OTHER SIGNING AND PAVEMENT MARKINGS.

(G) IF ACTIVE WARNING DEVICES ARE AT THE ROADWAY CROSSING, THEN ACTIVE DEVICES SHOULD ALSO BE AT THE BIKE LANE.

(H) THE TYPICAL FOR PERPENDICULAR RAILROAD CROSSING FOR SHARED-USE PATH THE DETECTABLE WARNING SURFACE SHALL BE PLACED ACROSS THE FULL WIDTH OF THE SHARED-USE PATH AT RAILROAD GRADE CROSSINGS. ALL COST OF FURNISHING AND INSTALLATION THE DETECTABLE WARNING SURFACE SHALL BE INCLUDED IN OTHER ITEMS OF CONSTRUCTION OF THE SHARED-USE PATH.

(I) RAILROAD CROSS-BUCK SIGN AND SUPPORT SHALL BE INSTALLED IN ACCORDANCE WITH STD. DWG. T-S-16. REFER TO STD. DWG. T-S-16A AT PASSIVE RAILROAD GRADE CROSSINGS FOR STOP SIGN OR YIELD SIGN INSTALLATION.

(Replaced Std Dwg T-M-10)

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

SIGNING AND PAVEMENT MARKINGS AT INTERSECTION CROSSINGS FOR SHARED-USE PATHS

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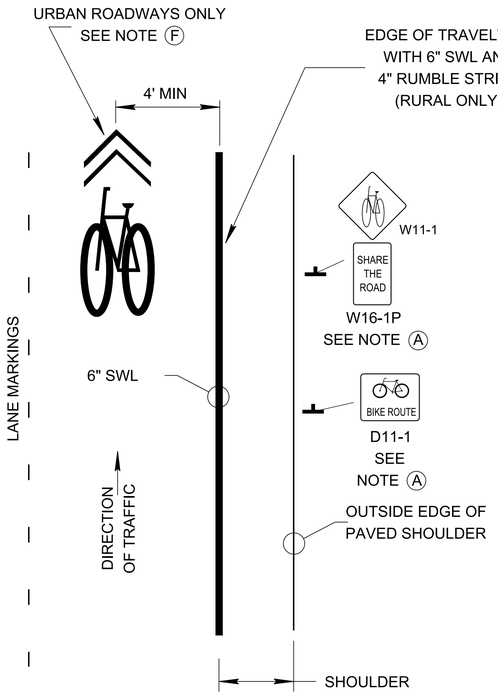
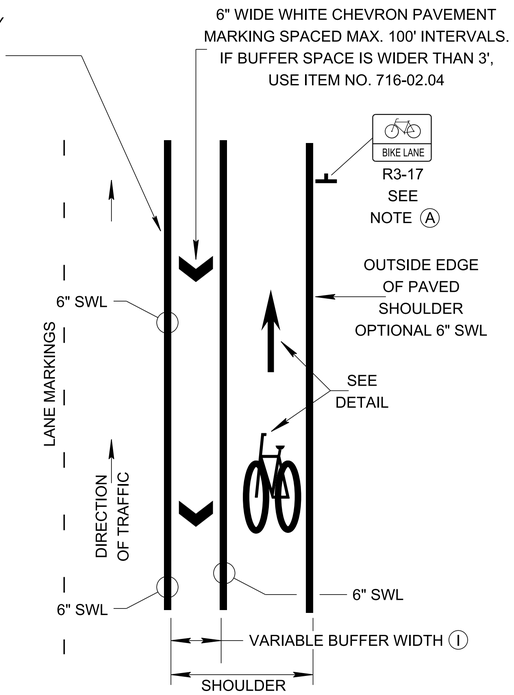
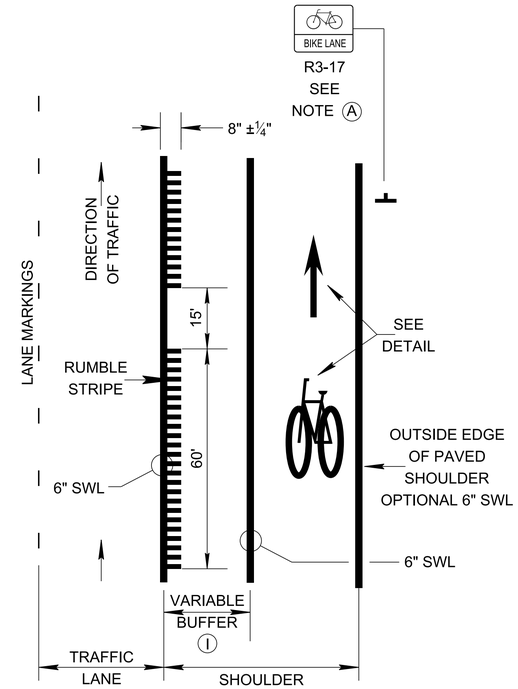


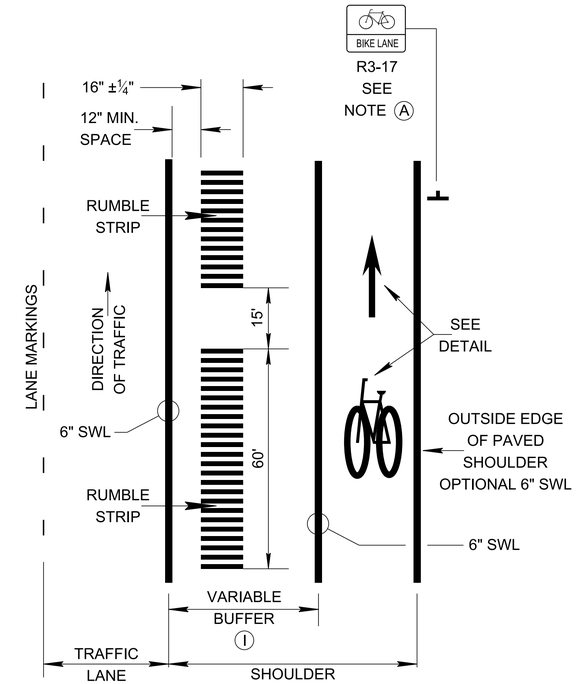
BIKE ROUTE
MARKING AND SIGN DETAILS



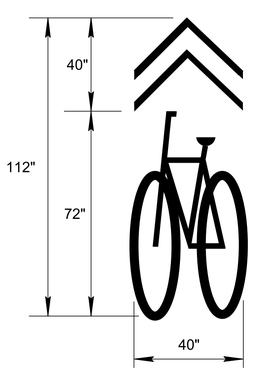
TYPICAL BIKE LANE
ON MAJOR SUBURBAN ROADWAY



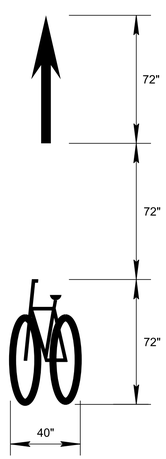
TYPICAL BIKE LANE/RUMBLE
STRIPE DETAIL



TYPICAL BIKE LANE/RUMBLE
STRIP DETAIL



TYPICAL PAVEMENT MARKING
FOR BICYCLE ROUTES
ITEM NO. 716-04.15
SEE NOTE F



TYPICAL PAVEMENT MARKING
FOR BICYCLE LANES
ITEM NO. 716-04.13
NOTE: SPACED AT INTERVALS NOT GREATER THAN 1000 FEET

GENERAL NOTES

A. SIGNS SHOULD BE PLACED APPROXIMATELY EVERY 0.25 MILE, AT EVERY TURN, AND AT ALL SIGNALIZED INTERSECTIONS. WHERE MULTIPLE SIDE ROADS/TURNS EXIST, IT IS NOT REQUIRED TO LOCATE SIGNS AT EVERY TURN; HOWEVER, SIGN SPACING SHOULD NOT EXCEED 0.25 MILE. SIGN SPACING SHOULD NOT EXCEED ONE MILE ON RURAL ROADS.

B. SEE STD. DWG. T-M-15A AND T-M-16 IF RUMBLE STRIP OR RUMBLE STRIPE IS PROPOSED IN CONJUNCTION WITH BIKE ROUTE.

C. BIKE LANES AND BIKE ROUTES ARE NOT PERMITTED ON ACCESS CONTROLLED FACILITIES.

D. IF BIKE LANE IS PROPOSED ON PAVED SHOULDER, RUMBLE STRIPS SHOULD NOT BE USED WHEN THEIR INSTALLATION WOULD LEAVE A CLEAR SHOULDER PATHWAY LESS THAN 4' WIDE (OR LESS THAN 5' WIDE IF THERE IS AN OBSTRUCTION SUCH AS A CURB OR GUARDRAIL) TO THE RIGHT OF THE RUMBLE STRIP FOR BICYCLE USE.

E. SEE MUTCD SECTIONS 9B.04, 9B.06, 9B.18, 9B.19, 9B.20, 9C.04 AND 9C.07, AND MUTCD TABLE 9B-1 FOR ADDITIONAL SIGNING AND PAVEMENT MARKING INFORMATION.

F. SHARED BIKE LANE MARKINGS SHOULD NOT BE PLACED ON ROADWAYS THAT HAVE A SPEED LIMIT ABOVE 35 MPH. MARKING TO BE PLACED IMMEDIATELY AFTER AN INTERSECTION AND SPACED AT INTERVALS NOT GREATER THAN 250 FEET.

G. IF USED, RUMBLE STRIP TO BE PAID FOR UNDER ITEM:
411-12.02, SCORING SHOULDERS (NON-CONTINUOUS) (16IN WIDTH), PER LINEAR MILE.

AND RUMBLE STRIPE TO BE PAID FOR UNDER ITEM:
411-12.03, SCORING FOR RUMBLE STRIPE (NON-CONTINUOUS) (8IN WIDTH), PER LINEAR MILE.

H. PAVEMENT MARKINGS FOR BICYCLE LANES OR ROUTES TO BE PAID FOR UNDER ITEMS:
716-04.13, PLASTIC PAVEMENT MARKING (BIKELANE SYMBOL & ARROW), PER EACH.
716-04.15, PLASTIC PAVEMENT MARKING-BIKE SYMBOL/ARROW SHARED, PER EACH.

I. ON MAJOR ROADWAYS APPROACHING URBAN AREAS, A BUFFERED BIKE LANE MAY BE USED, CONTACT THE TDOT BIKE COORDINATOR FOR GUIDANCE.

