



August 3, 2017

Bruce Reese, P.E.
Executive Vice President
Legacy Engineering, P.C.
809 William Street, Suite C
Fredericksburg, VA 22401

RE: Parking and Cut-Thru Traffic Study
Town of Occoquan, VA
JMT Project No. 17-11289-001

Dear Mr. Reese:

We are pleased to provide the following contract to perform professional transportation planning and traffic engineering services on the above referenced project.

Project Understanding

The Town of Occoquan (Town) is seeking a town-wide parking study and cut-through study to be prepared under its term contract with Legacy Engineering, PC, (LEPC). Johnson, Mirmiran and Thompson, Inc. (JMT) will provide the Scope of Services outlined below as a sub-consultant to LEPC. The Study will serve as a part of the Town's upcoming Community Plan. The Town will play a major role in the manpower required for this parking study as outlined below.

The cut-through study will be conducted in accordance with VDOT's Policy on Residential Cut-Through Traffic (Adopted by the Commonwealth Transportation Board, May 9, 1996), referred to herein as the "VDOT Cut-Through Policy." As part of the cut-through study, it is understood that JMT will collect the cut-through traffic data and the Town will collect the remaining surveys, Council documents, and other supporting documents to submit to VDOT. VDOT will then conduct the remainder of the cut-through study in accordance with the VDOT Cut-Through Policy. JMT understands that the Town's primary concerns with cut-through traffic are pedestrian safety and peak period traffic congestion.

JMT's proposed Scope, Schedule and Fees are as follows.

Scope of Work

Task 1 – Research / Review of Existing Documents - \$2,500 Lump Sum

JMT will review the following information to identify and document available data regarding the Town's past parking planning and document issues, plans, etc. The Town will furnish all documents to JMT for review in either electronic or hard copy format.

- a. Town Comprehensive Plan
- b. Town Council Priorities / Anecdotal Notes
- c. Available Town records related to parking (anecdotal studies / inquiries / complaints)
- d. Previous traffic counts, parking counts, or other data collection efforts

Deliverable = None (to be summarize in Memo; see below)

Task 2 Parking Study

JMT and the Town will work together to collect a town-wide inventory and parking occupancy as follows:

- a. JMT will prepare a spreadsheet and simple, graphical map for use by Town staff to collect an existing inventory of parking. Town staff will determine the study area (assumed to include all of the Historical Downtown plus certain adjacent areas within the Town limits) for the inventory and will perform the entire parking inventory of spaces / type / restrictions on time (if any) / metered vs. non-metered, for the following space types:
 - i. Public
 - ii. HC
 - iii. Delivery
 - iv. Business / Employee
 - v. Residential
 - vi. Other

Deliverable = Tabular Summary & Graphical (aerial overlay) Display - **\$1,000**

- b. Town staff will collect public surface lot occupancy data on an hourly basis for all public parking within the study area defined above. It is anticipated that the Town will collect digital photography of sections of parking on an hourly basis, supplemented with hand / field notes as necessary to obtain an accurate, legible understanding of the occupancy of each space in the study area during the times noted below.

The occupancy data will be collected by the Town as follows:

- i. For one (1) typical weekday during the summer (counts each hour from 7am – 7pm)
- ii. For one (1) typical Saturday during the summer (counts each hour from 7am – 7pm)
- iii. For one (1) Special Event Saturday during the summer (assumed for a concert event, from 3pm – 7pm)

The Town will compile the data in a usable format and will transmit the photos to JMT for JMT's use to determine hourly turnover. JMT will provide support and direction as needed during this task to help guide the Town's efforts collecting and compiling data.

Deliverable = Tabular & Graphical Summary of Occupancy & Dwell Time/Turnover Rate, by lot or other logical grouping - **\$4,500**

- c. Community Input Meeting
JMT will attend one (1) community input meeting to provide an overview of the parking study process and gather input from the Citizens. JMT will prepare one (1) aerial exhibit (24" x 36" color) for display purposes and use in orienting the audience to the study area. The cost for this task includes travel time and mileage expenses.

