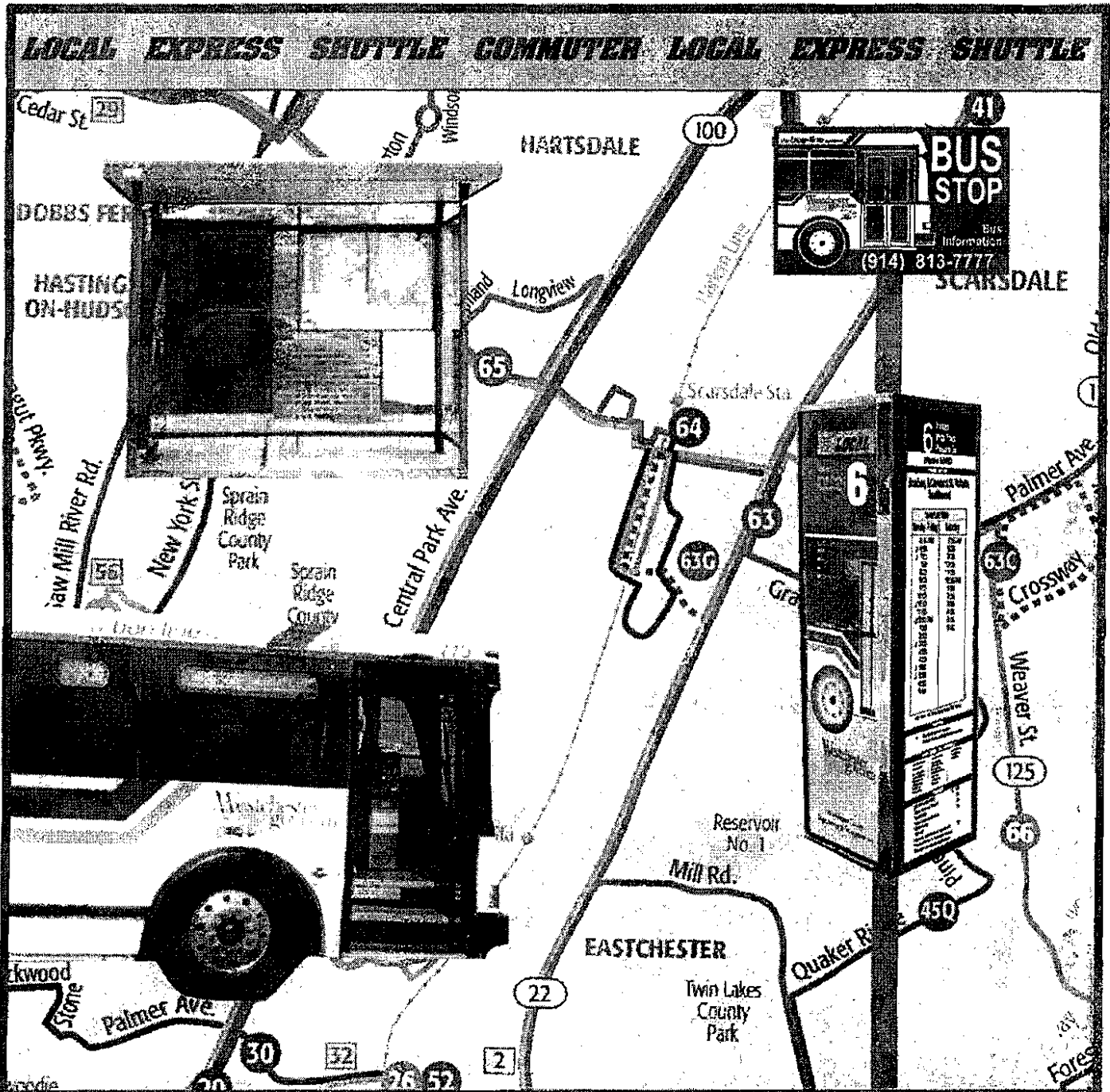


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Bus Service Guidelines for Westchester County Municipalities



Bus Service Guidelines for Westchester County Municipalities



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November, 2003

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16. Abstract The Westchester County Department of Transportation administers the operations of the Bee-Line Bus System, largely within Westchester County. This County, however, is fragmented into six cities, 16 towns and 23 villages each with its own home rule powers over local land use, zoning and other development issues. Within this milieu of local jurisdictions, the many operational details needed to ensure a smoothly running public transit system can be put at risk by mere oversight. These guidelines have been written to serve as a basic reference tool for municipal staff, governmental agencies and consultants engaged in site design and review activities. As a result of their anticipated distribution throughout the County, bus system characteristics, operational concerns and dimensional requirements should be addressed in a more systematic and timely fashion than has been the case in the past.			
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Bus Service Guidelines for Westchester County Municipalities

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This document is disseminated under the sponsorship of the Westchester County Department of Transportation in the interest of information exchange. The contents of this report reflect the views of the author who is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Federal Transit Administration, the Federal Highway Administration or the State of New York. This report does not constitute a standard specification or regulation.

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This publication was produced by the following staff members of the Westchester County Department of Transportation and is dedicated to the memory of August T. Nakagawa who died on June 20, 2002.

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8

SOURCE OF GRAPHICS

Most of the illustrations in this document, some with small modifications, originate from the San Diego, California, Metropolitan Transit Development Board's, Designing For Transit, 1993, and from the Transportation Research Board's, TCRP Report 19, Guidelines for the Location and Design of Bus Stops, 1996. Figure 5, Suggested Pavement for Curbside Bus Stop Pads is from the New York State Department of Transportation and Figure 12, Bee-Line System Bus Shelter Design, is from the Columbia Equipment Company, Inc. We acknowledge with thanks the use of their material in these guidelines.

I. INTRODUCTION

This publication is designed to create a greater awareness of the supportive role that public transit can play when local governments consider new or modified land development proposals. Too often, public transit services are not addressed at the appropriate time in the land use approval process, and the benefits of mass transit are lost.

This publication highlights minimum bus standard requirements as a basic reference tool for use by municipal staff, governmental agencies and private consultants engaged in site design and review activities. By using these guidelines, bus public transit needs can be considered and addressed in a more systematic and timely fashion.

This document will primarily affect sites located on or near streets already served by routes of the Bee-Line Bus System. However, large development projects could influence an extension or diversion of bus routes, or even warrant the initiation of an entirely new bus route.

This guidebook, through distribution to each municipality, local staff members and members of the development community, should promote a better understanding of bus characteristics, operational needs and dimensional requirements. With this knowledge, it is hoped that Westchester County's Bee-Line Bus System will be of even greater utility as a major contributor to the county's economic, environmental and social well-being.

Additional information on any of the material contained in this publication can be obtained by contacting the Planning Division of the Westchester County Department of Transportation at (914) 813-7753.

II. BUS DESIGN CHARACTERISTICS AND OPERATING REQUIREMENTS

A. General

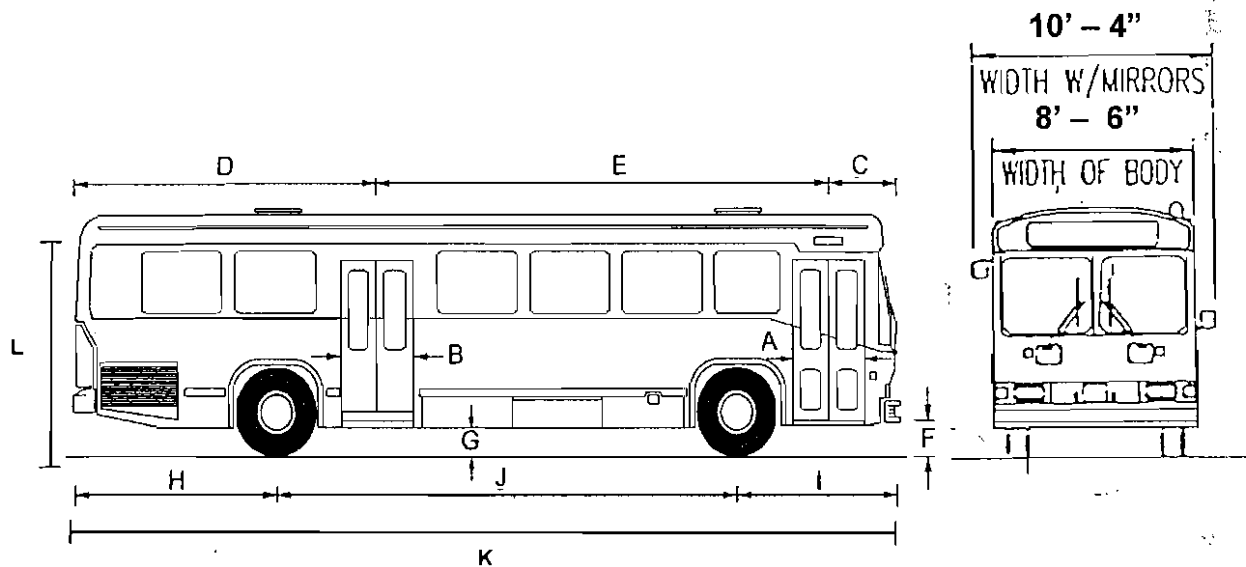
The Bee-Line Bus System uses primarily two types of buses...a 40-foot "standard" bus and a 60-foot "articulated" bus. Specialized shuttle and para-transit services use the more flexible 26-foot vans, and a smaller 30-foot bus. These guidelines address only the 40-foot and 60-foot buses. General operational consideration to keep in mind include the following:

