

ACCESSIBILITY ANALYSIS OF MODEL CODES

STANDARD BUILDING CODE ANALYSIS

REPORT FOR PUBLIC COMMENT

Prepared By:

Steven Winter Associates, Inc.
50 Washington Street
Norwalk, CT 06854
203-857-0200

Presented To:

U.S. Department of Housing and Urban Development
451 7th St. SW
Washington, DC 20410

October 20, 1999

I. PURPOSE

- The purpose of this report is to identify provisions of the 1997 edition of the Standard Building Code (SBC), published by the Southern Building Code Congress International (SBCCI) that do not meet the requirements of the Act, the Fair Housing Act regulations, or the Fair Housing Accessibility Guidelines (the Guidelines). Where variances are identified, Steven Winter Associates, Inc. (SWA) recommends how they may be revised to meet the requirements of the Act, the Fair Housing Act regulations, or the Guidelines. The 1999 edition of the SBC was published on January 29, 1999. A review of the 1999 edition of the SBC is not part of the scope of the following analysis.

II. METHODOLOGY

The analysis by SWA of the SBC consisted of the following:

- A review of the language of the Act, 42 U.S.C. § 3604 (f)(3)(C) (the Act), the Fair Housing Act regulations at 24 C.F.R. 100.201 and 205 (the regulations), the Fair Housing Accessibility Guidelines, 56 Fed. Reg. at 9472-9515 (the Guidelines), and the June 28, 1994 Supplement to Notice of Fair Housing Accessibility Guidelines: Questions and Answers About the Guidelines,” 59 Fed. Reg. at 33362-33368 (the Questions and Answers);
- A review of the December 15, 1997 copyrighted comparative matrix developed by the International Code Council (ICC), Building Officials & Code Administrators International (BOCA), International Conference of Building Officials (ICBO), Southern Building Code Congress International (SBCCI), and the Council of American Building Officials (CABO). The matrix, which was included with HUD’s Request for Quotations for this analysis consists of a side-by-side comparison of the Guidelines with the corresponding accessibility provisions of the three model building codes and the SBC. SWA began its analysis of the SBC by reviewing the column of the matrix that includes the SBC’s accessibility requirements and comparing them with the column that includes the provisions of the Guidelines. The matrix review was conducted to identify apparent variances between SBC’s accessibility requirements and those of the Act, regulations, and Guidelines.
- A review of the accessibility provisions of the 1997 edition of the Standard Building Code (herein referred to as the SBC); and a review of applicable referenced codes and standards, including: American National Standards Institute (ANSI) A117.1–1986, which is referenced in the regulations, and CABO/ANSI A117.1–1992, the title of the standard referenced by the SBC. Because the matrix did not include full text of the technical provisions, it was necessary to use these standards as companion documents in assessing the matrix, the Guidelines, and the SBC. They were

reviewed to identify any variances from the Act, regulations, or Guidelines in the technical provisions required by each.

- Interviews with John Battles, Vice-President, Technical Services, to gain insight into how the SBC responds to variances that SWA identified. SWA found it necessary to understand SBCCI's interpretations of its own requirements that may not be apparent when reviewing code text.

The original analysis of the SBC was submitted to HUD on September 27, 1999. HUD formed a Model Code Working Group consisting of representatives from the Office of Fair Housing and Equal Opportunity, the Office of General Counsel; and the Office of Housing. A representative of the U.S. Department of Justice also participated on the Working Group. The Working Group met with SWA on September 29, 1999, and asked questions and made comments and suggestions about the analysis. This analysis reflects the results of the Working Group's comments and suggestions. This analysis also has been revised and edited by HUD staff. The analysis described herein does, however, represent the findings and conclusions of SWA, the Department's contractor for this project.

III. THE STANDARD BUILDING CODE

The Southern Building Code Congress International, Inc. (SBCCI) administers the SBC series of model regulatory construction codes. Compliance with the SBC model building code is not required unless adopted by reference by a jurisdiction's board, council, or other authoritative governing body.

The 1997 SBC includes provisions for accessibility intended to reflect the intent of the guidelines. The 1994 SBC was the first attempt at codifying the Fair Housing Act accessibility requirements. Type B dwelling units accessibility criteria was codified in the 1997 SBC.

Unlike the Fair Housing Act, the SBC is a model building code and not a law. It provides minimum standards for public safety, health and welfare as they are affected by building construction. Compliance with the SBC is not required unless adopted by reference by a jurisdiction's board, council, or other authoritative governing body. Jurisdictions may adopt a model building code in its entirety or with modifications; hence, the building codes are referred to as "model codes."

Historically, model building codes have required that a certain percentage or number of dwelling units in defined residential uses meet the standards for full accessibility as defined by ANSI A117.1. These dwelling units are referred to in the SBC in Section 202 as "Type A" dwelling units. "Type B" dwelling unit which are defined in Section 202 as "a dwelling unit designed and constructed for accessibility in accordance with 1110" is an attempt to incorporate the requirements of the design and construction requirements of

the Act, the regulations, and the Guidelines. The SBC refers to CABO/ANSI A117.1 – 1992 for the technical provisions for Type B units.

IV. SCOPING PROVISIONS

Building codes have two major components that are relevant to this analysis. One component describes the technical standards that should be applied during the design and construction or alteration of a building or structure or elements within a structure. The other component is a description of the types of buildings or structures or elements within a structure to which the technical standards are applied. The provisions in this second component are referred to as “scoping” provisions. This section of the analysis sets forth areas where the scoping provisions of the SBC do not include all of the dwelling units, buildings, or uses that are covered by the Act, the regulations, or the Guidelines. This analysis of the scoping provisions of the SBC included an examination of the following:

- SBC’s definition of dwelling unit, building, structure, and ground floor dwelling unit;
- SBC’s classification of residential buildings according to use and occupancy; and
- SBC’s scoping of dwelling units to which the accessibility provisions apply.

This analysis concludes that the SBC covers most of the same dwelling units, buildings and residential uses as the Act, regulations, and Guidelines. For example, SWA concluded that, in buildings with four or more dwelling units, apartments, custom-designed condominiums, multistory units with internal elevators, single story townhouses, and modular units are covered. Additions of four or more units to existing buildings are included within the SBC’s scoping requirements for Type B dwelling units. However, SWA has concluded that the following provisions of the SBC do not or may not include “covered multifamily dwellings” as they are defined in the Act, regulations, or Guidelines. 42 U.S.C. § 3604 (f)(7); 24 C.F.R. § 100.201; 56 Fed. Reg. at 9500.

