

## NAU DESIGN GUIDELINES FOR DISABLED ACCESS PARKING AND ACCESSIBLE ROUTE AT VEHICULAR TRAFFIC AREAS



**Intent, Purpose And Goals:** The intent and purpose of these NAU technical requirements is to establish minimum requirements to safeguard the public health, safety and general welfare of those individuals making use of “Accessible Vehicle Space(s)” and “Accessible route(s)” at vehicular traffic areas. They are not intended as a complete set of specifications for their construction.

It should be noted that the following items are in addition to NAU adopted Codes and mandatory ADA requirements (see NAU Technical Standards Division 1, “Codes” section number 01 41 13. ) For the purpose of clarity, additional items such as code & ADA requirements may have partially been replicated within these NAU technical requirements. However, the provisions of these guidelines shall not be deemed to nullify any provisions of local, state or federal law. In the event that any part or provision of these guidelines is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.

**General And NAU Technical Requirements:** Accessible parking spaces and required accessible routes shall at least comply with NAU adopted Codes and mandatory ADA requirements. Additionally shall comply with the following NAU technical requirements:

**Exception - NAU technical requirements:** Where NAU determines that compliance with any section/item of the NAU technical requirement(s) would create an unreasonable hardship, a variance or waiver may be requested in writing and granted when equivalent facilitation is provided. Approval must be granted by the enforcing organization. The enforcing organization shall at least include the NAU Project Manager, and NAU Parking Services, and NAU Equity and Access Office (formerly known as NAU Affirmative Action), and NAU Disability Resources, and NAU Fire Marshal, and NAU Building Official (Lead Building Inspector) FYI: Additional approvals may be required, as determined by NAU Project Manager.

## **Location of “Accessible Vehicle Spaces” and “Accessible route(s)” at vehicular traffic areas:**

Accessible parking spaces shall be located so that persons with disabilities are not compelled to wheel or walk behind parked cars other than their own.

**Exception:** Parking spaces may be provided which would require a person with a disability to wheel or walk behind a parking space other than that person's own accessible parking space when the NAU enforcing organization determines that compliance with these regulations or providing equivalent facilitation would create an unreasonable hardship. The enforcing organization shall at least include the NAU Project Manager, and NAU Parking Services, and NAU Equity and Access Office (formerly known as NAU Affirmative Action), and NAU Disability Resources, and NAU Fire Marshal, and NAU Building Official (Lead Building Inspector) FYI: Additional approvals may be required, as determined by NAU Project Manager.

**Crosswalk At Hazardous Vehicular Areas.** When practical, the accessible route shall not cross lanes for vehicular traffic. When crossing vehicle traffic lanes is necessary (for example, such as but not limited to the following situations: Local fire engine access requirements prohibit parking immediately adjacent to a building. etc.) then the accessible route shall be designated and marked as a crosswalk. The crosswalk shall run perpendicular to the vehicular route.

**Accessible Routes Located Alongside Hazardous Vehicular Areas.** If an accessible route adjoins a vehicular way, and the walking surfaces are not separated by curbs or other elements (e.g. planters or other streetscape designs, parking spaces, etc.) between the pedestrian areas and hazardous vehicular areas, the boundary between the areas shall be defined by an approved continuous railing or other approved type of vehicle barrier.

**Advisory note:** Please be advised that as per the “Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way” R208: “Detectable warning surfaces are not intended to provide way-finding for pedestrians who are blind or have low vision.”

## **Dimensions, Marking and Identification of Surfaces, located at Accessible Parking Space(s) and Access Aisle(s):**

**Width (Preferred By NAU):** Accessible car parking space(s) shall be 108 inches (9ft) wide minimum and van parking spaces shall be 132 inches (11 ft) wide minimum. Access aisles serving car and accessible van parking spaces shall be 60 inches (5 ft) wide maximum.

Non-Accessible parking spaces shall be 102 inches (8 ft 6 inches) wide minimum and 108 inches (9ft) maximum. The objective is to minimize the width of parking spaces, and maximize the total number of parking spaces in the space available.

**Length:** The minimum length of each Accessible parking space shall be 18 feet (216 inches).

**Marking of Ground or Surface at Accessible Parking Space:** The accessible parking space shall be marked by a border painted with lines in **White**. The **White** painted lines shall be at least 4 inches wide, and shall be one consistent color.

**Each accessible parking space shall have a surface identification duplicating the following scheme:** The NAU CDAD Approved "Accessible Icon" shall be in **White** on a blue background, and outlined with a **White** border. A likeness and description of the "Accessible Icon" itself can be found at the following website:

<http://www.accessibleicon.org/icon.html> . The overall surface identification shall be a minimum 36 inches high by 36 inches wide (3 ft x 3ft) and shall be aligned with the end of the stall or space adjacent to the traffic aisle so that it is visible to a traffic enforcement officer when a vehicle is properly parked in the space.

**Marking of Ground or Surface at Access Aisle:** The accessible loading and unloading access aisle shall be marked by a border, whereas the painted lines are **White** and at least 4 inches wide. Within the border, hatched lines a maximum of 36 inches on center shall be at least 4 inches wide and painted **Blue**. The words "NO PARKING" shall be painted on the ground within each 5-foot wide loading and unloading access aisle. This notice shall be painted **Blue** in UPPERCASE letters, no less than 10 inches high, and clearly identifiable as written, and located so that it is visible to traffic enforcement officials.

