Circular Intersections

Traffic Circle
Traffic circles are a neighborhood traffic calming device. The outside curbs and pedestrian ramps at the intersection are very similar to a typical 4-way intersection with the addition of a center island meant to slow down traffic going through, right, or left. Because large trucks, emergency vehicles, etc. may need to turn left in front of the circle due to space limitations, the vegetation within the circle needs to be maintained for sight distance across it. Approaching vehicles must yield to traffic already within the traffic circle.

Roundabout
Modern roundabouts range in size from small single-lane roundabouts to multi-lane roundabouts depending on traffic volumes and patterns. They include an island with a truck apron so that large vehicles can make turns around it. There is typically something placed in the center island so that you can’t see through the intersection, encouraging drivers to really focus on the traffic coming at them in the circle from the left. Raised splitter islands are used on the approaches to the roundabout to get vehicles moving in the correct angles. Pedestrian crossings are pulled back from the circle and provided with a crossing through the splitter islands so that they only need to cross one direction of traffic at a time. Approaching vehicles must yield to traffic already within the roundabout.

Mini Roundabout
Mini roundabouts are a newer concept but work well in certain situations, usually in a location where there is limited right of way and a 4-way STOP is causing long backups during rush hours. The components are very similar to the modern roundabout with the exception of the needing the center island and splitter islands to be traversable. In the case of the mini-roundabout, similar to the traffic circle, large trucks can’t make it around the circle, so they need to travel over the center median to make a left turn. Approaching vehicles must yield to traffic already within the mini roundabout.

If you have questions on Circular Intersections in Des Moines, contact the Traffic & Transportation Division at 283-4973