

access route to connect accessible parking spaces or other site arrival points serving the trailhead; the starting point of the trail; and accessible elements, spaces, and facilities provided within the trailhead.

F247.4 Trail Facilities

This section requires camping facilities, picnic facilities, and viewing areas provided on trails to comply with the applicable scoping requirements for the facilities in F244 through F246, except for the scoping requirements for outdoor recreation access routes. The facilities are required to comply with the applicable scoping requirements regardless of whether the trail complies with the technical requirements for trails in 1017.

The section requires routes that connect trails complying with the technical requirements for trails in 1017 to camping facilities, picnic facilities, viewing areas, pit toilets, and accessible elements within the facilities to comply with the technical requirements for trails in 1017. Routes that connect trails that do not comply with the technical requirements for trails in 1017 to these facilities and accessible elements provided within the facilities are not required to comply with the technical requirements for trails in 1017.

F247.5 Outdoor Constructed Features

This section requires at least 20 percent, but not less than one, of each type of outdoor constructed feature provided at each location on trails, other than within facilities provided on trails, to comply with the applicable technical requirements in 1011.

F248 Beach Access Routes

F248.1 General

This section contains the scoping requirements for beach access routes. Where the entity that administers or manages a beach constructs or alters circulation paths, parking facilities, toilet facilities, or bathing facilities to serve the beach or undertakes a beach nourishment project, the section requires the entity to provide beach access routes. The entity is not required to expend more than 20 percent of the costs to construct or alter the facilities serving the beach or the beach nourishment project to provide beach access routes. Beach access routes can be permanent or removable. Removable beach access routes can be moved to a protected storage area during storms and other periods when the routes are subject to damage or loss. Beach access routes are not required where pedestrian access to the beach is not permitted.

F248.2 Minimum Number

This section requires at least one beach access route to be provided for each 1/2 mile of beach shoreline administered or managed by the entity. The number of beach access routes is not required to exceed the number of pedestrian access points provided by the entity to the beach. Pedestrian access points to a beach include parking facilities that serve beaches, dune crossings, and stairways or ramps leading from boardwalks to the beach.

F248.3 Location

This section requires beach access routes to coincide with or be located in the same general area as pedestrian access points to the beach.

Appendix D to 36 CFR part 1191 – Technical

Chapter 10: Recreation Facilities

The final rule adds technical requirements to Chapter 10 for outdoor constructed features (1011); parking spaces within camping units and picnic units and pull-up spaces at dump stations (1012); tent pads and tent platforms (1013); camp shelters (1014); viewing areas (1015); outdoor recreation access routes (1016); trails (1017); and beach access routes (1018). The final rule also adds the conditions for using the exceptions to the specific provisions in these technical requirements at 1019.

1011 Outdoor Constructed Features

1011.1 General

This section contains the technical requirements for outdoor constructed features provided within camping facilities, picnic facilities, viewing areas, and trailheads or on trails. All outdoor constructed features are required to comply with the provisions for clear ground space (1011.2) and operable parts (1011.3). The section includes specific provisions for picnic tables (1011.4); fire rings, grills, fireplaces, and woodstoves (1011.5); water spouts at water hydrants and water utility hook-ups (1011.6); outdoor rinsing showers (1011.7); and viewing scopes (1011.8).

1011.2 Clear Ground Space

This section requires a clear ground space to be provided at outdoor constructed features and includes specific provisions for the size and location (1011.2.1), surface (1011.2.2), slope (1011.2.3), and openings (1011.2.4).

Two exceptions are provided. Where individual outdoor constructed features are altered and the ground surface is not altered, Exception 1 does not require the clear ground space to comply with the specific provisions for surface and slope. In alterations, when an entity determines that a condition in 1019 does not permit full compliance with a

specific provision, Exception 2 permits the clear ground space to comply with the provision to the extent practicable.

1011.2.1 Size and Location

This section specifies the size and location of the clear ground space at outdoor constructed features. The size of the clear ground space is based on the dimensions for maneuvering clearance at clear floor or ground spaces that are confined on all or part of three sides in 305.7 of the Architectural Barriers Act Accessibility Guidelines. Outdoor constructed features can be confined on all or part of three sides by surfaces that are not firm and stable or that have changes in level. The dimensions for maneuvering clearance at clear floor or ground spaces that are confined on all or part of three sides in 305.7 of the Architectural Barriers Act Accessibility Guidelines provide additional space for maneuvering into and out of the space: 36 inches minimum by 48 inches minimum for a forward approach, and 30 inches minimum by 60 inches minimum for a parallel approach. At water hydrants, a clear ground space for a forward approach is required on each side of the water hydrant to enable individuals with disabilities to operate the water hydrant from their right side or left side. At rinsing showers, the size of the clear ground space is based on the dimensions for turning space in 304.3.1 of the Architectural Barriers Act Accessibility Guidelines to enable individuals with disabilities to turn in the space.

At picnic tables, fire rings, grills, fireplaces, and woodstoves, a clear ground space is required on all usable sides of the element. The usable sides of these elements are the sides that can be used for eating or serving food, building a fire, or cooking. All sides of picnic tables are generally usable, unless the picnic table is placed against a rock or tree

that renders the side against the rock or tree not usable. All sides of fire rings and grills are generally usable, unless there is a wall or other structure on a side that renders the side not usable. The front sides of fireplaces and woodstoves are generally the usable side.

1011.2.2 Surface.

This section requires the surface of the clear ground space to be firm and stable.

1011.2.3 Slope.

This section requires the slope of the clear ground space to not be steeper than 1:48 in any direction. Where the surface is other than asphalt, concrete, or boards, slopes not steeper than 1:20 are permitted when necessary for drainage.

1011.2.4 Openings

This section requires openings in the clear ground space such as drainage grates to not allow passage of a sphere more than 1/2 inch in diameter. Where possible, drainage grates should be located outside of the clear ground space. Elongated openings should be placed so that the long dimension is perpendicular, or as close to perpendicular as possible, to the dominant direction of travel.

1011.3 Operable Parts

This section requires operable parts of outdoor constructed features to comply with the technical requirements for the height of operable parts in 309.3 of the Architectural Barriers Act Accessibility Guidelines, which require operable parts to be placed within the reach ranges specified in 308 of the Architectural Barriers Act Accessibility Guidelines; and the technical requirements for operation in 309.4 of the Architectural Barriers Act Accessibility Guidelines, which require operable parts to be

operable with one hand without tight grasping, pinching, or twisting of the wrist and with not more than 5 pounds force.

Four exceptions are provided. Exception 1 requires fire rings, grills, fireplaces, wood stoves, water hydrants, and water utility hook-ups to comply with the technical requirements for operation in 309.4 of the Architectural Barriers Act Accessibility Guidelines to the extent practicable. Exception 2 requires trash and recycling receptacles with hinged lids and controls to keep out large animals to comply with the technical requirements for operation in 309.4 of the Architectural Barriers Act Accessibility Guidelines to the extent practicable. Exception 3 exempts dumpster type trash and recycling receptacles from complying with the technical requirements for the height of operable parts in 309.3 of the Architectural Barriers Act Accessibility Guidelines and the technical requirements for operation in 309.4 of the Architectural Barriers Act Accessibility Guidelines. Exception 4 exempts sewage hatches from complying with the technical requirements for the height of operable parts in 309.3 of the Architectural Barriers Act Accessibility Guidelines and the technical requirements for operation in 309.4 of the Architectural Barriers Act Accessibility Guidelines.

New products may be developed with operable parts that comply with the technical requirements for operation in 309.4 of the Architectural Barriers Act Accessibility Guidelines. As products that comply with the technical requirements for operation in 309.4 of the Architectural Barriers Act Accessibility Guidelines become available, entities should provide these products to enable individuals with disabilities to operate them.

1011.4 Picnic Tables

This section requires picnic tables to comply with the technical requirements for dining surfaces in 902.3 of the Architectural Barriers Act Accessibility Guidelines, which requires the tops of dining surfaces to be 28 inches minimum and 34 inches maximum above the ground. The section also requires at least one wheelchair space to be provided for each 24 linear feet of usable picnic table surface perimeter. Wheelchair spaces are required to be 30 inches minimum by 48 inches minimum; be positioned for a forward approach to the table; and provide knee and toe clearance complying with 306 of the Architectural Barriers Act Accessibility Guidelines under the table.

1011.5 Fire Rings, Grills, Fireplaces, and Wood Stoves

This section requires fire building surfaces to be 9 inches minimum above the ground, and cooking surfaces to be 15 inches minimum and 34 inches maximum above the ground. Where fire rings, grills, or fireplaces are constructed with raised edges or walls, the depth of the raised edge or wall is required to be 10 inches maximum. Fire rings with double walls or insulation on the sides are recommended to prevent burns.

1011.6 Water Spouts

This section requires water spouts at water hydrants and water utility hook-ups to be 28 inches minimum and 36 inches maximum above the ground,

1011.7 Outdoor Rinsing Showers

This section requires outdoor rinsing showers to provide at least one hand-held shower spray unit with a hose 59 inches long minimum. The hand-held shower spray unit is required to have at least one fixed position located 15 inches minimum and 48 inches maximum above the ground. Where vandalism is a consideration, a fixed shower

head located 48 inches above the ground is permitted in place of a hand-held shower spray unit.

1011.8 Viewing Scopes

This section requires eyepieces on viewing scopes to be 43 inches minimum and 51 inches maximum above the ground,

1012 Parking Spaces Within Camping Units and Picnic Units and Pull-Up Spaces at Dump Stations

1012.1 General

This section contains the technical requirements for parking spaces provided within camping units and picnic units with mobility features and pull-up spaces for recreational vehicles at dump stations. The technical requirements address the width of parking spaces and pull-up spaces for recreational vehicles (1012.2); the width of parking spaces for vehicles, other than recreational vehicles (1012.3); and the surface (1012.4) and slope (1012.5) of parking spaces and pull-up spaces.

1012.2 Recreational Vehicles

This section requires parking spaces and pull-up spaces for recreational vehicles to be 20 feet wide minimum to accommodate recreational vehicles equipped with a lift. Recreational vehicles are typically 8 feet wide. Recreational vehicles equipped with a lift need an additional 8 feet of space on the passenger's side to deploy the lift and for individuals who use wheeled mobility devices to maneuver onto and off of the lift. Utility hook-ups for recreational vehicles are typically located on the driver's side of the vehicle. An additional 4 feet of space is needed on the driver's side for individuals who use wheeled mobility devices to access the utility hook-ups. Where two adjacent parking

spaces are provided for recreational vehicles, one of the parking spaces is permitted to be 16 feet wide minimum.

1012.3 Other Vehicles

This section requires parking spaces for vehicles, other than recreational vehicles, to be 16 feet wide minimum to accommodate vans equipped with a lift or ramp. Where two adjacent parking spaces are provided for vehicles, other than recreational vehicles, one of the parking spaces is permitted to be 8 feet wide minimum.

1012.4 Surface.

This section requires the surface of parking spaces and pull-up spaces to be firm and stable.

1012.5 Slope.

This section requires the slope of the surface of parking spaces and pull-up spaces to not be steeper than 1:48 in any direction. Where the surface is other than asphalt, concrete, or boards, slopes not steeper than 1:20 are permitted when necessary for drainage.

1013 Tent Pads & Tent Platforms

1013.1 General

This section contains the technical requirements for tent pads and tent platforms provided within camping units with mobility features. Tent pads and tent platforms are defined spaces with prepared surfaces for setting up and securing tents. The technical requirements address the clear ground space around tent pads and tent platforms (1013.2); the slope of tent pads, tent platforms, and clear ground spaces (1013.2); and the height of tent platforms (1013.4). When an entity determines that a condition in 1019

does not permit full compliance with a specific provision in 1013, the tent pad or tent platform is permitted to comply with the provision to the extent practicable.

1013.2 Clear Ground Space

This section requires a clear ground space 4 feet wide minimum to be provided on all usable sides of tent pads and tent platforms to enable individuals who use wheeled mobility devices to set up and take down the tent. The usable sides of tent pads and tent platforms are the sides that can be used when setting up and taking down a tent. All sides of tent pads and tent platforms are generally usable, unless a tent pad or tent platform is located next to a natural feature such as a rock or tree that renders a side not usable. This section also requires the surface of the clear ground space to be firm and stable and to allow the use of tent stakes or other tent securement devices.

1013.3 Slope

This section requires the slope of the surface of tent pads, tent platforms, and clear ground spaces to not be steeper than 1:48 in any direction. Where the surface is other than asphalt, concrete, or boards, slopes not steeper than 1:20 are permitted when necessary for drainage.

1013.4 Height

This section requires tent platforms to be 19 inches high maximum measured from the clear ground space to the tent platform surface.

1014 Camp Shelters

1014.1 General

This section contains the technical requirements for camp shelters with mobility features. The technical requirements address the entrance to camp shelters (1014.2),

including transfer access (1014.2.1) and roll-in access (1014.2.2); and the floor within camp shelters (1014.3).

Two exceptions are provided. When an entity determines that a condition in 1019 does not permit full compliance with a specific provision in 1014, Exception 1 permits the camp shelter to comply with the provision to the extent practicable. Exception 2 does not require camp shelters to comply with the technical requirements for protruding objects in 307 of the Architectural Barriers Act Accessibility Guidelines.

1014.2 Entrance

This section requires camp shelters to provide either transfer access or roll-in access at the entrance to the camp shelter.

