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April 20, 2012

Ms. Karie Friling
Development Services Director
Village of Orland Park
14700 Ravinia Avenue
Orland Park, Illinois 60462

Re: Proposal for Engineering Study (Phase I) Services - *Revised*
US 45 (LaGrange Rd.) IDS Update – 153rd St. and 149th St (including 149th St. TIS)

Dear Ms. Friling,

In response to your request, the meeting you had with Mr. Steve Ravenesi and Mr. Tim Werner of our office yesterday, MAI is pleased to present this revised Proposal to the Village of Orland Park to update the Intersection Design Study (IDS) at 149th Street and US 45, update the IDS at 153rd Street and US 45, and to provide a Traffic Impact Study (TIS) for the Intersection of 149th Street and US 45. This proposal includes the request to update the 149th intersection with a second southbound US 45 Left turn to the eastbound 149th Street entrance into Orland Square Mall, *and now revised to include analysis of a second left turn lane for westbound 149th to US 45.* This proposed work also includes the request to add and look at the impacts of dual left turn lanes from westbound 153rd Street to southbound US 45 and to provide a TIS for the 149th Street and US 45 intersection.

This work will entail updating the intersection plan and profile geometrics, signal timing, traffic updates for each intersection and the complete update of the analysis of trip generators for the TIS at 149th Street and LaGrange Road. This proposal assumes the availability and use of all files of the previously approved IDOT IDS's, as well as any traffic generator information for the surrounding developments from the Village of Orland Park at the 149th Street Intersection.

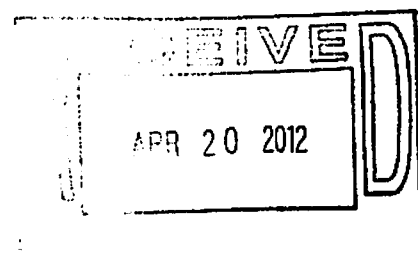
We propose a lump sum fee for these professional services of \$65,084.00.

These services will commence immediately upon receipt from the Village of the Notice to Proceed and will be completed to submit to IDOT for review as soon as possible. We cannot guarantee the time required by IDOT to complete their review and comments. If you have any questions regarding this proposal, please contact the undersigned. Thank you for the opportunity to be of service.

Very truly yours,
McDONOUGH ASSOCIATES INC.

Michael P. Hannemann, P.E.
Sr. Vice President

Encls: Scope of Work



**LaGrange Road (US45)
Intersection Design Studies at
US45 & 149th and US45 & 153rd**

Scope of Work

Rev 04-20-2012

The scope of work will consist of updating two (2) Intersection Design Studies and preparing a Traffic Impact Study at the intersection of 149th Street at US45. The Village of Orland Park has initiated the request for the geometric and capacity changes in a letter to IDOT on March 08, 2012. The request includes adding a second left turn lane on southbound US45 at 149th Street and adding a second left turn lane on westbound 153rd Street at US45. On 04-20-2012 the proposal was modified to include the analysis of providing dual lefts WB-SB from 149th Street. All work will be performed in full accordance with IDOT standards, procedures, requirements and criteria.

Working Tasks	Total Man-hours
1.0 Update Data Collection / Gather Information	
Utilities and Recent Improvements	8
Property Delineation and Ownership	8
2.0 Early Project Coordination	
Establish Design Criteria	8
Prepare Work Plan	4
Prepare Project Schedule	4
3.0 Update Phase I Field Survey	Not Included
4.0 Update Traffic Analysis & Intersection Design Study	
24 Hour machine counts	0
AM Peak Hour Directional Counts	0
PM Peak Hour Directional Counts	0
Year 2040 Projected Traffic (CMAP)	12
Synchro Report AM & PM	32
Traffic Signal Warrants	0
Intersection Design Study Plan Geometrics	36
Intersection Design Study Profile	18
Intersection Auto turn Exhibits	18
5.0 Update Accident Analysis	
Compile Accident Reports and Records (most recent three years)	0
Analysis of Collision Accident Data	0
Determine Accident Rates and Compare to Statewide Averages	0
Wet Weather Accident Analysis	0
6.0 Design Analysis and Identification of Impacts	
Horizontal Alignment Analysis	0
Vertical Alignment Analysis	0
Typical Section Study	0
Roadway Geometrics, Lanes, Median and Widths	24
Turn Storage Requirements, Tapers and Turn Radii	16
Retaining Walls, Side slopes and Guardrail vs. ROW Issues	24
Temporary Construction Easements	12
Plan Geometrics for Report Exhibits	0
Profile Geometrics for Report Exhibits	0
Cross Section Impact Analysis & Alternatives	48
Determine Right-Of-Way and Easement Requirements	24
Pavement Marking Details	8
Landscaping Issues	4
Embankment, Cuts and Excess Earthwork	0
Utility Relocations	16
Safety Issues	0
Lighting Issues	0
7.0 Village Coordination	
Meetings and Coordination	16

**LaGrange Road (US45)
Intersection Design Studies at
US45 & 149th and US45 & 153rd**

8.0 Streetscaping Issues	Not Included
9.0 Socio-Economic Business Establishment Issues	Not Included
10.0 Maintenance of Traffic and Detour Route Analysis	Not Included
11.0 Drainage Studies	Not Included
12.0 Traffic Impact Studies - at 149th Street Intersection Only	
Existing Traffic Conditions / Levels of Service	8
Existing, Proposed and Planned Improvements	24
Trip Generations	24
Directional Distributions	24
Background Traffic Growth	4
Site Traffic Assignments	8
Alternative Capacity Analysis / Synchro Report	16
Proposed Traffic Conditions / Levels of Service	16
Conclusions, Impacts and Recommendations	16
Calculations and Exhibits	24
Signal Warrant Review Summary	8
13.0 Structural Studies	Not Included
14.0 Wetland Delineation, Classification, Mitigation	Not Included
15.0 Environmental Studies	Not Included
16.0 Meetings, Coordination and Special Issues	Not Included
17.0 Public Involvement	Not Included
18.0 Cost Estimate	
Preliminary	4
Final	4
19.0 In-House Direct Costs	
Printing and Reproductions	
Preliminary Submittal	
Xerox Copies	
Paper Plots	
PreFinal Submittal	
Xerox Copies	
Paper Plots	
Final Submittal	
Xerox Copies	
Paper Plots	
Meeting Transportation	
Meeting Trips	
20.0 Services By Others	Not Included

Estimate Total Man-Hours	520
Estimate Average Hourly Wage Rate	\$ 46.00
Multiplier	2.7
Sub-Total	\$ 64,584.00
In-House Costs and Services by Others (see above)	\$ 500.00
Project Total	\$ 65,084.00