1. For bus drivers, left turns are preferable to right turns due to greater ease and safety.
2. Reverse bus movements are to be avoided and used only in emergency situations.
3. Passengers board and exit buses via doors on the right side of the bus.
4. Following the *Americans with Disabilities Act of 1990*, all new buses will be equipped to be wheelchair-accessible. [All para-transit vans are so equipped now.] Clearly this *Act* has many consequences which go far beyond wheelchair lifts on buses. For example, an unobstructed pathway to and from a bus stop served by an accessible bus is needed. Thus, if an accessible bus is placed on an existing bus route, all of the stops along that route should become fully accessible as well. A brief summary of the major provisions of the *Americans with Disabilities Act of 1990* is provided in Appendix A.
5. Under present practice, a limited number of bus shelters are provided by Westchester County's Department of Transportation to localities under an Inter-Municipal Agreement [IMA]. Many, but not all municipalities, have entered into such an agreement. In certain instances, private parties have installed their own bus shelters. A copy of the standard IMA can be found in Appendix B.
6. Each Bee-Line bus stop location is marked with a rectangular blue sign atop a tall curbside pole. It is usually accompanied by a display of schedules for each bus route serving the stop as well as restricted parking signs.
7. A review of manuals from a number of transit agencies across the U.S. indicates a wide variety of specific standards for bus operations and facilities. The standards expressed in this document represent those which have been judged to be acceptable by the Westchester County Department of Transportation's Bee-Line System. Still, the many dimensional citations described in these guidelines should be viewed as flexible standards. When questions arise in their applications, the staff of the Westchester County Department of Transportation should be consulted for its determination on a case-by-case basis.
8. Bus stops are designated by the municipalities in which they are located, or by the agency with jurisdiction over the road they are located on.

B. Bee-Line Bus Dimensions and Capacities:

With the many domestic and international manufacturers of buses, a great variety of dimensional and capacity figures are to be expected. For our purposes, however, the following data are applicable to Bee-Line System buses in Westchester County.

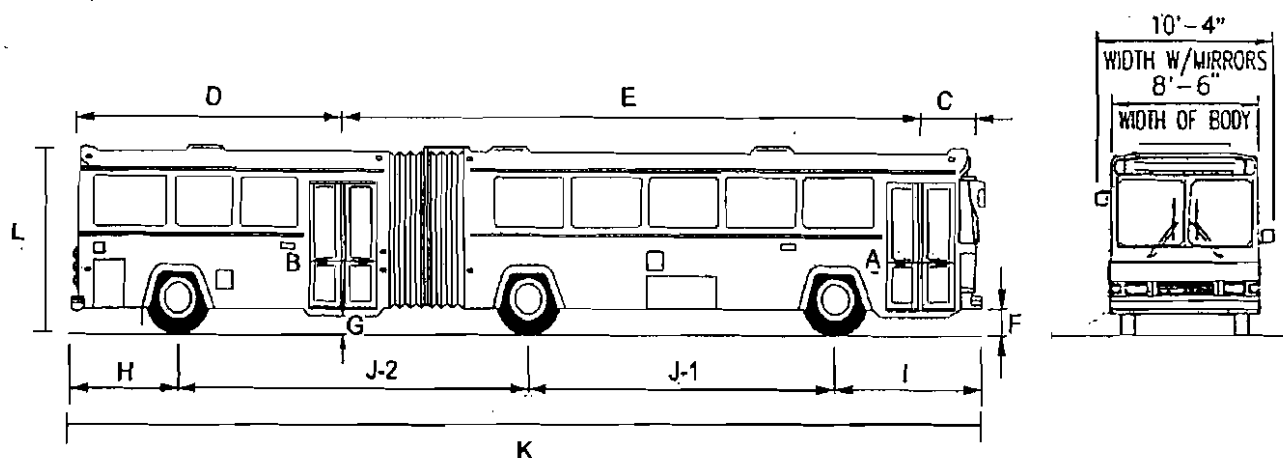
Figure 1: Typical Dimensions and Capacities of 40-foot Standard Transit Buses
(Flxible and Orion Buses -- dimensions do not apply to MCI buses)



Key	Item	Typical Dimension
A	Clear Entrance Door Opening.....	2' - 6"
B	Clear Exit Door Opening.....	2' - 2.5"
C	Centerline of Entrance Door to Front.....	3' - 0"
D	Centerline of Exit Door to Rear.....	17' - 11.25"
E	Centerline of Entrance Door to Centerline of Exit Door	19' - 8"
F-1	Step Height to Ground at Entrance Door (not kneeled)	1' - 5"
F-2	Step Height to Ground at Entrance Door (kneeled).....	0' - 9"
G	Step Height to Ground at Exit Door.....	1' - 4.5"
H	Rear Axle to Rear Bumper.....	9' - 4.75"
I	Front Axle to Front Bumper.....	7' - 3.75"
J	Length of Wheel base.....	23' - 9"
K	Body Length.....	40' - 0"
L	Body Height.....	10' - 5"
Seat Capacity (excluding driver) ¹		44
Standing Capacity		22
Total Passenger Capacity		66

¹ Seating capacity varies slightly with the model of the bus. Older buses have a seating capacity of 47, excluding the driver. MCI buses seat 53 (without wheelchair lift).

Figure 2: Typical Dimensions and Capacities of 60-foot Articulated Buses (Neoplan buses)

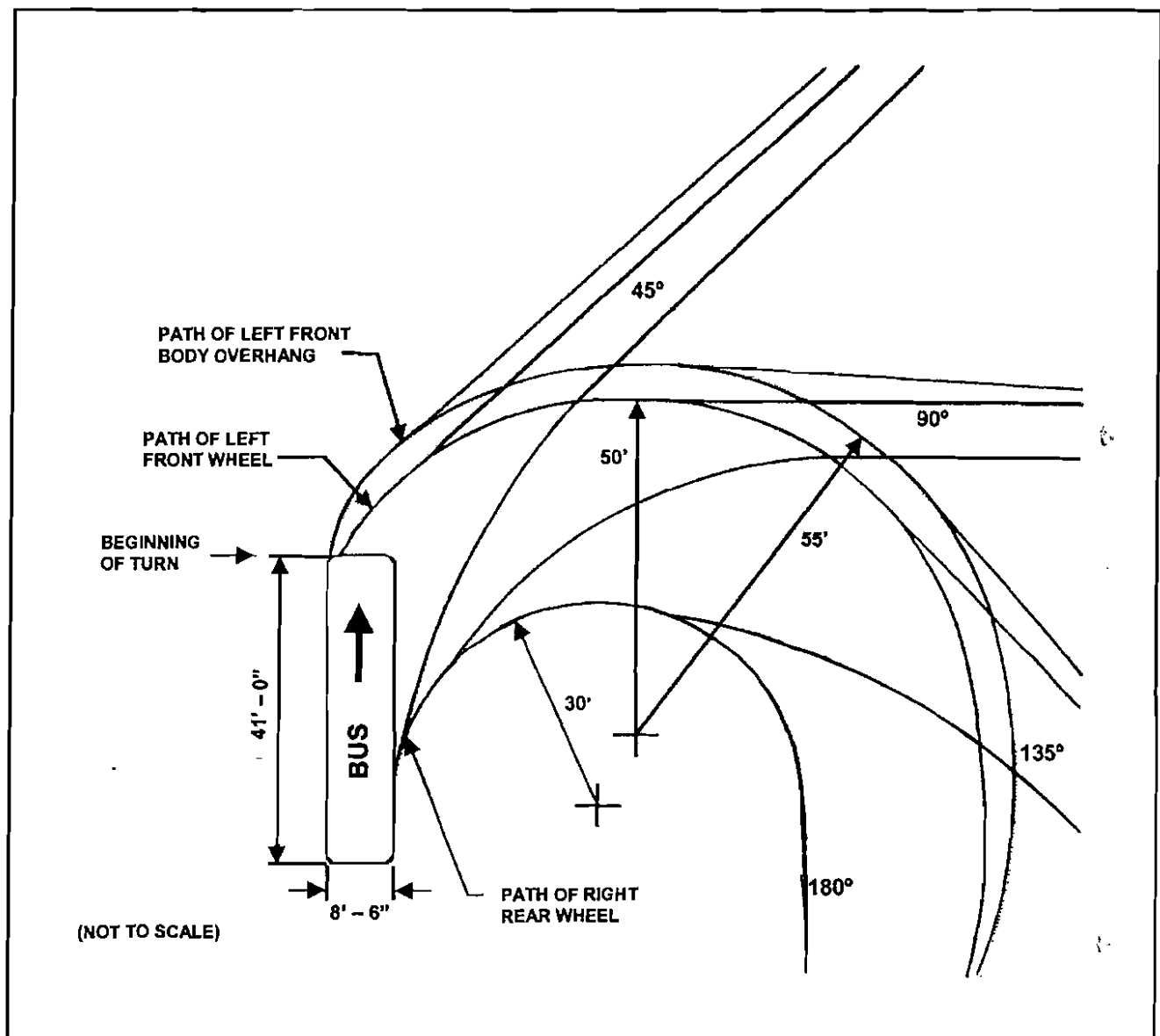


Key	Item	Typical Dimension
A	Clear Entrance Door Opening.....	3' - 2"
B	Clear Exit Door Opening.....	2' - 10"
C	Centerline of Entrance Door to Front (bumper outer edge).....	3' - 5"
D	Centerline of Exit Door to Rear (bumper outer edge).....	16' - 4"
E	Centerline of Entrance Door to Centerline of Exit Door	41' - 3"
F-1	Step Height to Ground at Entrance Door (not kneeled).....	1' - 2"
F-2	Step Height to Ground at Entrance Door (kneeled).....	9 - 7/8"
G	Step Height to Ground at Exit Door.....	1' - 3.75"
H	Rear Axle to Rear Bumper.....	10' - 11.5"
I	Front Axle to Front Bumper.....	8' - 1.5"
J-1	Length of Front Wheel Base.....	17' - 3"
J-2	Length of Rear Wheel Base	24' - 5"
K	Body Length.....	60' - 6"
L	Body Height.....	11' - 0"
	Maximum Horizontal Bend Angle	39 Degrees, ±
	Maximum Vertical Bend Angle	9 Degrees, ±
	Seat Capacity (excluding driver)	68
	Standing Capacity	51
	Total Passenger Capacity	119

