

**Town of Littleton, Massachusetts**

***PROPOSAL***

Peer Review of Traffic Impact &  
Access Study  
15 Great Road LLC

November 10, 2011

Mr. Keith A. Bergman  
Town Administrator  
Town of Littleton  
Town Hall – Room 309  
37 Shattuck Street  
Littleton, Massachusetts 01460

**Subject: Proposal to Provide Traffic Review Services  
For a Comprehensive 40B Permit in Littleton, Massachusetts**

Dear Mr. Bergman and Members of the Zoning Board of Appeals:

Fay, Spofford & Thorndike (FST) is pleased to submit this proposal to provide traffic engineering peer review services related to the Chapter 40B Comprehensive Permit application known as *15 Great Road LLC*. It is our understanding that the project is comprised of 200 apartment units with associated parking on 23+/- acres of land at 15 Great Road (Route 119) in Littleton.

FST has extensive experience with peer reviews having conducted numerous traffic reviews over the years. Some of the communities we have represented include Arlington, Belmont, Billerica, Bourne, Chatham, Hamilton, Haverhill, Groton, Lynnfield, Maynard, North Andover, Millbury, Swampscott, Uxbridge, Westford, Woburn, and Wilmington.

Our designated Project Manager, **Douglas C. Prentiss, P.E., PTOE**, recently conducted a traffic peer review for the Town of Littleton for a project on King Street while working with Mr. Thomas Harrington, Esq., and was requested to provide expert witness testimony for the Town of this project. Also, over the last 15 years, Doug has provided technical assistance to both Littleton's ZBA and the Planning Board on various commercial and residential projects. As a result, FST offers not only expertise in traffic engineering but also familiarity with the community and its environs.

We appreciate the potential opportunity to provide these services to you. If you have any questions on this proposal, please feel free to contact me at 781-221-1000.

Very truly yours,

FAY, SPOFFORD & THORNDIKE, LLC  
By



Frederick A. Moseley, P.E.  
Vice President

# PROPOSAL

## Peer Review of Traffic Impact & Access Study 15 Great Road LLC Littleton, MA

### PRIMARY PERSON RESPONSIBLE FOR PERFORMING THE WORK

**Douglas C. Prentiss, P.E., PTOE** will be the **Project Manager** and primary person responsible for performing the peer review work. Should Doug be unavailable for some reason, **Gary Hebert P.E., PTOE**, an FST Vice President, will serve as back-up Project Manager. Doug will be assisted by **Sarah Borenstein** as the junior traffic engineer on the project.

Doug has a B.S. in Civil Engineering from UMass-Lowell and a Master's degree (M.S.) in transportation engineering from the University of Connecticut. He is a registered professional engineer in the Commonwealth. Doug's registration in Massachusetts is designated in 'traffic'. He is also a registered professional engineer in three other New England states. Doug is also certified as a Professional Traffic Operations Engineer (PTOE).

### WORK EXPERIENCE OF PERSON PERFORMING THE WORK

Doug Prentiss brings over 35 years of experience in the traffic and transportation industry on projects throughout New England, with a primary focus in Massachusetts. Over the years he has worked on traffic impact studies, feasibility, justification and conceptual planning studies, conducted numerous traffic reviews for municipal, federal and state projects and has presented expert witness testimony in the public forum. Resumes of FST staff are included in the *Appendix*.

### EXPERIENCE WITH PREVIOUS PEER REVIEWS

Doug Prentiss brings a strong background in completing peer reviews for Massachusetts communities, including the Town of Littleton. He has provided expert witness testimony before the Massachusetts Housing Appeals Committee and in the public forum. Over the years, he has provided traffic peer review services for the Town of Littleton on numerous projects for both the ZBA and the Planning Board. A few include:

- 169 King Street (Route 2A/119)-Barking Dog project;
- Andrews Crossing commercial/retail development;
- Robinson Road 40B housing project;
- Farmstead Way Housing Project

In addition to working with the Town of Littleton, Doug and FST over the years have conducted traffic peer reviews for the following selected communities, with the number of reviews noted in parentheses:

- Arlington (1), Ashland (1), Belmont (2), Billerica (2), Bolton (2), Chatham (2), Dartmouth (2), Dracut (8), Hamilton (1), Haverhill (3), Hopkinton (10), Groton (10), Lynnfield (1), North Andover (3), Swampscott (2), Uxbridge (1), Westford (3), Woburn (3), and Wilmington (1).

