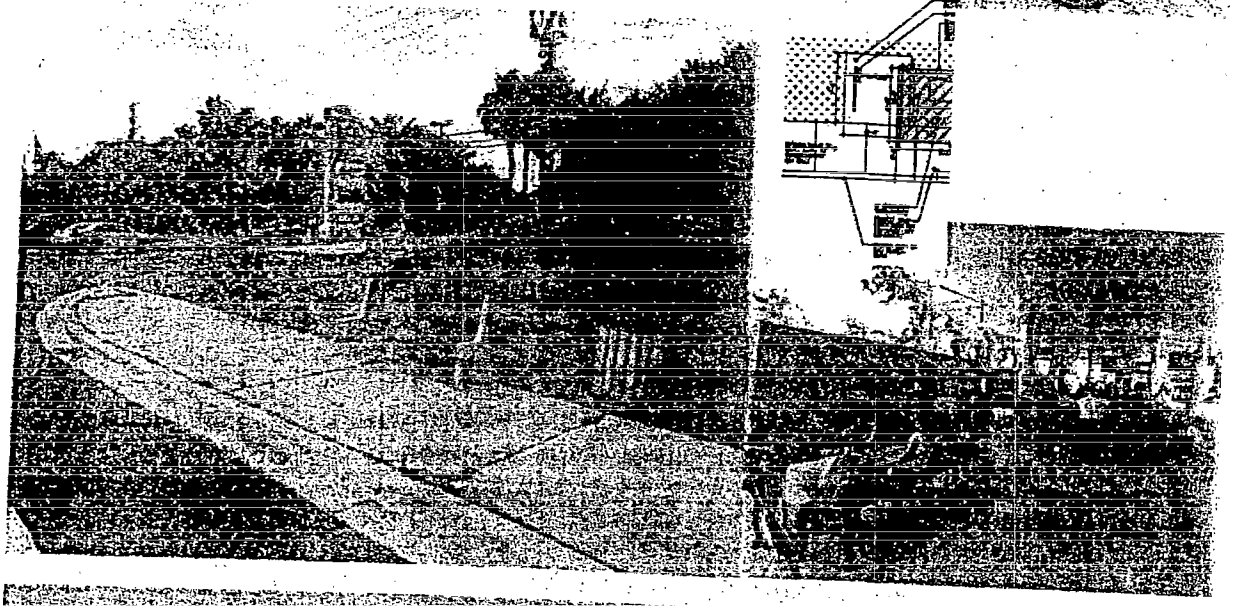
Votran

We drive a great bargain



TECHNICAL DESIGN STANDARDS FOR ACCESSIBLE BUS STOPS

PREPARED FOR

VOLUSIA COUNTY GOVERNMENT

VOTRAN PUBLIC TRANSIT SYSTEM

OCTOBER 2012

Tindale-Oliver
&
Associates, Inc.
Planning and Engineering

TECHNICAL DESIGN STANDARDS FOR ACCESSIBLE BUS STOPS

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1.0 INTRODUCTION

1.1 Overview

The Volusia County's public transit system, Votran, is interested in improving access and control of bus stops established throughout its service area, as well as providing comprehensive guidance and standards for the placement, maintenance, and usability of related bus stop amenities to other entities that are allowed to place bus stops and amenities in the public right-of-way. This document will address the accessibility of bus stops and the placement of amenities at bus stops in accordance with applicable requirements of the ADAAG (Americans with Disabilities Act Accessibility Guidelines) as revised and published by the U.S. Access Board on July 26, 2004, and adopted as regulatory requirements by the U.S. Department of Transportation on November 29, 2006, as well as in consideration of the Florida Building Code, Chapter 11, 2012 Florida Accessibility Code (FAC) (effective March 15, 2012).

To ensure a consistent approach to siting, placing, maintaining, and meeting standards related to transit stops and amenities, these guidelines for the design and placement of bus stops have been developed. The standards and design templates included in this document have been developed with respect to the requirements of the ADAAG, the FAC, and, where applicable, those standards adopted by Florida Department of Transportation (FDOT) from the Public Rights-of-Way Accessibility Guidelines issued by the U.S. Access Board. These standards and requirements help address issues related to the accessibility of bus stop facilities when placed in the public right-of-way. The standards include the following categories:

- Pedestrian access pathways
- Wheelchair maneuvering clearances
- Design characteristics
- Placement characteristics for bus stop passenger access

The goal of this design document is to promote consistency in bus stop placement and design throughout the Votran transit service area and to encourage the use of the stops by the general public and individuals with disabilities.

This document is intended as a design guide to be used to meet Federal, FDOT, and local standards as they exist based on the date of issue.

Consideration of existing Votran bus stop design standards and operational guidelines as detailed in the August 29, 2007, "Votran Transit Development Design Guidelines" manual as it pertains to the placement and design of bus stops has not been incorporated in this document except where changes in code compliance have occurred to accommodate those materials previously used by Votran staff in the design, maintenance, repair, and placement of bus stops. It must be noted that the 2007 document references the FDOT Accessing Transit guidelines (March 2004) for design guidance. The Accessing Transit guidelines were updated in 2008 and, as of this writing, this handbook is undergoing another update to include the ADAAG and FAC code changes occurring since 2004, among other enhancements.

1.0 INTRODUCTION

1.2 DISCLAIMER

The guidelines included in this document are intended to provide general parameters for personnel and organizations when designing and placing bus stops and amenities in the public right-of-way. This document is not intended to be an engineering design manual, and it does not provide site-specific detailed public transit, engineering, architectural, construction, or legal information. Users of this document will need to adjust the information contained in the guidelines to site-specific needs, constraints, and applicable laws, regulations, and ordinances. If a user desires expert advice concerning any of the information in these guidelines, the user is encouraged to retain the services of an appropriate expert.

Some bus stops, public seating benches, and other amenities at bus stops currently in place in the public domain at existing Votran transit facilities are inconsistent with the goals and guidelines presented in this document. In some instances, bus stop conditions and placement are defined by the underdeveloped corridors or roads they serve. In these cases, application of the design guidelines in this document may be limited by a lack of right-of-way development, constraints due to the natural terrain, unimproved roadways with no infrastructure (e.g., curb, gutter, drainage, sidewalks, etc.), or because of the policies and standards of the jurisdiction in which the bus stop is located. Because of these conditions, Votran may not be able to improve the public right-of-way sufficient to support an accessible bus stop placement until such time as major improvements are planned and funded. The facilities can best be improved through a coordinated planning and design effort between Votran and the local agencies responsible for maintaining and upgrading the roadway and pedestrian rights-of-way.

Votran has a responsibility to ensure that bus stops and amenities are placed in a manner that provides access and use by individuals with disabilities and must, therefore, use non-discriminatory judgment when planning for the placement of bus stops for public use. This judgment may result in refusal by Votran to either place or allow placement of a bus stop at a desired location because site conditions prevent an accessible environment resulting in a non-accessible transit stop. Establishment of a new bus stop at a site where full access is afforded is mandated by the ADA.

2.0 BUS STOP DESIGN PROTOTYPES

2.1 OVERVIEW

Successfully providing transit that is accessible to all individuals requires a balanced mix of local and state agency coordination and consideration regarding needs, costs, location, federal and state regulations, public relations, and transit-dependent populations. Better accessibility within the bus stop area ensures a comfortable and safe movement of passengers at a bus stop. Mobility aid users, older adults, individuals with disabilities, and passengers needing assistance (such as parents with strollers and shoppers with bags) will have less difficulty boarding and alighting the bus when there is a level and unobstructed area. ADA standards require all bus stops to have sufficient space for a boarding and alighting area that has a firm, stable, and slip-resistant surface to accommodate boarding and alighting at the stop.

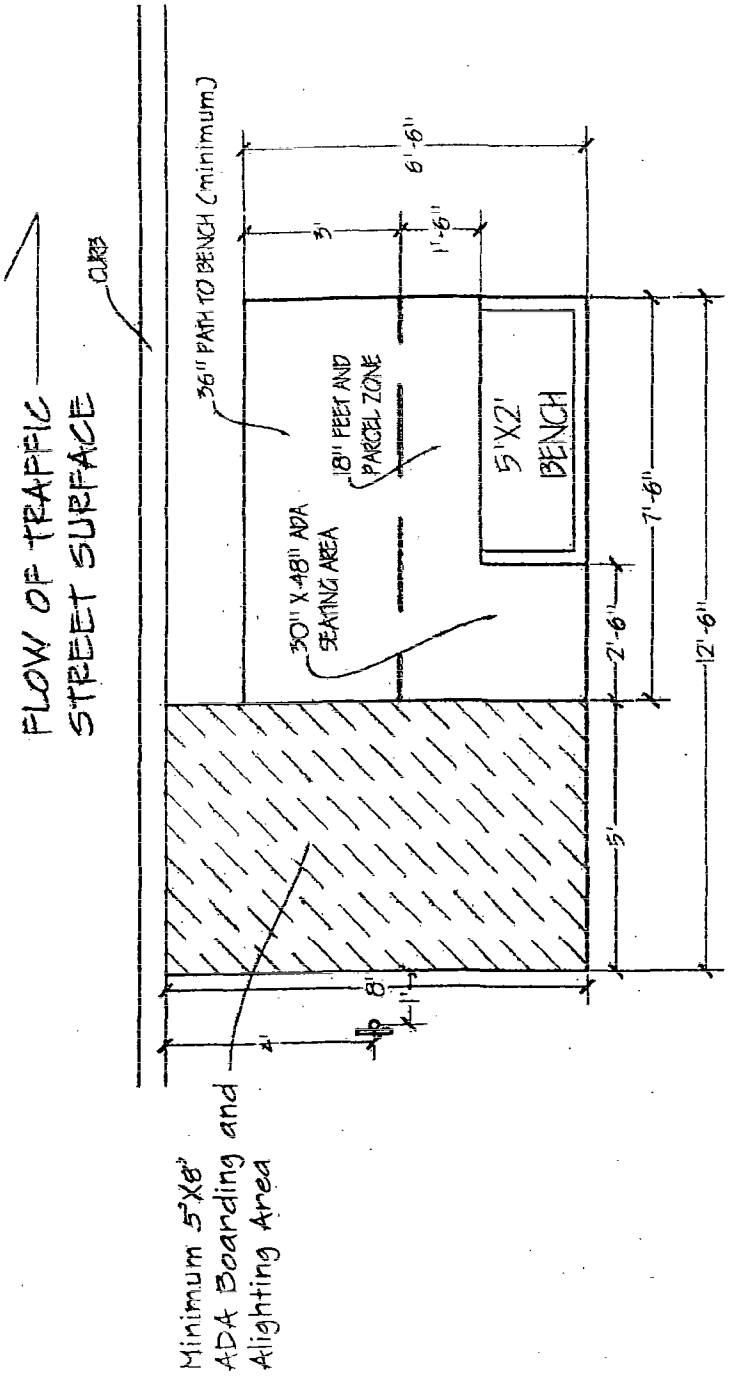
The following section contains design prototypes for ADA-compliant bus stops, including the coordination of bus stop elements such as bus stop signs, benches, and shelters. Any contracted improvements at Votran bus stops in Volusia County are required to meet the design criteria specified in these prototypes.

2.0 BUS STOP DESIGN PROTOTYPES

2.2 Basic Bus Stop Grade and Slopes

VOTRAN BUS STOP DESIGN
Basic Bus Stop Grade and Slopes
October 2012

2.0 BUS STOP DESIGN PROTOTYPES

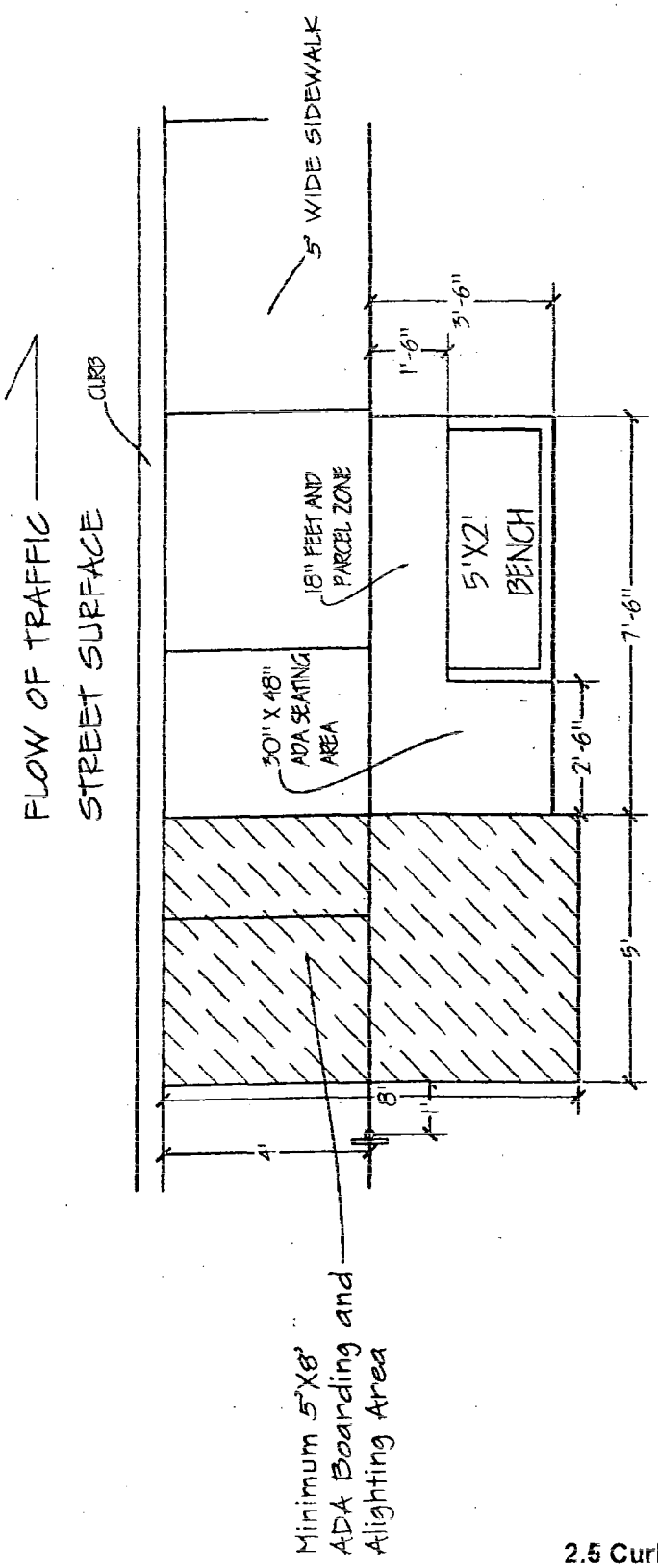


VOTRAN BUS STOP DESIGN
Bus Bench Pad: Curb without Sidewalk or Path
October 2012
Not to Scale

2.3 Curb without Sidewalk or Path

VOTRAN BUS STOP DESIGN
Bus Bench Pad: No Curb without Sidewalk or Path
October 2012 Not to Scale