C. Bee-Line Bus Operating Characteristics:

A key element in transit-friendly design is the attention paid to the turning radius requirements of the bus. For both its 40-foot and 60-foot buses, the Bee-Line System recommends a 55-foot outside and 30-foot inside turning radius. [While the 60-foot Articulated Bus is longer, it has a hinge that allows maneuverability comparable to the 40-foot Standard Bus.]. Of course, shorter vans and buses will require shorter turning radii.

Figure 3: Bus Turning Template [This template shows a right-turning bus: for left-turning buses, turn the template face-down.]



Bus Service Guidelines for Westchester County Municipalities

D. Minimum Vertical and Horizontal Clearances for Buses:

1. Horizontal Clearances

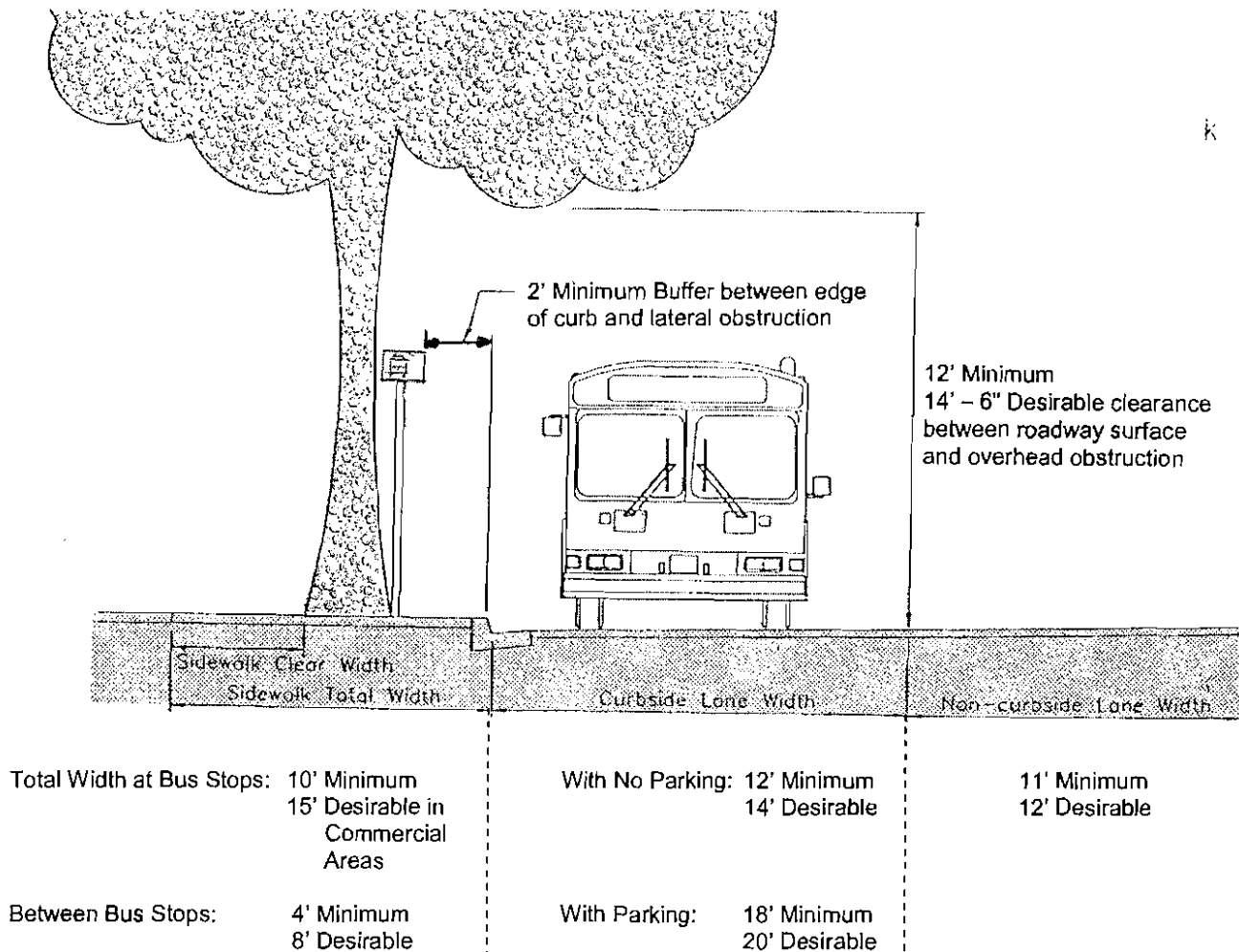
Buses generally travel along the outside lane of roadways, next to the curb if parking is prohibited. For this reason, a two-foot minimum lateral clearance must be maintained between the curb and any signs or other obstructions along the curb edge of the street.

2. Vertical Clearances

Most buses are 9 to 11.5 feet high. The minimum vertical clearance for buses should be no less than 12 feet, with 14.5 feet as the desirable clearance.

Figure 4: Horizontal and Vertical Clearances for Buses

[Approximate Scale: 1 inch = 6 feet]



Note:

Sidewalk clear width should be 4' minimum, 6' desirable; where pedestrian traffic is heavy, up to 8' of clear width should be reserved.

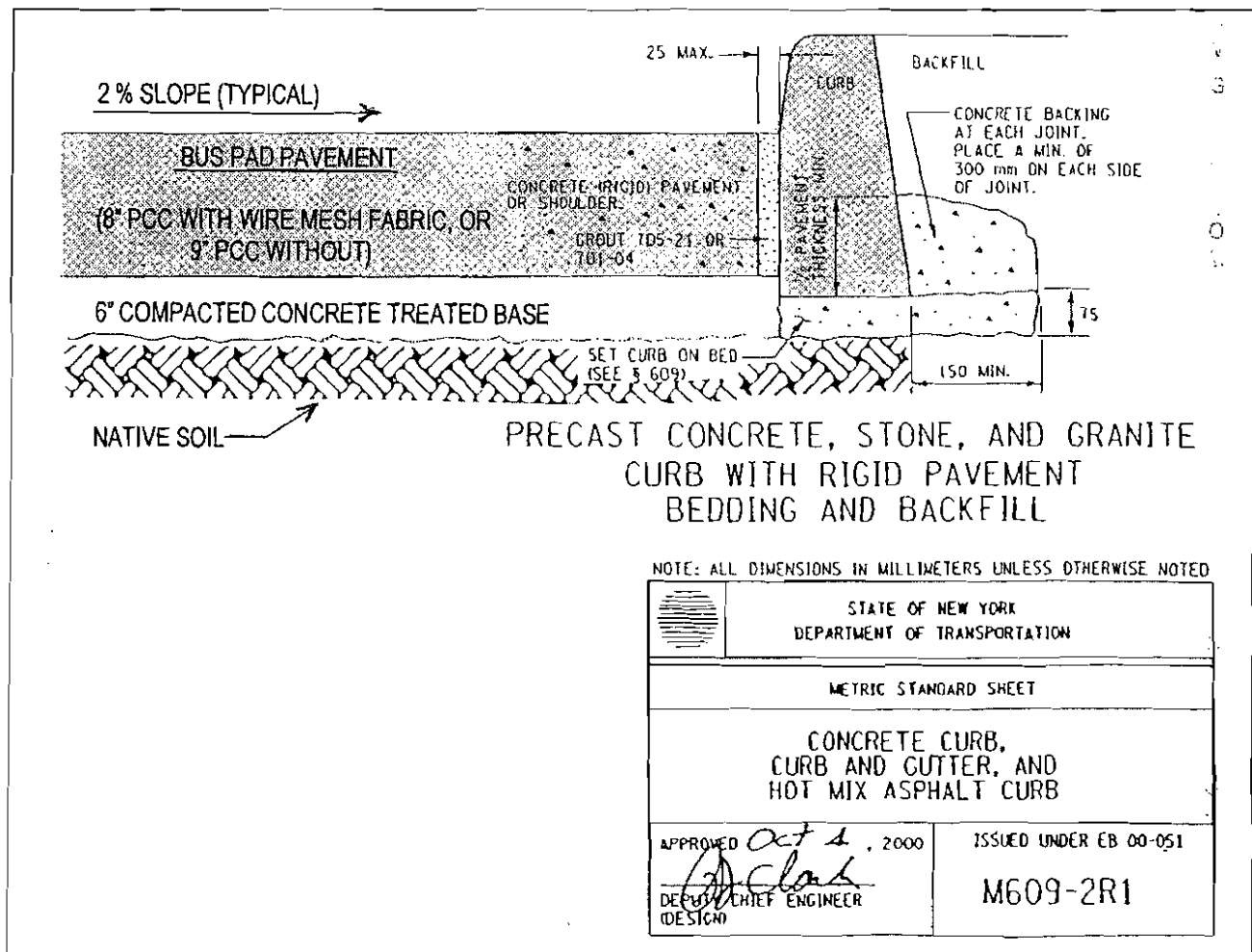
*Lane widths narrower than 11' will result in encroachment into adjacent lanes.