1014.2.1 Transfer Access

Where transfer access is provided, this section requires a clear ground space 36 inches minimum by 48 inches minimum positioned for a parallel approach to be provided at the entrance to the camp shelter, and one full unobstructed side of the clear ground space to adjoin or overlap an outdoor recreation access route or trail, as applicable, or another clear ground space. The surface of the clear ground space is required to be firm and stable, and to slope not steeper than 1:48 in any direction. Where the surface is other than asphalt, concrete, or boards, slopes not steeper than 1:20 are permitted when necessary for drainage. The camp shelter floor at the entrance is required to be 19 inches high maximum measured from the clear ground space. These requirements enable individuals who use wheeled mobility devices to transfer from their mobility device to the shelter floor

1014.2.2 Roll-in Access

Where roll-in access is provided, this section requires a level or sloped entry route complying with the technical requirements for outdoor recreation access routes in 1016 or trails in 1017, as applicable, at the entrance to the camp shelter. The section also requires a turning space complying with 304.3 of the Architectural Barriers Act Accessibility Guidelines to be provided within the camp shelter. These requirements enable individuals who use wheeled mobility devices to enter the shelter in their mobility device.

1014.3 Floor

This section requires the floor surface within camp shelters to be firm and stable and to slope not steeper than 1:48 in any direction. Where the floor surface is other than asphalt, concrete, or boards, slopes not steeper than 1:20 are permitted when necessary for drainage.

1015 Viewing Areas

1015.1 General

This section contains the technical requirements for viewing areas. The technical requirements address the clear ground space (1015.2) and viewing space (1015.3) at distinct viewing locations; the turning space within viewing areas (1015.4); and the surface (1015.5) and slope (1015.6) of the clear ground space and turning space. In alterations, when an entity determines that a condition in 1019 does not permit full compliance with a specific provision in 1015, the viewing area is permitted to comply with the provision to the extent practicable.

1015.2 Clear Ground Space

This section requires a clear ground space 36 inches minimum by 48 inches minimum positioned for either a forward or parallel approach to be provided at each

distinct viewing location, and one full unobstructed side of the clear ground space to adjoin or overlap an outdoor recreation access route or trail, as applicable, or another clear ground space.

1015.3 Viewing Space.

This section requires each distinct viewing location to provide a viewing space adjacent to the clear ground space required by 1015.2 through which the point of interest is viewable. The viewing space is required to be 32 inches maximum and 51 inches minimum high above the ground and extend the full width of the clear ground space. Guards or similar safety barriers are permitted to obstruct the viewing space to the extent the obstruction is necessary for the guard or safety barrier to serve its intended purpose.

1015.4 Turning Space

This section requires a turning space complying with 304.3 of the Architectural Barriers Act Accessibility Guidelines to be provided within the viewing area.

1015.5 Surface

This section requires the surface of the clear ground space and turning space to be firm and stable.

1015.6 Slope

This section requires the slope of the surface of the clear ground space and turning space to not be steeper than 1:48 in any direction. Where the surface is other than asphalt, concrete, or boards, slopes not steeper than 1:20 are permitted when necessary for drainage.

1016 Outdoor Recreation Access Routes

1016.1 General

This section contains the technical requirements for outdoor recreation access routes. The technical requirements address the surface of outdoor recreation access routes, passing spaces, and resting intervals (1016.2); the clear width of outdoor recreation access routes (1016.3); passing spaces (1016.4); obstacles (1016.5); openings (1016.6); slopes, including running slope (1016.7.1) and cross slope (1016.7.2); resting intervals (1016.8); and protruding objects (1016.9).

Three exceptions are provided. Exception 1 applies to alterations of existing camping facilities, picnic facilities, and trailheads. Exception 2 applies to new construction and alterations of viewing areas. When an entity determines that a condition in 1019 does not permit full compliance with a specific provision in 1016 on a portion of an outdoor recreation access route, Exceptions 1 and 2 permit the portion of the outdoor recreation access route to comply with the provision to the extent practicable. Exception 3 exempts outdoor recreation access routes that are provided within vehicular ways from complying with the technical requirements for passing spaces (1016.4); running slope (1016.7.1) and cross slope (1016.7.2); and resting intervals (1016.8).

1016.2 Surface

This section requires the surface of outdoor recreation access routes, passing spaces, and resting intervals to be firm and stable.

1016.3 Clear Width

This section requires the clear width of outdoor recreation access routes to be 36 inches minimum.

1016.4 Passing Spaces

This section requires passing spaces to be provided at intervals of 200 feet maximum where the clear width of outdoor recreation access routes is less than 60 inches. Entities should consider providing either 60 inches minimum clear width on outdoor recreation access routes or passing spaces at shorter intervals where the route is heavily used or adjoins elements, spaces, or facilities that are heavily used; or where the route is a boardwalk or otherwise not at the same level as the adjoining ground surface.

Passing spaces are required to be:

- A space 60 inches minimum by 60 inches minimum; or
- The intersection of two outdoor recreation access routes providing a T-shaped space complying with 304.3.2 of the Architectural Barriers Act Accessibility Guidelines where the base and the arms of the T-shaped space extend 48 inches minimum beyond the intersection.

Where the intersection of two outdoor recreation access routes serves as a passing space, the vertical alignment of the routes at the intersection that form the T-shaped space is required to be nominally planar (i.e., as flat as possible) so that all the wheels of a mobility device touch the ground when turning into and out of the passing space.

Passing spaces and resting intervals are permitted to overlap. Where passing spaces and resting intervals overlap, the technical requirements for resting intervals in 1016.8.3 require the slope of the surface to not be steeper than 1:48 in any direction. Where the surface is other than asphalt, concrete, or boards, slopes not steeper than 1:20 are permitted when necessary for drainage. Otherwise, passing space surfaces have the same slopes as the adjoining outdoor recreation access route.

1016.5 Obstacles

This section contains technical requirements for obstacles on outdoor recreation access routes, passing spaces, and resting intervals. The vertical alignment of joints in concrete, asphalt, or board surfaces on outdoor recreation access routes can be obstacles. Natural features such as tree roots and rocks on outdoor recreation access routes also can be obstacles. Where an outdoor recreation access route is provided within a vehicular way, traffic calming devices can be obstacles. This section requires obstacles to not exceed 1/2 inch in height measured vertically to the highest point. Where the surface is other than concrete, asphalt, or boards, obstacles are permitted to not exceed 1 inch in height measured vertically to the highest point.

The frequency of obstacles and obstacles that cross the full width of outdoor recreation access routes can make travel difficult for individuals who use wheeled mobility devices. Where possible, obstacles that cross the full width of outdoor recreation access routes should be separated by 48 inches minimum so individuals who use wheeled mobility devices can cross the obstacle before confronting another obstacle.

1016.6 Openings

This section requires openings in the surface of outdoor recreation access routes, passing spaces, and resting intervals such as spaces between the boards in a boardwalk and drainage grates to not allow passage of a sphere more than 1/2 inch in diameter. Where possible, drainage grates should be located outside the minimum clear width of the recreation access route. Elongated openings should be placed so that the long dimension is perpendicular, or as close to perpendicular as possible, to the dominant direction of travel.

1016.7 Slopes

This section contains technical requirements for the maximum running slope and segment length (1016.7.1) and cross slope (1016.7.2) of outdoor recreation access routes.

1016.7.1 Maximum Running Slope and Segment Length

This section requires the running slope of any segment of an outdoor recreation access route to not be steeper than 1:10 (10%). Where the running slope of a segment of an outdoor recreation access route is steeper than 1:20 (5%), the maximum length of the segment is specified in Table 1016.7.1, and a resting interval is required at the top and bottom of each segment. Gradual running slopes are more useable by individuals with disabilities. Where the terrain results in steeper running slopes, resting intervals are required more frequently. Where running slopes are less severe, resting intervals are permitted to be further apart.

1016.7.2 Cross Slope

This section requires the cross slope of outdoor recreation access routes to not be steeper than 1:48. Where the surface is other than asphalt, concrete, or boards, cross slopes not steeper than 1:20 are permitted when necessary for drainage.

1016.8 Resting Intervals

This section contains the technical requirements for the length (1016.8.1), width (1016.8.2), and slope (1016.8.3) of resting intervals; and for a turning space (1016.8.4) where resting intervals are provided adjacent to an outdoor recreation access route.

1016.8.1 Length

This section requires resting intervals to be 60 inches long minimum.

1016.8.2 Width

This section requires resting intervals that are provided within an outdoor recreation access route to be at least as wide as the widest segment of the outdoor recreation access route leading to the resting interval. Resting intervals that are provided adjacent to an outdoor recreation access route are required to be 36 inches wide minimum.

1016.8.3 Slope

This section requires the slope of resting intervals to not be steeper than 1:48 in any direction. Where the surface is other than asphalt, concrete, or boards, slopes not steeper than 1:20 are permitted when necessary for drainage.

1016.8.4 Turning Space

This section requires a turning space complying with 304.2.3 of the Architectural Barriers Act Accessibility Guidelines where resting intervals are provided adjacent to an outdoor recreation access route. The vertical alignment of the outdoor recreation access route, turning space, and resting interval is required to be nominally planar (i.e., as flat as possible) so that all the wheels of a mobility device touch the ground when turning into and out of the resting interval.

1016.9 Protruding Objects

This section requires constructed elements on outdoor recreation access routes, resting intervals, and passing spaces to comply with the technical requirements for protruding objects in 307 of the Architectural Barriers Act Accessibility Guidelines. Protruding objects can be hazardous for individuals who are blind or have low vision. Signs and other post mounted objects are examples of constructed elements that can be protruding objects. Natural elements such as tree branches are not required to

comply with the technical requirements for protruding objects in 307 of the Architectural Barriers Act Accessibility Guidelines. However, entities should maintain the vertical clearance along outdoor recreation access routes, resting intervals, and passing spaces free from tree branches for 80 inches high minimum above the ground.

1017 Trails

1017.1 General

This section contains the technical requirements for trails. The technical requirements address the surface of the trails, passing spaces, and resting intervals (1017.2); the clear tread width of trails (1017.3); passing spaces (1017.4); tread obstacles (1017.5); openings (1017.6); slopes, including running slope (1017.7.1) and cross slope (1017.7.2); resting intervals (1017.8); protruding objects (1017.9); and trailhead signs (1017.10).

Two exceptions are provided. When an entity determines that a condition in 1019 does not permit full compliance with a specific provision in 1017 on a portion of a trail, Exception 1 permits the portion of trail to comply with the provision to the extent practicable. When an entity determines that it is impracticable for the entire trail to comply with the technical requirements in 1017, Exception 2 exempts the entire trail from complying with the requirements. This determination is made after the entity applies Exception 1 to portions of the trail. The entity should consider the portions of the trail that can and cannot fully comply with the specific provisions in 1017 and the extent of compliance where full compliance cannot be achieved when determining whether it would be impracticable for the entire trail to comply with the technical requirements in 1017. As discussed under F201.4.1, federal agencies are required to document the basis

for their determination when using Exceptions 1 or 2, and are required notify us when using Exception 2.

1017.2 Surface

This section requires the surface of trails, passing spaces, and resting intervals to be firm and stable. A firm trail surface resists deformation by indentations. A stable trail surface is not permanently affected by expected weather conditions and can sustain normal wear and tear from the expected uses between planned maintenance.

1017.3 Clear Tread Width

This section requires the clear tread width of trails to be 36 inches minimum. The 36 inches minimum clear tread width is to be maintained for the entire distance of the trail and may not be reduced by gates, barriers, or other obstacles unless an entity determines under Exception 1 to 1017.1 that a condition in 1019 does not permit full compliance with the provision.

Where gates and barriers require wheelchair users to make 90 degree or 180 degree turns, sufficient space should be provided for wheelchair users to make the turns. We and National Institute on Disability and Rehabilitation Research sponsored research to collect anthropometric data from a sample of about 500 individuals who use manual wheelchairs, power wheelchairs, and scooters. The research is known as the Anthropometry of Wheeled Mobility Project and was conducted by the Center for Inclusive Design and Environmental Access in the School of Architecture and Planning, University at Buffalo, The State University of New York. The reports on the Anthropometry of Wheeled Mobility Project are available at:

<http://www.udeworld.com/anthropometrics.html>. The reports provide data on turning spaces for manual wheelchairs, power wheelchairs, and scooters.

1017.4 Passing Spaces

This section requires passing spaces to be provided at intervals of 1000 feet maximum where the clear tread width of trails is less than 60 inches. Entities should consider providing either 60 inches minimum clear tread width on trails or passing spaces at shorter intervals where the trail is heavily used or where the trail is a boardwalk or otherwise not at the same level as the adjoining ground surface. Where the full length of a trail does not fully comply with the technical requirements in 1017, a passing space is required to be located at the end of the trail segment that fully complies with the technical requirements 1017 to enable individuals who use wheeled mobility devices to turn and exit the trail.

Passing spaces are required to be:

- A space 60 inches minimum by 60 inches minimum; or
- The intersection of two trails providing a T-shaped space complying with 304.3.2 of the Architectural Barriers Act Accessibility Guidelines where the base and the arms of the T-shaped space extend 48 inches minimum beyond the intersection.

Where the intersection of two trails serves as a passing space, the vertical alignment of the trails at the intersection that form the T-shaped space is required to be nominally planar (i.e., as flat as possible) so that all the wheels of a mobility device touch the ground when turning into and out of the passing space.

Passing spaces and resting intervals are permitted to overlap. Where passing spaces and resting intervals overlap, the technical requirements for resting intervals in

1017.8.3 require the slope of the surface to not be steeper than 1:48 in any direction.

Where the surface is other than asphalt, concrete, or boards, slopes not steeper than 1:20 are permitted when necessary for drainage. Otherwise, passing space surfaces have the same slopes as the adjoining trail tread.

