

TECHNICAL MEMORANDUM	
Date:	October 13, 2013
To:	Ms. Angelica Gutierrez, Project Manager Department of Public Works and Parks City of University City, Missouri
From:	Mr. Srinivas Yanamanamanda, P.E., PTOE, PTP
CBB Job Number	2013-050 Addendum # 1
Project:	Delmar Boulevard Mock Roundabout Study University City, Missouri

As requested, Crawford Bunte Brammeier (CBB) has completed additional evaluation of the recently installed mock (temporary) roundabout at Trinity Avenue on Delmar Boulevard. This additional evaluation is to observe and document the operations of the roundabout with the recent closure of the one-way legs of Trinity Avenue immediately west of the roundabout. This technical memorandum summarizes our findings.

This additional evaluation of the roundabout's performance is based on field observations during two evening peak periods in October of 2013.

The following is a summary of our observations and findings:

- Overall traffic operations at the roundabout based on our observations during October 2013 are very similar to the operations of the roundabout during our August 2013 observations. It is our determination that the closure of the two one-way legs of Trinity Avenue west of the roundabout has negligible impact on the overall traffic operations of the roundabout.
- We did observe sporadic, yet quickly clearing, queuing on all approaches of the roundabout. However, no measurable increase in queuing was noticed compared to our August 2013 observations. In fact, our observations show improvement in driving behavior at the roundabout.
- Our observations also indicate awkward parking maneuvers in and out of the parking spaces adjacent to the landscaped areas.
- A potential concern with the closed leg of Trinity Avenue north of Delmar Boulevard is the limited and obstructed sight distance while looking into the roundabout resulting from the landscape island. The potential issues with the closed leg south of Delmar Boulevard include the poorly defined tie-in point of this leg with the south approach of the roundabout and likely driver confusion along eastbound Delmar Boulevard and turbulence associated with slowing traffic turning into this leg of Trinity Avenue upstream of the roundabout.



- As part of the modified conceptual roundabout layout completed by us earlier, we have considered striping the outside through lane along eastbound Delmar Boulevard a right-only lane into the currently closed leg of Trinity Avenue. However, that option was not included in the layout because of the concerns associated with trapping through vehicles in this lane and the awkward island that would be needed to force the lane as right-turn only.

In summary, even though we recognize the short-term inconvenience created by the closure of the one-way streets of Trinity Avenue, it is our opinion that the closure creates an overall safe and efficient condition for the roundabout operation. Should there be any questions or comments regarding this technical memorandum, please contact CBB at syanamanamanda@cbbtraffic.com or at 314-878-6644.