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FELICIANO TENEZACA; JOSE ZUNA; **Plaintiffs,** **vs.** **TOLL BROTHERS, INC.; BIG RIDGE DEVELOPERS, LP; COUNTRY CLUB OF THE POCONOS; COUNTRY CLUB OF THE POCONOS COMMUNITY ASSOCIATION, INC.; COUNTRY CLUB OF THE POCONOS CONDO ASSOCIATION, INC. ANCHOR FRAMING CORP; ANCHOR FRAMING INC.; TOLL PA IV, LP; TOLL PA IX, LP; TOLL BROS., INC.; ABC BUSINESS ENTITIES 4-20; JOHN DOES 1-20** **Defendants.**	**SUPERIOR COURT OF NEW JERSEY** **LAW DIVISION: ESSEX COUNTY** **DOCKET NO.: ESX-L-1262-11** **Civil Action** **CERTIFICATION OF EXHIBITS**

I, **GERALD H. CLARK**, of full age, do hereby certify as follows:

1. I certify that attached hereto are true and accurate copies of the following exhibits:

Exhibit A- *Vincent Gallagher Reports*

Exhibit B- *Abridged OSHA file*

Exhibit C- *Timothy Carlsen, P.E., liability reports*

Exhibit D- *Curriculum Vitae of Timothy Carlsen, P.E.*

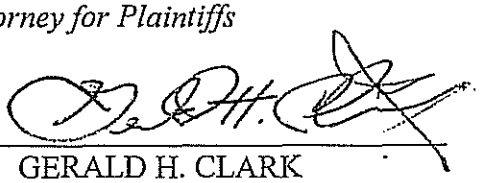
Exhibit E- *Complete Guide to the CSP, Application & Examination Information*

Exhibit F- *Deposition Transcript of Timothy Carlsen, P.E.*

Exhibit G- *Authorizations to be signed by Timothy Carlsen, P.E.*

I hereby certify that the foregoing statements made by me are true. I am aware that if any foregoing statements made by me are willfully false, I am subject to punishment.

Clark Law Firm, PC
Attorney for Plaintiffs

By: 
GERALD H. CLARK

Dated: January 5, 2015

EXHIBIT A

Vincent A. Gallagher

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www.safetyresearchinc.com

SAFETY RESEARCH, INC.

739 White Horse Pike
Suite 6
Audubon, NJ 08106
856-547-4884

February 26, 2013

FELICIANO TENEZACA vs. TOLL BROTHERS, et al.

I. ASSIGNMENT:

This case was assigned by attorney Gerald Clark to review various documents and to render an opinion regarding the conduct of Toll Brothers relative to the injury suffered by Feliciano Tenezaca.

II. PREPARATION:

On January 28, 2013, I met with Feliciano Tenezaca and Jose Zuna to learn of the ways work was being performed by workers relative to safety prior to the two injury incidents. By way of preparation, I reviewed the following:

- Deposition transcripts of Feliciano Tenezaca, Jose Zuna, Thomas Brown and Victor Rodrigues.
- Deposition exhibits.
- Discovery Response from Toll Brothers with attachments.
- Discovery Response from Anchor Framing with attachments.
- Plaintiff, Jose Zuna Discovery Response without attachments.
- Plaintiff, Feliciano Tenezaca Discovery Response without attachments.
- Toll Brothers' Safety Program.
- Anchor Framing's Safety Program.
- Anchor Framing Corp., OSHA Citation and Notification of Penalty.
- The Reserve at Pond Creek website details.
- Documents produced by Toll Brothers regarding safety.

- Anchor Framing certificates of training.
- Toll Brothers employees' business cards.
- Addendum Construction Agreement between Anchor Framing and Toll Brothers.
- Toll Brothers, Inc. Safety Inspection Forms.
- OSHA documents regarding the Reserve at Pond Creek project.
- Photos of the job site.

III. BACKGROUND:

This incident occurred February 23, 2009 at a construction site known as Country Club of the Poconos. Toll Brothers was the general contractor. Feliciano Tenezaca was a carpenter employed by Anchor Framing Corp. Anchor Framing Corp. was a subcontractor hired by Toll Brothers to do rough carpentry at this site. That is, they installed the framing work including walls, floors, joists, trusses and windows.

Prior to this incident, Feliciano Tenezaca was asked to perform some finishing touches. He was asked to go onto the roof and nail tacks to serve as a place to fasten the fascia. Tacks are six inch long two by fours nailed at the roof's edge. Mr. Tenezaca does not have specific recollection of how his fall was initiated. He fell while at the edge of the building. He was not protected by fall protection.

IV. METHODOLOGY OF EVALUATION:

The method to evaluate the conduct of Tolls Brothers in this case is to compare their conduct to the principles and practices of construction safety management established by industry safety authorities, to compliance with their safety program, and to compliance with OSHA standards. It will also consider the cause of this incident by way of Root Cause Analysis, sometimes called System Safety Analysis.

V. INTERVIEW WITH MESSRS. TENEZACA AND ZUNA – RECURRING HAZARDS AT THIS SITE:

On January 28, 2013, I spoke with Mr. Tenezaca and Mr. Zuna about the safety at this job site prior to the occurrence of both incidents. The purpose of the interview was for me to get a better understanding of how safety was being managed by Toll Brothers at this site. The following was learned:

- None of the carpenters who used nail guns ever wore eye protection at this job site. That is, for months, many workers were exposed to eye injuries because they were not required to comply with the OSHA standard. This is a conspicuous and serious hazard that was permitted by Toll Brothers representatives.
- More often than not, after the carpenters cut the stairway openings on the first and second floors, they did not immediately put a guardrail around the opening or did not secure a cover over the opening. This exposed those carpenters to falls through that opening on many occasions. This also was a conspicuous and ongoing problem to which many carpenters were exposed. Anchor Framing had the responsibility to install the fall protection as soon as possible after creating the opening. Likewise, Toll Brothers had the responsibility to plan, monitor and ensure that that protection was installed by Anchor Framing as soon as possible. According to both plaintiffs, the fall hazards at the stairway openings were ongoing and for many weeks prior to these incidents.
- Neither of the two injured workers received any OSHA training related to fall protection as required by 1926.503. None had any training with regard to personal protective equipment related to eye exposure from using nail guns.
- Mr. Zuna had no training in how to safely build a scaffold as required by 1926.454(b). He had no training with regard to use of a scaffold as required by 1926.454(a).
- When workers installed joists, they did not use scaffolds and they did not use any fall protection.

With regard to ongoing common, conspicuous violations of OSHA standards which existed at this site, the OSHA investigator was told by the Anchor Framing foreman that Anchor never had any design in place for fall protection regarding personal fall arrest systems. The foreman admitted that they did not have a fall protection plan as required by 1926.502(k). Appendix 4 of the Toll Brothers' Safety Program requires subcontractors to have a fall protection plan. This is another example of Toll Brothers permitting Anchor Framing to violate OSHA standards and Toll Brothers' safety program. Likewise, OSHA found that Anchor Framing's foreman told the OSHA inspector that Anchor Framing never had a plan to establish anchorage points for a fall arrest system. This shows that Toll Brothers

permitted Anchor Framing to violate OSHA standards. That is because OSHA requires a competent person to determine when the truss system becomes strong enough to act as an anchorage point for a fall arrest system. The Anchor Framing foreman testified that there never was a design or plan in place to determine when the trusses could serve as an anchorage point for a personal fall arrest system.

VI. MAGNITUDE AND SEVERITY OF FALLS IN THE CONSTRUCTION INDUSTRY:

Fall-related incidents are the primary cause of fatalities in the U.S. construction industry. A NIOSH analysis of fatality data from the Bureau of Labor Statistics Census of Fatal Occupational Injuries (CFOI) indicated that from 2004 to 2008, a total of 5,844 construction workers were killed from all causes (annual average 1,169) (BLS, 2005, 2006, 2007, 2008, 2009). During the same period, 2055 construction fatalities occurred due to falling (annual average 411). Workers falling accounted for more than 35 percent of all fatalities that occurred in construction from 2004 to 2008. Further analyses of CFOI data indicate that construction-related falls from roof edges, through roof and floor openings, and through skylights resulted in a five year total of 767 fatalities (annual average 153).

Table 1 presents a five year breakdown of these data, along with a total number of fatalities and total number of fall-related fatalities in all U.S. workplaces for comparison. The last category of construction workplace situations (falls from roof edges, and through roof and floor openings and skylights) are situations that can be addressed with a guardrail system to prevent falls to a lower level.[1]

[1] Journal of the American Society of Safety Engineers, *Professional Safety,* January 2011, "Construction Guardrails: Development of a multifunctional system" by Thomas G. Bobick and E.A. McKenzie Jr.

Table 1

Fall-Related Fatalities

Event	2004	2005	2006	2007	2008
Total U.S. occupational fatalities	5,764	5,734	5,840	5,657	5,214
Total U.S. occupational fatal falls	822 (14%)	770 (13%)	827 (14%)	835 (15%)	700 (13%)
Total construction fatalities	1,234	1,192	1,239	1,204	975
Total construction fatal falls	445 (36%)	394 (33%)	433 (35%)	447 (37%)	336 (34%)
Construction fatal falls involving roofs[a] and floor openings	175 (39%[b]) (14%[c])	147 (37%[b]) (12%[c])	170 (39%[b]) (14%[c])	162 (36%[b]) (13%[c])	113 (34%[b]) (12%[c])

Note. *Fall-related fatalities, all U.S. industries and construction, 2004-2008. Data from Table A-9, "2004 Census of Fatal Occupational Injuries," by Bureau of Labor Statistics (BLS), 2005, Washington, DC: Author, Department of Labor (DOL); Table A-9, "2005 Census of Fatal Occupational Injuries," by BLS, 2006, Washington, DC: Author, DOL; Table A-9, "2006 Census of Fatal Occupational Injuries," by BLS, 2007, Washington, DC: Author, DOL; Table A-9, "2007 Census of Fatal Occupational Injuries," by BLS, 2008, Washington, DC: Author, DOL; and Table A-9, "2008 Census of Fatal Occupational Injuries," by BLS, 2009, Washington, DC: Author, DOL.*

[a]From roof edge, and through roof openings and skylights. [b]Percentage value of "total construction fatal falls." [c]Percentage value of "total construction fatalities."

VII. INDUSTRY STANDARD FOR INJURY PREVENTION IN THE CONSTRUCTION INDUSTRY: SAFETY MANAGEMENT PRINCIPLES AND PRACTICES

The following is a brief review of the industry standard or standard of care relative to injury prevention in the construction industry. For decades, both industry authorities and government authorities have been in agreement with regard to the steps that a general contractor should take in order to ensure that work performed on their behalf is done safely and in compliance with OSHA.

a. Principles and Techniques of Construction Safety Management

A review of the construction safety management literature will find fundamental agreement with the following principles:

- Safety begins at the top.
- Assignment of specific responsibility and accountability are key to successful construction safety management.
- Safety begins in the design stages - on the drawing board.
- Safety is a shared responsibility.
- A proactive rather than reactive approach is best.

- Accidents are foreseeable and predictable.
- Controls can be anticipated and put in place before exposure to the hazard takes place.
- Planning is essential.
- It is irresponsible to allow the evolution of a hazard and hope that safety inspection discovers the hazard before injury results.

I have applied these principles and techniques of injury prevention for thirty-five years. I have evaluated over 200 construction safety programs, investigated over one thousand construction injury incidents and have applied the techniques of hazard identification, evaluation and control for thirty-five years. Likewise, over 36,000 members of the American Society of Safety Engineers, that is, representatives from the construction industry, general industry, the insurance industry, government and labor are also in agreement with these principles and techniques of safety management and have been applying them for decades. I have written on the subject of the appropriate methodology of evaluation in construction industry cases in peer-reviewed articles in the Journal of the American Society of Safety Engineers. There is no disagreement regarding these principles and techniques of construction safety management among construction safety experts.

b. **American National Standard for Construction and Demolition Operations - Safety and Health Program Requirements for Multi-Employer Projects ANSI A10.33-1992.**

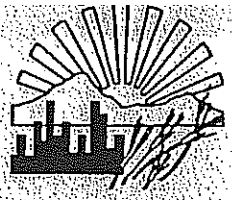
The Secretariat for this standard is the National Safety Council. It was promulgated in 1992. It establishes the minimum procedures that responsible owners and general contractors are required to comply with on a multi-employer construction site. The provisions contained in the ANSI standard are a composite of the most effective policy and program elements taken from examples provided by industry. The organizations represented by this standard are many of the most important organizations involved in the construction industry in the United States. They come from construction companies, insurance companies, labor organizations, governmental organizations, construction safety consultants and many major construction contractors.

ANSI has found that investigation of major construction failures and individual injuries indicate that in a majority of instances, the lack of coordination between owner, construction manager, general contractor and/or subcontractor was a primary contributing factor. The ANSI standard points out: "In addition, studies by Stanford University and the Business Roundtable (an association of the 200 largest corporations in America) have established that designation of a single individual to have overall authority and responsibility for the execution of a construction project is essential to ensure the safety of the employees and quality of workmanship." The requirements of this standard are essentially the same as those requirements established by previous authorities, such as the Associated General Contractors of America, the National Safety Council, the Construction Industry Institute and the Business Roundtable.

The Forward of this standard states: "Investigation of major construction failures and individual injuries indicate that in a majority of instances, a lack of coordination between the owner, construction manager, general contractor and/or subcontractor was a primary contributing factor. ... This standard is a basis for each owner and contractor to use as a minimum program in developing and implementing safe, cost effective construction projects. ... It is expected that this standard will find a major application in industry, serving as a guide to contractors, labor and equipment manufacturers." The organizations represented include safety organizations, many major contractors, international unions, employer organizations and representatives of the federal government agencies. The following are some of the provisions of this standard:

2. Definition. Project Constructor. A person, firm, or corporation, i.e., the construction manager, general contractor, prime contractor, or other entity, designated in the project documents, responsible for supervising and controlling all construction work performed on the project.

This standard requires the Project Constructor to implement an occupational safety and health program. This includes pre-work planning including hazard analysis before work begins. It requires training of supervisory personnel as well as monitoring of the job site by a competent person to identify hazardous conditions. It sets forth specific responsibilities of the Project Constructor which include developing, implementing, monitoring and enforcing the job site safety and health program.

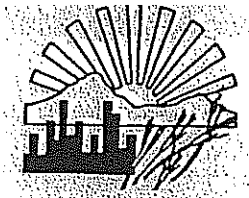


c. **The National Association of Home Builders**

The National Association of Home Builders gives guidance to literally tens of thousands of residential construction companies relative to ways to ensure that work is done in ways that contractors and subcontractors' workers are not needlessly injured and killed. They have provided several publications to guide this industry. The following are some examples:

- The Model Safety and Health Program for the Building Industry, Second Edition, 1995
- Construction Management - The Superintendent's Job, Second Edition, 1990
- How to Hire and Supervise Subcontractors, 1991
- Fall Protection Compliance Manual - An Employer's Compliance Manual for OSHA's Fall Protection Regulations, 1995
- An Ounce of Prevention - Job Site Safety and Ensurance for Builders and Remodelers, 1995
- An Occupational Safety and Health Program for Builders: Guidelines for Residential and Commercial Construction, 1990

In their publication, "An Ounce of Prevention," the National Association of Home Builders gives guidance to the builder to prevent injuries to subcontractors or their employees. They state: "It's just not **your own employees** you have to worry about. You can also be held responsible for injuries of subcontractors or their employees ... If you are doing business as a ... builder, you have a legal obligation to provide your subcontractors and their employees with a safe place to work. If you do not, you are being negligent. The law requires you to supervise the project to ensure the safety of **all** the workers on the site, including the employees of subcontractors. Moreover, this is one of those **nondelegable** duties we mentioned in Chapter 2. The responsibility to supervise and inspect your job sites to ensure that safety practices meet the requirements for your industry is yours. If you assign that task to someone else, and they do not do it right, you are liable for the consequences of their mistakes."



Throughout these publications, the National Association of Home Builders guides general contractors and builders to implement a job site occupational safety and health program. That is, they exhort the builders in this industry to design and implement safety programs by requiring contractors and subcontractors to implement their own safety and health programs. They exhort the builder to manage safety, just as they manage all other aspects of construction such as scheduling, quality assurance, coordination, etc. The National Association of Home Builders recognizes the moral responsibility of the builder to take reasonable steps to manage safety to ensure that contractor and subcontractor employees are not needlessly exposed to hazards and risks which could cause catastrophic injury or death.

The National Association of Home Builders specifically addresses the relationship between general contractor and subcontractors when they state: "More and more, builders are finding out that when an OSHA inspection takes place on their job site, they can be held responsible for the violations of their subs. Since March 1992, when OSHA increased their penalties by seven-fold, the affect of a subcontractor's violations can have an even greater impact on the builder's bottom line ... One of the best ways a builder can avoid OSHA citations that result from a subcontractor's violations is to only utilize subs who have effective safety and health programs and policies that aggressively attempt to comply with OSHA standards. Builders should share information about developing a safer work site with the sub. Having a safe, OSHA-compliant job site is good business for everyone on the site. If there are no injuries, then workers compensation rates go down and the concern for third party lawsuits is lessened ... Remember, OSHA currently wants the builder or general contractor to ensure that all employers under contractual control comply with all requirements."

d. **Associated General Contractors of America**

Since 1927, the Associated General Contractors of America have published their *Manual of Accident Prevention in Construction.* The primary objective of the Manual is to ensure effective control of accidents in the construction industry. They point out in their 1972 Edition of this Manual the following: "There must be recognition of the fact that control of accidents is the result of management and employees working together for a common objective. The

leadership for such an effort must, however, originate with management. The degree to which management accepts this responsibility will determine the success or failure of the entire program."

They state in Chapter 1 - Accident Prevention Organization: "The basic functions of any management are planning and controlling ... Failure, in too many instances, to give sufficient attention to planning and controlling is largely responsible for high frequency rates." In Chapter 1, they further point out the need for assignment of responsibility and accountability of management personnel. They state: "Supervisory personnel assigned to the job should confer as soon as practical, review initial planning, discuss any condition changes, and accordingly, alter safety plans. Further, it should be determined that procurement of safety needs has been provided for, that safety policies and procedures applicable to the work are reviewed, and that authority and responsibility have been clarified." With regard to subcontractors, they point out: "Coordination between the accident prevention activities of the subcontractors and those of the prime contractor is a must, if the objectives of accident frequency reduction and lower costs are to be achieved."

Safety Inspections

In Chapter 1, they state: "Day-by-day, hour-by-hour, job inspections should be made and a list of violations noted for use and discussion at the next safety meeting of supervisors after corrections have been made. Along with the normal daily surveys of the supervisors, a safety committee should tour the job site to confirm or add to the list of unsafe acts already noted."

In their 8th Edition of their *Manual of Accident Prevention in Construction* published in 2003, they point out the following:

1-2. Planning the Accident Prevention Program:

Planning begins with management's written commitment to accident prevention objectives. Management personnel should meet and agree on the need of an effective accident prevention program. When the decision has been made, management should decide who will oversee the program, how it will be accomplished, and to whom supervisory staff is

to report ... A management representative should be responsible for coordinating loss control activities. This assignment should be delegated to an individual with basic training in accident prevention. The individual selected should report directly to a company officer ... Areas of responsibility should include pre-planning, employee supervisory training, establishment of minimum safety standards, liaison with local medical facilities, accident investigation, inspections, and recordkeeping.

1-4. Assignment of Responsibility:

Line management should be responsible for achieving the objective of the accident prevention program.

1-5. Accident Prevention Compliance and Preparation of the Pre-Bid Estimate:

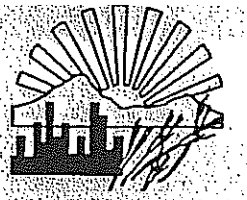
Accident prevention and OSHA compliance requirements should be carefully analyzed while the pre-bid estimate is being prepared. Adequate funds should be allocated to provide for items such as traffic control, excavation protection systems, barricades, signs, personal protective equipment, adequate work platforms, housekeeping, and other items necessary for the protection of employees, property, equipment, materials, and the general public.

1-7. Pre-Job Planning:

Management and staff should meet to discuss accident prevention as soon as the bid documents have been obtained. Job layouts, plans, and schedules should be studied to determine the requirements of the project. A procedural schedule should be developed.

1-8. Start of the Job Meeting:

Supervisory personnel assigned to the job should review initial planning, discuss any condition changes, and alter safety plans as needed. Safety policies and procedures applicable to the work should be reviewed, and authority and responsibility should be delegated.



1-9. Supervisory Meetings:

Meetings should be held on a regular basis. Supervisors should review accident and other hazardous conditions that occur, note deficiencies, establish necessary control measures. Future activities should be discussed to address potential hazards, control measures, protective devices, and training required.

1-13. The Subcontractor and Accident Prevention:

Compiling its project bid or proposal, the prime contractor should request information on the safety programs and recent history of subcontractors ... Requirements for the safe performance of subcontractors' work should be included in each subcontract. Among other things, such requirements should include a requirement for the subcontractor to continually monitor its own activities to assure compliance with all applicable safety requirements and to designate a safety representative at the site. The prime contractor also should periodically monitor each subcontractor's compliance with the applicable safety requirements, but such monitoring does not abrogate each subcontractor's responsibility to perform its work safely and in accordance with applicable safety requirements. The prime contractor may have less involvement in monitoring the safety and health efforts of a specialized subcontractor engaged in work of a type of which the prime contractor is unfamiliar. The prime contractor must have reason to believe, however, that its reliance on the specialty subcontractor to work safely is reasonable.

1-19. Construction Supervisor Training:

All construction supervisors should be given supervisory training that teaches them to work safely and cost efficiently. It should be emphasized by management that the construction supervisor is a "key" to the accident prevention program. Supervisory responsibilities should be defined. Construction supervisors should be encouraged to discuss the program and ask questions. Initial training can be supplemented

with supervisory group meetings. Construction supervisors should understand that they are responsible for full compliance with the established management directive regarding accident prevention.

e. **Construction Management Association of America**

The Construction Management Association of America gives guidance to construction managers relative to safety management. They point out the following:

Risk is managed by:

- Contract agreements.
- Documentation of the construction activities.
- Your Actions while in the field.
- Close observation of the construction work being performed.
- Schedule, cost, quality, safety.
- Staying one step head of the contractor.

Proactive Approach

- CM employees trained to identify hazards in the workplace.
- CM addresses safety in pre-job meetings and progress meetings.
- CM addresses safety concerns per the contract.
- Points out safety concerns to the contractor.
- CM provides information to the contractor and owner and advises their employees to keep away from the hazard until correct.

f. **National Safety Council**

Accident Prevention Manual for Industrial Operations:

The National Safety Council is considered by construction safety management professionals as a highly authoritative source for guidance in safety matters. In Chapter 2 of their ACCIDENT PREVENTION MANUAL FOR INDUSTRIAL OPERATIONS, it sets forth guidelines for controlling hazards in the construction industry. It has been available since at least 1969. In their Manual, they point out:

- The importance of insisting upon contractor compliance with all safety and health regulations.
- The need for advanced analyses and planning for safety.
- The need for a preconstruction safety conference.
- The need for periodic safety meetings during which plans are made for anticipating hazards associated with work so that controls can be put in place before the hazard evolves.

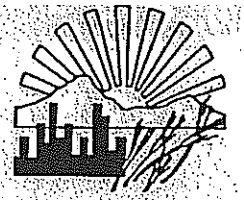
Essential to the principles established by the National Safety Council is the principle that all accidents are foreseeable, predictable, avoidable and preventable. Construction safety management should be proactive rather than reactive. That is, plans should be made to predict the hazards and to install the controls before the hazard evolves. This is a proactive approach. It is far more dependable than a reactive approach which would depend upon safety inspection to identify the hazard. Serious injury or death could result before the hazard is identified through safety inspection.

The National Safety Council further points out the importance of "assignment of responsibility" and "accountability" as key elements in a construction safety management program."

Core Safety Materials for the Construction Professional:

A Manual entitled "Core Safety Materials for the Construction Professional" has been prepared by the National Safety Council's Construction Division. In it, it gives guidance regarding the elements of an effective construction site-specific safety plan:

Introduction: An effective safety plan should get its start during the bid process. The owner should require the development of a pre-construction analysis by all successful bidders. The general contractor/project management team should take the lead in the developing process. All subcontractors - both first and second tier subs - should be invited to an initial meeting and encouraged to participate in the process.



Construction Management Responsibility:

a. Plan safety into the project.

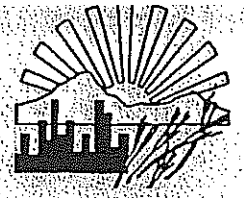
1. Comply with owner's safety requirements and local, state and federal regulations.
2. Establish minimum safety history requirements (e.g. last five years, EMRs, OSHA inspection history, etc.) for all project contractors.
3. Investigate, and pre-qualify as acceptable bidders, contractors who meet the pre-determined safety history requirements.
4. Establish and incorporate into contract documents the requirement for a Project Specific Safety and Health Plan to include:
    a. Construction process plan.
    b. Hazard analysis.
    c. Permit system.
    d. Designated project safety coordinator/administrator.

This document goes on to give guidance with regard to owners, general/prime contractors and subcontractors which is essentially the same as all of the other industry standards and authorities.

g. **Construction Industry Institute**

The Construction Industry Institute is an association of major general contractors/construction managers and major corporations in the United States. The Construction Industry Institute participates with leading universities in the United States. They funded research which resulted in the publication of a document entitled "Managing Subcontractor Safety", Publication 13-1, February 1991. The purpose of the CII Safety Task Force research was to identify the primary means by which general contractors influence the safety performance of their subcontractors ... The goal was to add to the body of knowledge so that effective measures can be implemented to reduce the cost of accidents.

Conclusions of CII Explained in "Managing Subcontractor Safety"



Task Force research shows that, where subcontractor safety is concerned, the role of project managers is very important. On large and small projects alike, emphasizing safety and providing quality coordination have a favorable impact on the safety of subcontractors. On small projects, subcontractor safety performance also was influenced by the quality of the project management existent on the job and the degree to which workers were dealt with in a humanitarian or personal manner ... **Since the general contractors have a significant influence on their subcontractors, owners too will have an influence on the safety performance of the general contractor and subcontractor. Thus, it can be inferred from the results of this study that owners also play a major role in construction safety** (emphasis added).

Guidelines for Managing Subcontractor Safety on Construction Projects

The following is a brief summary of the guidelines set forth by CII.

- They point out the importance of selecting subcontractors by evaluating their safety performance when evaluating bids.
- The contract should be detailed relative to how safety will be managed and reported. As a minimum, the scope of work should include requirements for a "Safety Plan", including such information as safety inspection, enforcement, safety staffing, permit required, preemployment testing, substance abuse testing, safety meetings, personal protective equipment required, ... basic safety training ...
- Pre-job safety conference to set forth safe procedures, training requirements and a schedule to discuss safety performance and training programs.
- Periodic safety progress reviews between managers and subcontractor safety representatives.
- Managers should conduct their own safety inspections of the subcontractor's work site, and a review of the inspection findings should take place at the periodic meetings.

Safety Rules - Enforcement Procedure

There must be a procedure for enforcing safety rules. This procedure should be written, and should be enforced equally among supervisors, managers, workers

and other parties on the site. It should spell out what situations will result in immediate discharge and what actions will be taken on the first, second or third incidents involving violations of a less serious nature.

VIII. U.S. DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

OSHA recognizes the need for the general contractor to take reasonable steps to ensure that their work is done safely and in compliance with their regulations by contractor and subcontractor workers.

OSHA Standard Interpretation 1926.32 Addressing Competent Persons at Construction Sites:

OSHA requires that all employers, general contractors, contractors and subcontractors employ OSHA competent personnel to perform safety inspections as part of their safety program. On August 31, 1995, OSHA gave a clarification regarding 1926.32 addressing competent persons at construction sites. The following is excerpted from that interpretation:

> "A legal principle relevant is that ... the general contractor normally has responsibility to assure that the other contractors fulfill their obligations with respect to employee safety which affect the entire site. The general contractor is well suited to obtain abatement of hazards, either through its own resources or through its supervisory role with respect to other contractors. It is therefore reasonable to expect the general contractor to assure compliance with the standards insofar as all employees on the site are affected. **Thus we will hold the general contractor responsible for violations as could reasonably be expected to prevent or abate by reason of its supervisor capacity** (Blount Int'l Ltd., 15 BNA OSHC 1897, 1991-93 Cch OSHD 29, 854 (No. 89-1394, 1992).
>
> "On the other hand, the Occupational Safety and Health Review Commission also noted in that decision that the duty imposed on a general contractor is a reasonable one and that the general contractor will not be held liable 'for violations which it could not reasonably be expected to detect or prevent' ... In addition to whatever responsibility it may have as

an exposing employer, the general contractor would also share responsibility for those violations by its subcontractors which it could reasonably have protected and had corrected. We would expect general contractors to take the steps necessary to satisfy themselves that subcontractors engage in activities which call for the involvement of competent persons will fulfill that obligation as well as the general inspection obligation imposed by 1926.20(b)(2).'

The United States Court of Appeal for the Eighth Circuit has recently upheld OSHA's right to cite general contractors as controlling employers responsible for compliance with OSHA standards even though their own workers are not exposed to the hazard – Hilda Solis, Secretary of Labor, United States Department of Labor vs. Summit Contractors, Inc., No. 07-2191 filed February 26, 2009.

OSHA also recognizes the overall responsibility of the contractor at the top in the Code of Federal Regulations.

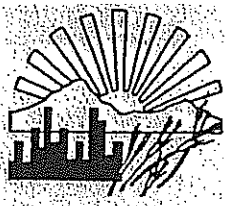
29CFR1926.16(a) "... In no case shall the prime contractor be relieved of overall responsibility for compliance with the requirements of this part for all work to be performed under the contract."

29CFR1926.16(b) "... The prime contractor assumes all obligations prescribed as employer obligations under the standards contained in this part, whether or not he contracts any part of the work."

29CFR1926.16(c) "... Thus, the prime contractor assumes the entire responsibility under the contract and the subcontractor assumes responsibility with respect to his portion of the work. With respect to subcontracted work, the prime contractor and any subcontractor or subcontractors shall be deemed to have joint responsibility."

29CFR1926.16(d) "... Where joint responsibility exists, both the prime contractor and his subcontractor or subcontractors, regardless of tier, shall be considered subject to the enforcement provisions of the Act."

The above OSHA regulations, 1926.16(a) through (d), could not be cited by OSHA since they set forth a "philosophy of safety management." This philosophy of safety management guides OSHA's Multi-Employer Citation Policy which



considers four types of employers: the Controlling Employer, the Creating Employer, the Correcting Employer and the Exposing Employer. When there is a violation of a particular standard related to a particular hazard, OSHA is required to issue allegations of violations to entities which meet the definition of the four types of employers that is expressed in OSHA's Multi-Employer Citation Policy. OSHA's Multi-Employer Citation Policy requires the controlling employer to exercise reasonable care to prevent and detect violations of OSHA standards. However, the extent of the measures that a controlling employer must implement to satisfy this duty of reasonable care is less than what is required of the employer with respect to protecting its own employees. OSHA recognizes that the controlling employer would not **normally inspect** for hazards **as frequently** or to have the same level of knowledge of the applicable standards as the employer it has hired. OSHA then sets forth the factors related to reasonable care that a controlling employer should use to determine the frequency with which they would inspect to identify violations.