1017.5 Tread Obstacles

This section contains technical requirements for tread obstacles on trails, passing spaces, and resting intervals. The vertical alignment of joints in concrete, asphalt, or board surfaces on trails can be tread obstacles. Natural features such as tree roots and rocks within the trail tread also can be obstacles. This section requires obstacles to not exceed 1/2 inch in height measured vertically to the highest point. Where the surface is other than concrete, asphalt, or boards, obstacles are permitted to not exceed 2 inches in height measured vertically to the highest point.

The frequency of tread obstacles and tread obstacles that cross the full width of the trail tread can make travel difficult for individuals who use wheeled mobility devices. Where possible, tread obstacles that cross the full width of the trail tread should be separated by 48 inches minimum so individuals who use wheeled mobility devices can cross the obstacle before confronting another obstacle.

1017.6 Openings

This section requires openings in the surface of trails, passing spaces, and resting intervals such as spaces between the boards in a boardwalk to not allow passage of a sphere more than 1/2 inch in diameter. Elongated openings should be placed so that the long dimension is perpendicular, or as close to perpendicular as possible, to the dominant direction of travel.

1017.7 Slopes

This section contains technical requirements for the maximum running slope and segment length (1017.7.1) and cross slope (1017.7.2) of trails.

1017.7.1 Maximum Running Slope and Segment Length

This section requires that not more than 30 percent of the total length of a trail have a running slope steeper than 1:12 (8.33%), and that the running slope of any segment of a trail not be steeper than 1:8 (12%). Where the running slope of a segment a trail is steeper than 1:20 (5%), the maximum length of the segment is specified in Table 1017.7.1, and a resting interval is required at the top and bottom of each segment.

Gradual running slopes are more useable by individuals with disabilities. Where the terrain results in steeper running slopes, resting intervals are required more frequently. Where running slopes are less severe, resting intervals are permitted to be further apart.

1017.7.2 Cross Slope

This section requires the cross slope of trails to not be steeper than 1:48. Where the surface is other than asphalt, concrete, or boards, cross slopes not steeper than 1:20 are permitted when necessary for drainage.

1017.8 Resting Intervals

This section contains the technical requirements for the length (1017.8.1), width (1017.8.2), and slope (1017.8.3) of resting intervals; and for a turning space (1017.8.4) where resting intervals are provided adjacent to a trail.

1017.8.1 Length

This section requires resting intervals to be 60 inches long minimum.

1017.8.2 Width

This section requires resting intervals that are provided within the trail tread to be at least as wide as the widest segment of the trail tread leading to the resting interval. Resting intervals that are provided adjacent to the trail tread are required to be 36 inches wide minimum.

1017.8.3 Slope

This section requires the slope of resting intervals to not be steeper than 1:48 in any direction. Where the surface is other than asphalt, concrete, or boards, slopes not steeper than 1:20 are permitted when necessary for drainage.

1017.8.4 Turning Space

This section requires a turning space complying with 304.2.3 of the Architectural Barriers Act Accessibility Guidelines where resting intervals are provided adjacent to the trail tread. The vertical alignment of the trail tread, turning space, and resting interval is required to be nominally planar (i.e., as flat as possible) so that all the wheels of a mobility device touch the ground when turning in and out of the resting interval.

1017.9 Protruding Objects

This section requires constructed elements on trails, resting intervals, and passing spaces to comply with the technical requirements for protruding objects in 307 of the Architectural Barriers Act Accessibility Guidelines. Protruding objects can be hazardous for individuals who are blind or have low vision. Signs and other post mounted objects are examples of constructed elements that can be protruding objects. Natural elements such as tree branches are not required to comply with the technical requirements for protruding objects in 307 of the Architectural Barriers Act Accessibility Guidelines. However, entities should maintain the vertical clearance along the trail tread, resting

intervals, and passing spaces free from tree branches for 80 inches high minimum above the ground.

1017.10 Trailhead Signs

This section requires trail information signs at trailheads to include information on the length of the trail or trail segment; surface type; typical and minimum tread width; typical and maximum running slope; and typical and maximum cross slope. This information enables individuals with disabilities to decide whether to hike the trail based on the characteristics of the trail. Entities also should provide information about the accessibility of trails on websites.

1018 Beach Access Routes

1018.1 General

This section contains the technical requirements for beach access routes. The technical requirements address connections (1018.2); surface (1018.3); clear width (1018.4); obstacles (1018.5); openings (1018.6); slopes, including running slope (1018.7.1) and cross slope (1018.7.2); resting intervals (1018.8); protruding objects (1018.9); and dune crossings (1018.10).

Three exceptions are provided. When an entity determines that a condition in 1019 does not permit full compliance with a specific provision in 1018 on a portion of a beach access route, Exception 1 permits the portion of route to comply with the provision to the extent practicable. When an entity determines that it is impracticable to provide a beach access route complying with the technical requirements in 1018, Exception 2 does not require a beach access route. This determination is made after the entity applies Exception 1 to portions of the route. The entity should consider the portions of the beach

access route that can and cannot fully comply with the specific provisions in 1018 and the extent of compliance where full compliance cannot be achieved when determining whether it would be impracticable to provide a beach access route complying with the technical requirements in 1018. Exception 3 exempts removable beach access routes from complying with the technical requirements for running slope (1018.7.1) and cross slope (1018.7.2); resting intervals (1018.8); and dune crossings (1018.10). As discussed under F201.4.1, federal agencies are required to document the basis for their determination when using Exceptions 1 or 2, and are required to notify us when using Exception 2.

1018.2 Connections

This section requires beach access routes to connect an entry point to the beach to the high tide level at tidal beaches; mean high water level at river beaches; and normal recreation water level at lake, pond, and reservoir beaches.

1018.3 Surface

This section requires the surface of beach access routes and resting intervals to be firm and stable.

1018.4 Clear Width

This section requires the clear width of beach access routes to be 60 inches minimum to enable individuals who use wheeled mobility devices to pass beach visitors traveling in the opposite direction. An exception permits the clear width of beach access routes that are not removable to be reduced to 48 inches minimum at dune crossings.

Where gates or barriers are installed to control access to beaches, the gates or barriers should permit the passage of beach wheelchairs. Beach wheelchairs have large,

wide wheels that can roll across sand without sinking. Gates or barriers that have clear openings at least 48 inches wide will accommodate most beach wheelchairs.

1018.5 Obstacles

This section contains technical requirements for obstacles on beach access routes and resting intervals. The vertical alignment of boards on a beach access route or removable sections of a beach access route can be obstacles. This section requires obstacles to not exceed 1/2 inch in height measured vertically to the highest point. Where the surface is other than concrete, asphalt, or boards, obstacles are permitted to not exceed 1 inch in height measured vertically to the highest point.

1018.6 Openings

This section requires openings in the surface of beach access routes and resting intervals such as spaces between boards to not allow passage of a sphere more than 1/2 inch in diameter. Elongated openings should be placed so that the long dimension is perpendicular, or as close to perpendicular as possible, to the dominant direction of travel.

1018.7 Slopes

This section contains technical requirements for the maximum running slope and segment length (1018.7.1) and cross slope (1018.7.2) of beach access routes.

1018.7.1 Maximum Running Slope and Segment Length

This section requires that the running slope of any segment of a beach access route not be steeper than 1:10 (10%). Where the running slope of a segment a beach access route is steeper than 1:20 (5%), the maximum length of the segment is specified in Table 1018.7.1, and a resting interval is required at the top and bottom of each segment.

Gradual running slopes are more useable by individuals with disabilities. Where the terrain results in steeper running slopes, resting intervals are required more frequently. Where running slopes are less severe, resting intervals are permitted to be further apart.

1018.7.2 Cross Slope

This section requires the cross slope of beach access routes to not be steeper than 1:48. Where the surface is other than asphalt, concrete, or boards, cross slopes not steeper than 1:20 are permitted when necessary for drainage.

1018.8 Resting Intervals

This section contains the technical requirements for the size (1018.8.1) and slope (1017.8.2) of resting intervals.

1018.8.1 Size

This section requires resting intervals to be 60 inches minimum by 60 inches minimum.

1018.8.2 Slope

This section requires the slope of resting intervals to not be steeper than 1:48 in any direction. Where the surface is other than asphalt, concrete, or boards, slopes not steeper than 1:20 are permitted when necessary for drainage.

1018.9 Protruding Objects

This section requires constructed elements on beach access routes and resting intervals to comply with the technical requirements for protruding objects in 307 of the Architectural Barriers Act Accessibility Guidelines. Protruding objects can be hazardous for individuals who are blind or have low vision. Signs and other post mounted objects are examples of constructed elements that can be protruding objects.

1018.10 Dune Crossings

This section requires handrails complying with 505 of the Architectural Barriers Act Accessibility Guidelines and curbs or barriers to be provided where the slope of a beach access route at a dune crossing is steeper than 1:20 (5%). The curbs or barriers are required to prevent the passage of a 2 inch diameter sphere, where any portion of the sphere is within 2 inches of the crossing surface.

1019 Conditions for Exceptions

1019.1 General

This section lists the conditions for the exceptions to specific provisions in 1011, 1013, 1014, 1015, 1016, 1017, and 1018. When an entity determines that any of the following conditions does not permit full compliance with the provision, compliance is required to the extent practicable:

- Compliance is not practicable due to terrain.
- Compliance cannot be accomplished with the prevailing construction practices.
- Compliance would fundamentally alter the function or purpose of the facility or the setting.
- Compliance is limited or precluded by any of the following laws, or by decisions or opinions issued or agreements executed pursuant to any of the following laws: Endangered Species Act; National Environmental Policy Act; National Historic Preservation Act; Wilderness Act; or other federal, state, or local law the purpose of which is to preserve threatened or endangered species; the environment; or archaeological, cultural, historical, or other significant natural features.

The last condition allows the following to be a basis for using the exceptions:

- Opinions issued by the Secretary of the Interior pursuant to the Endangered Species Act stating how a federal agency can implement an action without jeopardizing the continued existence of any endangered species or threatened species, or destroying or adversely modifying the habitat of such species (16 U.S.C. 1536 (b) (3) (A));
- Decisions issued by a federal agency pursuant to the National Environmental Policy Act in actions requiring environmental impact statements stating how it will avoid or minimize environmental harm (42 U.S.C. 4332; 40 CFR 1505.2);
- Agreements executed or decisions issued by a federal agency pursuant to National Historic Preservation Act stating how it will avoid, minimize, or mitigate adverse effects on historical properties (16 U.S.C. 470f and 470h-2; 36 CFR 800.6 (b) (iv) and 800.7 (c) (4)); and
- Provisions in the Wilderness Act that require federal agencies to preserve the wilderness character of designated wilderness areas and prohibit any structure or installation within such areas (16 U.S.C. 1131 (b) and (c)).

7. Regulatory Analyses

Executive Order 13563 (Improving Regulation and Regulatory Review) and Executive Order 12866 (Regulatory Planning and Review)

This final rule is not a significant regulatory action. We adhered to the principles of regulation in Executive Orders 13563 and 12866. Among other things, Executive Order 13563 directs agencies to propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs; tailor the regulation to impose the least

burden on society, consistent with obtaining the regulatory objectives; and, in choosing among alternative regulatory approaches, select those approaches that maximize net benefits. Executive Order 13563 recognizes that some benefits are difficult to quantify and provides that, where appropriate and permitted by law, agencies may consider and discuss qualitatively values that are difficult or impossible to quantify, including equity, human dignity, fairness, and distributive impacts.

We prepared a regulatory assessment for the final rule. The regulatory assessment is available at: <http://www.access-board.gov/outdoor> (click on Background). The costs and benefits of the final rule are discussed below.

Costs

The regulatory assessment compares the final rule to the guidelines and standards used by federal agencies for the design of outdoor developed areas without regard to accessibility to determine whether the final rule would result in additional costs. The regulatory assessment shows that the final rule would not result in additional costs for camping facilities and picnic facilities. The regulatory assessment shows that the final rule would result in additional costs for viewing areas, trails, and beach access routes as shown in Table 4.

Table 4. Additional Costs Due to Final Rule	
Viewing Areas	\$2,176 for dual base binocular scopes and \$3,380 for a dual base telescopes, if viewing scopes provided at viewing areas
Trails	\$40,655 per trail mile, if trail would not otherwise meet the technical requirements and the exceptions to the technical requirements do not apply to the trail
Beach Access Routes	\$4,497 to \$6,530 to purchase roll-out mats for beach access routes, if parking areas, toilet facilities, bathing facilities, and circulation paths serving beaches are constructed or altered or beach nourishment project is undertaken

We estimate the federal agencies would incur \$1.2 million additional annual costs due to the final rule for viewing areas, trails, and beach access routes as shown in Table 5.

Table 5. Additional Annual Costs for Federal Agencies		
Facility	Total Annual Costs	Assumptions
Viewing Areas	\$241,971	Fish and Wildlife Service provides a viewing scope over five years at 556 wildlife refuges to enhance visitor experiences.
Trails	\$617,956	Federal agencies construct 15.2 trail miles per year covered by the scoping requirements in F247 that would not otherwise meet the technical requirements for trails in 1017 and the exceptions in 1017 do not apply to the trails.
Beach Access Routes	\$344,662 ¹	Federal agencies provide beach access routes at 1,025 beaches over 20 years as parking areas, restrooms, shower facilities, and circulation paths serving the beaches are altered or replaced with new facilities.
1. Estimate is based on higher cost for roll-out mats.		

Benefits

The final rule would increase opportunities for individuals with mobility disabilities to participate in outdoor recreation activities with their families and friends.

Participation in outdoor recreation activities provides the following benefits:

- Physical health benefits, including reduces obesity, diminishes risk of chronic disease; and increases life expectancy;
- Mental health benefits, including reduces depression, relieves stress, and improves quality of life; and

- Community and social benefits, including unites families and promotes stewardship.⁹

The benefits are difficult to quantify, but include important national values recognized in Executive Order 13563 such as equity, human dignity, and fairness.

