



MEMORANDUM

Date: December 8, 2014
To: File
CC: Felix Obregon, P.E., Johanna Quinn, P.E., Ashley Landis, P.E., Veronica Wallace, P.E., Howard McCulloch, P.E.
From: Alan Morrison, P.E.
RE: Public Meeting Minutes from December 4, 2014

The purpose of this memorandum is to document the discussion of the meeting held on December 4, 2014 regarding the proposed Beam Road and Shopton Road Roundabout.

The meeting was held at the Police & Fire Training Academy at 6:00 PM and attended by City Staff, and concerned citizens. Howard McCulloch, from NE Roundabouts, was also present and provided his expertise in roundabout design.

The meeting was opened with introductions from Alan Morrison, Design Project Manager, and followed by a brief power point presentation. The presentation covered the following topics:

- Existing Conditions
- Project Need
- Why Roundabout?
- Concept Plan
- Questions/Answer
- Break-out Session

Felix Obregon, Transportation Project Manager from CDOT, began the presentation with background information on the existing conditions including traffic counts, crash history and landuse. Mr. Obregon described the current intersection capacity as severely congested during the morning and afternoon peak hours. This congestion is resulting in long queues for vehicles and delays. Crash history collected only indicated 8 incidents over the last four years. Although this is not significant from the number of crashes, the most common type was an angle crash. Mr. Obregon expressed concern for pedestrians and cyclist to maneuver through the intersection with the four-way stop control stating the crossings are long. During the peak times of traffic, drivers may become more aggressive in making movements putting pedestrians and cyclists at greater risk for conflict with vehicles. Mr. Obregon continued with a discussion of the project need based on accommodating traffic volumes, pedestrians, and cyclists as well as being proactive to improve safety.

Howard McCulloch, consultant with NE Roundabout, was introduced to discuss the proposed improvement to construct a roundabout. Mr. McCulloch shared a video from the traffic model Vissim demonstrating the flow of traffic through the roundabout with projected 2035 year morning peak traffic volumes. The simulation demonstrates the efficiency of the roundabout even during the peak hour of traffic. Mr. McCulloch talked more about the reduction in conflict points for vehicles as well as pedestrians and how this improves the safety of the intersection.

This is demonstrated by the statistics of crash reduction following a roundabout installation. In North Carolina, the data indicates a 74% crash reduction when converting a signal to a roundabout. Also, the most recorded type of crash, angle crash, occurring at Beam and Shopton would likely be eliminated. Mr. McCulloch touched on the funding provided by the Federal Highway Administration (FHWA) through environmental program Congestion Mitigation & Air Quality (CMAQ). This program provides funding to surface transportation projects contributing to air quality improvements. The City applied for the CMAQ grant and will receive \$1,125,000 but must match \$525,000 for a total project budget of \$1,650,000.

Mr. McCulloch shared with the citizens the proposed concept plan to convert the existing all way stop control to a single lane roundabout. Features discussed included the multi-modal options allowing easy crossing for pedestrians and the approach deflection to slow down vehicles entering the roundabout. Mr. McCulloch also noted the roundabout has the available option to include landscaping to improve the aesthetics of the intersection. Mr. Alan Morrison was introduced to give an overview of the proposed schedule.

Mr. Morrison shared the Federal funding schedule approved for Right-of-way Acquisition and Construction. These have been approved for Federal Fiscal Year 2016 and 2017. Based on these funding cash flow time frames, the City's internal milestones include the following:

- Survey (completed) March 2014- July 2014
- Planning/Design August 2014- July 2015
- Right-of-way August 2015- February 2017
- Bid Phase March 2017- October 2017
- *Construction November 2017- July 2018

*Note: Construction start will depend on the utility relocations completed.

Mr. Morrison went over the CMAQ funding and local match required and then opened the floor to questions. The following questions were answered by the attending staff:

1) How will traffic be maintained during construction?

A: The first choice is to maintain traffic without a road closure. This decision will be evaluated as the design and utility coordination progress and will also consider the time and cost to keep lanes open during construction.

2) Will the landscaping be maintained?

A: Yes. The City has a group, Landscape Management, which oversees installation, and maintenance of the City's landscaped areas.

3) Will construction be restricted during peak hours of traffic?

A: Yes. Standard contract provision limits lane closures during the morning and afternoon peak hours.

4) What is the scale of measurement for Level of Service(LOS) noted in the presentation material?

A: The Level of Service is measured in delay per vehicle. From the scale of A to F, the delay is 10 seconds per vehicle for the best LOS A and greater than 50 seconds per vehicle for LOS F.

5) Will the roundabout design accommodate larger vehicles?

A: Yes. The design allows a vehicle such as a tractor trailer to maneuver around and through the roundabout but it may need to track over the truck apron in the center to make the desired turning movement.

6) How big will the roundabout be?

A: The inner circle will have a radius of 50 feet and the outer circle radius is approximately 70 feet.

After the question and answer session, the citizens joined staff at a table to look closer at the concept plan. At the conclusion of the meeting, it was stated that the power point and meeting minutes would be posted on the project web page. Mr. Morrison requested any comments sheets be returned to the front or email them to the following address:

amorrison@charlottenc.gov

Please contact me at (704)336-7266 or email me at amorrison@charlottenc.gov if any changes to these minutes are needed.