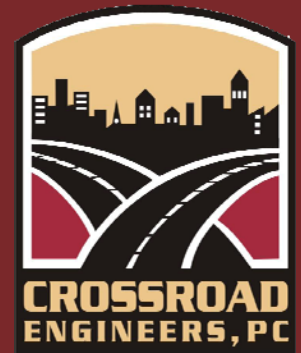


Apple and McKenzie Roundabout

Greenfield, Indiana



Apple and McKenzie Roundabout

Scope:

Reconstruct all way stop intersection as single lane modern roundabout.

Services Provided:

Survey
Traffic Capacity Analysis
Roadway Design
Right of Way Engineering

Client:

City of Greenfield

Contact:

Mike Fruth P.E., R.L.S.
City Engineer
(317)477-4320

Constructed:

2010

Construction Cost:

\$390,000

Project Highlights

- This junction of two primary thoroughfares in the northeast portion of the City of Greenfield presented delays to travelers but officials wanted the safest alternative to replace the existing all-way stop condition. Pleased with the performance record of their first roundabout built several years earlier, they decided this was an ideal location for the city's second circular intersection.
- Approaches and splitter islands were designed to provide the driver with a clearly visible obstacle in order to influence low speed not only at the roundabout entrances but also at the pedestrian crossings.
- Existing sidewalks were replaced and extended to provide pedestrian connectivity in all directions. Splitter island refuge areas were designed larger than minimum for increased safety and comfort of pedestrians walking together, with strollers, or with bicycles.
- The roundabout's 124' diameter and pavement widths allow the WB-50 tractor trailer design vehicle to negotiate the intersection from and to all directions without encroaching adjacent curbs. On the rare occasion that the larger interstate size truck should use the intersection, splitter island curbs are mountable and interiors paved to provide the driver the additional maneuverability he may need without the risk of damaging the vertical curbing or the signs, light poles, and sidewalks that lie beyond.
- Right of way was required in all four quadrants of the intersection, however parcel sizes were minimized with careful design of geometrics and grading. The result is a project that fits the surroundings so well, it looks as though it was built before the neighboring residential developments.