The 2010 Survey of Income and Program Participation (SIPP) sponsored by the U.S. Census Bureau estimates that among the civilian non-institutionalized population aged 15 and older, 30.6 million persons (12.6%) had limitations associated with ambulatory activities of the lower body.¹⁰ This number includes 23.9 million persons (9.9%) who had difficulty walking a quarter of a mile; 22.3 million (9.2%) who have difficulty climbing a flight of stairs; 11.6 million persons (4.8%) who used a cane, crutches, or walker to assist with mobility; and 3.6 million persons (1.5%) who use a wheelchair or scooter. Not all these persons are likely to directly benefit from the final rule because some may not participate in outdoor recreational activities. We do not have information to estimate the number of individuals with mobility disabilities who would directly benefit from the final rule.

Final Regulatory Flexibility Analysis

The Regulatory Flexibility Act requires federal agencies to consider the impacts of their rules on small entities, analyze alternatives that minimize the impacts on small entities, and to make the analysis available to the public. See 5 U.S.C. 604. We certified that the proposed rule would not have a significant economic impact on a substantial

⁹ These benefits are documented in California State Parks, The Health and Social Benefits of Recreation, 2005 at: http://www.parks.ca.gov/pages/795/files/health_benefits_online_6-1-05.pdf and Geoffrey Godbey, Outdoor Recreation, Health, and Wellness: Understanding and Enhancing the Relationship, 2009 at: <http://www.rff.org/rff/documents/rff-dp-09-21.pdf>.

¹⁰ Americans with Disabilities: 2010 available at: <http://www.census.gov/prod/2012pubs/p70-131.pdf>.

number of small entities because it would apply to federal agencies that administer outdoor areas developed for recreational purposes. Therefore, we did not prepare an initial regulatory flexibility analysis for the proposed rule. However, the Architectural Barriers Act also applies to facilities constructed or altered by non-federal entities on behalf of the United States. We prepared a final regulatory flexibility analysis for the final rule to consider the impacts of the final rule on small entities that construct or alter recreation facilities on federal lands on behalf of federal agencies pursuant to a concession contract, partnership agreement, or similar arrangement.

Need for and Objective of Final Rule

The Architectural Barriers Act requires facilities constructed or altered by or on behalf of federal agencies to be readily accessible to and usable by individuals with disabilities. Certain agencies are required to adopt accessibility standards for the design, construction, and alteration of facilities covered by the Architectural Barriers Act. We are required by section 502 of the Rehabilitation Act to establish and maintain minimum guidelines and requirements for the accessibility standards adopted the federal agencies. We are issuing the final rule pursuant to this authority to establish accessibility guidelines for camping facilities, picnic facilities, viewing areas, trails, and beach access routes constructed or altered by or behalf of federal agencies that administer outdoor developed areas.

Significant Issues Raised by Public Comments in Response to the Initial Regulatory Flexibility Analysis

As noted above, we certified that the proposed rule would not have a significant economic impact on a substantial number of small entities. Therefore, we did not prepare an initial regulatory flexibility analysis for the proposed rule.

Response to Comments Filed by Chief Counsel for Advocacy of the Small Business Administration

The Chief Counsel for Advocacy of the Small Business Administration did not file comments on the proposed rule.

Small Entities Affected by Rule

The final rule affects small entities that construct or alter camping facilities, picnic facilities, viewing areas, trails, and beach facilities on federal lands pursuant to a concession contract, partnership agreement, or similar arrangement with the following federal agencies and their components: U.S. Department of Agriculture (Forest Service), U.S. Department of Defense (Army Corps of Engineers), and U.S. Department of the Interior (Bureau of Land Management, Bureau of Reclamation, Fish and Wildlife Service, National Park Service). Data are not available on the number of small entities that construct or alter camping facilities, picnic facilities, viewing areas, trails, and beach facilities on federal lands pursuant to a concession contract, partnership agreement, or similar arrangement with the federal agencies. Small entities that construct facilities of federal land pursuant to a concession contract with federal agencies can include the costs of the capital improvements, including additional costs due to the final rule, in the contract bids and the costs can be offset in the concession fees paid to the federal agencies.

Compliance Requirements in Final Rule

The final rule contains scoping and technical requirements for camping facilities, picnic facilities, viewing areas, trails, and beach access routes. Scoping requirements specify what features are required to be accessible and, where multiple features of the same type are provided, how many of the features are required to be accessible. The scoping requirements in the final rule are summarized in Table 1 under Executive Summary. Technical requirements specify the design criteria for accessible features. The technical requirements include design criteria for the following outdoor constructed features: picnic tables, fire rings, grills, fireplaces, wood stoves, trash and recycling receptacles, water hydrants, utility and sewage hookups, outdoor rinsing showers, benches, and viewing scopes. The technical requirements also include design criteria for parking spaces within camping units and picnic units with mobility features; pull-up spaces for recreational vehicles at dump stations; tent pads and tent platforms; camp shelters; viewing areas; outdoor recreation access routes; trails; and beach access routes.

Steps to Minimize Significant Economic Impacts on Small Entities

The final rules permits exceptions to the specific provisions in the technical requirements for certain elements and facilities based on the conditions listed in Table 2 under Executive Summary. When an entity determines that a condition does not permit full compliance with a provision, compliance is required to the extent practicable. The final rule allows exemptions for an entire trail or beach access route when an entity determines that is impracticable for a trail to comply with the technical requirements for trails or to provide a beach access route complying with the technical requirements for beach access routes. This determination is made after the entity applies the exceptions

for specific provisions in the technical requirements for trails or beach access routes to portions of the trail or route.

Executive Order 13132 (Federalism)

The final rule does not have federalism implications as defined in Executive Order 13112. The final rule does not have substantial direct effects on the states or on the relationship, or the distribution of power and responsibilities, between the federal government and the states.

Unfunded Mandates Reform Act

The final rule does not impose a federal intergovernmental mandate or federal private sector mandate as those terms are defined in the Unfunded Mandates Reform Act. Any duties imposed on state, local, or tribal governments or on the private sector arise from participation in a voluntary federal program.

List of Subjects in 36 CFR Part 1191

Buildings and facilities, Civil rights, Incorporation by reference, Individuals with disabilities, Transportation.

Karen L. Braitmayer,

Chair.

For the reasons stated in the preamble, we amend 36 CFR part 1191 as follows:

PART 1191 – AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES; ARCHITECTURAL BARRIERS ACT (ABA) ACCESSIBILITY GUIDELINES

1. The authority citation for 36 CFR part 1191 continues to read as follows:

Authority: 29 U.S.C. 792 (b) (3); 42 U.S.C. 12204.

2-3. In §1191.1, redesignate Note 1 to paragraph (a) as Note 3 and add new Notes 1 and 2 to paragraph (a) and redesignate Notes 1 and 2 to paragraph (b) as Notes 2 and 3 and add new Notes 1 and 4 to paragraph (b) to read as follows:

§ 1191.1 Accessibility guidelines.

(a) * * *

Note 1 to paragraph (a): 1. Advisory sections and figures that illustrate the technical requirements in Appendix D are available on the Internet at: www.access-board.gov. The advisory sections provide guidance only and do not contain mandatory requirements.

Note 2 to paragraph (a): 2. The Department of Justice adopted the 2010 ADA Standards for Accessible Design (2010 Standards) as the regulatory standards for the new construction and alteration of facilities subject to its regulations under the Americans with Disabilities Act (ADA), effective March 15, 2012. 28 CFR 35.151 (c) (3), as amended at 75 FR 56163, September 15, 2010; and 28 CFR 36.406 (a) (3), as amended at 75 FR 56236, September 15, 2010. For state and local governments, the 2010 Standards consist of the regulations at 28 CFR 35.151 and the versions of Appendices B and D to this part published in the 2009 edition of the Code of Federal Regulations. 28 CFR 35.104. For public accommodations and commercial facilities, the 2010 Standards consist of the regulations at 28 CFR part 36, subpart D and the versions of Appendices B and D to this part published in the 2009 edition of the Code of Federal Regulations. 28 CFR 36.104. Because Appendices B and D to this part, as published in the 2009 edition of the Code of Federal Regulations, were adopted by reference by the Department of

Justice as part of the 2010 Standards for new construction and alteration of facilities subject to its ADA regulations, subsequent revisions to Appendices B and D by the Access Board are not included in the 2010 Standards and have no legal effect for facilities subject to its ADA regulations until adopted by the Department of Justice. Therefore, the public is cautioned not to use Appendices B and D to this part published in any edition of the Code of Federal Regulations after 2013, until such time as the later edition is adopted by the Department of Justice as a regulatory standard. Complete copies of the 2010 Standards can be obtained from the Department of Justice's ADA website at: http://www.ada.gov/2010ADASTandards_index.htm, or by contacting the DOJ Information Line, at: 800-514-0301 (Voice) or 800-514-0383 (TTY).

* * * * *

(b) * * *

Note 1 to paragraph (b): 1. Advisory sections and figures that illustrate the technical requirements in Appendix D are available on the Internet at: www.access-board.gov. The advisory sections provide guidance only and do not contain mandatory requirements.

* * * * *

Note 4 to paragraph (b): 4. The Department of Defense adopted by reference Appendices B and D to this part as accessibility standards for the new construction and alteration of its facilities subject to the Architectural Barriers Act, effective October 31, 2008. Deputy Secretary of Defense Memorandum dated October 31, 2008, Access for People with Disabilities [available on the Internet at: [71](http://www.access-</p></div><div data-bbox=)

[board.gov/guidelines-and-standards/buildings-and-sites/about-the-aba-standards/background/dod-memorandum](http://www.federalregister.gov/guidelines-and-standards/buildings-and-sites/about-the-aba-standards/background/dod-memorandum)].

4. Revise Appendix A to this part to read as follows:

APPENDIX A TO PART 1191 – TABLE OF CONTENTS

[Appendix A revises the Table of Contents for ABA Chapter 2 and Chapter 10 to include the new sections added by the final rule for outdoor developed areas. Appendix A can be viewed at: <http://www.ecfr.gov/cgi-bin/ECFR?page=browse> by selecting Title 36, Part 1191. Click on [Link to an amendment published at 78 FR 59493, September 26, 2013.](#)]

5. Revise Appendix B to this part to read as follows:

APPENDIX B TO PART 1191 – AMERICANS WITH DISABILITIES ACT: SCOPING

[Appendix B contains ADA Chapters 1 and 2 without advisory sections and figures. The final rule for outdoor developed areas does not otherwise change ADA Chapters 1 and 2. Appendix B can be viewed at: <http://www.ecfr.gov/cgi-bin/ECFR?page=browse> by selecting Title 36, Part 1191. Click on [Link to an amendment published at 78 FR 59495, September 26, 2013.](#)]

6. Revise Appendix C to this part to read as follows:

APPENDIX C TO PART 1191 – ARCHITECTURAL BARRIERS ACT: SCOPING

[Appendix C contains ABA Chapters 1 and 2, as amended by the final rule for outdoor developed areas, without advisory sections and figures. Appendix C can be viewed at: <http://www.ecfr.gov/cgi-bin/ECFR?page=browse> by selecting Title 36, Part 1191. Click on [Link to an amendment published at 78 FR 59509, September 26, 2013.](#)]

7. Revise Appendix D to this part to read as follows:

APPENDIX D TO PART 1191 – TECHNICAL

[Appendix D contains Chapters 3 through 10, as amended by the final rule for outdoor developed areas, without advisory sections and figures (except for mandatory figures). Appendix D can be viewed at: <http://www.ecfr.gov/cgi-bin/ECFR?page=browse> by selecting Title 36, Part 1191. Click on [Link to an amendment published at 78 FR 59526, September 26, 2013.](#)]

APPENDIX E TO PART 1191– LIST OF FIGURES AND INDEX [Removed and Reserved]

8. Remove and reserve Appendix E to this part.

Text of the Final Guidelines

[New sections added to Appendix A – Table of Contents]

ABA CHAPTER 2: SCOPING REQUIREMENTS

F244 Camping Facilities
F245 Picnic Facilities
F246 Viewing Areas
F247 Trails
F248 Beach Access Routes

CHAPTER 10: RECREATION FACILITIES

1011 Outdoor Constructed Features
1012 Parking Spaces Within Camping Units and Picnic Units and Pull-Up Spaces at
Dump Stations
1013 Tent Pads and Tent Platforms
1014 Camp Shelters
1015 Viewing Areas
1016 Outdoor Recreation Access Routes
1017 Trails
1018 Beach Access routes
1019 Conditions for Exceptions

[New sections added to Appendix C to Part 1191 – Architectural Barriers Act: Scoping]

ABA CHAPTER 1: APPLICATION AND ADMINISTRATION

F106.5 Defined Terms

Boards. Boards include, but are not limited to, wood, plastic, metal, and composite products.

Camp Shelter. A partially enclosed structure that provides campers and hikers cover from weather and that does not contain plumbing fixtures or kitchen appliances. Camp shelters are not transient lodging facilities or residential dwelling units.

Camping Facility. A site, or portion of a site, developed for outdoor recreational purposes that contains camping units.

Camping Unit. An outdoor space in a camping facility used for camping that contains outdoor constructed features, parking spaces for recreational vehicles or other vehicles, tent pads or tent platforms, or camp shelters.

Outdoor Constructed Features. Picnic tables, fire rings, grills, fireplaces, wood stoves, trash and recycling receptacles, water hydrants, utility and sewage hookups, outdoor rinsing showers, benches, and viewing scopes provided at outdoor recreation facilities.

Picnic Facility. A site, or portion of a site, developed for outdoor recreational purposes that contains picnic units.