With regard to the primary responsibility for implementation of the job site safety program, OSHA is clear in their Basic Instructor Course for Occupational Safety and Health Standards in the Construction Industry. OSHA states the following: "**General contractor has primary responsibility.** The federal safety and health laws now place the primary responsibility for the environmental safety of all personnel on the job squarely on the primary employer, the general contractor. He cannot contract away this responsibility. He must, therefore, insist that the subcontractors become a part of the planning as well as the execution of the job. The fact is that every employer on the construction site is responsible for the safety of his own employees and for the safety of any and all subcontractors working for him. **There is no way, under the Acts, that this responsibility can be contracted away for it is the responsibility under the law and not under the contract** (emphasis added)."

The following are the OSHA standards relevant in this case:

29CFR1926.20(b)(1). It shall be the responsibility of the employer to initiate and maintain accident prevention programs as may be necessary to comply with this part.

29CFR1926.20(b)(2). Accident prevention programs shall provide for frequent and regular inspections of the job sites, materials, and equipment to be made by competent persons designated by the employers.

29CFR1926.32(f). Competent person means one who is capable of identifying existing and predictable hazards in the surroundings or work conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt, corrective action to eliminate them.

29CFR1926.21(b)(2). The employer shall instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposures to illness or injury.

29CFR1926.501(b)(13). Residential construction. Each employee engaged in residential construction activity six feet or more above lower level shall be protected by guardrail systems, safety net systems, or personal fall arrest systems ...

29CFR1926.502(k). Fall protection plan. This option is available only to employees engaged in leading edge work, precast concrete erection work, or residential construction work who can demonstrate it as infeasible or it creates a greater hazard to use conventional fall protection equipment.

Note: In the Tenezaca OSHA report, the foreman told OSHA that there was no place to install an anchorage point.

29CFR1926.503. Training requirements. The following training provisions supplement and clarify the requirements of 1926.21 regarding the hazards addressed in Subpart M of this part.

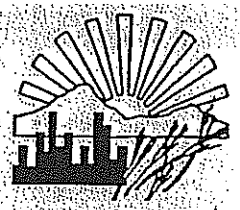
29CFR1926.503(a)(1). Training program. The employer shall provide a training program for each employee who might be exposed to fall hazards. The program shall enable each employee to recognize the hazard of falling and shall train each employee in the procedures to be followed in order to minimize these hazards.

29CFR1926.503(a)(2). The employer shall assure that each employee has been trained, as necessary, by a competent person qualified in the following areas:

(i) The nature of fall hazards in the work area;
(ii) The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems to be used;
(iii) The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones, and other protection to be used;
(iv) The role of each employee in the safety monitoring system when this system is used;
(v) The limitations on the use of mechanical equipment during the performance of roofing work on low-sloped roofs;
(vi) The correct procedure for handling and storage of equipment and materials and the erection of overhead protection;
(vii) The role of employees in fall protection plans;
(viii) The standards contained in this Subpart.

IX. HISPANIC WORKERS AT HIGHER RISK FOR WORKPLACE INJURY AND DEATH:

The following is taken from the Construction Chart Book published by the Center for Construction Research and Training: "The increase in the Hispanic portion of the labor force has been rapid, particularly in construction ... The number of Hispanics employed in construction almost quadrupled from 704,606 in 1990 to 2.6 million in 2005 ... In construction, 27 percent of production workers were Hispanic, higher than any other industry, except agriculture ... About 75 percent of the 2.6 million Hispanic construction workers were born outside of the United States ... The growth of Hispanic employment in construction is driven, in particular by recent arrivals." The Center for Disease Control published in *Morbidity and Mortality Weekly Report*, June 2008 that Hispanic workers face a far greater chance of being killed in the workplace than any other demographic group. Nearly one-third of fatal work injuries in construction occurred among Hispanic workers. Thirty-four percent of Hispanic workers' deaths from 2003 to 2006 occurred in the construction industry. Falls have emerged as an increasing cause of work-related injury and death among Hispanics, particularly in construction. The number of Hispanic worker deaths from falls increased 370 percent between 1992



and 2006, the CDC report noted. (National Safety Council, OSHA Up-To-Date, Volume 7, No. 8, August 2008)

X. Dong and J. Platner reported in the *American Journal of Industrial Medicine* that in 2000, Hispanic deaths accounted for 23.5 percent of the deaths in construction, while in the same year, Hispanic workers constituted less than 16 percent of the construction workforce. From 1996 to 2001, more than 30 percent of the Mexican born worker fatalities were construction related. M.J. Burnette reported in *Injury Prevention* that Hispanic construction workers experience a disproportionate number of injuries and fatalities compared to non-Hispanic workers. In 2001, the rate of Hispanic construction worker deaths was 19.5 per 100,000 full time workers – 62.5 percent higher than the rate of 12.0 for non-Hispanic construction workers. The above facts were reported in *Professional Safety*, April 2001, in an article entitled "Safety and Roofing – Practices of Contractors That Employ Hispanic Workers."

X. TOLL BROTHERS SAFETY PROGRAM:

SAFETY POLICY. The safety of all personnel on Toll job sites is a vital concern to the Company ... Our goal is to develop and maintain a "zero accident" safety culture on all job site locations ... Subcontractor is responsible for the safety and health of its employees and all its sub tier employees.

Each subcontractor will be held accountable for the safety and health of its employees and sub tier personnel. **Consequences for noncompliance with this safety policy may result in actions up to and including dismissal from the project.**

ORGANIZATION. Toll personnel shall exercise a level of safety oversight and safety leadership for the entirety of the project. Oversight will be accomplished through periodic safety inspection of the project and investigation of any accident that might occur ... Toll may notify subs of any noncompliance and the need for corrective action as hazardous conditions and practices are discovered throughout the course of the work on the project. This notice, whether verbal or written, when delivered to the Subcontractor or the Subcontractor's representative at the site of the work shall be sufficient notice of corrective action required. After receiving this notice, the subcontractor shall immediately take corrective action. If the subcontractor fails or refuses to take corrective action, Toll may, without prejudice

or other legal or contractual rights, issue an order stopping all or part of the work; thereafter, resumption may be issued at the discretion of Toll.

Safety Responsibilities. The Toll project manager and his/her designee (i.e. construction manager) is responsible for:

- Providing notification to subcontractors of any hazardous work practices or conditions observed throughout the course of the work. Although notification can be done verbally, continual non-compliance should be in writing (a form is provided in Appendix 1 of this program) and a copy kept on file.

Appendix 1 indicates that Form RISK 6267 is Notification of Hazardous Condition/Practice Form.

Appendix 4

1. Each employer performing work on a Toll residential construction project is required by law to have an occupational safety and health program that covers its employees … **Subcontractor safety program must address all potential hazards to which workers may be exposed and appropriate abatement procedures to those potential hazards** (i.e. A FALL PROTECTION PLAN).

XI. SYSTEM SAFETY ANALYSIS – ROOT CAUSE ANALYSIS:

Safety professionals are trained to see the hazard as a "symptom" rather than a "cause." A hazard is a dangerous condition or unsafe work practice. In order to understand causation, we ask questions relative to "why" the management system permitted hazards to evolve. If we allow the hazard to evolve and then require it to be corrected after an inspection identifies the hazard, it is likely that the hazard will recur. If we continually address the "symptom" (hazard) and not the underlying cause of the existence of the symptom, the symptom or hazard will continue to evolve. System safety analysis asks questions relative to "why" the hazard existed. It asks questions related to understanding how the management system failed and permitted hazards to evolve and workers to be exposed to dangerous conditions. System safety analysis considers whether or not the management system was being implemented by holding those responsible for allowing the hazard to evolve

accountable for their safety performance. It involves holding foremen, managers and owners accountable for their safety performance. That would involve Toll Brothers implementing their safety program regarding noncompliance as expressed above.

XII. HAZARD ANALYSIS:

Feliciano Tenezaca was exposed to a fall hazard. He was required to work at the edge of the roof without fall protection. He should have been required to use a personal fall arrest system. Apparently there were many other exposures to fall hazards on the roof when workers were not protected with fall arrest systems when they were required to be by OSHA. The OSHA investigator found that the foreman for Anchor Framing **never** had any design in place for a personal fall arrest system to be used by workers on the roof. Anchor Framing didn't have a fall protection plan even though it is required by Appendix 4 of Toll Brothers' safety program and by OSHA standard 1926.502(k). The Anchor Framing foreman was permitted by Toll Brothers to work in violation of OSHA's fall protection standards at this site. The exposure of Mr. Tenezaca was not an isolated incident.

There were many other common conspicuous exposures to hazards as indicated in the interview of Messrs. Tenezaca and Zuna. One example is the fact that workers at this site were not required by Anchor Framing nor Toll Brothers to wear personal protective equipment to protect their eyes while using nail guns. Like exposures to the many fall hazards, it is very easy to identify whether carpenters are wearing eye protection or not. Toll Brothers permitted many exposures to fall hazards and did not require contractors and subcontractors to show proof that their workers were trained as required by OSHA related to fall protection, eye protection and use of ladders and scaffolds.

Toll Brothers' Enforcement of Safety

Toll Brothers' safety program includes language that requires Toll Brothers to implement their program and hold contractors accountable (see paragraph X). In a memo from a safety meeting on October 31, 2007, Mark and Aldo of Toll Brothers indicated that at this site Toll Brothers religiously fills out weekly site safety inspections and keeps records. These gentlemen indicated that Toll Brothers' responsibility is to take whatever necessary actions are needed to correct the

problems. They type letters and send them to subcontractors. If this doesn't help, the next thing they do is send workers home for the day. They indicate that that has been done with very good results. The third course of action is to impose a fine on repeat offenders. They state: "This of course is the course of action none of us want to take ... We as construction managers do not want to have to take the second and third courses of action against our subcontractors, but we will as we also have bosses we have to answer to."

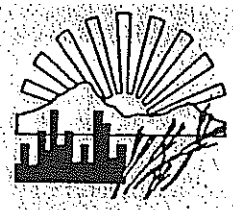
I have reviewed the weekly safety inspection reports from January 3, 2008 until February 17, 2009, that is, just before Mr. Tenezaca was injured on February 23. During that time, Anchor Framing was found by Toll Brothers to have workers exposed to fall hazards during ten inspections. Notifications of Hazardous Condition/Practice were sent to Anchor Framing on five of those ten times. There is no evidence in the record that Toll Brothers **ever** required a worker or foreman from Anchor Framing to leave the job site, nor is there any evidence of any fine **ever** being issued. Likewise, there is no evidence of any other contractor at this site having a worker sent home or being issued a fine.

On February 25, 2009, two days after Mr. Tenezaca's injury, Toll Brothers sent a notification to Anchor Framing indicating the following:

- Portable ladders without tie offs.
- Ladders with feet broken on two ladders.
- Halyard missing on multiple ladders.

The notification states: "Reinspection will commence in 24 hours. If infraction has not been corrected, a fine of $250 will be given and workers will be asked to leave for the day."

On February 27, 2009, four days after Mr. Tenezaca was injured, Ken Beck of Toll Brothers wrote to all contractors and told them: "Effective immediately, anyone who is observed not complying with ALL safety practices will be sent home with a warning for the first offense. If violations are noted after your first warning, you will be fined $250 per incident and sent home."



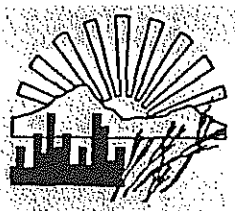
On March 4, 2009, Mr. Zuna was injured. The record indicates that on March 5, 2009, Toll Brothers issued the first fine for failure to guard a table saw to OLV Group, LLC.

There is no evidence in the record that there ever was any worker ever sent home or any contractor ever fined $250, that is, until after Mr. Zuna's injury. That is, there is no evidence that Toll Brothers ever sent a worker or foreman home even though Mark and Aldo indicated in their memo of October 31, 2007 that sending workers home has been done in the past with "very good results."

Mark and Aldo expressed in that memo their reservations about the second and third course of action, that is, sending workers home and fining them. Unfortunately, it was not until after this incident that they issued a fine for an unguarded saw.

The following is the most important deposition testimony of Thomas Brown, the project manager for Toll Brothers:

- Toll Brothers has a policy to perform safety inspection and has a responsibility to oversee the safety of the project.
- When Toll Brothers identifies a violation of OSHA standards, the first they do is verbally warn and then possibly issue a written violation and then the contractor needs to correct the situation.
- Mr. Brown was not aware of any steadfast rules with regard to violations of fall protection standards.
- He doesn't know if there is a three strikes, you're out policy with regard to fall protection. (Note: This is important. As project manager, Mr. Brown has the responsibility to evaluate and **hold accountable** Toll Brothers' management representatives for their safety performance. If he doesn't understand the policy regarding enforcement of the most important hazard on a construction site, people under him will not know what they are supposed to do. Assignment of responsibility and accountability are fundamental to management of any function, especially fall hazards in the construction industry.)
- He doesn't know if Toll Brothers required Anchor Framing to have a fall protection plan. (Note: This project manager doesn't know the requirements



of the Toll Brothers safety program which does indeed require Anchor Framing to have a fall protection plan.)

- He doesn't know if Toll Brothers required Anchor Framing's workers to have fall protection training. (Note: He can't hold construction managers responsible for verifying that contract workers were properly trained if he is not aware of the Toll Brothers policy.)
- He doesn't know if Anchor Framing had a qualified person at this project.
- He doesn't know if his safety performance is evaluated. (Note: This is important because his safety performance should be evaluated and he should evaluate the safety performance of those under him. That is, if management is to be held accountable for implementing the Toll Brothers safety program.)
- He doesn't know if Toll Brothers has a formal policy to monitor subcontractors to see that they work in accordance with OSHA. (Note: He doesn't understand the most fundamental requirement of the Toll Brothers safety program.)
- Toll Brothers did not investigate the Tenezaca incident before the Zuna incident. (Note: Toll Brothers has a policy to investigate accidents.)

The following is the most important deposition testimony of Victor Rodrigues, the owner of Anchor Framing:

- When asked if he thought fall protection violations were significant or important, he responded that he was not given any violations from Toll Brothers related to fall protection. (Note: Toll Brothers prepared Notification forms. It is not clear that Tolls Brothers then sent the Notification forms to Anchor Framing.)
- He was asked if he thought it was important for those safety rules regarding fall protection to be followed by his workers. He responded saying that it was.

From the deposition testimony of Victor Rodrigues and Thomas Brown, as well as the statements of the plaintiffs, it is clear that Toll Brothers was not implementing their safety program and requiring contractors to comply with OSHA.

XIII. OPINION/CONCLUSION:

My opinion is based on my training, education and experience in the field of occupational safety and health as well as my review of the documents set forth in Section II. It is my opinion that Toll Brothers violated the principles and practices of construction safety management because they failed to take reasonable steps to require Anchor Framing's workers to be protected from falls from elevation. It is my opinion that they were a controlling employer and violated the aforementioned OSHA standards. It is my opinion that they violated their own safety program. It is my opinion that the above failures were the cause of Feliciano Tenezaca's injuries.

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February 26, 2013

JOSE ZUNA vs. TOLL BROTHERS, et al.

I. ASSIGNMENT:

This case was assigned by attorney Gerald Clark to review various documents and to render an opinion regarding the conduct of Toll Brothers relative to the injury suffered by Jose Zuna.

II. PREPARATION:

On January 28, 2013, I met with Jose Zuna and Feliciano Tenezaca to learn of the ways work was being performed by workers relative to safety prior to the two injury incidents. By way of preparation, I reviewed the following:

- Deposition transcripts of Feliciano Tenezaca, Jose Zuna, Thomas Brown and Victor Rodrigues.
- Deposition exhibits.
- Discovery Response from Toll Brothers with attachments.
- Discovery Response from Anchor Framing with attachments.
- Plaintiff, Jose Zuna's Discovery Response without attachments.
- Plaintiff, Feliciano Tenezaca's Discovery Response without attachments.
- Toll Brothers' Safety Program.
- Anchor Framing's Safety Program.
- Anchor Framing Corp., OSHA Citation and Notification of Penalty.

- The Reserve at Pond Creek website details.
- Documents produced by Toll Brothers regarding safety.
- Anchor Framing certificates of training.
- Toll Brothers employees' business cards.
- Addendum Construction Agreement between Anchor Framing and Toll Brothers.
- Toll Brothers, Inc. Safety Inspection Forms.
- OSHA documents regarding the Reserve at Pond Creek project.
- Photos of the job site.

III. BACKGROUND:

This incident occurred March 4, 2009 at a construction site known as the Reserve at Pond Creek. Toll Brothers was the general contractor. Jose Zuna worked for Anchor Framing Corp. Anchor Framing Corp. contracted with Toll Brothers to do rough carpentry at this site. That is, they installed the framing work including walls, floors, joists, trusses and windows.

Prior to this incident, Jose Zuna was asked to reinstall a window that had not been properly installed. He and workers of Anchor Framing built a metal frame scaffold. He had never erected a scaffold before. He was not trained on how to properly erect a scaffold. He climbed the scaffold and began to remove nails from the window to remove the window. He was approximately 13 feet above ground at the time of his fall. There was no fall protection on the scaffold. That is, there were no OSHA compliant guardrails and workers were not using a personal fall arrest system. Had he been protected by either a guardrail or a personal fall arrest system, he would have been able to slip or trip but would not fall from elevation because he would have been automatically protected.

IV. DESCRIPTION OF INCIDENT:

Mr. Zuna does not remember how his fall from this scaffold was initiated. The last thing he remembers was being on the scaffold and removing nails from the window.

V. METHODOLOGY OF EVALUATION:

The method to evaluate the conduct of Tolls Brothers in this case is to compare their conduct to the principles and practices of construction safety management established by industry safety authorities, to compliance with their safety program, and to compliance with OSHA standards. It will also consider the cause of this incident by way of Root Cause Analysis, sometimes called System Safety Analysis.

VI. INTERVIEW WITH MESSRS. TENEZACA AND ZUNA – RECURRING HAZARDS AT THIS SITE:

On January 28, 2013, I spoke with Mr. Tenezaca and Mr. Zuna about the safety at this job site prior to the occurrence of both incidents. The purpose of the interview was for me to get a better understanding of how safety was being managed by Toll Brothers at this site. The following was learned:

- None of the carpenters who used nail guns ever wore eye protection at this job site. That is, for months, many workers were exposed to eye injuries because they were not required to comply with the OSHA standard. This is a conspicuous and serious hazard that was permitted by Toll Brothers representatives.
- More often than not, after the carpenters cut the stairway openings on the first and second floors, they did not immediately put a guardrail around the opening or did not secure a cover over the opening. This exposed those carpenters to falls through that opening on many occasions. This also was a conspicuous and ongoing problem to which many carpenters were exposed. Anchor Framing had the responsibility to install the fall protection as soon as possible after creating the opening. Likewise, Toll Brothers had the responsibility to plan, monitor and ensure that that protection was installed by Anchor Framing as soon as possible. According to both plaintiffs, the fall hazards at the stairway openings were ongoing and for many weeks prior to these incidents.
- Neither of the two injured workers received any OSHA training related to fall protection as required by 1926.503. None had any training with regard to personal protective equipment related to eye exposure from using nail guns.

- Mr. Zuna had no training in how to safely build a scaffold as required by 1926.454(b). He had no training with regard to use of a scaffold as required by 1926.454(a).
- When workers installed joists, they didn't use scaffolds and they didn't use any fall protection.

With regard to ongoing common, conspicuous violations of OSHA standards which existed at this site, the OSHA investigator was told by the Anchor Framing foreman that Anchor never had any design in place for fall protection regarding personal fall arrest systems. The foreman admitted that they did not have a fall protection plan as required by 1926.502(k). Appendix 4 of the Toll Brothers' Safety Program requires subcontractors to have a fall protection plan. This is another example of Toll Brothers permitting Anchor Framing to violate OSHA standards and Toll Brothers' safety program. Likewise, OSHA found that Anchor Framing's foreman told the OSHA inspector that Anchor Framing never had a plan to establish anchorage points for a fall arrest system. This shows that Toll Brothers permitted Anchor Framing to violate OSHA standards. That is because OSHA requires a competent person to determine when the truss system becomes strong enough to act as an anchorage point for a fall arrest system. The Anchor Framing foreman testified that there never was a design or plan in place to determine when the trusses could serve as an anchorage point for a personal fall arrest system.

VII. MAGNITUDE AND SEVERITY OF FALLS IN THE CONSTRUCTION INDUSTRY:

Fall-related incidents are the primary cause of fatalities in the U.S. construction industry. A NIOSH analysis of fatality data from the Bureau of Labor Statistics Census of Fatal Occupational Injuries (CFOI) indicated that from 2004 to 2008, a total of 5,844 construction workers were killed from all causes (annual average 1,169) (BLS, 2005, 2006, 2007, 2008, 2009). During the same period, 2055 construction fatalities occurred due to falling (annual average 411). Workers falling accounted for more than 35 percent of all fatalities that occurred in construction from 2004 to 2008. Further analyses of CFOI data indicate that construction-related falls from roof edges, through roof and floor openings, and through skylights resulted in a five year total of 767 fatalities (annual average 153).

Table 1 presents a five year breakdown of these data, along with a total number of fatalities and total number of fall-related fatalities in all U.S. workplaces for comparison. The last category of construction workplace situations (falls from roof edges, and through roof and floor openings and skylights) are situations that can be addressed with a guardrail system to prevent falls to a lower level.[1]

Table 1

Fall-Related Fatalities

Event	2004	2005	2006	2007	2008
Total U.S. occupational fatalities	5,764	5,734	5,840	5,657	5,214
Total U.S. occupational fatal falls	822 (14%)	770 (13%)	827 (14%)	835 (15%)	700 (13%)
Total construction fatalities	1,234	1,192	1,239	1,204	975
Total construction fatal falls	445 (36%)	394 (33%)	433 (35%)	447 (37%)	336 (34%)
Construction fatal falls involving roofs[a] and floor openings	175 (39%[b]) (14%[c])	147 (37%[b]) (12%[c])	170 (39%[b]) (14%[c])	162 (36%[b]) (13%[c])	113 (34%[b]) (12%[c])

Note. Fall-related fatalities, all U.S. industries and construction, 2004-2008. Data from Table A-9, "2004 Census of Fatal Occupational Injuries," by Bureau of Labor Statistics (BLS), 2005, Washington, DC: Author, Department of Labor (DOL); Table A-9, "2005 Census of Fatal Occupational Injuries," by BLS, 2006, Washington, DC: Author, DOL; Table A-9, "2006 Census of Fatal Occupational Injuries," by BLS, 2007, Washington, DC: Author, DOL; Table A-9, "2007 Census of Fatal Occupational Injuries," by BLS, 2008, Washington, DC: Author, DOL; and Table A-9, "2008 Census of Fatal Occupational Injuries," by BLS, 2009, Washington, DC: Author, DOL.

[a]From roof edge, and through roof openings and skylights. [b]Percentage value of "total construction fatal falls." [c]Percentage value of "total construction fatalities."

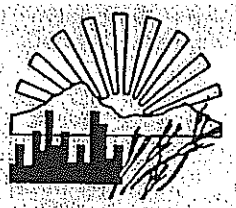
VIII. INDUSTRY STANDARD FOR INJURY PREVENTION IN THE CONSTRUCTION INDUSTRY: SAFETY MANAGEMENT PRINCIPLES AND PRACTICES

The following is a brief review of the industry standard or standard of care relative to injury prevention in the construction industry. For decades, both industry authorities and government authorities have been in agreement with regard to the steps that a general contractor should take in order to ensure that work performed on their behalf is done safely and in compliance with OSHA.

a. Principles and Techniques of Construction Safety Management

A review of the construction safety management literature will find fundamental agreement with the following principles:

[1] Journal of the American Society of Safety Engineers, *Professional Safety*, January 2011, "Construction Guardrails: Development of a multifunctional system" by Thomas G. Bobick and E.A. McKenzie Jr.



- Safety begins at the top.
- Assignment of specific responsibility and accountability are key to successful construction safety management.
- Safety begins in the design stages - on the drawing board.
- Safety is a shared responsibility.
- A proactive rather than reactive approach is best.
- Accidents are foreseeable and predictable.
- Controls can be anticipated and put in place before exposure to the hazard takes place.
- Planning is essential.
- It is irresponsible to allow the evolution of a hazard and hope that safety inspection discovers the hazard before injury results.

I have applied these principles and techniques of injury prevention for thirty-five years. I have evaluated over 200 construction safety programs, investigated over one thousand construction injury incidents and have applied the techniques of hazard identification, evaluation and control for thirty-five years. Likewise, over 36,000 members of the American Society of Safety Engineers, that is, representatives from the construction industry, general industry, the insurance industry, government and labor are also in agreement with these principles and techniques of safety management and have been applying them for decades. I have written on the subject of the appropriate methodology of evaluation in construction industry cases in peer-reviewed articles in the Journal of the American Society of Safety Engineers. There is no disagreement regarding these principles and techniques of construction safety management among construction safety experts.

b. **American National Standard for Construction and Demolition Operations - Safety and Health Program Requirements for Multi-Employer Projects ANSI A10.33-1992.**

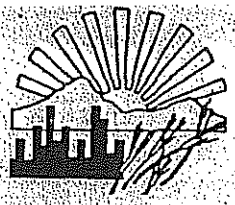
The Secretariat for this standard is the National Safety Council. It was promulgated in 1992. It establishes the minimum procedures that responsible owners and general contractors are required to comply with on a multi-employer construction site. The provisions contained in the ANSI standard are a composite of the most effective policy and program elements taken from

examples provided by industry. The organizations represented by this standard are many of the most important organizations involved in the construction industry in the United States. They come from construction companies, insurance companies, labor organizations, governmental organizations, construction safety consultants and many major construction contractors.

ANSI has found that investigation of major construction failures and individual injuries indicate that in a majority of instances, the lack of coordination between owner, construction manager, general contractor and/or subcontractor was a primary contributing factor. The ANSI standard points out: "In addition, studies by Stanford University and the Business Roundtable (an association of the 200 largest corporations in America) have established that designation of a single individual to have overall authority and responsibility for the execution of a construction project is essential to ensure the safety of the employees and quality of workmanship." The requirements of this standard are essentially the same as those requirements established by previous authorities, such as the Associated General Contractors of America, the National Safety Council, the Construction Industry Institute and the Business Roundtable.

The Forward of this standard states: "Investigation of major construction failures and individual injuries indicate that in a majority of instances, a lack of coordination between the owner, construction manager, general contractor and/or subcontractor was a primary contributing factor. ... This standard is a basis for each owner and contractor to use as a minimum program in developing and implementing safe, cost effective construction projects. ... It is expected that this standard will find a major application in industry, serving as a guide to contractors, labor and equipment manufacturers." The organizations represented include safety organizations, many major contractors, international unions, employer organizations and representatives of the federal government agencies. The following are some of the provisions of this standard:

2. Definition. Project Constructor. A person, firm, or corporation, i.e., the construction manager, general contractor, prime contractor, or other entity, designated in the project documents, responsible for supervising and controlling all construction work performed on the project.



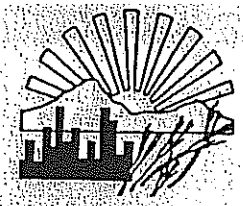
This standard requires the Project Constructor to implement an occupational safety and health program. This includes pre-work planning including hazard analysis before work begins. It requires training of supervisory personnel as well as monitoring of the job site by a competent person to identify hazardous conditions. It sets forth specific responsibilities of the Project Constructor which include developing, implementing, monitoring and enforcing the job site safety and health program.

c. **The National Association of Home Builders**

The National Association of Home Builders gives guidance to literally tens of thousands of residential construction companies relative to ways to ensure that work is done in ways that contractors and subcontractors' workers are not needlessly injured and killed. They have provided several publications to guide this industry. The following are some examples:

- The Model Safety and Health Program for the Building Industry, Second Edition, 1995
- Construction Management - The Superintendent's Job, Second Edition, 1990
- How to Hire and Supervise Subcontractors, 1991
- Fall Protection Compliance Manual - An Employer's Compliance Manual for OSHA's Fall Protection Regulations, 1995
- An Ounce of Prevention - Job Site Safety and Ensurance for Builders and Remodelers, 1995
- An Occupational Safety and Health Program for Builders: Guidelines for Residential and Commercial Construction, 1990

In their publication, "An Ounce of Prevention," the National Association of Home Builders gives guidance to the builder to prevent injuries to subcontractors or their employees. They state: "It's just not **your own employees** you have to worry about. You can also be held responsible for injuries of subcontractors or their employees ... If you are doing business as a ... builder, you have a legal obligation to provide your subcontractors and their employees with a safe place to work. If you do not, you are being negligent. The law requires you to supervise the project to ensure the safety of **all** the workers on the site, including the employees of subcontractors. Moreover, this



is one of those **nondelegable** duties we mentioned in Chapter 2. The responsibility to supervise and inspect your job sites to ensure that safety practices meet the requirements for your industry is yours. If you assign that task to someone else, and they do not do it right, you are liable for the consequences of their mistakes."

Throughout these publications, the National Association of Home Builders guides general contractors and builders to implement a job site occupational safety and health program. That is, they exhort the builders in this industry to design and implement safety programs by requiring contractors and subcontractors to implement their own safety and health programs. They exhort the builder to manage safety, just as they manage all other aspects of construction such as scheduling, quality assurance, coordination, etc. The National Association of Home Builders recognizes the moral responsibility of the builder to take reasonable steps to manage safety to ensure that contractor and subcontractor employees are not needlessly exposed to hazards and risks which could cause catastrophic injury or death.

The National Association of Home Builders specifically addresses the relationship between general contractor and subcontractors when they state: "More and more, builders are finding out that when an OSHA inspection takes place on their job site, they can be held responsible for the violations of their subs. Since March 1992, when OSHA increased their penalties by seven-fold, the affect of a subcontractor's violations can have an even greater impact on the builder's bottom line ... One of the best ways a builder can avoid OSHA citations that result from a subcontractor's violations is to only utilize subs who have effective safety and health programs and policies that aggressively attempt to comply with OSHA standards. Builders should share information about developing a safer work site with the sub. Having a safe, OSHA-compliant job site is good business for everyone on the site. If there are no injuries, then workers compensation rates go down and the concern for third party lawsuits is lessened ... Remember, OSHA currently wants the builder or general contractor to ensure that all employers under contractual control comply with all requirements."

d. **Associated General Contractors of America**

Since 1927, the Associated General Contractors of America have published their *Manual of Accident Prevention in Construction.* The primary objective of the Manual is to ensure effective control of accidents in the construction industry. They point out in their 1972 Edition of this Manual the following: "There must be recognition of the fact that control of accidents is the result of management and employees working together for a common objective. The leadership for such an effort must, however, originate with management. The degree to which management accepts this responsibility will determine the success or failure of the entire program."

