CITY OF ARVADA

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Architectural and Transportation Barriers Compliance Board:

The City of Arvada has reviewed the proposed guidelines offered by the Architectural and Transportation Barriers Compliance Board (Access Board) for the Design of Accessible Rights-of-Way. After careful review and discussion by City staff we offer the following comments and suggestions:

1. *Section 1102.2.2 Alterations*. We look forward to the future release of guidelines for alteration projects and would encourage the Access Board to carefully consider its impacts to items that many municipalities consider routine maintenance. An example of this would be in the replacement of short stretches of existing sidewalk (i.e. 5-15 feet) that are not currently 48 inches wide. Given existing constraints (such as right-of-way limits) it may be best to continue with existing 36 inch wide sidewalks, but keep them in good repair through replacement of cracked, broken, and/or raised sections of the pedestrian route.

2. *Section 1102.3 Alternate Circulation Path.* The suggested requirement that alternate circulation paths must be parallel and on the same side of the street as the disrupted access route will be infeasible for many projects that are under construction or maintenance. In many cases adequate right-of-way is not available to build such a path, and in these cases obtaining additional right-of-way would be cost prohibitive, disruptive to private property owners and users, and impractical. We would suggest that instead the requirement include provisions that safe and accessible pedestrian crossings be required for access to alternate paths, and that these paths may be located on either side of the street as per the requirements of the MUTCD. The impacts to projects that require only brief (up to one day) impacts to the pedestrian route also need to be considered in these requirements.

3. *Section 1104.3.2 Detectable Warnings.* The City considers these to be a major concern for maintenance and especially snow and ice removal. These devices will

be impossible to completely remove snow and ice from and will create additional safety issues with a slippery surface for all users of the pedestrian path. If it is not possible to remove these requirement then we would urge the Access Board to consider the suggestion that detectable warnings should not be required on curb ramps and blended transitions that are detectable by a slope of at least 1:15. This would help to minimize the concerns that we have by limiting their use and overall numbers.

4. *Section 1104.3.4 and 1104.3.5 Grade Breaks and Changes in Level*. Grade breaks or vertical changes between ramps and the gutter / flowline assist in the drainage of storm water and the prevention of ice build up on ramps. These breaks also help vehicles to better determine the traveled way versus ramps and pedestrian routes and helps prevent vehicles from traveling over these areas when making turns at intersections. The strict language as proposed does not take these situations into consideration and we believe this will have an adverse impact on pedestrians of all abilities.

5. *Section 1104.3.6 Counter Slopes*. Current industry practice and drainage design assumes a counter slope on gutters to be 1:12. The requirement of 1:20 as a maximum will create drainage problems by reducing the capacity of the gutter. Since the 1:12 is a current standard and does not appear to present an undue burden on pedestrians we would recommend that this section be modified to read as such.

6. *Section 1105.2.1 Crosswalk Width*. The minimum width of cross walks should be as stated in the MUTCD (72 inches) except as local conditions may warrant. The universal requirement for 96 inches is too large for the relative size of many intersections, as it will require vehicles to stop at a distance farther from the intersection. This will cause vehicles to commonly encroach into crosswalks when stopping at intersections so that drivers will have adequate sight distance at the intersection. Also, in many areas the number of pedestrians using a crosswalk at one time is small and the need for people of any ability to pass each other is minimal, thus a universal requirement of 96 inches is not needed. This would also equate to an unfounded mandate that would increase the cost of crosswalks by nearly 33% for the additional material, time and maintenance for the additional width. This additional cost will cause municipalities to re-consider the placement of marked crosswalks and reduce the number of them.

7. *Section 1105.2.2 Crosswalk Cross Slope.* The proposal of limiting crosswalk cross slope to 1:48 (2%) will be difficult if not impossible to meet at many locations, particularly those regions like Colorado that present many topographic challenges (i.e. hills and mountains). The current industry standard for intersection is up to 6%, which is necessary in area with steep grades. In order to achieve the 2% it would be necessary to create a steeper grade leading up to the intersection, and would thus also increase the grade of the sidewalks adjoining the

street leading to the intersection, or may require the acquisition and expense of additional right-of-way and disruption to private property users.

8. *Section 1105.3 Pedestrian Signal Phase Timing*. It is our belief that this is an issue to be addressed at specific locations and signals and should not be a uniform requirement. The increase in the time required by the change from current practice of 4 fps to 3 fps will cause many issues with the progression of traffic signals and will create additional delay to the traveling public, the consumption of additional fuel, and the creating of additional air pollution from this increased delay. The additional pedestrian crossing time is not needed in most cases and will cause additional red signal time that will frustrate motorists and will led to an increase in the occurrence of red light running, thus endangering more pedestrians and motorists. This issue should be addressed as needed and requested in specific areas and/or communities.