Picnic Unit. An outdoor space in a picnic facility used for picnicking that contains outdoor constructed features.

Trail. A pedestrian route developed primarily for outdoor recreational purposes. A pedestrian route developed primarily to connect elements, spaces, or facilities within a site is not a trail.

Trailhead. An outdoor space that is designated by an entity responsible for administering or maintaining a trail to serve as an access point to the trail. The junction of two or more trails or the undeveloped junction of a trail and a road is not a trailhead.

Viewing Area. An outdoor space developed for viewing landscapes, wildlife, or other points of interest.

ABA CHAPTER 2: SCOPING REQUIREMENTS

F201.4 Requirements Apply to Facilities Constructed or Altered by or on Behalf of Federal Agencies. The requirements in F216.13, F244 through F248, and 1011 through 1019 shall apply only to facilities constructed or altered by federal agencies or by non-federal entities on federal land on behalf of federal agencies pursuant to a concession contract, partnership agreement, or similar arrangement.

F201.4.1 Documentation and Notification When Exceptions Used for Trails and Beach Access Routes. Federal agencies shall document the basis for not fully complying with a specific provision in 1017 or 1018 on a portion of a trail or beach access route based on Exception 1 in 1017 or Exception 1 in 1018, and shall maintain the documentation with the records for the trail or beach project. Federal agencies shall notify the Access Board if an entire trail is exempted from complying with 1017 based on Exception 2 in 1017.1, and if a beach access route is not provided based on Exception 2 in 1018.1.

Advisory F201.4.1 Documentation and Notification When Exceptions Used for Trails and Beach Access Routes. Forms for notifying the Access Board if an entire trail is exempted from complying with 1017 based on Exception 2 in 1017.1, and if a beach access route is not provided based on Exception 2 in 1018.1 are available at: www.access-board.gov.

F202.3 Alterations. * * * * *
EXCEPTIONS: * * * * *

4. Where elements or spaces are altered in camping facilities, picnic facilities, viewing areas, or trailheads and the circulation path to the altered element or space is not altered, the circulation path shall not be required to comply with 1016.

F202.4 Alterations Affecting Primary Function Areas. * * * * *

EXCEPTIONS: * * * * *

2. Camping facilities, picnic facilities, viewing areas, trailheads, trails, and beach access routes shall not be required to comply with F202.4.

F206.1 General. * * * * *

EXCEPTIONS: 1. Accessible routes shall not be required where outdoor recreation access routes are provided at camping facilities in accordance with F244.5, picnic facilities in accordance with F245.4, viewing areas in accordance with F246.3, or trailheads in accordance with F247.3.2.

2. Accessible routes shall not be required where camping facilities, picnic facilities, viewing areas, or outdoor constructed features are provided on trails.

3. Accessible routes shall not be required where beach access routes are provided in accordance with F248.

F212.3 Sinks. * * * * *

EXCEPTIONS: * * * * *

2. In camping facilities and picnic facilities, sinks shall not be required to comply with F212.3 where a cooktop or conventional range is not provided.

F213.1 General. * * * * *

EXCEPTION: Pit toilets provided on trails and in camping facilities shall not be required to comply with F213.

Advisory F213.1 General. A pit toilet is a primitive outhouse consisting of a toilet riser over a hole dug into the ground or receptacle to receive and naturally decompose human waste.

F216.13 Trailhead Signs. Where new trail information signs are provided at trailheads on newly constructed or altered trails designed for use by hikers or pedestrians, the signs shall comply with 1017.11.

Advisory F216.13 Trailhead Signs. New trail information signs are required to comply with 1017.11 regardless of whether the newly constructed or altered trails comply with 1017. If trail information signs designate the name of the trail, only the name of the trail is required to comply with 703.5. See F216.2. Tactile characters are not required on exterior signs. Trail information signs are not required to display the International Symbol of Accessibility.

F244 Camping Facilities

F244.1 General. Camping facilities, other than camping facilities on trails, shall comply with F244.

Advisory F244.1 General. Camping facilities on trails are addressed in F247.4.1.

F244.2 Camping Units with Mobility Features. Camping facilities shall provide camping units with mobility features complying with F244.2 in accordance with Table F244.2. Where a camping facility provides different types of camping units, Table F244.2 shall apply to each type of camping unit provided.

Table F244.2 Camping Units with Mobility Features

Total Number of Camping Units Provided in Camping Facility	Minimum Number of Camping Units with Mobility Features Required
1	1
2 to 25	2
26 to 50	3
51 to 75	4
76 to 100	5
101 to 150	7
151 to 200	8
201 and over	8, plus 2 percent of the number over 200

Advisory F244.2 Camping Units with Mobility Features. Camping units for recreational vehicles only, camping units for tent camping only, and camping units with camp shelters are different types of camping units.

Camping units with mobility features are not required to be identified by signs. Entities should provide information on the location of camping units with mobility features on websites, in brochures, and at bulletin boards or information kiosks at the camping facility. Where entities operate reservation systems for camping units or assign camping units upon arrival, entities should establish policies to ensure that camping units with mobility features are available for individuals with disabilities until all the camping units are occupied.

F244.2.1 Alterations and Additions. Where camping units are altered or added, the requirements of F244.2 shall apply only to the camping units that are altered or added until the number of camping units with mobility features complies with the minimum number required in Table 244.2.

EXCEPTION: Where an entity is implementing a transition plan for program accessibility developed pursuant to regulations issued under section 504 of the Rehabilitation Act that designates specific camping

units to provide mobility features complying with F244.2, the entity shall not be required to comply with F244.2 when altering individual elements within camping units that are not designated to provide mobility features complying with F244.2.

Advisory F244.2.1 Alterations and Additions Exception. When all the elements within a camping unit are altered, the altered camping unit is required to comply with F244.2 unless the minimum number of camping units with mobility features required in Table 244.2 is provided.

F244.2.2 Dispersion. Camping units required to provide mobility features complying with F244.2 shall provide choices of camping units comparable to, and integrated with, those available to others.

F244.2.3 Elements Within Camping Units with Mobility Features. Elements within camping units required to provide mobility features shall comply with F244.2.3.

F244.2.3.1 Outdoor Constructed Features. Where provided, at least one of each type of outdoor constructed features shall comply with 1011. Where more than one of the same type of outdoor constructed features is provided, at least two of the same type of outdoor constructed features shall comply with 1011.

F244.2.3.2 Parking Spaces. Where provided, parking spaces shall comply with F244.2.3.2.

F244.2.3.2.1 Recreational Vehicles. Where parking spaces are provided for recreational vehicles, at least one parking space shall comply with 1012.2, 1012.4, and 1012.5. Where more than one parking space is provided for recreational vehicles, at least two parking spaces shall comply with 1012.2, 1012.4, and 1012.5.

F244.2.3.2.2 Vehicles Other Than Recreational Vehicles. Where parking spaces are provided for vehicles other than recreational vehicles, at least one parking space shall comply with 1012.3, 1012.4, and 1012.5. Where more than one parking space is provided for a vehicle other than a recreational vehicle, at least two parking spaces shall comply with 1012.3, 1012.4, and 1012.5.

F244.2.3.3 Tent Pads and Tent Platforms. Where provided, at least one tent pad and tent platform shall comply with 1013. Where more than one tent pad and tent platform is provided, at least two tent pads and tent platforms shall comply with 1013.

F244.2.3.4 Camp Shelters. Where provided, at least one camp shelter shall comply with 1014. Where more than one camp shelter is provided, at least two camp shelters shall comply with 1014.

F244.3 Outdoor Constructed Features in Common Use and Public Use

Areas. Where provided in common use and public use areas that serve camping units with mobility features, at least 20 percent, but not less than one, of each type of outdoor constructed feature provided at each location shall comply with 1011.

F244.4 Pull-up Spaces for Recreational Vehicles at Dump Stations. Where provided, pull-up spaces for recreational vehicles at dump stations shall comply with 1012.2, 1012.4, and 1012.5.

F244.5 Outdoor Recreation Access Routes. Camping facilities shall provide outdoor recreation access routes complying with 1016 in accordance with F244.5.

Advisory F244.5 Outdoor Recreation Access Routes. In alterations to existing camping facilities, there are exceptions in 1016.1 that can be used where conditions specified in 1019 apply.

F244.5.1 Routes Within Camping Units with Mobility Features. At least one outdoor recreation access route shall connect accessible elements, spaces, and facilities provided within camping units with mobility features.

F244.5.2 Routes to and Within Common Use and Public Use Areas. Common use and public use areas serving camping units with mobility features shall provide outdoor recreation access routes in accordance with F244.5.2.

EXCEPTION: Outdoor recreation access routes shall not be required to connect camping units with mobility features and recreational vehicle dump stations where a pull-up space complying with 1012.2, 1012.4, and 1012.5 is provided at the dump station for recreational vehicles.

F244.5.2.1 Routes to Common Use and Public Use Areas. At least one outdoor recreation access route shall connect each camping unit with mobility features with common use and public use areas serving the unit.

F244.5.2.2 Routes Within Common Use and Public Use Areas. At least one outdoor recreation access route shall connect accessible elements, spaces, and facilities provided within common use and public use areas serving camping units with mobility features.

F244.5.3 Routes to Adjacent Recreation Facilities. Where a circulation path connects camping facilities and adjacent recreation facilities, at least one outdoor recreation access route shall connect camping units with mobility features to an accessible route serving the adjacent recreation facilities.

Advisory F244.5.3 Routes to Adjacent Recreation Facilities. F244.5.3 does not modify the accessible route requirements in F206 that apply to recreation facilities.

F244.5.4 Location. Outdoor recreation access routes required by F244.5.2 and F244.5.3 shall coincide with or be located in the same area as general circulation paths.

Advisory F244.5.4 Location. Where a vehicular way serves as the general circulation path for pedestrians at a camping facility, the outdoor recreation access route can be provided within the vehicular way.

F245 Picnic Facilities

F245.1 General. Picnic facilities, other than picnic facilities on trails, shall comply with F245.

Advisory F245.1 General. Picnic facilities on trails are addressed in F247.4.2.

F245.2 Picnic Units with Mobility Features. Picnic facilities shall provide picnic units with mobility features in accordance with F245.2.

Advisory F245.2 Picnic Units with Mobility Features. Picnic units with mobility features are not required to be identified by signs. Entities should provide information on the location of picnic units with mobility features on websites, in brochures, and at bulletin boards or information kiosks at the picnic facility.

F245.2.1 Picnic Facilities with Two or Fewer Picnic Units. Where picnic facilities contain two or fewer picnic units, each picnic unit shall provide mobility features complying with F245.2.

F245.2.2 Picnic Facilities with More Than Two Picnic Units. Where picnic facilities contain more than two picnic units, at least 20 percent, but not less than two, of the picnic units shall provide mobility features complying with F245.2.

F245.2.3 Alterations and Additions. Where picnic units are altered or added, the requirements of F245.2 shall apply only to the picnic units that are altered or added until the number of picnic units with mobility features complies with the minimum number required in F245.2.1 or F245.2.2.

EXCEPTION: Where an entity is implementing a transition plan for program accessibility developed pursuant to regulations issued under section 504 of the Rehabilitation Act that designates specific picnic units to provide mobility features complying with F245.2, the entity shall not be required to comply with F245.2 when altering individual elements within picnic units that are not designated to provide mobility features complying with F245.2.

Advisory F245.2.3 Alterations and Additions Exception. When all the elements within a picnic unit are altered, the altered picnic unit is required to comply with F245.2 unless the minimum number of picnic units with mobility features required in F245.2.1 or F245.2.2 is provided.

F245.2.4 Dispersion. Picnic units required to provide mobility features complying with F245.2 shall provide choices of picnic units comparable to, and integrated with, those available to others.

F245.2.5 Elements Within Picnic Units with Mobility Features. Elements within picnic units required to provide mobility features shall comply with F245.2.5.

F245.2.5.1 Outdoor Constructed Features. Where provided, at least one of each type of outdoor constructed feature shall comply with 1011. Where more than one of the same type of outdoor constructed feature is provided, at least two of the same type of outdoor constructed features shall comply with 1011.

F245.2.5.2 Parking Spaces. Where provided, at least one parking space shall comply with 1012.3, 1012.4, and 1012.5. Where more than one parking space is provided, at least two parking spaces shall comply with 1012.3, 1012.4, and 1012.5.

F245.3 Outdoor Constructed Features in Common Use and Public Use Areas. Where provided in common use and public use areas that serve picnic units with mobility features, at least 20 percent, but not less than one, of each type of outdoor constructed feature provided at each location shall comply with 1011.

F245.4 Outdoor Recreation Access Routes. Picnic facilities shall provide outdoor recreation access routes complying with 1016 in accordance with F245.4.

Advisory F245.4. Outdoor Recreation Access Routes. In alterations to existing picnic facilities, there are exceptions in 1016.1 that can be used where conditions specified in 1019 apply.

F245.4.1 Routes Within Picnic Units with Mobility Features. At least one outdoor recreation access route shall connect accessible elements, spaces, and facilities provided within picnic units with mobility features.

F245.4.2 Routes to and Within Common Use and Public Use Areas. Common use and public use areas serving picnic units with mobility features shall provide outdoor recreation access routes in accordance with F245.4.2.

F245.4.2.1 Routes to Common Use and Public Use Areas. At least one outdoor recreation access route shall connect each picnic unit with mobility features with common use and public use areas serving that unit.

F245.4.2.2 Routes Within Common Use and Public Use Areas. At least one outdoor recreation access route shall connect accessible elements, spaces, and facilities provided within common use and public use areas serving picnic units with mobility features.