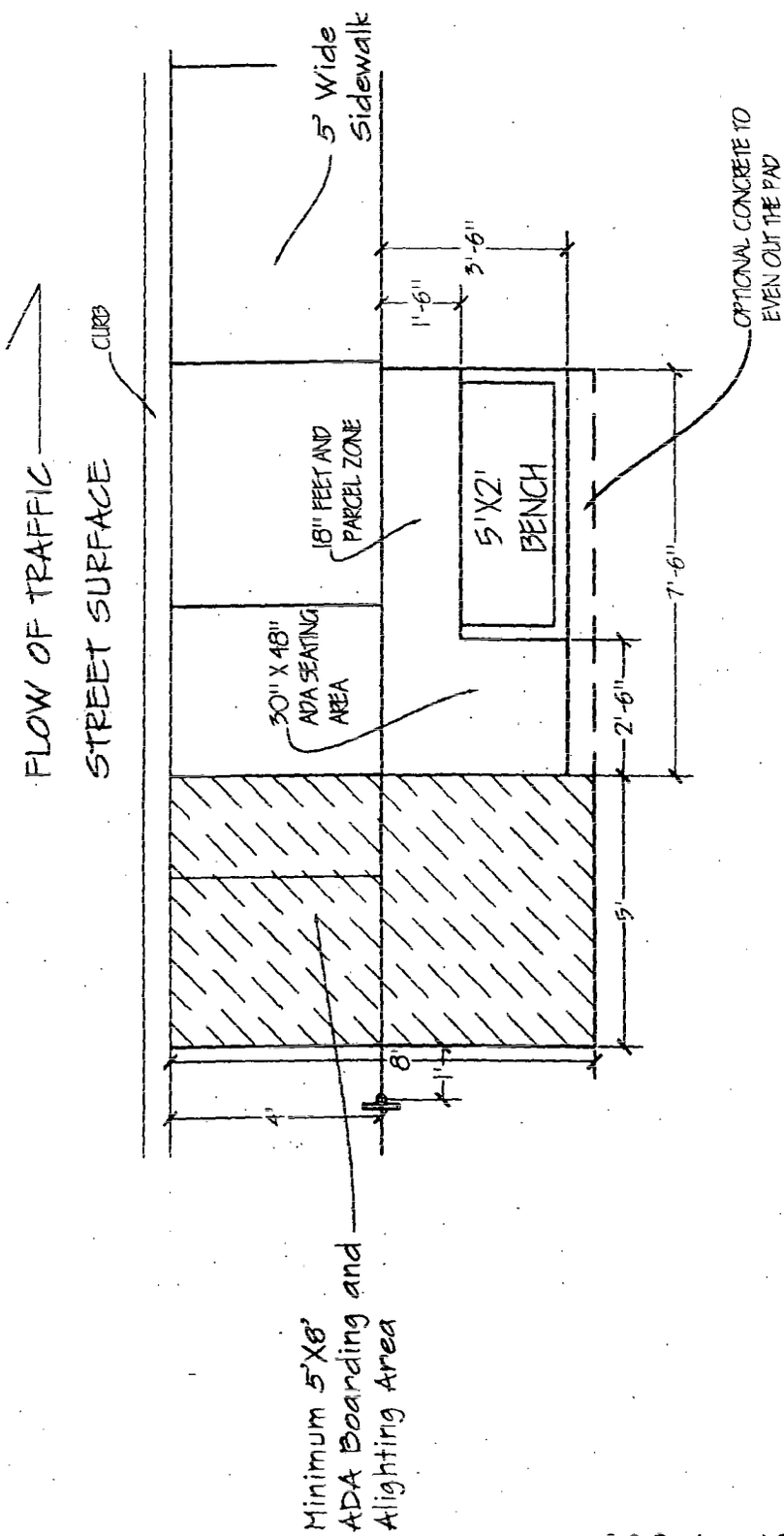
2.0 BUS STOP DESIGN PROTOTYPES



VOTRAN BUS STOP DESIGN
Bus Bench Pad: Curb Sidewalk
October 2012 Not to Scale

2.5 Curb and Sidewalk

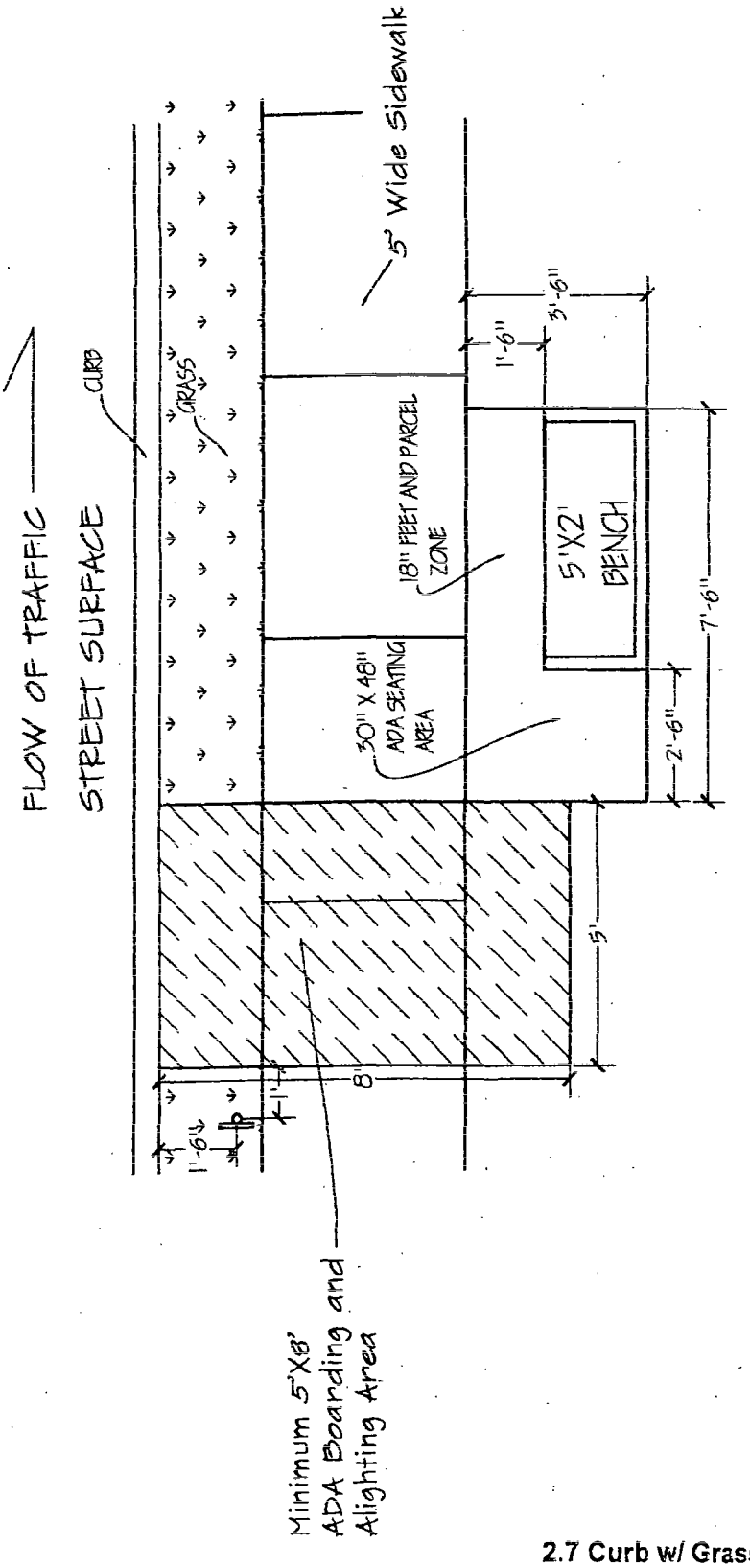
2.0 BUS STOP DESIGN PROTOTYPES



VOTRAN BUS STOP DESIGN
Bus Bench Pad: Curb Sidewalk
October 2012 Not to Scale

2.6 Curb and Sidewalk w/ Extension

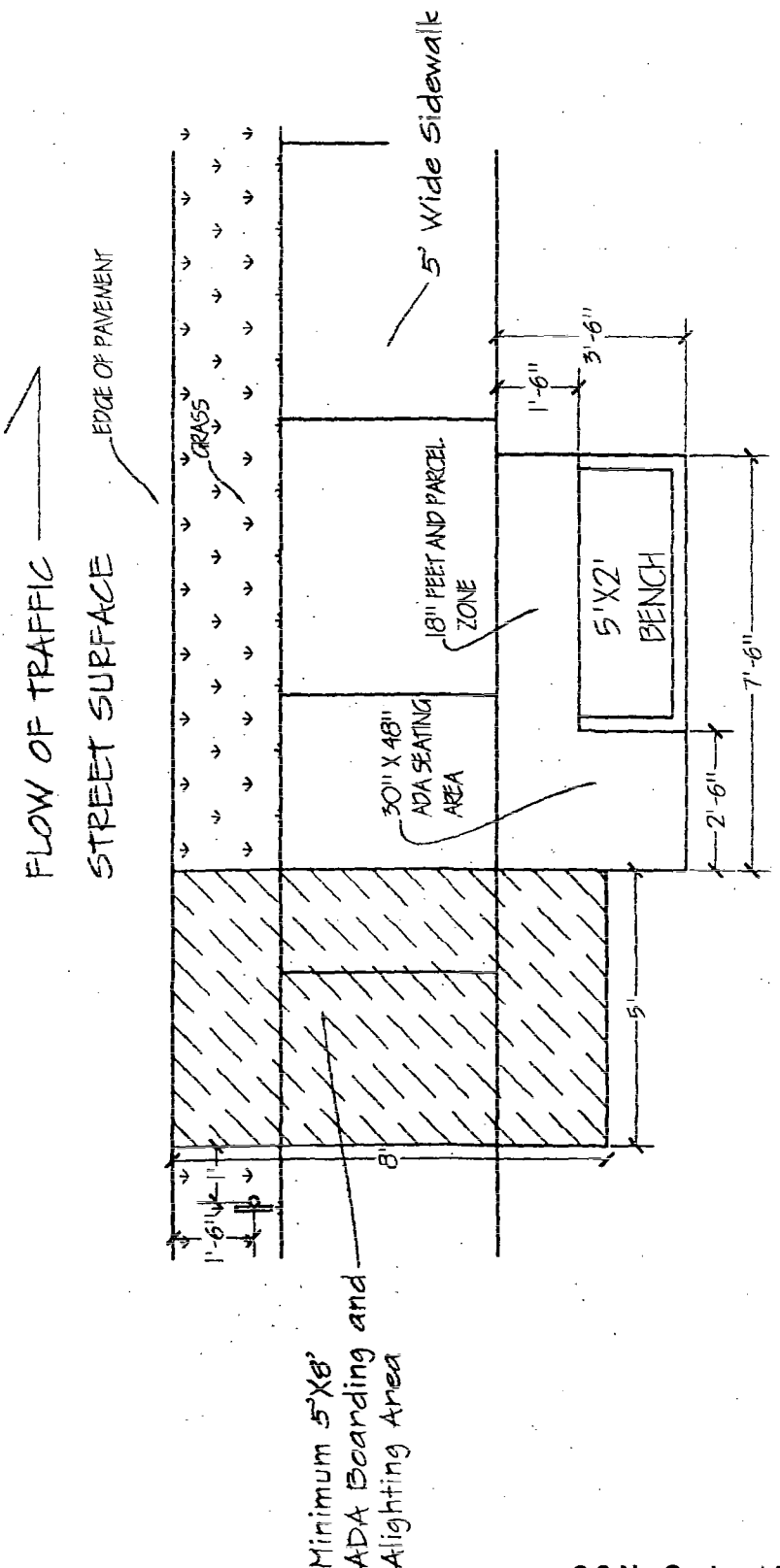
2.0 BUS STOP DESIGN PROTOTYPES



VOTRAN BUS STOP DESIGN
Bus Bench Pad: Curb Grass Sidewalk or Path
October 2012
Not to Scale

2.7 Curb w/ Grass, Sidewalk, or Path

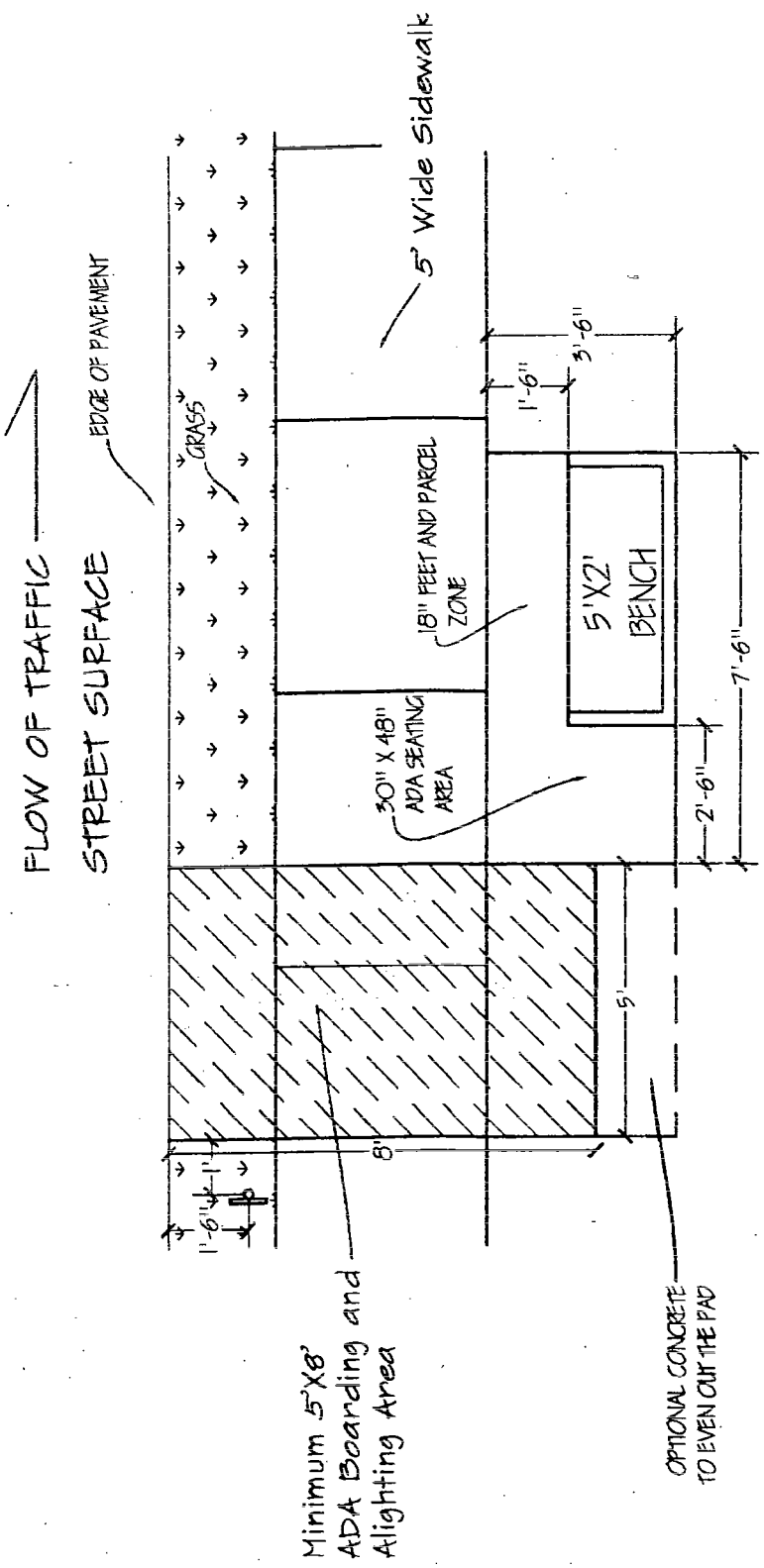
2.0 BUS STOP DESIGN PROTOTYPES



VOTRAN BUS STOP DESIGN
Bus Bench Pad: No Curb Grass Sidewalk or Path
October 2012
Not to Scale