E. Concrete Pavement Composition at Busiest Curbside Bus Stops:

Along roads with heavily used bus stops on asphalt pavement roadways, a washboard-like surface could develop, especially during hot weather. If the roadway surface consists of inadequate Portland cement concrete, it too will show signs of cracks and general deterioration.

For curbside lanes at frequently used bus stops, a special Portland cement concrete bus pad is recommended whether the rest of the street is paved with asphalt or a Portland concrete surface. A standard threshold for the installation of special concrete bus pads is based upon the actual frequency of stopping buses. Special Portland cement concrete (PCC) bus pads should be installed at bus stops having five or more weekday bus stops per peak A.M. or P.M. hours. Granite curbs, rather than pre-cast concrete or asphalt curbs, are also desired at these busy bus stops.

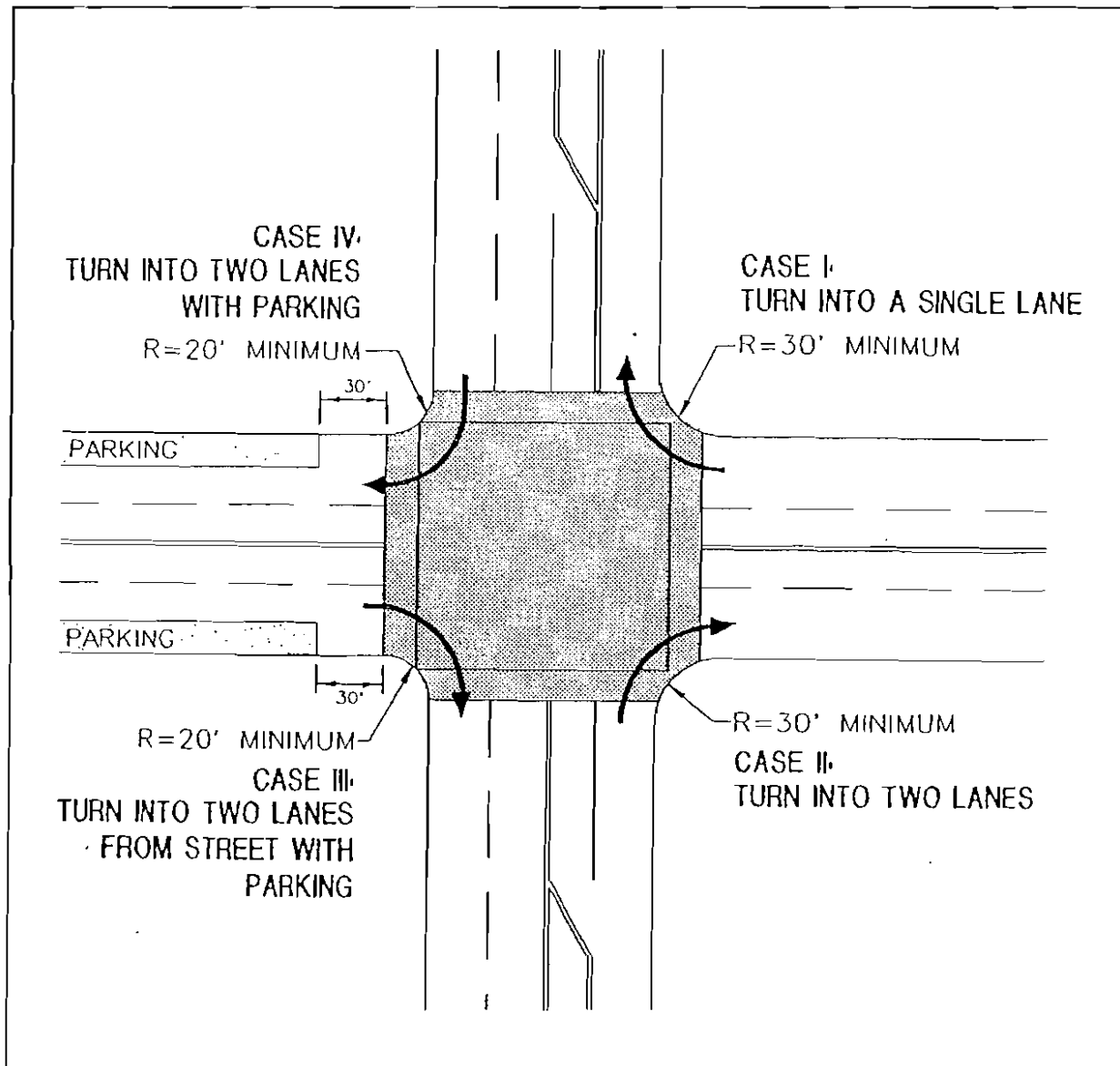
Figure 5: Suggested Pavement for Curbside Bus Stop Pads



F. Intersection Design for Bus Turning Movements:

The curb radius at intersections is an important design factor, especially for buses making right turns. Much depends upon the turning radii design, lane widths of the streets involved, where parking is permitted, the angle of the intersection, pedestrian volumes, etc. A field test with the actual bus to be used along the route is often the best way to test out the feasibility of bus operations. The importance of setting curbside parking to no less than 30 feet from each intersection can not be emphasized enough.

Figure 6: Intersection Design for Bus Turns
(Without Encroachment Onto Adjacent Lanes)* [Not to scale]

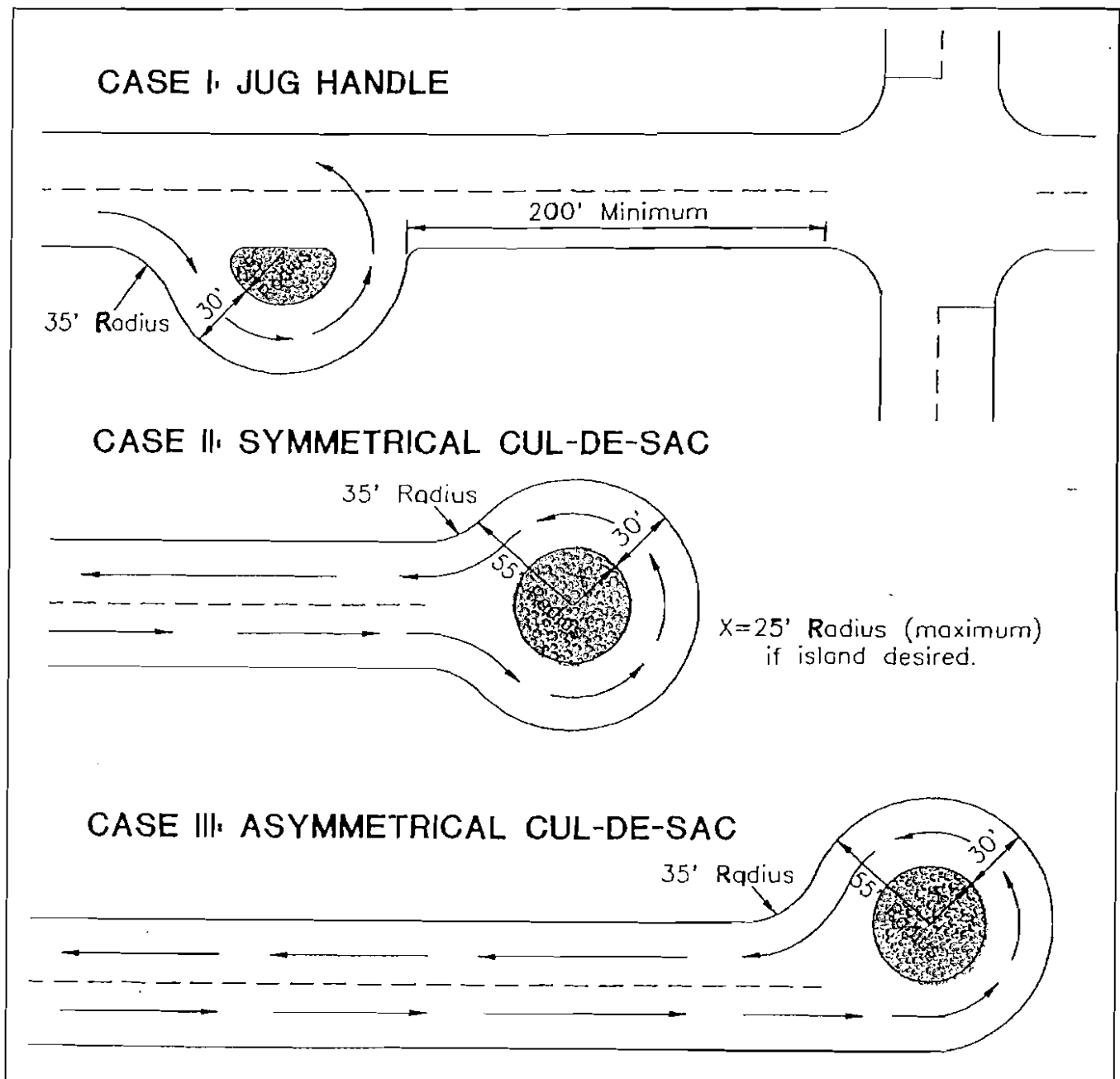


*Encroachment into adjacent lanes may be allowed on certain low-volume streets.