J. SEE STD. DWG. MM-PM-3 THRU MM-PM-5 AND MM-TS-1 FOR ADDITIONAL BIKE LANE GUIDANCE.

K. RUMBLES SHOULD NOT TYPICALLY BE INSTALLED AT V < 45 MPH IN URBAN ZONES.

(Replaced Std Dwg T-M-11)

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

SIGNING AND PAVEMENT MARKINGS FOR BICYCLE LANE OR ROUTES

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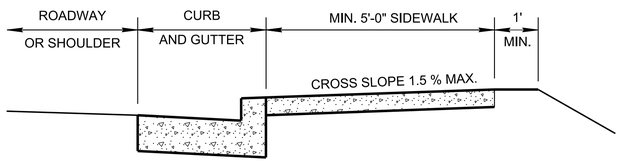
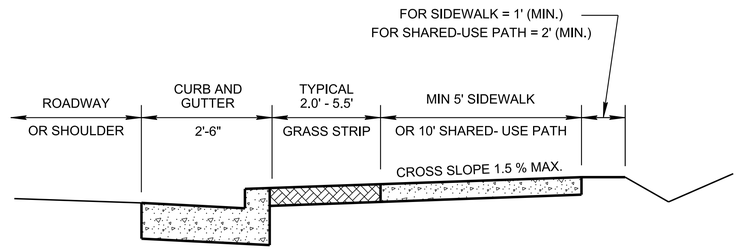
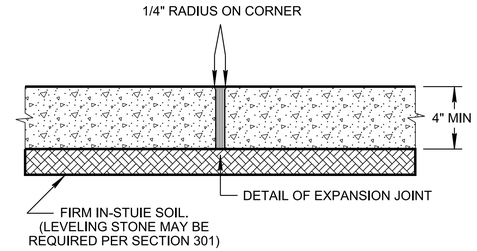


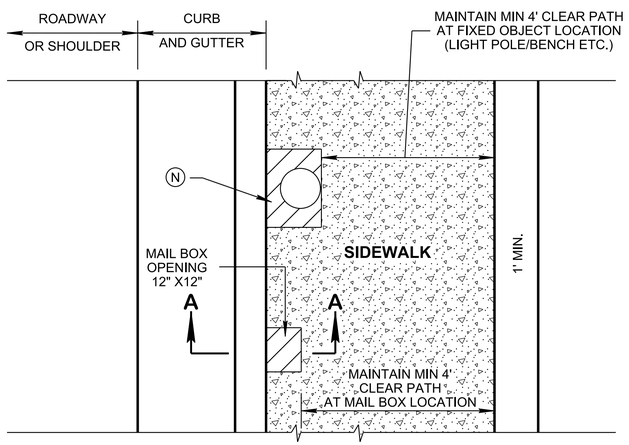
TYPICAL SIDEWALK CROSS SECTION WITHOUT GRASS STRIP



TYPICAL SIDEWALK CROSS SECTION WITH GRASS STRIP

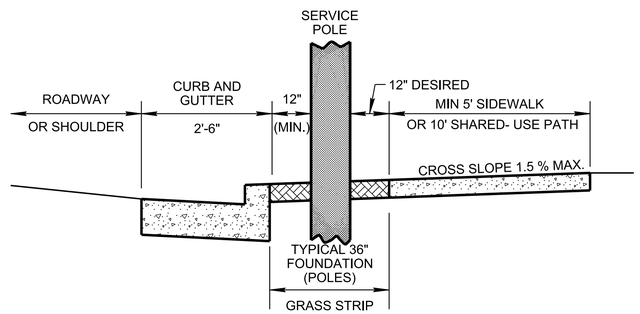


EXPANSION JOINT DETAIL



NOTE: SOME LOCATIONS WHEN THE PLACEMENT OF SERVICE APPURTENANCES OUTSIDE THE PEDESTRIAN FACILITY DUE TO EXTREME SITE CONDITIONS PLACEMENT SHALL PROVE UNINTERRUPTED 4' CLEAR PATH.

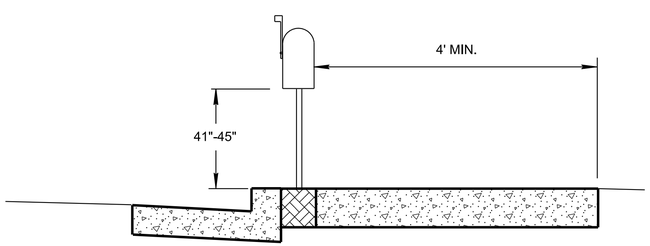
SIDEWALK CONSTRUCTION DETAILS WITHOUT GRASS STRIP PLAN VIEW



NOTE: IF SERVICE POLE IS PLACED IN GRASS STRIP THE POLE SHALL HAVE MIN. 3' OFFSET FROM TRAVELLED LANE. MINIMUM 36" DIAMETER AND 15' DEEP FOUNDATION SPACE SHALL BE EVALUATED TO ELIMINATE CONFLICTS.

SERVICE APPURTENANCE (LARGE SIGNS STRUCTURES, SIGNAL, LUMINARY AND UTILITY POLES 2' DIAMETER OR LARGER) SHALL BE PLACED OUTSIDE THE PEDESTRIAN ACCESSIBLE SPACE, PREFERABLE OUTSIDE THE SIDEWALK AREA AND INSIDE RIGHT-OF-WAY.

TYPICAL SIDEWALK CROSS SECTION WITH GRASS STRIP AND SERVICE APPURTENANCES



SECTION A-A MAIL BOX DETAIL

NOTE: LEAVE 12"X12" OPENING IN SIDEWALK FOR MAIL BOX POST. ORIENT BOXES TO FACE THE DIRECTION OF ONCOMING TRAFFIC. EDGE OF MAIL BOX SHALL NOT OVERHANG BEYOND THE FACE OF THE CURB. NOR SHALL THE MAIL BOX OVERHANG THE SIDEWALK SUCH THAT THE USABLE WIDTH IS LESS THAN 4 FEET.

REFERENCED STANDARD DRAWINGS

SEE T-M-4, FOR CROSS WALK MARKING
SEE MM-CR SERIES FOR CURB RAMP DETAILS
SEE MM-BPR-1, FOR PEDESTRIAN RAIL REQUIREMENTS
SEE MM-SW-2, FOR ALTERNATE DETAILS FOR CONCRETE SIDEWALK (REHABILITATION)
SEE RP-SC-1, FOR 6" SLOPING CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS
SEE RP-VC-10 OR 11, FOR VERTICAL CONCRETE CURB AND CONCRETE CURBS AND GUTTER DETAILS
SEE MM-PM-1 THRU MM-PM-5, FOR BIKE LANE/ROUTE PAVEMENT MARKINGS
SEE S-PL-6, FOR GUARDRAIL PLACEMENT
SEE RP-D-15 & 16 FOR CONCRETE DRIVEWAYS
SEE MM-TS-2 FOR PEDESTRIAN FACILITY LATERAL OFFSETS
SEE MM-TS-3 FOR SHARED USE TYPICAL SECTIONS

GENERAL NOTES

(A) ALWAYS PLACE SIDEWALK AS FAR AS AWAY FROM THE TRAVELLED WAY WHEN POSSIBLE FOR SPECIFICATIONS SEE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION.

(B) WHERE IT BECOMES NECESSARY TO REMOVE PARTS OF EXISTING CONCRETE SIDEWALKS OR RAMPS, THE RESULTING EDGES SHALL BE CUT TO A NEAT LINE, AND ANY OFFSETS IN SUCH LINES SHALL BE MADE OFFSETS IN SUCH LINES SHALL BE MADE AT RIGHT ANGLES.

(C) SIDEWALK WIDTHS DO NOT INCLUDE THE SIX INCH CURB WIDTH OF PROPOSED TOP OF CURB.

(D) DESIRABLE SIDEWALK CROSS SLOPE IS 1.5 %, ABSOLUTE MAXIMUM IS 2.0 %. ALL SIDEWALKS SHALL HAVE A BROOM FINISH AND SHALL BE 4" THICK UNLESS THE PLANS CALL FOR 6" THICKNESS. THE CONCRETE SHALL BE CLASS "A" AT 3000 PSI. ALL COST TO BE INCLUDES IN ITEM NO. 701-01.01,CONCRETE SIDEWALK (4"), S.Y. OR 701-01.02,CONCRETE SIDEWALK (6"), S.Y.

(E) SEE STD. DWG. MM-TS-2 FOR LATERAL OFFSET/ BUFFER GUIDANCE.

(F) EXPANSION JOINTS ARE TO BE PLACED 25 TO 30 FEET APART DEPENDING ON TRANSVERSE JOINT MARKINGS AND NEED TO MATCH CURB EXPANSION JOINT WHERE SIDEWALK IS BUILT DIRECTLY AGAINST CURB, OR AS DIRECTED BY THE ENGINEER WHERE THE PROPOSED SIDEWALK IS IN CONTACT WITH THE STREET RETURNS, ON BUILDING LINES PRODUCED AT STREET INTERSECTIONS, WHERE WALKS LEAD TO HOUSE OR OTHER ENTRANCES AND ANY OTHER LOCATIONS WHERE STRESSES MAY DEVELOP. THE COST OF ALL EXPANSION JOINTS IS TO BE INCLUDED IN THE UNIT PRICE BID FOR THE PROPOSED SIDEWALK.

(G) CONCRETE JOINT MATERIAL TO BE FLUSH WITH THE SIDEWALK SURFACE, HALF INCH AND/OR ONE INCH PREMOLDED FIBER IN ACCORDANCE WITH SECTION 905 OF THE STANDARD SPECIFICATIONS

(H) ONE INCH EXPANSION JOINTS ARE TO BE PLACED WHERE THE PROPOSED SIDEWALK IN CONTACT WITH CIRCULAR CURBS, BUILDINGS AND/OR RETAINING WALLS.

(I) HALF INCH EXPANSION JOINTS ARE TO BE USED AT ALL OTHER LOCATIONS

(J) LONGITUDINAL JOINT MARKINGS WILL NOT BE REQUIRED ON SIDEWALKS 5 FEET LESS IN WIDTH.

(K) ONE LONGITUDINAL JOINT MARKING WILL BE REQUIRED ON SIDEWALKS OVER 5 FEET BUT LESS THAN 9 FEET IN WIDTH.

(L) TWO LONGITUDINAL JOINT MARKINGS WILL BE REQUIRED ON SIDEWALKS OVER 9 FEET BUT LESS THAN 12 FEET IN WIDTH.

(M) TRANSVERSE JOINT MARKINGS ARE TO BE MADE TO FORM BLOCKS AS NEARLY TO SQUARE AS PRACTICAL.