2.8 No Curb w/ Grass, Sidewalk, or Path

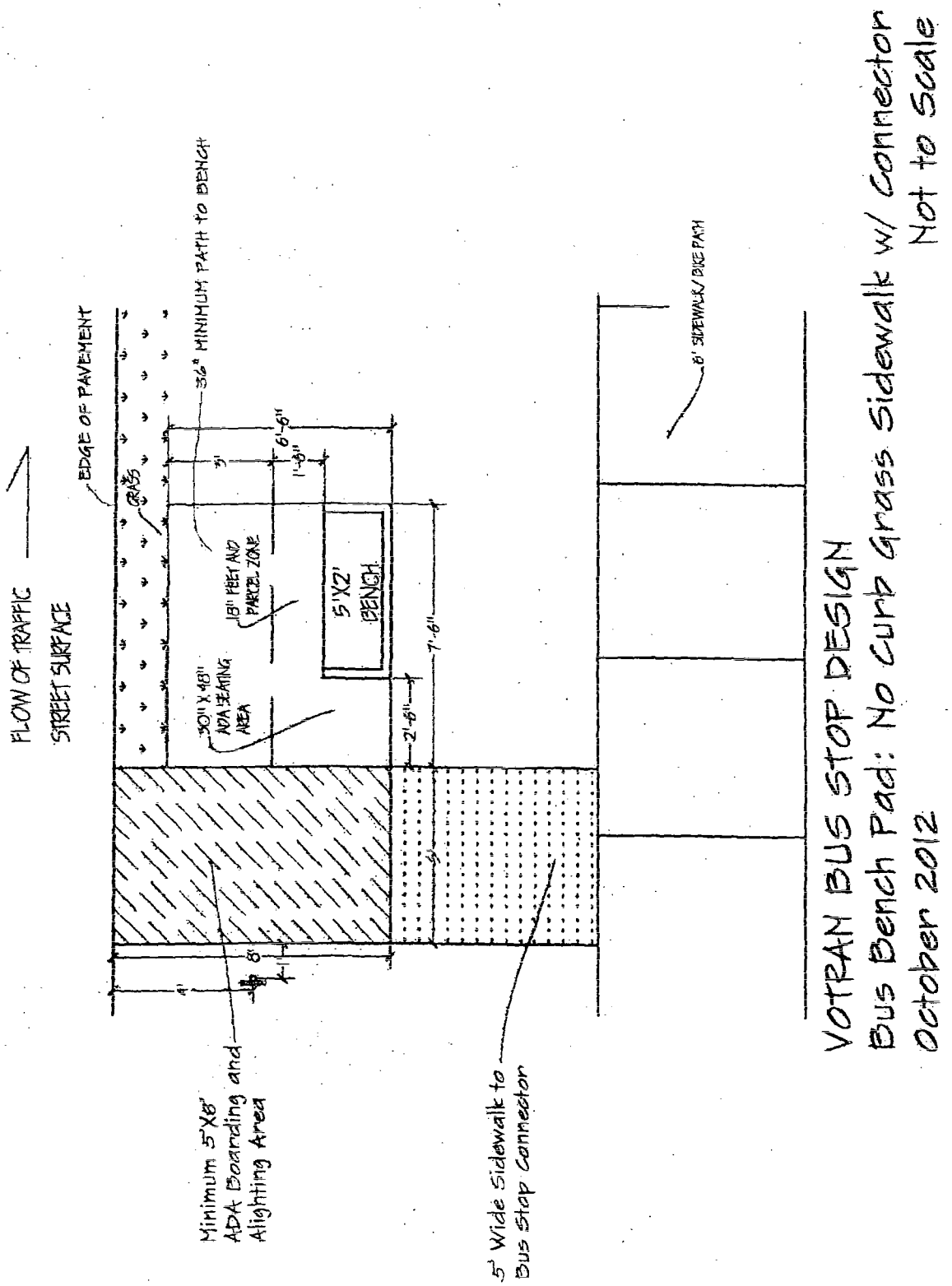
2.0 BUS STOP DESIGN PROTOTYPES



VOTRAN BUS STOP DESIGN
Bus Bench Pad: No Curb Grass Sidewalk or Path
October 2012
Not to Scale

2.9 No Curb w/ Grass, Sidewalk, or Path w/ Extension

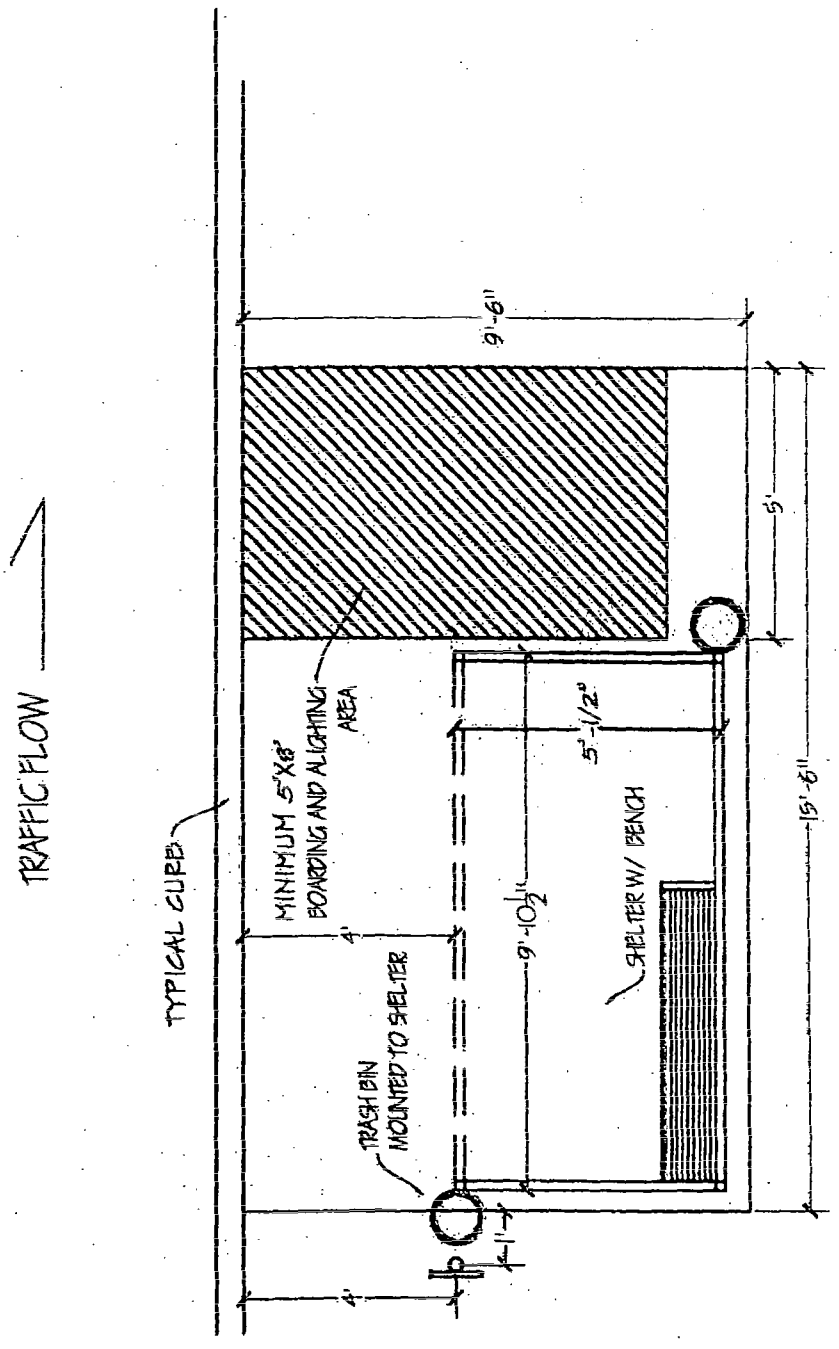
2.0 BUS STOP DESIGN PROTOTYPES



2.12 No Curb w/ Grass and Sidewalk w/ Connector

VOTRAN BUS STOP DESIGN
Bus Bench Pad: Shelter w/ Bench, Trash Bin & Bike Rack
October 2012
Not to Scale

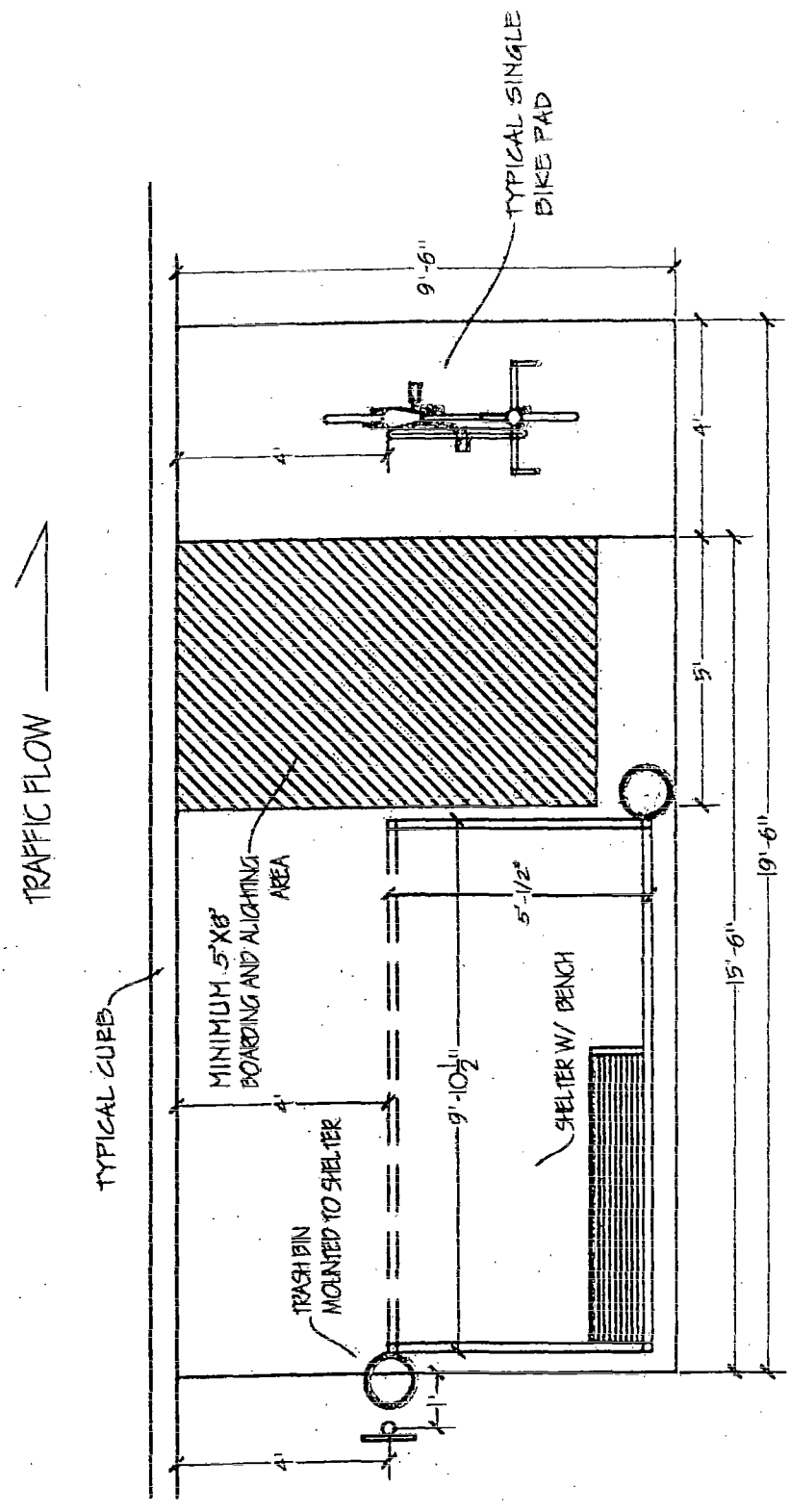
2.0 BUS STOP DESIGN PROTOTYPES



VOTRAN BUS STOP DESIGN
Bus Bench Pad: Shelter w/ Trash Bin
October 2012
Not to Scale

2.14 Shelter w/ Bench and Trash Bin

2.0 BUS STOP DESIGN PROTOTYPES



VOTRAN BUS STOP DESIGN
Bus Bench Pad: Shelter w/ Bike Pad & Trash Bin
October 2012
Not to Scale

2.15 Shelter w/ Bike Pad and Trash Bin

3.0 GENERAL ACCESSIBILITY GUIDELINES

3.1 Elements of an Accessible Environment

Bus stops should be designed to make transit more convenient, accessible, and aesthetically appealing to transit users. These measures are necessary if public transportation is to compete effectively with other transportation modes. The proper design of bus stop zones and adjacent curbs can increase transit access and convenience by eliminating barriers, especially for those individuals with mobility limitations. The ADA mandates equal access to mass transit for every U.S. citizen, thereby requiring every new bus and bus stop to be wheelchair accessible to the maximum extent practicable. All elements, including benches, placed at or near bus stops for use by the public in conjunction with use of the transit system must also be fully compliant with the ADA provisions as adopted by the U.S. Department of Transportation.

Regulatory Requirements for Accessible Transportation Facilities are provided by the Federal and State governments. The ADAAG includes the Federal regulations governing accessible transportation facilities and is enforced by the U.S. Department of Transportation. The ADAAG provides the architectural specifics for the construction of new and alteration of existing transportation facilities.

The Florida State regulatory requirements are provided under the Florida Building Code, Chapter 11 FAC for Building Construction. The FAC generally mirrors the requirements of the ADAAG, but is somewhat more stringent in some areas such as accessible parking spaces and accessible restroom configurations.

The following information provides a general overview of the accessibility regulations requirements for bus stops and facilities that may affect the accessibility to or use of a bus stop and amenities placed at the bus stop. Not all of the ADAAG requirements are given here. Only those pertinent for the understanding of personnel responsible for bus stop siting and placement of amenities in an accessible manner are listed.

- **Accessible Pedestrian Routes**
  - ◊ Must be 36" minimum width, continuous, and unobstructed path (note that the 2012 FAC requires a 48" clear accessible pathway which can be reduced to no less than 36" when approved by the Engineer).
  - ◊ Must have a 32" minimum width at doorways.
  - ◊ Must have 60" X 60" passing spaces at 200' intervals (if <60" wide).
  - ◊ Running slope (direction of travel) must be equal to or less than 5 percent (1:20) (>5% = ramp / ramp slope cannot exceed 8.33%.)
  - ◊ Cross slope (perpendicular to direction of travel) must be equal to or less than 2 percent (1:48).