G. Bus Turnarounds:

Three possible methods are illustrated below in the rare instance when a bus needs to reverse directions completely. Only low plantings should be placed within any islands to maintain clear sight distances. These turnarounds assume no parking is allowed on the approach and departure lanes, or within the 30-foot loop lanes.

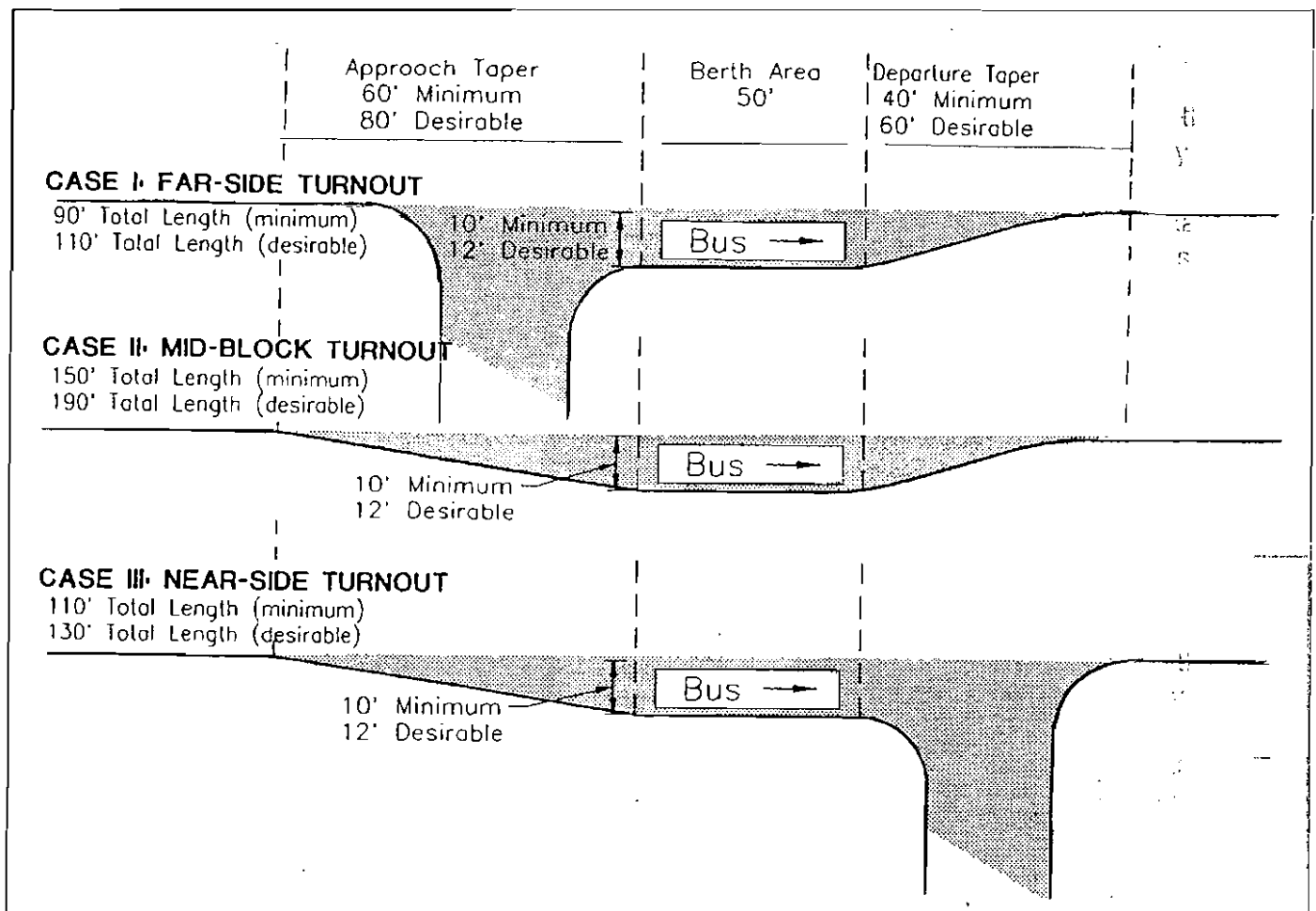
Figure 7: Bus Turnarounds: [Scale: 1 inch = 60 feet]



H. Bus Turnouts:

Typically, bus turnouts are placed on high-volume, high-speed roadways so that buses may get out of and re-enter the traffic stream at a bus stop. Turnouts may be placed mid-block (between intersections) before an intersection (near-side) or after an intersection (far-side). They are often placed at far-side stops to take advantage of the width of the intersecting street to move over to the curb lane. For near-side and mid-block turnouts, an approach taper is needed to complete the bus deceleration which typically starts while still in the approaching travel lane. For far-side and mid-block turnouts, a departure taper is needed for bus acceleration to re-enter the flow of traffic. Again, much of the bus acceleration will occur in the departing travel lane.

Figure 8: Bus Turnouts: [Not to scale]

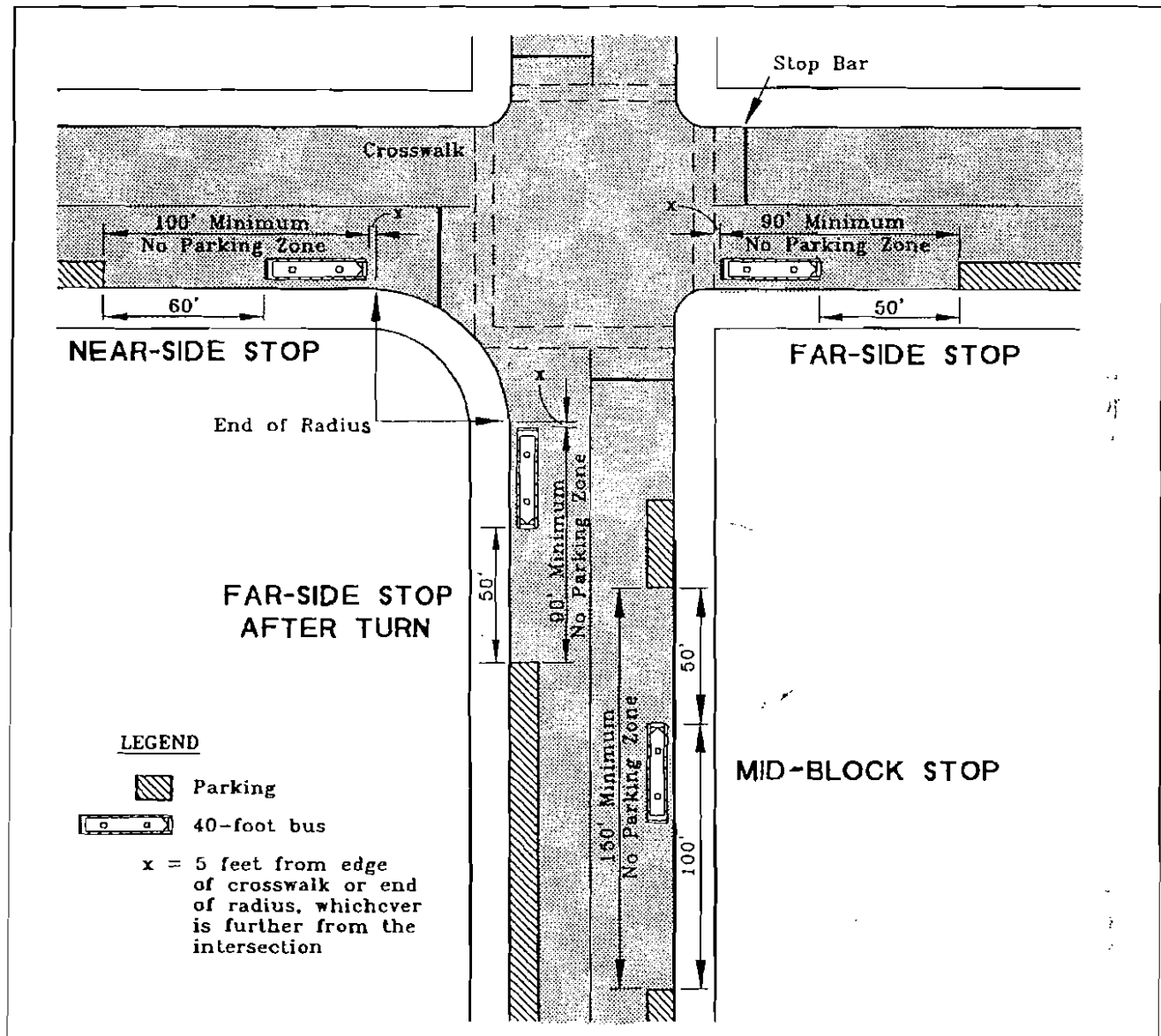


Berth Area Notes: Lengthen 20 feet if 60-foot articulated buses use the turnout. Add 50 feet for each standard bus and 70 feet for each articulated bus expected to use the turnout at the same time.

