



## 1 - Work Zone Traffic Control

During construction, traffic control by police and/or construction personnel (i.e. flagging) may be needed. Space channelizing devices so that the motorist, bicyclist, and pedestrian have a clear indication of the required travel path and turning radii. This may require closer spacing than the MUTCD would otherwise specify. [SDD15D21](#) and [SDD15D31](#) show example device spacing at turning radii and curve transitions. Evaluate traffic control needs for each roundabout installation on a site-specific basis until the Department develops the expertise in roundabout construction to provide guidance.

### 1.1 - Pavement Markings

Because of the confusion of a work area and the change in traffic patterns, pavement markings must clearly show the intended travel path. Misleading pavement markings shall be removed or covered in accordance with the Wisconsin Standard Specifications. As new pavement courses are placed consider specifying in the plans that splitter island delineation and broken white lines on the outside edge of the circulatory roadway be marked the same day the pavement course is placed according to Wisconsin Standard Specifications. When pavement markings are not practical, or misleading markings cannot be adequately deactivated, use closely spaced channelizing devices to define both edges of the travel path.

### 1.2 - Signing

Construction signing for a roundabout should conform to the MUTCD and the Standard Detail Drawings. Provide all necessary signing for the efficient movement of traffic through the work area, including pre-construction signing advising the public of the planned construction, and any regulatory and warning signs necessary for the movement of traffic outside of the immediate work area. The permanent roundabout signing may be installed, where practicable, during the first construction stage so that it is available when the roundabout is operable, but these signs must be covered until they are needed. Consider using portable changeable message signs when traffic patterns change.

### 1.3 - Lighting

Illuminate the temporary construction area through the intersection where possible. Consider adjacent lighting conditions, traffic volumes during the evening when the roundabout is illuminated, and mixture of use such as pedestrians and trucks.

### 1.4 - Construction Staging

The Transportation Management Plan, FDM 11-50-5, will consider detouring traffic away from the intersection during construction of the project. A detour will significantly reduce the construction time and cost and will increase the safety of the construction personnel.

It is desirable to complete construction as soon as possible to minimize the time the public is faced with an unfinished layout or where the traffic priority may not be obvious. If possible, all work, including the installation of splitter islands and striping, should be done before the roundabout is open to traffic.

If it is not possible to detour all approaches, detour as many approaches as possible. Carefully consider construction staging during the design of the roundabout if it must be built under traffic.

Prior to the work that would change the traffic patterns to that of a roundabout, certain peripheral items may be completed including permanent signing (covered), lighting, and some pavement markings that reflect actual conditions. These items, if installed prior to the construction of the central island and splitter islands, would expedite the opening of the roundabout and provide additional safety during construction.

As is the case with any construction project, install appropriate traffic control devices as detailed in the project plans and the Standard Specifications. This traffic control shall remain in place as long as it applies and be removed when it no longer applies to the condition.

Stage the construction as follows unless a different staging plan is approved during design:

- Install and cover proposed signing.
- Construct outside widening if applicable.
- Reconstruct approaches if applicable.
- Construct splitter islands and delineate the central island. Uncover the signs at this point and operate the intersection as a roundabout.
- Finish construction of the central island

If it is necessary to leave a roundabout in an uncompleted state overnight, construct the splitter islands before the central island. Any portion of the roundabout that is not completed must be marked, delineated, and signed in such a way as to clearly outline the intended travel path. Remove or mask pavement markings that do not conform to the intended travel path. Consider adding temporary lighting if the roundabout will be used by traffic in an unfinished state overnight, or install the permanent lighting that is in operational condition.

### **1.5 - Public Education**

The Transportation Management Plan, FDM 11-50-5, will advise the public whenever there is a change in traffic patterns. Education and driver awareness campaigns are especially important for a roundabout because a roundabout will be new to most motorists. The Regional Communication Manager coordination through both design and construction is typically vital to the success of a project. Provide brochures on how to drive, walk and bicycle through a roundabout. The following are some specific suggestions to help alleviate initial driver confusion.

- Hold public information meetings prior to construction.
- Prepare news releases/handouts detailing what the motorist can expect before, during, and after construction.
- Install portable changeable message signs or fixed message during construction and before construction begins. Advise drivers of anticipated changes in traffic patterns for about one week prior to the implementation of the new pattern.
- Use news media (and Highway Advisory Radio, if available) to broadcast current status of traffic patterns and changes during construction. Also, if appropriate, establish a web site, to post up-to-date traffic and construction information.