3.0 GENERAL ACCESSIBILITY GUIDELINES

- **Surfaces and Sidewalks**
  - ◊ Surface must be firm, stable, and slip resistant (wet or dry).
  - ◊ Changes in level between 1/4" and 1/2" must be beveled at 1:2 slope.
  - ◊ Changes in level greater than 1/2" are not allowed or must be ramped.
  - ◊ Gaps in gratings within the accessible pathway must be no greater than 1/2" wide and openings must be aligned perpendicular to travel.
  - ◊ The maximum walkway cross slope permitted is 1:48 (2%).
- **Protruding Objects**
  - ◊ Objects at 27" to 80" above grade must not be more than a 4" protrusion.
  - ◊ Post or column-mounted objects must not be more than a 12" protrusion.
  - ◊ Overhead clearance must be equal to or greater than 80" above the surface.
- **Curb Ramps**
  - ◊ The maximum ramp running slope permitted is 1:12 (8.33%).
  - ◊ The maximum ramp cross slope permitted is 1:48 (2%).
  - ◊ Side flare (transition) slopes must be no greater than 1:12.
  - ◊ Curb ramps must be 48" wide (FDOT Design Standards, Index 304 - width may be reduced to 36" as required by ADAAG in restricted conditions and as approved by the Engineer).
  - ◊ Curb ramps must have detectable warning material the full width of ramp and 24" from back edge of curb.
  - ◊ Curb ramps must have a 48" long landing at top of slope (FDOT Design Standards, Index 304).
  - ◊ Curb ramps must have detectable warning in truncated domes with pattern and characteristics defined by regulations, including contrasting color.
  - ◊ Detectable warning also required at landings and flush transitions at street crossings.
- **Bus Stops**
  - ◊ Must be on or connect to an accessible route.
  - ◊ Must have an accessible approach to the boarding and alighting area and all provided amenities.

3.0 GENERAL ACCESSIBILITY GUIDELINES

- ◊ The clear space of the boarding and alighting area must be equal to or no less than 60" parallel and 96" perpendicular to the curb or street/roadway edge and be connected to the accessible route.
- ◊ Slope of the boarding and alighting area perpendicular to the curb must be equal to or less than 1:48 (2%).
- ◊ The slope parallel to the curb of the boarding and alighting area should match the slope of the roadway.
- ◊ The boarding and alighting area must provide a firm, stable, and slip resistant surface.
- ◊ The bus stop site must be chosen to provide the greatest degree of accessibility practicable.
- ◊ If provided, the boarding and alighting area concrete pad must be located within the specified clear zone for the roadway environment being used according to FDOT Design Standards, Index Number 700.
- ◊ Bus stop amenities must be connected to the accessible route and allow accessible maneuvering space and be within 48" maximum reach range of all operating controls (FDOT requires a 42" reach range limit for pedestrian signal control buttons).
- ◊ If a shelter is provided, it must connect to the accessible route and allow a minimum space of 30" X 48" fully within shelter.
- ◊ If a bench is included within a shelter, it must allow minimum space of 30" X 48" resting/transfer space at one end of bench.

3.0 GENERAL ACCESSIBILITY GUIDELINES

3.2 Specific ADAAG Requirements for Bus Stops & Facilities

ADAAG Section 810—Requirements for Bus Stops

The following excerpt from the revised ADAAG (2004 published version adopted by the USDOT on November 29, 2006) provides the following specific requirements for bus stops.

810 Transportation Facilities

810.1 General. Transportation facilities shall comply with 810.

810.2 Bus Boarding and Alighting Areas. Bus boarding and alighting areas shall comply with 810.2.

Advisory 810.2 Bus Boarding and Alighting Areas. At bus stops where a shelter is provided, the bus stop pad can be located either within or outside of the shelter.

810.2.1 Surface. Bus stop boarding and alighting areas shall have a firm, stable surface.

810.2.2 Dimensions. Bus stop boarding and alighting areas shall provide a clear length of 96 inches (2,440 mm) minimum, measured perpendicular to the curb or vehicle roadway edge, and a clear width of 60 inches (1,525 mm) minimum, measured parallel to the vehicle roadway.

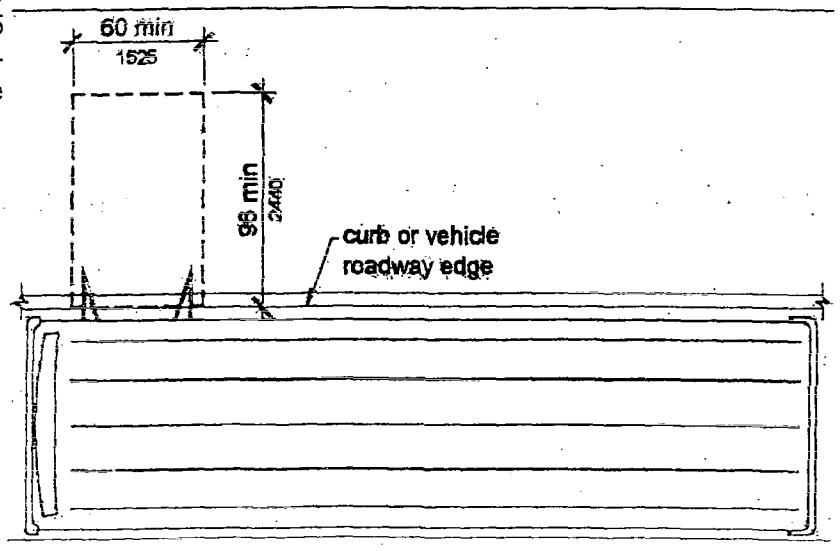


Figure 3.2.1
Dimensions of Bus Boarding and Alighting Areas
(Adapted from ADAAG Figure 810.2.2)

810.2.3 Connection. Bus stop boarding and alighting areas shall be connected to streets, sidewalks, or pedestrian paths by an accessible route complying with 402.

810.2.4 Slope. Parallel to the roadway, the slope of the bus stop boarding and alighting area shall be the same as the roadway, to the maximum extent practicable. Perpendicular to the roadway, the slope of the bus stop boarding and alighting area shall not be steeper than1:48.

810.3 Bus Shelters. Bus shelters shall provide a minimum clear floor or ground space complying with 305 entirely within the shelter. Bus shelters shall be connected by an accessible route complying with 402 to a boarding and alighting area complying with 810.2.

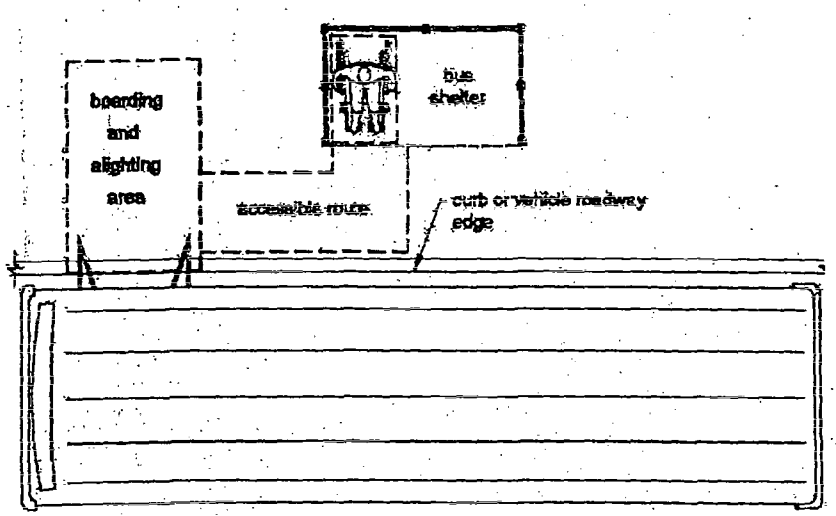


Figure 3.2.2
Bus Shelters
(Adapted from ADAAG Figure 810.3)

810.4 Bus Signs. Bus route identification signs shall comply with 703.5.1 through 703.5.4, and 703.5.7 and 703.5.8. In addition, to the maximum extent practicable, bus route identification signs shall comply with 703.5.5. These requirements include specifications for contrast, character height and spacing, style, etc.

EXCEPTION: Bus schedules, timetables, and maps that are posted at the bus stop or bus bay shall not be required to comply.

Figure 3.2.3 on the following page illustrates the dimensional characteristics of an accessible bus stop. Note that placement of a bench or other item at the transit site must be as an attached amenity and placed in a manner to ensure that those clear areas provided for accessibility are not obstructed.

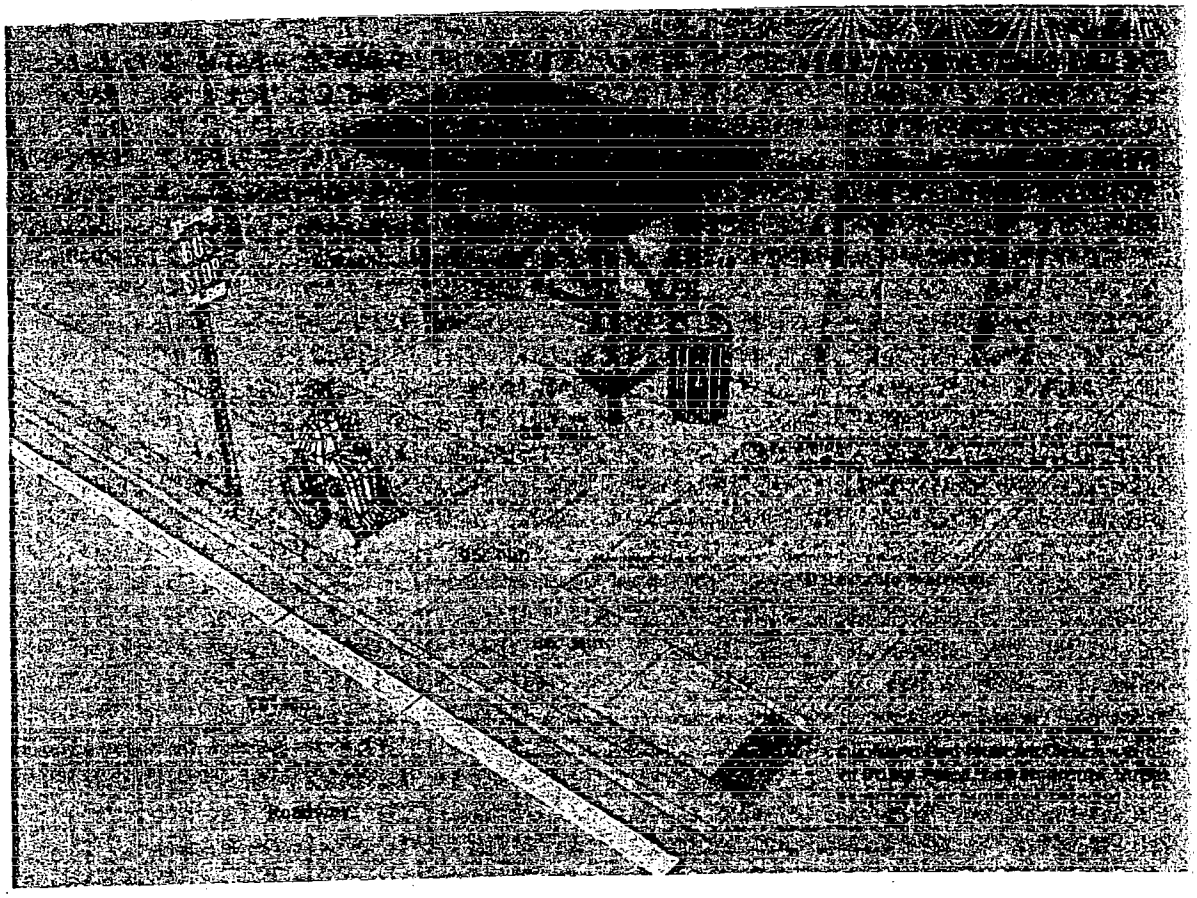


FIGURE 3.2.3 General Bus Stop Site Design Characteristics

4.0 RESEARCH & FINDINGS

4.1 Code Applicability Discussion for Bench Placement at Bus Stops

The ADAAG contains specific requirements for benches in Section 903. However, the scoping provisions of the ADAAG indicate that Section 903 is only applicable to benches located in interior spaces such as dressing, fitting, and locker rooms (803.4), and in holding and housing cells (807.2.2).

Additionally, to reinforce agreement of the above comment, it is necessary to note that according to direct communication with U.S. Access Board technical staff, ADAAG Section 903 is not applicable to benches placed in the public right-of-way. However, the Public Rights-of-Way Accessibility Guidelines published by the Access Board (PROWAG are not enforceable regulations at the time of this writing) do specify accessibility guidelines for benches in the public right-of-way. PROWAG particularly emphasizes the need to consider the dimensions and use of pedestrian circulation routes when coordinating the placement of improvements, appurtenances, utilities, or street furniture (including benches). Comments from disability organizations and individuals have identified blocked or compromised pedestrian routes as a major barrier to independent travel.

FDOT has taken an aggressive posture concerning the placement of benches and other amenities within the public right-of-way, particularly at transit stops. Rule 14-20.0032, Placement of Transit Bus Benches, specifically addresses requirements for benches placed in the public right-of-way. This rule utilizes many of the requirements of ADAAG Section 903 and PROWAG R212.6 covering the placement and dimensional characteristics for benches. This Votran Bus Stop Design standards document has been developed to incorporate the FDOT (PROWAG) and ADAAG requirements for benches and the applicable requirements are included on the following pages.

4.0 RESEARCH & FINDINGS

4.2 ADAAG SECTION 903 REQUIREMENTS

ADAAG SECTION 903

903 Benches

903.1 General. Benches shall comply with 903.

903.2 Clear Floor or Ground Space. Clear floor or ground space complying with 305 shall be provided and shall be positioned at the end of the bench seat and parallel to the short axis of the bench.

903.3 Size. Benches shall have seats that are 42 inches (1065 mm) long minimum and 20 inches (510 mm) deep minimum and 24 inches (610 mm) deep maximum.

903.4 Back Support. The bench shall provide for back support or shall be affixed to a wall. Back support shall be 42 inches (1065 mm) long minimum and shall extend from a point 2 inches (51 mm) maximum above the seat surface to a point 18 inches (455 mm) minimum above the seat surface. Back support shall be 2½ inches (64 mm) maximum from the rear edge of the seat measured horizontally.

903.5 Height. The top of the bench seat surface shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the finish floor or ground.

903.6 Structural Strength. Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 pounds (1112 N) is applied at any point on the seat, fastener, mounting device, or supporting structure.

903.7 Wet Locations. Where installed in wet locations, the surface of the seat shall be slip resistant and shall not accumulate water.

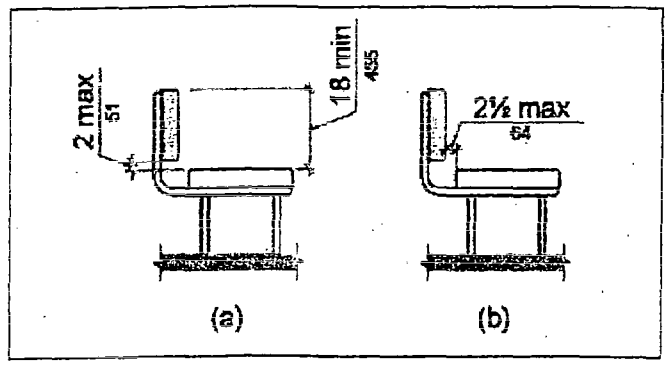


Figure 4.2.1
ADAAG Figure 903.4 Bench Back Support

4.0 RESEARCH & FINDINGS

4.3 Public Rights-of-Way Accessibility Guidelines

The specific PROWAG guidelines relevant to accessible placement of benches follows. As of this writing, these guidelines are not enforceable requirements. A public review and comment period and a Notice of Proposed Rule Making are pending for the adoption and enforcement of the PROWAG.