SBC Classification of Residential Use Groups

The SBC defines residential occupancies (Group R occupancies), in section 311.2 of the code, as follows:

- R1: Residential occupancies where the occupants are primarily transient in nature including:
Boarding houses (transient)
Hotels
Motels
- R2: Multiple dwellings where the occupants are primarily permanent in nature, including:

Apartment houses
Convents
Dormitory facilities which accommodate six or more persons of more than 2 ½ years of age who stay more than 24 hours.
Fraternities
Monasteries
Rectories
Rooming houses (not transient)

- R3: Residential occupancies including the following:
Child care facilities which accommodate five or less children of any age for any time period.
One and two family dwellings where the occupants are primarily permanent in nature and not classified as R1, R2, of I
Rooming houses (transient)
- R4: Residential Care/Assisted Living Facilities housing six or more occupants on a 24 hour bases; these occupancies include the following:
Alcohol and drug abuse centers
Assisted living facilities
Congregate care facilities
Convalescent facilities
Halfway houses
Group homes
Residential board and care facilities
Social rehabilitation facilities

According the SBC, Group R2 occupancies containing four or more dwelling units and Group R3 occupancies where there are four or more dwelling units in a single structure, all dwelling units shall be Type B dwelling units. Type B dwelling units are defined as units that are designed and constructed for accessibility in accordance with Section 1110, Chapter 11, Accessibility. Section 1110 – Type B Dwelling Units provides the design and construction requirement for Type B units.

DEFINITION OF DWELLING UNIT

The regulations define the term “dwelling unit” as:

“a single unit of residence for a family of one or more persons. Examples of dwelling units include: a single family home; an apartment unit within an apartment building; and in other types of dwellings in which sleeping accommodations are provided but toileting or cooking facilities are shared by occupants of more than one room or portion of the dwelling, rooms in which people sleep. Examples of the latter include dormitory rooms and sleeping

accommodations in shelters intended for occupancy as a residence for homeless persons.” 24 CFR Section 100.201.

It is clear from the discussion in the Preamble to the Regulations, found at 54 Fed. Reg. at 3244, that the Department intended that each sleeping room intended for occupancy by a separate household in a building with shared toileting or kitchen facilities would be considered a separate dwelling unit, and that buildings with four or more of these sleeping accommodations are “covered multifamily dwelling units” for purposes of the Act.

Of course, a detached building that has four or more sleeping rooms with shared toileting or kitchen facilities and that is intended for occupancy by one household is not considered to be a “covered multifamily dwelling” under the Act. For example, a detached single family house with four bedrooms occupied by four or more persons related by birth or marriage is not a covered multifamily dwelling. In addition, a single family house occupied by four or more unrelated persons that functions as one distinct household, such as what is commonly referred to as a “group home” would not be considered to be a “covered multifamily dwelling” for purposes of the application of the design and construction requirements of the Act. This latter example is consistent with case precedent and the position of the Department and the Department of Justice with respect to the application of zoning and land use restrictions to single family group homes.

The SBC defines the term “dwelling unit” in Chapter 2, Definitions, as follows:

- A single unit providing complete, independent living facilities for one or more persons including permanent provisions for living, sleeping, eating, cooking and sanitation.

As a result, many of the examples of R2 and R3 residences provided by the SBC are not covered by the accessibility provisions in Section 1105.4.2 because they do not fall under the SBC’s definition of “dwelling unit.” A dwelling unit, according to interviews with John Battles, Vice-President, Technical Services at SBCCI, cannot have sleeping rooms with shared common facilities. For example, the SBC lists convents, dormitory facilities which accommodate six or more people who stay more than 24 hours, fraternities, sororities, monasteries, rectories, and rooming houses (not transient), as examples of R2 occupancies. However, if these uses are composed of sleeping rooms with shared toileting or cooking, they do not fall under the SBC’s definition of “dwelling unit.” Mr. Battles confirmed that the only occupancy examples that fall under the SBC’s definition of “dwelling unit” are apartment houses (R2) and one and two family dwellings (R3).

The SBC’s definition of “dwelling unit” does not meet the requirements of the Act, regulations, or Guidelines.

Recommendation No. 1:

It is therefore recommended that the SBC definition of “dwelling unit” be modified as follows:

- **A single unit of residence for a family of one or more persons providing complete, independent living facilities for one or more persons including permanent provisions for living, sleeping, eating, cooking and sanitation. For purposes of Chapter 11, sleeping accommodations intended for occupancy by separate households in structures in which the occupants of the sleeping accommodations share toileting or cooking facilities shall be considered to be separate dwelling units.**

“TRANSIENT HOUSING”

The Department considers several factors in determining whether a building is a “covered multifamily dwelling.” In the “Questions and Answers,” in response to a question about coverage of continuing care facilities, the Department stated:

Whether a facility is a “dwelling” under the Act depends on whether the facility is to be used as a residence for more than a brief period of time....Factors that the Department will consider in making such an examination include, but are not limited to: (1) the length of time persons stay in the project; (2) whether policies are in effect at the project that are designed and intended to encourage or discourage occupants from forming an expectation and intent to continue to occupy space at the project; and (3) the nature of the services provided by or at the project.

56 Fed. Reg. at 33364.

Homeless shelters are listed in the regulations and the Guidelines as residential uses that may be covered under the Act’s new construction accessibility requirements, if the shelter is intended as a residence. 56 Fed. Reg. at 9500; 54 Fed. Reg. at 3244; 24 CFR § 100.201 The factors that the Department uses to determine whether a homeless shelter is a “covered multifamily dwelling” are the factors set forth in the Questions and Answers 59 Fed. Reg. at 33364..

In making a determination whether specific boarding houses, “corporate housing,” and similar uses are covered under the new construction accessibility requirements of the Act, the Department considers similar factors, such as: 1) whether the rental rate for the unit will be calculated based on a daily, weekly, monthly or yearly basis; 2) whether the terms and length of occupancy will be established through a lease or other written agreement; 3) what amenities will be included inside the unit, including kitchen facilities; 4) how the

purpose of the property will be marketed to the public; and 5) length of stay. With respect to this latter criterion, the Department has not adopted a “bright line” standard of a specified number of days.