Besides our 40B peer review experience, FST has on-call consulting contracts providing technical services in, Hopkinton, the Duxbury Planning Board, Somerset, Upton, Westford, and the City of Boston. Over the last five (5) years our staff has completed a number of peer reviews of Chapter 40B Comprehensive Permit projects and has a wealth of knowledge with the approval and permitting process. Our staff has testified before the Housing Appeals Committee in Boston, and is very qualified and knowledgeable with 40B reviews

Our Project Manager, Doug Prentiss, also published and presented the following article on transportation peer reviews at the Institute of Transportation Engineers (ITE) Annual meeting in Philadelphia in 2002: *"Transportation Peer Reviews: Big Business or Bust?"*

## DESCRIPTION OF WORK TO BE PERFORMED

As outlined in the RFP, FST's scope of work for this peer review project is as follows:

- a. Conduct a site visit to observe traffic operations, note off-peak travel speeds, speed limits, roadway and intersection geometry, stopping sight distance, pedestrian and bicycle amenities, area land uses, intersecting streets and driveway openings. While on-site, we will visit with selected Town officials to cording schedules and project information;
- b. We will review the project traffic study and plans. Basic traffic guidelines for our review will include MEPA's *Guidelines for EIR/EIS Traffic Impact Assessment* along with Institute of Transportation Engineers (ITE) guidelines for traffic studies. Any omissions or additional information will be outlined in a memo to the Town.
- c. We will review historical plans and documents completed in the area as well as accident data and record plans and traffic data;
- d. Trip generation rates, assumptions and methodologies will be reviewed for compliance with the Institute of Transportation Engineers *Trip Generation* and/or empirical data;
- e. Use of seasonal adjustments, historical traffic growth rates and background traffic from other area developments will be reviewed;
- f. Capacity analysis and vehicle queues will be reviewed for existing and future conditions;
- g. The future impacts of the project will be reviewed for operations and safety;
- h. We will review the future No Build and Build Level of Service for the study area intersections. Area deficiencies will be noted;

- i. The site development plans will be reviewed for appropriate access and egress conditions on Great Road and any abutting roadways. MassDOT geometric standards will be reviewed for geometry on State roadways. An AUTOTURN analysis will be conducted of the site using the appropriate design vehicle, along with the Littleton's fire department preferred vehicle. School bus access/egress conditions will be reviewed, including bus turnaround areas and bus stop areas;
- j. Traffic counts, signing pavement markings and data will be reviewed as noted in item 'c' above;
- k. Sight distance at any proposed site drives and adjacent roadways (stopping sight distance, intersection sight distance and passing sight distance) will be reviewed for conformance with MassDOT and federal standards;
- l. Proposed mitigation will be reviewed that will include both project-related mitigation and non-project mitigation. The latter will be to address existing and future area deficiencies;
- m. Traffic signal warrants will be reviewed for the project and a determination will be made as to the requirements of any signals at specific locations. Since Great Road is a State Highway, a MassDOT Highway Access permit will be required, and MassDOT will have to approve any proposed mitigation that impacts State Highway. We will contact MassDOT;
- n. We will prepare a preliminary report suitable for Board review. This memo report will include Applicant responses to review comments. This preliminary report will be supplemental to the initial information memo cited in Task b above. Following applicant responses and any modifications to the project, either via the site plan or the traffic study, a final report will be produced; and
- o. Meetings: total of five (5) meetings will be included in the Scope of Work. These include a project initiation meeting with the Town, staff meeting with the Town and three public hearings (presentation of findings, response to comments and final presentation).