R211 Street Furniture
Street furniture intended for use by pedestrians and installed on or adjacent to a pedestrian circulation path shall comply with R307.

Advisory R211 Street Furniture. This scoping applies usability and operability criteria to certain items intended for pedestrian use in the public right-of-way. Where multiple items of a single type are provided at a single location, only a proportion may be required to be accessible and to be located on a pedestrian access route. Types of street furniture for which usability and operational criteria are provided include elements such as drinking fountains; public telephones; public toilet facilities; and tables, counters, and benches in R211; parking meters in R308.6; bus stops and shelters in R212; and signage, including bus stop signage, in R210. Where applicable, usability and operability provisions shall be satisfied in the design and construction of other items installed on or along a public right-of-way for pedestrian use (see sections R307, R401, and R405).

Careful coordination is required between agencies and divisions authorized to install items on and along sidewalks in order to avoid inadvertent conditions that may constituted barriers. The U.S. Department of Justice ADA regulations required that the usability of accessible features be maintained (28 CFR §35.133 and §36.211).

R212 Bus Stops
Where provided, bus boarding and alighting areas shall comply with R410. Where provided, bus shelters shall comply with R410.2.

Advisory R212 Bus Stops. Where bus stops are marked along existing streets by the placement of signage, benches, or shelters, other features necessary to accessibility, such as surface improvements and curb ramps, will be subject to the program access requirements of the U.S. Department of Justice title II regulation at 28 CFR 35.151 or the U.S. Department of Transportation 504 regulation at 49 CFR Part 27. Transportation, public works, and transit agencies should consider including needed improvements in their transition plans and other program accessibility planning.

Furthermore, the placement of such items is subject to usability and protruding objects provisions that apply to street furniture. Bus stop benches and shelters shall not intrude into an existing pedestrian access route.

4.0 RESEARCH & FINDINGS

R307 Street Furniture

R307.1 General. Street furniture shall comply with R307.

Advisory R307.1 General. Elements are often placed on a sidewalk without coordination by different agencies or entities. Covered entities must ensure that the usability of the pedestrian access route is maintained.
Where items are added to an existing developed streetscape and the pedestrian walkway is not being replaced or altered within the scope of the project, locations should be carefully selected for minimum slope and cross slope and adequate width and maneuvering space to optimize usability.

R307.2 Clear Floor or Ground Space. Street furniture shall have clear space complying with R402 and shall be connected to the pedestrian access route.

R307.6 Tables, Counters, and Benches. Tables, counters, and benches shall comply with R307.6.

R307.6.3 Benches.

R307.6.3.1 Clear Space for Wheelchairs at Benches. Where benches without tables are provided at a single location, at least 50 percent, but no fewer than one*, shall provide clear space complying with R402 *[30" X 48"]* positioned at the end of the bench seat and located for shoulder-to-shoulder seating.

**This statement refers to a single seat position.*

R307.6.3.2 Benches. Where benches without tables are provided at a single location, at least 50 percent, but no fewer than one, shall have a seat height at the front edge of 43 cm (17 in) minimum and 49 cm (19 in) maximum above the ground or floor space.

Advisory R307.6.3.2 Benches. Benches will be most useful if they have full back support and armrests to assist in sitting and standing.

4.0 RESEARCH & FINDINGS

4.4 Florida Accessibility Code: Placement of Transit Bus Benches

The requirements of the FAC are generally in concert with the Public Rights-of-Way Accessibility Guidelines and the ADAAG accessibility requirements. The following provides the text of FAC 14-20.0032 *Placement of Transit Bus Benches*. Note that the upcoming update of the FDOT Accessing Transit handbook will likely include requirements that are not currently included in Rule 14-20. Additionally, FDOT's ADA Coordinator has stated that an update to Rule 14-20 is also likely in the near future.

The Department allows placement and maintenance of transit bus benches on the right-of-way of a Federal-Aid highway or state highway pursuant to written approval by the appropriate city or county government within whose jurisdiction the bench is to be located. All bus benches shall be subject to the following:

(1) Transit bus benches placed on the right-of-way shall not exceed 74 inches in length, 28 inches in depth, and 44 inches in height.

(2) Any bench placed on any part of a sidewalk shall leave at least three feet clearance for pedestrian traffic between the bench and the nearest edge of the road.

(3) Transit bus benches shall not be placed in the median of any divided highway or on limited access facilities.

(4) Unless otherwise herein provided, transit bus benches shall be placed only at recognized transit stops. However, only the minimum number of benches necessary to accommodate the comfort and convenience of the general public shall be erected or maintained.

(5) Benches may be placed at points of pedestrian convenience other than recognized transit bus stops, where, in the judgment of the appropriate city or county government, there exists a necessity for such seating or where such seating would otherwise serve the public interest and shall comply with all other requirements placed upon transit bus benches in Rule 14-20.0032, FAC. However, only the minimum number of benches necessary to accommodate the comfort and convenience of the general public shall be erected or maintained.

(6) If the Department finds any bench in violation of any portion of this rule, except those determined to endanger life or property, the Department shall provide written notice of the violation to the owner of the bench, or the appropriate city or county government, who shall correct the violation or remove the shelter within 30 days after receipt of the notice. If the Department finds any bench to be a danger to life or property, the Department shall provide notice to the owner of the bench, or the appropriate city or county government, who shall take immediate steps to make the bench safe or remove the bench. If the condition or location of a bench is not corrected in accordance with the Department's notice, the Department will cause the bench to be removed and seek the cost of removal from the owner of the bench.

(7) Commercial advertising shall be displayed upon a transit bus bench only on either the front or rear surface of the backrest area.

(8) Advertising displayed on a transit bus bench shall not be greater than 72 inches in length nor greater than 24 inches in height, and no advertising displayed upon a bench shall be of

(9) The transit bus bench location must meet the set back and minimum clear recovery zone requirements as detailed in the Florida Department of Transportation's *Roadway and Traffic Design Standards*, Index Number 700, entitled "Design Criteria Related to Highway Safety" (incorporated by reference in Rule 14-85.004, F.A.C).

(10)Any transit bus bench that was in service prior to April 1, 1992, may be replaced with a bus bench of the same size or smaller, if the bench is damaged or destroyed or otherwise becomes unusable.

(11)Any transit bus bench placed at points of public convenience which violates any portion of this rule shall be subject to removal upon 30 days notice if the violation is not corrected.

(12)Whenever necessary for the construction, repair, improvement, maintenance, safe and efficient operation, alteration, or relocation of all, or any portion of a State Road, as determined by the Department, any bus bench and appurtenances thereto, authorized by this Rule, shall be immediately removed from said State Road Right-of-Way or shall be reset or relocated thereon as required by the Department, at the expense of the bench owner unless reimbursement is authorized by separate agreement. In the event the relocation of said benches is scheduled to be done simultaneously with the Department's construction work, the bench owner shall coordinate with the Department before proceeding. The bench owner shall cooperate with the Department's contractor to arrange the sequence of work so as not to delay the work of the Department's contractor and shall defend any legal claims of the Department's contractor due to delays caused by the bench owner's failure to comply with the approved schedule. The bench owner shall not be responsible for delays for reasons beyond the bench owner's reasonable control.

Specific Authority 334.044(2) FS. Law Implemented 334.044(13), 335.021(1), 337.408 FS. History–New 12-26-90, Amended 8-11-92, 5-15-97, 7-16-98.

5.0 DESIGN STANDARDS & SCENARIOS

5.1 Priority Considerations for Bench and Shelter Placement at Bus Stops

This section describes important considerations for bench and shelter placement at bus stops. ADA standards require all bus stops to have sufficient space for a boarding and alighting area that has a firm, stable, and slip-resistant surface to accommodate boarding and alighting at the stop. When a bench or shelter is provided at a bus stop, a boarding and alighting area concrete pad is required and must be located within the specified clear zone for the roadway environment being used according to FDOT Design Standards, Index Number 700. If bus stop amenities in addition to a bus stop sign are provided, the bus stop boarding and alighting area shall be connected to the amenities, streets, sidewalks, and/or existing pedestrian infrastructure by an accessible route.

1. **Bus access characteristics (critical)** – This category involves characteristics related to the use of a particular location by a transit entity for a bus stop. For a location to be viable for application of a bus stop, requirements must be met for vertical and side clearance of the bus, turning radius of the intersection, curb lane width, parking clear zone, and presence of driveways, among other criteria. Placement of a bench at a site that does not provide an accessible environment is not recommended and may present liability issues for the transit agency.
2. **Patron accessibility characteristics (critical)** – Once it is determined that a bus is capable of safely accessing a potential bus stop location, it next must be determined whether patrons can access the location conveniently and safely. To do this, patron access to/from and use of the site must be assessed. For a location to be viable from the point of view of the transit patron, requirements must be met for the presence, width, and relative connectivity of sidewalks where applicable, the presence of an ADA boarding and alighting area (minimum 5-foot by 8-foot) enabling clearance for wheelchair lift/ramp deployment, and the presence of accessible connecting pedestrian pathways and curb ramps, among other potential considerations.
3. **Site infrastructure characteristics (non-critical)** – If buses and patrons are both able to successfully access a potential bus stop location, then the location should be suitable for the placement of a bus stop. As noted previously, the purpose of evaluating the site infrastructure characteristics is to locate the best spot for the stop within the general area of the location. In considering placement of a bench or shelter, issues that should be identified and considered in establishing the best placement at a stop within a particular location include utilities, guide wires, signage, and other potential obstructions to visibility and access; the presence of driveways and other access points to adjacent development; and the presence of parallel parking.

4. **Safety, comfort, & security characteristics (non-critical)** – The other category of characteristics that should be used to fine-tune the decision for bench or shelter placement at a potential stop at a particular location considers issues related to safety, comfort, and security of patrons and buses. Stop placement considerations in this category include appropriate visibility for both bus operators and patrons, the presence of lighting, the presence of shade, surrounding slopes (especially if a ditch is present), and the presence of a bridge, among others. These and other potential considerations related to safety, comfort, and security at stops are important considerations when reaching a decision to place a bench or shelter at a bus stop.

5.0 DESIGN STANDARDS & SCENARIOS

5.2 GUIDELINES FOR BENCH PLACEMENT

The following are minimum guidelines for the placement of benches at bus stops. These guidelines are written in concert with established accessibility requirements found in ADAAG and the FAC.

Wheelchair Clearance
Minimum clear width for a single wheelchair passage shall be 36 inches continuously.
Note: Clearance for new locations or locations to be adjusted should provide for 48-inch clearance to be in conformance with FDOT design standards and the 2012 FAC.

Minimum clear length of 96 inches (measured perpendicular from the curb or vehicle roadway edge) and a minimum clear width of 60 inches measured parallel to the curb or roadway (8-foot deep by 5-foot wide total space) will be provided on new construction to the maximum extent allowed by legal or site constraints for deployment of a wheelchair lift/ramp from a bus.

Minimum 60-inch clearance between bench and fire hydrants.

Minimum 30-inches by 48-inches clear area at the front edge of the bench to provide space for a wheelchair to maneuver at the bench and allow the transfer from wheelchair to bench if desired. See Exhibit 5.2.1 for suggested bus stop design layouts. There are a myriad of design layout options, and the ones shown are typical for urban, suburban, or rural environments.

Clearance between Bench and Other Bus Stop Components (Trash Cans, Shelters, and Kiosks)
Avoid placement of bench next to walls or fences. If possible, maintain 36-inch clearance in front of and behind bench. If not possible, place bench within 4 inches of wall or other structure. However, this placement ***must*** maintain 36 inches in front of bench for accessible path clearance.

Benches placed adjacent to shelters should allow an accessible route not less than 36 inches minimum, 48 inches preferred.

Benches may be placed within a bus shelter. A space no less than 30-inches by 48-inches at one end of the bench must be provided fully within the shelter for wheelchair parking. Most bus stop shelters are designed to include benches placed to provide for a wheelchair turning space of at least 60 inches. The space required for a wheelchair to make a 180-degree turn is a clear space of 60 inches in diameter.

5.0 DESIGN STANDARDS & SCENARIOS

Benches should avoid proximity to boarding and alighting area of 60 inches wide by 96 inches deep so as to not obstruct access.

Sight Visibility
Transit stop furniture over 2-½ feet high should be located to provide drivers in nearby driveways clear visibility of the street.

Firm Stable Surfaces
Place bench on firm, stable surface that allows for surface drainage.

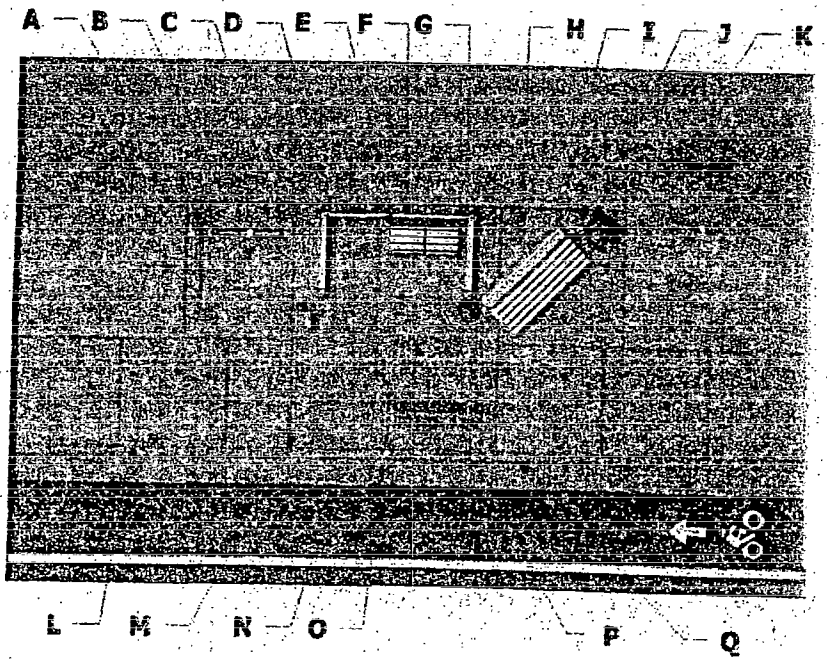
Desirable Placement
Wherever possible, benches should be anchored to concrete to prevent unauthorized movement.

Place bench in shaded area if possible.

Place bench outside of landscape watering areas.

Beginning on page 40, typical design scenarios are provided in Figures 5.2.2 through 5.2.6 that provide illustrations and descriptions of conditions for bench placement at bus stops. These scenarios are intended as guidance for the approach to siting a bus stop and the application of public seating found at typical sites throughout the Votran service area.

