

PROJECT INFORMATION



CARLTON STREET IMPROVEMENTS PROJECT

March, 2014

This project involves the design and construction of a single-lane roundabout at the intersection of Reservoir Street and Carlton Street located within the City of Harrisonburg, VA. This project will include new roadway, ADA curb ramps, pedestrian crossings, and sidewalk. Traffic at this intersection consists primarily of commuters and residents, as well as vehicular and pedestrian traffic accessing Spotswood Elementary School, nearby businesses, and the adjoining Kiwanis Recreation Park. The purpose of the project is to improve traffic capacity, traffic safety, and pedestrian safety at the intersection by replacing the existing stop-controlled intersection with a new single-lane roundabout.

The proposed roundabout will offer improved safety over the existing at-grade intersection because of fewer conflict points and reduced speeds. It will also provide increased traffic capacity and reduce congestion at this intersection, while improving pedestrian safety for both local residents and those accessing Spotswood Elementary School.

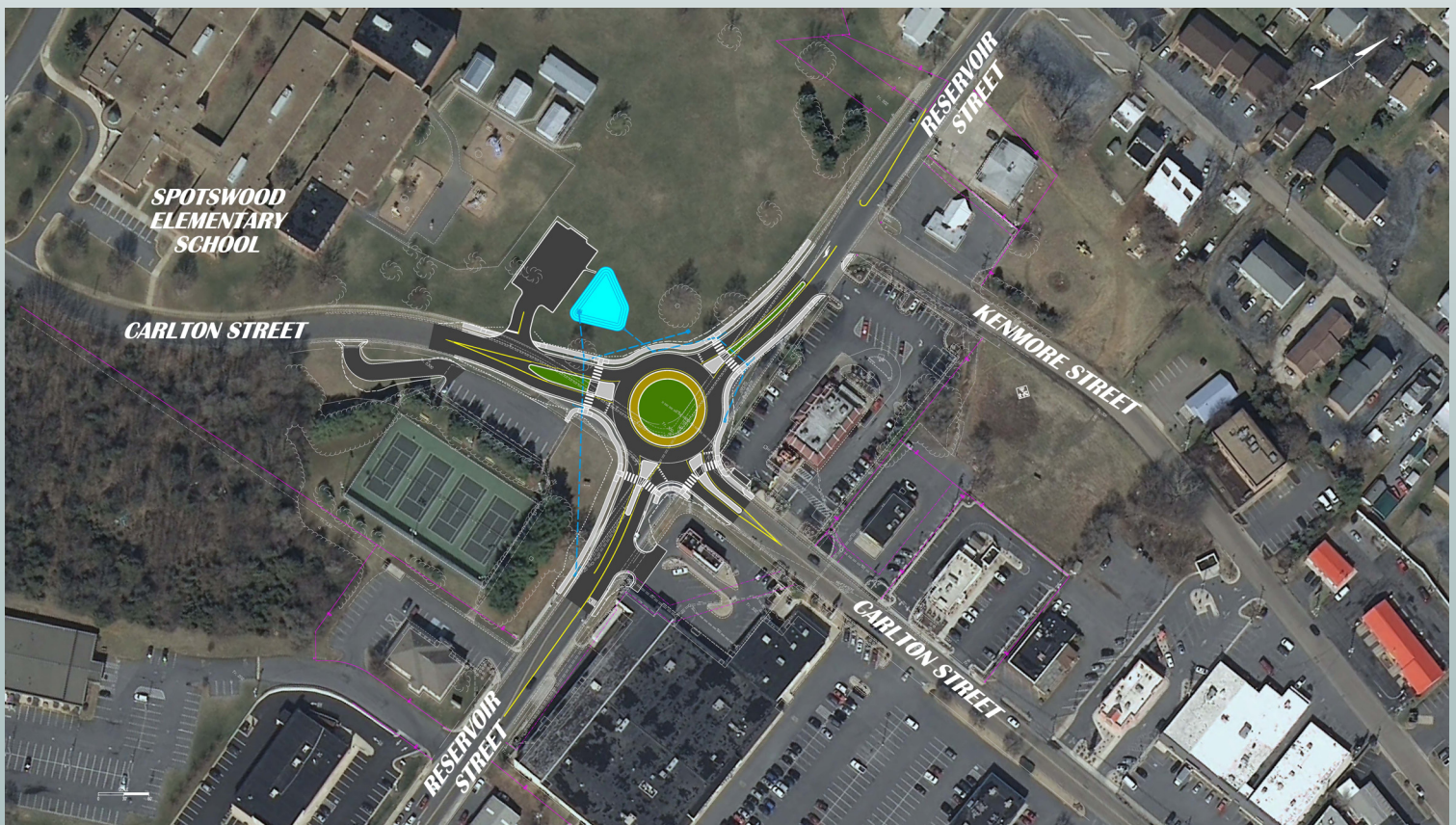
Right of Way Requirements:

Most of the proposed improvements are located within City of Harrisonburg existing right of way or city owned properties, though some of the proposed improvements will require acquisition of additional right of way. There are no planned displacements of families, businesses, or organizations.