F245.4.3 Routes to Adjacent Recreation Facilities. Where a circulation path connects picnic facilities and adjacent recreation facilities, at least one outdoor recreation access route shall connect picnic units with mobility features to an accessible route serving the adjacent recreation facilities.

Advisory F245.4.3 Adjacent Recreation Facilities. F245.4.3 does not modify the accessible route requirements in F206 that apply to adjacent recreation facilities.

F245.4.4 Location. Outdoor recreation access routes required by F245.4.2 and F245.4.3 shall coincide with or be located in the same area as general circulation paths.

Advisory F245.4.4 Location. Where a vehicular way serves as the general circulation path for pedestrians at a picnic facility, the outdoor recreation access route can be provided within the vehicular way.

F246 Viewing Areas

F246.1 General. Viewing areas, other than viewing areas on trails, shall comply with F246.

Advisory F246.1 General. Viewing areas on trails are addressed in F247.4.3.

F246.2 Distinct Viewing Locations. Each distinct viewing location within a viewing area shall comply with 1015.

Advisory F246.2 Distinct Viewing Locations. Viewing areas can provide more than one distinct viewing location. For example, a viewing area can provide a distinct viewing location for observing a mountain range, and another distinct viewing location for observing a river. Distinct viewing locations within a viewing area can be designated by signs or other markers.

F246.3 Outdoor Constructed Features. Where provided within viewing areas, at least 20 percent, but not less than one, of each type of outdoor constructed feature shall comply with 1011.

F246.4 Outdoor Recreation Access Routes. At least one outdoor recreation access route complying with 1016 shall connect accessible parking spaces or other arrival points serving the viewing area with accessible elements, spaces, and facilities provided within the viewing area.

Advisory F246.4. Outdoor Recreation Access Routes. There are exceptions in 1016.1 that can be used where conditions specified in 1019 apply.

F247 Trails

F247.1 General. Where a trail is designed for use by hikers or pedestrians and directly connects to a trailhead or another trail that substantially meets the requirements in 1017, the trail shall comply with 1017.

Advisory F247.1 General. The Federal Trail Data Standards classify trails by their designed use and managed use. A trail has only one designed use that determines the design, construction, and maintenance parameters for the trail. A trail can have more than one managed use based on a management decision to allow other uses on the trail. Trails that have a designed use for hikers or pedestrians are required to comply with 1017. Trails that have a designed use for other than hikers or pedestrians are not required to comply with 1017.

A trail system may include a series of connecting trails. Only trails that directly connect to a trailhead or another trail that substantially meets the requirements in 1017 are required to comply with 1017.

F247.2 Existing Trails. Where the original design, function, or purpose of an existing trail is changed and the altered portion of the trail directly connects to a trailhead or another trail that substantially meets the requirements in 1017, the altered portion of the trail shall comply with 1017.

Advisory F247.2 Existing Trails. Routine or periodic maintenance activities that are performed to return an existing trail to the condition to which the trail was originally designed are not required to comply with 1017.

F247.3 Trailheads. Trailheads shall comply with F247.3.

Advisory F247.3 Trailheads. Trailhead information signs are addressed in F216.13.

F247.3.1 Outdoor Constructed Features. Where provided within trailheads, at least 20 percent, but not less than one, of each type of outdoor constructed feature shall comply with 1011.

F247.3.2 Outdoor Recreation Access Routes. At least one outdoor recreation access route complying with 1016 shall connect the following:

1. Accessible parking spaces or other arrival points serving the trailhead;
2. Starting point of the trail; and
3. Accessible elements, spaces, and facilities provided within the trailhead.

Advisory F247.3.2 Outdoor Recreation Access Routes. In alterations to existing trailheads, there are exceptions in 1016.1 that can be used where conditions specified in 1019 apply.

F247.4 Trail Facilities. Where provided on trails, facilities shall comply with F247.4.

Advisory F247.4 Trail Facilities. Facilities are required to comply with F247.4 regardless of whether the trail complies with 1017. Outdoor recreation access routes are not required at camping facilities, picnic facilities, or viewing areas provided on trails.

F247.4.1 Camping Facilities. Camping facilities provided on trails shall comply with F244.2 and F244.3.

F247.4.2 Picnic Facilities. Picnic facilities provided on trails shall comply with F245.2 and F245.3.

F247.4.3 Viewing Areas. Viewing areas provided on trails shall comply with F246.2 and F246.3.

F247.4.4 Routes. Routes that connect trails complying with 1017 to camping facilities, picnic facilities, viewing areas, pit toilets, and accessible elements provided within the facilities shall comply with 1017.

Advisory F247.4.4. Routes. Routes that connect trails that do not comply with 1017 to camping facilities, picnic facilities, viewing areas, pit toilets, and accessible elements provided within the facilities are not required to comply with 1017. An exception to F213.1 exempts pit toilets from the requirements for accessible toilet facilities.

F247.5 Outdoor Constructed Features. Where outdoor constructed features are provided on trails, other than within facilities specified in F247.4, at least 20 percent, but not less than one, of each type of outdoor constructed feature at each location shall comply with 1011.

F248 Beach Access Routes

F248.1 General. Beach access routes complying with 1018 shall be provided in accordance with F248.1. Beach access routes shall be permanent or removable.

EXCEPTION: Beach access routes shall not be required where pedestrian access to the beach is not permitted.

Advisory F248.1 General. There are exceptions in 1018.1 that can be used where conditions specified in 1019 apply. Removable beach access routes can be moved to a protected storage area during storms and other periods when the routes are subject to damage or loss.

F248.1.1 Facilities Serving Beaches. Beach access routes shall be provided in a number complying with F248.2 where the entity that administers or manages a beach constructs or alters any of the following facilities to serve the beach:

1. Circulation paths;
2. Parking facilities;
3. Toilet facilities; or
4. Bathing facilities.

EXCEPTION: The entity shall not be required to expend more than 20 percent of the costs of constructing or altering the facilities to provide beach access routes.

F248.1.2 Beach Nourishment. Beach access routes shall be provided in a number complying with F248.2 where the entity that administers or manages a beach undertakes a beach nourishment project.

EXCEPTION: The entity shall not be required to expend more than 20 percent of the costs of a beach nourishment project to provide beach access routes.

F248.2 Minimum Number. Where beach access routes are required by F248.1, at least one beach access route shall be provided for each 1/2 mile (0.8 km) of beach shoreline administered or managed by the entity.

EXCEPTION: The number of beach access routes shall not be required to exceed the number of pedestrian access points provided by the entity to a beach.

Advisory F248.2 Minimum Number Exception. Pedestrian access points to a beach include parking facilities that serve beaches, dune crossings, and stairways or ramps leading from boardwalks to the beach.

F248.3 Location. Beach access routes shall coincide with or be located in the same area as pedestrian access points to the beach.

[New sections added to Appendix D to Part 1191 – Technical]

CHAPTER 10: RECREATION FACILITIES

1001.1 Scope. The provisions of Chapter 10 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

Advisory 1001.1 Scope. Unless otherwise modified or specifically addressed in Chapter 10, all other requirements in this document apply to the design and construction of recreation facilities.

The requirements in 1011 through 1019 apply only to facilities constructed or altered by federal agencies or by non-federal entities on federal land on behalf of federal agencies pursuant to a concession contract, partnership agreement, or similar arrangement. See F201.4. The requirements in 1011 and 1019 allow for limitations and other constraints posed by the existing outdoor environment.

1011 Outdoor Constructed Features

1011.1 General. All outdoor constructed features shall comply with 1011.2 and 1011.3. Outdoor constructed features specified in 1011.4 through 1011.8 shall comply with those provisions, as applicable.

Advisory 1011.1 General. The requirements in 1011 apply to outdoor constructed features provided within camping facilities, picnic facilities, viewing areas, and trailheads or on trails.

1011.2 Clear Ground Space. A clear ground space complying with 1011.2 shall be provided at outdoor constructed features.

EXCEPTIONS: 1. Where individual outdoor constructed features are altered and the ground surface is not altered, the clear ground space shall not be required to comply with 1011.2.2 and 1011.2.3.

2. In alterations, when an entity determines that a condition in 1019 does not permit full compliance with a specific provision in 1011.2, the clear ground space shall comply with the provision to the extent practicable.

1011.2.1 Size and Location. The size and location of the clear ground space shall be in accordance with Table 1011.2.1. Unless otherwise specified in Table 1011.2.1, one full unobstructed side of the clear ground space shall adjoin or overlap an outdoor recreation access route or a trail, as applicable, or another clear ground space.

Table 1011.2.1 Clear Ground Space

Outdoor Constructed Feature	Minimum Size and Location
Picnic tables	36 inches (915 mm) on all usable sides of the table measured from the back edge of the benches
Fire rings, grills, fireplaces, and woodstoves	48 inches (1220 mm) by 48 inches (1220 mm) on all usable sides of the fire ring, grill, fireplace, and woodstove Center the space on each usable side of the grill, fireplace, and woodstove
Trash and recycling receptacles	36 inches (915 mm) by 48 inches (1220 mm) positioned for forward approach to the receptacle opening; or 30 inches (760 mm) by 60 inches (1525 mm) positioned for a parallel approach to the receptacle

	opening
Water hydrants	<p>72 inches (1830 mm) by 48 inches (1220 mm) with the long side of the space adjoining or overlapping an outdoor recreation access route or trail, as applicable, or another clear ground space</p> <p>Locate the space so that the water spout is 11 inches (280 mm) minimum and 12 inches (305 mm) maximum from the rear center of the long side of the space</p>
Utility and sewage hookups	<p>30 inches (760 mm) by 60 inches (1525 mm) with the long side of the space adjoining or overlapping an accessible parking space or pull-up space for recreational vehicles</p> <p>Locate the space so that the hook-ups are at the rear center of the space</p> <p>Bollards or other barriers shall not obstruct the clear ground space in front of the hook-ups</p>
Outdoor rinsing showers	<p>60 inches (1525 mm) by 60 inches (1525 mm) centered on the shower heads</p> <p>Locate the space so that the shower pedestal or wall with the shower head are at the rear end of the space</p>
Benches	<p>36 inches (915 mm) by 48 inches (1220 mm) positioned near the bench with one side of the space adjoining an outdoor recreation access route or trail, as applicable</p> <p>The clear ground space shall not overlap the outdoor recreation access route or trail, or another clear ground space</p>
Viewing Scopes	<p>36 inches (915 mm) by 48 inches (1220 mm) positioned for forward approach to the viewing scope</p> <p>Provide knee and toe clearance complying with 306 under the viewing scope</p> <p>Locate the space so that the eyepiece is centered on the space</p>

Advisory 1011.2.1 Size and Location. The usable sides of picnic tables, fire rings, grills, fireplaces, and woodstoves are the sides of the outdoor constructed feature that can be used for eating or serving food, building a fire, or cooking. All sides of picnic tables are generally usable, unless the picnic table is placed against a rock or tree that renders the side against the rock or tree not usable. All sides of fire rings and grills are generally usable, unless there is a wall or other structure on a side that renders the side not usable. The front sides of fireplaces and woodstoves are generally the usable side.

1011.2.2 Surface. The surface of the clear ground space shall be firm and stable.

1011.2.3 Slope. The slope of the clear ground space surface shall not be steeper than 1:48 in any direction.

EXCEPTION: Where the surface is other than asphalt, concrete, or boards, slopes not steeper than 1:20 shall be permitted when necessary for drainage.

1011.2.4 Openings. Openings in the clear ground space surface shall not allow the passage of a sphere more than 1/2 inch (13 mm) in diameter.

Advisory 1011.2.4 Openings. Where possible, drainage grates should be located outside of the clear ground space surface. Elongated openings should be placed so that the long dimension is perpendicular, or as close to perpendicular as possible, to the dominant direction of travel.

1011.3 Operable Parts. Operable parts shall comply with 309.3 and 309.4.

EXCEPTIONS: **1.** Fire rings, grills, fireplaces, wood stoves, water hydrants, and water utility hookups shall comply with 309.4 to the extent practicable.

2. Trash and recycling receptacles with hinged lids and controls to keep out large animals shall comply with 309.4 to the extent practicable.

3. Dumpster type trash and recycling receptacles shall not be required to comply with 309.3 and 309.4.

4. Sewage hatches shall not be required to comply with 309.3 and 309.4.

Advisory 1011.3 Operable Parts. New products may be developed with operable parts that comply with 309.4. As products with operable parts that comply with 309.4 become available, entities should provide these products to enable individuals with disabilities to operate them.

1011.4 Picnic Tables. Picnic tables shall comply with 1011.4.

1011.4.1 Height. The tops of picnic tables shall comply with 902.3.

1011.4.2 Wheelchair Space. Picnic tables shall provide at least one wheelchair space for each 24 linear feet (7320 mm) of usable table surface perimeter. Wheelchair spaces shall be 30 inches (760 mm) minimum by 48 inches (1220 mm) minimum. Wheelchair spaces shall be positioned for a forward approach to the table and provide knee and toe clearance complying with 306 under the table.

1011.5 Fire Rings, Grills, Fireplaces, and Wood Stoves. Fire rings, grills, fireplaces, and wood stoves shall comply with 1011.5.

Advisory 1011.5 Fire Rings, Grills, Fireplaces, and Wood Stoves. Fire rings with double walls or insulation on the sides are recommended to prevent burns.

1011.5.1 Fire Building Surfaces. Fire building surfaces shall be 9 inches (230 mm) minimum above the ground.

1011.5.2 Cooking Surfaces. Where provided, cooking surfaces shall be 15 inches (380 mm) minimum and 34 inches (865 mm) maximum above the ground.

1011.5.3 Raised Edges or Walls. Where fire rings, grills, or fireplaces are constructed with raised edges or walls, the depth of the raised edge or wall shall be 10 inches (255 mm) maximum.

