



Client:

Village of Oakwood and
Village of Glenwillow

Client Contact :

Mayor Gary V. Gottschalk
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Oakwood, Ohio 44146
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Location:

Villages of Oakwood and Glenwillow, Ohio

Project Construction Budget:

\$540,000

Final Project Construction Cost:

\$607,000

Start Date:

August, 2013

Completion Date:

December, 2013



Above: Intersection prior to improvements

Below: Roundabout Alignment



Richmond-Pettibone Roundabout

Edward Hren, PE – Oakwood Village Engineer
Michael Henry, PE – Glenwillow Village Engineer
Bret Keller, PE – Project Engineer

This was a joint project between Oakwood and Glenwillow with Oakwood acting as the lead agent. The project provided for the design and construction of a modern “roundabout” at the intersection of Richmond Road and Pettibone Road. The improvement replaced an existing four way stop which is was also supplemented by a patrol officer who directs traffic during weekday peak traffic hours.

This project was undertaken in response to a 2006 corridor traffic study. This study assessed the existing and future traffic conditions of a 3.8 mile long portion of Richmond Road that stretches from Aurora Road in the north to the intersection with Twinsburg and Summit County at Broadway Avenue to the south. The report identified the Richmond Road and Pettibone Road intersection as arguably the most substandard intersection within the corridor. It serves almost 8,500 vehicles per day and operated in a failed condition, LOS of E or F, during the AM and PM peak hours. The report also identified the intersection as having the highest accident rate along the corridor.

The Richmond/Pettibone intersection provides direct access to the new 212 acre industrial park, Diamond Parkway, in Glenwillow. These developments have created hundreds of new jobs with employees that likely utilize the Richmond – Pettibone intersection. Backups on Pettibone Road, travelling westbound, of up to 40-50 vehicles at this intersection are not uncommon during peak hours.

After the installation of the roundabout, the LOS was brought up to a “C” or “D” in the worst case scenarios. This meant reduced traffic congestion, a reduction in the number and severity of accidents, eliminating the need for an officer to direct traffic, and a decrease in response times for the Oakwood Fire Department calls into Glenwillow and the entire Richmond corridor.

Project responsibilities included existing conditions survey, improvement plans and specifications, coordination of utility relocations, project bidding and award recommendation, coordination of traffic maintenance, construction administration including coordination with ongoing projects in the area, processing of pay applications, and as-built measurements of the finished product.

The project was developed and scheduled in a manner that allowed CVE to prepare successful grant applications and secure the majority of funding for the project from the Cuyahoga County Department of Development Block Grant in the amount of \$150,000 and Ohio Public Works Commission in the amount of \$449,999 for design, construction and construction administration costs.