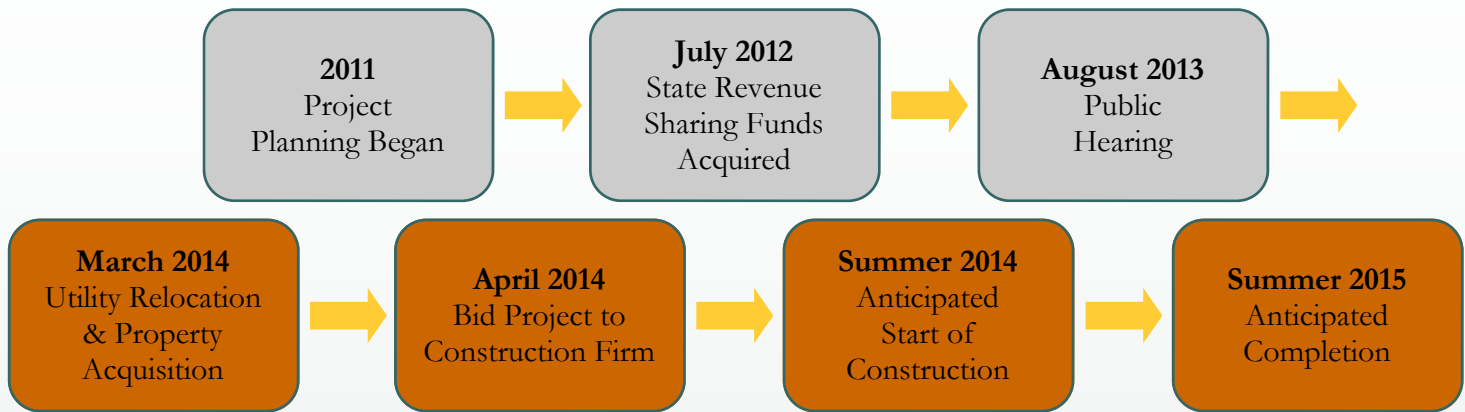
Estimated Cost:

- Preliminary Engineering: \$233,000
- Right of Way / Utilities: \$50,000
- Construction: \$1,083,000
- Total: \$1,366,000

Preliminary Design Rendering

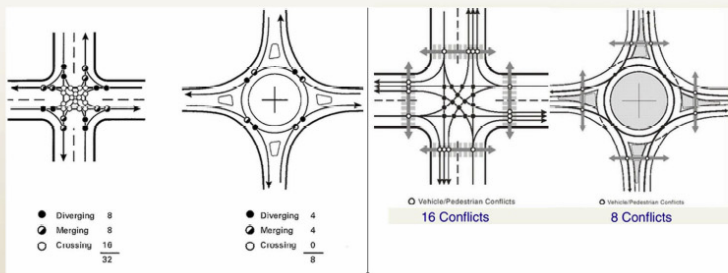


Anticipated Project Timeline



Roundabout Facts

Roundabouts have fewer conflict points than intersections, reducing the potential for vehicle-vehicle or vehicle-pedestrian accidents.



ADVANTAGES OF ROUNDABOUTS

- **Traffic Safety** - reduce total crashes by 35% and injury crashes by 76%
- **Pedestrian Safety** - reduced vehicle speeds and splitter islands provide for easier crossing
- **Traffic Calming** - all vehicles must slow to same uniform speed
- **Operational Performance** - often lower overall delay than traffic signals
- **Cost** - operating/maintenance costs are less than for a traffic signal
- **Aesthetics** - offers opportunity for landscaping and art displays

DISADVANTAGES OF ROUNDABOUTS

- **Footprint** - may have bigger footprint at the intersection quadrants (though signals may require greater width on the approaches due to the need for left and right turn lanes)
- **Visually Impaired Pedestrians** - can have difficulty navigating roundabouts



Typical Roundabout Layout

Studies have shown that public acceptance of roundabouts have grown significantly after roundabouts have been constructed in other communities.

ATTITUDE	PERCENT	
	Before	After
Negative/Very Negative	55%	28%
Positive/Very Positive	31%	63%

Additional Information

Project updates will continue to be provided on the project website at:
<http://www.harrisonburgva.gov/carlton-street>

Project information shared here is available for review at the Public Works Department:
 320 E. Mosby Road; Harrisonburg, VA 22801, telephone (540) 434-5928