They state in Chapter 1 - Accident Prevention Organization: "The basic functions of any management are planning and controlling ... Failure, in too many instances, to give sufficient attention to planning and controlling is largely responsible for high frequency rates." In Chapter 1, they further point out the need for assignment of responsibility and accountability of management personnel. They state: "Supervisory personnel assigned to the job should confer as soon as practical, review initial planning, discuss any condition changes, and accordingly, alter safety plans. Further, it should be determined that procurement of safety needs has been provided for, that safety policies and procedures applicable to the work are reviewed, and that authority and responsibility have been clarified." With regard to subcontractors, they point out: "Coordination between the accident prevention activities of the subcontractors and those of the prime contractor is a must, if the objectives of accident frequency reduction and lower costs are to be achieved."

Safety Inspections

In Chapter 1, they state: "Day-by-day, hour-by-hour, job inspections should be made and a list of violations noted for use and discussion at the next safety meeting of supervisors after corrections have been made. Along with the normal daily surveys of the supervisors, a safety committee should tour the job site to confirm or add to the list of unsafe acts already noted."

In their 8th Edition of their *Manual of Accident Prevention in Construction* published in 2003, they point out the following:

1-2. Planning the Accident Prevention Program:

Planning begins with management's written commitment to accident prevention objectives. Management personnel should meet and agree on the need of an effective accident prevention program. When the decision has been made, management should decide who will oversee the program, how it will be accomplished, and to whom supervisory staff is to report ... A management representative should be responsible for coordinating loss control activities. This assignment should be delegated to an individual with basic training in accident prevention. The individual selected should report directly to a company officer ... Areas of responsibility should include pre-planning, employee supervisory training, establishment of minimum safety standards, liaison with local medical facilities, accident investigation, inspections, and recordkeeping.

1-4. Assignment of Responsibility:

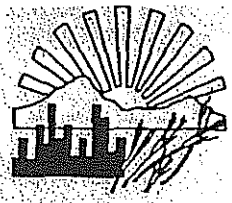
Line management should be responsible for achieving the objective of the accident prevention program.

1-5. Accident Prevention Compliance and Preparation of the Pre-Bid Estimate:

Accident prevention and OSHA compliance requirements should be carefully analyzed while the pre-bid estimate is being prepared. Adequate funds should be allocated to provide for items such as traffic control, excavation protection systems, barricades, signs, personal protective equipment, adequate work platforms, housekeeping, and other items necessary for the protection of employees, property, equipment, materials, and the general public.

1-7. Pre-Job Planning:

Management and staff should meet to discuss accident prevention as soon as the bid documents have been obtained. Job layouts, plans, and schedules should be studied to determine the requirements of the project. A procedural schedule should be developed.



1-8. Start of the Job Meeting:

Supervisory personnel assigned to the job should review initial planning, discuss any condition changes, and alter safety plans as needed. Safety policies and procedures applicable to the work should be reviewed, and authority and responsibility should be delegated.

1-9. Supervisory Meetings:

Meetings should be held on a regular basis. Supervisors should review accident and other hazardous conditions that occur, note deficiencies, establish necessary control measures. Future activities should be discussed to address potential hazards, control measures, protective devices, and training required.

1-13. The Subcontractor and Accident Prevention:

Compiling its project bid or proposal, the prime contractor should request information on the safety programs and recent history of subcontractors ... Requirements for the safe performance of subcontractors' work should be included in each subcontract. Among other things, such requirements should include a requirement for the subcontractor to continually monitor its own activities to assure compliance with all applicable safety requirements and to designate a safety representative at the site. The prime contractor also should periodically monitor each subcontractor's compliance with the applicable safety requirements, but such monitoring does not abrogate each subcontractor's responsibility to perform its work safely and in accordance with applicable safety requirements. The prime contractor may have less involvement in monitoring the safety and health efforts of a specialized subcontractor engaged in work of a type of which the prime contractor is unfamiliar. The prime contractor must have reason to believe, however, that its reliance on the specialty subcontractor to work safely is reasonable.

1-19. Construction Supervisor Training:

All construction supervisors should be given supervisory training that teaches them to work safely and cost efficiently. It should be emphasized by management that the construction supervisor is a "key" to the accident prevention program. Supervisory responsibilities should be defined. Construction supervisors should be encouraged to discuss the program and ask questions. Initial training can be supplemented with supervisory group meetings. Construction supervisors should understand that they are responsible for full compliance with the established management directive regarding accident prevention.

e. **Construction Management Association of America**

The Construction Management Association of America gives guidance to construction managers relative to safety management. They point out the following:

Risk is managed by:

- Contract agreements.
- Documentation of the construction activities.
- Your Actions while in the field.
- Close observation of the construction work being performed.
- Schedule, cost, quality, safety.
- Staying one step head of the contractor.

Proactive Approach

- CM employees trained to identify hazards in the workplace.
- CM addresses safety in pre-job meetings and progress meetings.
- CM addresses safety concerns per the contract.
- Points out safety concerns to the contractor.
- CM provides information to the contractor and owner and advises their employees to keep away from the hazard until correct.

f. **National Safety Council**

Accident Prevention Manual for Industrial Operations:

The National Safety Council is considered by construction safety management professionals as a highly authoritative source for guidance in safety matters. In Chapter 2 of their ACCIDENT PREVENTION MANUAL FOR INDUSTRIAL OPERATIONS, it sets forth guidelines for controlling hazards in the construction industry. It has been available since at least 1969. In their Manual, they point out:

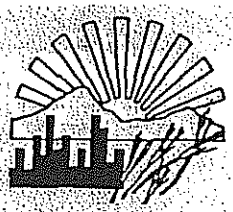
- The importance of insisting upon contractor compliance with all safety and health regulations.
- The need for advanced analyses and planning for safety.
- The need for a preconstruction safety conference.
- The need for periodic safety meetings during which plans are made for anticipating hazards associated with work so that controls can be put in place before the hazard evolves.

Essential to the principles established by the National Safety Council is the principle that all accidents are foreseeable, predictable, avoidable and preventable. Construction safety management should be proactive rather than reactive. That is, plans should be made to predict the hazards and to install the controls before the hazard evolves. This is a proactive approach. It is far more dependable than a reactive approach which would depend upon safety inspection to identify the hazard. Serious injury or death could result before the hazard is identified through safety inspection.

The National Safety Council further points out the importance of "assignment of responsibility" and "accountability" as key elements in a construction safety management program."

Core Safety Materials for the Construction Professional:

A Manual entitled "Core Safety Materials for the Construction Professional" has been prepared by the National Safety Council's Construction Division. In it, it gives guidance regarding the elements of an effective construction site-specific safety plan:



Introduction: An effective safety plan should get its start during the bid process. The owner should require the development of a pre-construction analysis by all successful bidders. The general contractor/project management team should take the lead in the developing process. All subcontractors - both first and second tier subs - should be invited to an initial meeting and encouraged to participate in the process.

Construction Management Responsibility:

a. Plan safety into the project.

1. Comply with owner's safety requirements and local, state and federal regulations.
2. Establish minimum safety history requirements (e.g. last five years, EMRs, OSHA inspection history, etc.) for all project contractors.
3. Investigate, and pre-qualify as acceptable bidders, contractors who meet the pre-determined safety history requirements.
4. Establish and incorporate into contract documents the requirement for a Project Specific Safety and Health Plan to include:
    a. Construction process plan.
    b. Hazard analysis.
    c. Permit system.
    d. Designated project safety coordinator/administrator.

This document goes on to give guidance with regard to owners, general/prime contractors and subcontractors which is essentially the same as all of the other industry standards and authorities.

g. **Construction Industry Institute**

The Construction Industry Institute is an association of major general contractors/construction managers and major corporations in the United States. The Construction Industry Institute participates with leading universities in the United States. They funded research which resulted in the publication of a document entitled "Managing Subcontractor Safety", Publication 13-1, February 1991. The purpose of the CII Safety Task Force research was to

identify the primary means by which general contractors influence the safety performance of their subcontractors ... The goal was to add to the body of knowledge so that effective measures can be implemented to reduce the cost of accidents.

Conclusions of CII Explained in "Managing Subcontractor Safety"

Task Force research shows that, where subcontractor safety is concerned, the role of project managers is very important. On large and small projects alike, emphasizing safety and providing quality coordination have a favorable impact on the safety of subcontractors. On small projects, subcontractor safety performance also was influenced by the quality of the project management existent on the job and the degree to which workers were dealt with in a humanitarian or personal manner ... **Since the general contractors have a significant influence on their subcontractors, owners too will have an influence on the safety performance of the general contractor and subcontractor. Thus, it can be inferred from the results of this study that owners also play a major role in construction safety** (emphasis added).

Guidelines for Managing Subcontractor Safety on Construction Projects

The following is a brief summary of the guidelines set forth by CII.

- They point out the importance of selecting subcontractors by evaluating their safety performance when evaluating bids.
- The contract should be detailed relative to how safety will be managed and reported. As a minimum, the scope of work should include requirements for a "Safety Plan", including such information as safety inspection, enforcement, safety staffing, permit required, preemployment testing, substance abuse testing, safety meetings, personal protective equipment required, ... basic safety training ...
- Pre-job safety conference to set forth safe procedures, training requirements and a schedule to discuss safety performance and training programs.
- Periodic safety progress reviews between managers and subcontractor safety representatives.

- Managers should conduct their own safety inspections of the subcontractor's work site, and a review of the inspection findings should take place at the periodic meetings.

Safety Rules - Enforcement Procedure

There must be a procedure for enforcing safety rules. This procedure should be written, and should be enforced equally among supervisors, managers, workers and other parties on the site. It should spell out what situations will result in immediate discharge and what actions will be taken on the first, second or third incidents involving violations of a less serious nature.

IX. U.S. DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

OSHA recognizes the need for the general contractor to take reasonable steps to ensure that their work is done safely and in compliance with their regulations by contractor and subcontractor workers.

OSHA Standard Interpretation 1926.32 Addressing Competent Persons at Construction Sites:

OSHA requires that all employers, general contractors, contractors and subcontractors employ OSHA competent personnel to perform safety inspections as part of their safety program. On August 31, 1995, OSHA gave a clarification regarding 1926.32 addressing competent persons at construction sites. The following is excerpted from that interpretation:

"A legal principle relevant is that ... the general contractor normally has responsibility to assure that the other contractors fulfill their obligations with respect to employee safety which affect the entire site. The general contractor is well suited to obtain abatement of hazards, either through its own resources or through its supervisory role with respect to other contractors. It is therefore reasonable to expect the general contractor to assure compliance with the standards insofar as all employees on the site are affected. **Thus we will hold the general contractor responsible for violations as could reasonably be expected to prevent or abate by**

reason of its supervisor capacity (Blount Int'l Ltd., 15 BNA OSHC 1897, 1991-93 Cch OSHD 29, 854 (No. 89-1394, 1992).

"On the other hand, the Occupational Safety and Health Review Commission also noted in that decision that the duty imposed on a general contractor is a reasonable one and that the general contractor will not be held liable 'for violations which it could not reasonably be expected to detect or prevent' ... In addition to whatever responsibility it may have as an exposing employer, the general contractor would also share responsibility for those violations by its subcontractors which it could reasonably have protected and had corrected. We would expect general contractors to take the steps necessary to satisfy themselves that subcontractors engage in activities which call for the involvement of competent persons will fulfill that obligation as well as the general inspection obligation imposed by 1926.20(b)(2)."

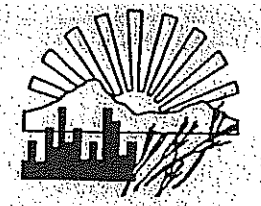
The United States Court of Appeal for the Eighth Circuit has recently upheld OSHA's right to cite general contractors as controlling employers responsible for compliance with OSHA standards even though their own workers are not exposed to the hazard – Hilda Solis, Secretary of Labor, United States Department of Labor vs. Summit Contractors, Inc., No. 07-2191 filed February 26, 2009.

OSHA also recognizes the overall responsibility of the contractor at the top in the Code of Federal Regulations.

29CFR1926.16(a) "... In no case shall the prime contractor be relieved of overall responsibility for compliance with the requirements of this part for all work to be performed under the contract."

29CFR1926.16(b) "... The prime contractor assumes all obligations prescribed as employer obligations under the standards contained in this part, whether or not he contracts any part of the work."

29CFR1926.16(c) "... Thus, the prime contractor assumes the entire responsibility under the contract and the subcontractor assumes responsibility with respect to his portion of the work. With respect to subcontracted work, the prime contractor and any subcontractor or subcontractors shall be deemed to have joint responsibility."



29CFR1926.16(d) "... Where joint responsibility exists, both the prime contractor and his subcontractor or subcontractors, regardless of tier, shall be considered subject to the enforcement provisions of the Act."

The above OSHA regulations, 1926.16(a) through (d), could not be cited by OSHA since they set forth a "philosophy of safety management." This philosophy of safety management guides OSHA's Multi-Employer Citation Policy which considers four types of employers: the Controlling Employer, the Creating Employer, the Correcting Employer and the Exposing Employer. When there is a violation of a particular standard related to a particular hazard, OSHA is required to issue allegations of violations to entities which meet the definition of the four types of employers that is expressed in OSHA's Multi-Employer Citation Policy. OSHA's Multi-Employer Citation Policy requires the controlling employer to exercise reasonable care to prevent and detect violations of OSHA standards. However, the extent of the measures that a controlling employer must implement to satisfy this duty of reasonable care is less than what is required of the employer with respect to protecting its own employees. OSHA recognizes that the controlling employer would not **normally inspect** for hazards **as frequently** or to have the same level of knowledge of the applicable standards as the employer it has hired. OSHA then sets forth the factors related to reasonable care that a controlling employer should use to determine the frequency with which they would inspect to identify violations.

With regard to the primary responsibility for implementation of the job site safety program, OSHA is clear in their Basic Instructor Course for Occupational Safety and Health Standards in the Construction Industry. OSHA states the following: "**General contractor has primary responsibility.** The federal safety and health laws now place the primary responsibility for the environmental safety of all personnel on the job squarely on the primary employer, the general contractor. He cannot contract away this responsibility. He must, therefore, insist that the subcontractors become a part of the planning as well as the execution of the job. The fact is that every employer on the construction site is responsible for the safety of his own employees and for the safety of any and all subcontractors working for him. **There is no way, under the Acts, that this responsibility can be contracted away for it is the responsibility under the law and not under the contract** (emphasis added)."

The following are the OSHA standards relevant in this case:

29CFR1926.20(b)(1). It shall be the responsibility of the employer to initiate and maintain accident prevention programs as may be necessary to comply with this part.

29CFR1926.20(b)(2). Accident prevention programs shall provide for frequent and regular inspections of the job sites, materials, and equipment to be made by competent persons designated by the employers.

29CFR1926.32(f). Competent person means one who is capable of identifying existing and predictable hazards in the surroundings or work conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt, corrective action to eliminate them.

29CFR1926.21(b)(2). The employer shall instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposures to illness or injury.

29CFR1926.451(g)(1). Fall protection. Each employee on a scaffold more than ten feet above lower level shall be protected from falling to that lower level.

29CFR1926.502(k). Fall protection plan. This option is available only to employees engaged in leading edge work, precast concrete erection work, or residential construction work who can demonstrate it as infeasible or it creates a greater hazard to use conventional fall protection equipment.

29CFR1926.503. Training requirements. The following training provisions supplement and clarify the requirements of 1926.21 regarding the hazards addressed in Subpart M of this part.

29CFR1926.503(a)(1). Training program. The employer shall provide a training program for each employee who might be exposed to fall hazards. The program shall enable each employee to recognize the hazard of falling and shall train each employee in the procedures to be followed in order to minimize these hazards.

29CFR1926.503(a)(2). The employer shall assure that each employee has been trained, as necessary, by a competent person qualified in the following areas:

(i) The nature of fall hazards in the work area;
(ii) The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems to be used;
(iii) The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones, and other protection to be used;
(iv) The role of each employee in the safety monitoring system when this system is used;
(v) The limitations on the use of mechanical equipment during the performance of roofing work on low-sloped roofs;
(vi) The correct procedure for handling and storage of equipment and materials and the erection of overhead protection;
(vii) The role of employees in fall protection plans;
(viii) The standards contained in this Subpart.

X. HISPANIC WORKERS AT HIGHER RISK FOR WORKPLACE INJURY AND DEATH:

The following is taken from the Construction Chart Book published by the Center for Construction Research and Training: "The increase in the Hispanic portion of the labor force has been rapid, particularly in construction ... The number of Hispanics employed in construction almost quadrupled from 704,606 in 1990 to 2.6 million in 2005 ... In construction, 27 percent of production workers were Hispanic, higher than any other industry, except agriculture ... About 75 percent of the 2.6 million Hispanic construction workers were born outside of the United States ... The growth of Hispanic employment in construction is driven, in particular by recent arrivals." The Center for Disease Control published in *Morbidity and Mortality Weekly Report*, June 2008 that Hispanic workers face a far greater chance of being killed in the workplace than any other demographic group. Nearly one-third of fatal work injuries in construction occurred among Hispanic workers. Thirty-four percent of Hispanic workers' deaths from 2003 to 2006 occurred in the construction industry. Falls have emerged as an increasing cause of work-related injury and death among Hispanics, particularly in construction. The

number of Hispanic worker deaths from falls increased 370 percent between 1992 and 2006, the CDC report noted. (National Safety Council, OSHA Up-To-Date, Volume 7, No. 8, August 2008)

X. Dong and J. Platner reported in the *American Journal of Industrial Medicine* that in 2000, Hispanic deaths accounted for 23.5 percent of the deaths in construction, while in the same year, Hispanic workers constituted less than 16 percent of the construction workforce. From 1996 to 2001, more than 30 percent of the Mexican born worker fatalities were construction related. M.J. Burnette reported in *Injury Prevention* that Hispanic construction workers experience a disproportionate number of injuries and fatalities compared to non-Hispanic workers. In 2001, the rate of Hispanic construction worker deaths was 19.5 per 100,000 full time workers – 62.5 percent higher than the rate of 12.0 for non-Hispanic construction workers. The above facts were reported in *Professional Safety*, April 2001, in an article entitled "Safety and Roofing – Practices of Contractors That Employ Hispanic Workers."

XI. TOLL BROTHERS SAFETY PROGRAM:

SAFETY POLICY. The safety of all personnel on Toll job sites is a vital concern to the Company ... Our goal is to develop and maintain a "zero accident" safety culture on all job site locations ... Subcontractor is responsible for the safety and health of its employees and all its sub tier employees.

Each subcontractor will be held accountable for the safety and health of its employees and sub tier personnel. **Consequences for noncompliance with this safety policy may result in actions up to and including dismissal from the project.**

ORGANIZATION. Toll personnel shall exercise a level of safety oversight and safety leadership for the entirety of the project. Oversight will be accomplished through periodic safety inspection of the project and investigation of any accident that might occur ... Toll may notify subs of any noncompliance and the need for corrective action as hazardous conditions and practices are discovered throughout the course of the work on the project. This notice, whether verbal or written, when delivered to the Subcontractor or the Subcontractor's representative at the site of the work shall be sufficient notice of corrective action required. After receiving this notice, the subcontractor shall immediately take corrective action. If the

subcontractor fails or refuses to take corrective action, Toll may, without prejudice or other legal or contractual rights, issue an order stopping all or part of the work; thereafter, resumption may be issued at the discretion of Toll.

Safety Responsibilities. The Toll project manager and his/her designee (i.e. construction manager) is responsible for:

- Providing notification to subcontractors of any hazardous work practices or conditions observed throughout the course of the work. Although notification can be done verbally, continual non-compliance should be in writing (a form is provided in Appendix 1 of this program) and a copy kept on file.

Appendix 1 indicates that Form RISK 6267 is Notification of Hazardous Condition/Practice Form.

Appendix 4

1. Each employer performing work on a Toll residential construction project is required by law to have an occupational safety and health program that covers its employees … **Subcontractor safety program must address all potential hazards to which workers may be exposed and appropriate abatement procedures to those potential hazards** (i.e. A FALL PROTECTION PLAN).

XII. SYSTEM SAFETY ANALYSIS – ROOT CAUSE ANALYSIS:

Safety professionals are trained to see the hazard as a "symptom" rather than a "cause." A hazard is a dangerous condition or unsafe work practice. In order to understand causation, we ask questions relative to "why" the management system permitted hazards to evolve. If we allow the hazard to evolve and then require it to be corrected after an inspection identifies the hazard, it is likely that the hazard will recur. If we continually address the "symptom" (hazard) and not the underlying cause of the existence of the symptom, the symptom or hazard will continue to evolve. System safety analysis asks questions relative to "why" the hazard existed. It asks questions related to understanding how the management system failed and permitted hazards to evolve and workers to be exposed to dangerous conditions. System safety analysis considers whether or not the management system was being

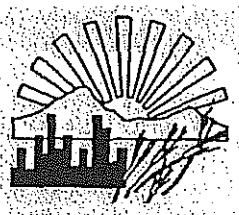
implemented by holding those responsible for allowing the hazard to evolve **accountable** for their safety performance. It involves holding foremen, managers and owners accountable for their safety performance. That would involve Toll Brothers implementing their safety program regarding noncompliance as expressed above.

XIII. HAZARD ANALYSIS:

Jose Zuna was exposed to a fall hazard. He and other workers built the scaffold and failed to include a standard guardrail. The exposure to Mr. Zuna to a fall hazard at the time of this incident was not an isolated incident. Many fall hazards were indicated in the interview that I had with Mr. Zuna and Mr. Tenezaca. Both workers were permitted by Toll Brothers to work without the OSHA required training for fall protection. Had they been properly trained, they would have been instructed to never work on a platform where there is no fall protection. Had Toll Brothers implemented a program of requiring workers to be properly trained as required by OSHA, Anchor Framing would have known that they would not be able to get away with workers assembling and using scaffolds without the OSHA required fall protection training. There is significant evidence to show that Toll Brothers was not competently implementing their safety program at this site. One example is the fact that workers at this site were not required by Anchor Framing nor by Toll Brothers to wear personal protective equipment to protect their eyes while using nail guns. Like the exposures to the many fall hazards at this site, it was very easy to identify the fact that carpenters were not wearing eye protection. Toll Brothers permitted many exposures to fall hazards and did not require contractors and subcontractors to show proof that their workers were trained as required by OSHA related to fall protection and eye protection.

Toll Brothers' Enforcement of Safety

Toll Brothers' safety program includes language that requires Toll Brothers to implement their program and hold contractors accountable (see paragraph X). In a memo from a safety meeting on October 31, 2007, Mark and Aldo of Toll Brothers indicated that at this site Toll Brothers religiously fills out weekly site safety inspections and keeps records. These gentlemen indicated that Toll Brothers' responsibility is to take whatever necessary actions are needed to correct the problems. They type letters and send them to subcontractors. If this doesn't help,



the next thing they do is send workers home for the day. They indicate that that has been done with very good results. The third course of action is to impose a fine on repeat offenders. They state: "This of course is the course of action none of us want to take … We as construction managers do not want to have to take the second and third courses of action against our subcontractors, but we will as we also have bosses we have to answer to."

I have reviewed the weekly safety inspection reports from January 3, 2008 until February 17, 2009, that is, just before Mr. Tenezaca was injured on February 23. During that time, Anchor Framing was found by Toll Brothers to have workers exposed to fall hazards during ten inspections. Notifications of Hazardous Condition/Practice were sent to Anchor Framing on five of those ten times. There is no evidence in the record that Toll Brothers **ever** required a worker or foreman from Anchor Framing to leave the job site, nor is there any evidence of any fine **ever** being issued. Likewise, there is no evidence of any other contractor at this site having a worker sent home or being issued a fine.

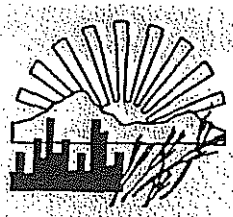
On February 25, 2009, two days after Mr. Tenezaca's injury, Toll Brothers sent a notification to Anchor Framing indicating the following:

- Portable ladders without tie offs.
- Ladders with feet broken on two ladders.
- Halyard missing on multiple ladders.

The notification states: "Reinspection will commence in 24 hours. If infraction has not been corrected, a fine of $250 will be given and workers will be asked to leave for the day."

On February 27, 2009, four days after Mr. Tenezaca was injured, Ken Beck of Toll Brothers wrote to all contractors and told them: "Effective immediately, anyone who is observed not complying with ALL safety practices will be sent home with a warning for the first offense. If violations are noted after your first warning, you will be fined $250 per incident and sent home."

On March 4, 2009, Mr. Zuna was injured. The record indicates that on March 5, 2009, Toll Brothers issued the first fine for failure to guard a table saw to OLV Group, LLC.

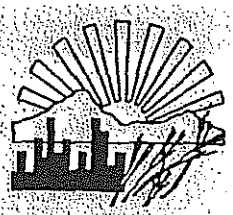


There is no evidence in the record that there ever was any worker ever sent home or any contractor ever fined $250, that is, until after Mr. Zuna's injury. That is, there is no evidence that Toll Brothers ever sent a worker or foreman home even though Mark and Aldo indicated in their memo of October 31, 2007 that sending workers home has been done in the past with "very good results."

Mark and Aldo expressed in that memo their reservations about the second and third course of action, that is, sending workers home and fining them. Unfortunately, it was not until after this incident that they issued a fine for an unguarded saw.

The following is the most important deposition testimony of Thomas Brown, the project manager for Toll Brothers:

- Toll Brothers has a policy to perform safety inspection and has a responsibility to oversee the safety of the project.
- When Toll Brothers identifies a violation of OSHA standards, the first they do is verbally warn and then possibly issue a written violation and then the contractor needs to correct the situation.
- Mr. Brown was not aware of any steadfast rules with regard to violations of fall protection standards.
- He doesn't know if there is a three strikes, you're out policy with regard to fall protection. (Note: This is important. As project manager, Mr. Brown has the responsibility to evaluate and **hold accountable** Toll Brothers' management representatives for their safety performance. If he doesn't understand the policy regarding enforcement of the most important hazard on a construction site, people under him will not know what they are supposed to do. Assignment of responsibility and accountability are fundamental to management of any function, especially fall hazards in the construction industry.)
- He doesn't know if Toll Brothers required Anchor Framing to have a fall protection plan. (Note: This project manager doesn't know the requirements of the Toll Brothers safety program which does indeed require Anchor Framing to have a fall protection plan.)
- He doesn't know if Toll Brothers required Anchor Framing's workers to have fall protection training. (Note: He can't hold construction managers



responsible for verifying that contract workers were properly trained if he is not aware of the Toll Brothers policy.)

- He doesn't know if Anchor Framing had a qualified person at this project.
- He doesn't know if his safety performance is evaluated. (Note: This is important because his safety performance should be evaluated and he should evaluate the safety performance of those under him. That is, if management is to be held accountable for implementing the Toll Brothers safety program.)
- He doesn't know if Toll Brothers has a formal policy to monitor subcontractors to see that they work in accordance with OSHA. (Note: He doesn't understand the most fundamental requirement of the Toll Brothers safety program.)
- Toll Brothers didn't investigate the Tenezaca incident before the Zuna incident. (Note: Toll Brothers has a policy to investigate accidents.)

The following is the most important deposition testimony of Victor Rodrigues, the owner of Anchor Framing:

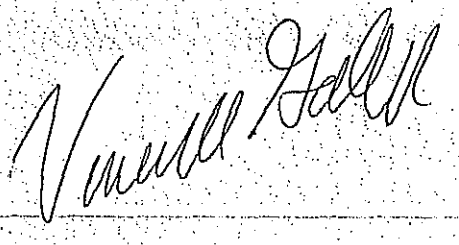
- When asked if he thought fall protection violations were significant or important, he responded that he was not given any violations from Toll Brothers related to fall protection. (Note: Toll Brothers prepared Notification forms. It is not clear that Tolls Brothers then sent the Notification forms to Anchor Framing.)
- He was asked if he thought it was important for those safety rules regarding fall protection to be followed by his workers. He responded saying that it was.

From the deposition testimony of Victor Rodrigues and Thomas Brown, as well as the statements of the plaintiffs, it is clear that Toll Brothers was not implementing their safety program and requiring contractors to comply with OSHA.

XIV. OPINION/CONCLUSION:

My opinion is based on my training, education and experience in the field of occupational safety and health as well as my review of the documents set forth in Section II. It is my opinion that Toll Brothers violated the principles and practices of construction safety management because they failed to take reasonable steps to

require Anchor Framing's workers to be protected from falls from elevation. It is my opinion that they were a controlling employer and permitted violations of the aforementioned OSHA standards. It is my opinion that they violated their own safety program. It is my opinion that the above failures were the cause of Jose Zuna's injuries.



Vincent A. Gallagher

VAG:ms

EXHIBIT B

Citation and Notification of Penalty

Company Name: ANCHOR FRAMING CORPORATION
Inspection Site: 1185 Big Ridge Drive, Marshalls Creek, PA 18335

EXHIBIT

The alleged violations below have been grouped because they involve similar or related hazards that may increase the potential for injury resulting from an accident.

Citation 1 Item 1a Type of Violation: Serious

29 CFR 1926.501(b)(13): Each employee engaged in residential construction activities 6 feet or more above lower levels was not protected by guardrail systems, safety net systems, or personal fall arrest systems, nor was an alternative fall protection plan which meets the requirements of 1926.502(k) developed and implemented:
a) Anchor Framing, Big Ridge Drive, Marshalls Creek, PA: two employees were performing carpentry work on a third story roof with out the use of fall protection. One employee fell a distance of approximately 25 feet, on February 23, 2009.

ABATEMENT OBSERVED DURING INSPECTION
NO CERTIFICATION REQUIRED

Date By Which Violation Must be Abated: Corrected During Inspection
Proposed Penalty: $ 7000.00

Citation 1 Item 1b Type of Violation: Serious

29 CFR 1926.503(a)(2)(iii): The employer did not assure that each employee has been trained, as necessary, by a competent person in the use and operation of guardrail systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones, and other protection to be used:

a) Anchor Framing, Big Ridge Drive, Marshalls Creek, PA: Employees performing carpentry work on a third story roof with out fall protection were not trained in the use personal fall arrest systems or other protection to be used, on or about February 23, 2009.

ABATEMENT CERTIFICATION AND DOCUMENTATION REQUIRED

Date By Which Violation Must be Abated: 08/26/2009

Citation and Notification of Penalty

Company Name: ANCHOR FRAMING CORPORATION
Inspection Site: 1185 Big Ridge Drive, Marshalls Creek, PA 18335

The alleged violations below have been grouped because they involve similar or related hazards that may increase the potential for injury resulting from an accident.

