

935 MAIN STREET STE B4 MANCHESTER, CT 06040 TELEPHONE 860.533.1210 FACSIMILE 860-533-1374

#### WILLIAM A. VLIET, P.E.

#### Curriculum Vitae

Mr. Vliet is a licensed Professional Engineer, experienced in traffic and transportation engineering. He has conducted traffic studies; analyzed traffic flows and roadway requirements; and designed roadways and traffic signals. He has designed mitigative roadway improvements associated with site generated development traffic. Mr. Vliet has also been a land surveyor as well as an inspector on traffic control signal and roadway construction projects.

He is an ACTAR Accredited Traffic Accident Reconstructionist, providing accident evidence collection assistance to the Manchester Police Department and accident reconstruction services to private sector clients in both civil and criminal cases. He has provided expert witness testimony in Connecticut and New Jersey.

#### License/Accreditation

**Licensed Professional Engineer** 

Connecticut, since 1988

**Accredited Traffic Accident Reconstructionist** 

ACTAR, since 1993

#### **Education**

**Bachelor of Science, Civil Engineering**, 1982 University of Hartford, West Hartford, CT

### Vliet & O'Neill, LLC

1998 – Present

#### Motor Vehicle Crash Reconstruction

- Review case files.
- Conduct on-site investigations.
- Conduct vehicle testing.
- Obtain "Black Box" data from vehicles.
- Reconstruct crashes.
- Analyze driver and pedestrian actions.
- Provide reports.
- Provide diagrams and exhibits.
- Provide 2D and 3D animations and/or simulations.
- Provide expert witness testimony.

### Traffic Planning and Engineering

- Assess traffic flow conditions.
- Devise solutions to traffic problems.
- Design geometric modifications and traffic control signals.
- Conduct traffic impact studies for residential and commercial developments.
- Represent clients at Planning & Zoning meetings.

## Traffic Consultant to the Town of Manchester, CT (1998 – 2002)

- Review applications to the Planning and Zoning Commission.
- Respond to citizen complaints.
- Design traffic control devices and traffic signals.
- Construction Management.

# **Manchester Police Department**

(Volunteer Position) 1994 – Present

### Member of the Accident Reconstruction Team

- Respond to serious and fatal accidents
- Assist with on-scene evidence identification and collection.
- Occasional follow-up reconstruction assistance.

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### Fuss & O'Neill, Inc.

1985 - 1998

### **Private Developer Work**

- Prepared over 100 traffic impact studies for projects ranging from single family homes to regional shopping malls to University Campuses to Major Pharmaceutical Companies and complex office developments.
- Identified and designed necessary roadway and intersection improvements to mitigate the impact of development traffic. Work included traffic control signal system design.
- Complete applications to local Planning & Zoning Commissions for approvals.
- Represent clients at Planning & Zoning meetings.
- Collaborate with municipal staff members to resolve design issues.
- Oversaw construction activities for designed improvements.

### **Public Agency Work**

Project Manager for ConnDOT closed-loop traffic signal systems.

- Coordinated design work with local officials/Legal Traffic Authorities.
- Provided final design documents in accordance with ConnDOT and MUTCD design guidelines.
- Review design plans for conformance with federal and state design requirements.
- Attend meetings with federal, state and local officials to resolve project issues.

Project Traffic Engineer for ConnDOT Interstate Ramp System modifications.

- Provided traffic engineering volume projections.
- Analyzed future traffic flow conditions.
- Determined lane geometry for future traffic flow conditions.
- Assessed current accident data.
- Presented project information to local officials.

Project Traffic Engineer for Town of Manchester Main Street Reconstruction.

- Assessed and analyzed traffic volume data.
- Determined intersection and corridor geometry for future conditions.
- Designed traffic signal plans and system for corridor intersections.

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Consultant Engineer to Town of Southington Planning/Zoning Commission.