It is assumed that the meeting will last up to three (3) hours in a format to be determined by the Town. It is assumed that the Town will make all arrangements for the meeting including determining a suitable venue, venue booking and setup, and publicity for the meeting. The Town will provide sign-in sheets and prepare comment and/or survey

forms. Any formal presentation items (i.e. PowerPoint, associated A/V setup, etc.) will be prepared by Town. Town staff will record questions / input received from members of the audience and summarize them in a written memo format. Town will handle preparation of any surveys, including analysis and tabulation of results, creation of tables summarizing results, etc. Prior to the meeting, JMT staff will review Town's draft survey and/or questionnaire to provide input and suggestions on wording and will furnish sample surveys from other parking studies for reference. The purpose of collecting formal surveys is to obtain broader and more meaningful input compared to past information the Town has received anecdotally.

Deliverable = Meeting attendance, display graphic - **\$1,900**

d. **Parking Demand Analysis - \$5,000**

- i. JMT will conduct an evaluation of estimated parking demand using standard traffic engineering parking demand calculations for the following:
 1. # of Residents
 2. SF of Businesses (for employee + estimated patrons)
 3. Tourism / special event demand

For the above, the Town will furnish JMT with estimated # of residential units by type (i.e. single family, condominium, apartment, etc.) and will identify the locations of commercial establishments by type (retail, restaurant, office, other). JMT will measure estimated square footages of commercial uses using Google aerial mapping tools.

For special event (concert) traffic, Town will provide JMT with estimated attendance (head count). JMT will convert head count attendance figures into estimate parking demand using standard vehicle occupancy rates for special events.

- ii. JMT will compare the estimated parking demand on weekday and Saturday (typical and Special Event) relative to parking supply and will create tabular and graphical summaries of the supply/demand results.

JMT will estimate the influence of adding metered and/or time restricted parking within the study area and will generate an estimated future parking demand vs. supply table and graphics to compare to the existing supply / demand.

JMT will provide recommendations to the Town for changes to the following:

1. Location of parking
2. Metered/Timed parking
3. Use of parking permits
4. Policy recommendations to enhance parking in the Town
5. Parking enforcement recommendations

e. **Summary Parking Study Memo - \$3,500**

JMT will prepare a brief summary memorandum to document the following aspects of the above tasks.

- i. Introduction and Background
- ii. Study Methodology

- iii. Review of anecdotal info + document Comp Plan, Town Council, etc. concerns
- iv. Review and Summary of Parking Demand Analysis
- v. Results (Inventory & Occupancy / Turnover) and Recommendations
(Recommendations will be categorized by Immediate/Near-term (Year 1),
Medium-term (1-5 years), and Long-term (5-10 years))
- vi. Implementation Plan (Action Steps, Responsible Parties, Timeline, High-level
Cost Estimates)

JMT will submit the memorandum to the Town in Draft format prior to the Council Work Session (next task). Following the Council Work Session, JMT will receive feedback from the Town and finalize the memorandum. JMT will deliver the draft and final memorandum to the Town in PDF format.

It is assumed that any hard copy printing/reproductions will be by the Town.

Task 3 – Cut-Through Data Collection

JMT will collect traffic data to quantify existing cut through traffic through the Town along the following routes, which are illustrated in Attachment A:

1. Route 123 (through Town on Mill Road) to Old Bridge Road – 4:30 – 6:30 PM
2. Old Bridge Road (through Town) to Route 123 – 6 – 9 AM

Cut-through data will be gathered by recording license plate information (both manually and using automated license plate reader (ALPR) technology) at beginning and end points along the route. Prior to conducting the cut-through survey, it is assumed that the Town will verify with VDOT that the cut-through route(s) meet the intent of the VDOT Cut-Through Policy relative to being “residential.” The cut through data will be collected on a typical weekday (Tuesday, Wednesday, or Thursday) in September 2017, after local public schools are in session. JMT will summarize the total number of vehicles and the total percentage of cut through vehicles during the periods noted. JMT will furnish this information to the Town in electronic format (Excel spreadsheet) for the Town's use in submitting a request to VDOT for a cut through study in accordance with VDOT's Cut-Through Policy. It is assumed that the Town will compile the remaining documents required by the VDOT Policy and will submit a formal cut-through study request, including the necessary supporting documents, to VDOT. The remainder of the cut-through study will be performed by VDOT.

