MEMORANDUM State of Alaska

Department of Transportation & Public Facilities

Design and Engineering Services – Central Region

Highway Design

|  |  |  |  |
| --- | --- | --- | --- |
| **TO**: | File | **DATE**: | April 1, 2019 |
|  |  |  |  |
|  |  | **TELEPHONE NO**: | 269-XXXX |
|  |  |  |  |
| **FROM**: | NAME | **PROJECT NAME:** | [Name] |
|  | Project Engineer | **PROJECT NO.:** | XXXXXXXXX |
|  |  | **SUBJECT:** | **ADA Technical Infeasibility Design Waiver Memo** |

**Technical Infeasibility Definition**

The Americans with Disability Act (ADA) Standards (adopted by the U.S. Department of Justice [2010] and the U.S. Department of Transportation [2006]) contains a provision relating to “technical infeasibility”, applicable only in alterations to existing facilities. *Technical Infeasibility* means that, with respect to an alteration of an existing facility, the alteration has little likelihood of being accomplished in full conformance with the ADA Standards because existing physical or site constraints prohibit modification or addition of elements, spaces or features that are necessary to provide accessibility in strict compliance with the minimum ADA Standards requirements for new construction. The provision is as follows:

**Exception:** In alteration work, if compliance with the ADA is technically infeasible, the alteration shall provide accessibility to the maximum extent feasible. Any elements or features of the building or facility that are being altered and can be made accessible shall be made accessible within the scope of the alteration.

Central Region (CR) follows the DOT&PF’s adopted standards for ADA and incorporates the Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG) dated July 26, 2011 as a best use practice for those ADA features not covered by the ADA Standards. These standards are collectively known as the CR ADA Standards.

Example Text:

**Project Specific Technical Infeasibility Conditions**

The PROJECT TITLE project follows the CR ADA Standards to the maximum extent feasible. The items listed below are not in full compliance with the respective guidelines because it is Technically Infeasible to do so.

Running Slope

ADA Standards: 403.3 Slope. The *running slope* of walking surfaces shall not be steeper than 1:20.

Location(s): First Avenue pathway

* The existing grades (running slopes) on segments of First Avenue pathway are relatively steep (over 7%) which matches the adjacent roadway profile grade.
  + Flattening First Avenue, and thereby the pathway, so that a 5% (1:20) grade could be constructed to provide a maximum running slope less than 5% would require extensive utility relocations and significant impact to private property along the roadway corridor. Private property acquisition would be required in some locations.
  + Though the First Avenue pathway does not meet the ADA Standards for slope, it does meet the PROWAG allowance for grades. PROWAG Guidance R302.5 Grade states: Except as provided in R302.5.1, where pedestrian access routes are contained within a street or highway right-of-way, the grade of pedestrian access routes shall not exceed the general grade established for the adjacent street or highway.

As stated above, the pathway matches the First Avenue profile grade.

Cross Slope

ADA Standards: 403.3 Slope. The *cross slope* of walking surfaces shall not be steeper than 1:48.

Location(s): A Street intersection

* A Street’s intersection will have to tie into First Avenue’s profile grade. The tie in is such that a 2% (1:48) cross slope through the pedestrian crossing is not achievable unless First Avenue is constructed with a maximum 5% grade thru the intersection. As stated above, the existing grade of First Avenue is relative steep (over 7%)

A 5% intersection grade is not feasible as described above.

Mitigation Measures Considered for Running and Cross Slope Issues

* As discussed above, decreasing the grade of First Avenue is not a feasible alternative due to the high utility and private property impacts.
* Alternate measures for providing pedestrian crossings in accordance with the ADA Standards were analyzed and it was determined that the only constructible measure would be to relocate the pedestrian crossing to the end of the curb return on the side street, 20-30 feet back from the edge of First Avenue. This location is not considered to be a safe crossing for pedestrians because:
  + It requires pedestrians cross at a non-standard location and may be difficult for visually impaired individuals to navigate
  + May be out of the line of sight of vehicles making right turns off of First Avenue and onto the side street which may increase the number of crashes between pedestrians and vehicles
  + The alternate location requires pedestrians cross behind and/or between stopped vehicles which could restrict the width of the crossing, trapping pedestrians in the roadway and hide them from vehicles traveling on the side street

Curb Ramp

ADA Standards: 406.4 Landings. Landings shall be provided at the tops of curb ramps. The landing clear length shall be 36 inches (915 mm) minimum. The landing clear width shall be at least as wide as the curb ramp excluding flared sides, leading to the landing.

Location(s): B Street intersection

* The curb ramp in the northwest corner of the intersection of First Avenue and B Street was found to have many non-compliant features including an inadequate landing length. The existing landing is 24” whereas the guidelines state that this should be 36”.
  + To provide a landing length of 36 inches, the curb ramp landing would have to extend another 1’ that would result in a property acquisition. This property has a building that abuts the ROW and leads directly into the entrance of the building. Acquiring any portion of the property to extend the landing would result in a full acquisition of a business.

Mitigation Measures Considered for Curb Ramp Issues

* The curb ramp at the corner of First Avenue and B Street will be improved to standards except for the landing length. This will improve the overall accessibility of the ramp but not bring the ramp into full compliance with the standards. However, because of the building location and the large ROW impact to bring it into full compliance, it was deemed infeasible for the project to upgrade the ramp to full compliance.

We acknowledge that responsibility for approving an “ADA Technical Infeasibility Design Waiver” rests with the DOT&PF Central Region Preconstruction Engineer.

Proposed by: Date:

Project Engineer (Consultant or Staff)

Recommended by: Date:

Design Project Manager

Concurred by: Date:

Chief, Highway Design

Approved by: Date:

Central Region Preconstruction Engineer

cc: John Linnell, P.E., Preconstruction Engineer

Jim Amundsen, P.E., Chief, Highway Design

Project Manager, P.E., Project Manager, Highway Design

Rashaud Joseph, Statewide Title VI Specialist & ADA Compliance Officer