I. Bus Stop Dimensions:

Curb-side bus stop zone dimensions are one of the most variable factors due to each stop's particular circumstances. When a desired bus stop offers less than perfect design choices, much is left to good professional judgment decisions. As an ideal standard, however, this graphic illustrates typical dimensions for curb-side bus stops.

Figure 9: Typical Bus Stop Zone Design Types

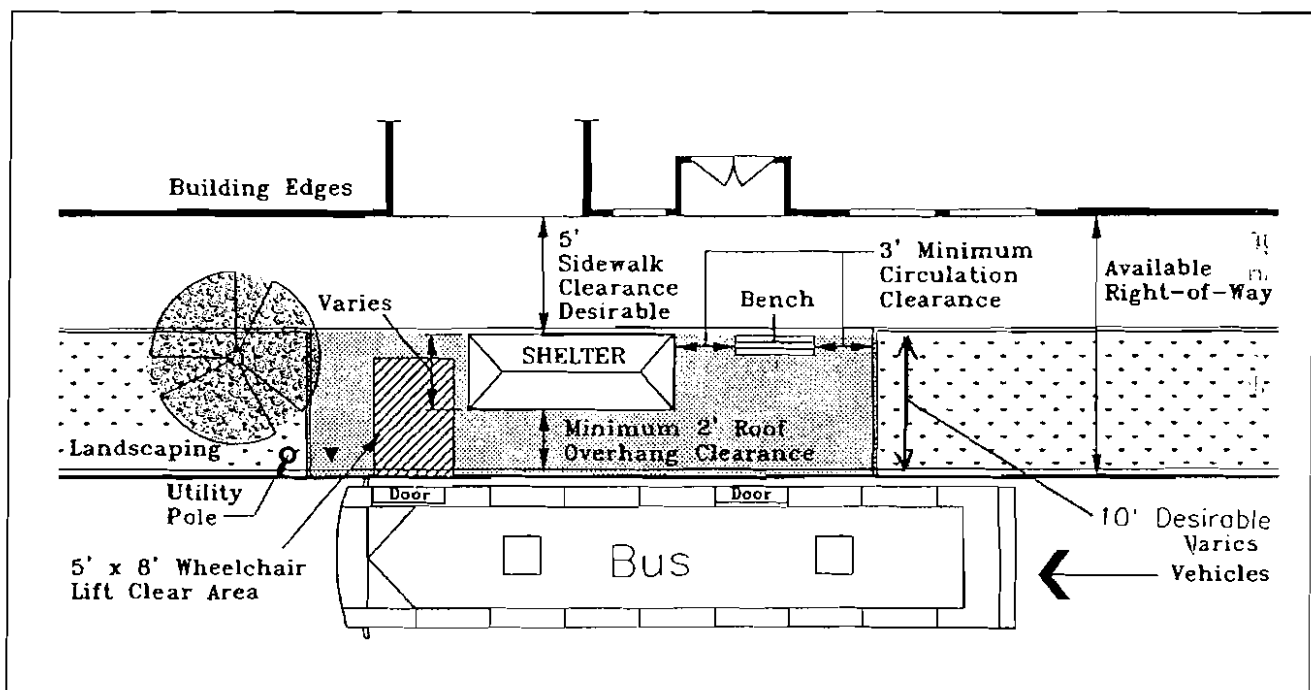


Notes: Lengthen bus stop zones by 20 feet for 60-foot articulated buses. Add 50 feet for each standard bus and 70 feet for each articulated bus expected to use the stop at the same time.

J. Bus Stop Waiting Pad Layout:

The waiting pad at a bus stop is an impervious, slip-resistant paved area containing a bus shelter or bench and such optional amenities as bus schedules, telephones, trash baskets, bike racks, etc. Ideally, the bus stop pad is an 8-foot to 10-foot wide extension to a 5-foot continuous sidewalk and extending 25 to 30 feet along the street frontage. The minimum ADA requirement calls for a 5' x 8' wheelchair lift clear area, however a 6' x 10' wheelchair lift clear area is recommended. Some factors on waiting pad size are illustrated below.

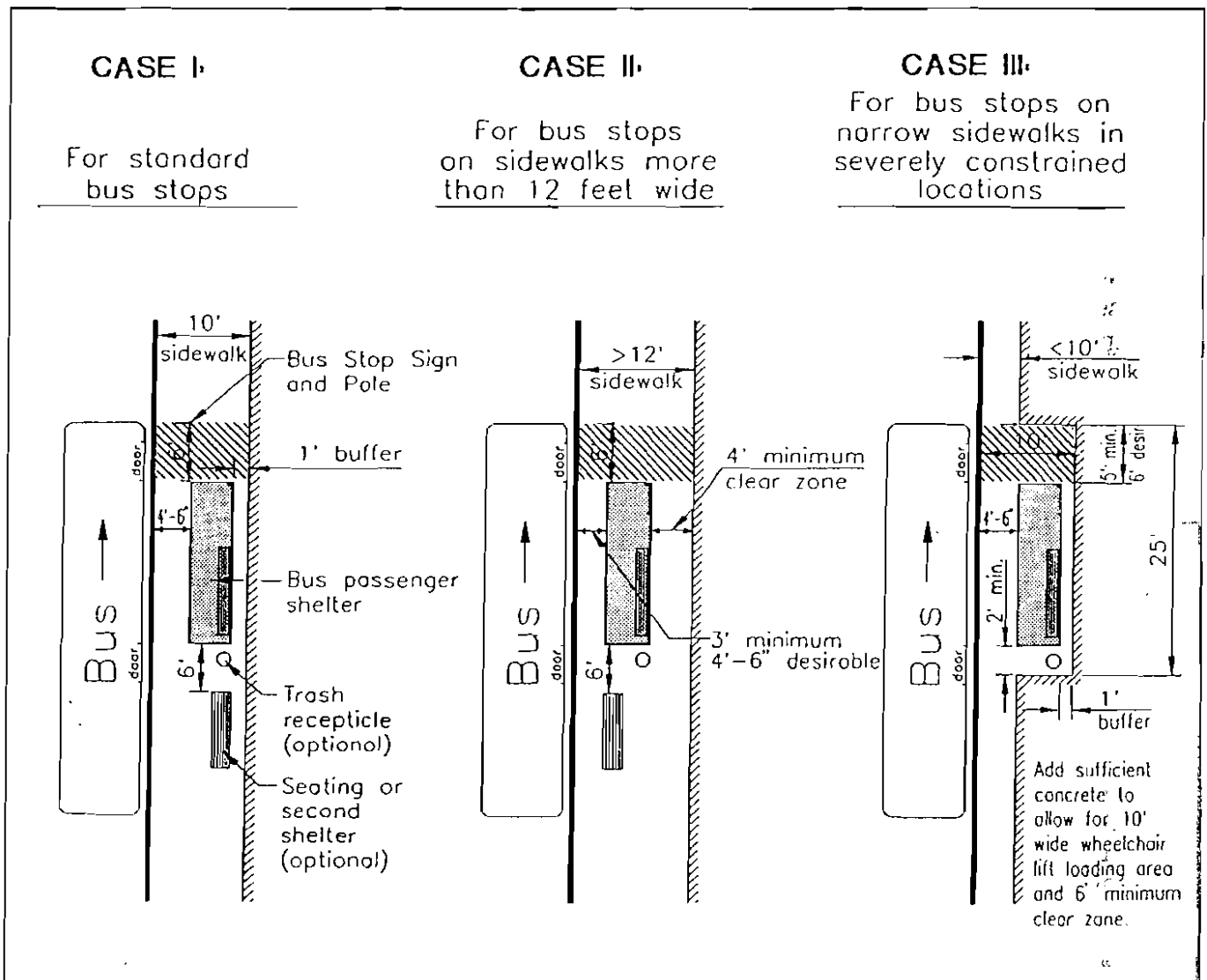
Figure 10: Sizing and Positioning Factors for Bus Waiting Pad



K. Bus Stop Passenger Shelter Placement:

This graphic illustrates the placement of bus shelters under three varying sidewalk width conditions. In all Cases, a 6' wide by 10' or longer wheelchair lift clear area is shown and noted as a 6' x 10' wheelchair lift loading area in Case III. The minimum ADA wheelchair requirement calls for a 5' x 8' area.