As part of this task, JMT will provide up to four (4) hours of assistance to the Town for the purposes of supporting the request to VDOT, including email or phone coordination with the Town and/or VDOT, and other services related to the mitigation of cut through traffic in the Town.

JMT will also provide Town staff with instructions to collect remaining cut-through traffic counts for the third cut-through route shown in Attachment A (Route 123 to Washington Street/Occoquan Road at Southern Town limit, both directions AM and PM).

Deliverable = Spreadsheet Summary of Cut-Through Data Collection – **\$5,200**

Task 4 – Attend Council Work Session

JMT will attend one (1) Town Council Work Session to present the findings of the draft recommendations and answer questions from the Council. The cost for this task includes travel time and mileage expenses.

Deliverable = Meeting attendance - \$1,100

Exclusions

- i. Traffic Study
- ii. Additional Cut-Through Data Collection
- iii. Multimodal Study (assessing bicycle / transit / pedestrian influence on parking demand)
- iv. Surveys
- v. Additional meetings / council hearings / work sessions

Fee Summary

Task	Description	Qty	Unit	Unit Price	Total
1	Research/Review Existing Documents & Project Startup	1	LS	\$ 2,500	\$ 2,500
2	Parking Study	1	LS	\$ 15,900	\$ 15,900
3	Cut-Through Data Collection	1	LS	\$ 5,200	\$ 5,200
4	Attend Council Work Session	1	LS	\$ 1,100	\$ 1,100
				Total =	\$ 24,700

Refer to Attachment B for JMT's hourly rate schedule.

Scheduled Completion Dates – All Tasks Assume Notice to Proceed (NTP) of 8/4/2017

Task 1 – Within Approx. 3-4 weeks of Notice to Proceed – End of August

Task 2a – JMT to deliver tables/maps to Town by August 9, 2017. Town to deliver inventory to JMT by August 15, 2017

Task 2b thru 2c – Town to conduct occupancy data collection during remainder August; Community Meeting TBD in August

Task 2d and 2e – Parking Memo (draft) by October 9; Final Draft by November 1, 2017 (for Nov. 7th Council)

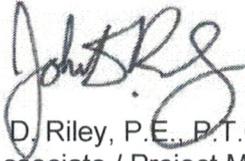
Task 3 – Cut-through Survey – JMT to complete and deliver data to Town in September 2017, after local public schools are in session; Remaining schedule for VDOT to conduct formal Cut-Through Study = TBD

Task 4 – Work Session Presentation – October 17, 2017

We appreciate the opportunity to provide these services and look forward to working with Legacy Engineering, P.C. on this project. If you should have any questions or need further information, please do not hesitate to contact me at (804) 205-5599 or JRiley@jmt.com.

Very truly yours,

JOHNSON, MIRMIRAN & THOMPSON, INC.