- Provided traffic impact review/analysis of development applications.
- Presented review comments to town staff and applicants.
- Presented review findings to the Planning/Zoning Commission.

#### **Motor Vehicle Crash Reconstruction**

- Reviewed case files
- Conducted on-site investigations.
- Conducted vehicle testing.
- Obtained "Black Box" data from vehicles
- Reconstructed crashes.
- Analyzed driver and pedestrian actions.
- Provided reports.
- Provided diagrams and exhibits.
- Provided expert witness testimony

# Township of Wayne, New Jersey

1983 - 1985

## **Town Traffic Engineer/Traffic Engineering**

- Reviewed all site plan and sub-division development applications.
- Reviewed Traffic impact studies submitted in support of development application approval by the Planning and Zoning Commission.
- Provided planning department staff with comments and recommendations concerning traffic impact associated with the development applications.
- Met with planning department staff, other town staff and the applicant to discuss and resolve traffic issues prior to Planning and Zoning Commission meetings.
- Presented traffic engineering review findings to the Planning and Zoning Commission.
- Implemented a joint review process between the town police department and the traffic engineering office for high accident locations.
- Responded with the town police department to serious and fatal traffic accidents as part of the on-scene evidence collection team.

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- Maintained signal timings for all town owned signalized intersections.
- Coordinated all signing, striping and signal maintenance for town roadways.
- Project Manager for consultant designed transportation projects.
- Coordinated town development and improvement projects with the New Jersey Department of Transportation as required.

### **County of Passaic, New Jersey**

1982 - 1983

### Civil Engineer/Civil Engineering

- Worked with the County Engineer and County Traffic Engineer in performing various civil engineering duties.
- Reviewed land development applications affecting county roadways/facilities for traffic and drainage impacts.
- Prepared and presented review comments to county planning department staff and development applicants as required.
- Assisted the County Traffic Engineer concerning maintenance and improvements to signing and striping of county roadways.
- Designed minor structural improvements for county buildings and facilities.

# **Specialized Training**

Highway Safety Evaluation, 1982 Federal Highway Administration

Traffic Control Devices Handbook, 1984 Federal Highway Administration

Accident Investigation, 1984 The Police Academy of Passaic County, New Jersey

Special Problems in Accident Reconstruction, 1985 Institute of Police Technology & Management, University of North Florida

Traffic Signal Design, 1985 Institute of Transportation Engineers

Intersection Traffic Signal Controllers, 1989 Federal Highway Administration

Traffic Accident Reconstruction I, 1992 The Traffic Institute, Northwestern University

Traffic Accident Reconstruction II, 1992 The Traffic Institute, Northwestern University

Intersection Design and Channelization, 1992 The Traffic Institute, Northwestern University

Work Zone Safety, 1994 Technology Transfer Center, University of Connecticut

Microcomputer/Edcrash Accident Reconstruction, 1997 The Traffic Institute, Northwestern University

Acceleration and VC200 Familiarization, 1999 Vericom Computers, Inc.

Inspection and Investigation of Commercial Motor Vehicle Accidents, 1999 Institute of Police Technology and Management, University of North Florida

Traffic Calming, 2000 Center for Public Safety, Northwestern University

Pedestrian/Bicycle Crash Investigation, 2000 Institute of Police Technology and Management, University of North Florida

World Reconstruction Exhibition 2000, 2000 Texas A&M University

Millennium Manual on Uniform Traffic Control Devices Workshop, 2002 Transportation Institute, University of Connecticut

Introduction to Event Data Recorders & Crush Documentation, 2002 National Association of Professional Accident Reconstruction Specialists

Joint Annual Conference, 2002 NAPARS, NATARI, NJAAR, MATAI, CSI, NYSTARS, Ocean City, MD

Crash Data Retrieval (CDR) System Operator Certification, 2004 Collision Safety Institute

Human Vehicle Environment (HVE) Forum, 2004 Engineering Dynamics Corporation

One Day Driving School, 2005 Dodge/Skip Barber Driving School, Lime Rock Park, CT