Figure 11: Bus Stop Shelter Placement

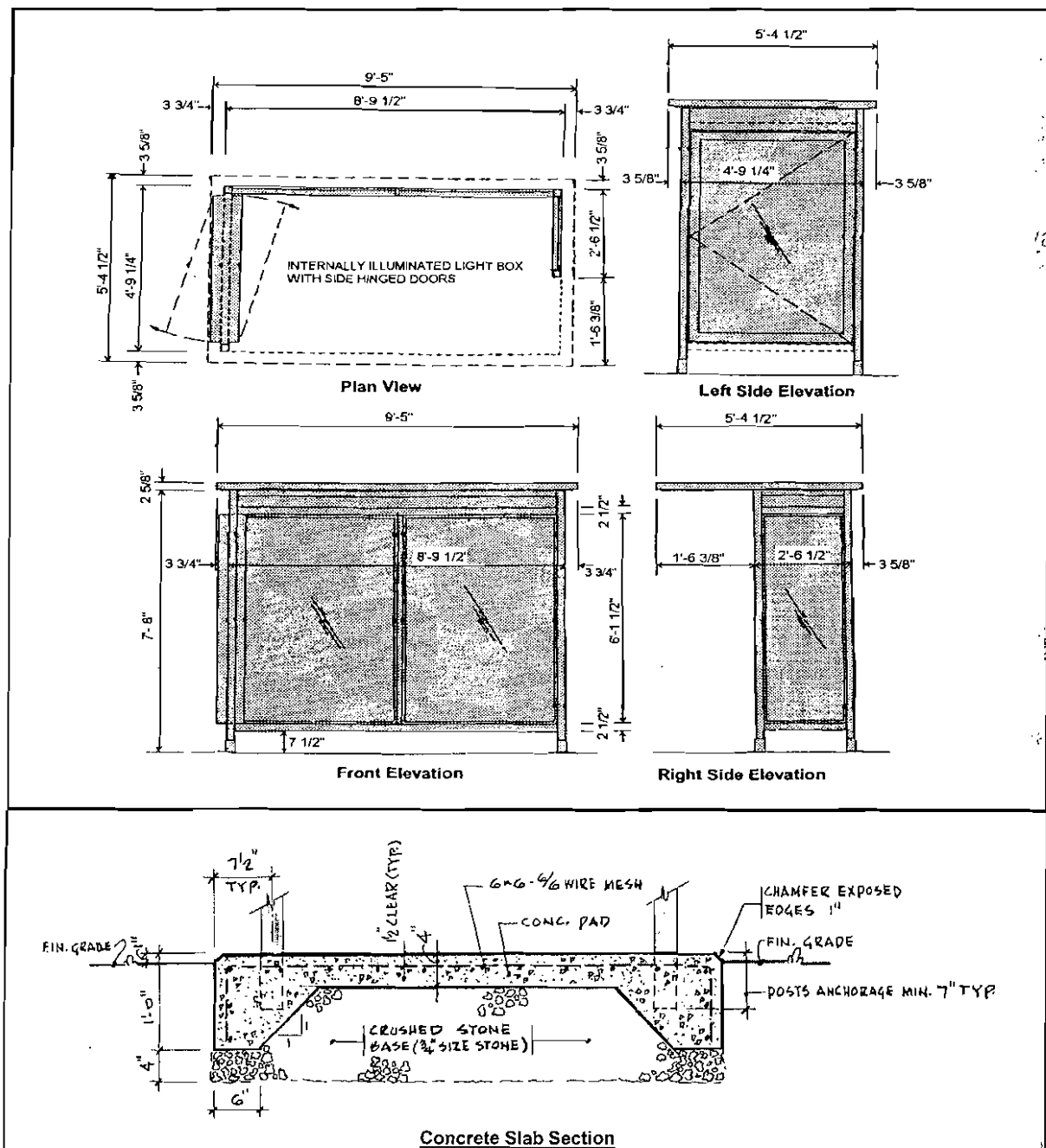


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L. Bus Passenger Shelter Design:

While there are a number of different bus shelter designs and makers, Westchester County DOT prefers to use the one style illustrated in the plans below. Shelters are installed by a county-approved licensee within cities, towns and villages with valid Inter-Municipal Agreements [IMA's]. The IMA's each cover a five-year period and detail such issues as insurance, advertising displays, maintenance, fees, relocation costs, etc. [See Appendix B, Inter-Municipal Agreement]. For bus shelter needs on private properties, owners have a choice of acquiring the County's design and installation services or seeking their own suppliers.

Figure 12: Bee-Line System Bus Shelter Design



Bus Service Guidelines for Westchester County Municipalities

M. Summary Tabulation of Desirable Bus Stop Features:

This table summarizes desirable and appropriate bus stop features, based upon five levels of daily passenger boarding at the stop. Those features marked with an "S" should be required regardless of the intensity of use, simply as a basic bus stop necessity.

Table A: Summary Tabulation of Desirable Bus Stop Features

Feature	Daily Passenger Boarding				
	<50	50-100	101-200	201-500	>500
Sign and Pole	S	S	S	S	O
Public Roadway	S	S	S	S	S
Non-Public Roadway	NA	NA	NA	NA	S
Expanded Sidewalk	O	O	S	S	S
Accessible	S	S	S	S	S
Seating	O	S	S	S	S
Passenger Shelter	O	O	S	S	S
Permanent Structure	NA	NA	NA	NA	S
Route Designations	S	S	S	S	S
Timetable	S	S	S	S	S
Route Map	S	S	S	S	S
System Map	O	O	S	S	S
Trash Receptacle	O	O	O	S	S
Telephone	NA	O	O	O	S
Individual Bus Bays	NA	NA	NA	NA	S
Park-and-Ride	NA	O	O	O	O
Bus Pads	R	R	R	R	S
Lighting	S	S	S	S	S
Approved Advertising	O	O	O	O	O

Notes: S = Standard Feature

O = Optional Feature

R = Required for Stops with 5 or More Weekday Buses per AM or PM Peak Hour

NA = Not Applicable

III. CONCLUSION

A large amount of information has been included in the previous pages. We here at the Westchester County Department of Transportation hope that these guidelines will facilitate the incorporation of public transit facilities within new public or private development projects.

The Planning Division of the Department of Transportation is available to provide additional information and expertise in the areas of bus stop locations, bus routing, review of site plans to facilitate transit, and ways to encourage alternatives to single occupant vehicle travel. For additional information, call us at (914) 813-7753.

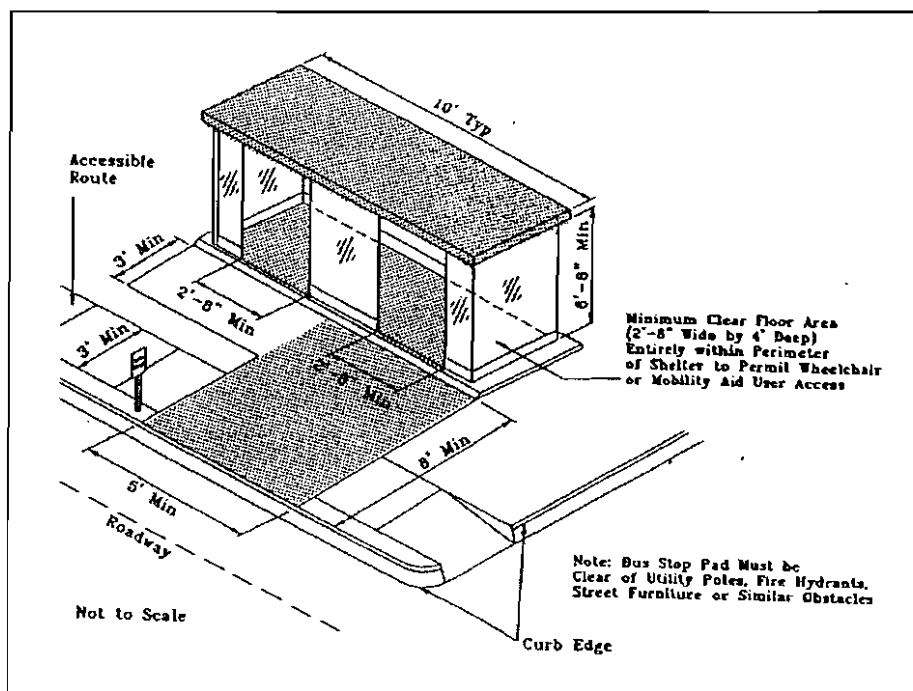
Appendix A: Americans with Disabilities Act Requirements

The Americans with Disabilities Act of 1990 covered a host of subjects dealing with equal opportunity for the disabled as a civil right. Title I covered equal employment issues; Title II addressed public service issues including transportation provided by public entities; Title III extended non-discrimination regulations to public accommodations in the private sector and Title IV addressed telecommunications issues for those with hearing or speech impairments.

Following enactment of the ADA, specific definitions, interpretations and requirements were subsequently spelled out in more detail by the various implementing governmental agencies. For example, the Equal Employment Opportunity Commission, the Department of Justice and the Federal Communications Commission issued several regulations pertaining to their areas of responsibility within Titles I through IV. Regulations covering transportation services provided by both public entities (under Title II) and private entities (under Title III) were issued by the US Department of Transportation (USDOT).

The USDOT regulations include design standards for both facilities and vehicles issued by the Architectural and Transportation Barriers Compliance Board (Access Board). Vehicle design standards are included as Part 38 of the regulation. The total document covering ADA regulations for public transportation can be found in the Federal Register of Friday, September 6, 1991, titled, Part IV, Department of Transportation, 49 CFR, Parts 27, 37, and 38, Transportation for Individuals With Disabilities; Final Rule.

The following graphic illustrates ADA minimum design dimensions for accessible bus stop pad and bus shelter placements. This assumes a direct connection to sidewalks leading to and from the bus stop. Such connections, if lacking, should be mandated by local jurisdictions as part of the site plan approval process for new developments and new bus stops. Until such time as they are provided by the local jurisdictions, Bee-Line bus drivers must ask wheelchair passengers to use the closest bus stop with adequate sidewalk connections.