According to Section 1105.4.2, the SBC accessibility provisions apply to Group R2 and R3 occupancies. Transient boarding houses are not covered under Section 1105.4.2 because they are classified as R1. If, however, the occupants of a boarding house are not primarily transient in nature, the boarding house is classified as R2 or R3. The term “transient” is not defined. The SBC classifies transient rooming houses as R2 but classifies transient boarding houses as R1. The basis for this distinction in the code is unclear. However, according to Mr. Battles, hotels and boarding houses would not be covered under the provisions of Section 1105.4.2, apparently under any circumstances. Therefore, the SBC does not meet the requirements of the Act, the regulations, or the Guidelines.

Recommendation Number 2:

It is recommended that the SBC classification of residential uses be modified as follows:

- **R1: Residential occupancies where the occupants are primarily transient in nature including:**
 - Boarding houses (transient)**
 - Hotels (transient)**
 - Motels (transient)**

- **R2: Multiple dwellings where the occupants are primarily permanent in nature, including:**
 - Apartment houses**
 - Convents**
 - Dormitory facilities which accommodate six or more persons of more than 2 ½ years of age who stay more than 24 hours.**
 - Fraternities**
 - Monasteries**
 - Rectories**
 - Rooming houses (not transient)**
 - Boarding houses (not transient)**
 - Hotels (not transient)**
 - Motels (not transient)**
 - Homeless shelters (not transient)**

- **R3: Residential occupancies including the following:**

Child care facilities which accommodate five or less children of any age for any time period.

One and two family dwellings where the occupants are primarily permanent in nature and not classified as R1, R2, or I.

Rooming houses (transient)

CONTINUING CARE FACILITIES

The Act defines a “dwelling” as “any building, structure, or portion thereof which is occupied as, or designed or intended for occupancy as, a residence by one or more families....” 42 USC 3602 (b). Such a building may serve more than one purpose. Some buildings, known as continuing care facilities, residential care facilities, or assisted living facilities, serve both as a residence for their occupants and as a place where the occupants receive personal, medical or other support services.

As mentioned in the discussion of transient residential uses above, the Questions and Answers addressed the issue of whether the design and construction requirements of the Act apply to continuing care facilities which incorporate housing, health care and other types of services. That publication states:

The new construction requirements of the Fair Housing Act would apply to continuing care facilities if the facility includes at least one building with four or more dwelling units. Whether a facility is a “dwelling” under the Act depends on whether the facility is to be used as a residence for more than a brief period of time. As a result, the operation of each continuing care facility must be examined on a case-by-case basis to determine whether it contains dwellings. Factors that the Department will consider in making such an examination include, but are not limited to: (1) the length of time persons stay in the project; (2) whether policies are in effect at the project that are designed and intended to encourage or discourage occupants from forming an expectation and intent to continue to occupy space at the project; and (3) the nature of the services provided by or at the project.

59 Fed. Reg. at 33364.

As a result of the application of these factors, and the regulations’ definition of “dwelling unit,” the Department considers that residential care/assisted living facilities with four or more dwelling units, including sleeping rooms occupied by separate households with shared toileting or kitchen facilities, and nursing homes, to be “covered multifamily dwellings” for purposes of the accessibility requirements of the Act.

The SBC classifies residential care/assisted living facilities as R4 residential uses. Section 202 of the Code defines Residential Care/Assisted Living Occupancies as follows:

- A building or part thereof housing six or more persons, on a 24 hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides personal care and supportive services. The occupants are mostly capable of responding to an emergency situation without assistance from staff. And this occupancy subclassification shall include residential board and care facilities, assisted living facilities, halfway houses, group homes, congregate care facilities, social rehabilitation facilities, alcohol and drug abuse centers and convalescent facilities.

There are no scoping provisions in Chapter 11 related to the R4 classification. R4 occupancies are not covered under Section 1105.4.2. It is unclear whether this is an oversight, or whether all R4 occupancies are covered under some other accessibility standard.

Recommendation Number 3:

It is recommended that the definition of “dwelling unit” contained in Recommendation Number 1 be adopted and that Section 1105.4 be modified to add a new section, that provides the following, in addition to any other applicable accessibility criteria under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990:

- **In R4 occupancies, all ground floor dwelling units in structures of four or more dwelling units, and all dwelling units in structures of four or more dwelling units with elevators shall be Type B dwelling units.**

Nursing homes occupied by six or more persons (both intermediate care facilities and skilled nursing facilities) are classified in section 309.1 of the code as Group I Unrestrained Occupancy. This classification is defined below:

- Group I Unrestrained Occupancy. Group I Unrestrained included buildings or portions thereof used for medical, surgical, psychiatric, nursing, or custodial care on a 24 hour basis of six or more persons who are not capable of self-preservation. Facilities with five or less persons not ancillary to other uses are classified as a residential occupancy,

The relevant accessibility standards required for Group I (Unrestrained, Section 1105.3.3, 1105.3.5) are as follows:

- Group I Institutional
 - 1105.3.3: In Group I Unrestrained nursing homes, at least 50%, but not less than one, of the patient sleeping rooms and their bathing and toilet facilities shall be accessible.

- 1105.3.5: In Group I Unrestrained occupancies, at least one accessible entrance shall include a passenger loading zone complying with CABO/ANSI A117.1 – 1992.

Recommendation Number 4:

It is recommended that the definition of dwelling unit in Recommendation Number 1 be adopted and that Section 1105.3.3 be modified as follow:

- **1105.3.3: In Group I Unrestrained nursing homes, at least 50%, but not less than one, of the patient sleeping rooms and their bathing and toilet facilities shall be accessible. All ground floor dwelling units in a structure of four or more dwelling units, and all dwelling units in structures of four or more dwelling units with elevators shall be Type B dwelling units.**

DEFINITION OF BUILDING AND STRUCTURE

In the definition of “covered multifamily dwellings,” the Guidelines contain the statement that: “Dwelling units within a single structure separated by firewalls do not constitute separate buildings.” 56 Fed. Reg. at. 9500. The Guidelines’ definition of “building” is a “structure, facility, or portion thereof that contains or serves one or more dwelling units.” 56 Fed. Reg. at 9500.

The SBC defines Building, and Structure as follows:

- **Building**
Any structure that encloses a space used for sheltering any occupancy. Each portion of a building separated from other portions by a firewall shall be considered as a separate building.
- **Structure**
That which is built or constructed.

Based on discussions with code staff, for the purposes of accessibility, the intent of the SBC is to eliminate the firewall criteria when scoping dwelling units in “structures” that are required to be accessible. Since a “structure” by definition includes buildings and buildings separated from others by firewalls are separate buildings, a reference to “structure” includes all buildings separated by firewalls which meets the requirements of the Guidelines. However, this distinction may not be sufficiently clear.

