

IN THE SUPERIOR COURT OF DOOLY COUNTY
STATE OF GEORGIA

MICHELLE WALKER ARTHUR AND
HUDSON E. ARTHUR, JR.,

Plaintiffs,

vs.

AISHA LATRICE ELLIS;
DEPARTMENT OF
TRANSPORTATION, STATE OF
GEORGIA; ARCHER WESTERN
CONTRACTORS, LTD; WILBUR
SMITH ASSOCIATES, INC.;
COSTELLO INDUSTRIES, INC.;
COSTELLO SOUTHEAST, INC.;
WILKES CONCRETE COMPANY,
INC.; C&G CONCRETE
CONSTRUCTION COMPANY, INC.;
and, JOHN DOES 1 THROUGH 10,

Defendants.

Civil Action

File No. 09DV-0130

STATE OF GEORGIA,
COUNTY OF DOUGLAS

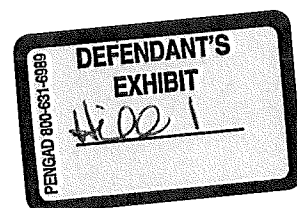
AFFIDAVIT OF HERMAN A. HILL, P.E., P.T.O.E.

Personally appeared before the undersigned attesting officer authorized by law to administer oaths, Herman A. Hill, who after being duly sworn, deposes and says as follows:

1.

That he is a licensed professional engineer, a certified traffic operations engineer, and has been regularly engaged in practice as a consulting engineer under

EXHIBIT "G"



the business name of Herman Hill & Associates for each of the last 15 years. He was participating in this capacity in December, 2007 and thereafter.

2.

That attached hereto as Exhibit "1" is a copy of his curriculum vitae which sets forth his knowledge, skill, education, training and experience qualifying him as an expert in the field of traffic and transportation engineering, including highway design, construction, operation and maintenance. Said attachment is hereby incorporated by reference.

3.

That he has had extensive education, training and experience in the area of transportation and traffic engineering, as well as highway design, traffic operations, traffic control, construction and maintenance. This experience includes substantial study, application and use of AASHTO Geometric Design Policy, *The Manual on Uniform Traffic Control Devices*, *AASHTO Roadside Design Guide*, *Georgia Department of Transportation Standard Specifications*, and other standards, publications, studies and documents on highway design, traffic control, traffic operations, construction and maintenance.

4.

That in regard to this case, he has, among other things, done the following:

- (a) Reviewed the Uniform Motor Vehicle Accident Report regarding the December 21, 2007 collision involving a vehicle operated by Michelle A. Arthur and a vehicle operated by Aisha Latrice Ellis;

- (b) Visited and inspected the area around the site where the collision occurred;
- (c) Reviewed photographs of the area around the construction site where the collision occurred;
- (d) Reviewed, among other things, Manual on Uniform Traffic Control Devices Handbook, Federal Highway Administration; Georgia D.O.T. Standard Specifications, and Supplements; AASHTO Geometric Design Policy; AASHTO Roadside Design Guide and other applicable literature, standards and industry publications;
- (e) Reviewed Plaintiffs' Complaint and First Amendment to Complaint to be filed herein;
- (f) Reviewed industry and Georgia Department of Transportation publications relating to highway and bridge design, construction, maintenance, traffic control and traffic operations;
- (g) Reviewed various documents and videotapes from the Georgia Department of Transportation file regarding the road/bridge project ongoing at the time of the December 21, 2007 wreck.

5.

That he has assumed the following facts, all of which are derived from the documents and items and work referred to in Paragraph 4 herein, to be true and which are of the type reasonably relied upon by highway engineering experts:

- (a) That, Eighth Avenue in Cordele, Crisp County, Georgia, also known as Highway 257, is a public highway which is a part of the state highway system of Georgia, and therefore was designed, constructed, inspected, operated and maintained by the Georgia Department of Transportation;
- (b) That, on December 21, 2007 at the time of the collision which is the subject matter of this case, it was daylight;
- (c) That, Eighth Avenue runs generally in an east/west direction as it proceeds through Cordele, Crisp County, Georgia, and said highway crosses I-75 in Crisp County, Georgia;
- (d) That, on the date of the aforescribed collision and in the area around the aforescribed collision, a road/bridge construction project was underway. The Georgia Department of Transportation had contracted with Archer Western Contractors, LTD, to perform work on the project, which included widening the bridge over I-75 for traffic utilizing Eighth Avenue;
- (e) That, at the aforesaid time and place, said Eighth Avenue, the approaches thereto, and the adjoining right of way, were under the possession, control and responsibility of at least the Georgia Department of Transportation and the contractor Archer Western Contractors, LTD;
- (f) That, at the aforesaid place, at least Georgia Department of Transportation, Archer Western Contractors, LTD, and Wilbur Smith Associates, Inc. had inspection responsibilities to ensure, among other

things, that the construction activities and construction work did not create an unsafe condition for motorists;

- (g) That, on December 21, 2007, Eighth Avenue, then under construction, had concrete barriers, construction materials, and equipment positioned between the eastbound and westbound lanes of Eighth Avenue and the eastbound and westbound lanes of travel had been separated in distance from their original design and traffic pattern;
- (h) That, at the time of the December 21, 2007 collision, construction activity was occurring on Eighth Avenue, including the bridge over I-75;
- (i) That, at the time of the December 21, 2007 collision, no flagmen were present on Eighth Avenue and its bridge over I-75;
- (j) That, on December 21, 2007, Aisha Latrice Ellis was operating her vehicle in an easterly direction on Eighth Avenue, approaching the east end of the Eighth Avenue bridge, then under construction;
- (k) That, Michelle W. Arthur was operating her vehicle on December 21, 2007 in a westerly direction on Eighth Avenue approaching the east end of the Eighth Avenue bridge;
- (l) That, Aisha Latrice Ellis turned her vehicle left while on the Eighth Avenue bridge in an effort to access the I-75 north entrance ramp;
- (m) That, Aisha Latrice Ellis, after turning her vehicle left, then occupied an area created by the construction activity between the eastbound and westbound lanes of Eighth Avenue;

- (n) As Aisha Latrice Ellis' vehicle attempted to cross the westbound lane of Eighth Avenue occupied by the vehicle of Michelle W. Arthur, to access I-75 North entrance ramp, a collision occurred in the westbound lane of Eighth Avenue;
- (o) That, because of the construction activity, construction materials and equipment, and the geometry of the roadway and bridge then existing, the line of sight available to Aisha Latrice Ellis to see traffic approaching, including the vehicle of Michelle W. Arthur in the westbound lane of Eighth Avenue, was significantly degraded; and,
- (p) That, this significantly degraded line of sight caused or contributed to the aforescribed collision.

6.

That he has reached the following conclusions and opinions based on reliable principles and methods of engineering and analysis, applied reliably to the facts set out herein, all in his capacity as a licensed professional engineer and certified traffic operations engineer. He has applied, among other things, the principles which are ordinarily and customarily accepted principles of transportation engineering, civil engineering, highway and bridge design, highway and bridge construction and highway and bridge maintenance, and which are consistent with and supported by his extensive education, training and experience:

- (a) That, at least, the Georgia Department of Transportation and Archer Western Contractors, LTD were responsible for the design, construction,

traffic control, traffic operations and maintenance of Eighth Avenue in the area of the aforescribed wreck, at the time of the wreck;

- (b) That, at least, Wilbur Smith Associates, Inc., Georgia Department of Transportation, and Archer Western Contractors, LTD were responsible for inspection of the work, including traffic control and traffic operations of Archer Western Contractors, LTD, in the construction project, including the Eighth Avenue bridge construction work;
- (c) That the Georgia Department of Transportation, Archer Western Contractors, LTD, and Wilbur Smith Associates, Inc. failed to adequately inspect and monitor the work on Eighth Avenue and make necessary changes to eliminate or minimize significantly diminished lines of sight for motorists attempting to access the I-75 North entrance ramp from Eighth Avenue;
- (d) That the Georgia Department of Transportation, Archer Western Contractors, LTD, and Wilbur Smith Associates, Inc. failed to take measures to cause adequate warnings to be given to motorists of the unique hazards and diminished lines of sight created by the construction work and activity of this portion of Eighth Avenue as existed at the time of the wreck;
- (e) The Georgia Department of Transportation, Archer Western Contractors, LTD, Wilbur Smith Associates, Inc., Costello Industries, Inc., Costello Southeast, Inc., Wilkes Concrete Company, Inc., and C&G Concrete