Information to be included in our traffic peer review will be an overall assessment of the adequacy of the applicant's traffic study, including traffic and accident data, reviewing compliance with standard traffic engineering guidelines in completing the study, assessing the safety and location of the proposed site access, provisions for safe pedestrian circulation on-site and placement of crosswalks, sidewalk and benches and inclusion of bicycle amenities. On-site circulation and review of parking supply, alignment and compliance with Littleton's Zoning by-laws will be included. Safety elements will also include provisions for emergency services, school activity and site access/egress.

### **TIME SCHEDULE TO PERFORM REVIEW**

The time to complete the initial review would be twenty (20) working days and a preliminary report will be submitted to the Board four (4) days prior to the hearing date. FST will adhere to the remaining schedule set by the ZBA.

## **HOURLY RATES AND EXPENSES**

The maximum hourly rates of our staff that likely would be involved in this project include:

- Gary Hebert, PE, PTOE - \$185/hour
- Douglas C. Prentiss, PE, PTOE - \$152/hour
- Sarah Borenstein - \$79/hour

It is expected that the cost to conduct the peer review will be \$8,600. Five (5) meetings will add an additional \$3,000 and \$300 for direct expenses for a total stipulated maximum cost of \$11,900. If additional work is required of FST, a new scope and associated fee will be provided beyond what is outlined.

Our fee is included on the following page.

## **REFERENCES**

Noted below are peer review references from communities where we have provided peer review services. In these communities noted, we have completed reviews of Chapter 40B Comprehensive Permit projects.

Mr. John Crowley, Chairman  
Dracut Zoning Board of Appeals  
**Town of Dracut, MA**  
T: 978.453.4557  
E: [boardofappeals@dracut-ma.us](mailto:boardofappeals@dracut-ma.us)

Ms. Maren Toohill  
Town Planner/Permit Coordinator  
**Town of Littleton, MA**  
T: 978.540.2425  
E: [toohill@littletonma.org](mailto:toohill@littletonma.org)

## **SIGNED CERTIFICATES OF TAX COMPLIANCE AND NON-COLLUSION**

Signed certificates are included in the *Appendix*.

**Fixed Fee-ZB-11T-98****Town of Littleton  
15 Great Rd**

Fay, Spofford &amp; Thorndike

**FEE SUMMARY**

Services	\$11,600.00
Direct Costs - Mileage, Printing, etc.	\$300.00
Total Project Fee	<u>\$11,900.00</u>

**SAY:** 11,900

**FEE SCHEDULE - LABOR**

PROJECT TASKS	DCP Project Manager	Senior Engineer	SEB Asst Engineer	CADD Technician	TOTAL
Task 1 - Site visit/Proj Int	1		6		7
Task 2 - Review mtrls	2		4		6
Task 3 - Review Traffic Counts/accidents	0.5		12		12.5
Task 4 - Review TG/TA	0.5		3		3.5
Task 5 - Historical/seasonal			2		2
Task 6 - Analysis/Q			2		2
Task 7 - Future impacts	1		2		3
Task 8 - NB & B LOS	1		2		3
Task 9 - Plan review	4		2		6
Task 10 - Review data					0
Task 11 - SSD					0
Task 12 - Mitigation	1		2		3
Task 13 - Signal Warrants			1		1
Task 14 - Report	12		24		36
Task 15 - Meetings (5)	20		2		22
<b>TOTAL</b>	<b>43</b>	<b>0</b>	<b>64</b>	<b>0</b>	<b>107</b>
Rate	152.00		79.00		
Labor COST	6536.00	0.00	5056.00	0.00	\$11,592.00
<b>TOTAL Labor Cost</b>	<b>6536.00</b>	<b>0.00</b>	<b>5056.00</b>	<b>0.00</b>	<b>\$11,592.00</b>