1011.6 Water Spouts. Water spouts at water hydrants and water utility hook-ups shall be 28 inches (710 mm) minimum and 36 inches (915 mm) maximum above the ground.

1011.7 Outdoor Rinsing Showers. Outdoor rinsing showers shall provide at least one hand-held shower spray unit with a hose 59 inches (1500 mm) long minimum. The hand-held shower spray unit shall have at least one fixed position located 15 inches minimum (380 mm) and 48 inches (1220 mm) maximum above the ground.

EXCEPTION: Where vandalism is a consideration, a fixed shower head located at 48 in (1220 mm) above the ground shall be permitted in place of a hand-held shower spray unit.

1011.8 Viewing Scopes. Eyepieces on viewing scopes shall be 43 inches (1090 mm) minimum and 51 inches (1295 mm) maximum above the ground.

1012 Parking Spaces Within Camping Units and Picnic Units and Pull-Up Spaces at Dump Stations

1012.1 General. Parking spaces within camping units and picnic units with mobility features and pull-up spaces for recreational vehicles at dump stations shall comply with 1012.

1012.2 Recreational Vehicles. Parking spaces and pull-up spaces for recreational vehicles shall be 20 feet (6100 mm) wide minimum.

EXCEPTION: Where two adjacent parking spaces are provided for recreational vehicles, one parking space shall be permitted to be 16 feet (4880 mm) wide minimum.

1012.3 Other Vehicles. Parking spaces for vehicles, other than recreational vehicles, shall be 16 feet (4880 mm) wide minimum.

EXCEPTION: Where two adjacent parking spaces are provided for vehicles, other than recreational vehicles, one parking space shall be permitted to be 8 feet (2440 mm) wide minimum.

1012.4 Surface. The surface of parking spaces and pull-up spaces shall be firm and stable.

1012.5 Slope. The slope of the surface of parking spaces and pull-up spaces shall not be steeper than 1:48 in any direction.

EXCEPTION: Where the surface is other than asphalt, concrete, or boards, slopes not steeper than 1:20 shall be permitted when necessary for drainage.

1013 Tent Pads and Tent Platforms

1013.1 General. Tent pads and tent platforms shall comply with 1013.

EXCEPTION: When an entity determines that a condition in 1019 does not permit full compliance with a specific provision in 1013, the tent pad and tent platform shall comply with the provision to the extent practicable.

Advisory 1013.1 General. Tent pads and tent platforms are defined spaces with prepared surfaces for setting up and securing tents.

1013.2 Clear Ground Space. Clear ground space complying with 1013.2 shall be provided on all usable sides of tent pads and tent platforms.

1013.2.1 Size. The clear ground space shall be 48 inches (1220 mm) wide minimum.

1013.2.2 Surface. The surface of the clear ground space shall be firm and stable. The surface shall allow use of tent stakes and other tent securement devices.

1013.3 Slope. The slope of the surface of tent pads, tent platforms, and clear ground spaces shall not be steeper than 1:48 in any direction.

EXCEPTION: Where the surface is other than asphalt, concrete, or boards, slopes not steeper than 1:20 shall be permitted where necessary for drainage.

1013.4 Height. Tent platforms shall be 19 inches (485 mm) high maximum measured from the clear ground space to the tent platform surface.

1014 Camp Shelters

1014.1 General. Camp shelters shall comply with 1014.

EXCEPTIONS: 1. When an entity determines that a condition in 1019 does not permit full compliance with a specific provision in 1014, the camp shelter shall comply with the provision to the extent practicable.

2. Camp shelters shall not be required to comply with 307.

1014.2 Entrance. Camp shelters shall provide an entrance complying with 1014.2.1 or 1014.2.2.

1014.2.1 Transfer Access. Where transfer access is provided at the entrance to a camp shelter, the entrance shall comply with 1014.2.1.

1014.2.1.1 Clear Ground Space. A clear ground space shall be provided at the entrance to the camp shelter. The clear ground space shall be 36 inches (915 mm) minimum by 48 inches (1220 mm) minimum and shall be positioned for a parallel approach to the camp shelter. One full unobstructed side of the clear ground space shall adjoin or overlap an outdoor recreation access route or trail, as applicable, or another clear ground space.

1014.2.1.1.1 Surface. The surface of the clear ground space shall be firm and stable.

1014.2.1.1.2 Slope. The slope of the surface of the clear ground space shall not be steeper than 1:48 in any direction.

EXCEPTION: Where the surface is other than asphalt, concrete, or boards, slopes not steeper than 1:20 shall be permitted where necessary for drainage.

1014.2.1.2 Floor Height. The camp shelter floor at the entrance shall be 19 inches (485 mm) high maximum measured from the clear ground space.

1014.2.2 Roll-in Access. Where roll-in access is provided at the entrance to a camp shelter, the entrance shall comply with 1014.2.2.

1014.2.2.1 Level or Sloped Entry Route. Camp shelters providing roll-in access shall have a level or sloped entry route complying 1016 or 1017, as applicable.

1014.2.2.2 Turning Space. A turning space complying with 304.3 shall be provided within the camp shelter.

1014.3 Floor. The floor within camp shelters shall comply with 1014.3.

1014.3.1 Surface. The floor surface shall be firm and stable.

1014.3.2 Slope. The slope of the floor surface shall not be steeper than 1:48 in any direction.

EXCEPTION: Where the floor surface is other than asphalt, concrete, or boards, slopes not steeper than 1:20 shall be permitted when necessary for drainage.

1015 Viewing Areas

1015.1 General. Viewing areas shall comply with 1015.

EXCEPTION: In alterations, when an entity determines that a condition in 1019 does not permit full compliance with a specific provision in 1015, the viewing area shall comply with the provision to the extent practicable.

1015.2 Clear Ground Space. A clear ground space shall be provided at each distinct viewing location. The clear ground space shall be 36 inches (915 mm) minimum by 48 inches (1220 mm) minimum and shall be positioned for either a forward or parallel approach to the viewing location. One full unobstructed side of the clear ground space shall adjoin or overlap an outdoor recreation access route or trail, as applicable, or another clear ground space.

1015.3 Viewing Space. Each distinct viewing location shall provide a viewing space adjacent to the clear ground space required by 1015.2 through which the point of interest is viewable. The viewing space shall be 32 inches (815 mm) maximum and 51 inches (1295 mm) minimum high above the ground and shall extend the full width of the clear ground space.

EXCEPTION: Guards or similar safety barriers shall be permitted to obstruct the viewing space to the extent the obstruction is necessary for the guard or safety barrier to serve its intended purpose.

1015.4 Turning Space. A turning space complying with 304.3 shall be provided within viewing areas.

1015.5 Surface. The surface of clear ground spaces and turning spaces shall be firm and stable.

1015.6 Slope. The slope of the surface of clear ground spaces and turning spaces shall not be steeper than 1:48 in any direction.

EXCEPTION: Where the surface is other than asphalt, concrete, or boards, slopes not steeper than 1:20 shall be permitted when necessary for drainage.

1016 Outdoor Recreation Access Routes

1016.1 General. Outdoor recreation access routes shall comply with 1016.

EXCEPTIONS: **1.** In alterations to existing camping facilities, picnic facilities, and trailheads, when an entity determines that a condition in 1019 does not permit full compliance with a specific provision in 1016 on a portion of an outdoor recreation access route, the portion of the outdoor recreation access route shall comply with the provision to the extent practicable.

2. At viewing areas, when an entity determines that a condition in 1019 does not permit full compliance on a portion of an outdoor recreation access route with a specific provision in 1016, the portion of the outdoor recreation access route shall comply with the provision to the extent practicable.

3. Where outdoor recreation access routes are provided within vehicular ways, outdoor recreation access routes shall not be required to comply with 1016.4, 1016.7, and 1016.8.

1016.2 Surface. The surface of outdoor recreation access routes, passing spaces, and resting intervals shall be firm and stable.

1016.3 Clear Width. The clear width of outdoor recreation access routes shall be 36 inches (915 mm) minimum.

1016.4 Passing Spaces. Outdoor recreation access routes with a clear width less than 60 inches (1525 mm) shall provide passing spaces complying with 1016.4 at intervals of 200 feet (61 m) maximum. Passing spaces and resting intervals shall be permitted to overlap.

Advisory 1016.4 Passing Spaces. Entities should consider providing either a 60 inches (1525 mm) minimum clear width on outdoor recreation access routes or passing spaces at shorter intervals if the clear width is less than 60 inches (1525 mm), where the route is:

- Heavily used or adjoins elements, space, or facilities that are heavily used; or
- A boardwalk or otherwise not at the same level as the ground surface adjoining the route.

1016.4.1 Size. The passing space shall be either:

1. A space 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum; or
2. The intersection of two outdoor recreation access routes providing a T-shaped space complying with 304.3.2 where the base and the arms of the T-shaped space extend 48 inches (1220 mm) minimum beyond the intersection. Vertical alignment at the intersection of the outdoor recreation access routes that form the T-shaped space shall be nominally planar.

Advisory 1016.4.1 Size. Where the passing space is the intersection of two outdoor recreation access routes, the intersection must be as flat as possible so that all of the wheels of a mobility device touch the ground when turning into and out of the passing space.

1016.5 Obstacles. Obstacles on outdoor recreation access routes, passing spaces, and resting intervals shall not exceed 1/2 inch (13 mm) in height measured vertically to the highest point.

EXCEPTION: Where the surface is other than asphalt, concrete, or boards, obstacles shall be permitted to not exceed 1 inch (25 mm) in height measured vertically to the highest point.

Advisory 1016.5 Obstacles. The vertical alignment of joints in concrete, asphalt, or board surfaces can be obstacles. Natural features such as tree roots and rocks on outdoor recreation access routes can also be obstacles. Where an outdoor recreation access route is provided within a vehicular way, traffic calming devices can be obstacles. Where

possible, obstacles that cross the full width of outdoor recreation access routes should be separated by a distance of 48 inches (1220 mm) minimum.

1016.6 Openings. Openings in the surface of outdoor recreation access routes shall not allow the passage of a sphere more than 1/2 inch (13 mm) in diameter.

Advisory 1016.6 Openings. Spaces between the boards in a boardwalk and drainage grates are examples of openings. Where possible, drainage grates should be located outside the minimum clear width of the outdoor recreation access route. Elongated openings should be placed so that the long dimension is perpendicular, or as close to perpendicular as possible, to the dominant direction of travel.

1016.7 Slopes. The slopes of outdoor recreation access routes shall comply with 1016.7.

1016.7.1 Maximum Running Slope and Segment Length. The running slope of any segment of an outdoor recreation access route shall not be steeper than 1:10 (10%).

Where the running slope of a segment of an outdoor recreation access route is steeper than 1:20 (5%), the maximum length of the segment shall be in accordance with Table 1016.7.1, and a resting interval complying with 1016.8 shall be provided at the top and bottom of each segment.

Table 1016.7.1 Maximum Running Slope and Segment Length

Running Slope of Outdoor Recreation Access Route Segment		Maximum Length of Segment
Steeper than	But not Steeper than	
1:20 (5%)	1:12 (8.33%)	50 feet (15 m)
1:12 (8.33%)	1:10 (10%)	30 feet (9 m)

Advisory 1016.7.1 Maximum Running Slope and Segment Length. Gradual running slopes are more useable by individuals with disabilities. Where the terrain results in steeper running slopes, resting intervals are required more frequently. Where running slopes are less severe, resting intervals are permitted to be further apart.

1016.7.2 Cross Slope. The cross slope shall not be steeper than 1:48.

EXCEPTION: Where the surface is other than concrete, asphalt, or boards, cross slopes not steeper than 1:20 shall be permitted when necessary for drainage.

1016.8 Resting Intervals. Resting intervals shall comply with 1016.8.

1016.8.1 Length. The resting interval length shall be 60 inches (1525 mm) long minimum.

1016.8.2 Width. Where resting intervals are provided within an outdoor recreation access route, resting intervals shall be at least as wide as the widest segment of the outdoor recreation access route leading to the resting interval. Where resting intervals are provided adjacent to an outdoor recreation access route, the resting interval shall be 36 inches (915 mm) wide minimum.

1016.8.3 Slope. Resting intervals shall have slopes not steeper than 1:48 in any direction.

EXCEPTION: Where the surface is other than concrete, asphalt, or boards, slopes not steeper than 1:20 shall be permitted when necessary for drainage.

1016.8.4 Turning Space. Where resting intervals are provided adjacent to an outdoor recreation access route, a turning space complying with 304.3.2 shall be provided.

Vertical alignment between the outdoor recreation access route, turning space, and resting interval shall be nominally planar.

1016.9 Protruding Objects. Constructed elements on outdoor recreation access routes, passing spaces, and resting intervals shall comply with 307.

Advisory 1016.9 Protruding Objects. Protruding objects on outdoor recreation access routes, passing spaces, and resting intervals can be hazardous for individuals who are blind or have low vision. Signs and other post mounted objects are examples of constructed elements that can be protruding objects.

1017 Trails

1017.1 General. Trails shall comply with 1017.

EXCEPTIONS: 1. When an entity determines that a condition in 1019 does not permit full compliance with a specific provision in 1017 on a portion of a trail, the portion of the trail shall comply with the provision to the extent practicable.

2. After applying Exception 1, when an entity determines that it is impracticable for the entire trail to comply with 1017, the trail shall not be required to comply with 1017.

Advisory 1017.1 General Exception 2. An entity must apply Exception 1 before using Exception 2. The entity should consider the portions of the trail that can and cannot fully comply with the specific provisions in 1017 and the extent of compliance where full compliance cannot be achieved when determining whether it would be impracticable for the entire trail to comply with 1017. The determination is made on a case-by-case basis. Federal agencies must document the basis for their determination when using Exceptions 1 or 2, and must notify the Access Board when using Exception 2. See F201.4.1.