(N) LEAVE SQUARE OPENING IN SIDEWALK. THE LENGTH OF THE SIDE OF THE SQUARE OPENING SHOULD BE EQUAL TO THE DIAMETER OF THE FIXED OBJECT PLUS SIXTEEN INCHES, IT WILL BE BORDERED BY HALF INCH EXPANSION JOINT.

(O) WHEN NEW SIDEWALK IS PLACED ADJACENT TO EXISTING SIDEWALK THE CONTRACTOR SHALL CORRECT ALL ABRUPT CHANGES AND SLOPES TO PROVIDE A SMOOTH TRANSITION FROM THE LIMIT OF CONSTRUCTION TO EXISTING PEDESTRIAN FACILITY.

(Replaced Std Dwg RP-S-7)

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

DETAILS FOR CONCRETE SIDEWALK

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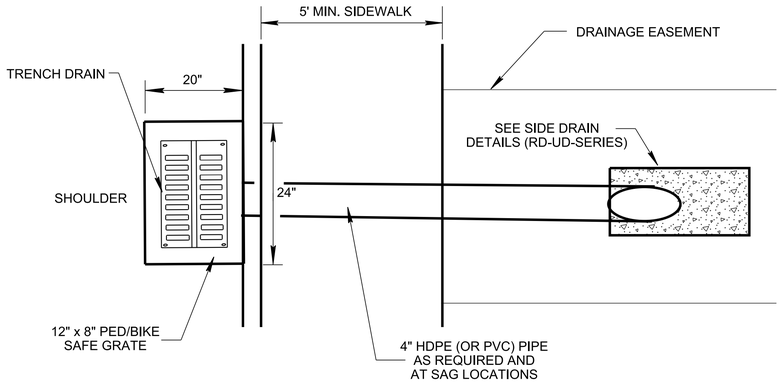
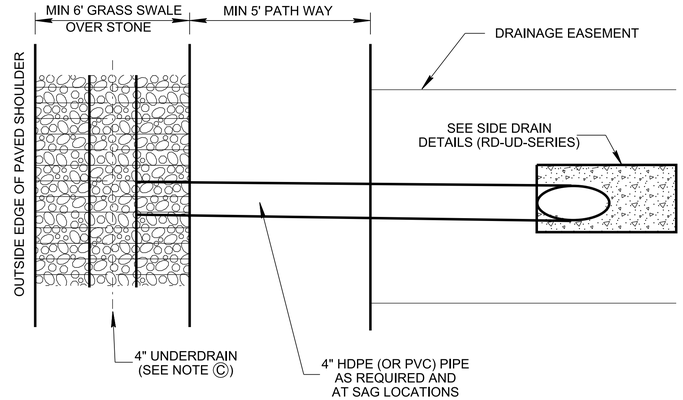
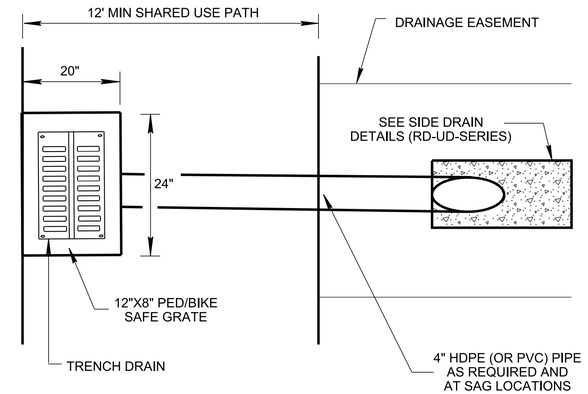


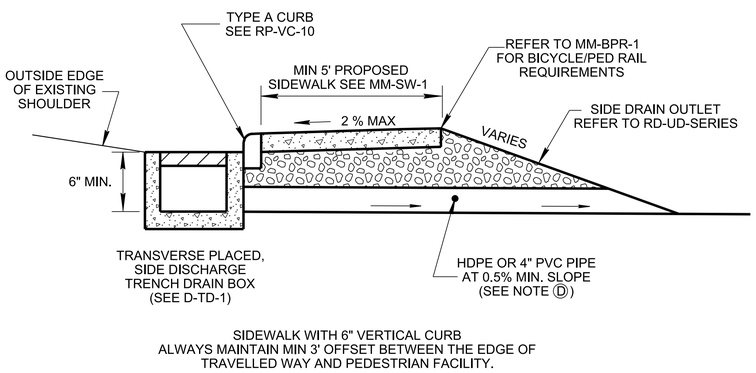
SIDEWALK PLAN VIEW



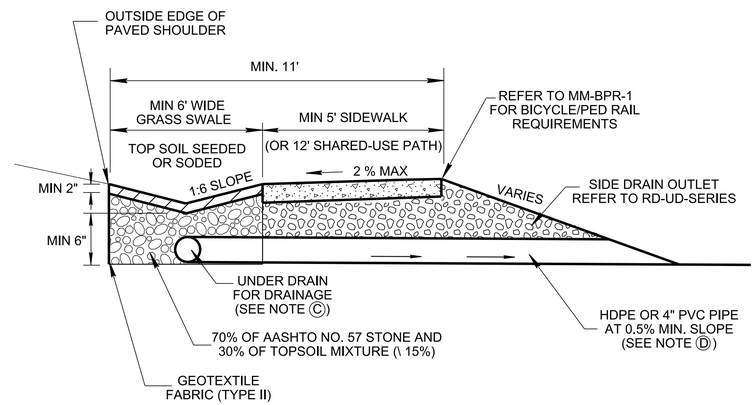
SIDEWALK PLAN VIEW



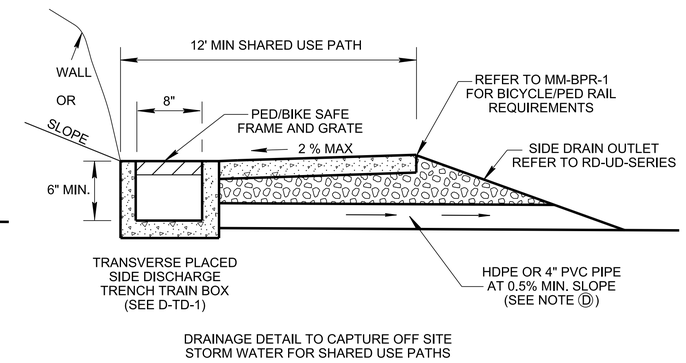
SHARED-USE-PATH PLAN VIEW



SECTION VIEW



SECTION VIEW



SECTION VIEW

LOW-COST PEDESTRIAN FACILITY ALTERNATIVES FOR ROADS AND STREETS WITHOUT CURB AND GUTTER

DRAINAGE GENERAL NOTES

Ⓐ ALTERNATE DRAINAGE DETAILS MAY BE USED AT LOCATIONS WHERE INSTALLING NEW STORM WATER SYSTEM IS NOT FEASIBLE.

Ⓑ PAYMENT FOR TRENCH DRAINS WILL BE MADE UNDER ITEM NUMBER 611-05.01, TRENCH DRAIN PER LINEAR FOOT.

Ⓒ ALL COST FOR TRENCHING, FURNISHING AND INSTALLING THE PIPE AND AGGREGATE FOR THE UNDERDRAIN WITH PIPE WILL BE INCLUDED IN THE BID PRICE FOR ITEM NO. 710-02, AGGREGATE UNDERDRAINS (WITH PIPE) OR ITEM NO. 710-04, FILTER CLOTH UNDERDRAIN (WITH PIPE). THE UNIT OF PAYMENT WILL BE PER LINEAR FOOT.

Ⓓ BACKFILL MATERIAL USED WITH UNDERDRAIN LATERALS ON ALL HIGHWAY SYSTEMS SHALL BE MINERAL AGGREGATE. MINERAL AGGREGATE BACKFILL SHALL MEET REQUIREMENTS OF SUBSECTION 903.05 OF THE STANDARD SPECIFICATIONS FOR CLASS "A" OR CLASS "B" GRADING "D". IT SHALL BE PAID FOR UNDER THE PRICE BID FOR ITEM NO. 710-05, LATERAL UNDERDRAIN PER LINEAR FOOT.

GENERAL NOTES

1. NOT FOR NEW CONSTRUCTION. LOW-COST PEDESTRIAN FACILITY DETAILS MAY BE USED FOR REHABILITATION PROJECTS ONLY.
2. DETAILS MAY BE USED ON LOCAL ROADS AND STREETS WHERE INSTALLING NEW STORM WATER SYSTEM MAY NOT BE POSSIBLE.
3. SEE STD. DWG. MM-SW-1 FOR SIDEWALK DETAILS.
4. SEE STD. DWG. MM-CR SERIES FOR CURB RAMP DETAILS.

(Replaced Std Dwg RP-S-9)

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

ALTERNATE DETAILS FOR CONCRETE SIDEWALK (REHABILITATION)

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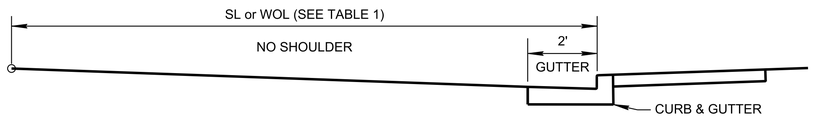
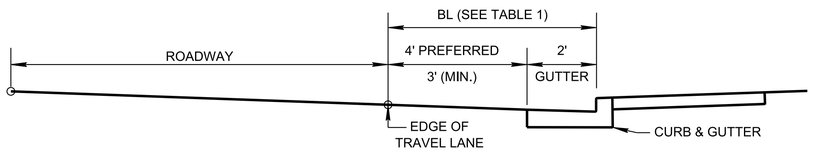
TYPICAL ROADWAY SECTION ELEMENTS TO ACCOMMODATE BIKE FACILITY

REV. 01-07-19: REVISED DIMENSIONS AND DRAWINGS TO ALIGN WITH DESIGN GUIDELINES SECITON 9-500. ADDED TYPICAL FOR SEPARATED BIKE LANE, BUFFER NOTES, TABLE 1 AND 2. REPLACED GENERAL NOTES (2), (3) AND (4). ADDED GENERAL NOTE (5). REDREW SHEET.