Labor Total \$11,592.00

Say \$11,600.00

# APPENDIX



## DOUGLAS C. PRENTISS, P.E., PTOE Senior Principal Engineer

### EDUCATION

M.S. 1982, Transportation,  
University of Connecticut  
B.S. 1971, Civil Engineering, Lowell  
Technological Institute

### PROFESSIONAL AFFILIATIONS

Institute of Transportation  
Engineers – MA and NH  
ITE District 1 - Membership  
Chairman 1993-1996  
NEITE Executive Board, 1988-  
1994 (President in 1992)  
ITE International Nominating  
Committee – 1997  
NEITE Awards Committee- 2005  
to present  
Vermont Society of Engineers  
Barnstable County Public Works  
Association

### AWARDS

1983 Technical Paper Award,  
NEITE  
NEITE Distinguished Service  
Award, 1996

### PROFESSIONAL REGISTRATIONS

P.E., MA 1985, Traffic  
P.E., NH, 1990  
P.E., VT 1980  
P.E., ME 1990  
  
Nat'l, PTOE

### PROJECT ROLE: Project Manager

Doug Prentiss assists on a variety of projects in FST's transportation department including traffic and highway design projects as well as planning studies, traffic signal design projects as well as parking and feasibility studies. He is responsible for senior level management, analysis and assessment of traffic engineering projects including assisting clients through the state and local permitting process.

### REPRESENTATIVE RELEVANT EXPERIENCE

**Technical Assistance/Peer Review - Various Communities.** Project Manager for a number of traffic peer reviews in various Massachusetts communities including Tewksbury, Deerfield, Littleton, Dartmouth, North Andover, Dracut, Haverhill, Taunton and Dighton, to name a few.

**Route 137 Improvements, Town of Brewster, MA.** Project Manager for planning and design of geometric improvements and re-alignment alternatives for a two-mile corridor section of Long Pond Road (Route 137) in Brewster. Bike lanes are included as part of the roadway section.

**Milford Alternate Route Transportation Study, Milford, MA.** Project Manager responsible for completing a traffic/transportation feasibility study for the planning of an Alternative Route (or Veterans memorial Drive Extension) that will serve as a by-pass to the Route 16 (Main Street) corridor and run along a Town-owned right-of-way (ROW) from and abandoned railroad corridor.

**On-Call Traffic Services, Winchester, MA.** Project Manager for various traffic/transportation projects throughout the Town of Winchester. Assignments included assessing the traffic and pedestrian safety of all the public schools in Town including school zone analysis, traffic peer review of the re-development of one of the last open-space areas in Town, various intersection studies and assessments.

**Lots Hollow Road, Orleans, MA.** Project Manager and grant writer for a Public Works Economic Development (PWED) grant that was administered by the MassDOT. Working with the Town, the \$550,000 grant was awarded and allowed the Town to design and relocate a critical intersection that leads to the Town's only transfer station and industrial park.

**Massachusetts Avenue East Arlington Traffic Operations Study, Arlington, MA.** Project Manager for the traffic component operations study and concept plan development for the improvement to Tatnuck Square area, an area of three closely spaced intersections. Improvements included traffic signal modifications and coordination; turn lane modifications and circulation changes.



## PUBLICATIONS

Public Works, June 1984 - *A Pavement Management Program Designed for Multi-Community Use*

ITE Compendium of Technical Papers, August 2002 - *Transportation Peer Reviews - Big Business or Bust?*

Central Vermont Regional Planning Commission, March 1984 - *Barre-Berlin-Montpelier Transportation Plan Update - 1984*

NEITE - various articles over the years

## RECENT PROFESSIONAL PRESENTATIONS

ITE District 1 Meeting, Cooperstown, NY; May 2006 - *Non-Traditional Funding for Transportation Improvements*

