

TEC Fax

Exhibit 'A'
Ord. 2000-152

To: Richard Fair From: Susan Heinrich
Company: City of Mason Company: TEC Engineering, Inc.
Fax: 398-8146 Fax: (513)771-0707 Phone: (513)771-8828
Phone: 398-3035 Pages: 3 (including cover page)
Re: _____ Date: 9/7/00

Urgent For Review As Requested Reply Requested Confirm receipt of this fax

* Comments

Hello Richard, The following is an estimate for each section of the Mason Traffic Study:

Thoroughfare Plan:	\$20,000
Traffic Studies:	\$10,000
Signal Systems:	\$10,000
Residential Traffic Calming:	\$5,000
Non-Materialized Modal Studies:	\$7,000
Prioritization:	\$2,000
Funding:	\$2,000
Total:	\$56,000

Let us know if you need anything else! Have a great day!

TEC Engineering, Inc.
161 Northland Boulevard Cincinnati, Ohio 45246

Mason Traffic Study

Objective

The purpose of this study is to hire a qualified traffic engineering consultant to identify major routes in the City of Mason and subsequently make recommendations to improve traffic circulation within and outside of Mason; reduce congestion; reduce delay; improve safety and reduce accidents. Specifically the consultant shall focus his efforts to improve traffic flow in the downtown area. Furthermore, the consultant shall incorporate the following regulations and reports in formulating the final report: The City of Mason Subdivision Regulations, Access Management Regulations, Traffic Impact Study Regulations, Comprehensive Plan, the Mason-Montgomery Road Corridor Study, the Traffic Signal Inventory, and the U.S. 42 Corridor Safety Study. The Consultant shall also examine non-motorized modes of transportation, integrating recommendations from the Bike Path and Pedestrian Master Plan.

The consultant shall be responsible to perform the following tasks:

Thoroughfare Plan

The purpose of the Thoroughfare Plan analysis is to determine major routes of traffic and to aid in the determination of areas that require improvement. Any recommendations that are made will be directly related to improvements in the movement of traffic. In order to determine, and properly recommend changes to the current Thoroughfare Plan, the consultant will complete the following steps:

- Analyze existing and proposed vehicular volumes (based on land use and the Comprehensive Plan) to determine high traffic areas and major routes.
- Complete origin/destination studies in order to aid in the determination of the major routes of traffic. Examples of Origin/Destination studies are license plate surveys, post card surveys, and roadside interviews. These studies are done in order to determine from where vehicles are coming and where they are going. The consultant will use this data along with the traffic volume data to determine the major routes of traffic and direction of traffic flow.
- Examine existing routes to determine if they are adequate for the existing volumes of traffic. On routes inadequate to handle existing volumes of traffic, make recommendations to upgrade, recommend alternate routes or construct new routes.
- Determine the ideal location for a future I-75 to I-71 connection.
- Update the Mason Thoroughfare Plan, subdivision regulations, and/or access management regulations based on the above recommendations.

Traffic Safety Studies

The purposes of the Traffic Safety Studies are to determine areas within the City of Mason that can be improved to ensure better vehicular safety. Any recommended improvements will directly effect the safety of Mason residents as well as Mason visitors. In order to determine these problem areas, and make proper recommendations, the consultant will complete the following steps:

- Examine existing vehicular facilities to determine if problem areas exist with respect to geometric design. If problem areas are found, make the proper recommendations to resolve each design hazard.
- Collect and analyze accident data to determine problem areas. If problem areas are found, determine the causes and make recommendations for corrections.
- Inventory pavement markings and signage throughout the City. Use the City's current sign inventory for the basis of this report. Make recommendations to improve existing conditions.
- Conduct speed studies where directed by the City Engineer to determine how traffic is moving on major routes in the City of Mason. From these studies, determine if posted speeds need to be changed.

Signal Systems

The purpose of the Signal System analysis will be to determine the efficiency and necessity of the existing and of proposed signal systems. This analysis will be completed and aided with the use of real-time cameras at high traffic intersections with-in the City of Mason. These cameras will give the City of Mason, as well as the consultant, the ability to see the real-time effects in traffic due to changes made to the signal systems. In order to determine the efficiency and necessity of the current signal system, the consultant will complete the following steps:

- Signal Efficiency
 - Analyze traffic signals on major routes to determine if proper coordination and/or signal efficiency is in place. In areas where the signal efficiency is determined to be inadequate the signal system will be examined to determine proper improvements. Proper recommendations to the signal systems will be made to improve the signal efficiency.

Residential Traffic Calming

The purpose of this section will be to properly implement traffic calming techniques in the residential areas of Mason. In this section, the consultant, along with the City Engineer will also determine Standards for the use of traffic calming on Mason streets. There are two general areas that can be affected by traffic calming; the consultant will study these areas to determine proper improvements.

- **Traffic Diversion**
 - In areas where existing vehicular traffic is not desired or the existing roadway system capacity is inadequate, calming techniques can be used to divert traffic from those areas.
- **Speed Control**
 - In areas where the existing traffic is deemed traveling at excessive speeds, traffic calming techniques can be used to control vehicular speed.

Non-Motorized Modal Studies

The purpose of Non-Motorized Modal Studies will be to determine the demand and the necessity for upgrades and/or establishment of Pedestrian and Bicycle facilities. The use of these facilities will make the Mason area more accessible via non-motorized actions. These studies will also focus on the existing facilities to ensure that there is proper pedestrian and bicycle safety. In order to determine the current status and current demand for updated non-motorized facilities, the consultant will complete the following steps.

- **Pedestrian Facilities**
 - The high pedestrian areas in the City of Mason will be determined. These areas will then be analyzed to determine if the existing facilities are adequate for pedestrian safety and access. If areas are found to be inadequate, proper recommendations will be made to improve pedestrian safety and access.
- **Bicycle Facilities**
 - The demand for bicycle facility usage will be determined for the City of Mason. This demand will be determined for specific areas (i.e. downtown). If areas are found to have a high demand for bicycle facility usage, the existing facilities will be examined to determine if adequate bicycle safety and access exists. If areas are found to be inadequate, proper recommendations will be made to improve bicycle safety and access.

Prioritization

- Set a priority designation on each recommendation. Determine which recommendation is the most important to improve traffic flow and circulation and set a priority designation for each recommendation.

Funding

- Identify funding sources and assist the City in applying for grants or loans to construct projects recommended in this report.