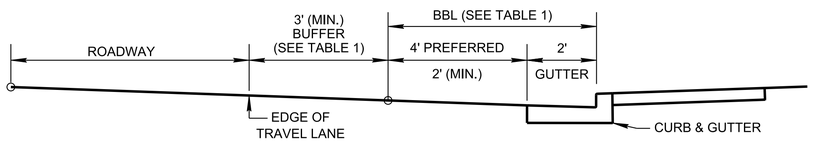
URBAN (CURB & GUTTER)



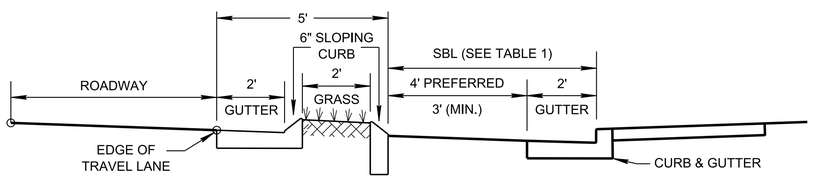
TYPICAL SHARED LANE OR WIDE OUTSIDE LANE STREET



TYPICAL CONVENTIONAL BIKE LANE

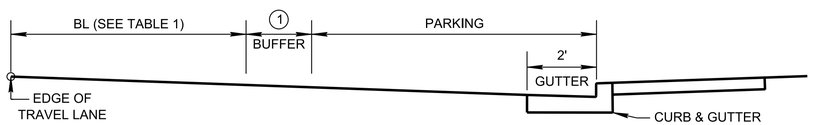


TYPICAL BUFFERED BIKE LANE



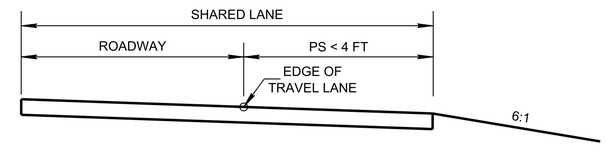
TYPICAL SEPARATED BIKE LANE

(MONO DIRECTIONAL)

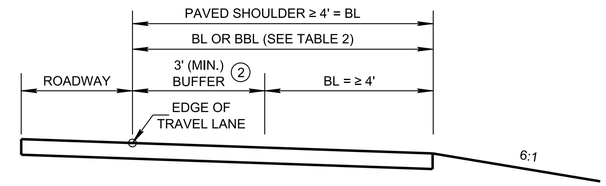


TYPICAL BIKE LANE WITH ON STREET PARKING

RURAL (SHOULDER AND DITCH)



TYPICAL BIKE ACCOMMODATION/ BIKE ROUTE



TYPICAL BIKE LANE

TABLE 2

MINIMUM BICYCLE FACILITY GUIDANCE FOR RURAL (SHOULDER AND DITCH) CROSS SECTIONS (F)

ADT		< 2000	2,000 - 10,000	> 10,000
POSTED SPEED LIMITS (D)	≤ 35 MPH	SL	BL	BL (3)
	40 - 45 MPH	SL	PS ≥ 4 FT = BL (3)	PS ≥ 4 FT = BL (3)
	> 45 MPH	PS ≥ 4 FT = BL (3)	PS ≥ 8 FT = BBL	PS ≥ 8 FT = BBL

SL = SHARED LANE
BL = CONVENTIONAL BIKE LANE WITHOUT BUFFER
PS = PAVED SHOULDER
BBL = BUFFERED BIKE LANE

MIN. 28' PAVED ROADWAY SECTION IS REQUIRED TO ACCOMMODATE BICYCLES ON TWO LANE ROADWAYS.

TABLE 1

MINIMUM BICYCLE FACILITY GUIDANCE FOR URBAN (CURD AND GUTTER) CROSS SECTIONS (F)

ADT		< 2000	2,000 - 10,000	> 10,000
POSTED SPEED LIMITS (D)	≤ 35 MPH	WOL or SL	BL	BL
	40 - 50 MPH	BL (5 FT)	BL (5 FT) or BBL (4 FT ▲)	BL (5 FT) or BBL (4 FT ▲) or SBL (5 FT ▲)
	50 -55 MPH	BBL (4 FT ▲) or SBL (5 FT ▲)	BBL (4 FT ▲) or SBL (5 FT ▲)	BBL (4 FT ▲) or SBL (5 FT ▲)
	> 55 MPH	SUP	SUP	SUP

SL = SHARED LANE
SUP = SHARED-USE PATH
BBL = BUFFERED BIKE LANE
SBL = SEPARATED BIKE LANE
BL = CONVENTIONAL BIKE LANE
WOL = WIDE OUTSIDE LANE (MIN. 14 FT WIDE)

▲ ADD BUFFER A MINIMUM OF 3 FEET IN WIDTH; BUFFERED BIKE LANES ARE PREFERRED WHEN ON-STREET PARKING IS PRESENT REGARDLESS OF THE SPEED.

BUFFER NOTES

(1) BUFFERED BIKE LANES ARE PREFERRED ADJACENT TO ON-STREET PARKING. BUFFER MAY BE ADJACENT TO THE PARKING LANE, TRAVEL LANE, OR A COMBINATION OF THE TWO, DEPENDING ON LOCAL CONDITIONS AND ENGINEERING JUDGEMENT.

(2) THE BIKE LANE SHOULD BE LOCATED AS FAR FROM THE TRAVEL LANE AS THE PAVED SHOULDER WIDTH AND LOCAL CONDITIONS WILL ALLOW. BUFFER TYPICALLY RANGES FROM 3 TO 6 FT. BUFFERS LESS THAN 3 FT. SHOULD BE EVALUATED AND SUPPLEMENTED BY DEVICES SUCH AS GROUND MOUNTED DELINEATORS OR A BARRIER TO IMPROVE SAFETY.

(3) SHOULDERS LESS THAN 8' AND LESS THAN 45 MPH NO MINIMUM BUFFER REQUIRED.

GENERAL NOTES

(A) THE INTENT OF THIS DRAWING IS TO PROVIDE MINIMUM BIKE ACCOMMODATION DESIGN GUIDANCE FOR VARIOUS TYPICAL CONDITIONS. TDOT DESIGN GUIDELINES SECTION 9-500.00 SHOULD BE REFERENCED FOR ADDITIONAL INFORMATION AND GUIDANCE. EXCEEDING THE MINIMUM IS TYPICALLY DESIRABLE.

(B) SEE STD. DWG. MM-PM-1 AND MM-PM-2 FOR PAVEMENT MARKING AND SIGNING.

(C) TABLES 1 AND 2 PROVIDE MINIMUM ACCOMMODATION ALLOWED WITHOUT MULTIMODAL DESIGN DEVIATION APPROVAL. EXCEEDING MINIMUMS IS OFTEN PREFERRED. TYPICAL SECTIONS DEMONSTRATE TYPICAL IMPLEMENTATION OF GUIDANCE.

(D) TYPICALLY ASSUME POSTED SPEED IS 5 MPH LESS THAN DESIGN SPEED.

(E) FOR REFERENCE SEE: AASHTO GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES, 2019.

(F) FOR MONO DIRECTIONAL ONLY.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

BIKE ACCOMMODATION DESIGN GUIDANCE

08-24-2017 | MM-TS-1

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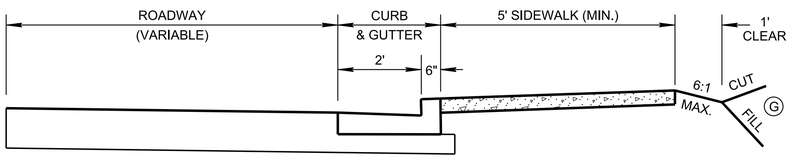
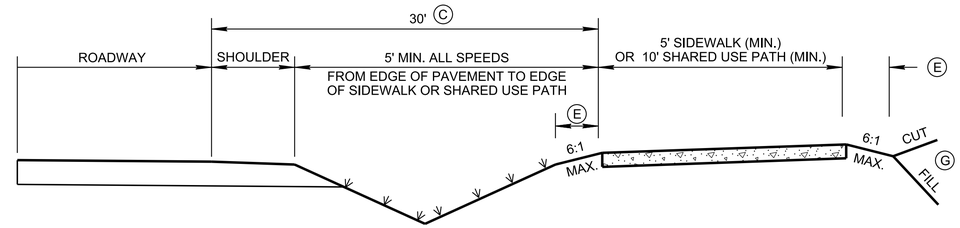
LATERAL OFFSET/BUFFER DETAILS

REV. 01-07-19: REVISED DIMENSIONS TO ALIGN WITH SECTION 9 OF DESIGN GUIDELINES. REVISED DRAWING NAME AND THE GENERAL NOTES. REDREW SHEET.



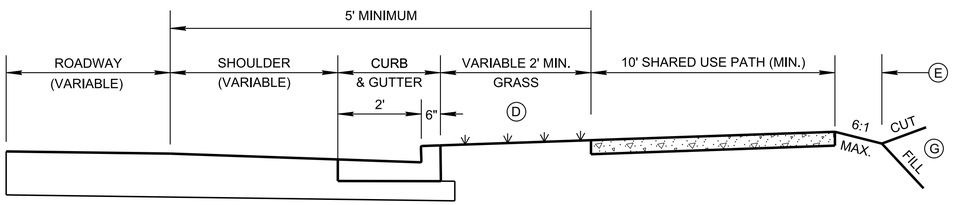
SIDEWALK ADJACENT TO CURB & GUTTER

POSTED SPEEDS ≤ 35 MPH (H)



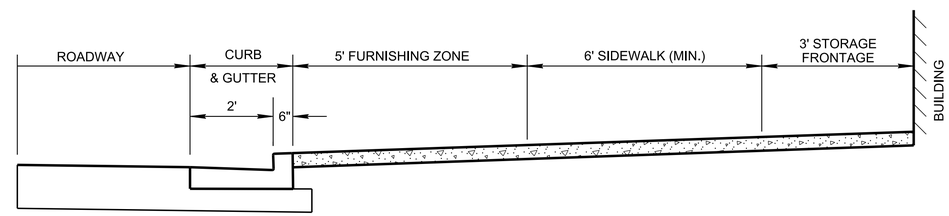
SIDEWALK OR SHARED USE PATH ON HIGH-SPEED FACILITY

RUAL HIGH SPEED ROADWAYS



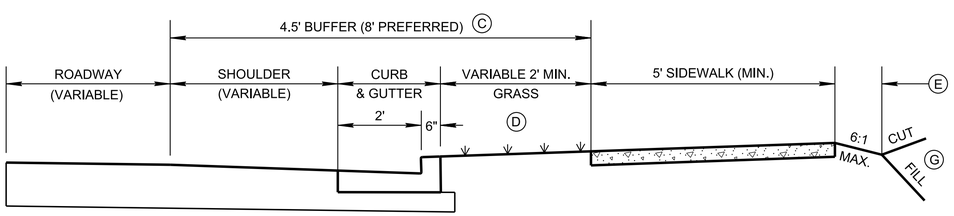
SHARED USE PATH W/ GRASS STRIP BEHIND CURB & GUTTER

POSTED SPEEDS ≤ 40 MPH (H)



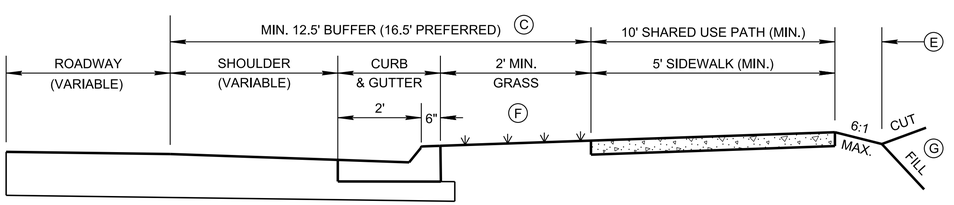
SIDEWALK IN CENTRAL BUSINESS DISTRICT/COMMERCIAL AREA

POSTED SPEEDS ≤ 35 MPH (DESIGN SPEEDS ≤ 40 MPH)



SIDEWALK W/ GRASS STRIP BEHIND CURB & GUTTER

POSTED SPEED = 40 MPH (H)



SIDEWALK OR SHARED USE PATH W/ GRASS STRIP BEHIND CURB & GUTTER

POSTED SPEEDS 45 TO 55 MPH (H)

GENERAL NOTES

(A) THE INTENT OF THIS DRAWING IS TO PROVIDE MINIMUM AND PREFERRED PEDESTRIAN BUFFER DESIGN CRITERIA FOR NEW, RECONSTRUCTION, AND RESURFACING PROJECTS.