NEITE/UMass Section Meeting; April 2005 - *Cape Cod Rail Trail At-Grade Conflicts-Who has the Right of Way?*

ITE District 1 Meeting, Burlington, VT; May 2004 - *Cape Cod Solutions to Bicycle, Vehicle and Pedestrian Crossings*

ITE International Meeting, Philadelphia, PA; August 2002 - *Transportation Peer Reviews - Big Business or Bust?*

**Beach Road Improvements, Orleans, MA.** As Project Manager provided the Town with the transportation engineering assistance related to the location of a proposed sidewalk from Main Street to the very-popular Nauset Beach. A concept plan was developed showing the cross section and an estimate developed that gave the Town the necessary information for the feasibility planning of the project.

**Expert Witness Testimony, Various Locations.** For a variety of private and municipal clients, provided expert testimony in many public forums around the state and in Massachusetts Land Courts in Middlesex, Bristol and Dukes Counties. Also has provided expert testimony in the Act 250 process in Vermont.

**Route 140 Corridor Transportation Study, Boylston, MA.** As Project Manager provided the Town with the transportation engineering assistance related to the existing assessment and likely future build out of the corridor from the Shrewsbury Town line to the West Boylston Town line.

**Route 28 Chatham Intersections, Town of Chatham, MA.** Project Manager for developing improvement alternatives for Route 28 in the Town of Chatham. Meetings with various boards, committees are on-going to develop consensus building for optimum traffic improvements along the corridor. Improvement alternatives consist of roundabouts, traffic signals while providing accommodations for bicycle and pedestrians. MassDOT will review the submitted Project Initiation Form (PIF) so the project can ultimately be placed on the Transportation Improvement Program (TIP).

**Orleans Town Center to South Orleans Bike Feasibility Study, Orleans, MA.** Project Manager for the undertaking of a comprehensive bike feasibility study that is proposed to connect South Orleans to the Town Center Village area, and provide gateways to the Cape Cod Rail Trail.

**Gateway Center Environmental Impact Report, Everett, MA.** Project Manager for transportation elements of a 714,00 GSF shopping center located on former brownfields site that fronted on a DCR roadway. Review elements included, MassDOT- Transit Division bus lines, bikeway connections, traffic analysis and conceptual design of the obsolete rotary, Santilli Circle.



## GARY L. HEBERT, P.E., PTOE Vice President

### EDUCATION

B.S., 1970, Electrical Engineering,  
University of Buffalo  
A.A.S., 1968, Engineering Science,  
State University of New York

### PROFESSIONAL REGISTRATIONS

P.E., MA, Traffic, 1991  
P.E., ME, Civil, 2002

Nat'l, PTOE, 2005

### PROFESSIONAL ACTIVITIES

Fellow: Institute of Transportation Engineers  
2011 – ITE Northeastern District Chair  
2008 - Selected to represent practitioners on an International Committee to update ITE's *Manual on Transportation Engineering Studies* published for national distribution in 2010.  
ITE New England Section:  
2007 - Distinguished Service Award  
2007 - Co-chair: ITE Northeastern Dist. Meeting, Providence, RI  
2002 - President  
Author: NEITE PDH Policy  
Instructor: PTOE Refresher Course  
Moderator: Complete Streets II Technical Session, May 2011.

### PROJECT ROLE: Project Manager (Back-Up)

Gary Hebert's professional experience includes project management; traffic, pedestrian, bike studies; parking, public transportation and shuttle studies; environmental impact reports and assessments. He has managed numerous access, circulation, and parking planning efforts and provided traffic and parking expert witness testimony on several occasions and has conducted numerous peer reviews on behalf of Clients throughout New England. He has organized and/or participated in community involvement programs for more than 100 transportation-related projects.