Citation 1 Item 2a Type of Violation: Serious

29 CFR 1926.451(c)(2): Supported scaffold poles, legs, posts, frames, and uprights did not bear on base plates and mud sills or other adequate firm foundation:

a) Anchor Framing, 13 West Lake Drive, Marshalls Creek, PA: the legs of a tubular welded frame scaffold with a working platform height of approximately 13 feet, did not bear on base plates. Thereby exposing the employees to fall hazards from working on an unstable scaffold, on or about March 4, 2009.

ABATEMENT OBSERVED DURING INSPECTION
NO CERTIFICATION REQUIRED

Date By Which Violation Must be Abated: Corrected During Inspection
Proposed Penalty: $ 7000.00

Coverage Information/Additional Comments

1st Accident:

On February 25, 2009 There were two employees working on a three story high roof of a town house in Marshalls Creel PA. The employees were completing an overhang between the second roof and the third roof, when one man fell. Ther was no fall protection of any type provided for those employees working at the rear section of the roof. An employe fell and suffered severe head injury.
The foreman, [redacted] when interviewed said that he knew the men were working on the roof. He did not stop th men from working and provide them with fall protection because it was the last part of the day and he had other thing on his mind.
[redacted] also admitted that there was never any design in place for a fall protection system to protect anyone working o the roof. He also said that he had received OSHA 10 hour training and knew the employees needed fall protection.
Victor Rodrigues, the owner stated that there was never a plan in place to design any type of personal fall arrest systen into the project. There were some 2x6 boards laid flat on the front roof section, but none on the rear section where th employees were working. The 2x6's, according to [redacted] were to stop a man from sliding off the roof. He wa asked if they were installed according to OSHA regs and his answer was "no they should be standing up. When asked why they weren't mounted correctly he said they did not have any roof brackets on site, and he figured that way wa better than nothing.
The slide guard system was not in compliance in that the 2x6's were laying flat instead of at 90 degrees as required by the standard.
[redacted] was asked by the CSHO to describe how the men could have been protected. His response was that they could have used roof anchors and set the slide guards up correctly, placing them the entire length of the roofs edge.

2nd Accident

On March 4, 2009 Anchor Framing Corp employees had removed a window from the front of a house on West Lake Drive, Marshalls Creek, PA when an employee fell approximately 13 feet from the working platform of a tubular welded frame scaffold, with no guard rails in place. There were cross braces in place but they did not conform with the height requirements of standard guardrails. In addition to the missing guardrails there were no base plates. The scaffold poles were setting on multiple pieces of wood and was not secured to the house by any means. There was no ladder provided for access to the working platform, instead the employees climbed the end rails but had to alternate from side to side because the scaffold components were mismatched and the ends did not line up. The foreman, [redacted] was working with an employee named Jose Roddigo Zuna (the injured employee) when the accident occurred. He and Jose erected the scaffold that morning with parts he borrowed from a different contractor. And the additional pieces for the guardrail and base plates were not available. He intentionally built it with those parts missing with the thought that it would be good enough to get the job done, and they were in a hurry to do the job. [redacted] also stated that he had received OSHA 10 hour training on how to erect a scaffold correctly. He knew the guard rails and base plates were needed.
Victor Rodriguez, owner stated that about a week previous he had a conversation with Toll Brothers managers about fixing the window and the need for scaffolding. He also said the company has an approved attachment for the front of a forklift that could have been used instead of scaffolding. But he did not have the equipment sent to the site because [redacted] was running the job and if he needed the stuff he could have called for it.
Victor Rodriguez did not follow up with [redacted] to see if the forklift and basket attachment were needed on site.
[redacted] said he had been trained in the proper way to erect a scaffold. And that there was scaffolding available at the shop in NJ, with all the components necessary to build it safely. It would have taken about a 2 hrs to get the scaffold pieces to the site after they were loaded. Which would have taken longer than the entire job, so he chose to erect it with the parts that were available, rather than waste the time required to do it right. He also said that Toll Brothers had asked him numerous times when that window would be fixed, so he was in a hurry to fix it to satisfy them.

The accident was referred to the Wilkes-Barre office by the Monroe County Fire Marshall, [redacted] He informed the AAD Gonzalez that he would secure the area until we arrive. While enroute to the scene this CSHO had a cell phone conversation with [redacted], at which time [redacted] stated that when he arrived on site he ordered the contractor (Anchor Framing) not to touch the scaffold until OSHA arrived. I informed him of my ETA and he said the contractor asked again to tear down the scaffold. He again informed them that they were not to touch the scaffold until OSHA gave the ok.

[redacted]

Exemption # 4 1C
Exemption # 4 1C

Exemption # 5

comments made by the fire chief that the foreman asked no less then twice if the scaffold could be torn down [redacted]

Conclusions: [redacted]

CSHO Signature	[redacted]	Date	7/24/09
Accompanied By			

Exemption # 7c

Facts relating to Intentional Disregard or Plain Indifference: Anchor Framing Corporation/312289481:

Exemption # 6, 7C

1. What steps did the employer take to eliminate or reduce the hazardous condition? None, in regards to the first accident the Foreman, [redacted] told the CSHO that he was aware of the men working on the roof without fall protection and that he directed them to be careful. He did not stop them from working without fall protection because it was near the end of the day and he wanted the job completed before they left for the day. He also said that there were harnesses in the van for the guys to use when the felt they needed them. But when asked where they would have tied off he said "there was no where because the roof was already sheeted". And that's why he had the slide guards installed, "to keep them from sliding off the roof." It was observed that the slide guards were laid flat onto the sheeting instead of at a 90degree angle as required. [redacted] comment about the angle of the slide guards was that he knew they were to be at an angle but there were no roof brackets on site so he had them laid flat and figured that was better than nothing. The foremen run their jobs respectively without much interference from the owner. And when asked about any type of fall protection plan being in place for this site [redacted] said there was none, that the employees knew if they went on the roof they were to wear their harnesses.

   In regards to the second accident the foreman, [redacted], said that Toll Brothers, The GC was pressuring his boss get the job done as soon as possible. So he borrowed scaffolding from another contractor. There were scaffold parts available at their shop in New Jersey and he could have had them brought to the site, but in order to save time he borrowed the scaffolding. At the time he knew all the parts were not there to build it correctly, but he did not expect the job to take long and figured it would be good enough to do what they needed. So he instructed the laborer to assist him in the erection of the scaffold that morning with the full knowledge that it would not meet OSHA compliance.

2. Was the supervisor aware of company policy or safety program that addressed the hazardous condition? Yes, the foreman was trained by the owner and was responsible for training the employees on it.

3. Were recommendations or advice rendered by state agencies, safety advisors, or consultants? There is no evidence of this.

4. Was the supervisor aware of OSHA standards that applied to this situation? How did he know about them?
   Did he follow them? If so, how? If not, why not? Both foremen stated they received their training of the standards when they attended an OSHA 10 hour Safety and Health course conducted by a consultant in New York, and confirmed that training by providing OSHA with their attendance cards.

5. Did the employer say or do anything that reflected his intent not to comply with the OSHA standard? What did he say or do? The foreman at the roofing site knew there were two employees on the roof but because of the late hour of the day; just ignored the fact that there was no fall protection. The foreman at the scaffold site told the CSHO that he intentionally erected the scaffold wrong knowing full well that it was not in compliance, but did it because his boss was being pressured by the General Contractor to get the job done.

6. Were compliance responsibilities entrusted to specific managerial employees? What was the training and knowledge of these employees? Both foremen were OSHA 10 hr trained and knew the regulations and their obligations to prevent and correct hazards when they were aware of them.

7. Did the employer follow safety standards, internal company policies, or enforce discipline for safety violations? No. The foreman clearly did not follow their own rules, or the OSHA regulations. And they were not disciplined for their actions.

8. Did the employer make efforts to identify hazards and to correct them? No

9. How did the employer respond if there were previous injuries or illness related to the hazardous condition?

Victor Rodrigues, the owner of Anchor Framing was onsite after the first accident and was informed of the violative conditions and the absence of fall protection and the dereliction of his foreman. He chose however to do nothing proactively to ensure that safety measures were being followed at all of his work sites.
He had been informed previously by [redacted] that the date on which the second accident occurred, the work on the window was going to be done. He later told the CSHO that he had discussed the use of a fork lift and basket with [redacted] and also reminded him about the availability of scaffolding at the shop. But they made no definitive plans to use either. He also said that he had not planned to be at the site that day but he never asked [redacted] how he planned to do the job safely.

[redacted] was at the scene of the first accident when OSHA started the investigation and was aware that an employee fell off the roof. He may not have known why, but he was present when the CSHO was informed that the victim was not wearing a harness. The second accident occurred seven work days after the first one at a different location at the site where [redacted] was the foreman, and even with his knowledge of the previous accident, he made a conscience decision to erect a scaffold that was unsafe.

Exemption # 6, 7c

Facts relating to Heightened Awareness: Anchor Framing Corporation. /312289481

PREVIOUS OSHA VIOLATIONS:

1. Has OSHA conducted previous inspections that resulted in violations for similar hazardous conditions? No.

2. Did the employer take any action to comply with the requirements of the standards? No.

Why did the employer take no action? The employer was in a hurry to get the jobs completed.

COMPLAINTS/INSPECTIONS BY OTHER PERSONS:

1. Were specific complaints made by employees or union about the hazardous conditions? No.
   When? n/a
   What were the conditions? n/a

2. Was the employer previously notified by a state agency of the hazardous conditions? No.

PREVIOUS INJURIES/ACCIDENTS:

1. Have there been any previous injuries resulting from the same hazardous condition? No.

OTHER CONSIDERATIONS:

1. Does the company have a safety program addressing the kind of unsafe conditions at issue? Yes, however the program states " Build scaffolds to manufactures' recommendations and OSHA Construction Standard Safety Standard Part 12-Scaffolding" The program also contains a sentence that states" The use of harnesses with safety lines when working from unprotected high places is mandatory. Always keep your line as tight as possible". The safety program contains a section on fall protection plan for residential roofing construction.

2. Are supervisors present in the immediate vicinity of observed violation – How near? How Long? How Often? Yes, there was a foreman from each crew working with the employees and was present at the locations where the violations existed. One foreman intentionally created the scaffold hazards, and worked directly with the exposed employee on the unsafe scaffold.

3. Are supervisors trained to recognize the hazardous condition? What type of training has the supervisor received? When did the supervisor receive such training? What was the nature of the training? The foremen worked in the construction industry for many years and stated to the CSHO that they had received OSHA 10 hour training and were very knowledgeable of the work and regulations and the hazards associated with the type of work being done. The foremen stated that they received training from OSHA State Consultation in the White Plains, NY.

4. Is the violative condition obvious? How is the violative condition obvious? Yes. It is obvious because on
February 23, when the first accident occurred the foreman knew there were two employees on the roof with no fall protection and told the men to be careful on the roof. The condition was in plain view.

At the time of the second accident on March 4, that foreman knew the violative condition was obvious because he was the one who intentionally erected the unsafe scaffold, and worked on it with the victim. The condition was in plain view.

5. Has the supervisor acknowledged that he saw the violative condition and exposure? What did the supervisor think about whether the condition was safe or unsafe? How did the supervisor reach that conclusion? What factors did the supervisor consider and why? Yes, the foremen were aware of the conditions: When the foreman of the framing crew observed the men on the roof he told them to be careful; and the second condition was intentionally created by the foreman when he erected the scaffold improperly. Both foremen knew of the unsafe conditions, but neither did anything to correct them because they were in a hurry to get the jobs completed. The fall hazard from the roof occurred near the end of the day and the foreman wanted the job finished before they left for the day. [redacted]

Exemption 4 5

6. Has the supervisor seen these violative conditions before? When? How often? What did the supervisor do on those previous occasions? No, the owner said he has always made sure the employees were provided with fall protection. Both foremen told the CSHO that they always assured there was adequate fall protection on site and that all the employees knew where it was and that they were to wear it when needed.

7. If the supervisor was aware of previous occurrences of the hazardous condition were any disciplinary actions taken? What was done? If not, why not? None of the managers, admitted to having any knowledge of the violative conditions occurring previously

U. S. Department of Labor
Occupational Safety and Health Administration

Referral Report

Wed Mar 4, 2009 10:35am

Reporting ID	0317700	Previous Activity	0	Referral Number	201377249		
Establishment Information	Establishment Name	ANCHOR FRAMING CORPORATION		Employer ID			
	Site Address	1185 Big Ridge Drive Marshalls Creek PA 18335		City Code	4908	County Code	089
		Site Phone		Site Fax			
	Mailing Address	P.O. Box 5308 Newark NJ 07105					
		Mailing Address Phone	(973) 589-9500	Fax			
Industry & Ownership	Type of Business		Primary SIC 1522	Primary NAICS	236116	No. of Employees	10
	Ownership	A. Private Sector					
Source	Referred By	G. State/Local Government		Date Received	03/04/09		
	Source or Contact (Name, Location, Affiliation, Telephone Number):						
Referral Classification	Safety - Serious						

HAZARD DESCRIPTION:

An employee fell 30 feet from a scaffold while removing a large window. The wind caught the window and the employee fell off of the scaffold. He was flown to a Lehigh Valley hospital. He is in highly critical condition.

Referral Action	Send Letter	Date Letter Sent	Date Response Due	Response Received (Satisfactory or Not Satisfactory)	Supervisor(s) Assigned
					B9995
	Inspection Planned? No	If Yes, Priority:		If No, Reason:	
	Transfer To (Name):			Transfer Date	
	Transfer To Category:				
Strategic Initiatives					
National Emphasis					
Local Emphasis					

Optional Information	Type	ID	Optional Information Value
Close Referral Comments			

U. S. Department of Labor
Occupational Safety and Health Administration

Worksheet

7c

Mon Jul 13, 2009 8:57am

Inspection Number	312289481
Opt. Insp. Number	[redacted]

Establishment Name	ANCHOR FRAMING CORPORATION				
Type of Violation	S Serious	Citation Number	01	Item/Group	001 (a)
Number Exposed	7	No. Instances	1	REC	
Std. Alleged Vio.	1926.0501(b)(13)				

Abatement Period	MultiStep Abatements			Final Abatement	Action Type/Dates
	PPE Period	Plan	Report		
0					

Abatement Documentation Required	Y	Date Verified		

Substance Codes	

AVD/Variable Information:

29 CFR 1926.501(b)(13): Each employee engaged in residential construction activities 6 feet or more above lower levels was not protected by guardrail systems, safety net systems, or personal fall arrest systems, nor was an alternative fall protection plan which meets the requirements of 1926.502(k) developed and implemented:

a) Anchor Framing, Big Ridge Drive, Marshalls Creek, PA: two employees were performing carpentry work on a third story roof with out the use of fall protection. One employee fell a distance of approximately 25 feet, on February 23, 2009.

ABATEMENT OBSERVED DURING INSPECTION
NO CERTIFICATION REQUIRED

Penalty Calculations				Adjustment Factors			Proposed Adjusted Penalty
Severity	Probability	Gravity	GBP	Size	Good Faith	History	
H High	G Greater	10	7000.00	60	0	0	7000.00
Repeat Factor		0					

Employee Exposure:

Occupation	laborer	Employer	Anchor Framing Inc		
Nr of Employees	1	Duration	2 hrs	Frequency	1 day
Employee Name	[redacted]				
Address	[redacted]	Phone	( ) -		
Occupation	Framer	Employer	Anchor Framing Inc		
Nr of Employees	1	Duration	2 hrs	Frequency	1 day
Employee Name	[redacted]				
Address	[redacted]	Phone	( ) -		
Occupation	framer	Employer	Anchor Framing Inc		
Nr of Employees	1	Duration	2 hrs	Frequency	1 day
Employee Name	[redacted]				
Address	[redacted]	Phone	[redacted]		

Exemption 6

U. S. Department of Labor
Occupational Safety and Health Administration

Referral Report

Tue Feb 24, 2009 10:17am

Reporting ID	0317700	Previous Activity	0	Referral Number	201377231		
Establishment Information	Establishment Name	ANCHOR FRAMING CORPORATION		Employer ID			
	Site Address	1185 Big Ridge Drive Marshalls Creek PA 18335		City Code	4908	County Code	089
		Site Phone		Site Fax			
	Mailing Address	P.O. Box 5308 Newark NJ 07105					
		Mailing Address Phone	(973) 589-9500	Fax			
Industry & Ownership	Type of Business		Primary SIC 1751	Primary NAICS	238130	No. of Employees	5
	Ownership	A. Private Sector					
Source	Referred By	G. State/Local Government		Date Received	02/24/09		
	Source or Contact (Name, Location, Affiliation, Telephone Number):						
Referral Classification	Safety - Serious						

HAZARD DESCRIPTION:

Construction Site:

On 02/23/09, a PA State Trooper arrived to investigate a construction worker that apparently fell from a 20 foot height on a resident building site. None of the four co-workers spoke english. The victum was seriously injured and was life flighted to a hospital.

Work Site: Country Club of the Poconos
1185 Big Ridge Dr.
Marshalls Creek, PA
(take Marshalls Creek exit, take 209 north to 2nd light, make right and stay on 209 North, entrance is about 2 miles on left).

GC: Toll Brothers Construction

Sub-contractor: Anchor Framing Corp, Newark, NJ; Victor Rodriques (office 973-589-9500, cell 732-433-8642)

Victum: Feliciano Tenecaca, DOB [redacted]
Site Forman: [redacted] Exemption # 607C

Reported by: PA State Police, Swiftwater Barracks, Trooper [redacted]

Referral Action	Send Letter	Date Letter Sent	Date Response Due	Response Received (Satisfactory or Not Satisfactory)	Supervisor(s) Assigned
					B9995
	Inspection Planned? Yes	If Yes, Priority:		If No, Reason:	
	Transfer To (Name):			Transfer Date	
	Transfer To Category:				
Strategic Initiatives	FALL FROM HEIGHT				

U.S. Department of Labor
Occupational Safety and Health Administration

Inspection Report

Exemption #7c

Wed Jul 8, 2009 1:11pm

Rpt ID	Assignment Nr	CSHO ID	Supervisor ID	Inspection Nr	Opt Insp Nr
0317700	0	[redacted]	Z1112	312289457	[redacted]

Establishment Name	TOLL BROTHERS				
Site Address	271 Tournament Court Marshalls Creek, PA 18335	Site Phone	(570) 223-6106	Site FAX	
Mailing Address	271 Tournament Court Marshalls Creek, PA 18335	Mail Phone	(570) 223-6106	Mail FAX	
Controlling Corp	250 Gilbraltor Rd, Horsham, PA 19044	Employer ID			
Ownership	A. Private Sector	City	4908	County	089
Legal Entity		Previous Activity (State Only)			

Related Activity					
Type	Number	Satisfied	Type	Number	Satisfied

Exemption # 4

Employed In Establishment	[redacted]	Advance Notice?	No	Category	S. Safety
Covered By Inspection		Union?	No	Interviewed?	Yes
Controlled By Employer	[redacted]	Walkaround?	No		
Primary SIC	1522	Secondary SIC		Inspected	
Primary NAICS	236116	Secondary NAICS		NAICS Inspected	

Inspection Type	G. Unprogrammed Related	Reason No Inspection	
Scope of Inspection	A. Comprehensive Inspection		
Classification			
Strategic Initiatives			
National Emphasis			
Local Emphasis			

Anticipatory Warrant Served?	No	Denial Date	Date ReEntered	Date ReDenied	ReEntered
Anticipatory Subpoena Served?	No				

Entry	02/24/09	11:35	First Closing Conference		
Opening Conference	02/24/09	11:40	Second Closing Conference		
Walkaround	02/24/09	12:00	Exit	03/31/09	15:30
Days On Site	3		Case Closed		
			No Citations Issued		

Type	ID	Optional Information
N	01	312289457

CSHO Signature	[redacted]	Date	7/8/09

U.S. Department of Labor
Occupational Safety and Health Administration

Inspection Narrative

Exemption # 7C

Wed Jul 8, 2009 1:11pm

Inspection Nr:	312289457
Opt. Case Number:	[redacted]

Establishment Name	TOLL BROTHERS		
Legal Entity		Type of Business	Construction management

Additional Citation Mailing Addresses

Organized Employee Groups

Authorized Employee Representatives

Employer Representatives Contacted

Name	Title	Function
Ken Peck	Construction Manager	I O
Thomas Brown	Project Manager	I O
Kevin Price	Senior Project Manager	I O

Other Persons Contacted

[redacted] Exemption # 6 [redacted]

Entry	02/24/09	11:35	First Closing Conference		
Opening Conference	02/24/09	11:40	Second Closing Conference		
Walkaround	02/24/09	12:00	Exit	03/31/09	15:30
			Case Closed		

Penalty Reduction Factors

Size	0	Good Faith	0	History	0

Followup Inspection?		Reason	

Coverage Information/Additional Comments

This employer is the construction manager and owner of the housing sites in the Country Club of the Poconos. They hire all the work out to sub contractors. On February 23, at about 4:30 pm an employee of a sub contractor; Anchor Framing Corp, fell off the roof of a four unit town house that is presently under construction. On February 24 the inspection was initiated with this employer. Anchor Framing was not on site. While at the site of the accident I asked Mr. Tom Brown, the project manager if he had ever seen any of Anchor's employees on the roof. His response was that on Monday, the day of the accident, he did not see anyone on the roof. He said he drove by the site and did not see the contractor on site so he left. I asked him if he ever saw any of their employees on the roof with no fall protection, and he said "yes". He thinks it was Tuesday Feb. 10, he drove by and saw two guys standing on the trusses about thirty feet in the air and they were not wearing harnesses. I asked Tom if he told the men to get their harnesses on and tie off. He said, that he did not because he was on his way to another site. When I asked him why he did not make sure they had their fall protection on, his response was " he was thinking about other things and just didn't think about it.

In a subsequent interview Tom said he stated that he observed two men of Anchors framing crew setting trusses. He saw one man standing on a step ladder helping to align the rafters and a second man standing in the webbing of a previous rafter to assist the crane operator in setting the trusses in the right location. He was questioned as to why he did not require the men to be tied off. His response was that the Residential roofing alternative procedures allow for employees to stand in the previous truss webbing as log as its secured and while setting trusses.

On March 4 2009, Anchor Framing Corp had a second accident involving a scaffold at a single house on West Lake Drive. The accident occurred when an employee fell from a 13 foot high tubular frame scaffold that was erected without guardrails. And the employees were not wearing fall protection. See 1bs for more info.

On April 11, 2003 Toll Brothers entered into a contract agreement with Anchor Framing Corp. to build houses on lots owned by Toll Brothers. An addendum to that contract signed by Toll Brothers 12/16/05, and Anchor Framing on 01/17/06, is included in this file.

This employer meets the definition of a Controlling employer by their contractual right of control over their sub contractors. The company representatives conduct inspections at the worksites for observation of OSHA violations. They maintain the authority to impose monetary sanctions and/or removal of employers that do not comply with all safety practices.
(See the enclosed Toll Brothers letter to all Contractors, dated February 27, 2009, from Ken Peck, the company's Sr. Construction Manager).

Ged

Kevin Price, Senior Project Manager, Tom Brown Project Manager and Ken Peck, Sr Construction Manager had knowledge of the serious fall accident that occurred on February 23, 2009 involving Anchor Framing Corp employees. An inspection conducted on February 25, 2009, by Toll Brother Managers of Anchor Framing, at a different location revealed several violations related to a portable ladder. Toll Brothers, Project Manager, Tom Brown sent Victor Rodriguez, owner of Anchor Framing Corp a letter dated 2/25/09 describing the hazards and their position on the corrections of those violations.(See enclosed letter captioned Notice of Hazardous Condition/Practice). In addition the managers were pressuring Anchor to repair a window at the house where the second accident occurred on March 4, 2009. Kevin Price, Sr Project manager stated he knew that Anchor was going to be working on the window, and that he was at the house to speak to another sub contractor, but did not observe their work at that time.

Sub Contractors working for Toll Brothers are as follows

Anchor Framing Corp

Fox Tile

Internet Painting

JMC Construction

CSHO Signature	[redacted]	Date	7/9/09
Accompanied By			

Exemption # 7c

OSHA investigates two falls in Country Club of the Poconos

A Country Club of the Poconos builder is under investigation after two workplace accidents in the past nine days left two employees seriously injured.

On Feb. 23, a worker was injured when he fell from scaffolding at a construction site in the Marshalls Creek development. Then, Wednesday morning, a second worker was flown to the hospital after a similar fall.

Both workers were employed by Anchor Framing Corp. of Newark, N.J., a subcontractor for Toll Brothers, the developer building homes in one of the two sections of the development.

The federal Occupational Safety and Health Administration opened separate investigations of each incident, according to spokesperson Lenore Uddyback-Fortson.

"We want to find out why the falls occurred," she said.

Fall hazards are the No. 1 cause of workplace injuries, according to Uddyback-Fortson.

This is the first incident she was aware of that involved the subcontractor. "The Anchor Framing Corp. does not have any OSHA history," she said.

The names of the injured workers were not available, nor were the precise extent of their injuries. Uddyback-Fortson said OSHA would not release that information during the course of the investigation.

"We don't talk about the nature of the investigation because we want to preserve the integrity of the investigation," Uddyback-Fortson said.

OSHA has six months to conduct the investigation and release the results. If violations are found and citations are issued, the reports will be made public, she said.

Representatives from Anchor Framing, Toll Brothers and Country Club of the Poconos could not be reached for comment. The state police in Swiftwater, which patrols that area, were unable to provide any information about either incident.

— Howard Frank

U.S. Department of Labor

Occupational Safety and Health Administration
WILKES-BARRE AREA OFFICE
The Stegmaier Building
7 North Wilkes-Barre Boulevard
Suite 410
Wilkes-Barre, PA 18702
(570) 826-6538

August 5, 2009

Toll Brothers
Attn: Kevin J. Price, Senior Project Manager
207 Big Ridge
East Stroudsburg, PA 18302

Dear Mr. Price

An inspection of your company's workplace on February 24, 2009 at Big Ridge Drive and again on March 4, 2009 at 13 West Lake Drive, Country Club of The Poconos, Marshalls Creek, PA 18335, disclosed the following hazards.

a) 13 West Lake Drive: the legs of a tubular welded frame scaffold with a working platform height of approximately 13 feet did not bear on base plates, thereby exposing the employees of Anchor Framing to fall hazards.

b) 13 West Lake Drive: there was no safe means of access provided for the employees of Anchor Framing to reach the 13 ft. 3 in. working platform of a tubular welded frame scaffold. The employees climbed the end frames that were not aligned with each other and as such were exposed to fall hazards.

c) 13 West Lake Drive: two employees of Anchor Framing working at a height of 13 ft. 3 in. from the working platform of a tubular welded frame scaffold while removing a window were not protected from falling by the use of a personal fall arrest system or guardrail system.

The above hazards could result in the serious or fatal injuries to the employees, however, it has been decided by OSHA that at this time, it would not be appropriate to issue citations against your company. As the General Contractor, with control of the site and worksite safety responsibilities, I recommend that in the interest of workplace safety and health; the work of the sub-contractors be observed more diligently and in accordance with your company's written safety & health program to ensure compliance with the OSHA standards.

If you have any questions concerning this occupational safety matter, please contact our office.

Respectfully,

Mark L. Stellmack

cc: Case file

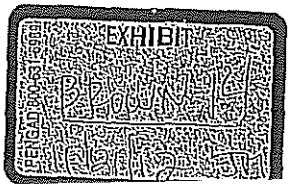


EXHIBIT C

AFFILIATED ENGINEERING LABORATORIES, INC.
Engineering Consultants

Physical Location:
777 New Durham Road
Edison, NJ 08817

P.O. Box 3300
Edison, NJ 08818-3300

Phone (732) 429-1200
Fax (732) 429-1201
www.affiliatedinc.net

December 17, 2013

Goldberg Segalla, LLP
902 Carnegie Center / Suite 100
Princeton, New Jersey 08540-6530

Attention: Bonnie Hanlon, Esq.

Re: Zuna v. Toll Brothers, Inc., et al.
Docket No. ESX-L-1262-11
Your File No. 679.0117
Our File No. T-1363

Dear Ms. Hanlon:

In accordance with your request, the writer has reviewed file materials pertaining to the captioned claim, including the following:

1. Plaintiff's Answers to Form A Interrogatories;
2. 9/12/12 deposition transcript of Jose Zuna;
3. 1/7/13 deposition transcript of Victor Rodriguez (Anchor Framing, Inc.);
4. 11/21/12 deposition transcript of Thomas Brown (Toll Bros., Inc.);
5. 10/2/13 deposition transcript of David Konicke (Toll Brothers);
6. 10/2/13 deposition transcript of Aldo Mazzarino (Toll Brothers);
7. Defendant Toll Brothers, Inc.'s Responses to Form C Interrogatories;
8. Defendant Toll Brothers Inc.'s Responses to C(2) Interrogatories;
9. Defendant Toll Brothers, Inc.'s Responses to Plaintiff's Notice to Produce;
10. Defendant Toll Brothers, Inc.'s Responses to Plaintiff's Supplemental Interrogatories;
11. April 11, 2003 construction agreement between Anchor Framing Corporation and Toll Bros., Inc.;
12. January 17, 2006 Addendum to April 11, 2003 Construction Agreement between Toll Bros. Inc. and Anchor Framing Corporation;
13. November 7, 2007 Construction Agreement between Toll Bros., Inc. and Anchor Framing;

14. OSHA Investigation and Citation File for Inspection Number 312289481 (Anchor Framing);
15. OSHA photographs;
16. Anchor Framing Corporation Safety Program (as included within OSHA file);
17. OSHA Investigation File for Inspection Number 312289457 (Toll Brothers, Inc.);
18. Toll Brothers safety audit and inspection records;
19. Toll Brothers "Toll Safety Program";
20. Toll Brothers Weekly Site Safety Inspection Forms (January 2008–March 2009); and
21. Tolls Brothers, Inc. Subcontractors Accident Investigation Report dated 3/4/09.
22. 2/26/13 opinion report of Vincent Gallagher; and
23. 11/11/13 supplemental opinion report of Vincent Gallagher.

Based on the foregoing, the writer has formulated the following understandings and opinions regarding a March 4, 2009 construction accident that occurred at a residential development project known as Country Club of the Poconos.

Understandings

The writer understands that Toll Brothers Inc./Toll Bros., Inc. [hereafter "Toll Brothers"] was actively engaged in the construction of single-family homes and townhouses at Country Club of the Poconos. Based upon the reviewed materials, Toll Brothers hired in 2003 its longtime framing subcontractor, Anchor Framing, Inc., to provide framing and sheathing operations at the site. Anchor Framing performed its work continuously from 2003 until the date of the accident. Based upon the reviewed materials, Jose Zuna, an Anchor Framing carpenter, was working upon a three-frame high, tubular steel scaffold that he and his foreman erected. Shortly after mounting the scaffold and working with a large, fixed window, Mr. Zuna fell from the scaffold. The injuries sustained form the basis of the captioned claim. The writer understands that Mr. Zuna alleges that his accident was caused, in whole or in part, by actions or inactions on the part of Toll Brothers. Mr. Zuna's accident was thoroughly investigated by OSHA, which included an investigation of both Anchor Framing and Toll Brothers. Citations were issued by OSHA to Anchor Framing only.