(B) SEE STD. DWG. MM-SW-1 FOR CONCRETE SIDEWALK DETAILS.

(C) A SHOULDER/ PARKING LANE/ OR BIKE LANE CAN BE UTILIZED IN PLACE OF A GRASS STRIP (OR IN COMBINATION WITH A GRASS STRIP) TO MEET THE MINIMUM BUFFER REQUIREMENT SEPARATING PEDESTRIAN FACILITIES FROM THE TRAFFIC LANE. WHEN THE MINIMUM BUFFER REQUIREMENTS CANNOT BE MET ON NEW CONSTRUCTION OR RECONSTRUCTION PROJECTS, A MULTIMODAL DESIGN DEVIATION FORM SHALL BE COMPLETED AND SUBMITTED TO TDOT HEADQUARTERS DESIGN. FOR ADDITIONAL INFORMATION REFER TO SECTION 9 OF TDOT'S DESIGN GUIDELINES.

(D) TYPICALLY GRASS STRIP. AREA CAN BE PAVED TO CREATE A FURNISHING ZONE.

(E) 1' CLEAR ZONE FOR SIDEWALKS (MIN.), 2' CLEAR ZONE FOR SHARED USE PATHS (MIN.)

(F) BARRIER BETWEEN SIDEWALK/SHARED USE PATH AND ROADWAY SHOULD BE USED WHEN SIDEWALK/ SHARED USE PATH IS PLACED WITHIN CLEAR ZONE OR MINIMUM LATERAL OFFSET CANNOT BE MAINTAINED.

(G) SEE STD. DWG. MM-BPR-1 FOR GUIDANCE REGARDING SAFETY REQUIREMENTS.

(H) POSTED SPEED IS 5 M.P.H. LESS THAN DESIGN SPEED.

(I) SEE AASHTO, GUIDE FOR THE PLANNING, DESIGN, AND OPERATION OF PEDESTRIAN FACILITIES (CURRENT ADDITION).

(J) FOR BUFFERS REFER TO STD. DWG. MM-TS-3, SEPARATED SHARED USE PATH TYPICAL SECTIONS.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

LATERAL OFFSETS FOR SIDEWALK AND SHARED USE PATH

08-24-2017 | MM-TS-2

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REV. 6-20-83: GENERAL REVISIONS.

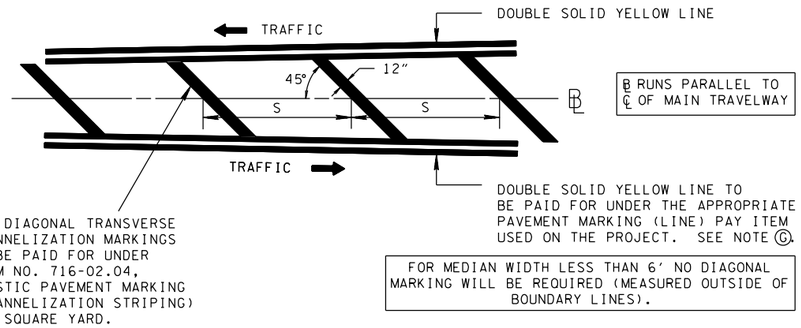
REV. 3-22-85: ADDED NOTE 'SAME FOR DEPRESSED ISLAND' TO MARKING FOR RAISED ISLAND.

REV. 2-22-88: CHANGED MINIMUM "B" DIMENSION TO 6'. CHANGED DWG. NO. FROM T-M-10 TO T-M-3. REVISED GEN. NOTE D. CHANGED MINIMUM "A" DIMENSION TO 6'.

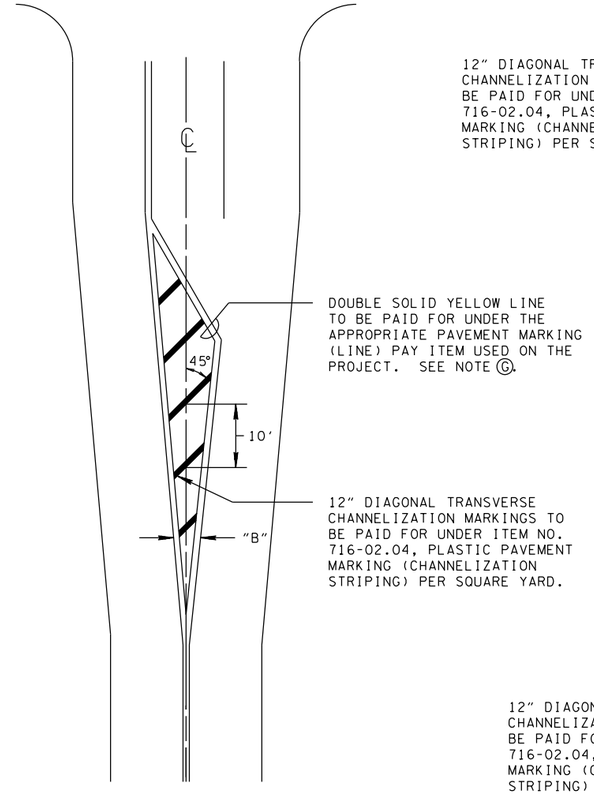
REV. 3-20-91: REDREW AND REORGANIZED SHEET.

REV. 9-19-91: GENERAL REVISION.

☐ REV. 7-24-14: ADDED GENERAL NOTE Ⓖ.

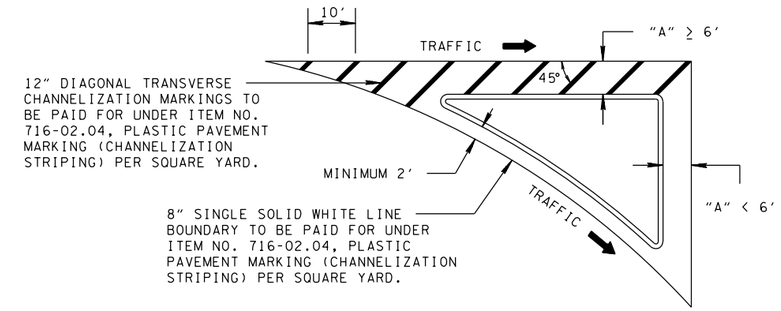


MARKED MEDIAN ISLAND
AND OBSTRUCTION APPROACH

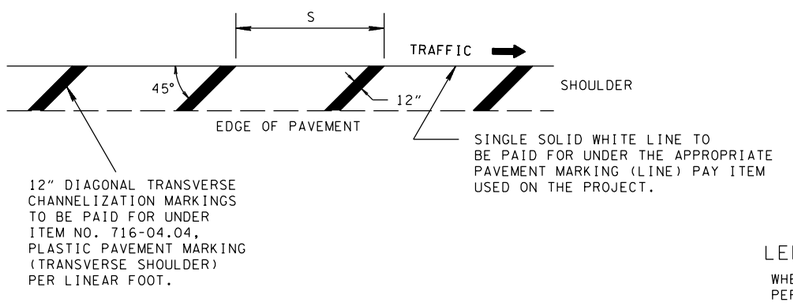


LEFT TURN CHANNELIZATION ISLAND

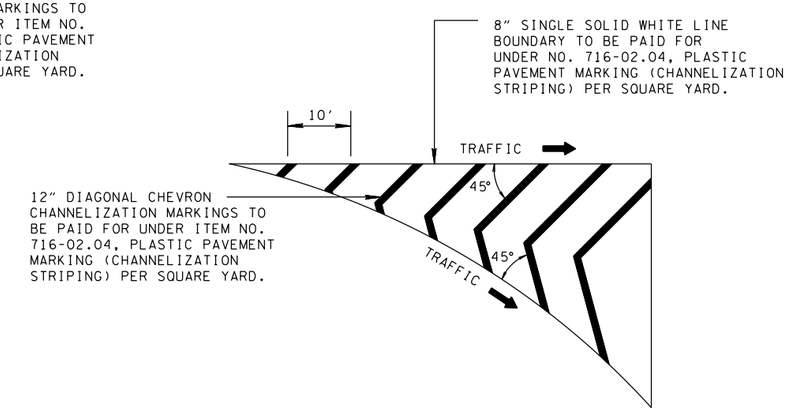
WHEN WIDTH "B" IS LESS LESS THAN 6' (MEASURED PERPENDICULAR TO THE ℄) -NO DIAGONAL MARKING WILL BE REQUIRED.



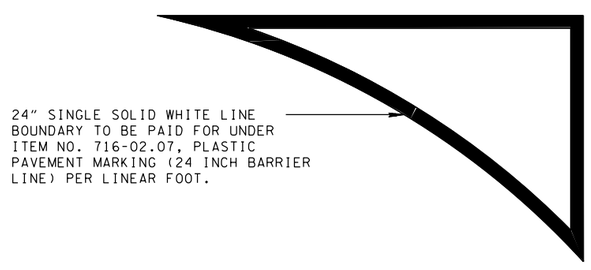
RAISED ISLAND
(SAME FOR DEPRESSED ISLAND)



TRANSVERSE SHOULDER MARKING



MARKED ISLAND
AREA GREATER THAN 400 SQUARE FEET



MARKED ISLAND
AREA EQUAL TO OR LESS THAN 400 SQUARE FEET
(SEE NOTE Ⓔ)

Ⓓ TABLE FOR SPACING OF DIAGONAL LINES		
POSTED SPEED	SHOULDERS AND MARKED MEDIANS	OBSTRUCTION APPROACH
40 MPH OR LESS	50'	10'
45 MPH OR GREATER	100'	20'

Ⓓ SPACING IN TABLE SHOWN AS "S" IN DETAILS ON THIS SHEET.