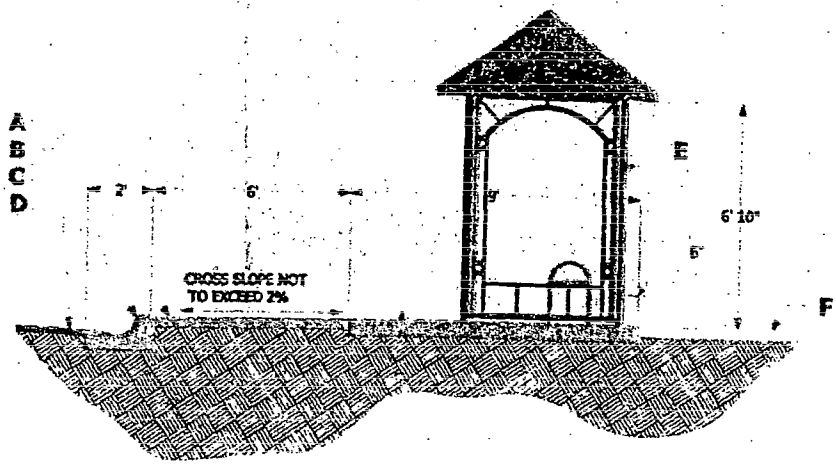
5.0 DESIGN STANDARDS & SCENARIOS



Plan View: Bus Stop Site at Existing Sidewalk

Plan View

A: optional bike rack
B: optional concrete pad (~56 SF)
C: Braille sign if provided (not required)
D: 30"X48" minimum clear area for wheelchair resting area within shelter
E: bench within shelter
F: bus shelter
G: hanging trash can
H: optional concrete pad for bench (~54 SF)
I: optional bench
J: optional trash can
K: 30"X48" minimum clear area for wheelchair access to bench
L: existing roadway curb
M: minimum 5'X8' bus stop boarding and alighting area
N: ~9'X9'-7" concrete bus shelter pad
O: cross slope not to exceed 2% perpendicular to roadway edge
P: typical 60" diameter wheelchair turning space
Q: roadway curb & gutter



Cross Section View: Bus Stop Site at Existing Sidewalk

Cross Section View

A: new concrete bus shelter pad
B: new sidewalk
C: new roadway curb and gutter
D: existing asphalt
E: new bus shelter
F: existing grass

Figure 5.2.1 Accessible Bus Stop Site Layout Design

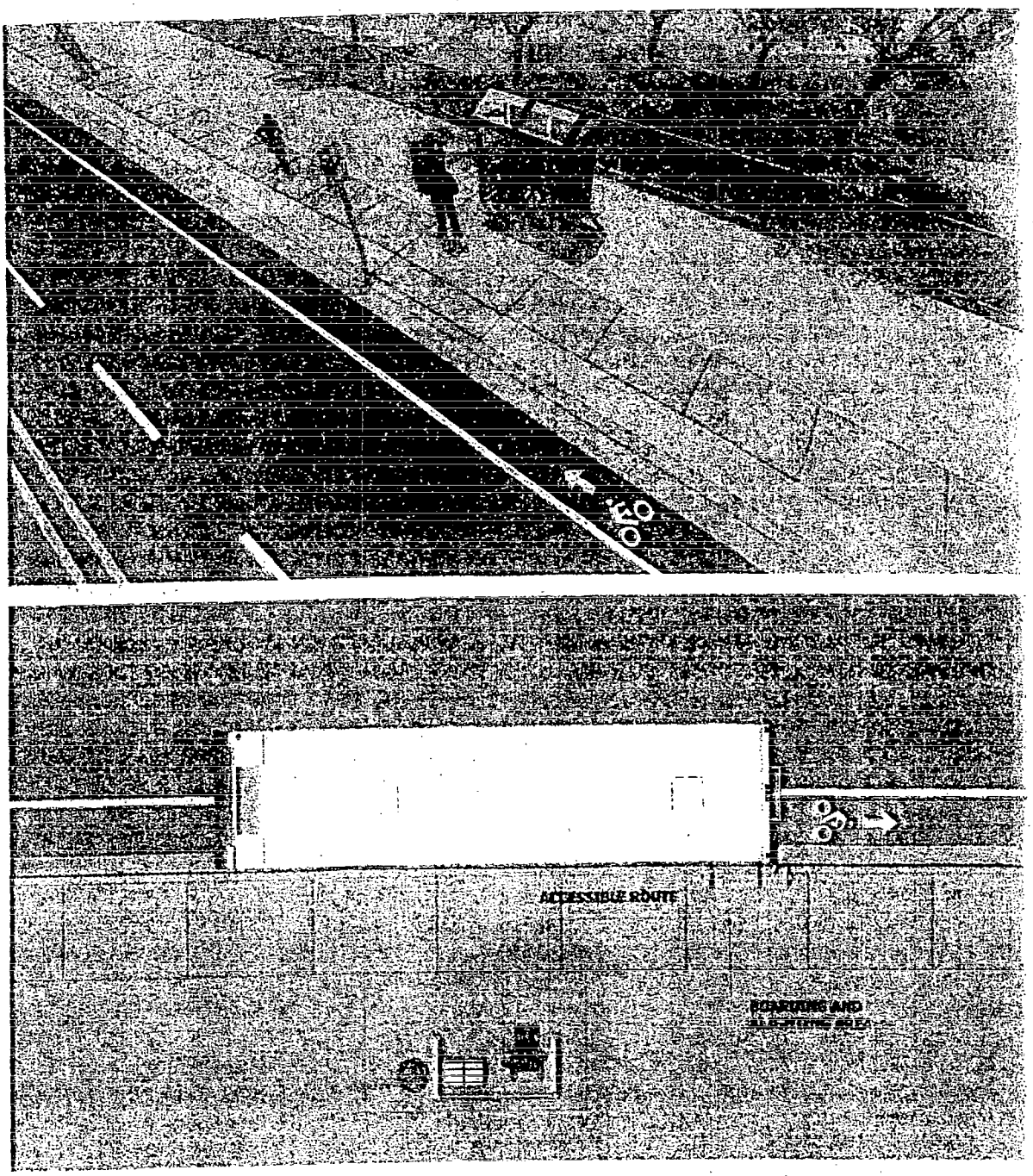
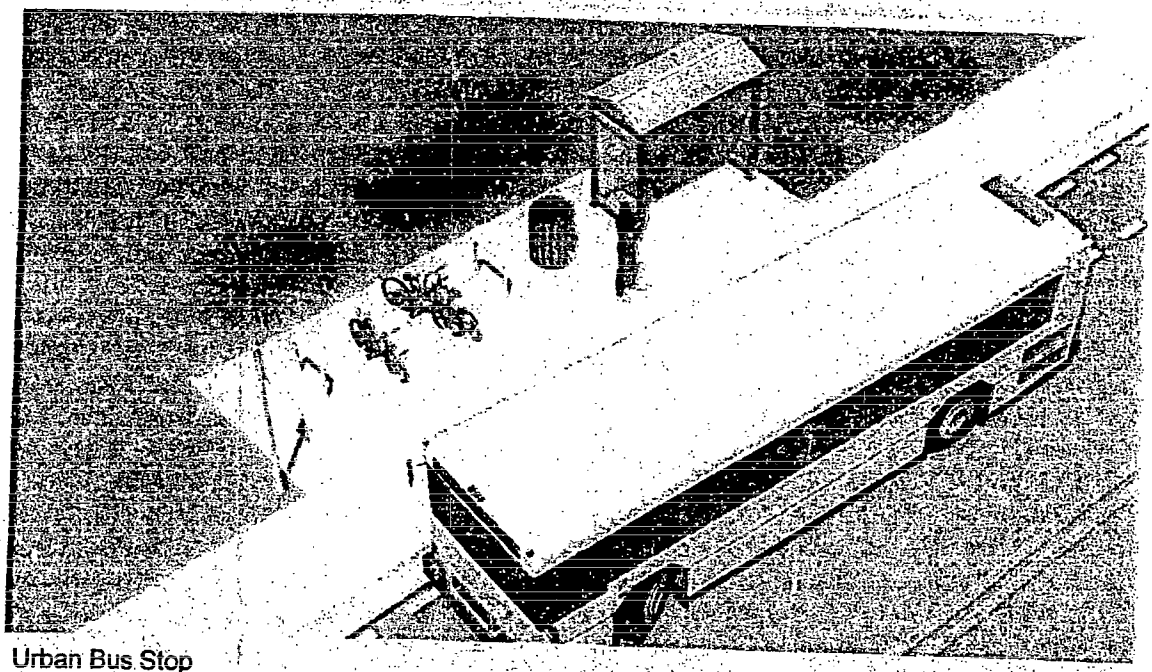


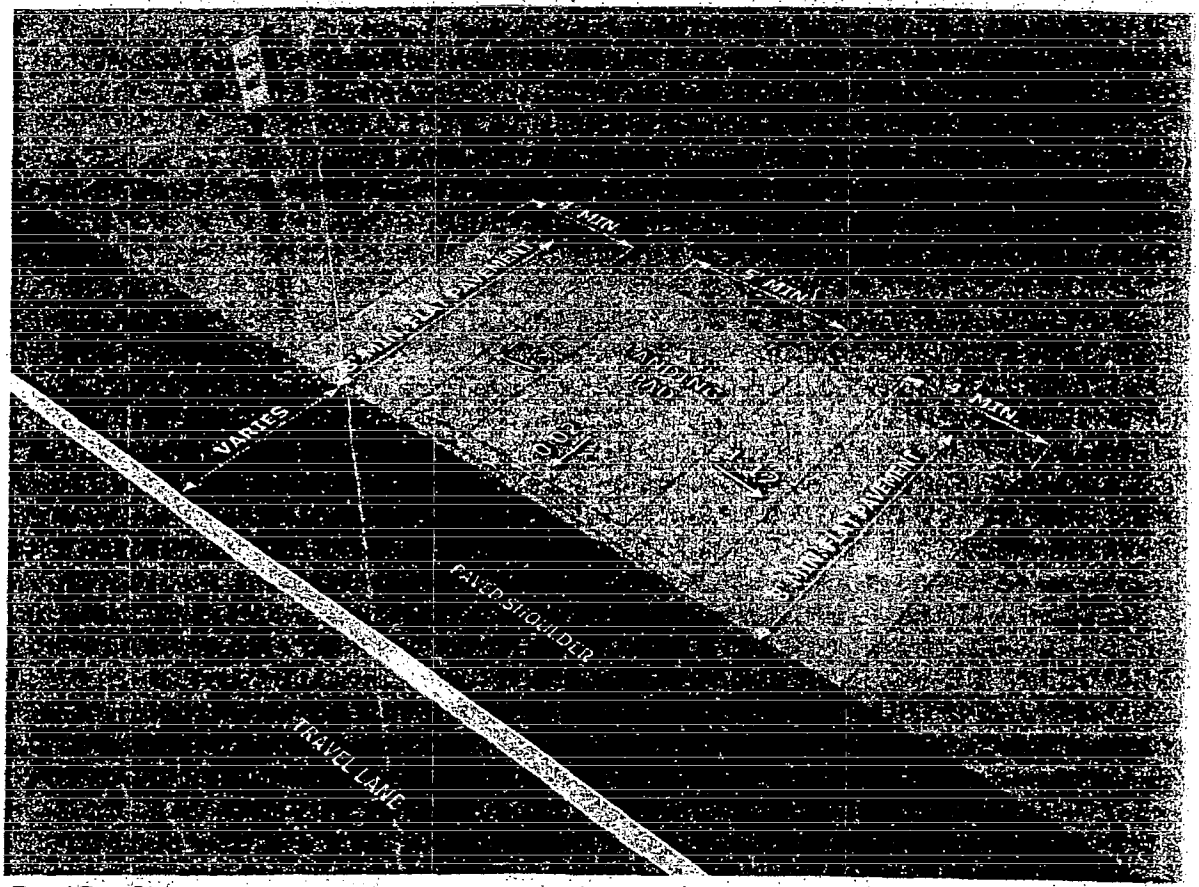
Figure 5.2.1 Accessible Bus Stop Site Layout Design (continued)



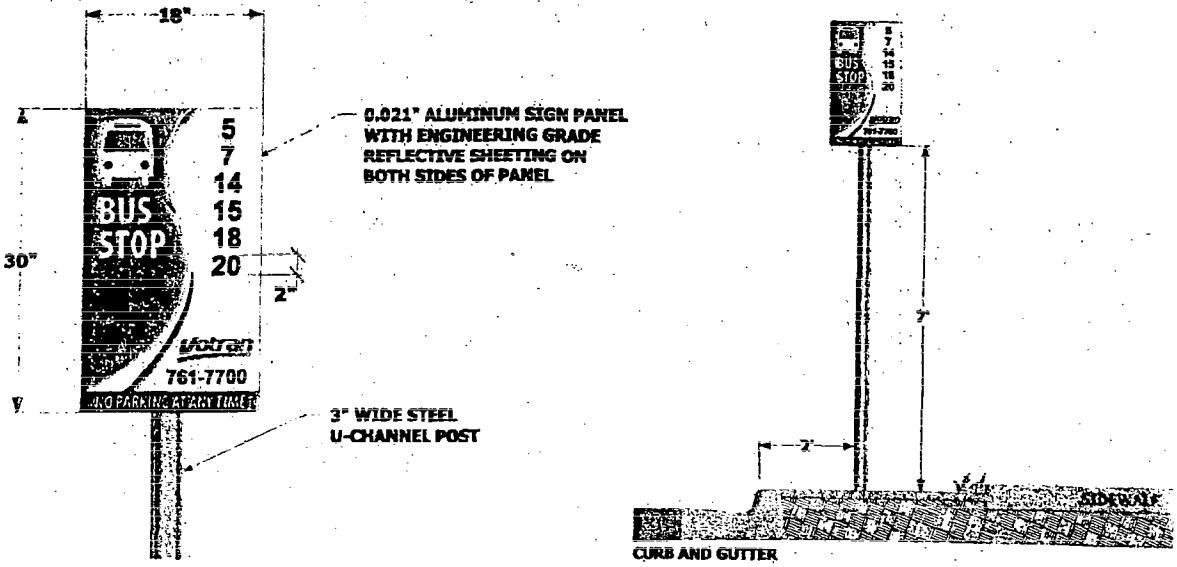
Urban Bus Stop

Suburban Bus Stop

Figure 5.2.1 Accessible Bus Stop Site Layout Design (continued)