Recommendation Number 5:

To ensure that this firewall criteria is eliminated for the purpose of accessibility, it is recommended that the SBC modify Section 1105.4 by eliminating any reference to the term “building” and replacing it with the term “structure.”

GROUND FLOOR

The Fair Housing Act regulations define “ground floor” as a “floor of a building with a building entrance on an accessible route. A building may have one or more ground floors.” 24 CFR 100.202. The Guidelines further state: “Where the first floor containing dwelling units in a building is above grade, all units on that floor must be served by a building entrance on an accessible route. This floor will be considered to be a ground floor.” 56 Fed. Reg. at 9500.

If a building is built into a hill, for example, and the front and the back of the building have entrances to dwelling units at grade, but at different elevations, the ground floor dwelling units on both levels are covered under the Guidelines. See the Questions and Answers about the Guidelines question number 6. 59 Fed. Reg. at 33364.

Exception 1, Section 1105.4.2, states that the requirements for Type B dwelling units shall not apply to dwelling units that are both located above the first level containing dwelling units and that are not provided with elevator access thereto. This implies that if a building is built into a hill, for example, and the front and the back of the building have entrances at grade but at different elevations, the first level containing dwelling units could be considered the level at the lowest elevation. Since a ground floor is a floor of a building with a building entrance on an accessible route and that there can be more than one ground floor, it is clear in the example above that both levels of that building built into the hill are considered “ground floors” and must comply with the Guidelines.

The SBC defines the term “ground floor dwelling unit” in Chapter 2 as a dwelling unit with a primary entrance and habitable space at grade. However, the SBC does not refer to the term in its provisions for accessible dwelling units (Section 1105.4.2). The definition of “ground floor dwelling unit” does not indicate that there can be more than one ground or grade levels and therefore more than one level of ground floor dwelling units. According to the SBC, in the example given above, the level at the lowest elevation is the only level required to have accessible dwelling units. Therefore, the SBC definition of “ground floor dwelling unit” does not meet the requirements of the Act, regulations, and the Guidelines.

Recommendation Number 6:

It is recommended that the SBC define the term “ground floor” to match the definition in the Fair Housing Act regulations; refer to the term “ground floor” in

Exception 1, Section 1105.4.2, and modify the term “ground floor dwelling unit” as follows:

- The term “ground floor dwelling unit” should be deleted from Chapter 2, Definitions and replaced with the term and definition of “ground floor” as follows:

Ground floor: A floor of a structure with an entrance on an accessible route. A structure may have one or more ground floors. Where the first floor containing dwelling units in a structure is above grade, all units on that floor must be served by an entrance on an accessible route. This floor will be considered to be a ground floor.

- Section 1105.4.2, Exception 1, should be modified as follows:

Where no elevator service is provided in a structure, the requirement(s) for Type B dwelling units shall not apply to dwelling units on floors that are not ground floor dwelling units.

BUILDINGS CONNECTED BY BREEZEWAYS OR STAIRWAYS

The regulations define a building as “a structure, facility or portion thereof that contains or serves one or more dwelling units.” 24 C.F.R. § 100.201. Based on that definition, a structure with three dwelling units that is structurally connected to another structure with three units, by a stairway or breezeway, for example, is considered one covered multifamily dwelling with six dwelling units.

According to the SBC buildings that are structurally connected by a breezeway or stairway are considered two separate buildings. However, there are instances when two buildings connected by a stairway that provides the only means of egress to dwelling units are considered one building. However, this must be determined on a case-by-case. As a result, the SBC may not meet the requirements of the Guidelines in terms of covered units connected by breezeways or stairways.

Recommendation Number 7:

It is recommended that the SBC be modified to include an additional provision under Section 3104, Covered and Enclosed Walkways and Tunnels, as follows:

3104.2.1. Separate structures. For purposes of accessibility as required by Chapter 11, buildings or structures structurally connected to other buildings or structures by pedestrian walkways, breezeways, stairways, or tunnels shall be considered one structure.

MULTISTORY DWELLING UNITS

The regulations determined that a multistory dwelling unit that does not have an elevator internal to the unit that is located in a building that does not have an elevator is not a “covered multifamily dwelling” because the entire unit is not on the ground floor. 54 Fed. Reg. at 3244. The Guidelines define a “multistory dwelling unit” as a dwelling unit with finished living space located on one floor and the floor or floors immediately above or below it. 56 Fed. Reg. at 9500. A “single-story dwelling unit is defined as a dwelling unit with all finished living space located on one floor. 56 Fed. Reg. at 9501.

The SBC defines “multistory dwelling units” as a dwelling unit with habitable or bathroom space located on more than one story. The SBC defines “habitable space (room)” as a space in structure for living, sleeping, eating or cooking. Bathrooms, toilet compartments, closets, halls, storage or utility space, and similar areas, are not considered habitable space.

According to the SBC’s definition of “multistory dwelling unit”, a unit would be considered multistory if one level contains living or “habitable” space and the floor next above or below contained only a bathroom. According to the definitions in the Guidelines, a two-level unit with only a bathroom, or only a bathroom and storage space on one level, is not a multistory dwelling unit because finished living space must be located on both floors. Bathroom space alone does not constitute living space, nor does bathroom and storage space. The SBC’s definition of “dwelling unit, multistory” does not meet the Department’s interpretation of the Act, the regulations and the Guidelines of what constitutes a “multistory dwelling unit.”

Recommendation Number 8:

It is recommended that the reference to “or bathroom space” in the IBC’s definition of “multistory dwelling unit” be deleted as follows:

- **Section 1102, Definitions:**
Dwelling unit, multistory: For application of the accessibility requirements, this term shall mean a dwelling unit with habitable space located on more than one story.

V. SEVEN SPECIFIC DESIGN AND CONSTRUCTION REQUIREMENTS

The Guidelines specify seven requirements relating to accessibility which reflect the language of the Act and the regulations. Compliance with the provisions of the Guidelines constitutes a safe harbor for compliance with the requirements of the Act. The Act itself references the ANSI A117.1 standard as a means for meeting the technical requirements of the Act. As discussed in the Department’s policy statement, at the time the Act was passed and the Guidelines were written, ANSI A117.1-1986 was in effect. Since that time, there have been two additional editions of ANSI A117.1 published, the CABO/ANSI A117.1 in 1992 and the ICC/ANSI A117.1 in 1998.

