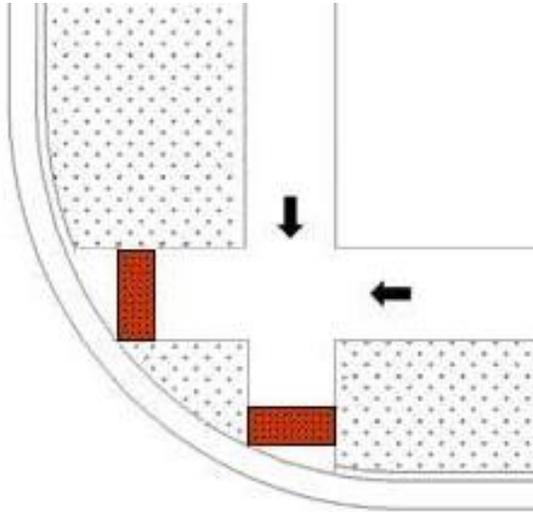


Examples of common scenarios:



Perpendicular ramp with “bump” between ramps

The layout shown above is typical where wider parking exists. Because the curb drop is not continuous through the “bump” in the middle of the ramp, there will be two locations for placement. In both locations, the detectable warning panels must extend across the entire length of the curb drop and maintain a minimum of 2 feet of depth. Also note that the maximum distance between the detectable warning panels and the back of curb line must be less than 5 feet.

Take care to ensure that the entire drop is covered. This scenario seems straight forward, however if the bottom of the curb drop is wider than 4 feet, more than one 4 foot wide detectable warning panel may be required.



Public Works ADA Detectable Warning Panels Layout Guide

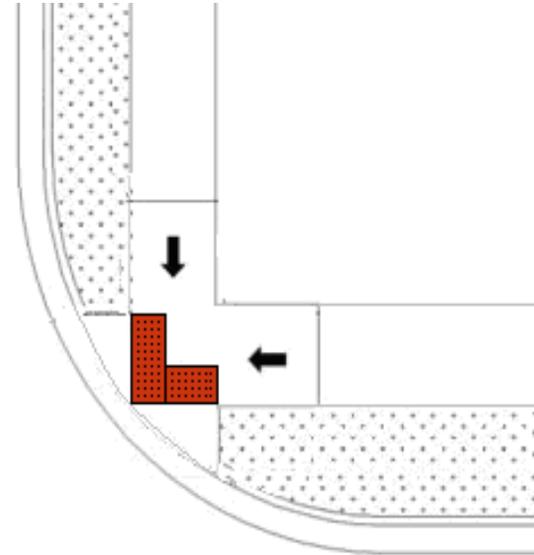


February 2016

Nothing in this guide should be taken to override current City of Ames Specifications, Supplemental Specifications, SUDAS, Iowa DOT Specifications, State Regulations, or Federal Regulations. This guide is simply a tool to aid in the proper placement of detectable warning panels.

- Detectable Warning Panels **must** extend for the **full width** of the curb drop (no gaps between panels).
- Detectable Warning Panels **must be** a minimum 2' wide when measured along the direction of travel.
- Detectable Warning Panel orientation **does not necessarily** indicate direction of travel or crossing. **When possible** orientate the Detectable Warning Panels along the intended path of travel.
- Detectable Warning Panels **may be** in the turning space if necessary to obtain compliance, however turning space slope requirements still apply.
- One corner of the Detectable Warning Panel **must be** touching the back of curb.
- No portion of the Detectable Warning Panel **shall be** more than 5' from the back of curb.
- Detectable Warning Panels **may be** placed side by side and considered as a continuous unit if there are no gaps between the Detectable Warning Panels.

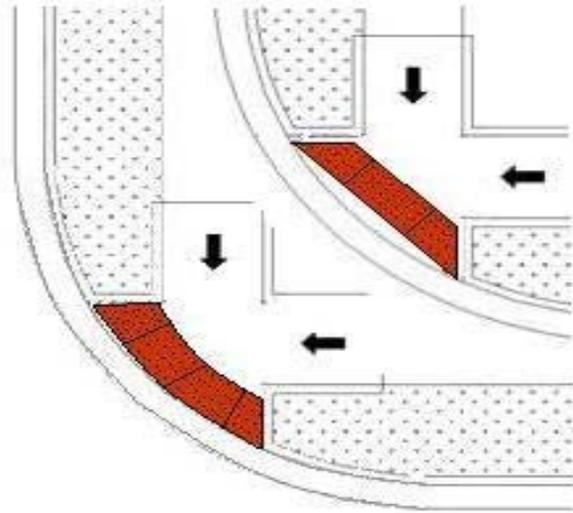
Examples of common scenarios:



Narrow parking and sidewalk near the back of curb line

In the layout above, the turning space typically is pushed towards the curb line. The detectable warning panels as indicated above are considered one continuous unit. As long as one corner of the unit is touching the back of the curb, and the distance from the edge of the detectable warning panel to the back of the curb does not exceed 5 feet, and there is no gap between individual detectable warning panel units the dome installation is correct.

Examples of common scenarios:



Perpendicular ramp with no “bump” between ramps

The two layouts shown above are both correct. In this scenario, the two ramps are not separated by a concrete bump or island. Thus the detectable warning panels must extend across the entire length of the curb drop.