Appendix B: Inter-Municipal Agreements for Bus Shelters

Westchester County has a License Agreement with a private franchisee to construct and maintain bus passenger shelters within municipalities which have signed a cooperative agreement with the County for this purpose. This cooperative agreement is commonly referred to as an "Inter-Municipal Agreement" or "IMA." Almost half of the 45 municipalities within Westchester County have signed Inter-Municipal Agreements with the County. The following pages contain a sample IMA for Bus Shelter installations, but without the part titled, "Attachment A," as follows:

SAMPLE BUS SHELTER INTER-MUNICIPAL AGREEMENT

THIS AGREEMENT entered into this ____ day of _____, 2001 by and between

THE COUNTY OF WESTCHESTER, a municipal corporation of the State of New York, having an office and place of business in the Michaelian Office Building, 148 Martine-Avenue, White Plains, New York 10601 (the "County")

and

_____, a municipal corporation of the State of New York, having an office and place of business at _____
(the "Cooperating Municipality")

WITNESSETH:

WHEREAS, the County has entered into a License Agreement with a private franchisee to construct and maintain bus passenger shelters at various locations within the County; and

WHEREAS, the Cooperating Municipality is desirous of having the County provide bus passenger shelters within the Cooperating Municipality pursuant to said License Agreement for the comfort and benefit of its citizens.

NOW, THEREFORE, in consideration of the terms and conditions herein contained, the parties agree as follows:

Bus Service Guidelines for Westchester County Municipalities

FIRST: The County is hereby authorized to provide and maintain shelters pursuant to a License Agreement between the County and Adshel Inc., or its successors at locations within the Cooperating Municipality, all as shown on Attachment "A" attached hereto and made a part hereof. The Cooperating Municipality warrants and guarantees to the County and its Licensee that all sites shown on Attachment "A" have been reviewed by the Cooperating Municipality and that each and every site conforms with traffic and safety standards, with all local, state and federal laws, rules and regulations, and that it is either wholly contained on a public right-of-way or the appropriate easement has been requested and granted, and a private property release is on file with the Westchester County Department of Transportation. The Cooperating Municipality further certifies and guarantees that the sites designated on Attachment "A" are legally designated bus stop locations or that the sites will be so designated prior to installation of new bus passenger shelters. If such designation is the responsibility of a governmental agency other than the Cooperating Municipality, the Cooperating Municipality will use its best efforts to obtain such designation.

Attachment "A" shall consist of:

1. A list of all bus shelters built under the County Bus Shelter Program located in the Cooperating Municipality.
2. A list of all necessary permits and the name of the municipal official who should be contacted. As the bus shelters are going to be provided as a municipal service, all permit fees shall be waived.

The Cooperating Municipality shall have the opportunity to request additional bus passenger shelters other than those in Attachment A. Requests shall be made to the Westchester County Department of Transportation. The County will provide shelters to cooperating municipalities, as they are available based upon the terms of License Agreement. They will be installed according to site suitability and passenger usage.

Bus Service Guidelines for Westchester County Municipalities

SECOND: The term of this Agreement shall be for five (5) years commencing on April 1, 2001 and expiring on March 31, 2006, which term coincides with the expiration of the License Agreement with Adshel Inc. A copy of the License Agreement is on file with the Westchester County Department of Transportation ("WCDOT") and may be examined by an authorized representative of the Cooperating Municipality upon reasonable notice to the County. This Agreement shall encompass presently existing bus passenger shelters and those constructed pursuant to the License Agreement.

THIRD: The design and installation of any bus passenger, shelters to be erected within the Cooperating Municipality shall be similar to, but may vary in details from the design drawings entitled "Bus Stop Shelter Design - Type A & B" and dated August 10, 1977, copies of which are on file with the Cooperating Municipality and the County (hereinafter the "Design Drawings"). In no event, however, shall the size and illumination of the advertising signs vary from those shown in the Design Drawings without prior approval of the Cooperating Municipality.

FOURTH: After the County has deducted \$50,000 in years 1 and 2, and \$55,000 in years 3 through 5, for administrative expenses, the remaining revenue received by the County from the Licensee shall be divided between the County and the Cooperating Municipalities on a 50/50 ratio. The share of the revenue due the Cooperating Municipality will be determined by the ratio of that number of shelters operated by the Licensee and producing revenue in the Cooperating Municipality to the total County-wide number of shelters operated under the License Agreement during one annual payment period. Payment will be made by the County to the Cooperating Municipality after April 15th of each year of this Agreement, beginning on or after April 15th, 2002.

FIFTH: The Licensee of the County shall be required to hold harmless and defend the Cooperating Municipality and its employees, officers and agents from all claims, suits and actions arising from the construction and maintenance of the shelters.

SIXTH: All advertising to be displayed on the bus passenger shelters will be submitted to the County Commissioner of Transportation or his authorized designee for

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approval. The Cooperating Municipality agrees that this approval shall be sufficient approval for the display of such advertising within the Cooperating Municipality. The County agrees that no political or religious advertising shall be allowed. The County further agrees that no advertising for alcohol or tobacco products will be allowed, nor shall the County accept any advertising which does not meet reasonable standards of good taste.

SEVENTH: The Licensee of the County shall be required to maintain all shelters in good condition. They shall clean each shelter on a regular basis, and shall be required to repair any damaged shelter.

EIGHTH: The Cooperating Municipality shall not enter into bus shelter advertising programs on its own. The Cooperating Municipality shall waive all municipal fees for the bus shelters.

NINTH: If during the term of this Agreement any bus passenger shelter is required to be removed or relocated for any reason at the request of the Cooperating Municipality, said removal or relocation shall be done only by the County's Licensee, at the sole cost and expense of the Cooperating Municipality.

TENTH: This Agreement and its attachments constitute the entire Agreement between the parties with respect to the subject matter hereof and shall supersede all previous negotiations, commitments and writings. It shall not be released, discharged, changed or modified except by an instrument in writing signed by a duly authorized representative of each of the parties.

ELEVENTH: This Agreement shall not be enforceable until signed by both parties and approved by the Office of the County Attorney.

TWELFTH: This Agreement may be executed simultaneously in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument. This Agreement shall be construed and enforced in accordance with the laws of the State of New York.

THIRTEENTH: In the event of any conflict between the terms of this Agreement and those of its attachments, the terms of the Agreement shall control.

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement in triplicate.

THE COUNTY OF WESTCHESTER

By: _____
Lawrence C. Salley
Commissioner of Transportation

COOPERATING MUNICIPALITY

By: _____
(Name & Title)

Authorized by the Board of Legislators of the County of Westchester pursuant to Act No. 194 - 2001 adopted on the 10th day of September, 2001.

Authorized by the Board of Acquisition and Contract of the County of Westchester on the 4th day of October, 2001.

Authorized by the governing board of the Cooperating Municipality on the ____ day of _____, 2001.

Approved as to form
and manner of execution:

Sr. Assistant County Attorney
County of Westchester
S/L/DTR/39144/Bus Shelter IMA

Add as Attachments: **CERTIFICATE OF AUTHORITY** and **MUNICIPAL ACKNOWLEDGEMENT**.

APPENDIX C: SAMPLE PRIVATE PROPERTY RELEASE FORM

I, _____, the owner/manager of _____

_____ hereby grant permission for the installation
of a bus shelter with advertising by the County of Westchester and/or its franchisee on
property situated at _____. Additionally, I hereby grant
permission for the connection of the bus shelter to the electrical service provided on my
property.

1. I will be held harmless from all liability with regard to property damage and bodily injury.
2. The County's franchisee shall pay directly to the owner the sum of \$35.00 per month for the use of electricity, if required.
3. I will not be responsible for relocating the shelter should I wish to develop the land on which the shelter is placed.
4. I will not be responsible for the maintenance of the shelter, nor for the maintenance of the electrical service to the shelter.

Lawrence C. Salley
Commissioner of Transportation

Property owner/manager

Date

APPENDIX D: GLOSSARY OF TERMS

ACCESSWAY OR PATHWAY -- a paved connection, preferably non-slip concrete or asphalt, that connects the bus stop waiting pad with the back face of the curb.

ADA – American's with Disabilities Act of 1990. The Act supplants a patchwork of previous accessibility and barrier-free legislation with a comprehensive set of requirements and guidelines for providing *reasonable* access to and use of building facilities and transportation.

BUS BAY OR BUS TURNOUT -- a recessed, specially constructed area separated from the moving traffic lanes for bus loading and unloading purposes.

BUS STOP ZONE -- the length of a roadway marked or signed as available for use by a bus loading or unloading passengers.

BUS STOP DIMENSIONS -- typical distances needed for ideal bus stop operations at near-side, far-side or mid-block curb-side locations.

BUS STOP WAITING PAD -- a paved area, often as an extension along a sidewalk, that is provided at a bus stop and may contain a bench, shelter and other bus patron amenities.

BUS STOP SHELTER -- a curb-side amenity designed to provide protection and relief from the elements while patrons wait for the bus.

BUS TURNAROUND -- a roadway system which allows buses to return to the street they are serving, generally in the opposite direction of travel.

BUS TURNING RADII -- the dimensions needed to accommodate a bus turning movement, often shown for 90-degree or 180-degree turns.

FAR-SIDE BUS STOP -- a bus stop located immediately after an intersection.

IMA FOR BUS SHELTERS -- a cooperative legal agreement between an incorporated city, town or village and Westchester County through which the County agrees to provide bus shelters to those municipalities for designated periods and under specified conditions.

MID-BLOCK BUS STOP -- a transit stop located within the block between intersections.

NEAR-SIDE BUS STOP -- a transit stop located immediately before an intersection.

PEAK TRAVEL PERIOD -- those hours during the day when traffic volumes reach their highest levels. The peak period hours generally are between 6 A.M. to 10 A.M. and 3 P.M. to 6:30 P.M., Monday through Friday.