GENERAL NOTES

Ⓐ TO SEPARATE TRAFFIC MOVEMENT IN THE SAME DIRECTION, DIAGONAL MARKING SHALL BE WHITE (HWL) WITH AN 8 INCH SSWL BOUNDARY.

Ⓑ TO SEPARATE OPPOSING LANES OF TRAFFIC, DIAGONAL MARKING SHALL BE YELLOW (HYL) WITH DSYL BOUNDARY.

Ⓒ ALL DIAGONAL MARKINGS SHALL BE 12 INCHES IN WIDTH MARKED AT 45 DEGREES TO MARKINGS OUTLINING RESTRICTED AREA OR TO CENTERLINE TO ROADWAY.

Ⓓ THERE SHALL BE A MINIMUM OF THREE DIAGONAL MARKINGS AT THE REQUIRED SPACING. OTHERWISE, NO DIAGONAL MARKING SHALL BE USED.

Ⓔ MARKED TRAFFIC ISLANDS SHOULD BE A MINIMUM OF 75 SQUARE FEET.

Ⓕ THE RECOMMENDED SPACING IS MEASURED PARALLEL TO THE CENTERLINE OF THE MAIN TRAVELWAY.

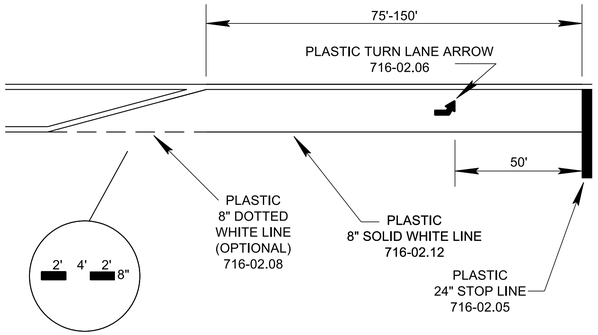
Ⓖ DOUBLE SOLID YELLOW LINE SHALL MATCH THE STRIPPING ON THE ADJACENT ROADWAY. IN GENERAL: USE 4" FOR SPEEDS 40 MPH AND BELOW AND 6" FOR SPEEDS 45 MPH AND ABOVE.

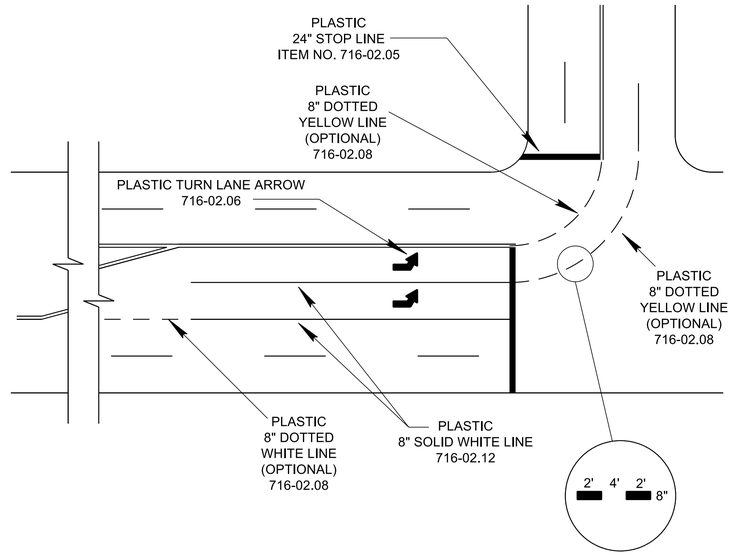
TRAFFIC ISLANDS

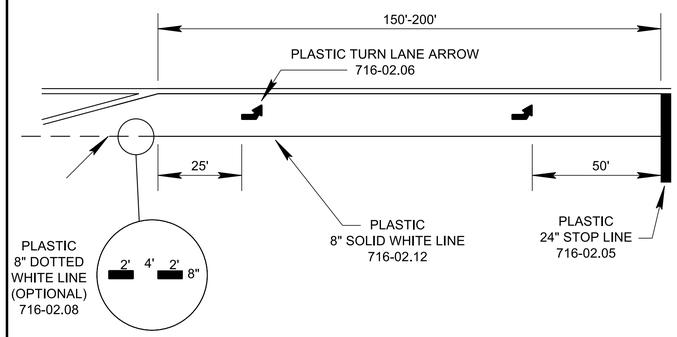
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS & PAVED SHOULDERS ON CONVENTIONAL ROADS.

I-M-3





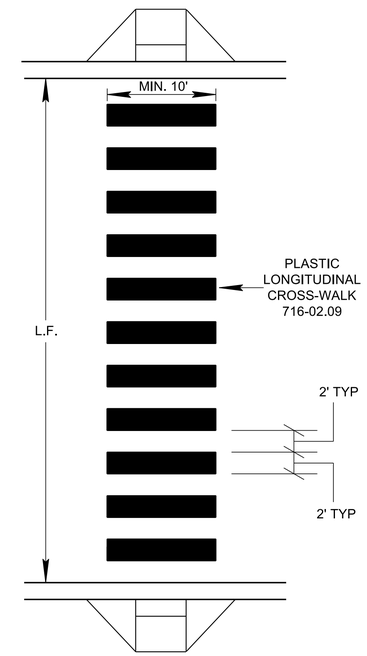


TYPICAL MARKING FOR DOUBLE LEFT TURN LANES

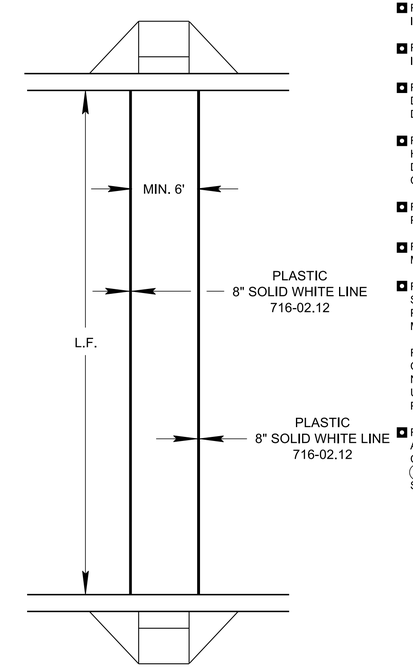
LEFT TURN ARROWS SHALL BE PAID FOR UNDER ITEM NO. 716-02.06, PLASTIC PAVEMENT MARKING (TURN LANE ARROW), PER EACH. 8" DOTTED WHITE LINE SHALL BE PAID FOR UNDER ITEM NO. 716-02.08, PLASTIC PAVEMENT MARKING (8" DOTTED LINE), PER LINEAR FOOT.

LONGITUDINAL CROSS-WALK MARKING

(FOR SPECIAL EMPHASIS)
TO BE USED WHERE V>45 MPH

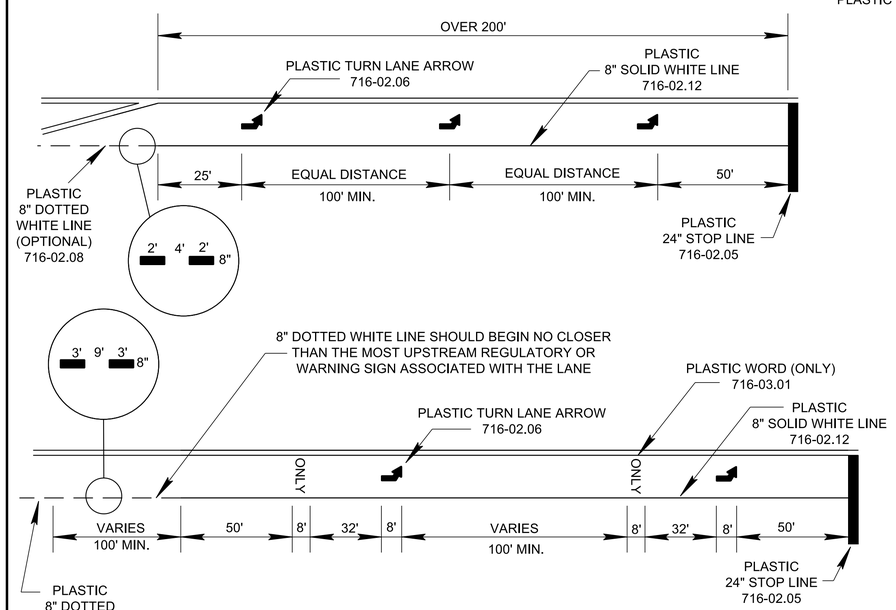


TRANSVERSE CROSS-WALK MARKING



PAVEMENT MARKINGS SHALL BE PAID FOR UNDER ITEM NO. 716-02.09 PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK) PER L.F. ON LOCAL ROADS WITH ADT<1000, PAVEMENT MARKINGS COULD ALTERNATIVELY BE PAID FOR UNDER ITEM NO. 716-05.22 PAINTED PAVEMENT MARKING (LONGITUDINAL CROSS-WALK) PER L.F. MEASUREMENT IS CALCULATED AS THE FULL WIDTH OF PAVEMENT.

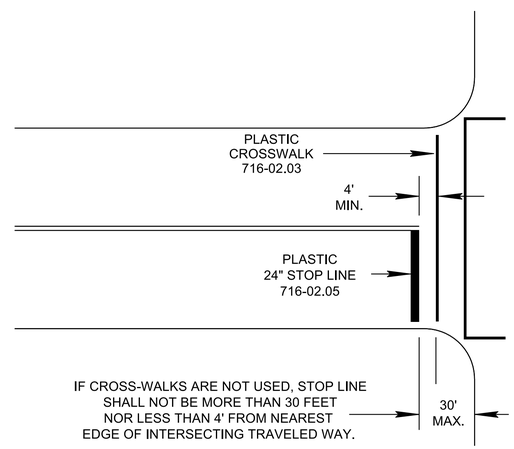
PAVEMENT MARKINGS SHALL BE PAID FOR UNDER ITEM NO. 716-02.03 PLASTIC PAVEMENT MARKING (CROSSWALK) PER L.F. ON LOCAL ROADS WITH ADT<1000, PAVEMENT MARKINGS COULD ALTERNATIVELY BE PAID FOR UNDER ITEM NO. 716-05.03 PAINTED PAVEMENT MARKING (CROSS-WALK) PER L.F. MEASUREMENT IS CALCULATED AS THE FULL WIDTH OF PAVEMENT.