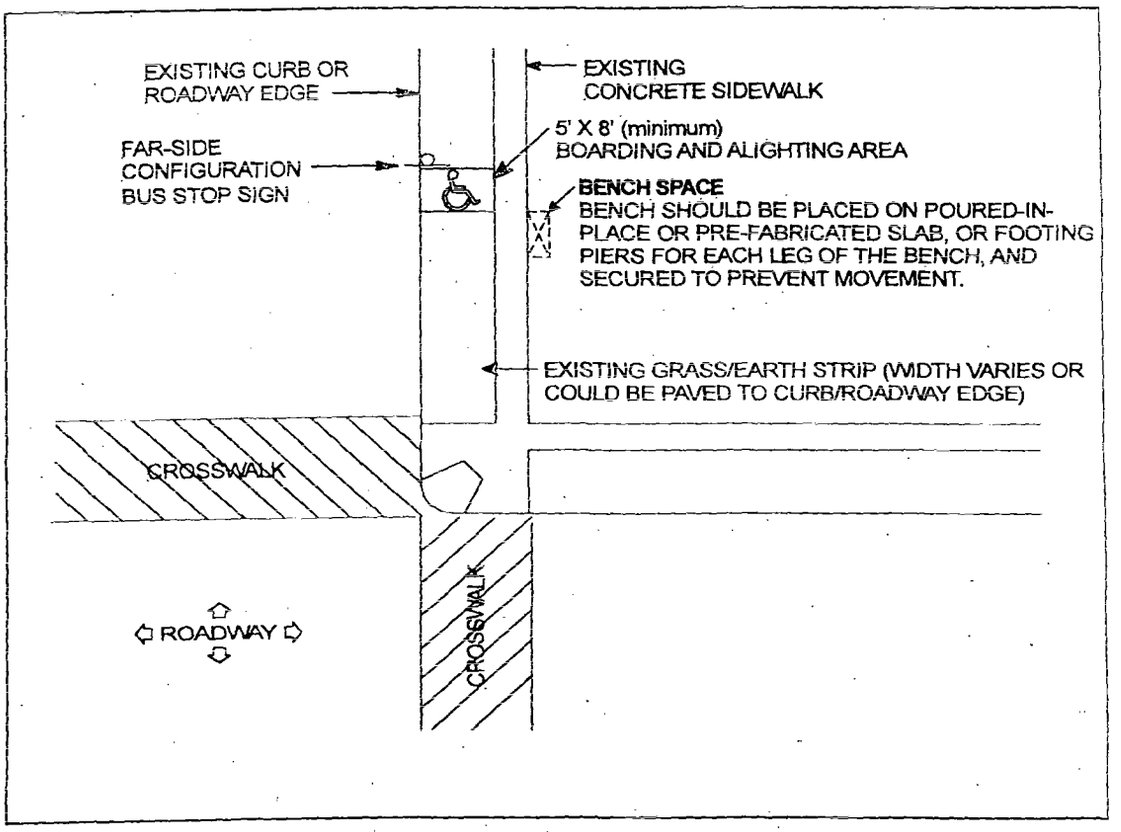
Rural Bus Stop



Bus Stop Sign Design & Placement

Figure 5.2.1 Accessible Bus Stop Site Layout Design (continued)

5.0 DESIGN SCENARIOS & CONSIDERATIONS



SCENARIO 1: GRASS/EARTH STRIP BETWEEN CURB/ROADWAY EDGE AND EXISTING WALKWAY

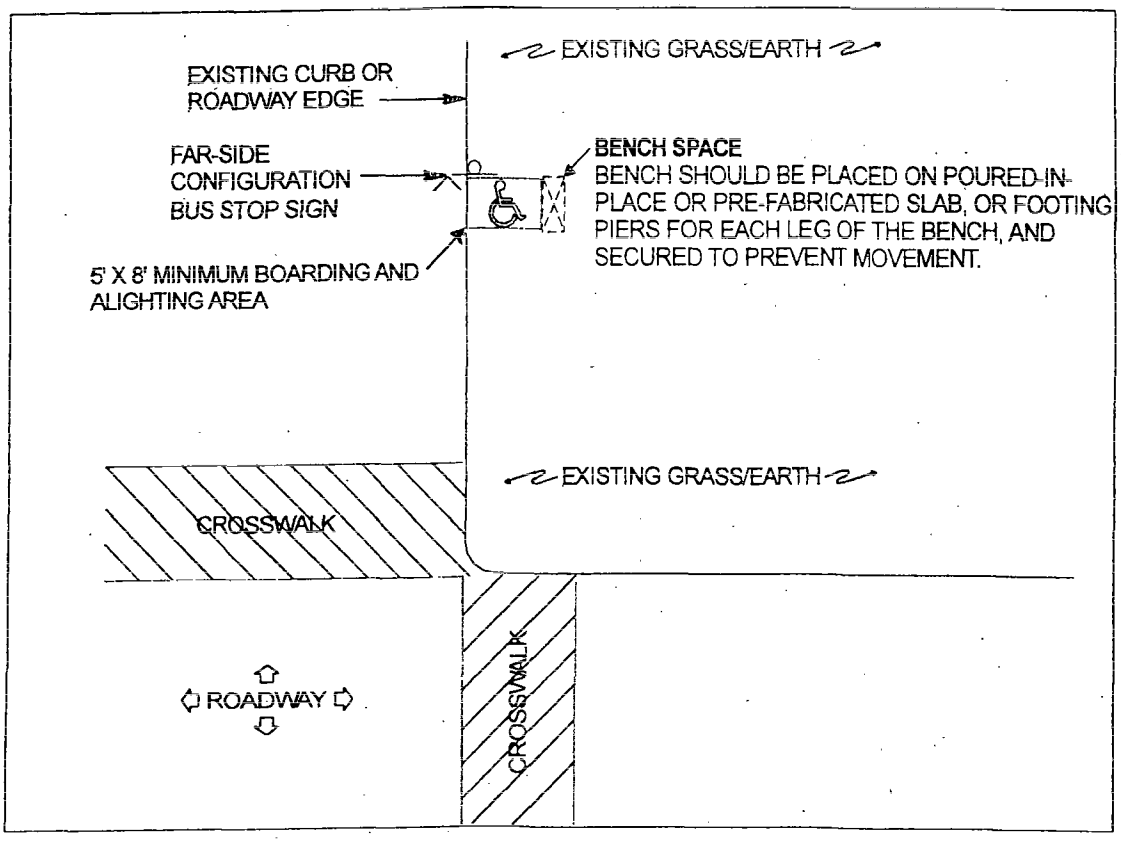
This scenario solution can be applied at urban, suburban, or rural environments.

The determination of a site for bench placement at a bus stop that affords the greatest accessibility practicable given the existing site conditions is essential. Placement of the bench must allow access by an individual using a wheelchair. A minimum 36" wide path to the bench and an area no less than 30" perpendicular and 48" parallel to the bench must be provided. The bench location must provide an unobstructed accessible path from the bus stop boarding and alighting area to the bench.

All new work, or alterations to existing sites, must be performed in compliance with ADAAG regulations by maintaining a cross slope less than 2% and running slope less than 5% except that the boarding and alighting area must coincide with slope of the roadway. Connection to existing curb/roadway edge and existing walkway must be consistent with ADAAG surface and walkway regulations by ensuring that the connection provides a smooth transition with a change in level not to exceed 1/4 inch. Walking surfaces of new work must be slip resistant - generally achieved by a broom finish to standard concrete surface.

Figure 5.2.2 Bench Placement Scenario One

5.0 DESIGN SCENARIOS & CONSIDERATIONS



SCENARIO 2: GRASS/EARTH ALONG CURB/ROADWAY EDGE - NO EXISTING WALK-WAY AT STOP WITH CONCRETE BOARDING AND ALIGHTING AREA.

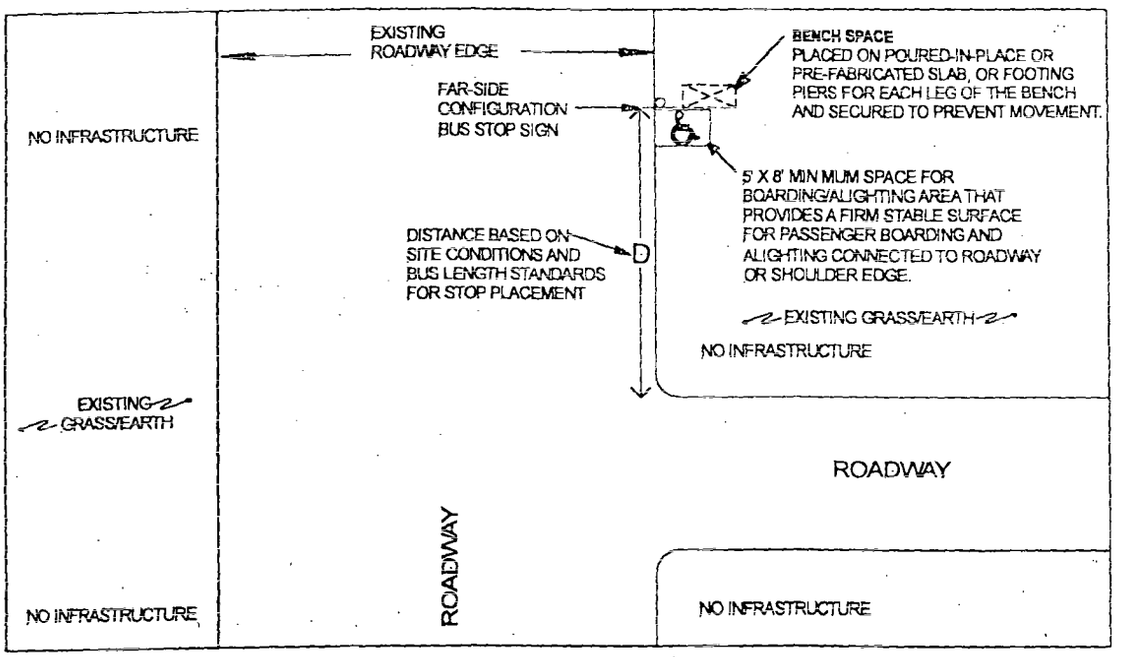
This scenario solution can be applied at urban, suburban, or rural environments.

The determination of a site for bench placement at a bus stop that affords the greatest accessibility practicable given the existing site conditions is essential. Placement of the bench must allow access by an individual using a wheelchair. A minimum 36" wide path to the bench and an area no less than 30" perpendicular and 48" parallel to the bench must be provided. The bench location must provide an unobstructed accessible path from the bus stop boarding and alighting area to the bench.

All new work, or alterations to existing sites, must be performed in compliance with ADAAG regulations by maintaining a cross slope less than 2% and running slope less than 5% except that the boarding and alighting area must coincide with slope of the roadway. Connection to existing curb/roadway edge and existing walkway must be consistent with ADAAG surface and walkway regulations by ensuring that the connection provides a smooth transition with a change in level not to exceed 1/4 inch. Walking surfaces of new work must be slip resistant generally achieved by a broom finish to standard concrete surface.

Figure 5.2.3 Bench Placement Scenario Two

5.0 DESIGN SCENARIOS & CONSIDERATIONS



SCENARIO 3: RURAL ENVIRONMENT WITH GRASS/EARTH ALONG CURB/ROADWAY EDGE - NO EXISTING WALKWAY OR INFRASTRUCTURE AT BUS STOP SITE OR OTHER RIGHT-OF-WAY ABUTMENTS.

Transit agencies are required by the ADA to select a site for the creation of a bus stop that affords the greatest accessibility practicable given the route and site conditions.

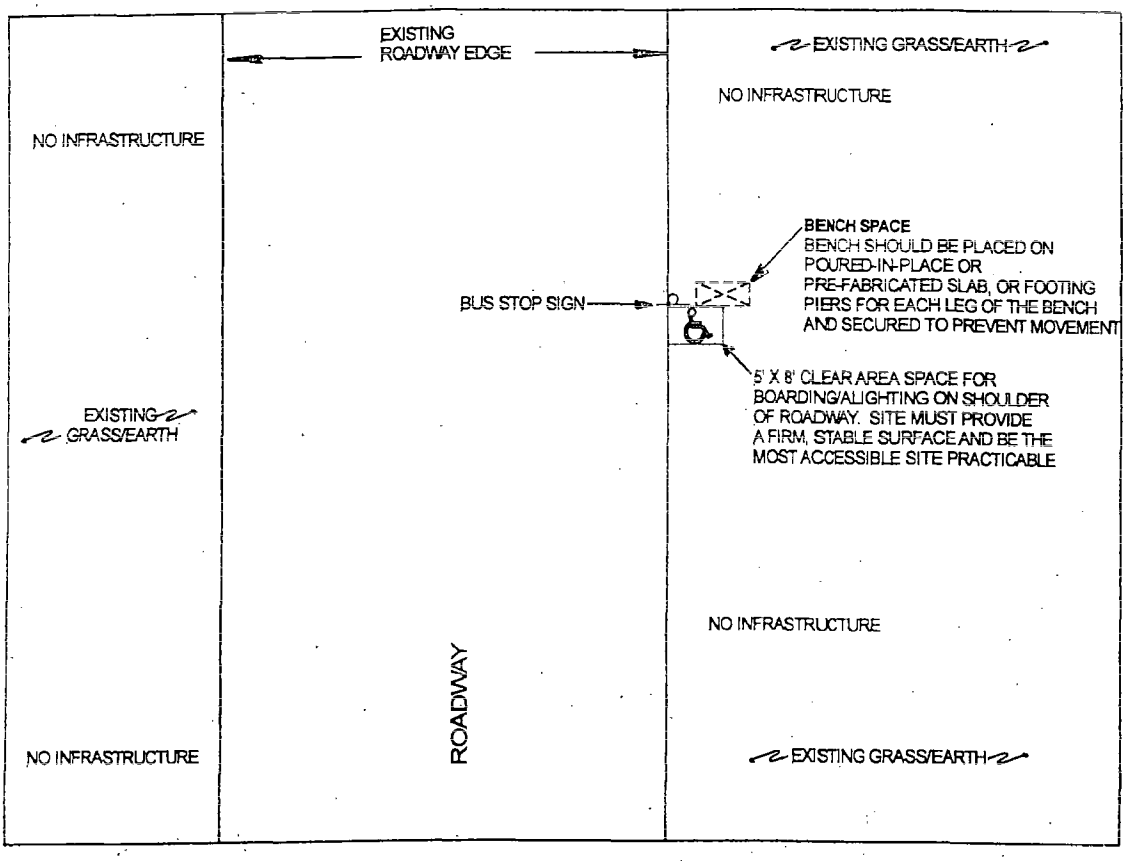
This scenario solution can be applied at suburban or rural environments where no infrastructure exists and no pedestrian pathways have been established formally or informally. However, it is presumed that the minimum 5'-by 8'-bus stop boarding and alighting area has been established by the transit agency with a paved material.

Without infrastructure support such as walkways, curb ramps, crosswalks, pedestrian or vehicle control devices, or other forms of pedestrian rights-of-way amenities (except for the paved boarding and alighting area), passengers are at risk whenever entering into the environment described in this scenario as it is assumed that the roadway shoulder provides the pathway to and from the bus stop. However, in certain instances, particularly in undeveloped rural areas, the establishment of public transit services may serve the best interest of the community. Given this condition, bus stop sites must be selected to provide the most accessible environment possible.

Placement of a bench at sites where undeveloped and non-accessible connections to the bus stop is not provided is not recommended. However, in good faith to provide seating at these stops, placement of benches must also be accomplished in the interest of providing the most accessible placement arrangement possible. Direct connection to the paved boarding and alighting area is required to afford access to the bench by individuals with disabilities.