One Day Racing School, 2006 Dodge/Skip Barber Advanced Driving School, Lime Rock Park, CT

Conservation of Linear Momentum Refresher Course, 2007 SRR Traffic Safety Consulting

Highway Vehicle Event Data Recorder Symposium, 2007 Society of Automotive Engineers

Basic/Advanced Diagramming and 3D Animation, 2007 Visual Statement

ARC-CSI Crash Conference, 2009 Las Vegas, NV

Human Factors for Traffic Accident Reconstruction, 2010 Accident Dynamics Research Center

Advanced 3D Computer Diagramming for Crash Reconstruction, 2011 ARAS 360

Investigating Motorcycle Collisions, 2012 Annual Joint Conference/NYSTARS

Case Presentation – Computer Simulation/Animation 30<sup>th</sup> Annual CTLA College of Evidence Seminar, 2012

Advanced 3D Computer Diagramming for Crash Reconstruction, 2013 ARAS 360 HD

Crash Data Retrieval Data Analyst, 2013 Northwestern University Center for Public Safety

Crush Damage Energy; Memory Formation, 2014 NAPARS Combined Annual Joint Conference

Investigating Motor Vehicle Crashes with Utility Poles and Trees, 2014 SRR Traffic Safety Consulting

World Reconstruction Exhibition 2016 Orlando, Florida

Investigating Pedestrian Collisions, 2018 NYSTARS Combined Annual Joint Conference

Video Analysis, 2019 NJAAR Seminar

FARO Zone Crash, 2019 FARO Zone 3D

Human Factors, 2019 NJAAR Combined Annual Joint Conference

Annual Joint Conference, 2020 NAPARS

Research & Info Sources; Linear Momentum; Bendix Pro; Spin Analysis, 2022 NAPARS

IDRR/Response Software, 2022 Crash Safety Solutions/Driver Research Institute

EDR Update, 2023 NAPARS

Aerial Photogrammetry, 2023 NAPARS

Human Factors in Crash Reconstruction, 2023 NAPARS

World Reconstruction Exposition 2023 Orlando, FL

Ignition Cycology, 2023 NAPARS

Digital Video Analysis, 2023 NAPARS

Update on Heavy Vehicle EDR Data, 2023 NAPARS

Traffic Signal Collision Investigation, 2023 NAPARS

Monte Carlo Analysis, 2023 NAPARS

Critical Speed Yaw, 2024 NAPARS

Toyota Safety Systems, 2024 NAPARS

Crash Analysis with EDR Data, 2024 NAPARS

Horrible Crash Reconstruction; Learning from Others Mistakes, 2024 NATARI Combined Annual Joint Conference

Video Analysis, 2024 NATARI Combined Annual Joint Conference

## **Speaking/Teaching Activities**

Accident Evidence Collection - Instructor (16) Suhaka & Associates, Inc., 1989-1997

Transportation Engineering/Accident Reconstruction - Lecturer (10) University of Hartford, 1992-2003

### **Speaking/Teaching Activities (continued)**

Accident Investigation – Instructor Bergen County Police Academy, New Jersey, 1993

Accident Litigation Mitigation – Speaker American Public Works Association, N.E. Chapter Annual Convention, 1995

Accident Evidence Collection – Speaker American Public Works Association, National Convention, 1996

DPW/Police Partnering in Municipal Vehicle Accident Evidence Collection – Instructor Transportation Institute, University of Connecticut, 1997

Accident Evidence Collection – Speaker Connecticut Conference of Municipalities Convention, 1998

### **Professional Memberships**

American Society of Civil Engineers, since 1982
Institute of Transportation Engineers, since 1985
National Association of Professional Accident Reconstruction Specialists, since 1992
Society of Automotive Engineers, since 1992
Society of Accident Reconstructionists, since1996
Accident Reconstruction Communications Network, 2001 – 2019
The Crash Hub, since 2019