Review of File Materials

Mr. Zuna testified that he was a framer with Anchor Framing and had been employed by them for a number of years before the date of his accident. According to Mr. Zuna, he and the Anchor Superintendent, Antonio Amorim ("Tony"), borrowed tubular frame scaffold components from another contractor on site and erected them into a scaffold for their use. Mr. Zuna indicated that he had never before erected a scaffold. The scaffold was erected sometime between the hours of 8:00 A.M. and 9:00 A.M. It was Mr. Zuna's testimony that he ascended the scaffold he built by climbing the end frames, and began working by himself remove the nailed

fasteners that secured a large, fixed window into an opening in the house wall. According to Mr. Zuna, his last memory prior to his falling from the scaffold was as follows:

> *"I started–I remember that I got on the scaffold. I remember removing the first nail from the window, and after that I don't know anything else."*

According to Mr. Zuna, he was wearing a hard hat, work boots and work gloves at the time of his accident. Mr. Zuna did not recall receiving any safety training from his employer, Anchor Framing. The writer noted that Mr. Zuna denied seeing, discussing or receiving safety information and training sheets signed by him. Sign-in sheets bearing the name Jose Zuna were reviewed by the writer, and included the following training topics:

- OSHA's Top 10: Does the List Sound Familiar? (4/12/08)
- Heat-Related Illnesses (6/14/08);
- Machine Guarding (7/12/08);
- Guarding Opening in Walls and Floors (9/27/08); and
- Hard Hats & Struck-By Injuries (11/21/08).

Victor Rodriguez, owner of Anchor Framing Corporation, testified that he began his framing company in 1997 after working as a carpenter and framer for another contractor on a Toll Brothers project. Mr. Rodriguez testified that he had completed the OSHA 10 hour construction outreach training course at some time prior to the accident, and indicated that his two foremen, Victor Lopez and Antonio Amorim ("Tony"), had also completed such training. Mr. Rodriguez testified that he had received a copy of the Toll Brothers safety manual during his work for them. According to Mr. Rodriguez, Anchor Framing was a framing subcontractor to Toll Brothers at this project site, and approximately 80% of his work was for Toll Brothers. Mr. Rodriguez stated that his company had been working for Toll Brothers for approximately 12 years prior to the date of the accident, and that all such work was associated with the framing of single-family houses and residential buildings. Mr. Rodriguez indicated that he had been notified by Toll Brothers on a number of occasions before the accident that the window, which was originally installed by Anchor Framing, had to be removed and repaired. According to Mr. Rodriguez, his company had all of the necessary scaffold components at their storage yard in New Jersey to erect a proper scaffold to safely perform the work. In addition, Mr. Rodriguez indicated that his company had a manlift that could be used for such work. Consistent with Mr. Zuna's testimony, Mr. Rodriguez testified that Antonio Amorim was Mr. Zuna's foreman at the time of the fall. Based upon Mr. Rodriguez' testimony, his primary interactions with Toll Brothers were through its employees, Kevin Price and Ken Peck.

Thomas Brown, a 17 year employee of Toll Brothers, was the project manager for Reserve at Pond Creek Tournament Collection townhomes, a portion of the Country Club of the Poconos project. Kevin Price was the project manager for Reserve at Pond Creek single family houses. The construction managers who would interact daily with the subcontractors and

perform site inspections were Aldo Mazzarino and Ken Peck. Mr. Brown indicated that he provided management services to the project from the office trailer located approximately 2.4 miles away from the work area, and that the day-to-day fieldwork, coordination of subcontractors, and ordering of materials was the responsibility of the construction manager. Mr. Brown stated that he drove around the project site each morning as part of his duties. According to Mr. Brown, who was familiar with Anchor Framing, Anchor Framing was a "responsive and reliable" subcontractor. It was Mr. Brown's understanding that Anchor Framing was responsible for training its employees and for following safety guidelines, and that they had the day-to-day responsibility to oversee the safety of their workers. According to Mr. Brown, Anchor Framing personnel attended quarterly safety meetings held on site by Toll Brothers. Mr. Brown was aware that weekly, documented safety inspections were being performed by Toll Brothers personnel (Aldo Mazzarino and himself). Mr. Brown recalled performing an inspection of the site before Anchor Framing arrived for work on the date of the accident; he never saw the scaffold or Mr. Zuna working upon a scaffold prior to the accident occurring.

Aldo Mazzarino, Toll Brothers Construction Manager, indicated that he performed site safety inspections and would prepare written notices to subcontractors for safety concerns at the site when he observed them. Mr. Mazzarino indicated that Anchor Framing was not a "problem contractor" regarding safety matters, but that he did provide them with written safety warnings on occasion. Mazzarino recalled that Anchor Framing generally performed its work in accordance with Toll Brothers requirements. Mr. Mazzarino was no longer working for Toll Brothers as of the date of the accident.

David Klonicke, Toll Brothers Assistant Vice President for Corporate Safety at the time of the accident, indicated that he had been informed by Victor Rodriguez, owner of Anchor Framing, that all of his workers had safety and fall protection training. Mr. Klonicke indicated that site safety oversight for Toll Brothers was provided by either the Toll Brothers Project Manager or Construction Manager. Mr. Klonicke also indicated that Toll Brothers held quarterly safety meetings with subcontractors, and that Toll Brothers also issued safety tip sheets every three weeks.

The reviewed subcontract documents between Toll Brothers and Anchor Framing were consistent in that anchor framing was at all times responsible for providing all labor, services, materials and equipment necessary to perform its work completely and safely. The latest agreement, dated November 2007, specified that Anchor Framing:

> *"...has agreed to comply with and has full knowledge of the latest revised Occupational Safety and Health Act (OSHA) and all related regulations and will work in accordance with the requirements therein contained regarding the safety precautions to be taken on all construction projects. All applicable sections of the latest approved OSHA requirements and any and all amendments shall be observed on this project. Contractor agrees that it will provide a 'competent*

person' as that term is defined under 29 CFR 1926.20(b)(2) to provide for frequent and regular inspections of the Jobsite, materials, and equipment as part of Contractor's accident prevention program."

In addition to the above, Exhibit "A" entitled "Rough Carpentry" restated the requirement that Anchor Framing's work be performed in accordance with OSHA standards. Exhibit "A" also required that subcontractor personnel wear OSHA-approved hardhats at all times while on site, with exceptions granted by the Toll Brothers project manager, as necessary. Exhibit "A" also clearly specified that Anchor Framing was responsible for training its subcontractors in all aspects of safety related to their work, and to provide all materials, equipment and supervision necessary to complete the work safely.

The Toll Brothers Toll Safety Program for Home Building Operations included various policies, statements of responsibilities and work procedures for maintaining a safe worksite. These included:

- A policy for safety compliance that included dismissal from the project for noncompliance.
- Toll Brothers would provide general safety oversight for the project, including periodic safety inspections. These inspections, however, were in addition to each subcontractor being responsible for taking all reasonable precautions in the performance of their work to protect the safety and health of all site workers.
- An option for Toll Brothers to provide written notice to subcontractors of *"any noncompliance and the need for corrective action as hazardous conditions and practices are discovered throughout the course of work on the project."* Upon receipt of such notice, the program required subcontractors to take immediate corrective action; if such action was not taken, Toll Brothers reserved the right to escalate the matter and issue a stop work order until corrections were made.
- The program required Toll Brothers' project managers and construction managers to complete the OSHA 10 hour construction safety course or similar construction safety training prior to working on the project.
- The program required Toll Brothers to perform documented job site safety inspections on a weekly basis for the purpose of identifying *"any existing or potential hazardous situations on project sites where injuries are likely to occur."*
- The program required quarterly Project Safety Meetings with subcontractor personnel for the purpose of discussing project safety issues.

- The program included a Weekly Site Safety Inspection Form, which was used at this site.

The writer reviewed Toll Brothers Weekly Site Safety Inspection Forms for the period January 3, 2008 through March 6, 2009. These inspection forms were completed by Toll Brothers employees Aldo Mazzarino and Thomas Brown. These inspections indicated that no notices of unsafe conditions were issued to Anchor Framing for scaffolding. Toll Brothers was inspecting scaffolding, and had issued written notices to subcontractors Mack Donohoe and Madeira Stone for various scaffolding deficiencies. The writer noted that on various occasions, Toll Brothers provided written notification to contractors regarding various types of deficiencies observed during the site inspections. Other times, minor hazards were corrected at the time of inspection as result of verbal notice from the Toll Brothers inspector to the subcontractor.

The writer reviewed portions of the Anchor Framing Corporation Safety Program that were contained within an OSHA investigation file. The program stated that Victor Rodriguez was the designated person to administer the safety and health program for Anchor Framing. Safety Rule #29 within the program stated, *"Build scaffolds according to manufacturers' recommendations and OSHA construction safety standard part 12-scaffolding."* OSHA *"part-12"* refers to the twelfth subpart of 29 CFR 1926 (Subpart L), which provides the substantive requirements for scaffold design, assembly, inspection and use.

The incident report prepared by Toll Brothers indicated that Mr. Zuna fell at or about 9:00 A.M. on March 2, 2009. The accident location was "13 Westlake Drive, Lot 17." The report indicated that Mr. Zuna had fallen from a scaffold. The report was completed by Kevin Price of Toll Brothers, who was not a witness to the accident.

Mr. Zuna's accident was investigated by OSHA. Investigation file 312289481 indicated that Anchor Framing Corporation had never before been cited by OSHA, which the writer confirmed. The records also stated that Anchor Framing never had a fall injury until February 23, 2009, when a carpenter fell from a roof at this project site (Felicino Tenezaka). The investigation records included detailed information about the happening of the subject accident, including the following:

- Anchor Framing had sufficient notice from Toll Brothers regarding the window work so as to properly plan for the safe performance of the work, *"but they made no definitive plans..."*

- Mr. Amorim made a *"conscience* [sic.] *decision to erect a scaffold that was unsafe." "One foreman intentionally created the scaffold hazards, and worked directly with the exposed employee on the unsafe scaffold."*

- *"The wind caught the window and the employee fell off of the scaffold."*

- Mr. Zuna was working alone on the scaffold when his accident occurred.
- The Anchor Framing foreman had been trained, which was confirmed by the Compliance Safety and Health Officer (CSHO) at the time of inspection. The CSHO determined that the foreman *"knew the regulations and* [his] *job obligations to prevent and correct hazards when* [he was] *aware of them."*
- The window measured 8 feet by 6 feet.
- The erected scaffold was comprised of 6 foot, 6 inch tall frames that were 5 feet wide. The scaffold was three frames tall. The fall height was just over 13 feet.

OSHA issued citations to Anchor Framing for violating the following standards applicable to the scaffold on which Mr. Zuna was working when he fell:

29 CFR 1926.451(c)(2) [lack of base plates on scaffold]
29 CFR 1926.451(e)(1) [improper access to scaffold]
29 CFR 1926.451(g)(1) [lack of fall protection/guard rails on scaffold]

The photographs included within the OSHA investigation file provided valuable information with regard to the site conditions at or about the time of the incident. The actual date and time when the photographs were taken is not known, but it was close in time to when the accident occurred based upon the date stamp on the photographs and the scaffold and window configurations. The photographs indicated that the single family house was sheathed and the windows and doors had been installed. The roofing, fascia and soffits had also been installed, but the exterior cladding had not yet been applied.

The writer reviewed OSHA investigation file 312289457 wherein OSHA investigated Toll Brothers in conjunction with the accident. The investigation file indicated that Mr. Brown never saw Anchor Framing employees working on the scaffold on the date of the accident. The CSHO stated within its report that Toll Brothers was a Controlling Employer and found that *"the company representatives conducted inspections at the work sites for observation of OSHA violations."* OSHA's investigation resulted in no citations being issued to Toll Brothers in connection with the accident.

The writer noted that one and a half weeks before Mr. Zuna's fall another Anchor Framing employee suffered an injury when he fell while performing carpentry work on a townhouse roof at the project site. Toll Brothers responded to that accident by implementing on 2/27/09 additional safety enforcement controls, as follows:

> *"Effective immediately anyone who is observed not complying with ALL safety practices will be sent home with a warning for the first offense. If violations are*

noted after your first warning you will be fined $250 per incident, and sent home."

Toll Brothers also scheduled on 2/27/09 a mandatory, site-wide safety meeting with all subcontractors to take place on 3/12/09.

Review of Codes, Standards and Technical Materials

Scaffold design, erection and use in construction are regulated by OSHA Subpart L entitled *"Scaffolds."* The specific standard or standards that may have been causally related to Mr. Zuna's fall include the following:

"1926.451(b)(1) Each platform on all working levels of scaffolds shall be fully planked or decked between the front uprights and the guardrail supports as follows..."

"1926.451(g)(1) Each employee on a scaffold more than 10 feet (3.1 m) above a lower level shall be protected from falling to that lower level. Paragraphs (g)(1)(i) through (vii) of this section establish the types of fall protection to be provided to the employees on each type of scaffold. Paragraph (g)(2) of this section addresses fall protection for scaffold erectors and dismantlers."

"1926.451(g)(1)(vii) For all scaffolds not otherwise specified in paragraphs (g)(1)(i) through (g)(1)(vi) of this section, each employee shall be protected by the use of personal fall arrest systems or guardrail systems meeting the requirements of paragraph (g)(4) of this section."

Based upon the reviewed photographs, it was apparent that the large, fixed window that had been installed in the opening had been rotated 90° and was also lying flat, face down, on the scaffold platform. Such a position indicates that the window may have been removed from the opening and placed on edge on the scaffold platform and abutting the house wall. The writer cannot eliminate as a possible cause of the accident the window falling over onto Mr. Zuna and knocking him off the platform. Since the window weight is significantly greater at the outside edge due to the glass location, such a window assembly has the propensity to roll over onto the glazing side as compared to falling onto the wooden jamb side of the window assembly. Had the window fallen over as a result of the light breeze or incidental contact, it is reasonable to conclude that the window would not have fallen had it been oriented with the glass facing the house wall. It is also possible that the window fell while being removed/manipulated by Mr. Zuna. Mr. Zuna's attempt to manage the window dead weight and any forces imparted by the breeze could have resulted in his losing his balance and the window falling onto the platform.

OSHA provides a directive addressing multi-employer sites, which was discussed within the OSHA investigation file for Toll Brothers. This directive, known as the Multi-Employer Citation Policy (CPL 02-00-124 dated 12/10/1999), revised OSHA Field Inspector's requirements and guidance for implementing the Field Inspection Reference Manual as it pertained to sites with multiple employers. The policy provides the following definitions for various classifications of site employers:

> Exposing Employer: An employer whose own employees are exposed a hazardous condition that violates an OSHA standard. *"If the exposing employer created the violation, it is citable for the violation as a creating employer."* Anchor Framing was the exposing employer because it exposed its employees to scaffold fall hazards that violated OSHA standards.
>
> Creating Employer: The employer that caused a hazardous condition that violates an OSHA standard. Employers must not create violative conditions. *"An employer that does so is citable even if the only employees exposed are those of other employers at the site."* Anchor Framing was the creating employer because its employees erected the scaffold without guardrails or a fully planked work platform.
>
> Correcting Employer: An employer who is engaged in a common undertaking, on the same worksite, as the exposing employer and is responsible for correcting a hazard. This usually occurs where an employer is given the responsibility of installing and/or maintaining particular safety/health equipment or devices. *"The correcting employer must exercise reasonable care in preventing and discovering violations and meet its obligations of correcting the hazard."* Based upon the reviewed inspection reports, it appeared that Anchor Framing was a correcting employer for the installation and maintenance of temporary wooden guardrails within the houses it was framing. Anchor Framing's role as a correcting employer was unrelated to Mr. Zuna's accident.
>
> Controlling Employer: An employer who has general supervisory authority over the worksite, including the power to correct safety and health violations itself or require others to correct them. Controlling employers have broad responsibility at the site involving almost all aspects of the job. Such responsibilities include the authority to resolve disputes between subcontractors, setting schedules, and determining construction sequencing. Control can be established by contract or, in the absence of explicit contractual provisions to control safety, by the exercise of control in practice. *"A controlling employer must exercise reasonable care to prevent and detect violations on the site. The extent of the measures that a controlling employer must implement to satisfy this duty of reasonable care is less than what is required of an employer with respect to protecting its own*

> *employees. This means that the controlling employer is not normally required to inspect for hazards as frequently or to have the same level of knowledge of the applicable standards or of trade expertise as the employer it has hired"* [emphasis added].

The *controlling employer* has a responsibility under the Multi-Employer Citation Policy to exercise reasonable care to prevent and detect violations of the OSHA standards at the site. Such detection is typically made by inspection. No enumerated inspection frequency for *controlling employers* is identified in The Policy. General guidance for employers is that they should inspect their work sites at least once per day[1], which implies that a frequency of once per day or less would be satisfactory for *controlling employers*. Factors relating to the "reasonable care standard" as it applies to the frequency and how closely the *controlling employer* must inspect the subcontractor's work include the following:

- The scale of the project;
- The frequency with which the hazards change; and
- The *controlling employer's* knowledge of the subcontractor's safety performance.

A *controlling employer* is considered to have met the "reasonable care standard" if it conducted inspections at an appropriate frequency; implemented an effective system for correcting hazards; and enforced the subcontractor's compliance with safety requirements using a graduated system of enforcement and follow-up inspections. Based upon OSHA's investigation, it was clear that OSHA determined that Toll Brothers met the standard of care.

Based upon the reviewed documents, Toll Brothers had worked with Anchor Framing for more than a decade with no known accidents. Similarly, all evidence indicates that prior to Mr. Tenezaca's fall on 2/23/09, Anchor Framing performed its work without incident on the Country Club of the Poconos project. Mr. Rodriguez indicated that he trained his workers, and held periodic safety meetings. To this end, the foreman overseeing Mr. Zuna's work at the time of his fall had 10-hour OSHA construction safety outreach training. Toll Brothers had an escalation program in place within its safety program as a tool to enforce safety compliance on site. Specifically, Toll Brothers provided verbal and written notices requiring corrections. Based upon the reviewed safety inspection forms and the subsequent follow-up inspections, Toll Brothers' system was effective in correcting hazards. Had a subcontractor been non-compliant after verbal and written notices, Toll Brothers could stop their work until corrections were made. Toll Brothers also added, on 2/27/09, additional measures for safety enforcement, including a more clearly defined, graduated system of enforcement for individual violators of safety policies.

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[1] OSHA Subpart L for scaffolding; ANSI A10.38 §3.3.1(9); typical requirement included in OSHA citation settlement documents.

Based upon the reviewed safety inspection forms, it was apparent that no violations/problems existed regarding scaffolding associated with the work of Anchor Framing prior to the date of the accident. With regard to others using scaffolding, hazards identified by Toll Brothers during their documented inspections were being corrected as required.

It was apparent Toll Brothers was performing inspections of the site on a regular basis. Mr. Brown performed his daily rounds of the project each morning and weekly documented safety inspections were performed by Mr. Brown or Mr. Mazzarino. Since the hazards associated with the repetitive construction of dozens of townhouse structures or single family houses don't change, it is the writer's opinion that Toll Brothers' inspection frequency was appropriate. It is also important to note that the writer understands that Toll Brothers did not observe any portion of the Anchor Framing scaffolding prior to the 9:00 A.M. time of the accident. The scaffolding did not exist in the erected condition until one hour or less before the accident. Therefore, Toll Brothers neither observed, nor had sufficient time to observe, the subject scaffolding prior to Mr. Zuna's fall. Only an inspection occurring at the time of the exposure may have allowed Toll Brothers to intervene in the chain of events that resulted in Mr. Zuna's fall. Only full-time oversight of Mr. Zuna's work to identify unsafe work practices may have prevented the incident. Such full-time oversight was the responsibility of the employer (Anchor Framing) and not the general contractor (Toll Brothers). However, OSHA determined that, contrary to safe work practices, the Anchor Framing foreman knowingly allowed the use of the unsafe scaffold erected by him and Mr. Zuna.

Discussion

Based upon the reviewed photographs and testimony, Mr. Zuna's accident was initiated by improper staging/handling of the window. Based upon Mr. Zuna's testimony, his last memory was him actively removing fasteners from the window flanges/clips that held the window into the opening. The OSHA report indicated that Mr. Zuna fell while he was alone on the scaffold. Since the window in the photographs occupied the entire width and nearly all the length of the scaffold platform, it is reasonable to conclude that the window falling precipitated Mr. Zuna's fall from the platform. Had Mr. Zuna's work included a method to temporarily support the large, heavy window, the window would not have fallen. The writer also notes that based upon weather data from Mount Pocono reporting station (13 miles northwest of the site), a gentle breeze was blowing from the northwest (11.5 mph). Gusts to 20.7 mph at or about the time of the accident were also recorded at that station. A 48 square foot window exposed to a direct, 20.7 mph breeze would create an approximate 53 pound force. A person attempting to manipulate the heavy window would have to manage the window dead weight plus some or all wind load depending on window and house orientation.

All of Anchor Framing's work methods were designed and carried out by them. Nothing within the reviewed materials indicated that Anchor Framing relied upon Toll Brothers, or that Toll Brothers was contractually obligated to determine Anchor Framing's means and methods. It

was the Anchor Framing crew who determined how to remove and manipulate the window in question. Anchor Framing had at least one week's time to plan and obtain the necessary equipment to safely perform the work. Anchor Framing's failure to properly sequence its work and obtain the necessary equipment for the work was not a result of Toll Brothers asking them to perform the task.

With regard to the lack of guardrails and complete planking on the scaffold, such conditions were causally related to Mr. Zuna falling to the ground. While an injury of some type was likely to occur as a result of the window falling, it was Anchor Framing's failure to install appropriate guardrails and complete planking on the scaffold that allowed Mr. Zuna to fall to the ground. While Toll Brothers was familiar with guardrail and platform construction requirements for scaffolding, they never observed the scaffold erected by Anchor Framing prior to the accident occurrence. Said scaffold was erected only within the hour before the accident occurred and had not been a longstanding condition at the site.

Unlike a contractor who was unaware of the proper manner to perform its work, the OSHA investigation records clearly indicated that Anchor Framing had appropriate and proper scaffolding at their office storage yard that could have been retrieved and erected prior to the date of the accident. By the testimony of Mr. Rodriguez and as included within the OSHA investigation documents, Toll Brothers had given Anchor Framing sufficient to notice to allow them to properly plan and execute safely the window repair. It was a failure of Anchor Framing to plan its work that was causally related to Mr. Zuna's fall.

Based upon the file materials reviewed, codes and standards researched, the writer's training, education, licensure and certifications, and the foregoing, the writer's summary opinions, within a reasonable degree of engineering certainty, are:

1. Mr. Zuna's fall was related to the manner in which he removed and/or manipulated the large, heavy fixed window that fell onto the scaffold platform. Prevailing wind conditions may have contributed to accident causation.

2. The assembly of an incomplete and unsafe scaffold was due to Anchor Framing's failure to properly plan its work, resulting in them quickly and improperly erecting borrowed scaffold components.

3. Toll Brothers provided sufficient and satisfactory safety oversight of the work, including daily work observations and documented, weekly site safety inspections. Since the subject scaffold was erected within the hour before the accident occurred, Toll Brothers did not have an opportunity to observe or correct its shortcomings.

4. Based upon its decade-long relationship with Anchor Framing, during which time there were no fall accidents, Toll Brothers reasonably relied upon Anchor Framing's expertise

in the trade of residential wood frame construction to perform its work safely. Anchor Framing safely installed wood framing, wood trusses, windows and roof sheathing for dozens if not hundreds of structures at the project prior to the date of the accident. OSHA does not require general contractors, like Toll Brothers, to have the same level of knowledge of the applicable standards or trade expertise as Anchor Framing. The means and methods by which the window was staged/supported/removed were solely under the control of Anchor Framing.

5. Anchor framing and not Toll Brothers was responsible under OSHA to make all necessary determinations with regard to the manner in which it provided its employees with a safe place of employment.

6. Anchor Framing was required, by contract, to perform its work in accordance with OSHA regulations and to provide all necessary oversight, equipment and materials for such work. The agreement did not include any contractual obligations for Toll Brothers to provide any safety training, oversight, equipment, planning or other provisions for Anchor Framing's work.

7. The fall hazard from the scaffold was open, obvious and known to Anchor Framing supervisory personnel prior to Mr. Zuna's fall. Anchor Framing supervisory personnel knowingly exposed its employee to a fall hazard from the scaffold Mr. Zuna and Tony erected.

8. Mr. Zuna's accident did not result from any impropriety or shortcoming on the part of Toll Brothers. It resulted from poor decisions and planning by Anchor Framing supervisory personnel and Mr. Zuna.

Review of Reports by Others

Vincent Gallagher's 2/26/13 report included allegations that Anchor Framing personnel were exposed to various, unmitigated hazards; however, no such hazards were related to Mr. Zuna's accident. Mr. Gallagher based his reporting of alleged violations on discussions he had with Mr. Zuna and a coworker, Mr. Tenezaca. Based upon the reviewed, documented site safety inspections performed by Toll Brothers personnel, no known, unmitigated fall hazards existed in Anchor Framing work areas in the months prior to the accident. Further, there was no evidence to suggest that Anchor Framing had violated scaffold erection or use standards prior to the morning of Mr. Zuna's accident.

Mr. Gallagher was critical of Anchor Framing for not having an alternate fall protection plan in place in accordance with 29 CFR 1926.502(k), a section within 29 CFR 1926 Subpart M, *"Fall Protection."* Mr. Gallagher is incorrect, as Subpart M does not apply to scaffolding fall protection, as follows:

> *"1926.500(a)(2) Section 1926.501 sets forth those workplaces, conditions, operations, and circumstances for which fall protection shall be provided except as follows:*
>
> *1926.500(a)(2)(i) Requirements relating to fall protection for employees working on scaffolds are provided in subpart L of this part"* [emphasis added].

Therefore, only Subpart L applies to the manner in which fall hazards are managed by employers whose employees work from scaffolds. The writer noted that Mr. Gallagher opined that a personal fall arrest system should have been implemented for Mr. Zuna's work. The writer disagrees. Personal fall arrest systems allow a person to fall; guardrails do not. Therefore, the prevention of the fall using guardrails on scaffolds is preferred in most situations to using arrest systems. Anchor Framing's failure to complete the scaffold installation with a fully planked platform, top rails and mid-rails created fall hazards to which their employees were exposed.

All other aspects of Subpart M relied upon by Mr. Gallagher in the formation of his opinions regarding Mr. Zuna's accident are similarly incorrect. Subpart L, and not Subpart M, applies to managing fall hazards on scaffolding.

Mr. Gallagher referenced various texts and standards within his report, including documents by the American National Standards Institute (ANSI), Associated General Contractors of America (AGC), American Society of Safety Engineers (ASSE), Construction Management Association of America (CMAA), National Safety Council (NSC) and Construction Industry Institute (CII). The writer notes that all references to "contractor," "management" and "employer" in such documents include Anchor Framing and its management. While the referenced publications provide useful information for contractors, they are not adopted codes or standards referenced within the applicable governing regulations of OSHA. OSHA regulations and the OSH Act form the basis of the standard of care with regard to construction safety. The writer cited applicable and authoritative OSHA standards and policies earlier in this report.

Mr. Gallagher incorrectly opined within his report that Toll Brothers was required under OSHA to have a *competent person* with respect to scaffolding at the site. Since no Toll Brothers employees utilized scaffolding, none of its employees were exposed to fall hazards associated with such work. Only the employer with employees exposed to such hazards is required to have a *competent person* on site. OSHA actually allows one contractor to rely upon another contractor's *competent person* under certain circumstances when it has employees exposed to hazards. Therefore, Mr. Gallagher's opinion that the *"general contractor"* was required to have a *competent person* on site is incorrect.

Mr. Gallagher referenced the Blount International Limited case when opining that the General Contractor was responsible for violations that they could *"reasonably be expected to*

prevent or abate by reason of its supervisory capacity." Since only Anchor Framing personnel were aware of the existence of the erected scaffolding and Mr. Zuna's working upon same, the writer disagrees with Mr. Gallagher that anyone from Toll Brothers had an opportunity to detect or prevent the accident. The scaffold erection and subsequent accident occurred within one hour of Anchor Framing beginning its work.

Mr. Gallagher opined that 29 CFR 1926.16 applied to the Country Club of the Poconos project. The cited CFR section is not an adopted OSHA construction standard. Specifically, the adoption of the construction standards specifies:

> *"1910.12. Construction Work. (c) Construction Safety Act distinguished. This section adopts as occupational safety and health standards under section 6 of the Act the standards which are prescribed in part 1926 of this chapter. Thus, the standards (substantive rules) published in Subpart C and the following parts of Part 1926 of this chapter are applied. This section does not incorporate subparts A and B of Part 1926 of this chapter. Subparts A and B have pertinence only to the application of section 107 of the Contract Work Hours and Safety Standards Act (the Construction Safety Act)."*

It should be noted that 29 CFR 1926.16 is located within Subpart B of 29 CFR 1926 and, as such, is not an adopted, applicable OSHA standard. It should also be noted that only federal projects are subjected to the Contract Work Hours and Safety Standards Act where Subparts A and B are applicable. The OSHA Assistant Secretary has confirmed the rejection of 29 CFR 1926.16 as an adopted OSHA standard in his 8/31/90 letter to the American Society of Safety Engineers. His letter states, in part:

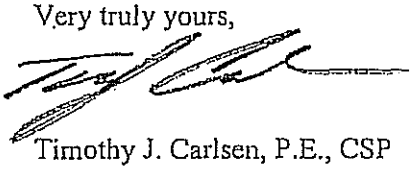
> *"Therefore, 29 CFR 1926.16, as part of Subpart B (General Interpretation), has pertinence only to the application of section 107 of the Contract Work Hours and Safety Standards Act (The Construction Safety Act) and has no direct significance in the enforcement of the OSHA Act."*

Mr. Gallagher's concluding opinion that Toll Brothers *"failed to take reasonable steps to require Anchor Framing's workers to be protected from falls from elevation"* is not consistent with the reviewed materials. Specifically, Toll Brothers performed regular inspections of the project site, including documented weekly safety inspections that looked specifically for, among other things, scaffold deficiencies. When identified, Toll Brothers would take the reasonable step of providing verbal and/or written notification to the affected contractor to assure that the deficiency was corrected. For example, on 1/24/08 Aldo Mazzarino identified a Mack Donohoe scaffold without baseplates. The safety inspection form stated, *"Had worker install base plates under staging."* On another occasion with a different contractor (Madeira Stone), Toll Brothers faxed a written deficiency notice to that contractor. No deficient scaffolds were identified in the five month period prior to the accident.

All of the writer's opinions within the entirety of this report have been offered to a reasonable degree of engineering certainty. The writer reserves the right to supplement this report based upon additional information. Affiliated Engineering Laboratories, Inc. will be compensated by Goldberg Segalla, LLP for time and expenses associated with the preparation of this report.

Should you require additional information or further discussion, please do not hesitate to contact the writer.