Figure 5.2.4 Bench Placement Scenario Three

5.0 DESIGN SCENARIOS & CONSIDERATIONS



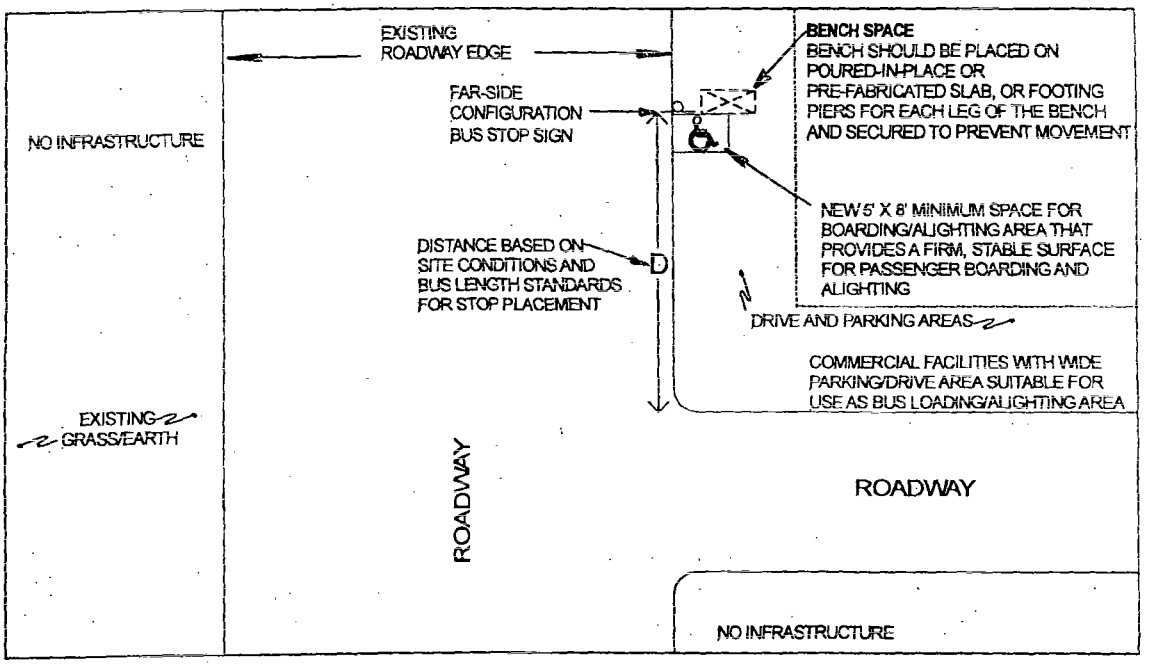
SCENARIO 4: RURAL ENVIRONMENT WITH GRASS/EARTH ALONG CURB/ROADWAY EDGE AND NO AREA AVAILABLE FOR BOARDING/ALIGHTING DUE TO RAVINE, SWALE, OVERGROWTH, OR OTHER OBSTRUCTIONS OR STRUCTURES PREVENTING SPACE FOR PASSENGERS TO MANEUVER OR BOARD BUS - NO EXISTING WALKWAY OR INFRASTRUCTURE AT STOP SITE OR OTHER RIGHT-OF-WAY ABUTMENTS.

Given this scenario, a more suitable location must be identified to establish a bus stop unless site conditions and traffic patterns allow the bus to stop in the roadway and board or alight passengers directly onto an existing shoulder meeting the boarding and alighting area requirements of the ADA. Otherwise, the site will have to be improved or another site chosen for the stop.

Without infrastructure support such as walkways, curb ramps, crosswalks, pedestrian or vehicle control devices, or other forms of pedestrian rights-of-way amenities (except for the paved boarding and alighting area), passengers are at risk whenever entering into the environment described in this scenario as it is assumed that the roadway shoulder provides the pathway to and from the bus stop. However, in certain instances, particularly in undeveloped rural areas, the establishment of public transit services may serve the best interest of the community. Given this condition, bus stop sites must be selected to provide the most accessible environment possible.

Figure 5.2.5 Bench Placement Scenario Four

5.0 DESIGN SCENARIOS & CONSIDERATIONS



SCENARIO 5: RURAL ENVIRONMENT WITH NO EXISTING WALKWAY OR INFRASTRUCTURE NEAR PROPOSED STOP SITE OR OTHER RIGHT-OF-WAY ABUTMENTS. PLACEMENT OF STOP WITHIN EXISTING PAVED COMMERCIAL DRIVE/PARKING AREA.

This scenario solution can be applied at suburban or rural environments where no infrastructure exists and no pedestrian pathways have been established formally or informally except at site abutting commercial space.

Without infrastructure support such as walkways, curb ramps, crosswalks, pedestrian or vehicle control devices, or other forms of pedestrian rights-of-way amenities (except for the paved boarding and alighting area), passengers are at risk whenever entering into the environment described in this scenario as it is assumed that the roadway shoulder provides the pathway to and from the bus stop. However, in certain instances, particularly in undeveloped rural areas, the establishment of public transit services may serve the best interest of the community. Given this condition, bus stop sites must be selected to provide the most accessible environment possible.

Placement of a bench at sites where undeveloped and non-accessible connections to the bus stop are not provided are not recommended. However, in good faith to provide seating at these stops, placement of benches must also be accomplished in the interest of providing the most accessible placement arrangement possible. Direct connection to the paved boarding and alighting area is required to afford access to the bench by individuals with disabilities.

Figure 5.2.6 Bench Placement Scenario Five

6.0 DEFINITIONS & ACRONYM LIST

ACCESSIBLE - A site, building, facility, or portion thereof that is in compliance with the ADAAG provisions and regulations.

ACCESSIBILITY - A measure of the ability or ease of all people to access a given area or system.

ACCESSIBLE MEANS OF EGRESS - A continuous and unobstructed way of egress travel from any point in a building or facility that provides an accessible route to an exit or a public way.

ADA - The Americans with Disabilities Act of 1990, which includes the final rule, which sets forth the transportation standards contained in 49 CFR Parts 27, 37, and 38.

ADAAG - The appendix to the 49 CFR Part 37 containing the Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities, which provides the architectural and structural requirements for an accessible environment.

ALTERATION - A change to a building or facility that affects or could affect the usability of the building or facility or portion thereof. Alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historic restoration, resurfacing of circulation paths or vehicular ways, changes or rearrangement of the structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions. Normal maintenance, reproofing, painting or wallpapering, or changes to mechanical and electrical systems are not alterations unless they affect the usability of the building or facility.

BOARDING AND ALIGHTING AREA - The clear space at a bus stop allocated for patrons to board or alight from the bus.

BUILDING - Any structure used or intended for supporting or sheltering any use or occupancy.

BUS BAY - A widened portion of the roadway or right-of-way that permits buses or special use vehicles to stop outside of the traffic through lanes while passengers board or alight the bus or special use vehicle. It is designed to allow easy reentry of the bus or special use vehicle into the traffic stream.

6.0 DEFINITIONS & ACRONYM LIST

BUS STOP - A designated area where local buses stop to load and unload passengers along local or express routes. The bus stop is the passenger interface and bus operating area. The ADA considers a bus stop a "transportation facility" and is governed by the USDOT ADA regulations.

CIRCULATION PATH - An exterior or interior way of passage provided for pedestrian travel, including, but not limited to, walks, hallways, courtyards, elevators, platforms, ramps, stairways, and landings.

CONNECTION - For purposes of access management, any driveway, street, turnout, sidewalk, or other means of providing for the movement of vehicles, pedestrians, or bicycles to or from the public roadway system.

CORRIDOR - A broad geographical band that follows a general directional flow or connects major sources of trips.

CROSS SLOPE - The slope that is perpendicular to the direction of travel.

CURB RAMP - A short ramp cutting through a curb or built up to it to allow accessible travel between two elevations.

DETECTABLE WARNING - A standardized surface feature built in or applied to walking surfaces or other elements to warn of hazards on a circulation path.

ELEMENT - An architectural or mechanical component of a building, facility, space, or site.

FAC - Florida Accessibility Code

FACILITY - All or any portion of buildings, structures, site improvements, elements, and pedestrian routes or vehicular ways located on a site.

FDOT - Florida Department of Transportation

HEADWAY - The scheduled time intervals between vehicles moving along the same route, line, or roadway in the same direction.

MARKED CROSSING - A crosswalk or other identified path intended for pedestrian use in crossing a vehicular way.

6.0 DEFINITIONS & ACRONYM LIST

MODE - A particular form of travel (i.e., walking; bicycling; travel by air, land, or sea in various purpose vehicle). More generally identifies mode of transportation within a system such as bus, rail, shuttle, etc.

PPM - Plans Preparation Manual. The PPM sets forth geometric and other design criteria, as well as procedures, for Florida Department of Transportation (FDOT) projects.

PUBLIC ROAD - Any roadway owned and/or maintained by the state, county, or city.

PUBLIC TRANSPORTATION FACILITIES - Bus stops, transit centers, park-and-ride lots, high occupancy vehicle (HOV) lanes and pullouts, multi-modal facilities, rail stations, etc.

PUBLIC USE - Interior or exterior rooms, spaces, or elements that are made available to the public. Public use may be provided at a building or facility that is privately or publicly owned.

PUBLIC WAY - Any street, alley, or other parcel of land open to the outside air leading to a public street, which has been deeded, dedicated, or otherwise permanently appropriated to the public for public use and that has a clear width and height of not less than 10 feet.

RAMP - A walking surface that has running slope steeper than 1:20 (5%).

REGULATED ROADWAY - A road segment that has an adopted level of service standard.

RIGHT-OF-WAY - A general term denoting land, property, or interest therein, usually in a strip, acquired for transportation purposes.

ROADWAY - The portion of a street or highway, including shoulders, for the intended use of vehicles.

RUNNING SLOPE - The slope that is parallel to the direction of travel.

SHELTER - A structure constructed at a transit stop that provides protection for patrons from weather elements. These are generally equipped with a bench and transit information displays.

SITE - A parcel of land bounded by a property line or a designated portion of a public right-of-way.

6.0 DEFINITIONS & ACRONYM LIST

SPACE - A definable area, such as a room, toilet room, hall, assembly area, entrance, storage room, alcove, courtyard, or lobby.

TACTILE - An object that can be perceived using the sense of touch.

TECHNICALLY INFEASIBLE - With respect to an alteration of a building or a facility, something that has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member that is an essential part of the structural frame; or because other existing physical or site constraints prohibit modification or addition of elements, spaces, or features that are in full and strict compliance with the minimum requirements.

TRANSFER - A passenger's change from one transit vehicle to another transit vehicle to complete the patron's travel pattern.

TRANSIT AMENITIES - Added fixtures at transit stops and facilities to provide additional comfort and conveniences for patrons (i.e., benches, kiosks, waste receptacles, telephones, shelters, etc.) (also known as "transit infrastructure").

TRANSIT STATION - A designated area where passengers may embark or disembark from rail or bus public transportation equipment.

TRANSIT STOP - A designated area where passengers may embark or disembark from rail or bus public transportation equipment.

US DOJ - United States Department of Justice

US DOT - United States Department of Transportation

VEHICLE - Every device in, upon, or by which any person or property is or may be transported or drawn upon a travel way, excepting devices used exclusively upon stationary rails or tracks.

VEHICULAR WAY - A route provided for vehicular traffic, such as in a street, driveway, or parking facility.

WALK - An exterior prepared surface for pedestrian use, including pedestrian areas such as plazas and courts.

6.0 DEFINITIONS & ACRONYM LIST

WHEELCHAIR LIFT - A device mounted on a transit vehicle used to raise and lower a platform to transport a person in a wheelchair or other mobility aid from the ground surface, sidewalk, or landing area to the interior of a transit vehicle and vice versa.

WHEELCHAIR RAMP - A device mounted on a transit vehicle and deployed to the ground surface, sidewalk, or boarding and alighting area to allow a person in a wheelchair or other mobility aid to enter or exit the transit vehicle.

WHEELCHAIR SPACE - Space for a single wheelchair and its occupant.

7.0 REFERENCES

TECHNICAL RESOURCES AND REFERENCES OF INDUSTRY STANDARDS AND BEST PRACTICES

Our appreciation for those involved in previous work on bus stop guidelines, as these were used as base information to develop the Votran Technical Design Standards for Accessible Bus Stops. Most notable of these were:

- *TCRP Report 19, Guidelines for the Location and Design of Bus Stops (1996)*

Review of content from several other agency design and standards manuals and other technical sources were considered in the development of this manual and include:

- *U.S. Access Board technical publications and published regulations and guidelines*
- *TCRP/Transit Research Board technical publications*
- *Easter Seals Project ACTION publications*
- *U.S. Department of Transportation/Federal Transit Administration technical assistance publications*
- *U.S. Department of Justice technical source documentation*
- *Florida Department of Transportation resource publications*
- *American Public Transportation Association resources*

Volusia County
FLORIDA

Inter-Office Memorandum

To: File

From: J. Giffin Chumley, Assistant County Attorney

Date: October 2, 2013

RE: ADA & Florida State Transit Requirements for Disabled Persons

Bus Stops and Other Similar Facilities – Federal Requirements

49 CFR Part 37 governs the construction of transportation facilities, including bus stops. "Facility" is defined as "all or any portion of buildings, structures, sites, complexes, equipment, roads, walks, passageways, parking lots, or other real or personal property, including the site where the building, property, structure, or equipment is located."[1]

49 CFR § 37.61 requires the county to operate a designated public transportation program or activity conducted in an existing facility so that, when viewed in its entirety, the program or activity is readily accessible to and usable by individuals with disabilities; however, § 37.61 does does not require the County to make structural changes to existing facilities in order to make the facilities accessible by individuals who use wheelchairs, unless those facilities are altered or otherwise qualify as key stations in light, rapid, and commuter rail systems.

The County must construct any new facility[2] to be used in providing designated public transportation services so that the facility is readily accessible to and usable by individuals with disabilities, including individuals who use wheelchairs. The ADA does not require full compliance with accessibility requirements where an entity can demonstrate that it is structurally impracticable to meet the requirements; however, full compliance will be considered structurally impracticable only in those rare circumstances when the unique characteristics of terrain prevent the incorporation of accessibility features.[3] If full compliance would be structurally impracticable, the county would still be required to comply with accessibility requirements to the

[1] 49 CFR § 37.3 (2012).

[2] A facility or station is "new" if its construction begins (*i.e.* , issuance of notice to proceed) after January 25, 1992, or, in the case of intercity or commuter rail stations, after October 7, 1991. 49 CFR § 37.41(a).

[3] 49 CFR § 37.41(b)(1).

extent that implementation of those features is not structurally impracticable.[4] If providing accessibility in conformance with this section to individuals with certain disabilities (e.g., those who use wheelchairs) would be structurally impracticable, accessibility shall nonetheless be ensured to persons with other types of disabilities (e.g., those who use crutches or who have sight, hearing, or mental impairments).[5]

State Law – Florida Provisions

Benches and transit shelters may be installed within the right-of-way limits of any municipal, county, or state road (except a limited access highway), provided that the installation of such benches or shelters has been authorized by (i) the county for unincorporated areas of the county or (ii) the municipality within whose jurisdictional boundaries the right-of-way is located.[6] The county or municipality authorizing any such installation shall be responsible for ensuring that the bench or transit shelter complies with all applicable laws and rules, including the Americans with Disabilities Act, or shall otherwise be required to remove the bench or transit shelter.[7]

[4] 49 CFR § 37.41(b)(2).

[5] 49 CFR § 37.41(b)(3).

[6] § 337.408(1), Fla. Stat. (2012) ("Benches or transit shelters, including advertising displayed on benches or transit shelters, may be installed within the right-of-way limits of any municipal, county, or state road, except a limited access highway, provided that such benches or transit shelters are for the comfort or convenience of the general public or are at designated stops on official bus routes and provided that written authorization has been given to a qualified private supplier of such service by the municipal government within whose incorporated limits such benches or transit shelters are installed or by the county government within whose unincorporated limits such benches or transit shelters are installed.").

[7] § 337.408(1), Fla. Stat. (2012) ("All installations shall be in compliance with all applicable laws and rules, including, without limitation, the Americans with Disabilities Act. Municipalities and counties that authorize or have authorized a bench or transit shelter to be installed within the right-of-way limits of any road on the State Highway System shall be responsible for ensuring that the bench or transit shelter complies with all applicable laws and rules, including, without limitation, the Americans with Disabilities Act, or shall remove the bench or transit shelter.").