### REPRESENTATIVE RELEVANT EXPERIENCE

**Traffic and Parking Peer Reviews, MA.** Conducted numerous traffic and parking impact peer reviews of developments in a wide array of Massachusetts communities including Arlington, Lynnfield, Lenox, Lunenburg, Gardner, Groton, Billerica, Braintree, Hamilton, Kingston, Marblehead, Norfolk, Plymouth, Somerville, Stoneham, Swampscott, Westford, and Winchester. Developments evaluated included medical office buildings, shopping centers, single and multi-family residential, regional high schools, fast food, and major retail/office developments. Among the peer traffic impact reviews he conducted under Chapter 40B, Massachusetts Affordable Housing Zoning Law were several developments proposed in Groton and one each in Braintree, Billerica, Lenox, Hamilton, Lunenburg, Marblehead, and the Jefferson site in Westford. He assisted the Town of Groton in brokering a land swap needed to mitigate the impacts of a Chapter 40B (Massachusetts Affordable Housing law) development including the preparation of a PowerPoint presentation for technical assistance at a Special Town Meeting.

**On-Call Engineering Services, City of Salem, MA.** Has served as Project Engineer or Project Manager on several assignments completed under on-call services contracts. Assignments have included Citywide Bicycle Circulation Master Plan with a 4.85 mile Pilot Route bid package (just opened), Lafayette Street safety improvements, peer review of traffic impact study prepared in connection with redevelopment of Tri-City Sales/Dunkin Donuts site to include a new CVS Pharmacy on northwest corner of Highland Avenue intersection with Marlborough Road.

**On-Call Services, Mass. Dept. of Conservation & Recreation.** Project Engineer on several on-call assignments including Jamaica Pond pedestrian/bike access enhancements, Lynn Parkways system enhancements, pedestrian crossings of Gallivan Boulevard, traffic analysis of the reversal of Cambridge Parkway, and Bowker overpass reconstruction traffic analysis.

**Bridge Replacement Traffic Impact Studies.** On behalf of MassDOT, conducted an assessment of traffic impacts of Morton and River Streets bridge replacement alternatives.



## PRESENTATIONS

*"Long Term Parking and Trip Generation for a Large Multi-use Development"*, ITE District 1, May 2010  
*"Lafayette Street Safety Improvements, Salem, MA,"*  
ECHA, May 2010  
*"Station Avenue Redevelopment Analysis"*, May 2007;  
*"Road and Intersection Safety Policy and Legislative Initiatives – Comparing the New England States"*, May 2004; and  
*"Vineyard Haven Ferry Terminal, Designing a Strategy for Traffic and Parking Improvements"*, May, 2001  
Editor: New England ITE Chronicle 1995-96 and Fall 2001

**Various Assignments for Planning Board/Zoning Board of Appeals, Groton, MA.** Town has retained Gary to review transportation impacts of residential and commercial developments. He has made several recommendations, subsequently implemented, and completed several community presentations. He also has provided expert witness testimony on behalf of the Town.

**Residential Development Traffic Impact Studies, Cambridge, MA, Georgetown, MA, Groton, MA.** Project Manager for traffic impact studies of apartment complexes ranging in size from 20-280 units in five different communities.

**Transportation Management Plan, Braintree, MA, Town of Braintree.** Project Engineer, examined traffic patterns, levels of service, plan for improvements in preparation of town wide Transportation Management Plan.

**Overview Services, Boston Public Works Department, MA.** Traffic Engineer, design traffic calming measures on Congress Street and Alexander the Great Square. Involved speed table and neckdowns to slow traffic speeds and enhance pedestrian safety. Conducted traffic operations analysis.

**Dartmouth Plaza Traffic Impact Study, Boston, MA, Boston Transportation Department.** Project Manager explored options for re-routing traffic through closure of Dartmouth Plaza.

**Main Street/Rock Harbor Road Safety Improvements, Orleans, MA.** Prepared bikeway/transportation enhancement study of Main Street, included successful consensus-building effort that addressed bikeway/pedestrian safety and streetscape improvements.

**Walgreen's Traffic Impact Study Review, Town of Stoneham, MA.** Reviewed traffic impact study completed by others for new Walgreen's Drugstore.