Construction Company, Inc., failed to design, maintain, construct or inspect the roadway of Eighth Avenue so as to protect the motoring public from the dangerous and hazardous conditions which existed on December 21, 2007;

- (f) The Georgia Department of Transportation, Archer Western Contractors, LTD, Wilbur Smith Associates, Inc., Costello Industries, Inc., Costello Southeast, Inc., Wilkes Concrete Company, Inc., and C&G Concrete Construction Company, Inc. created or allowed to exist an inherently dangerous condition on Eighth Avenue at the time of the wreck relative to the motoring public;
- (g) The Georgia Department of Transportation, Archer Western Contractors, LTD, and Wilbur Smith Associates, Inc. were under a duty to safely control the movement of traffic at the aforesaid time and place and to ensure the timely use of appropriate traffic control measures for the safety of the motoring public given the conditions then existing; and,
- (h) That the foregoing acts and omissions of The Georgia Department of Transportation, Archer Western Contractors, LTD, Wilbur Smith Associates, Inc., Costello Industries, Inc., Costello Southeast, Inc., Wilkes Concrete Company, Inc., and C&G Concrete Construction Company, Inc. contributed to the collision which resulted in the injuries sustained by Michelle W. Arthur.

This Affidavit has been made in the capacity of an expert witness upon, among other things, personal review and knowledge of the matters and materials referred to in this Affidavit and about matters concerning which he is competent to testify.

8.

The conclusion and opinions offered in this Affidavit are based on facts and data of the type usually relied upon by experts in the field of traffic and civil engineering, highway design, construction and maintenance, and are the product of reliable principles and methods, and in arriving at said opinions and conclusions the Affiant has applied the principles and methods reliably to the facts of this case.

9.

The methodology and principles which I have used, and which I use regularly in my work, are well recognized in the fields of engineering, traffic operations and highway engineering, and accident reconstruction and are drawn from experience, tests and experiments that can be tested, replicated and verified. They involve well recognized and accepted principles of science, mathematics and physics, which are accepted throughout the world. This same methodology and these same principles are utilized and accepted by GDOT.

10.

There is no "new" component to the methodology and principles that I use. They have not been developed by me personally, but have emerged from extensive use, experience and testing by other experts over many decades and are generally accepted throughout the engineering and traffic operations, highway engineering and accident reconstruction professions.

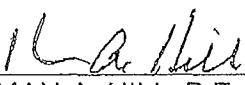
11.

This Affidavit is not intended to set forth each and every allegation of negligence or each and every detail which is known by him or learned by him with regard to the above-captioned case, but is intended only to set forth his preliminary opinions with regard to negligence and the source of the facts which serve as the basis of those opinions. Opinions expressed herein are based on the information available to me at the present time and I may have additional or different opinions based on information developed during the course of discovery in this case.

12.

This Affidavit has been made upon personal knowledge and upon reliable assumptions for the purpose of being attached to and used in support of Plaintiffs' Complaint and First Amendment to Complaint in the case of Michelle Walker Arthur and Hudson E. Arthur, Jr., and if necessary, to comply with O.C.G.A. 9-11-9.1. Affiant is competent to testify about the matters herein.

FURTHER AFFIANT SAYETH NOT.


HERMAN A. HILL, P.E., P.T.O.E.

Sworn to and subscribed before me
this 30 day of December, 2009.


NOTARY PUBLIC

Douglas County, Georgia
My Commission Expires April 3, 2018

December 2, 2009

HERMAN A. HILL, P.E., P.T.O.E.