Very truly yours,



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December 16, 2013

Goldberg Segalla, LLP
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Princeton, New Jersey 08540-6530

Attention: Bonnie Hanlon, Esq.

Re: Tenezaca v. Toll Brothers, Inc., et al.
Docket No. ESX-L-1262-11
Your File No. 679.0117
Our File No. T-1362

Dear Ms. Hanlon:

In accordance with your request, the writer has reviewed file materials pertaining to the captioned claim, including the following:

1. Plaintiff's Answers to Form A Interrogatories;
2. 9/12/12 deposition transcript of Feliciano Tenezaca;
3. 1/7/13 deposition transcript of Victor Rodriguez (Anchor Framing, Inc.);
4. 11/21/12 deposition transcript of Thomas Brown (Toll Bros., Inc.);
5. 10/2/13 deposition transcript of David Konicke (Toll Brothers);
6. 10/2/13 deposition transcript of Aldo Mazzarino (Toll Brothers);
7. Defendant Toll Brothers, Inc.'s Responses to Form C Interrogatories;
8. Defendant Toll Brothers Inc.'s Responses to C(2) Interrogatories;
9. Defendant Toll Brothers, Inc.'s Responses to Plaintiff's Notice to Produce;
10. Defendant Toll Brothers, Inc.'s Responses to Plaintiff's Supplemental Interrogatories;
11. Miscellaneous handwritten notes;
12. April 11, 2003 construction agreement between Anchor Framing Corporation and Toll Bros., Inc.;
13. January 17, 2006 Addendum to April 11, 2003 Construction Agreement between Toll Bros. Inc. and Anchor Framing Corporation;
14. November 7, 2007 Construction Agreement between Toll Bros., Inc. and Anchor Framing;

15. OSHA Investigation and Citation File for Inspection Number 312289481 (Anchor Framing);
16. OSHA photographs;
17. Anchor Framing Corporation Safety Program (as included within OSHA file);
18. OSHA Investigation File for Inspection Number 312289457 (Toll Brothers, Inc.);
19. Toll Brothers safety audit and inspection records;
20. Toll Brothers "Toll Safety Program";
21. Toll Brothers Weekly Site Safety Inspection Forms (January 2008–March 2009); and
22. Tolls Brothers, Inc. Subcontractors Accident Investigation Reports dated 2/23/09;
23. 2/26/13 opinion report of Vincent Gallagher; and
24. 11/11/13 supplemental opinion report of Vincent Gallagher.

Based on the foregoing, the writer has formulated the following understandings and opinions regarding a February 23, 2009 construction accident that occurred at a residential development project known as Country Club of the Poconos, located in Marshall's Creek, Pennsylvania.

Understandings

The writer understands that Toll Brothers Inc./Toll Bros., Inc. [hereafter "Toll Brothers"] was actively engaged in the construction of single-family homes and townhouses at Country Club of the Poconos. It is further understood that the project included townhouses located in a section of the development known as Reserve at Pond Creek Tournament Collection, which were of wood frame construction and intended for residential use. Based upon the reviewed materials, Toll Brothers hired in 2003 its longtime framing subcontractor, Anchor Framing, Inc., to provide framing and sheathing operations at the site. Anchor Framing performed its work continuously from 2003 until the date of the accident. Based upon the reviewed materials, Segundo Tenezaca, an Anchor Framing carpenter, worked upon a roof near the eave at or about 4:50 P.M. on February 23, 2009. It is understood that the work was minor carpentry associated with the installation of blocking for future fascia installation. At some point during the work, Mr. Tenezaca fell from the roof to the ground surface. The injuries sustained form the basis of the captioned claim. The cause of the fall is unknown. The writer understands that Mr. Tenezaca alleges that his accident was caused, in whole or in part, by actions or inactions on the part of Toll Brothers. Mr. Tenezaca's accident was thoroughly investigated by OSHA, which included an investigation of both Anchor Framing and Toll Brothers. Citations were issued by OSHA to Anchor Framing only.

Review of File Materials

Feliciano Tenezaca testified that he was a full-time carpenter with Anchor Framing for four years prior to his February 23, 2009 accident. Mr. Tenezaca testified that he had no prior accidents while working for Anchor Framing during that four year period. According to Mr. Tenezaca, his supervisor each day was Victor Lopez, a foreman who worked for Anchor

Framing. Mr. Tenezaca also testified that Victor Rodriguez, owner of Anchor Framing, would occasionally supervise his work and was ultimately responsible for all of the work at the site. According to Mr. Tenezaca, approximately two years before his accident he asked his foreman, Victor Lopez, to provide some type of rope or other fall device while working on another project. Mr. Tenezaca provided no testimony of requesting safety equipment at this project or being denied such equipment. Based upon Mr. Tenezaca's testimony, he had no recollection regarding any of the facts relative to the happening of his accident. However, in a 1/28/13 interview with Vincent Gallagher reported in Mr. Gallagher's 2/26/13 report, Mr. Tenezaca recalled his accident occurring when he was installing six inch long 2x4 members at the eave, to which fascia would be attached.

Victor Rodriguez, owner of Anchor Framing Corporation, testified that he began his framing company in 1997, after working as a carpenter and framer for another contractor on a Toll Brothers project. Mr. Rodriguez testified that he had completed the OSHA 10 hour construction outreach training course at some time prior to the accident, and indicated that his two foremen, Victor Lopez and Antonio Amorim (aka Tony), had also completed such training. Mr. Rodriguez testified that he had received a copy of the Toll Brothers safety manual during his work for them. According to Mr. Rodriguez, Anchor Framing was a framing subcontractor to Toll Brothers at this project site, and approximately 80% of his work was for Toll Brothers. Mr. Rodriguez stated that his company had been working for Toll Brothers for approximately 12 years prior to the date of the accident, and that all such work was associated with the framing of single-family houses and residential buildings. Mr. Rodriguez indicated that he understood the OSHA rules for fall protection and that he provided his work crews the appropriate fall protection equipment for use when needed. It was Mr. Rodriguez's testimony that such equipment was kept in the project van that was used daily to transport some or all of his workers to the job site. Mr. Rodriguez also testified that slide guards were used as part of his fall protection plans, and indicated that they would be installed on edge. Mr. Rodriguez disputed an OSHA claim that any 2x6 slide guards installed flat on the roof deck would have been the only slide guards on the roof. The writer notes that a contractor can install any devices necessary as part of his work, in any configuration appropriate, that are additional to the minimum required devices per the OSHA regulations, directives and other guidance. Consistent with Mr. Tenezaca's testimony, Mr. Rodriguez testified that Victor Lopez was Mr. Tenezaca's foreman at the time of the fall. Based upon Mr. Rodriguez's testimony, his primary interactions with Toll Brothers was through its employees, Kevin Price and Ken Peck.

Thomas Brown, a 17 year employee of Toll Brothers, was the project manager for Reserve at Pond Creek Tournament Collection townhomes where Mr. Tenezaca's accident occurred. The construction managers who would interact daily with the subcontractors and perform site inspections were Aldo Mazzarino and Ken Peck. Mr. Brown indicated that he provided management services to the project from the office trailer located approximately 2.4 miles away from the work area, and that the day-to-day fieldwork, coordination of subcontractors, and ordering of materials was the responsibility of the construction manager. Mr.

Brown stated that he drove around the project site each morning as part of his duties. According to Mr. Brown, who was familiar with Anchor Framing, Anchor Framing was a "responsive and reliable" subcontractor. It was Mr. Brown's understanding that Anchor Framing was responsible for training its employees and for following safety guidelines, and that they had the day-to-day responsibility to oversee the safety of their workers. According to Mr. Brown, Anchor Framing personnel attended quarterly safety meetings held on site by Toll Brothers. Mr. Brown was aware that weekly, documented safety inspections were being performed by Toll Brothers personnel (Aldo Mazzarino and himself). Based upon his testimony, Mr. Brown did not observe Mr. Tenezaca on the roof prior to the fall.

Aldo Mazzarino, Toll Brothers Construction Manager, indicated that he performed site safety inspections and would prepare written notices to subcontractors for safety concerns at the site when he observed them. Mr. Mazzarino indicated that Anchor Framing was not a "problem contractor" regarding safety matters, but that he did provide them with written safety warnings on occasion. Mazzarino recalled that Anchor Framing generally performed its work in accordance with Toll Brothers requirements. Mr. Mazzarino was not working at the site on the date of the accident.

David Klonicke, Toll Brothers Assistant Vice President for Corporate Safety at the time of the accident, indicated that he had been informed by Victor Rodriguez, owner of Anchor Framing, that all of his workers had safety and fall protection training. Based upon notes prepared by Mr. Klonicke shortly after the incident, Mr. Rodriguez also informed Mr. Klonicke that the necessary anchorage and personal fall arrest equipment was available on site on the date of the incident. Mr. Klonicke indicated that site safety oversight for Toll Brothers was provided by either the Toll Brothers Project Manager or Construction Manager. Mr. Konicke also indicated that Toll Brothers held quarterly safety meetings with subcontractors, and that Toll Brothers also issued safety tip sheets every three weeks.

The reviewed subcontract documents between Toll Brothers and Anchor Framing were consistent in that anchor framing was at all times responsible for providing all labor, services, materials and equipment necessary to perform its work completely and safely. The latest agreement dated November 2007 specified that Anchor Framing:

> *"...has agreed to comply with and has full knowledge of the latest revised Occupational Safety and Health Act (OSHA) and all related regulations and will work in accordance with the requirements therein contained regarding the safety precautions to be taken on all construction projects. All applicable sections of the latest approved OSHA requirements and any and all amendments shall be observed on this project. Contractor agrees that it will provide a 'competent person' as that term is defined under 29 CFR 1926.20(b)(2) to provide for frequent and regular inspections of the Jobsite, materials, and equipment as part of Contractor's accident prevention program."*

In addition to the above, Exhibit "A," entitled "Rough Carpentry," restated the requirement that Anchor Framing's work be performed in accordance with OSHA standards. Exhibit "A" also required that subcontractor personnel wear OSHA-approved hardhats at all times while on site, with exceptions granted by the Toll Brothers project manager, as necessary. Exhibit "A" also clearly specified that Anchor Framing was responsible for training its subcontractors in all aspects of safety related to their work, and to provide all materials, equipment and supervision necessary to complete the work safely.

The Toll Brothers Toll Safety Program for Home Building Operations included various policies, statements of responsibilities and work procedures for maintaining a safe worksite. These included:

- A policy for safety compliance that included dismissal from the project for noncompliance.
- Toll Brothers would provide general safety oversight for the project, including periodic safety inspections. These inspections, however, were in addition to each subcontractor being responsible for taking all reasonable precautions in the performance of their work to protect the safety and health of all site workers.
- An option for Toll Brothers to provide written notice to subcontractors of *"any noncompliance and the need for corrective action as hazardous conditions and practices are discovered throughout the course of work on the project."* Upon receipt of such notice, the program required subcontractors to take immediate corrective action; if such action is not taken, Toll Brothers reserved the right to escalate the matter and issue a stop work order until such corrections were made.
- The program required Toll Brothers' project managers and construction managers to complete the OSHA 10 hour construction safety course or similar construction safety training prior to working on the project.
- The program required Toll Brothers to perform documented job site safety inspections on a weekly basis for the purpose of identifying *"any existing or potential hazardous situations on project sites where injuries are likely to occur."*
- The program required quarterly Project Safety Meetings with subcontractor personnel for the purpose of discussing project safety issues.
- The program included a Weekly Site Safety Inspection Form, which was used at this site.

The writer reviewed Toll Brothers Weekly Site Safety Inspection Forms for the period January 3, 2008 through March 6, 2009. These inspection forms were completed by Toll Brothers employees Aldo Mazzarino and Thomas Brown. These inspections indicated that at no time in the one year period before the accident was Anchor Framing found to have unsafe fall protection on roofs. Toll Brothers did identify, and Anchor Framing corrected, missing or removed guardrails at stair openings, decks and/or holes on five occasions in the more than one year period before the accident. In the 2-1/2 month period prior to the accident, no deficiencies in Anchor Framing's fall protection methods were identified. The writer noted that on many occasions, Toll Brothers provided written notification to contractors with identified deficiencies resulting from the site inspections. Other times, minor hazards were corrected at the time of inspection as result of verbal notice from the Toll Brothers inspector to the subcontractor.

The writer reviewed portions of the Anchor Framing Corporation Safety Program that were contained within an OSHA investigation file. The program stated that Victor Rodriguez was the designated person to administer the safety and health program for Anchor Framing. The safety program recognized that Anchor Framing would be using non-conventional means of fall protection and traditional fall protection for the protection of its workers. It was noted that the program required *"the use of harnesses with safety lines when working from unprotected high places..."* The safety program recognized and implemented a generic fall protection plan for residential construction consistent with OSHA STD 03-00-001, *"Plain Language Revision of OSHA Instruction STD 3.1, Interim Fall Protection Compliance Guidelines for Residential Construction."*

The incident report prepared by Toll Brothers indicated that Mr. Tenezaca fell at or about 4:50 P.M. on February 23, 2009. The accident location was "1169 A-D Big Ridge Drive." The report indicated that wind may have been a causal element in the fall. The report was completed by Kevin Price of Toll Brothers, who was not a witness to the accident.

Mr. Tenezaca's accident was investigated by OSHA. Investigation file 312289481 indicated that Anchor Framing Corporation had never before been cited by OSHA, which the writer confirmed. The records also stated that Anchor Framing never had a fall injury prior to Mr. Tenezaca's accident. The investigation records included detailed information about the happening of the accident, including the following:

- The Anchor Framing foreman knew that *"if they went on the roof they were to wear their harnesses."*
- The Anchor Framing foreman had been trained, which was confirmed by the Compliance Safety and Health Officer (CSHO) at the time of inspection. The CSHO determined that the foreman *"knew the regulations and* [his] *job obligations to prevent and correct hazards when* [he was] *aware of them."*

violations." OSHA's investigation resulted in no citations being issued to Toll Brothers in connection with the accident.

Review of Codes, Standards and Technical Materials

Residential fall protection standards in place on the date of the accident included OSHA Subpart M and STD 03-00-001. OSHA STD 03-00-001 can be utilized by employers who are engaged in certain residential construction activities. The writer noted that most, if not all of Anchor Framing's scope of work could be performed using the alternate fall protection measures. Based upon the Anchor Framing safety program, they were following OSHA STD 03-00-001 when providing fall protection for its residential wood framing projects. Section I of this policy states:

> *"I. B. Fall protection requirements for residential construction are set out in 29 CFR 1926.501(b)(13). In general, that provision requires conventional fall protection for work at or over six feet. However, OSHA Instruction STD 3.1 modifies those requirements. It permits employers engaged in certain residential construction activities to use alternative procedures routinely instead of conventional fall protection. No showing of infeasibility of conventional fall protection is needed before using these procedures. A fall protection plan is required but it does not have to be written nor does it have to be specific to the jobsite. Different alternative procedures are specified for different activities"* [emphasis added].

Based upon the reviewed materials, Anchor Framing had both a generic, written safety program addressing residential fall protection and its foremen were aware of the appropriate safety measures for their work.

STD 03-00-001 defined the work being performed by Mr. Tenezaca at the time of his accident as Group 3 (carpentry on a roof). Group 3 activities include carpentry performed on a roof after sheathing is installed. In this category of work, OSHA allows carpentry work to be performed on a roof with no conventional fall protection. OSHA also does not require the installation of slide guards or other protective measures. The workers performing such work are required to be trained; materials are to be staged for easy access; impalement hazards below the work area are to be removed or guarded to prevent further injury to a worker who may fall; and the employer is to stop work when weather conditions create a *"hazardous condition."* Unlike Group 1 sheathing activities where work must stop when winds exceed 40 mph or when it is raining, Group 3 activities do not have threshold weather conditions where work must be stopped.

OSHA provides a directive addressing multi-employer sites, which was discussed within the OSHA investigation file for Toll Brothers. This directive, known as the Multi-Employer

Citation Policy (CPL 02-00-124 dated 12/10/1999), revised OSHA Field Inspector's requirements and guidance for implementing the Field Inspection Reference Manual as it pertained to sites with multiple employers. The policy provides the following definitions for various classifications of site employers:

Exposing Employer: An employer whose own employees are exposed to a hazardous condition that violates an OSHA standard. *"If the exposing employer created the violation, it is citable for the violation as a creating employer."* Based upon the type of work being performed by Mr. Tenezaca at the time of his accident, no condition violating an OSHA standard existed unless the weather conditions created sufficiently hazardous conditions that Anchor Framing should have ceased work. Based upon hourly weather data obtained for Mount Pocono station (13 miles northwest of Marshall's Creek), wind gusts were between 28 and 33 mph during the 4:00 P.M. to 5:00 P.M. hours. Light snow was reported at Mount Pocono at 8:00 A.M., with no further precipitation during the day.

Creating Employer: The employer that caused a hazardous condition that violates an OSHA standard. Employers must not create violative conditions. *"An employer that does so is citable even if the only employees exposed are those of other employers at the site."* To the extent that a condition existed that violated an OSHA standard, it was created solely by Anchor Framing, the contractor who placed its employees on the building roof as part of its framing work.

Correcting Employer: An employer who is engaged in a common undertaking, on the same worksite, as the exposing employer and is responsible for correcting a hazard. This usually occurs where an employer is given the responsibility of installing and/or maintaining particular safety/health equipment or devices. *"The correcting employer must exercise reasonable care in preventing and discovering violations and meet its obligations of correcting the hazard."* Based upon the reviewed inspection reports, it appeared that Anchor Framing was a correcting employer for the installation and maintenance of temporary wooden guardrails. Anchor Framing's role as a correcting employer was unrelated to Mr. Tenezaca's accident.

Controlling Employer: An employer who has general supervisory authority over the worksite, including the power to correct safety and health violations itself or require others to correct them. Controlling employers have broad responsibility at the site involving almost all aspects of the job. Such responsibilities include the authority to resolve disputes between subcontractors, setting schedules, and determining construction sequencing. Control can be established by contract or, in the absence of explicit contractual provisions to control safety, by the exercise of control in practice. *"A controlling employer must exercise reasonable care to*

> *prevent and detect violations on the site. The extent of the measures that a controlling employer must implement to satisfy this duty of reasonable care is less than what is required of an employer with respect to protecting its own employees. This means that the controlling employer is not normally required to inspect for hazards as frequently or to have the same level of knowledge of the applicable standards or of trade expertise as the employer it has hired"* [emphasis added].

The *controlling employer* has a responsibility under the Multi-Employer Citation Policy to exercise reasonable care to prevent and detect violations of the OSHA standards at the site. Such detection is typically made by inspection. No enumerated inspection frequency for *controlling employers* is identified in The Policy. General guidance for employers is that they should inspect their work sites at least once per day[1], which implies that a frequency of once per day or less would be satisfactory for *controlling employers*. Factors relating to the "reasonable care standard" as it applies to the frequency and how closely the *controlling employer* must inspect the subcontractor's work include the following:

- The scale of the project;
- The frequency with which the hazards change; and
- The *controlling employer's* knowledge of the subcontractor's safety performance.

A *controlling employer* is considered to have met the "reasonable care standard" if it conducted inspections at an appropriate frequency; implemented an effective system for correcting hazards; and enforced the subcontractor's compliance with safety requirements using a graduated system of enforcement and follow-up inspections. Based upon OSHA's investigation, OSHA determined that Toll Brothers met the standard of care.

Based upon the reviewed documents, Toll Brothers had worked with Anchor Framing for more than a decade with no known accidents. Similarly, all evidence indicates that prior to Mr. Tenezaca's fall, Anchor Framing worked without incident on the Country Club of the Poconos project. Mr. Rodriguez indicated that he trained his workers and held periodic safety meetings. To this end, the foreman overseeing Mr. Tenezaca's work at the time of his fall had 10-hour OSHA construction safety outreach training. Such training includes a module on fall protection and related hazards. Toll Brothers had an escalation program in place within its safety program as a tool to enforce safety compliance on site. Specifically, Toll Brothers provided verbal and written notices requiring corrections. Based upon the reviewed safety inspection forms and the subsequent follow-up inspections, Toll Brothers' system was effective in correcting hazards. Had

[1] OSHA Subpart L for scaffolding; ANSI A10.38 §3.3.1(9); Typical requirement included in OSHA citation settlement documents.

a subcontractor been non-compliant after verbal and written notices, Toll Brothers could stop their work until corrections were made. Based upon the reviewed safety inspection forms, it was apparent that no violations/problems existed with Anchor Framing's roof work practices prior to the date of the accident. With regard to other matters, it was apparent that all hazards identified by Toll Brothers during their documented inspections were corrected as required. Written notices were provided to Anchor Framing when deemed appropriate by Toll Brothers' personnel.

Toll Brothers was performing inspections of the site on a regular basis. Mr. Brown performed his daily rounds of the project each morning and weekly documented safety inspections were performed by Mr. Brown or Mr. Mazzarino. Since the hazards associated with the repetitive construction of dozens of townhouse structures or single family houses don't change, it is the writer's opinion that Toll Brothers' inspection frequency was appropriate. It is also important to note that the writer understands that Mr. Tenezaca's exposure time on the roof was limited to the last portion of the day. Therefore, only an inspection occurring at the time of the exposure may have allowed Toll Brothers to intervene in the chain of events that resulted in Mr. Tenezaca's fall. Only full-time oversight of Mr. Tenezaca's work to identify unsafe work practices may have prevented the incident. Such full-time oversight was the responsibility of the employer (Anchor Framing) and not the general contractor (Toll Brothers).

Discussion

Based upon the state of construction of the accident area as shown in the OSHA photographs, roof sheathing operations had been completed in the area of Mr. Tenezaca's fall as of the time of his accident. Therefore, had Anchor Framing chosen to do so, an anchorage point could have been installed on the roof to which a personal fall arrest system could be attached, in accordance with its safety program. Based upon Mr. Rodriguez's testimony, Mr. Tenezaca, a four-year employee, knew about fall protection devices and was aware of the location of such equipment prior to the date of his accident. Similarly, Mr. Lopez had received OSHA training and explained to the OSHA CSHO that he knew what fall protection devices should have been used; yet he did not enforce the use of such equipment when directing Mr. Tenezaca's work.

It is important to note that based upon all reviewed materials, the only employer working at 1169 A-D Big Ridge Drive was Anchor Framing. Therefore, hazards created by them exposed only their workers and not those of any other contractor or the employees of Toll Brothers. The framed, sheathed structure was built by Anchor Framing, who had intimate knowledge of the roof geometry, wood sheathing condition, locations of support structures to which an anchorage point could be installed, and which knew the height of the structure above grade. All of these factors were known to, or under the control of, Anchor Framing. Similarly, Anchor Framing could have utilized scaffolding, an aerial lift, ladders or other typical construction access equipment to provide Mr. Tenezaca with a safer location from which to work on the eave.

Nothing within Anchor Framing's contract indicated that any entity other than Anchor Framing was responsible for materials, equipment, means or methods associated with keeping its employees and work areas safe. Similarly, nothing within the reviewed testimony indicated that Anchor Framing was relying upon Toll Brothers for any type of safety support or oversight.

Anchor Framing and not Toll Brothers was responsible for determining all necessary and appropriate fall protection methods to employ for this Group 3 activity. The alternative fall protection methods specified by OSHA are complex and require regular and repeated knowledge and implementation of such methods to fully appreciate which fall protection systems are required at what time. For example, some Group 1 sheathing activities are required to be performed with 2x4 slide guards, while some roofing work under the policy requires 2x6 slide guards. Sheathing installation requires, at times, personal fall arrest systems, while at other times it does not. Similarly, carpentry, plumbing and electrical work performed on the roof after sheathing is completed require no specific fall protection devices. It is such specific trade knowledge that general contractors, such as Toll Brothers, rely upon when working with professional framing subcontractors like Anchor Framing.

Based upon the file materials reviewed, codes and standards researched, the writer's training, education, licensure and certifications, and the foregoing, the writer's summary opinions, within a reasonable degree of engineering certainty, are:

1. The underlying cause of Mr. Tenezaca's fall from the roof is unknown. It is unknown if slide guards would have prevented the accident. Weather conditions did not include excessively high wind speeds or precipitation.

2. Based upon the reviewed photographs, the roof trusses were sufficiently braced so as to allow the installation of an anchor point appropriate for use with a personal fall arrest system had Anchor Framing chosen to do so.

3. Based upon the task being performed by Mr. Tenezaca (the installation of 2x4 blocking at the eave for future fascia installation), the OSHA alternative fall protection methods identified within STD 03-00-001 did not require the use of conventional fall protective devices for this Group 3 activity. While such a work method was allowed under OSHA, the writer notes that Anchor Framing's safety program required that its employees utilize a personal fall arrest system for this work.

4. The determination of which fall protection methodology was appropriate and proper for the task being performed by Mr. Tenezaca at the time of his accident was the responsibility of his employer, Anchor Framing.

5. Toll Brothers provided sufficient and satisfactory safety oversight of the work, including daily work observations and documented, weekly site safety inspections.

6. Based upon its decade-long relationship with Anchor Framing, during which time there were no fall accidents, Toll Brothers reasonably relied upon Anchor Framing's expertise in the trade of residential wood frame construction to perform its work safely. Anchor Framing safely installed wood framing, wood trusses and roof sheathing for dozens if not hundreds of structures at the project prior to the date of the accident. OSHA does not require general contractors, like Toll Brothers, to have the same level of knowledge of the applicable standards or trade expertise as Anchor Framing.

7. Anchor framing and not Toll Brothers was responsible under OSHA to make all necessary determinations with regard to the manner in which it provided its employees with a safe place of employment.

8. Anchor Framing was required, by contract, to perform its work in accordance with OSHA regulations and to provide all necessary oversight, equipment and materials for such work. The agreement did not include any contractual obligations for Toll Brothers to provide any safety training, oversight, equipment, planning or other provisions for Anchor Framing's work.

9. Had Anchor Framing foremen or employees desired to use a personal fall arrest system, Anchor Framing and not Toll Brothers was responsible for providing and installing such a system.

10. The fall hazard to which Mr. Tenezaca was exposed was created by his employer, Anchor Framing, and not Toll Brothers. The hazard was open, obvious and known to Mr. Tenezaca prior to his accessing the roof. Further, a person nailing wooden blocking at the eave would be at the roof's edge and able to directly observe the ground surface below.

11. Mr. Tenezaca's accident did not result from any impropriety or shortcoming on the part of Toll Brothers. It resulted from poor decisions made by Anchor Framing supervisory personnel and Mr. Tenezaca, who worked in an unsafe manner at a roof edge unknown to Toll Brothers.

Review of Reports by Others

Vincent Gallagher's 2/26/13 report included a description of the accident occurrence as told to him by Mr. Tenezaca in a personal interview that took place on 1/28/13. Mr. Tenezaca told Mr. Gallagher that he was performing carpentry services at the roof eave when he fell. Specifically, Mr. Tenezaca indicated to Mr. Gallagher that he was installing 6 inch long pieces of 2x4 lumber at the roof eave to which fascia would eventually be attached.

Mr. Gallagher referenced various texts and standards within his report, including documents by the American National Standards Institute (ANSI), Associated General Contractors of America (AGC), American Society of Safety Engineers (ASSE), Construction

Management Association of America (CMAA), National Safety Council (NSC) and Construction Industry Institute (CII). The writer notes that all references to "contractor," "management" and "employer" in such documents include Anchor Framing and its management. While the referenced publications provide useful information for contractors, they are not adopted codes or standards referenced within the applicable governing regulations of OSHA. OSHA regulations and the OSH Act form the basis of the standard of care with regard to construction safety. The writer cited applicable and authoritative OSHA standards and directives earlier in this report.

Mr. Gallagher incorrectly opined within his report that Toll Brothers was required under OSHA to have a *competent person* with respect to fall protection for residential roofing/framing/ truss installation/joist installation. Since no Toll Brothers employees participated in any such activities, none of its employees were exposed to fall hazards associated with such work. Only the employer with employees exposed to such hazards is required to have a *competent person* on site. OSHA actually allows one contractor to rely upon another contractor's *competent person* under certain circumstances when it has employees exposed to hazards. Therefore, Mr. Gallagher's opinion that the *"general contractor"* was required to have a *competent person* on site is incorrect.

Mr. Gallagher referenced the Blount International Limited case when opining that the General Contractor was responsible for violations that they could *"reasonably be expected to prevent or abate by reason of its supervisory capacity."* Since only Anchor Framing personnel were aware of Mr. Tenezaca's position at the roof eave late in the day, the writer disagrees with Mr. Gallagher that anyone from Toll Brothers had an opportunity to detect or prevent the accident.

Mr. Gallagher opined that 29 CFR 1926.16 applied to the Country Club of the Poconos project. The cited CFR section is not an adopted OSHA construction standard. Specifically, the adoption of the construction standards specifies:

> *"1910.12. Construction Work. (c) Construction Safety Act distinguished. This section adopts as occupational safety and health standards under section 6 of the Act the standards which are prescribed in part 1926 of this chapter. Thus, the standards (substantive rules) published in Subpart C and the following parts of Part 1926 of this chapter are applied. This section does not incorporate subparts A and B of Part 1926 of this chapter. Subparts A and B have pertinence only to the application of section 107 of the Contract Work Hours and Safety Standards Act (the Construction Safety Act)."*

It should be noted that 29 CFR 1926.16 is located within Subpart B of 29 CFR 1926 and, as such, is not an adopted, applicable OSHA standard. It should also be noted that only federal projects are subjected to the Contract Work Hours and Safety Standards Act where Subparts A

and B are applicable. The OSHA Assistant Secretary has confirmed the rejection of 29 CFR 1926.16 as an adopted OSHA standard in his 8/31/90 letter to the American Society of Safety Engineers. His letter states, in part:

> *"Therefore, 29 CFR 1926.16, as part of Subpart B (General Interpretation), has pertinence only to the application of section 107 of the Contract Work Hours and Safety Standards Act (The Construction Safety Act) and has no direct significance in the enforcement of the OSHA Act."*

Mr. Gallagher opined that Anchor Framing was required to provide a written fall protection in plan in accordance with 29 CFR 1926.502(k) for this residential framing project. Mr. Gallagher is incorrect since Anchor Framing was performing residential construction activities specifically addressed by STD 03-00-001. STD 03-00-001 does not require the showing of an infeasibility to implement OSHA's prescriptive fall protection methods for Group1, Group 2, Group 3 and Group 4 activities as defined within that directive. It also does not require a written or site-specific plan be prepared by the contractor. The writer notes, however, that Anchor Framing did have a written plan regarding the residential fall protection methods it planned on using.

Mr. Gallagher's concluding opinion that Toll Brothers *"failed to take reasonable steps to require Anchor Framings workers to be protected from falls from elevation"* is not consistent with the reviewed materials. Specifically, Toll Brothers performed regular inspections of the project site, including documented weekly safety inspections that looked specifically for, among other things, fall hazards. When identified, Toll Brothers would take the reasonable step of providing verbal and/or written notification to the affected contractor to assure that the deficiency was corrected. Such actions and enforcement were demonstrated to be effective since there were no identified fall hazards in the two and a half months before the accident. Therefore, it is reasonable to conclude that Anchor Framing was performing its work safely, and that Toll Brothers' oversight was effective. With regard to the specific accident, it was apparent that Anchor Framing personnel disregarded their training and purposefully and knowingly worked in an unsafe manner at the edge of the roof located 25 feet above the frozen ground surface below.