In the top-right figure the detectable warning panels cut diagonally across the ramp opening from edge of curb drop to edge of curb drop and touch the back of curb at each end only. The full center panel touches each cut panel with no gaps, thus making it one continuous unit. The maximum distance between

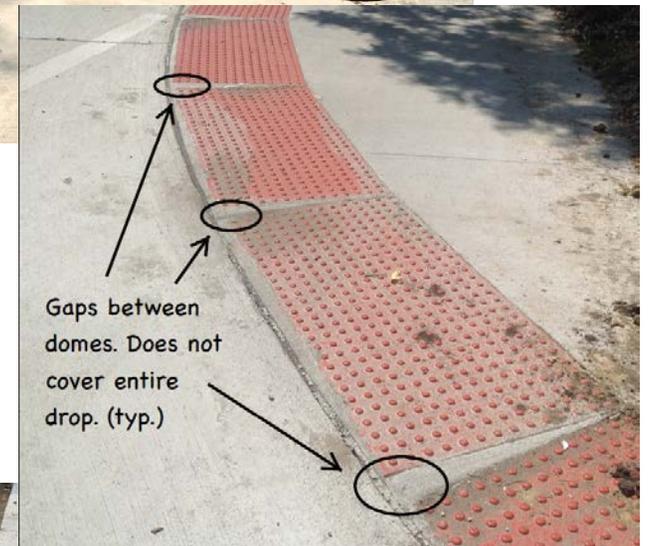
the detectable warning panels and the back of curb line must be less than 5 feet.

The bottom-left figure indicates the detectable warning panels are wrapped, touching the back of curb with each panel. Here the panels must be cut to ensure no gaps are present between individual panels and extend across the entire length of the curb drop maintaining a minimum of 2 feet of depth.

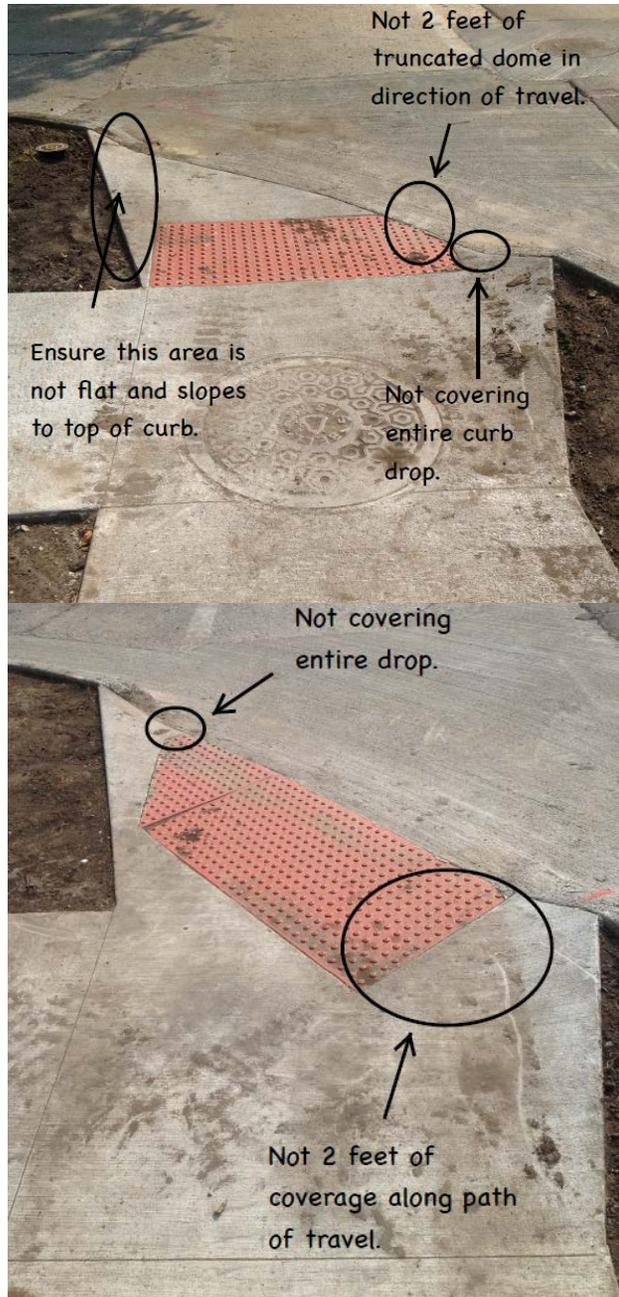
Other Tips:

- **Beware of property pins behind sidewalks. Per SUDAS Spec 1070, 2.09, all property pins or markers are to be protected. Any damage may require reestablishment at the contractor’s expense.**
- **Retaining walls may be necessary along private property if the grade change from existing conditions is too great. Consult with the design engineer prior to any wall installation.**
- **Utilities in the sidewalk or ramp (water valve, handhold, etc) may need to be adjusted to appropriate grades to meet compliance.**

Examples of incorrect installation:



Examples of incorrect installation (con't)



Specification Resources:

City of Ames Supplemental Specifications:

<http://www.cityofames.org/home/showdocument?id=24668>

Iowa SUDAS Specifications:

<http://www.iowasudas.org/manuals/manual.cfm?manual=specifications>

Iowa SUDAS Sidewalk Design Specifications – Chapter 12:

<http://www.iowasudas.org/manuals/manual.cfm?manual=design>

Iowa DOT Specifications:

<http://www.iowadot.gov/erl/index.html>

PROWAG (Public Right of Way Accessibility Guidelines) adopted by Iowa SUDAS.

Contact City of Ames Civil Engineer II, Eric Cowles, at 515-239-5277 with questions regarding this material.