EDUCATION:

- ♦ Bachelor of Civil Engineering, 1964
Georgia Institute of Technology
- ♦ Master of Science in Civil Engineering, 1965
Georgia Institute of Technology
- ♦ Master of Science in Public Administration, 1986
Brenau Professional College

PROFESSIONAL ACTIVITIES:

Licensed Professional Engineer - Alabama (#20592), Georgia (#6553), SC (#27473)
Certified Professional Traffic Operations Engineer, ITE, #322
Senior Member, National Academy of Forensic Engineers, #634S
ACTAR, Accredited Traffic Accident Reconstructionist, #663
National Committee on Uniform Traffic Control Devices -
Regulatory/Warning Signs Technical Committee; 1996-2009
Expert Witness Council, ITE
Guest lecturer at Traffic Engineering Seminars, Georgia Tech
Work Zone Traffic Controls Handbook, 1995
Former President of Georgia Section and Southeast United States District, ITE
Recipient of Marble Hensley Individual Activity Award by Southern District, ITE
Georgia Section, ITE, Chairman, Legislative Committee, 1994-2003
Receipant of 2006 Commendation For Service To Douglas County Sheriff Department

EXPERIENCE: 1995-

**Traffic Engineering & Accident Reconstruction Consultant
Herman Hill & Associates**

Traffic/Highway Engineering -

- Highway Design, Maintenance & Construction Analysis
- Assess Human Factors Elements in Operations and Design
- Evaluation of Traffic Signal Operation & Performance with HICAP 2000
- Traffic Counts using JAMAR Technology equipment/software
- Application of Federal and State Regulations
- Traffic Impact Studies and Rezoning with TEAPAC
- Evaluation of Street Lighting for Driver/Pedestrian Vision
- Prepare Design Plans for Traffic Signalization Projects
- Produce Video and Print Photos for Traffic Conditions
- Documents for Preparation of Settlement Reports

Accident Reconstruction -

- Auto, Truck, Pedestrian, Bicycle, Motorcycle, Railroad Collisions
- Speed-Distance Computations and Depictions
- Speed Calculations Using Momentum, Energy or Crush
- Develop Computer Simulation Using PC CRASH
- Analysis of vehicle crush damage and Delta V using PC CRASH
- Download vehicle crash data using Vetronix Crash Data Retrieval
- Use of NHTSA crash test data by CD library; Multi-Source Program
- Prepare Computerized Site Plans and Layouts with AutoCad 2009
- Measurement of wreck sites with Sokkia SET 530R 3 Total Station System

Herman Hill, P.E.
Curriculum Vitae

- Computerized Measurement of Pavement Surface Friction, Vericom VC-3000
- Analysis of Physical and Behavioral Factors

1992-1995

Transportation Engineering Consultant
Archie Burnham Associates

Perform engineering consulting services in a variety of traffic engineering and safety applications including accident analysis, traffic studies, traffic signal design, intersection design, zoning reviews, traffic access design.

1986-92 Local Government Manager

As City Manager and County Manager responsible for operation of all departments of local government.

1983-86 Public Works Director, Floyd County.

Responsible for all types county road maintenance, construction, drainage, paving, work schedule, solid waste collection, county engineering, vehicle maintenance, building maintenance and inmate crew assignments. Administration of subdivision regulations, solid waste permit system, land use planning and grant applications. Implemented computerized maintenance work flow system and vehicle maintenance system.

1980-82 Co-Owner of Aviation Business.

Operated business specializing in air cargo; responsible for all personnel, financial, marketing, FAA coordination, maintenance and scheduling.

1965-80 Transportation Engineer, Georgia DOT.

Assistant State Traffic Engineer for eight years with supervision for staff of section managers. Responsible for studies, planning, analysis, data collection, report writing, programming, public presentation, design of federally funded safety programs for intersections, railroad crossings, traffic signals and other capacity/safety deficient locations. Coordinated program direction with Federal, State and local elected and appointed officials. Some examples of this work are listed below:

- Produced highway design plans for high accident location improvements.
- Organized and developed railroad signal design and study unit for defining hazardous crossings throughout state.
- Managed design of arterial and network signal systems
- Managed areawide traffic and safety studies for all major urban areas in Georgia.
- Conducted spot, segment and network studies throughout the State
- Conducted freeway evaluation studies
- Administered traffic engineering design program for preparation of intersection and section improvements
- Developed accelerated design procedures for traffic engineering projects
- Developed plans for statewide pavement marking program to provide operational improvement to local roads.