**Streetscape Improvements, Marblehead, MA.** Project Manager and lead planner for a corridor study on Pleasant Street, an urban minor arterial, also state numbered Route 114. Study environment included four of the Town's schools and serves a wide array of users. Gary updated the corridor crash history and operations, evaluated near term improvements for seven focus areas, prepared a functional design memorandum, and conducted community coordination and outreach presentations. Was also Project Manager and transportation planner for another ½-mile of streetscape in Old-Town to place overhead utilities underground and enhance the walking environment by unique traffic calming measures. He organized a successful operational test prior to implementation.



## SARAH E. WEIMER

Assistant Engineer

### EDUCATION

B.S. 2007, Architectural  
Engineering, Wentworth Institute  
of Technology

### Project Role: Traffic Engineering

Sarah Weimer assists on a variety of projects in FST's transportation department including traffic and highway design projects as well as planning studies, traffic signal design projects, and feasibility studies.

### Representative Relevant Experience

#### *School Traffic Control Plans and Misc. Traffic Assistance*

**Winchester, MA.** Conducted field reconnaissance of the school zone signage at the seven schools. Prepared updated traffic control plans and made recommendations to the safety and circulation of the schools.

**Malden Center, Malden, MA.** Conducted field reconnaissance and a feasibility study to provide traffic engineering assistance to evaluate the potential changes in circulation of a section of Washington Street and Garnet Road, in downtown Malden.

**Proposed Mixed Use Development, Brookhaven, New York.** Assessed and compared the project vehicle trip generation of the proposed mixed-use development located along the Long Island Expressway (I-495) and William Lloyd Parkway (Route 46).

**Route 134 Safety Improvements Dennis, MA.** Conducted field reconnaissance and signal analysis of the corridor in order to enhance safety in the area. Developed intersection layout concepts to improve bicycle and pedestrian access along Route 134.

**Needham St/Highland Ave Needham and Newton, MA.** Conducted traffic study and signal analysis of the corridor in order to enhance safety in the area. Developed corridor layout concepts to improve traffic flow and bicycle and pedestrian access along Needham St/Highland Ave.

**Anderson Memorial Bridge Cambridge/Boston, MA.** Prepared graphics presentations for public hearings to be used to discuss traffic issues on the bridge. Developed existing and proposed traffic circulation and cross section concepts to analyze the possible traffic modifications considered part of the rehabilitation of the Anderson Memorial Bridge. Performed analyses of the intersections and prepared reports about the proposed design.

**Route 28 Chatham, MA.** Conducted signal analysis along with corridor layout concepts in order to develop a community and business consensus for the area in order to accommodate motorists, pedestrians, and bicycle needs. Attended public hearings to explain the proposed concepts to the residents and businesses.

CERTIFICATE OF COMPLIANCE WITH TAX LAWS

Pursuant to Commonwealth of Massachusetts General Laws, Chapter 62C, Section 49A, I certify  
under the pains and penalties of perjury that, Fay, Spofford & Thorndike  
(Contractor)

has filed all Commonwealth of Massachusetts state tax returns, has complied with all  
Commonwealth of Massachusetts laws relating to taxes, and has paid all Commonwealth of  
Massachusetts State Taxes required under law.

Fay, Spofford & Thorndike

(Contractor)

By: Dean L. Green

Contractor's Federal Tax I.D. No. 04-3486454

END OF DOCUMENT

### CERTIFICATE OF NON-COLLUSION

The undersigned certifies under the pains and penalties of perjury that this contract has been obtained in good faith and without collusion or fraud with any other person. As used in this certification, the word 'person' shall mean any natural person, business, partnerships, corporation, union, committee, club, or other organization, entity, or group of individuals.

Name of Business: Fay, Spofford & Thorndike

Signature: Dean L. Groves

Name of Person signing Bid: Dean L. Groves

END OF DOCUMENT