**Identification Signs:** Marking symbols & wording (as noted above) painted over parking surfaces / access aisles must also be used to supplement the following identification sign requirements. Parking space identification signs shall include the International Symbol of Accessibility (please reference adopted codes and ADA for further requirements), and shall be installed in front of each accessible parking space. The signs shall be displayed on fixed mountings in an area where they are not hidden from view, and so they cannot be obscured by a vehicle parked in the space. An additional sign or additional language below the International Symbol of Accessibility shall state "NAU PERMIT REQUIRED".

#### **Directional Signage, Located Between Accessible Parking And Building**

**Entrances:** Where there are inaccessible building entrances and inaccessible exterior routes, directional signage should be provided, indicating the nearest available accessible route to the nearest accessible building entrance or like accessible element. These directional signs shall include the International Symbol of Accessibility and directional arrow.

### **Approvals & Permit Requirements:**

Building permits and plan review approvals are required for all new and existing “parking facilities” on campus, and under any one or more of the following circumstances:

- Re-striping, New striping.
- Resurfaced, Resealed, Newly surfaced, Newly sealed.
- Addition or deletion of parking spaces.
- Newly installed or altered or changes to signs (those signs required by ADA, codes and these requirements.)
- Newly installed or altered or changes to accessible routes (those routes required by ADA, codes and these requirements.)
- FYI: As per ADA, the term "parking facility" is used instead of the term "parking lot" so that it is clear that both parking lots and parking structures are required to comply.
- FYI: Please be advised that all of the above circumstances trigger ADA mandatory requirements. It should also be noted that what some may consider as “only maintenance” may trigger ADA mandatory requirements.

**Re-Striping and new striping:** When a new or existing parking facility is striped or re-striped, all work must comply as required by the ADA requirements and applicable codes as well.

Re-striping (without resurfacing or resealing) also requires a permit from the NAU Lead Building Inspector. The new striping must exactly match the old striping. However, if the old striping and/or the sloped surfaces did not meet the current code and ADA requirements, then the new striping and/or the sloped surfaces will have to be modified to meet current code and ADA requirements. Plans submitted for permits shall identify whether any changes will have to be made to the current striping and/or the sloped surfaces to meet current code and ADA requirements.

**Resurfacing And Resealing:** Parking facility resurfacing and resealing requires a permit from the NAU Lead Building Inspector.

**Parking Facility Layout:** Fire lane requirements may need to be updated. Parking facility layout and aisle widths may be contingent on or determined by fire apparatus access route requirements. The location of fire hydrants shall also not be obstructed. Therefore, prior to striping and/or re-striping of any parking area, the requirements for fire apparatus access routes and location of fire hydrants shall be taken into consideration and approved as determined by the NAU Fire Marshal.

Before allowing striping and/or re-striping of any parking facility on campus, an accessible route must be installed as required by the ADA requirements.

**Although not a complete list of ADA scoping and technical requirements, here are a number of items to keep in mind. For a comprehensive and up to date list of requirements, please reference applicable NAU adopted codes and ADA mandatory requirements.**

- There is no "grandfathering" for the required number of disabled parking spaces at existing or new parking facilities. The number of accessible spaces required is regulated by the ADA.
- Where more than one parking facility is provided on a site, the number of accessible spaces provided on the site shall be calculated according to the number of spaces required for each parking facility.
- Where parking spaces are marked with lines, width measurements of parking spaces and access aisles shall be made from the centerline of the markings. EXCEPTION: Where parking spaces or access aisles are not adjacent to another parking space or access aisle, measurements shall be permitted to include the full width of the line defining the parking space or access aisle.
- Accessible parking spaces and access aisles are required to be nearly level in all directions, except slopes not steeper than 1:48 shall be permitted for drainage purposes.
- Access aisles shall not overlap with the vehicular way. For safety reasons, it is important that the access aisle not overlap the road or driveway where vehicles could possibly strike the person emerging from their vehicle. This is especially important when parallel parking is provided.
- Two accessible parking spaces shall be permitted to share a common access aisle, and placed on either side of the car or van parking space. Except where Van parking spaces are angled, then access aisles shall be located on the passenger side of the parking space.
- Access aisles shall adjoin an accessible route. Accessible routes must connect parking spaces to accessible entrances. Accessible routes shall consist of one or more of the following components: walking surfaces with a running slope not steeper than 1:20, ramps and/or curb ramps not steeper than 1:12 ( unless very specific exceptions are applicable ), etc. In any event, cross slopes shall not be steeper than 1:48. Ramp runs shall always have landings at top and bottom, and in most cases curb ramps will require the same. Handrails and guard rails must also be considered.
- Parking spaces that serve a particular building or facility shall be located on the shortest accessible route from parking to an entrance.

- Where parking serves more than one accessible entrance, parking spaces shall be dispersed and located on the shortest accessible route to the accessible entrances.
- In parking facilities that do not serve a particular building or facility, parking spaces shall be located on the shortest accessible route to an accessible pedestrian entrance of the parking facility.
- Parking spaces shall be permitted to be located in different parking facilities if substantially equivalent or greater accessibility is provided in terms of distance from an accessible entrance or entrances, parking fee, and user convenience. Factors that could affect "user convenience" include, but are not limited to, protection from the weather, security, lighting, and comparative maintenance of the alternative parking site.
- In residential parking facilities, the requirements differ, therefore please reference NAU adopted codes and ADA for these particular requirements.
- **Curb ramps.** (1) Newly constructed or altered streets, roads, and highways must contain curb ramps or other sloped areas at any intersection having curbs or other barriers to entry from a street level pedestrian walkway. (2) Newly constructed or altered street level pedestrian walkways must contain curb ramps or other sloped areas at intersections to streets, roads, or highways. [ 28 CFR 35.151(i) ]