All of the writer's opinions within the entirety of this report have been offered to a reasonable degree of engineering certainty. The writer reserves the right to supplement this report based upon additional information. Affiliated Engineering Laboratories, Inc. will be compensated by Goldberg Segalla, LLP for time and expenses associated with the preparation of this report.

Should you require additional information or further discussion, please do not hesitate to contact the writer.

Very truly yours,

Timothy J. Carlsen, P.E., CSP
Engineering Consultant

TJC/jl

EXHIBIT D

AFFILIATED ENGINEERING LABORATORIES, INC.

Engineering Consultants

777 New Durham Road
Edison, NJ 08817

Phone: (732) 429-1200 Fax: (732) 429-1201

Resume: **TIMOTHY J. CARLSEN**

Education:

Bachelor of Science – Systems Engineering (Civil)
University of Pennsylvania, School of Engineering and Applied Science, Philadelphia, PA, 1992

Master of Science – Environmental Engineering
University of Notre Dame, School of Civil Engineering and Geological Sciences, Notre Dame, IN, 1993

Professional:

Professional Engineer – New Jersey License No. 24GE04071400
Professional Engineer – Pennsylvania License No. PE062682
Professional Engineer – New York License No. 081249-1
New Jersey Building Inspector License No. 008683
Certified Safety Professional (CSP)
Authorized OSHA Construction Safety Trainer (10 hr. and 30 hr. courses)
Member – National Society of Professional Engineers
Member – New Jersey Society of Professional Engineers
Member – International Code Council (ICC)
Member – American Society of Civil Engineers
Professional Member – American Society of Safety Engineers
Member – ASTM International Committee F-13 on Pedestrian/Walkway Safety and Footwear, and Committee D-21 on Polishes
Member – ASTM International Committee E-06 on Performance of Buildings
Past President, University of Pennsylvania School of Engineering Alumni Society Board of Directors
Past Director, University of Pennsylvania General Alumni Society Board of Directors

Awards:

David S. Fine Memorial Award in Civil Engineering (1992)
Dondanville Family Graduate Award for Excellence in Teaching by a Graduate Student (1993)
University of Pennsylvania Young Alumni Award of Merit (2007)

EXHIBIT
Carlsen 1
December 11, 2014
Dolores DeFilippis, RMR-CSR

Continuing Education:

Various continuing education courses in structural design, assessment of existing structures, building code implementation, construction safety, environmental hazards, and OSHA regulations. Representative list of courses:

OSHA HAZWOPER-40 hr. Training
NJ Building Inspector Review Course
Residential Lumber Connectors
NJ Rehabilitation Subcode
NJ Barrier Free Access Subcode
OSHA 510-30 hr. Construction Training
Investigation of Structural Failures
Masonry Construction Code Requirements
ACI Concrete Repair Techniques
Mold Identification and Prevention through Design
Guide Specifications for Interlocking Concrete Pavements
Architectural Design Considerations for Segmental Retaining Walls
Permeable Interlocking Concrete Pavements
Unique/Special Applications of Segmental Retaining Walls
Wood Truss Inspection/WTCA training
OSHA 500 Construction Trainer Certification
Welding Inspection
Wood Framing Inspection
ASCE Earth Retaining Structures
Design/Inspection of Residential Doors and Windows
Design/Use of Engineered Lumber
ASSE Slip Resistance and Safety in the Workplace
International Building Code 2006 Updates
Design/Inspection of Chimneys & Vents
International Fire Code/NJ Uniform Fire Code
Design/Inspection of Boilers & Pressure Vessels
ASCE Structural Design of Residential Structures
ASCE Design of Shallow Foundations
OSHA 3010 Excavation Safety/Trenching/Soil Mechanics
ASCE Underpinning and Foundation Strengthening
Design/Inspection of Firestopping and Fireblocking
OSHA 502 Construction Safety Trainer Re-certification
OSHA 3080 Scaffold Design, Use and Erection
Pump Jack Scaffold Erection/Use
ASCE Structural Condition Assessment of Existing Structures
Advanced Barrier Free Accessibility
ACI/PCA Reinforced Concrete Design
IRC/IBC Requirements for Stucco Installation

OSHA 3110 Fall Arrest Systems
Building Diagnostics – Moisture and Vapor Transmission
2009 International Building Code Updates
ACI Troubleshooting Concrete Construction
2009 IECC & ASHRAE 90.1-2007 Update
Professional Engineering Ethics
ASCE Design and Renovation of Wood Structures
Uniform Fire Code/Retrofit Code
Stucco Manufacturer's Association Three-Coat Stucco System
ASCE Design, Construction and Renovation of Masonry Structures
Quality Assurance in Masonry Construction
Hotel/Multiple Dwelling Code & Uniform Fire Code
Snow and Ice Removal
ASCE Elevating Wood Structures
Wooden Truss Manufacturing, Design and Installation - BCSI Updates
OSHA 7505 Accident Investigation
OSHA 502 Construction Outreach Trainer Update
2012 International Mechanical Code and 2006 International Fuel Gas Code
ASCE Wind Loads for Buildings and Other Structures
ASTM F2948 Walkway Auditor Training
Seismic Code Provisions

Publications:

Carlsen, T.J., Klotzbach, F., Klotzbach, R., Knight, R., "Removal/ Demolition/Decontamination of Vertac Facilities and Incinerator," Proceedings of the Mid-Atlantic Industrial and Hazardous Waste Conference, Philadelphia, Pennsylvania, July 1998.

Carlsen, T.J., Horne, B., "Thermal Desorption of Manufactured Gas Plant Wastes," Included in Proceedings of 1995 HAZMAT Conference, Dallas, Texas.

Carlsen, T.J., "Groundwater and Stream Communication Considering Evapotranspiration-Induced Stage Cycling Effects at Juday Creek, Indiana," American Geophysical Union Proceedings, Baltimore, MD, May 1994.

Professional Experience:

ABB Power Automation (Combustion Engineering), Edison, NJ
Project Engineer (1990)

Performed nuclear power plant cooling system calculations and researched control system components to determine feedback data required for controlling unit processes.

Roy F. Weston, Edison, NJ
Project Engineer (1991, 1992)

Performed bench and pilot scale testing for remediation systems for wood treating and pesticide industries. Designed and installed remotely operated control systems for soils composting projects.

Seaview Thermal Systems, Blue Bell, PA
Project Engineer, Project Manager (1993-1995)

Oversaw construction and installation of high-temperature soil remediation equipment and temporary tensioned membrane structures. Provided engineering assistance to equipment manufacturers and designers during troubleshooting and optimization periods. Oversaw compliance testing and reporting. Provided technical support for OSHA.

ENSR Corporation, Piscataway, NJ
Project Engineer, Project Manager, Senior Project Manager (1995-2001)

Performed on-site engineering design and construction management for large-scale construction projects including force main installation; building construction; demolition of structures and facilities; concrete construction; roadway construction; slurry wall installation; water treatment plant installation and operation; landfill cap construction; borrow area analysis and management; river dredging; shoreline protection installation; manhole installation; channel construction (earthen, rip-rap, gabion basket and fabricform); sediment pond construction; groundwater collection trenches installation and various other site improvements. Assembled project work estimates, performed contract reviews, prepared construction evaluations, prepared permit applications and interfaced with local code officials.

Earth Tech, Inc., Bridgewater, NJ
Project Director (2002)

Provided technical expertise in the civil and environmental engineering and construction fields for the preparation of work estimates, proposals and engineering alternatives for clients. Reviewed design documents for constructability, conformance to standards, and completeness relative to project performance criteria.

Affiliated Engineering Laboratories, Inc., Edison, NJ
Engineering Consultant (2002-Present)

Perform engineering investigations and evaluations of design and construction elements relating to civil and environmental construction projects. Work includes element analysis for conformance with applicable building codes and regulations, OSHA requirements and other accepted standards.

EXHIBIT E

Complete Guide to the CSP®

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First Edition | AUGUST 2014

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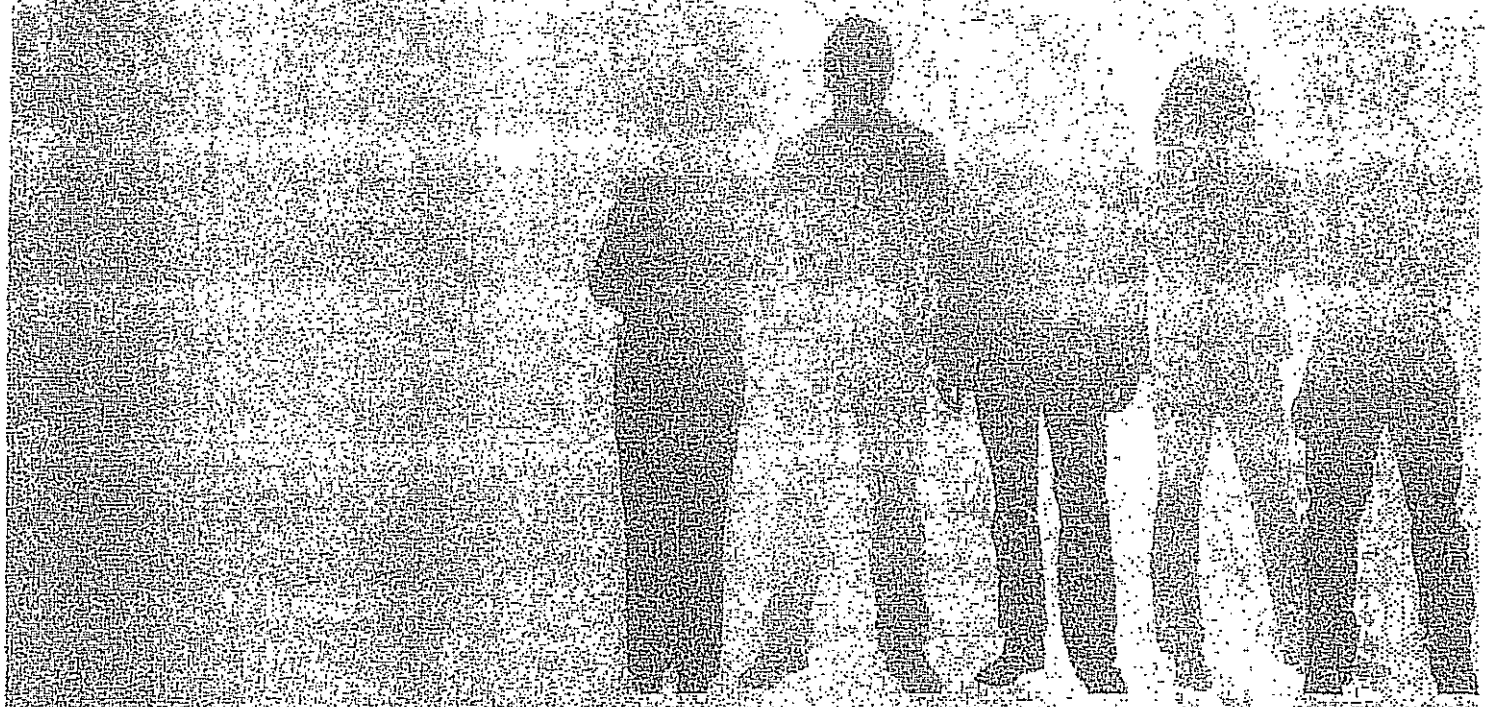

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EXHIBIT
Carlsen 4
December 11, 2014
Dolores DeFilippis, RMR-CSR

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The purpose of this guide is to walk you through the process of applying for and taking the examination leading to the CSP certification. This guide is the first step to help you achieve the credential.

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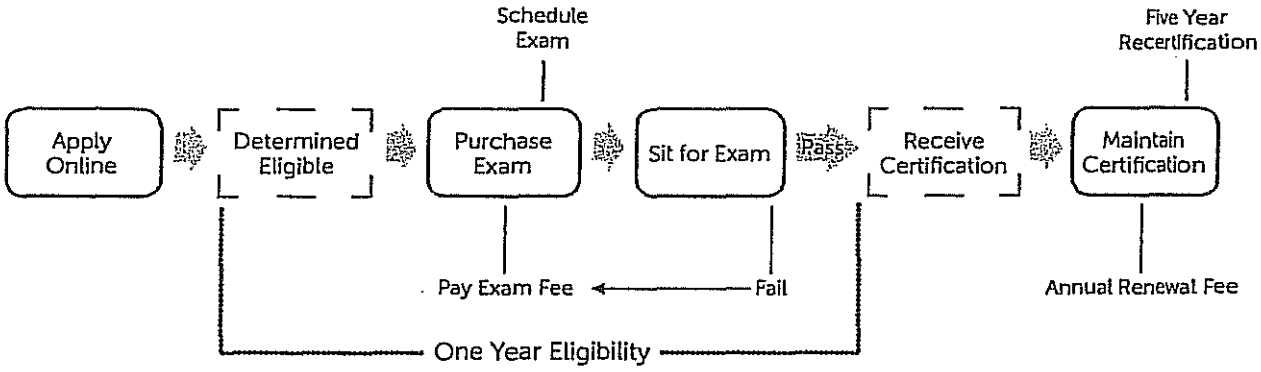

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- National Commission for Certifying Agencies (NCCA), www.credentialingexcellence.org
- Council of Engineering and Scientific Specialty Boards (CESB), www.cesb.org

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Chapter 2 Certification Summary

Chapter Abstract

This chapter provides general information about the Certified Safety Professional (CSP) credential. You may download this chapter as well as other chapters of the *Complete Guide to the CSP* from the Board of Certified Safety Professionals (BCSP) website at www.bcsp.org.

An overview of the CSP certification is presented along with qualifications, requirements, time limits, degree evaluations and the Graduate Safety Practitioner® (GSP®) path.

Visit www.bcsp.org for the most current version of this guide.

Overview of the CSP Certification

The CSP is a certification awarded by BCSP to individuals who meet all of the Board-established requirements.

The CSP Process

One of the most common questions by potential candidates is "What do I have to do to become a CSP?" The process has several stages, each one building on the other.

1.) Are You Eligible?

Academic Requirement:

All individuals applying for the CSP must have a bachelor's degree or higher in any field from an accredited institution; or an associate degree in safety, health, or environmental from an accredited institution.

There is no waiver of the academic requirement and proof of a minimum qualifying degree must be provided. For U.S. degrees, BCSP requires the school hold institutional accreditation recognized by the Council for Higher Education Accreditation (CHEA) (www.chea.org) and/or the U.S. Department of Education (www.ed.gov).

Continuing education courses, seminars, and certificate programs are not a substitute for, and do not receive credit toward, the academic requirement.

A degree achieved from a Qualified Academic Program accredited by the Accreditation Board for Engineering and Technology-Applied Science Accreditation Commission (ABET-ASAC) or the Aviation Accreditation Board International (AABI) may qualify for the Graduate Safety Practitioner (GSP) program. The GSP designation meets the qualification of holding a BCSP-credential (detailed in this section).

Unaccredited degrees are a growing concern and some states have laws making it illegal to use unaccredited degrees. Applicants and certificants cannot use unaccredited degrees and the use is a violation of the *BCSP Code of Ethics*.

BCSP requires all degrees from colleges and universities outside the United States be evaluated for U.S. equivalency. Information regarding the process for having an international degree evaluated for BCSP certification is available in Chapter 3, "Application Instructions".

Experience Requirement:

CSP candidates must have four years professional safety experience to sit for the CSP exam. Professional safety experience must meet the following criteria to qualify:

- ☐ Professional safety must be the primary function of the position. Collateral duties in safety are not counted.
- ☐ The position's primary responsibility must be the prevention of harm to people, property, or the environment, rather than responsibility for responding to harmful events.
- ☐ Professional safety functions must be at least 50% of the position duties. BCSP defines full-time as at least 35 hours per week. Part-time safety experience is allowed if the applicant has the equivalent of at least 900 hours of professional safety work during any year (75 hours per month or 18 hours per week) for which experience credit is sought.
- ☐ The position must be at a professional level. This is determined by evaluating the degree of professional charge by which there is a reliance of employees, employers or clients on the person's ability to identify, evaluate and control hazards through engineering and/or administrative approaches.
- ☐ The position must have breadth of professional safety duties. This is determined by evaluating the variety of hazards about which the candidate must advise and the range of skills involved in recognizing, evaluating, and controlling hazards.

BCSP-Approved Credential Requirement (applicant must hold one of the following credentials at the time they apply for the CSP):

- ☐ Associate Safety Professional (ASP) *
- ☐ Graduate Safety Practitioner (GSP) *
- ☐ Certified Industrial Hygienist (CIH)
- ☐ Chartered Member of the Institution of Occupational Safety and Health (CMIOSH)**
- ☐ Canadian Registered Safety Professional (CRSP)**
- ☐ Professional Member of Singapore Institution of Safety Officers (SISO)**
- ☐ Diploma in Industrial Safety by Government of India**

** Credential offered by BCSP*
*** Must meet eligibility requirements when pursuing CSP*

Associate Safety Professional

The Associate Safety Professional® (ASP®) is a permanent certification awarded by BCSP and is one of several approved credentials that can qualify an individual to sit for the CSP examination. A list of this and other qualifying credentials is included in the next section of this chapter. To learn more about the ASP certification, please see *The Complete Guide to the ASP.*

Graduate Safety Practitioner

The Graduate Safety Practitioner® (GSP®) is an additional path to the CSP available to safety degree graduates from degree programs which meet BCSP Qualified Academic Program (QAP) standards. Those awarded the GSP designation meet the requirement of holding a BCSP approved credential. To learn more about the GSP and what degree programs qualify, please see Chapter 8, "The GSP Designation".

2.) Submit Your Application

BCSP reviews all application materials to determine eligibility for the CSP examination. Candidates must meet all requirements in order to be made eligible to sit for the CSP examination. More information about the application process can be found in Chapter 3, "Application Instructions".

3.) Purchase Your Exam

Anytime during the one-year eligibility period, candidates may pay for their examination through "My Profile" at www.bcsp.org or by calling Certification Services at +1 217-359-9263. The examination authorization period begins the day a candidate purchases an exam (within their one-year eligibility period) and ends once he/she has sat for the examination or on the day their eligibility ends, whichever comes first.

Active or retired military may qualify for a reimbursement of the examination fee through the VA. The VA Brochure is located on the BCSP website for more information.

4.) Schedule Your Exam

Once BCSP has processed your examination fee, you will then be able to schedule your examination with Pearson VUE. Pearson VUE is the official computer-based testing proctor for all BCSP examinations. More information about scheduling your examination can be found in Chapter 5, "Examination Overview".

5.) Sit For Your Exam

Candidates eligible for the CSP examination must pass the examination within their one-year of eligibility.

BCSP allows candidates to extend their eligibility time limit once during their term and the extension is valid for one year. Extensions are available for purchase within the last 60 days of a candidate's eligibility period and the candidate cannot have an outstanding exam authorization. Extensions can be purchased through "My Profile" at www.bcsp.org, as long as the candidate is eligible.

Those who do not meet this time limit nor purchase the eligibility extension must reapply as a new candidate and meet the current application requirements. A detailed outline of eligibility is provided once an application has been approved.

BCSP's examination provider, Pearson VUE (www.pearsonvue.com/BCSP), has hundreds of test centers located around the world and operates every business day. Examinations are delivered via computer at the test center. Candidates will be given their examination results at the center immediately after submitting their exam. Candidates that fail may purchase a new examination authorization as long as they remain eligible.

For a list of current fees, visit www.bcsp.org/Safety-Certifications.

6.) Maintain Certification

Annual Renewal Fees:

After completing all of the requirements, BCSP awards candidates who pass the CSP exam the CSP credential. Certificants will need to pay annual renewal fees in order to maintain certification. A prorated renewal fee will be applied for the remainder of the year in which the candidate passes the exam.

Recertification:

CSPs must remain up-to-date with changes in professional practice by earning 25 Recertification points every five years.

Additional information regarding Recertification can be found in the *Recertification Guide*, located at www.bcsp.org/Recertification.

Chapter 3
Application Instructions

Chapter Abstract

This chapter provides detailed instructions and information about how to apply to become a CSP. You may download this chapter as well as other chapters of the *Complete Guide to the CSP* from the Board of Certified Safety Professionals (BCSP) website at www.bcsp.org.

Visit www.bcsp.org for the most current version of this guide.

Application Instructions

Individuals who wish to pursue the CSP must create a profile through "My Profile" at www.bcsp.org. Once you have created your profile, you may select the certification application you are interested in and follow the online instructions. Candidates for certification apply only once, provided they follow all policies and stay within their eligibility time limit.

A complete application requires candidates to provide:

1. Contact Information
2. A Qualifying Credential
3. Experience Information
4. Education Information
5. Application Agreement and Validation (*acknowledging truthful information has been provided, informing BCSP of any criminal convictions or unethical behavior, and agreeing to adhere to BCSP Code of Ethics*)
6. Payment of Application

Do not send resumes, professional papers, continuing education course certificates, or any other items that are not specifically requested.

After you submit your application, BCSP Certification Services will contact you with any questions or once your application review has been completed.

The application fee is nonrefundable and nontransferable. For a list of current fees, visit www.bcsp.org/Safety-Certifications. You will be prompted to include payment along with your application. Your application will not be complete until payment for the application fee and any additional requested materials have been received.

Submitting Transcripts

Information on submitting transcripts will be provided as you fill out your application online.

International transcripts must be evaluated by BCSP's approved third party degree evaluators so that U.S. equivalency may be determined. The evaluation must be completed by a member of the National Association of Degree Evaluation Services (NACES). A list of NACES members can be found at www.naces.org.

Validation

BCSP requires applicants to disclose criminal convictions, disciplinary actions, and denial or revoked certifications, licenses and professional registrations taken against the applicant by the issuing certification board or agency. BCSP uses its policy relating to criminal convictions to determine whether the application can proceed or whether it will be terminated. In some cases, a BCSP attorney may contact the applicant to clarify information about the conviction. A copy of the BCSP criminal conviction policy appears at www.bcsp.org/About_BCSP.

Applicants are required to provide disclosure of:

- All felony convictions
- All misdemeanor convictions within the past five (5) years (Minor traffic violations and petty offenses DO NOT have to be reported)
- Any record of unethical behavior
- Information related to having a professional license or certification denied, suspended or revoked for reasons other than not meeting qualifications, failure of examination, or failure to pay renewal fees

Auditing

BCSP randomly selects 5% of applications for audit. If your application is selected, you will be required to provide proof of employment and an official university transcript in a sealed envolope.

Chapter 4 Preparing for the Examination

Chapter Abstract

This chapter provides information about BCSP examinations and suggestions for preparation. You may download this chapter as well as other chapters of the *Complete Guide to the CSP* from the Board of Certified Safety Professionals (BCSP) website at www.bcsp.org.

Visit www.bcsp.org for the most current version of this guide.

Preparing for the Examination

You may use various approaches to prepare for the examination:

- Complete Self-Assessment examination
- Perform individual study
- Participate in informal study groups
- Attend formal review courses

Some keys to success include:

- Knowing your strengths and weaknesses
- Having an examination preparation plan
- Developing a test-taking strategy
- Understanding how to use your calculator

Having an Examination Study Plan

The examination blueprint shows how the items on an examination are distributed across domains and tasks/topics. The percentage of items per domain is noted on the examination blueprint.

Converting your subject strengths and weaknesses into a study plan is likely to increase your overall examination score. Scoring well in one subject area can compensate for a weaker score in another subject area. However, there may not be enough items in your strong areas to achieve a passing score.

Note that knowledge and understanding are essential in passing the examination. Relying only on simulated examination items is not the best way to increase knowledge and understanding. Use simulated items to provide insight into the areas in which you should engage in additional study.

Developing a Test-Taking Strategy

Knowing how to take the examination will help improve your score. The examination uses multiple-choice items with only one correct answer and three incorrect answers. Remember, the goal is to get as many items correct as possible. There is no penalty for selecting an incorrect answer. However, only correct answers count toward reaching the passing score.

- Read the items carefully
- Consider the context
- Use examination time wisely
- Go back to troublesome items
- Complete all items

Using Your Authorized Calculator(s)

You may bring two calculators into the secure testing room as long as they both are among the brands and models listed below:

- Casio models FX-100, 200 or 300 series
- Hewlett Packard models HP 10, 12, or 17 series
- Texas Instruments models TI-30 series

Make sure you know how to use your calculator(s) so you don't waste valuable time trying to understand how to use it once the examination clock starts. It is a good idea to practice working solutions and to be able to recall the correct calculator procedures.

Remember, solutions to computational items usually are rounded. You should select the answer closest to the computed value.

Obtaining Information on the Body of Knowledge

Draw on your experience and on professional and study references in your own library, a company library, or a public library. BCSP maintains a list of examination references for each certification at www.bcsp.org/Sources. Examination items are not necessarily taken directly from these sources. However, BCSP believes these references represent the breadth and depth of coverage of safety, health, and environmental practice.

BCSP-Published Self-Assessment Examination

It is essential for you to compare your knowledge against what is contained in the examination blueprint. One way to do this is by using a self-evaluation method. A self-evaluation helps determine how well you know various subjects.

BCSP publishes a self-assessment examination for all certifications. The self-assessment examination can help diagnose how well you know the body of knowledge, as well as to help refresh your test-taking skills.

The self-assessment examination is based on the blueprint described in this guide and is half the length of a full examination. The self-assessment examination includes a scoring sheet and correct answers. It also includes solutions to computational items, along with references for each item.

To order a self-assessment examination, please log on to "My Profile" at www.bcsp.org to make the purchase.

Other Review and Study Sources

A number of professional membership organizations, trade organizations, colleges, and universities, and private companies offer study courses, software, and materials to assist candidates when preparing for BCSP examinations. Because candidates for BCSP examinations often ask where to locate review courses and materials, BCSP maintains an online list strictly as a courtesy at www.bcsp.org/Sources.

Beyond the written materials BCSP publishes, BCSP has no involvement in the development, content, or distribution of any courses or materials associated with preparing for BCSP examinations or evaluating readiness. BCSP neither endorses the providers shown on the online list nor evaluates the providers or the providers' materials for consistency with BCSP examination blueprints or with any aspect of any BCSP examination.

Candidates must contact the sources directly about materials, course schedules, fees, or matters related to satisfaction with their products or services.

Examination Integrity

A key to a successful and respected credentialing program is examination security. Without it, a peer-operated credentialing program has little value. BCSP relies on the ethical behavior of candidates and certificants to maintain the security of BCSP examinations.

When those who hold credentials or those who are pursuing credentials reveal information about the content of BCSP examinations, they violate the agreement all candidates accept when they apply for certification and when they take an examination. Applicants, examination candidates, or certificants who reveal confidential information about the content of BCSP examinations through any means also violate the *BCSP Disciplinary Action Policy* and the *BCSP Code of Ethics*.

BCSP pursues legal actions against organizations, individuals not seeking certification, and individuals who fraudulently claim or misrepresent their intent to seek certification, who reveal information about the content of BCSP examinations. Penalties include permanently barring individuals from pursuing the credential and revoking the certifications and interim designations of those who have status with BCSP, in addition to other legal remedies.

Chapter 5
Examination Overview

Chapter Abstract

This chapter provides detailed information about the CSP examination leading to the CSP credential. You may download this chapter as well as other chapters of the *Complete Guide to the CSP* from the Board of Certified Safety Professionals (BCSP) website at www.bcsp.org.

An overview of the CSP examination is presented along with its respective examination blueprint. Sample items typical of the examination can be found in Chapter 6 with solutions and explanations.

Visit www.bcsp.org for the most current version of this guide.

Computer-Based Testing

The CSP examination uses computer-based testing, with one item appearing on the screen at a time. You will simply use a mouse to point to the desired answer and click on it to select it. Answers can be changed the same way.

You can mark items to return to later or simply skip them and move to the next item. At the end of the examination, there is a table of items and answers selected. The table also shows skipped and marked items. You can return to any item by simply clicking on the item number.

Prior to beginning the actual examination, there is a tutorial. Your examination clocks begins when you officially commence with the examination itself. After completing the examination, you will log off to formally submit your examination for scoring. You will receive results before you leave the testing center facility.

Examinations are closed book, and accessing external reference materials during your examination is not permitted. For use during the examination, the testing center will provide you with materials for working out calculations by hand.

Refer to the *Pearson VUE Computer-Based Testing Brochure* located at *www.bcsp.org* for more details and requirements.

Scheduling Your Exam

Once you have purchased your examination, BCSP will send you information on scheduling your examination with a Pearson VUE testing center. It is important that when you schedule, you do so on Pearson VUE's website or by calling their national number. Local testing centers do not schedule examinations.

For a complete list of testing center rules and procedures, visit www.PearsonVUE.com/BCSP/.

General Description of the CSP Examination

All candidates for the CSP must pass the CSP examination to earn the credential.

The CSP examination contains 200 multiple-choice items with four possible answers and only one correct answer. Data necessary to answer items are included in the item or in a scenario shared by several items. Each item is independent and does not rely on the correct answer to any other item. Formulas will be embedded into each item that requires one.

CSP Examination Blueprint

BCSP examination blueprints are based on surveys of what safety professionals do in practice. The CSP examination is required for candidates to demonstrate knowledge of professional safety practice at the CSP level.

The top levels, called domains, represent the major functions performed by safety professionals at the CSP level. Each domain is divided among several tasks. Within each task are lists of knowledge areas and skills necessary for carrying out the task in that domain. The knowledge areas for the CSP examination build upon the knowledge candidates have already demonstrated by virtue of having achieved the ASP certification, GSP designation, or other BCSP-approved credential. Each domain heading is accompanied by a percentage label which represents the proportion of the actual CSP examination devoted to that domain. The following pages describe the subject matter covered by the CSP examination.

Examination Content Development and Revision

BCSP updates examinations continuously. Most items come from safety professionals in practice. Before items are accepted into item banks, they go through rigorous technical, psychometric, and grammatical editing. Also, 10–15% of the items on BCSP examinations are experimental, and do not contribute to a candidate's pass/fail decision. BCSP analyzes the performance of these experimental items before including them as scored items.

How BCSP Establishes the Minimum Passing Score

BCSP uses a criterion-referenced procedure (the modified Angoff technique) to establish minimum passing scores for examinations. This procedure ensures that the passing score is independent of scores for other candidates sitting for the examination and involves having a panel of experts rate each examination item with respect to the minimally qualified candidate. As examinations are modified on a regular basis, the minimum passing score is adjusted for the difficulty of items on the examination. Item performance is also evaluated regularly to ensure that BCSP examinations maintain the highest testing standards.

CSP® Examination Blueprint

Domain 1
Collecting Safety, Health, Environmental, and Security Risk Information – 28.6%

Task 1 — Identify and characterize hazards, threats, and vulnerabilities using equipment and field observation methods in order to evaluate safety, health, environmental, and security risk.