TYPICAL MARKING FOR LEFT TURN LANES

APPLICABLE FOR RIGHT TURN LANES

IF A THROUGH LANE BECOMES AN EXCLUSIVE LEFT TURN LANE, AN "ONLY" MESSAGE IS REQUIRED FOR EACH ARROW. THE "ONLY" MESSAGE SHALL BE PAID FOR UNDER ITEM NO. 716-03.01, PLASTIC WORD PAVEMENT MARKING (ONLY), PER EACH.



TYPICAL MARKING FOR STOP LANE

PAVEMENT MARKING TABLE

DESIGN SPEED	EDGE LINE	LANE LINE
V ≥ 45 MPH	6" *	6"
V < 45 MPH	4"	4"

* IF SHOULDER IS LESS THAN 2' WIDE USE 4" LINE

STOP LINE PLACEMENT NOTES

(A) LOCATION SHALL BE DETERMINED BY VEHICLE TURNING PATHS FROM INTERSECTION ROADWAY, AND IF SIGNALIZED, ITS POSITION RELATIVE TO SIGNAL HEADS, PER MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

(B) STOP LINES SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBER: 716-02.05, PLASTIC PAVEMENT MARKING (STOP LINE), PER L.F.

(C) STOP LINES REQUIRED ONLY ON APPROACHES CONTROLLED BY STOP SIGNS OR TRAFFIC SIGNALS.

CROSS-WALK NOTES

(A) SPECIAL PAVERS AND PAVEMENT TEXTURES ARE NOT ACCEPTABLE CROSS-WALK MARKINGS. THEREFORE, SPECIAL PAVERS AND PAVEMENT TEXTURES SHALL ONLY BE USED IN CONJUNCTION WITH TRANSVERSE CROSS-WALK MARKINGS. SPECIAL PAVERS ARE TO BE DESIGNED TO MEET PAVEMENT DESIGN SCHEDULE AND DESIGN LOADING, ON STATE ROUTES, DETAILS SHALL BE REVIEWED AND APPROVED BY THE DEPARTMENT.

(B) IF SPECIAL PAVERS, PAVEMENT TEXTURES, OR ANY OTHER ARCHITECTURAL PAVEMENT MATERIALS ARE USED, THE ARCHITECTURAL PAVEMENT MATERIALS SHALL PROVIDE A SMOOTH, WITHOUT JOINT, WALKABLE/RIDEABLE, STABLE, FIRM AND SLIP-RESISTANT SURFACE PER ADA STANDARDS.

(C) ARCHITECTURAL PAVEMENT SHALL BE PAID FOR UNDER ITEM NO. 701-01.08 CONCRETE PAVERS (CROSS-WALK) PER. S.F.

REV. 2-22-88: REVISED DETAIL LEFT TURN LANE MARKING. ADDED NOTE FOR STOP LINE TO BE PARALLEL TO CROSS-WALK. NOTED LONGITUDINAL CROSS-WALK LINES TO BE WHITE. CHANGED DWG. NO. FROM T-M-11 TO T-M-4. ADDED DETAIL FOR DOUBLE LEFT TURN LANE.

REV. 3-20-91: REDREW AND REORGANIZED SHEET. ADDED PAY ITEMS AND THEIR DESCRIPTIONS.

◘ REV. 5-27-01: CHANGED DESCRIPTION IN ITEM NO. 716-02.09.

◘ REV. 9-5-01: CHANGED DESCRIPTION IN ITEM NO. 716-02.03.

◘ REV.1-19-05: CHANGED HANDICAP RAMP DETAIL SHOWN ON CROSS-WALK MARKING DETAILS.

◘ REV.3-15-07: REVISED TO REFER THE HANDICAP RAMP STANDARDS TO DETERMINE THE MINMUM WIDTH OF CROSS-WALK MARKINGS.

◘ REV.6-1-09: TYPICAL STOP LINE PLACEMENT NOTE REVISED.

◘ REV. 11-1-11: REVISED PAVEMENT MARKINGS FOR LEFT TURN DETAILS.

◘ REV. 7-24-14: REVISED CROSS-WALK TO SHOW LONGITUDINAL LINES AS PREFERRED OPTION. ADDED PAVEMENT MARKING TABLE.

REV. 10-10-16: ADDED DETAIL FOR CROSS-WALK MARKING, UPDATED ITEM NUMBERS FOR CROSS-WALK MARKING, UPDATED NOTES FOR STOP LINE PLACEMENT AND CROSS-WALK MARKING.

◘ REV. 08-02-18: MODIFIED NOTE (A), ADDED ALTERNATIVE PAY ITEMS FOR PAINTED CROSS-WALK MARKINGS. ADDED NOTE (C) TO THE CROSS-WALK NOTES. REDREW SHEET.

◘ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STANDARD
INTERSECTION
PAVEMENT
MARKINGS

T-M-4

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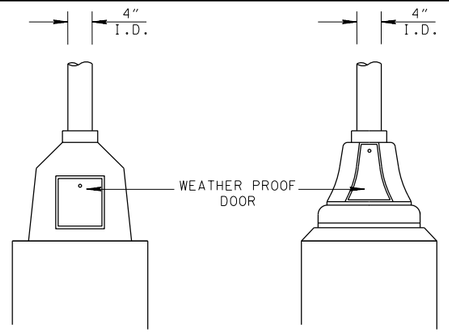
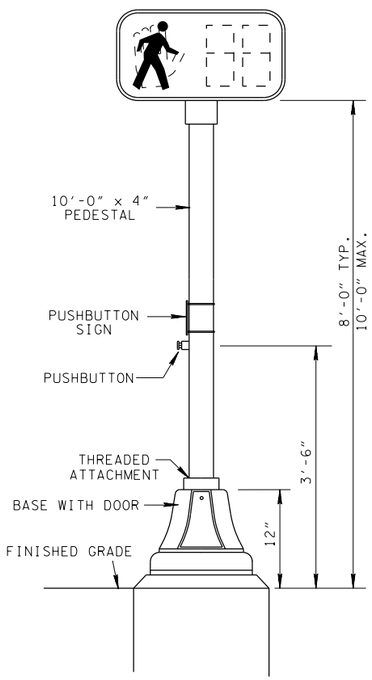


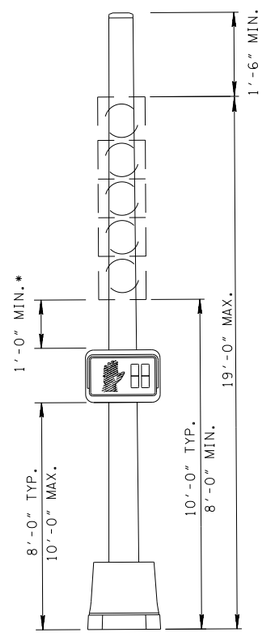
SQUARE OCTAGONAL

CAST PEDESTAL BASE ALTERNATES



PEDESTAL POLE TYPE A

FOR PEDESTAL POLE FOOTING
SEE 2' DIAMETER FOOTING ON T-SG-10



PEDESTAL POLE TYPE B

* IF PEDESTRIAN DISPLAYS ARE PROVIDED ON SAME POLE, THE MINIMUM HEIGHT OF THE VEHICULAR DISPLAY SHALL BE AT LEAST ONE FOOT ABOVE THE TOP OF THE PEDESTRIAN DISPLAY, HOUSING, AND BRACKETS.

PEDESTRIAN GENERAL NOTES

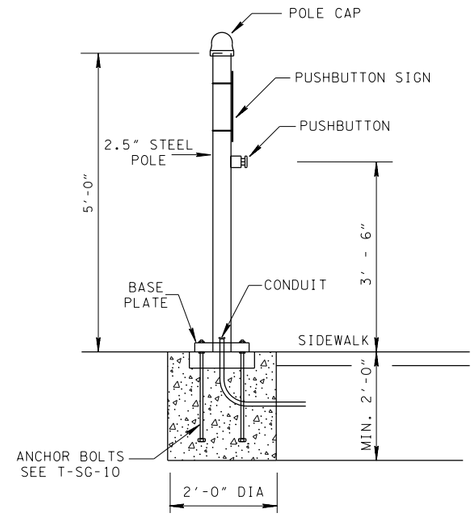
(A) WHERE PEDESTRIAN SIGNAL HEADS ARE PROVIDED AT PEDESTRIAN STREET CROSSINGS, THEY SHALL INCLUDE ACCESSIBLE PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTONS COMPLYING WITH SECTIONS 4E.08 THROUGH 4E.13 OF THE MUTCD (INCORPORATED BY REFERENCE, SEE R104.2). OPERABLE PARTS SHALL COMPLY WITH R403.

(B) PUSHBUTTONS AT SIGNALIZED CROSSWALKS SHALL INCORPORATE A LOCATOR TONE MEETING THE REQUIREMENTS OF MUTCD SECTION 4E.12, SUBSECTION 04 THROUGH 06. AN ACCESSIBLE PEDESTRIAN SIGNAL AND PEDESTRIAN PUSHBUTTON IS AN INTEGRATED DEVICE THAT COMMUNICATES INFORMATION ABOUT THE WALK AND DON'T WALK INTERVALS AT SIGNALIZED INTERSECTIONS IN NON -VISUAL FORMATS (I.E. AUDIBLE TONES AND VIBROTACTILE SURFACES) TO PEDESTRIANS WHO ARE BLIND OR HAVE LOW VISION.

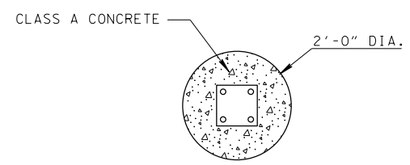
(C) PEDESTRIAN PUSHBUTTON SHALL PROVIDE TACTILE VIBRATING ARROW BUTTON AND AUDIBLE SOUND.

(D) THE COST OF PEDESTRIAN PUSHBUTTON SHALL INCLUDE THE FRAME, SIGN, ADA COMPLIANT PUSHBUTTON, AND MOUNTING HARDWARE.