The Department believes that compliance with either of these newer versions of the ANSI-A117.1 constitutes an additional safe harbor in terms of demonstrating compliance with the technical provisions of the Act's accessibility requirements. It is, of course, still necessary to refer to the Act and the regulations, or the Guidelines, for implementing the scoping requirements. The Department believes that Code officials may rely on the edition of ANSI A117.1 that has been adopted by the code organization or State or local jurisdiction, if it has been adopted without modifications and is uniformly enforced.

The SBC utilizes the technical criteria contained in CABO/ANSI A 117.1 -1992. Therefore, SWA has determined that there is no variance between the requirements of the Act and the model code provision if the model code provision is based on CABO/ANSI A117.1-1992, even where those criteria differ from the ANSI A117.1-1986 criteria or the Guidelines.

REQUIREMENT 1: ACCESSIBLE BUILDING ENTRANCE ON AN ACCESSIBLE ROUTE.

The Guidelines set forth specifications to implement the requirements of 24 CFR 100.205(a) that all covered multifamily dwellings shall be designed and constructed to have at least one building entrance on an accessible route, unless it is impractical to do so because of terrain or unusual characteristics of the site. 56 Fed. Reg. at 9503.

Requirement 1 of the Guidelines includes specifications for providing an accessible entrance on an accessible route, and explains that the requirements apply to a single building on a site and to multiple buildings on a site. 56 Fed. Reg. at 9503. In addition, Requirement 1 includes specifications for determining site impracticality based on terrain and unusual site characteristics. 56 Fed. Reg. at 9503. However, the Guidelines specify that covered multifamily dwellings with elevators shall be designed and constructed to provide at least one accessible entrance on an accessible route, regardless of terrain or unusual characteristics of the site. 56 Fed. Reg. at 9504.

In conducting this analysis, SWA and the Department noted that the SBC 1997 applies the site impracticality test to both Type A and Type B dwelling units. The inclusion of Type A units in the scoping of application of the site impracticality test may conflict with the requirements of Section 504 of the Rehabilitation Act of 1973 in multifamily residential projects receiving federal financial assistance, or with the requirements of the Americans with Disabilities Act of 1990 , 42 U.S.C. § 12101 *et seq*; 29 U.S. C. § 794(a), in multifamily residential projects constructed by governmental entities.

The SBC's provision related to Requirement 1 are consistent with the Act, the regulations, and the Guidelines, except as follows:

SITE IMPRACTICALITY DUE TO TERRAIN

The Guidelines set forth two tests to assess site impracticality due to terrain-- the individual building test and the site analysis test. 56 Fed. Reg. at 9503.

Individual Building Test -- This test may be used for all sites, but must be used for sites with a single building having a common entrance for all units. 56 Fed. Reg. at 9503

Site Analysis Test --May be used for all sites, including those with multiple buildings and single buildings with multiple entrances serving individual dwelling units or clusters of dwelling units except sites with a single building having a common entrance for all units. This test has three steps. 56 Fed. Reg. at 9503-04

Step A requires the calculation of the percentage of total buildable area of the undisturbed site with a natural slope of less than 10%. A professional licensed engineer, landscape architect, architect or surveyor must certify the analysis of the slope. 56 Fed. Reg. at 9504.

Step B states that the percentage of ground floor units that must be made accessible should be equal to the total buildable area of the undisturbed site (not including floodplains, wetlands, or other restricted areas) that has an existing natural grade of less than 10% slope (previously determined in Step A). 56 Fed. Reg. at 9504.

Step C requires that in addition, **all** ground floor units in a building, or ground floor units served by a particular entrance, shall be made accessible if the entrance to the units is on an accessible route, defined as a walkway with a slope between the planned entrance and a pedestrian or vehicular arrival point that is no greater than 8.33%. In some cases, application of Step C will result in a greater number of accessible units being required. 56 Fed. Reg. at 9504.

For example, according to the Guidelines' site analysis test for determining impracticality due to terrain, if 60% of the total area of an undisturbed site has an existing natural grade of less than 10% slope, then 60% of the ground floor units are required to be served by an accessible entrance on an accessible route. If we construct, two buildings not served by elevators on that site, each with 20 ground floor units for a total of 40 ground floor dwelling units on the entire site, then 24 ground floor dwelling units (60% of ground floor units) must have an accessible entrance on an accessible route. In addition, according to step C of the site analysis test, all ground floor units in the building, or ground floor units served by a particular entrance shall be made accessible if the entrance to the units is on an accessible route.

Variances Related to Site Analysis Test.

Section 1105.4.2, Exception 3, of the SBC provides that the number of Type B dwelling units in multiple non-elevator buildings on a single site is allowed to be reduced to a percentage of the ground floor units which is equal to the percentage of the entire site

having grades, prior to development, which are 10% or less; but in no case shall the number of Type B units be less than 20% of the ground floor dwelling units on the entire site.

This Exception corresponds to Steps A and B of the site analysis test, except that the Guidelines requires the grades to be "less than 10%". 56 Fed. Reg. at 9504. In addition, the Exception fails to provide equivalent language to Step C -- i.e., it does not require that, in addition to the percentage of ground floor units required to be accessible, all ground floor units in buildings, or ground floor units served by a particular entrance, must be made accessible if the entrance to the units is on an accessible route. 56 Fed. Reg. at 9504. Therefore, the SBC does not meet this aspect of the Guidelines.

In addition, according to the Guidelines, regardless of site considerations, an accessible entrance served by an accessible route is practical whenever an elevator connects parking with a ground floor, in which case all ground floor units are covered, or whenever an elevated walk with a slope no greater than 10% is planned between an entrance and a pedestrian or vehicular arrival point. 56 Fed. Reg. at 9504. The SBC does not include any language that reflects these requirements. As a result, the SBC does not meet these provisions of the Guidelines.

Recommendation Number 9:

In order to address these inconsistencies, we therefore recommend the following changes and additions to Section 1105.4.2, Exception 3, of the SBC:

The number of Type B dwelling units provided in multiple non-elevator buildings on a single site is allowed to be reduced to a percentage of the ground floor units which is equal to the percentage of the entire site having grades, prior to development, which are less than 10%. In addition to the percentage established, all ground floor units in a building, or ground floor units served by a particular entrance, shall be Type B if the entrance to the units is on an accessible route, defined as a walkway with a slope between the planned entrance and a pedestrian or vehicular arrival point that is no greater than 8.33%. In no case shall the number of Type B dwelling units be less than 20 percent of the ground floor dwelling units on the entire site. When a building is equipped with an elevator which provides access to the ground floor only, or when an elevated walkway is planned between a building entrance and a pedestrian or vehicular arrival point and the planned walkway has a slope no greater than 10%, all ground floor units shall comply with the requirements for Type B dwelling units. The walkway, in such cases shall be reduced to no greater than 8.33%.