1017.2 Surface. The surface of trails, passing spaces, and resting intervals shall be firm and stable.

Advisory 1017.2 Surface. A firm trail surface resists deformation by indentations. A stable trail surface is not permanently affected by expected weather conditions and can sustain normal wear and tear from the expected uses between planned maintenance.

1017.3 Clear Tread Width. The clear tread width of trails shall be 36 inches (915 mm) minimum.

1017.4 Passing Spaces. Trails with a clear tread width less than 60 inches (1525 mm) shall provide passing spaces complying with 1017.4 at intervals of 1000 feet (300 m) maximum. Where the full length of a trail does not fully comply with 1017, a passing space shall be located at the end of the trail segment that fully complies with 1017. Passing spaces and resting intervals shall be permitted to overlap.

Advisory 1017.4 Passing Spaces. Entities should consider providing either a 60 inches (1525 mm) minimum clear tread width or passing spaces at shorter intervals if the clear tread width is less than 60 inches (1525 mm), where a trail is:

- Heavily used; or
- A boardwalk or otherwise not at the same level as the ground surface adjoining the trail.

Where the full length of the trail does not fully comply with 1017, locating a passing space at the end of the trail segment that fully complies with 1017 enables a person who uses a mobility device to turn and exit the trail.

1017.4.1 Size. The passing space shall be either:

1. A space 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum; or
2. The intersection of two trails providing a T-shaped space complying with 304.3.2 where the base and the arms of the T-shaped space extend 48 inches (1220 mm) minimum beyond the intersection. Vertical alignment at the intersection of the trails that form the T-shaped space shall be nominally planar.

Advisory 1017.4.1 Size. Where the passing space is the intersection of two trails, the intersection must be as flat as possible so that all of the wheels of a mobility device touch the ground when turning into and out of the passing space.

1017.5 Tread Obstacles. Tread obstacles on trails, passing spaces, and resting intervals shall not exceed 1/2 inch (13 mm) in height measured vertically to the highest point.

EXCEPTION: Where the surface is other than asphalt, concrete, or boards, tread obstacles shall be permitted to not exceed 2 inches (50 mm) in height measured vertically to the highest point.

Advisory 1017.5 Tread Obstacles. The vertical alignment of joints in concrete, asphalt, or board surfaces can be tread obstacles. Natural features such as tree roots and rocks within the trail tread can also be tread obstacles. Where possible, tread obstacles that cross the full width of the trail tread should be separated by a distance of 48 inches (1220 mm) minimum.

1017.6 Openings. Openings in the surface of trails, passing spaces, and resting intervals shall not allow the passage of a sphere more than 1/2 inch (13 mm) in diameter.

Advisory 1017.6 Openings. Elongated openings should be placed so that the long dimension is perpendicular, or as close to perpendicular as possible, to the dominant direction of travel.

1017.7 Slopes. The slopes of trails shall comply with 1017.7.

1017.7.1 Maximum Running Slope and Segment Length. Not more than 30 percent of the total length of a trail shall have a running slope steeper than 1:12 (8.33%). The running slope of any segment of a trail shall not be steeper than 1:8 (12%). Where the running slope of a segment of a trail is steeper than 1:20 (5%), the maximum length of the segment shall be in accordance with Table 1017.7.1, and a resting interval complying with 1017.8 shall be provided at the top and bottom of each segment.

Table 1017.7.1 Maximum Running Slope and Segment Length

Running Slope of Trail Segment		Maximum Length of Segment
Steeper than	But not Steeper than	
1:20 (5%)	1:12 (8.33%)	200 feet (61 m)
1:12 (8.33%)	1:10 (10%)	30 feet (9 m)
1:10 (10%)	1:8 (12%)	10 feet (3050 mm)

Advisory 1017.7.1 Maximum Running Slope and Segment Length. Gradual running slopes on trails are more useable by individuals with disabilities. Where the terrain results in steeper running slopes, resting intervals are required more frequently. Where running slopes are less severe, resting intervals are permitted to be further apart.

1017.7.2 Cross Slope. The cross slope shall be not be steeper than 1:48.

EXCEPTION: Where the surface is other than concrete, asphalt, or boards, cross slopes not steeper than 1:20 shall be permitted when necessary for drainage.

1017.8 Resting Intervals. Resting intervals shall comply with 1017.8.

1017.8.1 Length. The resting interval length shall be 60 inches (1525 mm) long minimum.

1017.8.2 Width. Where resting intervals are provided within the trail tread, resting intervals shall be at least as wide as the widest segment of the trail tread leading to the resting interval. Where resting intervals are provided adjacent to the trail tread, the resting interval clear width shall be 36 inches (915 mm) minimum.

1017.8.3 Slope. Resting intervals shall have slopes not steeper than 1:48 in any direction.

EXCEPTION: Where the surface is other than concrete, asphalt, or boards, cross slopes not steeper than 1:20 shall be permitted when necessary for drainage.

1017.8.4 Turning Space. Where resting intervals are provided adjacent to the trail tread, a turning space complying with 304.3.2 shall be provided. Vertical alignment between the trail tread, turning space, and resting interval shall be nominally planar.

1017.9 Protruding Objects. Constructed elements on trails, passing spaces, and resting intervals shall comply with 307.

Advisory 1017.9 Protruding Objects. Protruding objects on trails, passing spaces, and resting intervals can be hazardous for individuals who are blind or have low vision. Signs and other post mounted objects are examples of constructed elements that can be protruding objects.

1017.10 Trailhead Signs. Trail information signs at trailheads shall include the following:

1. Length of the trail or trail segment;
2. Surface type;
3. Typical and minimum tread width;
4. Typical and maximum running slope; and
5. Typical and maximum cross slope.

1018 Beach Access Routes

1018.1 General. Beach access routes shall comply with 1018.

EXCEPTIONS: 1. When an entity determines that a condition in 1019 does not permit full compliance with a specific provision in 1018 on a portion of a beach access route, the portion of the beach access route shall comply with the provision to the extent practicable.

2. After applying Exception 1, when an entity determines that it is impracticable to provide a beach access route complying with 1018, a beach access route shall not be required.

3. Removable beach access routes shall not be required to comply with 1018.7, 1018.8, and 1018.10.

Advisory 1018.1 General Exception 2. An entity must apply Exception 1 before using Exception 2. The entity should consider the portions of the beach access route that can and cannot fully comply with the specific provisions in 1018 and the extent of compliance where full compliance cannot be achieved to determine whether it would be impracticable to provide a beach access route complying with 1018. The determination is made on a case-by-case basis. Federal agencies must document the basis for their determination when using Exceptions 1 or 2, and must notify the Access Board when using Exception 2. See F201.4.1.

1018.2 Connections. Beach access routes shall connect an entry point to the beach to the:

1. High tide level at tidal beaches;
2. Mean high water level at river beaches; or
3. Normal recreation water level at lake, pond, and reservoir beaches.

1018.3 Surface. The surface of beach access routes and resting intervals shall be firm and stable.

1018.4 Clear Width. The clear width of beach access routes shall be 60 inches (1525 mm) minimum.

EXCEPTION: At dune crossings, the clear width of beach access routes that are not removable shall be permitted to be reduced to 48 inches (1220 mm) minimum.

1018.5 Obstacles. Obstacles on beach access routes and resting intervals shall not exceed 1/2 inch (13 mm) in height measured vertically to the highest point.

EXCEPTION: Where the surface is other than asphalt, concrete, or boards, obstacles shall be permitted to not exceed 1 inch (25 mm) in height measured vertically to the highest point.

Advisory 1018.5 Obstacles. The vertical alignment of boards on a beach access route or removable sections of a beach access route can be obstacles.

1018.6 Openings. Openings in the surface of beach access routes and resting intervals shall not allow the passage of a sphere more than 1/2 inch (13 mm) in diameter.

Advisory 1018.6 Openings. Elongated openings should be placed so that the long dimension is perpendicular, or as close to perpendicular as possible, to the dominant direction of travel.

1018.7 Slopes. The slopes of beach access routes shall comply with 1018.7.

1018.7.1 Maximum Running Slope and Segment Length. The running slope of any segment of a beach access route shall not be steeper than 1:10 (10%). Where the running slope of a segment of a beach access route is steeper than 1:20 (5%), the maximum length of the segment shall be in accordance with Table 1018.7.1,

and a resting interval complying with 1018.8 shall be provided at the top and bottom of each segment.

Table 1018.7.1 Maximum Running Slope and Segment Length

Running Slope of Beach Access Route Segment		Maximum Length of Segment
Steeper than	But not Steeper than	
1:20 (5%)	1:12 (8.33%)	50 feet (15 m)
1:12 (8.33%)	1:10 (10%)	30 feet (9 m)

Advisory 1018.7.1 Maximum Running Slope and Segment Length. Gradual running slopes on beach access routes are more useable by individuals with disabilities. Where the terrain results in steeper running slopes, resting intervals are required more frequently. When running slopes are less severe, resting intervals are permitted to be further apart.

1018.7.2 Cross Slope. The cross slope shall not be steeper than 1:48.

EXCEPTION: Where the surface is other than concrete, asphalt, or boards, cross slopes not steeper than 1:20 shall be permitted when necessary for drainage.

1018.8 Resting Intervals. Resting intervals shall comply with 1018.8.

1018.8.1 Size. Resting intervals shall be 60 inches minimum (1525 mm) by 60 inches (1525 mm) minimum.

1018.8.2 Slope. Resting intervals shall have a slope not steeper than 1:48 in any direction.

EXCEPTION: Where the surface is other than concrete, asphalt, or boards, cross slopes not steeper than 1:20 shall be permitted when necessary for drainage.

1018.9 Protruding Objects. Constructed elements on beach access routes and resting intervals shall comply with 307.

Advisory 1018.9 Protruding Objects. Protruding objects on beach access routes and resting intervals can be hazardous for individuals who are blind or have low vision. Signs and other post mounted objects are examples of constructed elements that can be protruding objects.

1018.10 Dune Crossings. Where the slope of a beach access route at a dune crossing is steeper than 1:20 (5%), handrails complying with 505 and curbs or barriers shall be provided. The curbs or barriers shall prevent the passage of a 2 inch (50 mm) diameter

sphere, where any portion of the sphere is within 2 inches (50 mm) of the crossing surface.

1019 Conditions for Exceptions

1019.1 General. Exceptions to specific provisions in 1011, 1013, 1014, 1015, 1016, 1017, and 1018 shall be permitted when an entity determines that any of the following conditions does not permit full compliance with the provision:

1. Compliance is not practicable due to terrain.
2. Compliance cannot be accomplished with the prevailing construction practices.
3. Compliance would fundamentally alter the function or purpose of the facility or the setting.
4. Compliance is limited or precluded by any of the following laws, or by decisions or opinions issued or agreements executed pursuant to any of the following laws:
 - Endangered Species Act (16 U.S.C. §§ 1531 et seq.);
 - National Environmental Policy Act (42 U.S.C. §§ 4321 et seq.);
 - National Historic Preservation Act (16 U.S.C. §§ 470 et seq.);
 - Wilderness Act (16 U.S.C. §§ 1131 et seq.); or
 - Other federal, state, or local law the purpose of which is to preserve threatened or endangered species; the environment; or archaeological, cultural, historical, or other significant natural features.

Advisory 1019.1 General. Exceptions in the following sections require compliance to the extent practicable when an entity determines that a condition in 1019 does not permit full compliance with a specific provision:

- 1011.2 Exception (clear ground space in alterations to outdoor constructed features);
- 1013.2 Exception (any provision for tent pads and tent platforms);
- 1014.1 Exception 1 (any provision for camp shelters);
- 1015.1 Exception (any provision in alterations to viewing areas);
- 1016.1 Exception 1 (any provision for outdoor recreation access routes in alterations to existing camping facilities, picnic facilities, and trailheads);
- 1016.1 Exception 2 (any provision for outdoor recreation access routes at viewing areas);
- 1017.1 Exception 1 (any provision for trails); and
- 1018.1 Exception 1 (any provision for beach access routes).

Entities should consider all design options before using the exceptions. On outdoor recreation access routes, trails, and beach access routes, the exceptions apply only on the portion of the route where the condition applies. The outdoor recreation access route, trail, or beach access route is required to fully comply with the provisions in 1016, 1017, and 1018, as applicable, at all other portions of the route where the conditions do not apply. There are additional exceptions that apply to an entire trail or beach access route in 1017.1 and 1018.1.

Condition 4 allows the following to be a basis for using the exceptions:

- Opinions issued by the Secretary of the Interior pursuant to the Endangered Species Act stating how a federal agency can implement an action without jeopardizing the continued existence of any endangered species or threatened species, or destroying or adversely modifying the habitat of such species (16 U.S.C. 1536 (b) (3) (A));
- Decisions issued by a federal agency pursuant to the National Environmental Policy Act in actions requiring environmental impact statements stating how it will avoid or minimize environmental harm (42 U.S.C. 4332; 40 CFR 1505.2);
- Agreements executed or decisions issued by a federal agency pursuant to National Historic Preservation Act stating how it will avoid, minimize, or mitigate adverse effects on historical properties (16 U.S.C. 470f and 470h-2; 36 CFR 800.6 (b) (iv) and 800.7 (c) (4)); and
- Provisions in the Wilderness Act that require federal agencies to preserve the wilderness character of designated wilderness areas and prohibit any structure or installation within such areas (16 U.S.C. 1131 (b) and (c)).

Condition 4 also applies where archaeological, cultural, historical, or other significant natural features are eligible for protection under federal, state, or local law.