PROFESSIONAL ORGANIZATIONS:

Institute of Transportation Engineers	Society of Automotive Engineers
National Academy of Forensic Engineers	National Society of Professional Engineers
Transportation Research Board	American Public Works Association
National Association of Professional Accident Reconstruction Specialists	
American Society of Testing & Materials International (ASTM)	

RECENT TRAFFIC/HIGHWAY SEMINARS:

- Improving Operational Safety on Local Roads, Georgia Tech Transfer, Feb, 2000
- Georgia ITE 2000 MUTCD Seminar – Sept, 2000
- Traffic Barrier/End Terminal Design, Auburn University, March, 2001
- Basis of Soils with Geotechnical Applications, Auburn University, Aug, 2001
- Millennium MUTCD Traffic Control, Auburn University, Nov, 2001
- Georgia Quality Initiative Workshop, Dec 2001; Dec 2003; Dec 2007
- Tort Liability for Public Agencies, Auburn University, Dec, 2002
- Pavement Subsurface Drainage, Auburn University, Dec, 2002
- Storm Water Design, Auburn University, Apr, 2003
- Safety Analysis – Signalized Intersections, ITE, Dec, 2003
- Practical Surveying Using GPS, Auburn University, Dec, 2004
- Solutions Through Participation, District 5 ITE, April, 2005
- Past/Future, Summer Conference, Ga Section ITE, July, 2005
- Intersection Safety Audits, ITE, June, 2006
- Intersection Safety Workshop, GA ITE, Jan, 2007
- Traffic Operations Basics, Summer Conference, GaSection ITE, July 2007
- Older Driver Safety Design Workshop, Nov 2007
- What's Next in Transportation, Summer Conference, GaSection ITE, July 2008
- NCUTCD Technical Signs Committee, (Two Meetings/year), 1996-2009
- Public Works Management Seminar, UGA, Jan 2009
- Crash Analysis Procedures for Intersections and Segments, ITE, Feb 2009
- Intersection Sight Distance, ITE, March 2009
- Presentations For Traffic Engineers, ITE, March 2009
- Horizontal Curve Safety, ITE, April, 2009
- Southern District ITE Conference, April, 2009
- Standards of Practice for Surveying, Auburn University, June, 2009
- Urban Intersection Design, ITE, July 2009
- Getting There, Ga Section ITE Summer Seminar, July 2009

SEMINARS/CERTIFICATES:

- Accident Reconstruction Simulation - EDSMAC, Engineering Dynamics Corporation, 1993
- Accident Reconstruction Certificate, Northwestern University, Traffic Institute, 1994
- Tractor Trailer Vehicle Inspection & Accident Reconstruction, Texas A & M, 1996
- CAD Operator Certificate, Carroll Technical Institute, 1996
- BioMechanics For Traffic Accident Reconstruction, Texas A & M, 1997
- HVE-2D Forum, Engineering Dynamics Corporation, 1998
- Crush Damage and Energy Relationship, Texas A & M, 1999
- Crash Data Recorder Certification, Vetronix Corporation, 2000

Herman Hill, P.E.
Curriculum Vitae

- Vericom Seminar For VC3000 Accelerometer, 2002
- 2002 Roadside Design Guide, University of Maryland, 2002.
- NAFE Forensic Engineering Seminar, 2003
- PC Crash Seminar, Macinnis Engineering, 2004
- Vehicle Accident Reconstruction Methods, SAE, 2006
- Temporary Traffic Control Workshop, Dec 2007
- CDR Technician Re-Certification, Jan 2008
- NAFE Forensic Engineering Seminar, 2006, 2007, 2009
- Specialized Training for AutoCad Civil 3D, Repro Products, July 2009
- Mechanical Engineering Conference, Auburn University, Nov 2009
- AutoDesk Field To Finish Seminar, Dec 2009

GENERAL:

Past community involvement such as: Rotary Club; United Way; March of Dimes
Active member of Douglasville First Baptist Church

FEES: \$160.00 per hour plus expenses \$200.00 per hour for deposition/trial

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