VariANCES Related to Buildings with Elevators

According to the Guidelines, buildings with elevators must provide an accessible entrance on an accessible route regardless of site impracticality. 56 Fed. Reg. at 9503.

The SBC does not reflect this requirement in Section 1105.4.2, Exception 4.

Recommendation Number 10:

It is recommended that Exception 4, Section 1105.4.2 be modified to exempt buildings with elevators from site impracticality as follows:

The required number of Type A and Type B dwelling units shall not apply to a site where the lowest floor or the lowest structural member of a structure not provided with elevator service is required to be at or above the base floor elevation resulting in...

Variance Related to Sites with Unusual Characteristics

In addition, the criteria in the Guidelines for determining site impracticality for sites having unusual characteristics specifies that an accessible entrance on an accessible route is impractical when the unusual site characteristics result in a difference in finished grade elevation exceeding 30 inches AND 10 percent, measured between an entrance and all vehicular or pedestrian arrival points within 50 feet of the planned entrance, and if none, then between the closest vehicular or pedestrian arrival point. 56 Fed. Reg. 9504.

The SBC does not reflect this requirement in Section 1105.4.2, Exception 4. The SBC's corresponding provision states that the accessibility requirements shall not apply to a site where the lowest floor or the lowest structural building member is required to be at or above the base flood elevation resulting in a difference in elevation between the minimum required floor elevation at the primary entrances and vehicular and pedestrian arrival points within 50 feet exceeding 30 inches, OR a slope exceeding 10 percent between the minimum required floor elevation at the primary entrances and vehicular and pedestrian arrival points within 50 feet. The Guidelines specify that the difference in finished grade elevation must be both 30 inches and 10 percent.

Recommendation Number 11:

It is further recommended that Section 1105.4.2, Exception 4, be modified to read:

1. A difference in elevation between the minimum required floor elevation at the primary entrances and vehicular and pedestrian arrival points within 50 feet (15 240 mm) exceeding 30 inches (762 mm), AND

REQUIREMENT 2: ACCESSIBLE AND USABLE PUBLIC AND COMMON USE AREAS.

The Act and the regulations provide that covered multifamily dwellings with a building entrance on an accessible route be designed and constructed in a manner so that the public and common use areas are readily accessible to and usable by people with disabilities. 42 USC 3604 (f)(3)(c)(i); 24 CFR 100.205 (c) (1). The Guidelines' Requirement 2 cites the appropriate section of the ANSI A117.1 – 1986 Standard for the technical provisions for 15 accessible elements or spaces, and describes the application of the specifications including modifications to the referenced Standard. 56 Fed. Reg. at 9505. Following are the 15 basic elements or spaces for accessible and usable public and common use areas or facilities:

- Accessible routes
- Protruding objects
- Ground and floor surface treatments
- Parking and passenger loading zones
- Curb ramps
- Ramps
- Stairs
- Elevators
- Platform lifts
- Drinking fountains and water coolers
- Toilet rooms and bathing facilities
- Seating, tables, or work surfaces
- Places of assembly
- Common-use spaces and facilities
- Laundry rooms

56 Fed. Reg. at 9505.

When a variance is identified in the SBC that does not meet or exceed the requirements of the Guidelines for each of the 15 elements or spaces above, they are noted below.

ACCESSIBLE ROUTE(S)

Vehicular Route

Requirement 1, paragraph (5) of the Guidelines states that if the slope of the finished grade between covered multifamily dwellings and a public or common use facility exceeds 8.33%, or where other physical barriers or legal restrictions, all of which are outside the control of the owner, prevent the installation of an accessible pedestrian route, an acceptable alternative is to provide access via a vehicular route, so long as necessary site provisions such as parking spaces and curb ramps are provided at the public or common use facility. 56 Fed. Reg. at 9504.

The Exception in SBC Section 1105.4.4 contains language which is comparable to the Guidelines with two omissions. That section states:

If the slope of the finished grade between accessible facilities and buildings exceeds 1:12, or where physical barriers prevent the installation of an accessible route, a vehicular route with parking at each accessible facility or building is permitted in place of the accessible route.

The SBC does not include language making it clear that accessible parking and curb ramps must be available at the accessible facility if access is provided by a vehicular route.

Recommendation Number 12:

It is recommended that SBC, Section 1105.4.4, Exception, be modified to include the following language:

- **If the slope of the finished ground level between accessible facilities and buildings exceeds one unit vertical in 12 units horizontal, or where physical barriers prevent the installation of an accessible route, a vehicular route with accessible parking spaces and curb ramps at each public or common use facility or building is permitted in place of the accessible route.**

Headroom

The Guidelines refer to headroom requirements through their adoption of the ANSI A117.1-1986 section on Accessible routes and its subsection, 4.3.5. which references headroom requirements. 56 Fed Reg. at 9505. The SBC does not include headroom requirements in its referenced technical provisions for accessible routes but does include mean of egress headroom provisions in Section 1003.2.4.

Recommendation Number 13:

It is recommended that the SBC reference the headroom requirements stipulated in Section 1003.2.4 in Section 1107.5.5, Accessible route.

Stairs

The Guidelines require that accessibility be provided on stairs located along accessible routes connecting levels not connected by an elevator. 56 Fed. Reg. at 9505. For example, a ground floor entry might have steps up to a bank of mailboxes, with a ramp located beside the steps. The stairs in this case are required to meet the ANSI A117.1 specification, since they will be used by people with disabilities for whom stairs are more usable than ramps. However, stairs are not a component of an accessible route.

Since stairs are not parts of accessible routes and they are not specifically referenced in Chapter 11, Accessibility, of the proposed SBC, one must refer to Chapter 10, Means of Egress, for stair provisions. However, the Chapter 10 requirements do not necessarily apply to stairs that connect levels not connected by an elevator if they are not a part of a means of egress. There are variances between the SBC and the Guidelines' requirements for stairs along accessible routes regarding handrail extensions and projections, for example.

