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Public Works

City Transit  
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## MEMORANDUM

Equipment Maintenance  
Roadway Maintenance  
Collection & Drainage  
Building & Grounds  
Engineering

To: Gregg Mansager, City Administrator;  
Brian Stineman, Public Works Director  
FROM: Jim Edgmond, City Engineer  
DATE: May 25, 2017  
RE: 2<sup>nd</sup> Street and Mulberry Ave. Intersection for Miss. Drive Corridor

### INTRODUCTION:

The current design of Mississippi Drive Corridor (MDC) Project is under construction. Because of the concerns expressed by the City Council the 2<sup>nd</sup> Street and Mulberry Avenue Intersection was pulled from the first phase of the project to allow for time to further evaluate the type of intersection and to allow time for the National Environmental Policy Act (NEPA) process to be reevaluated for accommodating a different intersection design.

### BACKGROUND:

In the design process the City Council has looked at multiple alternatives for this intersection. The design consultant, Bolton-Menk recommended a roundabout intersection see attached preliminary sketch. City of Muscatine staff also concurred with this recommendation as the best alternative for the intersection. However, there are multiple aspects to this preferred intersection. The first is additional ROW must be acquired to accommodate this intersection. Second the NEPA clearances did not address the roundabout as a possibility. This alternative is currently being reevaluated by the state.

Concurrence by the City Council on the type of intersection for 2<sup>nd</sup> and Mulberry accomplishes the following:

1. Allows the NEPA reevaluation process to state that the roundabout is the preferred alternative for the City. A stronger case than it is one of the alternatives.
2. Allows the ROW negotiations to be started on a preliminary basis.
3. Start the process of planning for this type of intersection in the design.

The final design will not be done until the NEPA revision process has concluded in the City's favor for the alternative selected. Stated another way no money will be spent on final design of the intersection until the NEPA revision to the EA is complete and the revised intersection is allowed.

The following information has been provided in the past about this intersection but is redone here to summarize the intersection.

		Signalized New	Roundabout New
Cost		\$850,000	\$700,000
Traffic Comparisons between a signalized intersection and a roundabout:			
		Signalized	Roundabout
LOS	AM	C	A
	PM	D	A
EVENT			
LOS	IN	D	B
LOS	OUT	E	A

LOS= Level of Service

One other item of note is the roundabout intersection allows for easy truck traffic from 2<sup>nd</sup> Street onto Mulberry Ave. headed north. This is needed when Mississippi Drive flooding is at its worst and all HNI traffic, personal vehicles and trucks have to go out Mulberry. The current intersection does not provide for this and the preferred intersection shown in the NEPA preliminary plans did not account for this truck traffic satisfactorily.

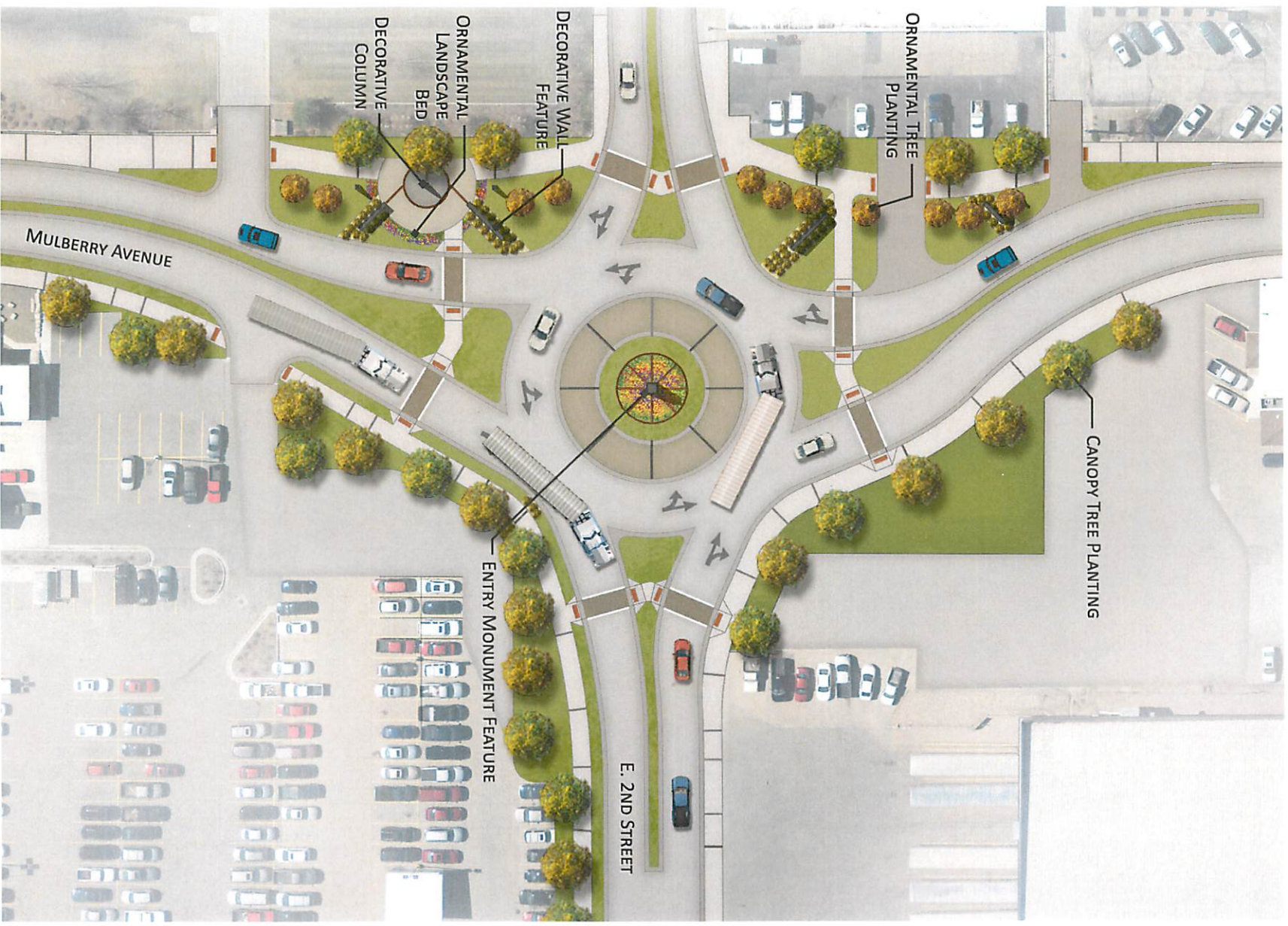
#### RECOMMENDATION/RATIONALE:

The design consultant has studied this intersection extensively and recommends the roundabout due to superior performance in level of service during daily peak traffic and during special events downtown that generate a lot of traffic into the downtown and out of the downtown. City Staff has also reviewed this proposed intersection and recommends it as the preferred alternative for this intersection. Staff is asking for approval of the Roundabout intersection as the preferred alternative for the intersection at 2<sup>nd</sup> Street and Mulberry Ave.

#### BACKUP INFORMATION:

1. Attached: Sketch of the intersection as a roundabout.





## MULBERRY & 2ND STREET ROUNDABOUT CONCEPT

### MISSISSIPPI DRIVE CORRIDOR REVITALIZATION

City of Muscatine, Iowa



Muscatine  
Power  
and Water

CANADIAN  
PACIFIC

Low-Zero Emissions  
Technology



H2R

APRIL, 2016