9. *Section 1105.5 Pedestrian Overpass and Underpass*. The guidelines requirement of an elevator for rises over 60 inches is unrealistic and causes other safety concerns with the use of unsupervised elevators that may be placed in remote or unmonitored locations. Many times we grade separate pedestrian paths from roadways to increase the safety for the pedestrians by eliminating the need to cross the path of vehicles. This requirement would make the building of these separations considerably more expensive and would likely led to many of them never being constructed. The on-going maintenance of elevators placed in weather and environmental elements and in remote locations and along busy corridors will create a large burden for municipalities. We are also concerned about the safety of people using elevators in unmonitored areas where help would not be readily available in the event of mechanical malfunction or in the event of criminal action. We recommend that this requirement be removed and other options be considered.

10. *Section 1105.6 Roundabouts*. The requirement to install traffic signals on each leg of a roundabout eliminates all advantages to this type of intersection. Placement of traffic signals at each leg would be in violation of the requirements for signals in the MUTCD and will generate confusion for drivers as to what actions they should take at a roundabout. The confusion that would be created by signals placed at roundabouts would cause safety concerns for all users. Recent studies have indicated that roundabouts provide an overall safer intersection for all users, and when crashes occur they are usually at lower speeds resulting in less serious injuries and damages. We recommend that this requirement be removed and additional options researched and considered.

11. *Section 1105.7 Turn Lanes at Intersections*. The requirement that free right of left turn lanes be signalized will add confusion to the operations of these lanes at a signalized intersection, including confusion on who has the right of way for turns versus the through movements given the different signal indications that will be present. The additional delay the elimination of these lanes will cause will

generate additional air pollution, burn more fuels, and decrease the operating efficiency of the road network. This would also defeat the purpose of these improvements by eliminating much of the additional capacity this type of lane gives an intersection. The problems and costs generated by this requirement will probably led to the elimination of the use of these types of turn lanes and will thus impeded a high number of users. We believe that it is possible for pedestrians of all abilities to safely cross at these devices when they are properly engineered. This requirement maybe acceptable at areas of high pedestrian volume but should not be a blanket requirement.

12. *Section 1106.2 Pedestrian Signal Devices*. The requirement of audible and vibrotactile indications of the walk interval should not be required at all intersections. We currently install audible indications of the walk interval when requested and have had complaints from other disabled users that this is not necessary and causes them more difficulty. The volume requirement is also difficult, as with current equipment the volume would have to be set for the noisiest time of the day. Even at current settings we receive complaints from people who live or work near these signals about the noise. Increasing the volume is likely to increase the complaints and present new problems for all involved, including visually impaired individuals who have complained that these devices make it more difficult for them to discern the sounds of vehicular traffic. The need and use of these devices should be a location specific determination and upon request of the users.

13. *Section 1106.3 Pedestrian Pushbuttons*. The requirement of locator tones for pedestrian pushbuttons will led to additional noise pollution and confusion for pedestrians given the number of different audible noises mixing with and changing the background sound. This tone will also mix with the audible walk indicator for other phases of the signal and will create a mixture of different sounds. The need and use of these devices should be a location specific determination and upon request of users of the facility.

14. *Section 1102.4 On-Street Parking*. Since block lengths can vary greatly depending on the layout of the roadway network this requirement is extremely problematic and may cause more parking areas to be designated than intended. We suggest that this requirement be eliminated and that guidelines could be offered for the use of on-street parking and the creation of accessible spaces. The guidelines should take into consideration the type of area and the size of blocks that are present.

15. *Section 1109.2 Parallel Parking Spaces*. The requirement for a 60 inch wide access aisle will be a problem in winter conditions. These areas will not be accessible to plows and thus will not be cleared of snow and ice. Drainage around this spots will also be difficult leading to accumulations of water, debris and ice. Since most van and car lifts do not need an area that is flush with the street this requirement may not be necessary. Instead we would suggest that the requirement

be that the sidewalk be of adequate width to allow for the lift access. It is also unlikely that a driver will be able to pull all the way into the access aisle since it would be a difficult maneuver for anybody parallel parking.

As the stewards of public money (taxes) we are required to consider the costs and benefits of what we do. Many of the items discussed in this letter would cause additional cost burdens to the taxpayers, and in some instances would create harm or lessen the benefits to the general public of facilities in the right-of-way. These issues must be considered in anything that we endeavor to complete and should be considered in any final rules that are made. Action on these guidelines and future proposed rules should be delayed and additional input from all members of our society and communities should be considered and used in crafting the final requirements.

The City also voices its support and strong encouragement for the Access Board to consider the comments and recommendations adopted on October 14, 2002 by the American Association of State Highway and Transportation Officials (AASHTO). Their review and comments provide a good summary of concerns from officials throughout the transportation profession.

We appreciate the opportunity to offer these comments and trust that they will be of use in drafting the final guidelines and ultimately in any rulemaking that may occur on this issue. If you have additional questions please feel free to contact the city Public Works Department at 720-898-7600.

Regards,

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City Manager

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