Recommendation Number 14:

It is recommended that the SBC include a provision for stairways under Section 1106, other Features and Facilities as follows:

- **Stairways**

Stairways in structures, or portions of structures, located along accessible routes not connected by an elevator shall be designed and constructed to comply with CABO/ANSI A117.1 - 1992.

ELEVATORS

The Guidelines require that elevators on accessible routes be accessible according to the technical specifications of ANSI A117.1-1986, Section 4.10, Elevators. 56 Fed. Reg. at 9505. This applies to elevators located within multistory dwellings. SBC section 1106.3, Elevators, Lifts, states that all passenger elevators on an accessible route shall be accessible. However, the SBC provides an exception to Section 1106.3 which states that elevators within a dwelling unit are not required to be accessible. This does not meet the requirements of the Guidelines because elevators within multistory units must provide accessibility.

Recommendation Number 15:

It is recommended that this exception be deleted.

PARKING AND PASSENGER LOADING ZONES

The Questions and Answers (Question and Answer 14c) states that at least 2% of parking garages where there are several individual parking garages grouped together either in a separate area of the building (such as at one end of the building, or in a detached building), for assignment or rental to residents, at least 2% of the garages must be at least 14'2" wide and have a vehicular door at least 10' wide. 59 Fed. Reg. at 33366.

The SBC does not provide minimum requirements for these garages, and therefore, does not meet this aspect of the provisions of the Guidelines.

In its scoping provision for parking facilities, Section 1104.1, the SBC does not include those facilities provided for R-3 occupancies.

In addition, the Questions and Answers provide that parking shall be provided that is on the same terms and with the full range of choices (e.g., surface parking or garage) that is provided for other residents. 59 Fed. Reg. at 33366.

The Guidelines provide that accessible parking on a route accessible to persons in wheelchairs be provided for at least 2% of the covered dwelling units, and that there be accessible visitor parking sufficient to provide access to grade level entrances of covered multifamily dwellings, and accessible parking at facilities. 56 Fed. Reg. at 9505.

The SBC does not include comparable language in Section 1104, Parking Facilities, and therefore, this aspect of the SBC does not meet the provisions of the Guidelines.

In addition, the SBC does not scope accessibility requirements for passenger loading zones which does not meet the requirements of the Act.

Recommendation Number 16:

In order to address these inconsistencies, it is recommended that the SBC add the following language to Section 1104.1:

- **Two percent of parking spaces provided for R2 and R3 occupancies required to have accessible/adaptable dwelling units shall be accessible...**
- **At least 2% of parking garages provided for R2 and R3 occupancies required to have accessible dwelling units where there are several individual garages grouped together, either in a separate area of a structure or in a detached structure, for assignment or rental to residents, must be at least 14'2" wide and have a vehicular door at least 10' wide.....**
- **...Where accessible parking spaces are provided, they shall be on the same terms and with the full range of choices (surface parking or garage) that are provided for other residents.**

Accessible visitor parking sufficient to provide access to grade level entrances for Type A and Type B dwelling units and accessible parking at facilities serving accessible structures shall be provided.

- **In order to ensure that passenger loading zones comply with the requirements of the Guidelines, it is recommended that SBC add a provision under Section 1104 which states the following:**

When provided, passenger loading zones shall be located on an accessible route. Passenger loading zones shall be designed and constructed in accordance with CABO/ANSI A117.1 – 1992.

Table 1104.3, Accessible Parking Spaces includes a note that states “the accessible space shall be provided but need not be designated as reserved for the physically disabled.” In addition, Section 1107, Signs, indicated that elements shall be identified by the International Symbol of Accessibility at four locations. One of which states that it is required at accessible parking spaces required by 1104.1 (Parking Facilities) but not where the total parking spaces provided are five or less. This does not meet the requirements of the Guidelines which requires signage at all accessible parking space.

Recommendation Number 17:

It is recommended that this language from provision 1 under Section 1107.1, Signs.

REQUIREMENT 3: USABLE DOORS.

The Act and regulations require that all doors designed to allow passage into and within a covered dwelling unit be sufficiently wide to allow passage by persons in wheelchairs. 42 U.S.C. § 3604 (f)(3)(C)(ii); 24 C.F.R. § 100.205(c)(2). The Guidelines set forth criteria to meet this requirement. The Guidelines also set forth additional guidance regarding doors that are a part of an accessible route in the public and common use areas of multifamily dwellings and to doors into and within individual dwelling units. 56 Fed. Reg. at 9506.

The Guidelines provide the following:

On accessible routes in public and common use areas, and for primary entry doors to covered units, doors that comply with ANSI A117.1 4.13 will meet the Act’s requirements for usable doors; and

Within individual dwelling units, doors intended for user passage through the unit which have a clear opening of at least 32 inches nominal width when the door is open 90 degrees, measured between the face of the door and the stop, would meet the Act’s requirement. 56 Fed. At 9506.

The Department has determined that the SBC meets the requirements of the Act, regulations, and the Guidelines, insofar as the requirement for usable doors.

REQUIREMENT 4: ACCESSIBLE ROUTE INTO AND THROUGH THE COVERED DWELLING UNIT.

The Act and regulations require that all covered multifamily dwellings with a building entrance on an accessible route shall be designed and constructed such a manner that all

premises within covered multifamily dwelling units contain an accessible route into and through the covered dwelling unit. 42 U.S.C. §.3604 (f)(3)(C)(iii)(I), 24 C.F.R § 100.205 (c)(3)(i). Requirement 4 of the Guidelines sets forth criteria to meet this requirement 56 Fed. Reg. at 9509-10. The SBC meets the provisions of the Act, regulations, and Guidelines with respect to Requirement 4, except the following.

MULTISTORY UNITS SERVED BY ELEVATORS

Among the criteria for Requirement 4 is the provision that in multistory dwelling units in buildings with elevators, the story of the unit that is served by the building elevator is the primary entry to the unit. 56 Fed. Reg. at 9507.

The SBC provides the following exceptions to the requirement for Type B units as follows (Section 1105.4.2):

- A multistory dwelling unit which is not provided with elevator service is not required to comply with requirements for Type B dwelling units. Where a multistory dwelling unit is provided with elevator service to only one floor, the floor provided with the elevator service shall comply with the requirements for a Type B dwelling unit and a toilet facility shall be provided.

The SBC does not mention that where a multistory dwelling unit is provided with elevator service, the story served by the elevator must be the primary entry to the unit. As a result, the SBC does not meet the requirements of the Guidelines in terms of the exceptions for multistory units in buildings served by elevators.