John D. Riley, P.E., P.T.O.E.
Sr. Associate / Project Manager

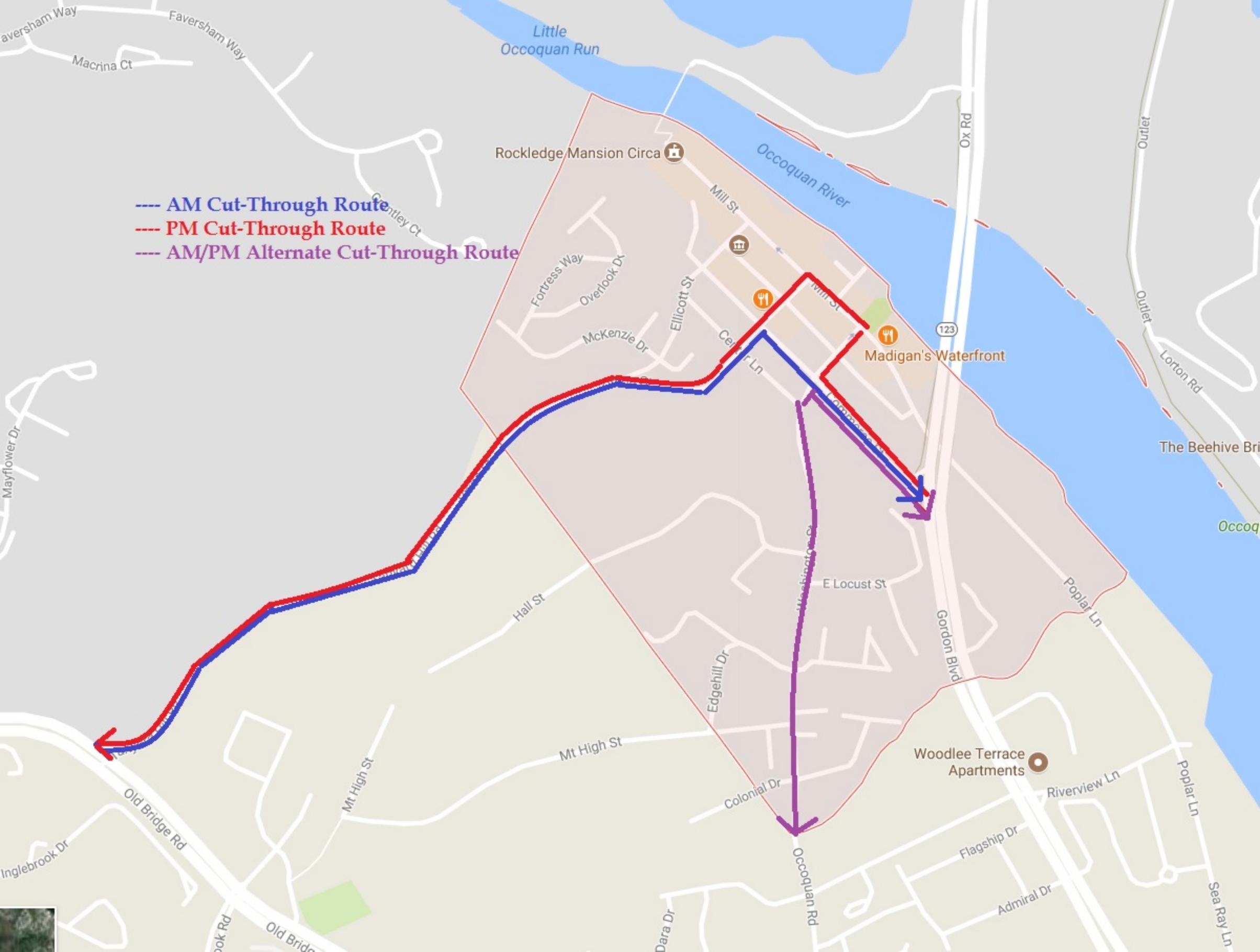


Robert T. Gallagher, P.E.
Sr. Vice President

WE HEREBY AUTHORIZE JOHNSON, MIRMIRAN & THOMPSON, INC. TO PROCEED IN ACCORDANCE WITH THE ABOVE PROPOSAL. IF ANY PROFESSIONAL SERVICES ARE ORDERED BY A REPRESENTATIVE OF THE CLIENT, FOR ITEMS LISTED ABOVE WITH A RETURNED ACCEPTANCE, THE PRICES AND TERMS OF THIS PROPOSAL SHALL BE IN EFFECT.

ORGANIZATION: LEGACY ENGINEERING DATE: 8.4.17
BY: B A Reese, EVP TITLE: EVP
BROG A. REESE, EVP

Attachment A – Town of Occoquan Cut-Through Route Exhibit



- AM Cut-Through Route
- PM Cut-Through Route
- AM/PM Alternate Cut-Through Route

Rockledge Mansion Circa

Madigan's Waterfront

Woodlee Terrace Apartments

Little Occoquan Run

Occoquan River

Old Bridge Rd

Mt High St

Gordon Blvd

Macrina Ct

Faversham Way

Hall St

Edgehill Dr

Colonial Dr

Occoquan Rd

Edgemoor St

E Locust St

Flagship Dr

Riverview Ln

Poplar Ln

Sea Ray Ln

Mill St

Fortress Way

Overlook Dr

Ellicott St

McKenzie Dr

Center Ln

123

Ox Rd

Outlet

Lorton Rd

The Beehive Bri

Occoq

Poplar Ln

Mt High St

Old Bridge

ook Rd

Inglebrook Dr

Mayflower Dr

aversham Way

Gentley Ct