730-26.11 COUNTDOWN PEDESTRIAN SIGNAL HEAD W/ AUDIBLE PUSHBUTTON & 15" SIGN

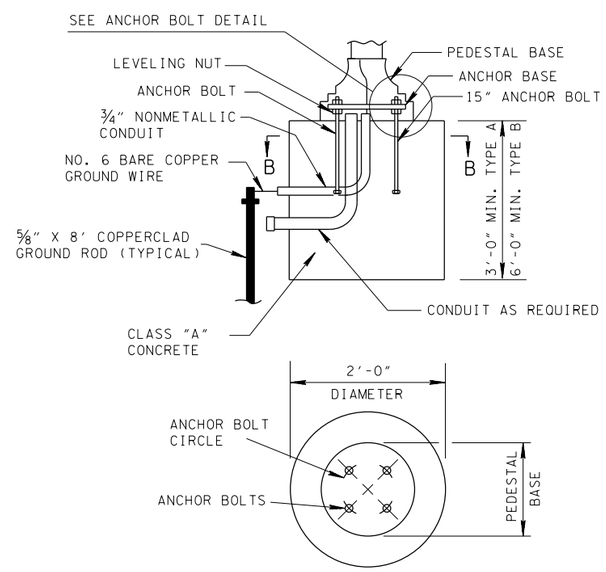


PEDESTRIAN PUSHBUTTON POST



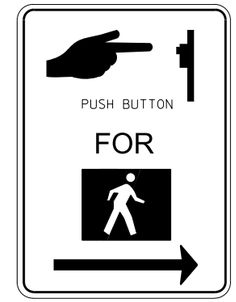
FOUNDATION DETAIL

PEDESTRIAN PUSHBUTTON POST

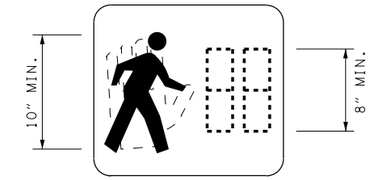


SECTION B-B

FOUNDATION DETAIL FOR STEEL PEDESTAL POLE TYPE A



R10-3 (9"X12")

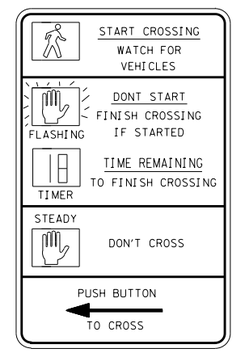


COLOR LEGEND

MAN - WHITE
HAND - PORTLAND ORANGE
NUMBERS - PORTLAND ORANGE

COUNTDOWN PEDESTRIAN CROSSWALK SIGNAL

NOTE: SEE SECTION 4E.07 OF THE MUTCD FOR ADDITIONAL INFORMATION.



R10-3E (9"X15")

R10-3 (MOD.) (5.44"X14.09")

PEDESTRIAN PUSHBUTTON SIGNS LEFT & RIGHT

LEGEND - WHITE "WALK"(FIGURE) ON BLACK
ORANGE "DONT WALK"(HAND) ON BLACK
ALL ELSE BLACK
BACKGROUND - WHITE (REF.)
LOCATION - IMMEDIATELY ABOVE PUSHBUTTON

MATERIAL - TYPE II REFLECTIVE SHEETING
1) MOUNTED ON 0.064" MINIMUM THICK FLAT SHEET ALUMINUM AND BANDED TO WOOD POLES, STEEL POLES, OR PEDASTAL POLES.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PEDESTRIAN SIGNAL DETAILS

6-27-16 | T-SG-6

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APPENDIX G: DISABILITY AND IMPAIRMENT CONCEPTS & DEFINITIONS

The following are several key concepts that make up the definition of disabilities and impairments according to the ADA. It is intended for general application and is not exhaustive. For a full listing of definitions, concepts and examples please refer to the complete text of the Americans with Disabilities Act.

Who is protected?

An individual with a disability is a person who:

Has a physical or mental impairment that substantially limits one or more major life activities;
Has a record of such an impairment; or
Is regarded as having such an impairment.
The ADA measures an impairment as when the condition is most severe. If you are only sometimes impaired, the ADA will look at when your symptoms show the most.

There are two essential parts to having a disability:

You must have a physical or mental impairment; and
The impairment must substantially keep you from doing major life activities.

Where is protection mandated?

The Americans with Disabilities Act (ADA) protects people with disabilities from discrimination. Those areas with protection are:

- State and local government services
- Places of public accommodation
- Employment
- Telecommunications
- Transportation

The ADA covers employers with 15 or more employees, including state and local governments.

How are people protected?

If the individuals' disabilities prevent them from performing the essential functions of the program or activity, it is necessary to determine whether reasonable program modifications would enable these individuals to perform the essential functions of the program or activity.

A reasonable program modification is any change in program or activity or in the way things are customarily done that enables an individual with a disability to enjoy equal program opportunities. Adjustments may include altering activity registrations, modifying program environment or, for known disabilities, potentially modifying facilities.

What are disabilities according to the ADA?

To have a disability under the ADA, you must have a qualified physical or mental impairment. Not everything that keeps you from doing activities is an impairment covered by the ADA. The ADA uses a broad definition of disability.

Some examples of physical or mental impairments covered by the ADA:

- AIDS, and its symptoms
- Alcoholism
- Asthma
- Blindness or other visual impairments
- Cancer
- Cerebral palsy
- Depression
- Diabetes
- Epilepsy
- Hearing or speech impairments
- Heart Disease
- Migraine Headaches
- Multiple sclerosis
- Muscular dystrophy
- Orthopedic impairments
- Paralysis
- Pregnancy with complications
- Thyroid gland disorders
- Tuberculosis
- Loss of body parts

Some temporary, short-term impairments with little or no lasting effects are not qualified. The ADA does not protect against discrimination based on different lifestyles. Being addicted to drugs is not a disability. This applies to unlawful drugs like cocaine and to the abuse of prescription drugs.

Examples of conditions that are not considered impairments:

- Short-term or seasonal viral and bacterial infections
- Muscular or skeletal injuries that are expected to heal completely
- Addictive or compulsive behaviors
- Pregnancy without complications
- Lack of good decision-making skills
- Cultural factors such as education, socio-economic status, age, or sexual preferences.

APPENDIX H: GLOSSARY OF TERMS

This appendix is to serve a brief glossary of commonly used Americans with Disabilities Act (ADA) terms. For additional terms, see https://adata.org/glossary-terms#A

ABA: See Architectural Barriers Act.

ADA: See Americans with Disabilities Act.

ADA Transition Plan: A governmental agency's plan that identifies accessibility needs, the process to fully integrate accessibility, and ensures all facilities, services, programs, and activities are accessible to all individuals.

ADAAG: See Americans with Disabilities Act Accessibility Guidelines.

Accessible: A facility that provides access to people with disabilities using the design requirements of the ADA.

Accessible Pedestrian Signal (APS): A device that communicates information about the WALK phase in audible and vibrotactile formats.

Alteration: A change to a facility in the public right-of-way that affects or could affect access, circulation, or use. An alteration must not decrease or have the effect of decreasing the accessibility of a facility or an accessible connection to an adjacent building or site.

Americans with Disabilities Act (ADA): The Americans with Disabilities Act; Civil rights legislation passed in 1990 and effective July 1992. The ADA sets design guidelines for accessibility to public facilities, including sidewalks and trails, by individuals with disabilities.

Americans with Disabilities Act Accessibility Guidelines (ADAAG): contains scoping and technical requirements for accessibility to buildings and public facilities by individuals with disabilities under the Americans with Disabilities Act (ADA) of 1990.

APS: See Accessible Pedestrian Signal.

Architectural Barriers Act (ABA): Federal law that requires facilities designed, built, altered or leased with Federal funds to be accessible. The Architectural Barriers Act marks one of the first efforts to ensure access to the built environment.

Capital Improvement Program (CIP): The CIP for the Transportation Department includes an annual capital budget and a five-year plan for funding the new construction and reconstruction projects on the county's transportation system.

Disability – A physical or mental impairment that substantially limits one or more major life activities, a record of such an impairment, or being regarded as having such an impairment.

Detectable Warning: A surface feature of truncated domes, built in or applied to the walking surface to indicate an upcoming change from pedestrian to vehicular way.

DOJ: See United States Department of Justice

Federal Highway Administration (FHWA): A branch of the US Department of Transportation that administers the federal-aid Highway Program, providing financial assistance to states to construct and improve highways, urban and rural roads, and bridges.

Major Life Activities: Major life activities include the operation of any major bodily function. For example, things that affect the immune system, bowels, bladder, digestive, endocrine, reproductive functions, etc. Basic daily functions also count such as: eating, sleeping, standing, walking, speaking, bathing, dressing, shaving, preparing a meal, etc. It also includes problems with learning, reading, thinking, interacting, and working.

Pedestrian Access Route (PAR): A continuous and unobstructed walkway within a pedestrian circulation path that provides accessibility.

Pedestrian Circulation Route (PCR): A prepared exterior or interior way of passage provided for pedestrian travel.

PROWAG: An acronym for *Public Rights-of-Way Accessibility Guidelines* issued in 2005 by the U. S. Access Board. This guidance addresses roadway design practices, slope, and terrain related to pedestrian access to walkways and streets, including crosswalks, curb ramps, street furnishings, pedestrian signals, parking, and other components of public rights-of-way.

Qualified individual with a disability – A person with a disability who satisfies the requisite skill, experience, education and other job-related requirements of the employment position such individual holds or desires, and who, with or without reasonable accommodation, can perform the essential functions of such position.

Reasonable accommodation – A modification or adjustment to a job, the work environment, or the way things usually are done that enables a qualified individual with a disability to enjoy an equal employment opportunity. For example:

- Modifications or adjustments to a job application process that enable a qualified applicant with a disability to be considered for the position such qualified applicant desires; or
- Modifications or adjustments to the work environment, or to the manner or circumstances under which the position held or desired is customarily performed, that enable a qualified individual with a disability to perform the essential functions of that position; or
- Modifications or adjustments that enable a covered entity's employee with a disability to enjoy equal benefits and privileges of employment as are enjoyed by its other similarly situated employees without disabilities.

Right of Way: A general term denoting land, property, or interest therein, usually in a strip, acquired for the network of streets, sidewalks, and trails creating public pedestrian access within a public entity's jurisdictional limits.

Section 504: The section of the Rehabilitation Act that prohibits discrimination by any program or activity conducted by the federal government.

Uniform Accessibility Standards (UFAS): Accessibility standards that all federal agencies are required to meet; includes scoping and technical specifications.

United States Access Board: An independent federal agency that develops and maintains design criteria for buildings and other improvements, transit vehicles, telecommunications equipment, and electronic and information technology. It also enforces accessibility standards that cover federally funded facilities.

United States Department of Justice (DOJ): The United States Department of Justice (often referred to as the Justice Department or DOJ), is the United States federal executive department responsible for the enforcement of the law and administration of justice.