Recommendation Number 18:

It is recommended that the SBC modify Section 1105.4.2, Exception 2 as follows:

- **A multistory dwelling unit which is not provided with elevator service is not required to comply with the requirements for Type B dwelling units. Where a multistory dwelling unit is provided with elevator service to only one floor, the floor provided with elevator service shall be the primary entry to the unit, shall comply with the requirements for a Type B dwelling unit, , and a toilet facility shall be provided.**

REQUIREMENT 5: LIGHT SWITCHES, ELECTRICAL OUTLETS, THERMOSTATS AND OTHER ENVIRONMENTAL CONTROLS IN ACCESSIBLE LOCATIONS.

The Act and regulations require that all covered multifamily dwellings with a building entrance on an accessible route shall be designed and constructed so that all premises within the covered units contain light switches, electrical outlets, thermostats, and other environmental controls in accessible locations. 42 USC Section 3604 (f)(3)(C) (iii)(II);

24 CFR Section 100.205. Requirement 5 of the Guidelines sets forth criteria to meet these requirements. The SBC meets the provisions of the Act, regulations, and Guidelines with respect to Requirement 5.

REQUIREMENT 6: REINFORCED WALLS FOR GRAB BARS.

Requirement 6 of the Guidelines sets forth technical specifications to meet the requirements of the Act at 42 USC 3604 (f)(3)(C)(iii)(III) and the regulations at Section 100.205(c)(3)(iii), which specifies that all covered multifamily dwellings with a building entrance on an accessible route shall be designed and constructed so that all premises within the covered units contain reinforcements in bathroom walls to allow later installation of grab bars around toilet, tub, shower stall and shower seat, where such facilities are provided. 56 Fed. Reg. at 9509-10.

The SBC Section 1110.9.3, Grab bar and seat reinforcement, states that where walls are located so as to permit installation of grab bars and seats complying with Section 4.17.4, 4.21.4, 4.22.4, 4.23.3, of CABO/ANSI A117.1 – 1992, reinforcement shall be provided for the installation of grab bars and seats meeting those requirements. The SBC does not include any provisions for the installation of grab bars for fixtures, sunken or raised tubs for example, that are located away from walls, which does not meet the requirements of the Guidelines.

Recommendation Number 19:

It is recommended that the SBC modify Section 1110.9.4, Toilet and bathing fixtures, as follows:

- **Section 1110.9.4 Toilet and bathing fixtures:**
Toilet and bathing fixtures shall comply with either Section 1110.9.4.1 Option A or 1110.9.4.2 Option B. Where fixtures are located away from walls alternative reinforcement complying with CABO/ANSI A117.1 4.24.2.5 and 4.24.3 shall be provided for the mounting of grab bars.

REQUIREMENT 7: USABLE KITCHENS AND BATHROOMS.

Usable kitchens

The Act and regulations provide that all covered multifamily dwellings with a building entrance on an accessible route shall be designed to have usable kitchens and bathrooms such that an individual in a wheelchair can maneuver about the space. 42 U.S.C. § 3604 (f)(3)(C)(iii)(IV); 24 CFR § 100.205. Requirement 7 of the Guidelines sets forth technical criteria to meet those requirements. 56 Fed. Reg. at 9511-15.

The Guidelines address a parallel approach to kitchen sinks in Requirement 7. The parallel approach to the sink is addressed in Figure 7(c). 56 Fed. at 9511. The ANSI

A117.1 – 1986 standard requires, with respect to sinks and lavatories, a forward approach with clear floor space below, and illustrates the forward approach centered on the sink/lavatory. (ANSI A117.1 1986, Fig.32 on page 50) The Department's Guidelines allowed a departure from the ANSI standard. The Guidelines permit the clear floor space to be designed for a parallel position. 56 Fed. Reg. at 9511-12. While the Guidelines only show the clear floor space centered on the lavatory [Fig. 7 (c)], it is equally applicable to the sink.

SBC, Section 1110.8.2.2, states that the clear floor space at the sink shall be positioned for a parallel approach. The offset of the centerlines of the clear floor space and sink is required to be 9 inches which does not meet the requirements of the Guidelines. The Guidelines require the centering of the parallel approach on the sink.

Recommendation Number 20:

It is recommended that the SBC delete the 9-inch offset requirement and modify, Section 1110.8.2.2, Clear floor space, as follows:

- **Section 1110.8.2.2 Clear floor space:**
The clear floor space at the sink positioned for a parallel approach shall be centered on the sink.

Usable Bathrooms

The Guidelines provide two options for designing accessible bathrooms. 56 Fed. Reg. at 9511. The first option requires a minimal level of accessibility. This option requires that walls be reinforced for grab bars and sufficient maneuvering space be provided within the bathroom for a person using a wheelchair or other mobility aid to enter, close the door, use the fixtures, reopen the doors and exit. 56 Fed. Reg. at 9511. The second option for designing accessible bathrooms provides a greater level of accessibility than that provided by the first option.

The second option for designing accessible bathrooms requires that they have reinforced walls for grab bars, clear space at specific locations within the bathroom to permit use of the fixtures, and specific clearances for fixtures. 56 Fed. Reg. at 9511.

According to the Guidelines, for covered multifamily dwelling units in elevator buildings, only bathrooms on the accessible level are subject to the requirements. If a powder room is the only facility provided on the accessible level of a multistory dwelling unit; it must comply with the first or second option for designing accessible bathrooms and have reinforcement for grab bars.

As discussed in reference to kitchens above, the Guidelines require the centering of the parallel approach on the lavatory. 56 Fed. Reg. at 9512. The SBC clear floor space requirements for lavatories under Option A, Section 1110.9.4.1.1, does not require

centering of the clear floor space on the lavatory which does not meet the requirements of the Guidelines.

Recommendation Number 21:

It is recommended that Section 1110.9.4.1.1 be modified as follows:

- **Section 1110.9.4.1.1 Lavatory:**
A 30 inch by 48 inch minimum clear floor space positioned for a parallel approach shall be provided and centered on the lavatory.

Section 1110.9.4.2.1, Lavatory, under Option B provisions requires a 9-inch maximum offset of the centerlines of the clear floor space and lavatory which does not meet the requirements of the Guidelines.

Recommendation No. 22:

It is recommended that Section 1119.9.4.2.1, Lavatory, be modified as follows:

- **Section 1110.4.2.1 Lavatory:**
A 30 inch by 48 inch minimum clear floor space positioned for parallel approach shall be centered on the lavatory.