Knowledge of:	Skill in:
1. Types, sources, and characteristics of hazards, threats, and vulnerabilities	1. Identifying hazards associated with equipment, manufacturing systems, and production processes
2. Job safety analysis and task analysis methods	2. Recognizing external and internal threats to facilities, systems, processes, equipment, and employees
3. Hazard analysis methods	3. Conducting job safety analyses and task analyses
4. Qualitative, quantitative, deductive, and inductive risk assessment methods	4. Performing hazard analyses
5. Incident investigation techniques	5. Leading incident investigations
6. Methods and techniques for evaluating facilities, products, systems, processes, and equipment	6. Interviewing witnesses to incidents
7. Methods and techniques for measurement, sampling, and analysis	7. Interpreting plans, specifications, technical drawings, and process flow diagrams
8. Sources of information on hazards, threats, and vulnerabilities (e.g., subject matter experts, relevant best practices, published literature)	8. Using monitoring and sampling equipment
9. Competencies of other professionals with whom the safety professional interacts	9. Communicating with subject matter experts
10. Information security and confidentiality requirements	10. Consulting with equipment manufacturers and commodity suppliers
11. Internet resources	11. Finding sources of information on hazards, threats, and vulnerabilities
	12. Interviewing people
	13. Using the Internet to find information

Task 2 — Design and use data management systems for collecting and validating risk information in order to evaluate safety, health, environmental, and security risk.

Knowledge of:	Skill in:
1. Mathematics and statistics	1. Calculating statistics from data sources
2. Qualitative, quantitative, deductive, and inductive risk assessment methods	2. Determining statistical significance
3. Chain of custody procedures	3. Comparing statistics to benchmarks
4. Electronic data logging and monitoring equipment	4. Preserving evidence from incident investigations
5. Data management software	5. Calibrating and using data logging and monitoring equipment
6. Electronic data transfer methods and data storage options	6. Using data management software
7. Information security and confidentiality requirements	7. Creating data collection forms
	8. Maintaining data integrity

Task 3 — Collect and validate information on organizational risk factors by studying culture, management style, business climate, financial conditions, and the availability of internal and external resources in order to evaluate safety, health, environmental, and security risk.

Knowledge of:	Skill in:
1. Mathematics and statistics	1. Calculating statistics from data sources
2. Qualitative, quantitative, deductive, and inductive risk assessment methods	2. Determining statistical significance
3. Incident investigation techniques	3. Comparing statistics to benchmarks
4. Sources of information on hazards, threats, and vulnerabilities (e.g., subject matter experts, relevant best practices, published literature)	4. Leading incident investigations
5. Organizational and behavioral sciences	5. Interviewing witnesses to incidents
6. Group dynamics	6. Developing surveys to capture data related to organizational culture
7. Management sciences	7. Communicating with subject matter experts
8. Management principles of authority, responsibility, and accountability	8. Interviewing people
9. Budgeting, finance, and economic analysis techniques	9. Using the Internet to find information
10. Business planning	
11. Competencies of other professionals with whom the safety professional interacts	
12. Internet resources	

Task 4 — Research applicable laws, regulations, consensus standards, best practices, and published literature using internal and external resources to develop benchmarks for assessing an organization's safety, health, environmental, and security performance and to support the evaluation of safety, health, environmental, and security risk.

Knowledge of:

1. Benchmarks and performance standards
2. Mathematics and statistics
3. Sources of information on hazards, threats, and vulnerabilities (e.g., subject matter experts, relevant best practices, published literature)
4. Sources of information related to local laws, regulations, and consensus codes and standards
5. Product certification and listing agencies
6. Qualitative, quantitative, deductive, and inductive risk assessment methods
7. Competencies of other professionals with whom the safety professional interacts
8. Internet resources

Skill in:

1. Calculating statistics from data sources
2. Determining statistical significance
3. Using statistics to define benchmarks and performance standards
4. Comparing statistics to benchmarks
5. Interpreting local laws, regulations, and consensus codes and standards
6. Communicating with subject matter experts
7. Consulting with equipment manufacturers and commodity suppliers
8. Obtaining information on product certification and listing requirements
9. Using the Internet to find information

Domain 2
Assessing Safety, Health, Environmental, and Security Risk • 36.6%

Task 1 — Evaluate the risk of injury, illness, environmental harm, and property damage to which the public or an organization is exposed associated with the organization's facilities, products, systems, processes, equipment, and employees by applying quantitative and qualitative threat, vulnerability, and risk assessment techniques.

Knowledge of:

1. Qualitative, quantitative, deductive, and inductive risk assessment methods
2. Root cause analysis methods
3. Mathematics and statistics
4. Basic sciences: anatomy, biology, chemistry, physics, physiology
5. Applied sciences: fluid flow, mechanics, electricity
6. Organizational and behavioral sciences
7. Agriculture safety (including food supply safety)
8. Biological safety
9. Business continuity and contingency planning
10. Chemical process safety
11. Community emergency planning
12. Construction safety
13. Dispersion modeling
14. Emergency/crisis/disaster management
15. Emergency/crisis/disaster response planning
16. Environmental protection and pollution prevention
17. Epidemiology
18. Equipment safety
19. Ergonomics and human factors
20. Facility safety
21. Facility security and access control
22. Facility siting and layout
23. Fire prevention, protection, and suppression
24. Hazardous materials management
25. Hazardous waste management
26. Healthcare safety (including patient safety)
27. Industrial hygiene
28. Infectious diseases
29. Insurance/risk transfer principles
30. Maritime safety
31. Mining safety
32. Multi-employer worksite issues
33. Mutual aid agreements
34. Physical and chemical characteristics of hazardous materials
35. Pressure relief systems
36. Product safety
37. Public safety and security
38. Radiation safety
39. System safety
40. Toxicology
41. Transportation safety and security
42. Ventilation systems
43. Workplace violence
44. Sources of information on risk (e.g., subject matter experts, relevant best practices, published literature)
45. Information security and confidentiality requirements

Skill in:

1. Leading comprehensive risk assessments
2. Leading threat and vulnerability assessments
3. Facilitating chemical process hazard analyses
4. Conducting root cause analyses
5. Estimating organizational risk
6. Estimating public risk
7. Estimating the risk of human error
8. Using statistics to estimate risk
9. Interpreting plans, specifications, technical drawings, and process flow diagrams
10. Evaluating facility fire risk
11. Evaluating life safety features in facilities
12. Calculating maximum occupancy and egress capacity
13. Calculating required containment volumes and hazardous materials storage requirements
14. Determining how released hazardous materials migrate through the air, surface water, soil, and water table
15. Determining occupational exposures (e.g., hazardous chemicals, radiation, noise, biological agents, heat)
16. Evaluating emergency/crisis/disaster management and response plans
17. Using chemical process safety information
18. Using dispersion modeling software
19. Communicating with subject matter experts
20. Consulting with equipment manufacturers and commodity suppliers
21. Interviewing people

Domain 2 (Continued)
Assessing Safety, Health, Environmental, and Security Risk • 36.6%

Task 2 — Audit safety, health, environmental, and security management systems using appropriate auditing techniques to compare an organization's management systems against established standards for identifying the organization's strengths and weaknesses.

Knowledge of:

1. Safety, health, and environmental management and audit systems (e.g., ANSI/AIHA Z10, ISO 14000 series, OHSAS 18000 series, ISO 19011, U.S. Occupational Safety and Health Administration Voluntary Protection Programs)
2. Management system auditing techniques
3. Benchmarks and performance standards
4. Methods and techniques for evaluating facilities, products, systems, processes, and equipment
5. Methods and techniques for measurement, sampling, and analysis
6. Qualitative, quantitative, deductive, and inductive risk assessment methods
7. Root cause analysis methods
8. Mathematics and statistics
9. Basic sciences: anatomy, biology, chemistry, physics, physiology
10. Applied sciences: fluid flow, mechanics, electricity
11. Organizational and behavioral sciences
12. Management sciences
13. Management principles of authority, responsibility, and accountability
14. Budgeting, finance, and economic analysis techniques
15. Business continuity and contingency planning
16. Business planning
17. Business software
18. Change management
19. Emergency/crisis/disaster management
20. Emergency/crisis/disaster response planning
21. Group dynamics
22. Hazardous materials management
23. Hazardous waste management
24. Job safety analysis and task analysis methods
25. Multi-employer worksite issues
26. Report presentation strategies
27. Competencies of other professionals with whom the safety professional interacts
28. Sources of information on hazards, threats, and vulnerabilities (e.g., subject matter experts, relevant best practices, published literature)
29. Information security and confidentiality requirements
30. Internet resources

Skill in:

1. Leading management system audits
2. Comparing management systems with benchmarks
3. Comparing documented procedures and tasks with actual operations
4. Evaluating safety, health, environmental, and security plans, programs, and policies
5. Evaluating risk assessments
6. Evaluating the results of root cause analyses
7. Recognizing external and internal threats to facilities, systems, processes, equipment, and employees
8. Interpreting plans, specifications, technical drawings, and process flow diagrams
9. Recognizing management system changes
10. Using monitoring and sampling equipment
11. Determining statistical significance
12. Comparing statistics to benchmarks
13. Performing facility and equipment inspections
14. Evaluating business continuity and contingency plans
15. Communicating with subject matter experts
16. Consulting with equipment manufacturers and commodity suppliers
17. Using business software to present reports
18. Interviewing people
19. Using the Internet to find information

Task 3 — Analyze trends in leading and lagging performance indicators related to safety, health, environmental, and security management systems using historical information and statistical methods to identify an organization's strengths and weaknesses.

Knowledge of:

1. Types of leading and lagging safety, health, environmental, and security performance indicators
2. Benchmarks and performance standards
3. Safety, health, and environmental management and audit systems (e.g., ANSI/AIHA Z10, ISO 14000 series, OHSAS 18000 series, ISO 19011, U.S. Occupational Safety and Health Administration Voluntary Protection Programs)
4. Management system auditing techniques
5. Mathematics and statistics
6. Organizational and behavioral sciences
7. Management sciences
8. Management principles of authority, responsibility, and accountability
9. Budgeting, finance, and economic analysis techniques
10. Business planning
11. Business software
12. Change management
13. Competencies of other professionals with whom the safety professional interacts
14. Training assessment instruments (e.g., written tests, skill assessments)

Skill in:

1. Using statistics to show trends in performance indicators
2. Calculating statistics from data sources
3. Using statistics to define benchmarks and performance standards
4. Communicating with subject matter experts
5. Comparing statistics to benchmarks
6. Determining statistical significance
7. Evaluating management system audits
8. Evaluating risk assessments
9. Evaluating safety, health, environmental, and security plans, programs, and policies
10. Evaluating the results of root cause analyses
11. Interpreting organizational culture surveys and perception surveys
12. Measuring training program effectiveness
13. Recognizing management system changes
14. Using business software to present reports
15. Interviewing people
16. Obtaining meaningful feedback

Domain 3
Managing Safety, Health, Environmental, and Security Risk • 34.8%

Task 1 — Design effective risk management methods using the results of risk assessments to eliminate or reduce safety, health, environmental, and security risks.

Knowledge of:

1. Engineering controls
2. Principles of managing risk throughout the design process
3. Administrative controls
4. Personal protective equipment
5. Qualitative, quantitative, deductive, and inductive risk assessment methods
6. Root cause analysis methods
7. Risk-based decision-making tools
8. Mathematics and statistics
9. Applied sciences: fluid flow, mechanics, electricity
10. Basic sciences: anatomy, biology, chemistry, physics, physiology
11. Organizational and behavioral sciences
12. Management sciences
13. Management principles of authority, responsibility, and accountability
14. Budgeting, finance, and economic analysis techniques
15. Business planning
16. Business software
17. Adult learning
18. Cultural norms and population stereotypes
19. Training methods
20. Training assessment instruments (e.g., written tests, skill assessments)
21. Agriculture safety (including food supply safety)
22. Biological safety
23. Business continuity and contingency planning
24. Change management
25. Chemical process safety
26. Community emergency planning
27. Construction safety
28. Education and training methods
29. Emergency/crisis/disaster management
30. Emergency/crisis/disaster response planning
31. Employee assistance programs
32. Employee/stakeholder incentive programs
33. Environmental protection and pollution prevention
34. Epidemiology
35. Equipment safety
36. Ergonomics and human factors
37. Facility safety
38. Facility security and access control
39. Facility siting and layout
40. Fire prevention, protection, and suppression
41. Hazardous materials management
42. Hazardous waste management
43. Healthcare safety (including patient safety)
44. Incident command methods
45. Industrial hygiene
46. Infectious diseases
47. Insurance/risk transfer principles
48. Labels, signs, and warnings (including international symbols)
49. Maritime safety
50. Mining safety
51. Multi-employer worksite issues
52. Mutual aid agreements
53. Physical and chemical characteristics of hazardous materials
54. Pressure relief systems
55. Product safety
56. Public safety and security
57. Radiation safety
58. System safety
59. Toxicology
60. Transportation safety and security
61. Ventilation systems
62. Workplace violence
63. Competencies of other professionals with whom the safety professional interacts
64. Sources of information on risk management options (e.g., subject matter experts, relevant best practices, published literature)

Skill in:

1. Recommending effective engineering controls
2. Developing effective administrative controls
3. Developing procedures that incorporate risk management controls
4. Developing safety, health, environmental, and security plans, programs, and policies
5. Designing effective labels, signs, and warnings
6. Performing training needs assessments
7. Developing training programs
8. Developing training assessment instruments
9. Applying risk-based decision-making tools for prioritizing risk management options
10. Interpreting plans, specifications, technical drawings, and process flow diagrams
11. Creating emergency/crisis/disaster management and response plans
12. Performing financial analyses of risk management options
13. Evaluating the costs and benefits of risk management options
14. Organizing chemical process safety information
15. Performing gap analyses
16. Determining hazardous materials storage requirements
17. Recommending facility life safety features
18. Recommending methods to reduce the risk of occupational exposures (e.g., hazardous chemicals, radiation, noise, biological agents, heat)
19. Reducing the risk of error-likely situations
20. Selecting appropriate personal protective equipment
21. Using sampling and measurement devices
22. Using statistics to understand risk
23. Using the results of risk assessments to support risk management options
24. Using the results of root cause analyses to support risk management options
25. Communicating with subject matter experts
26. Consulting with equipment manufacturers and commodity suppliers
27. Interviewing people

Domain 3 (Continued)
Managing Safety, Health, Environmental, and Security Risk • 34.8%

Task 2 — Educate and influence decision makers to adopt effective risk management methods by illustrating the business-related benefits associated with implementing them to eliminate or reduce safety, health, environmental, and security risks.

Knowledge of:

1. Risk-based decision-making tools
2. Budgeting, finance, and economic analysis techniques
3. Business planning
4. Business software
5. Education and training methods
6. Interpersonal communications
7. Mathematics and statistics
8. Organizational and behavioral sciences
9. Management sciences
10. Management principles of authority, responsibility, and accountability
11. Organizational protocols
12. Presentation media and technologies
13. Presentation strategies
14. Project management concepts
15. Target audience background

Skill in:

1. Applying risk-based decision-making tools for prioritizing risk management options
2. Creating plans for implementing risk management options
3. Describing the costs and benefits of risk management options
4. Describing the effects of implementing safety, health, and environmental plans, programs, and policies
5. Describing trends to support risk management options
6. Explaining risk management options to decision makers
7. Making presentations to decision makers
8. Presenting financial analyses of risk management options
9. Recognizing changes needed in management systems
10. Using statistics to explain the effects of risk management options
11. Using the results of risk assessments to support risk management options
12. Using the results of root cause analyses to support risk management options

Task 3 — Lead projects to implement the risk management methods adopted by decision makers using internal and external resources to eliminate or reduce safety, health, environmental, and security risks.

Knowledge of:

1. Project management concepts
2. Management sciences
3. Management principles of authority, responsibility, and accountability
4. Methods of achieving project stakeholder acceptance of project goals
5. Financial management principles
6. Schedule management principles
7. Risk-based decision-making tools
8. Organizational and behavioral sciences
9. Business software
10. Project management software
11. Change management
12. Group dynamics
13. Interpersonal communications
14. Methods of facilitating teamwork
15. Organizational protocols
16. Presentation media and technologies
17. Presentation strategies
18. Principles of supervising people
19. Competencies of other professionals with whom the safety professional interacts

Skill in:

1. Implementing project management plans
2. Applying management principles of authority, responsibility, and accountability
3. Using project management software
4. Developing systems to track project implementation
5. Leading people
6. Leading teams
7. Making presentations to stakeholders
8. Motivating project stakeholders
9. Resolving conflicts
10. Supervising people
11. Communicating with subject matter experts
12. Consulting with equipment manufacturers and commodity suppliers
13. Interviewing people

Domain 3 (Continued)
Managing Safety, Health, Environmental, and Security Risk • 34.8%

Task 4 — Promote a positive organizational culture that is conscious of its safety, health, environmental, and security responsibilities by communicating these responsibilities to all stakeholders and by training all stakeholders as part of the organization's overall risk management program.

Knowledge of:

1. Management sciences
2. Management principles of authority, responsibility, and accountability
3. Methods of achieving project stakeholder acceptance of project goals
4. Organizational and behavioral sciences
5. Organizational protocols
6. Cultural norms and population stereotypes
7. Group dynamics
8. Interpersonal communications
9. Labels, signs, and warnings (including international symbols)
10. Multi-employer worksite issues
11. Organized labor/management relations
12. Presentation media and technologies
13. Presentation strategies
14. Protocols for public announcements
15. Public communication techniques
16. Risk communication techniques
17. Stakeholder participation committees
18. Target audience background
19. Adult learning
20. Education and training methods
21. Behavior modification techniques
22. Training methods
23. Training assessment instruments (e.g., written tests, skill assessments)
24. Business communication software
25. Competencies of other professionals with whom the safety professional interacts
26. Standards development processes
27. Information security and confidentiality requirements

Skill in:

1. Explaining risk concepts to stakeholders and the public
2. Explaining risk management options to stakeholders and the public
3. Applying management principles of authority, responsibility, and accountability
4. Encouraging participation in risk management processes
5. Influencing stakeholder behavior
6. Developing and using lesson plans
7. Conducting training
8. Administering training assessment instruments
9. Providing an effective learning environment
10. Delivering motivational presentations
11. Creating motivational literature
12. Facilitating stakeholder participation committees
13. Giving public announcements
14. Interacting with journalists and the media
15. Making presentations to stakeholders and the public
16. Negotiating with political entities
17. Resolving conflicts
18. Soliciting stakeholder feedback
19. Working with organized labor unions and management
20. Motivating stakeholders
21. Leading people
22. Leading teams
23. Exchanging information over the Internet
24. Communicating with subject matter experts
25. Interviewing people
26. Providing input in standards development activities

Chapter 6 Examination Sample Items

Chapter Abstract

This chapter provides sample examination items and their solutions for the CSP examination. You may download this chapter as well as other chapters of the *Complete Guide to the CSP* from the Board of Certified Safety Professionals (BCSP) website at www.bcsp.org.

Visit www.bcsp.org for the most current version of this guide.

Examination Question Samples

The following questions illustrate only the style and format typical of items on the CSP examination. Not all CSP examination task areas are represented by these sample items. Please note it is essential for you to read and understand the CSP examination blueprint found in Chapter 5 so you have a complete awareness of the depth and breadth of all of the subject matter appearing on the actual CSP examination.

1. An employee fell from a broken ladder and sustained a fractured arm. In evaluating the management system in place when the accident occurred, which is considered a root cause?
   A. The ladder had a broken rung.
   B. The ladder's repair log was not attached to the ladder.
   C. The employee was not trained in ladder use and how to recognize unsafe ladder conditions.
   D. The maintenance employee did not inspect the ladder before issuing the ladder to the employee.

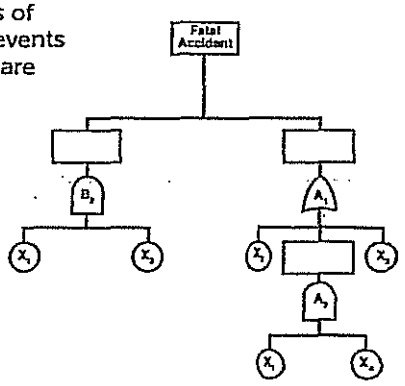
2. In the development of an incident data collection and management system, what is the most important first step?
   A. To differentiate between human error and design error
   B. To define the subsequent use of the data
   C. To establish accident-reporting responsibilities
   D. To codify data to conform to existing data sources

3. A control system contains a subsystem having series elements A and B. The subsystem will perform as intended if both elements A and B function properly. Failures by A and B are mutually exclusive. Failure rates of the two elements are equal at a long-term value of one failure per 10,000 trials. What is the long-term failure rate of the subsystem?
   A. One per 5,000 trials
   B. One per 10,000 trials
   C. One per 20,000 trials
   D. One per 100,000 trials

4. A solvent mixture contains, by volume, 50% Solvent A, 25% Solvent B, and 25% Solvent C. The mixture evaporates into the work atmosphere, and an air sampling has revealed a vapor concentration of 20 ppm of Solvent C. The eight-hour time-weighted average Threshold Limit Values for Solvents A, B, and C are 100 ppm, 50 ppm, and 50 ppm, respectively. Assuming that the effects are additive and that the concentrations in air are of the same proportions as in the solvent mixture, is the eight-hour time-weighted average Threshold Limit Value exceeded in the work atmosphere?
   A. No. The vapor concentration of any component does not exceed its Threshold Limit Value.
   B. Yes. The sum of the vapor concentration of the components exceeds the sum of their Threshold Limit Values.
   C. No. The sum of the fractions of the solvent components in ratio of concentration to the Threshold Limit Value is less than unity.
   D. Yes. The sum of the fractions of the solvent components in ratio of concentration to Threshold Limit Value exceeds 1.0.

The probabilities of occurrence for events X^1, X^2, X^3, and X^4 are shown below.

- $X^1 = 0.0025$
- $X^2 = 0.050$
- $X^3 = 0.0050$
- $X^4 = 0.00050$



5. What is the calculated probability of occurrence of the fatal accident?
   A. 1.2×10^{-4}
   B. 1.3×10^{-6}
   C. 6.9×10^{-6}
   D. 3.1×10^{-10}

6. When calculating the coefficient of correlation between facility audit scores and facility injury rates, what does a positive coefficient of correlation indicate?

   A. That high audit scores tend to be associated with low injury rates
   B. That high audit scores tend to be associated with high injury rates
   C. That low audit scores tend to be associated with low injury rates
   D. That there is an increase in correlation between audit scores and injury rates

7. Construction sites frequently have multiple companies working concurrently on a single work site, each with the responsibility for ensuring the safety of their employees. Which is the first step for ensuring that owners, prime contractors, and subcontractors work together to achieve a safe work site?

   A. Hold planning meetings with all parties involved in each phase of the work in order to go over safety requirements.
   B. Review all contracts to ensure that safety responsibilities are clearly identified.
   C. Inspect the work, work areas and equipment of all parties on a regular basis.
   D. Hold each contractor or subcontractor responsible for the daily activities of its workers.

8. A company plans to retrofit a storage building with a sprinkler system because the facility will soon be storing a high density of ordinary combustibles. In conducting a feasibility study, a safety professional determines that the 4-in (10-cm) water main in the street must be extended to the storage building. Relevant data are presented below.

   - Storage area to be sprinkled: 200,000 ft² (18 580 m²)
   - Area covered per sprinkler head: 125 ft² (11.6 m²)
   - Distance from street water line to the plant: 500 ft (150 m)

   Cost Data:

   - $1,200 / ft ($3,940 / m) to lay a 4-in (10-cm) water main
   - $310 per installed sprinkler
   - $200,000 for miscellaneous plumbing
   - $100,000 for the control system

   What is the best estimate of the direct cost of this project?

   A. $510,000
   B. $830,000
   C. $1,000,000
   D. $1,400,000

Answers to the Sample Items

Item Number	Correct Answer	Item Number	Correct Answer
1	C	5	A
2	B	6	A
3	A	7	B
4	D	8	D

Solutions to the Sample Items

1. The lack of training is a root cause because the lack of training is a management system deficiency that directly led to the causal factor of the employee falling from a broken ladder.

2. The designer of an incident data management system should be aware of the function and subsequent use that the data managed by the system will serve.

3. Since both elements must function for the subsystem to function, the failure of any one element will cause the subsystem to fail (i.e., the subsystem will fail if either A or B fails). Because the failures are also mutually exclusive, the probability of failure of the subsystem is P(A) + P(B) - (1/10,000 x 1/10,000)

   Since the last term (the minus term) is so small with respect to the other terms, it can be considered equal to zero; therefore,

   P(A) + P(B) = 1/10,000 + 1/10,000 = 1/5,000

4. For a mixture, assuming additive effects, the sum of the concentrations divided by the Threshold Limit Values for each component of the mixture must not exceed unity (1.0).

   $C1 / T1 + C2 / T2 + \ldots + C_n / T_n < 1.0$

   Assuming proportionate evaporation, if solvent C = 20 ppm and is 25% of the mixture, then

   A = [(0.50 / 0.25) (20 ppm)]
   A = 40 ppm
   B = [(0.25 / 0.25) (20 ppm)]
   B = 20 ppm
   40 ppm / 100 ppm + 20 ppm / 50 ppm
   + 20 ppm / 50 ppm = 1.2
   1.2 exceeds 1.0; therefore the limit has been exceeded.

5. The top event is represented by B2 • A1. $B2 = X_1 • X_2$ and $A_1 = X_2 + A_2 + X_3$. $A_2 = X_1 • X_4$. The calculated probability of occurrence of the fatal accident (top event) is therefore $((X_1 • X_2) • [X_2 + (X_1 • X_4) + X_3]) = [(X_1 • X_2 • X_2) + (X_1 • X_2 • X_1 • X_4) + (X_1 • X_2 • X_3)]$. This simplifies to $[(X_1 • X_2) + (X_1 • X_2 • X_4) + (X_1 • X_2 • X_3)]$. This further simplifies to $[(X_1 • X_2)(1 + X_4 + X_3)]$. This yields a minimum cut set of $(X_1 • X_2)$. Thus, the probability of the fatal accident (top event) is $0.0025 \times 0.050 = 0.000125 \approx 1.2 \times 10^{-4}$.

6. A positive coefficient of correlation means a positive relationship between the two sets of ranked data. A negative coefficient means a negative relationship.

7. In order to ensure that safety responsibilities are clearly established, the contract for each company must define those responsibilities. Other factors help ensure that the responsibility is implemented effectively.

8. Cost of water main = 500 feet x $1,200/foot
   = $600,000

   Cost of sprinkler installation

   = 200,000 square feet/125 square feet x $310

   = $496,000

   Total cost = $600,000 + $496,000 + $200,000

   + $100,000

   = $1,396,000 ≈ $1,400,000

Chapter 7
After You Achieve Your Certification

Chapter Abstract

This chapter provides detailed information needed after earning your credential. You may download this chapter as well as other chapters of the *Complete Guide to the CSP* from the Board of Certified Safety Professionals (BCSP) website at www.bcsp.org.

An overview of the rules and procedures essential in retaining the CSP credential is presented as well as proper use of the title. It also defines discipline procedures, contains guidelines for helping promote the value of the CSP credential, and provides information on ordering seals, stamps, jewelry, certificate frames, and other logo products.

Visit www.bcsp.org for the most current version of this guide.

Features and Benefits of Obtaining BCSP Credentials

Wallet Card. Each year when you pay the required annual renewal fee, a wallet card is made available which shows you are certified as well as your Recertification date for your certification. The card identifies you as a title holder for the calendar year (unless declared invalid).

Wall Certificate. When you achieve the CSP credential, BCSP issues a wall certificate suitable for framing. Should you lose or damage your wall certificate, BCSP will replace it for a nominal fee. Visit "My Profile" on the BCSP website to order.

Access to BCSP's Career Center. Many employers post open job positions seeking qualified safety professionals. With a BCSP credential, you may post your resume online and employers have access to view your resume and contact you if you wish.

BCSP *e*Newsletter Subscription. As a BCSP certificant, you will receive the quarterly BCSP *e*Newsletter. The BCSP *e*Newsletter contains information about important changes which may affect BCSP certifications and designations, information about certificate holders, and professional safety practice information. Current issues and back issues are located on the BCSP website.

BCSP Annual Report. The BCSP Annual Report is another important publication you will receive electronically. It contains summarized data about CSPs and the annual audited financial report and can be found on the BCSP website at www.bcsp.org/About_BCSP.

BCSP Directories. BCSP publishes directories of individuals who currently hold BCSP certifications and designations. An abbreviated format, containing names, cities, and states, appears on the BCSP website and allows viewers to confirm if a person currently holds a BCSP certification or designation.

*e*SafetySource Registration. BCSP offers the opportunity for BCSP certification and designation holders to register on the electronic safety source registry, indicating their areas of specialization.

Mail Lists. Organizations and companies providing valuable services to safety professionals may purchase a list of BCSP certificant names and addresses. Use of the list is restricted and all list sales are approved by BCSP. Restrictions limit the sale to uses which are of value in professional safety practice (i.e. notices of upcoming conferences or professional publications). Sales are not approved for promotion of general merchandise or services or for resale or distribution to third-party organizations. CSPs may specify at any time that their names not be included on mail lists by selecting that option in "My Profile" online.

Membership Level. Individuals may use the CSP credential to qualify for the highest level of membership in professional safety societies. After achieving the CSP credential, check with the safety and health organizations in which you hold memberships to see if you qualify for a status change. For example, the CSP credential qualifies members of the American Society of Safety Engineers (ASSE) for "Professional Member" status.

Title Protection and Laws Involving the BCSP Credentials. Some states have enacted title protection laws which restrict anyone from claiming to hold a BCSP certification without having duly obtained them from BCSP. Additionally, several states have enacted laws or regulations which specify that CSPs may provide loss control services for insurance companies. Check your state government website for more details.

Use of the CSP Title

It is important to know how to use your CSP title correctly. The "Certified Safety Professional" title and the letters "CSP" are registered certification marks issued to BCSP by the U.S. Patent and Trademark Office. They can only be used when authorized for a period specifically designated by BCSP. There are guidelines for displaying your CSP credential properly.

Examples of correct use:

- Robert A. Smith, CSP
- Robert A. Smith, Certified Safety Professional

The CSP credential is awarded to individuals, not companies, and should only be used with individual names.

The CSP credential may be used only for the period for which use is authorized. Use expires if you have not paid the annual renewal fee or have not met Recertification requirements for the CSP. Use of these titles beyond the authorized

period (without complying with renewal or Recertification requirements) constitutes unauthorized use of the credential.

You may use these credential on your business cards, resume, and correspondence or with your signature. You may use your CSP credential virtually anywhere you use your name.

Example of proper company use:

> ABC Safety Company provides the latest safety services. Employees holding the Certified Safety Professional® (CSP®) certification include Robert A. Smith, CSP and Mary A. Jones, CSP.

Example of improper company use:

> ABC Safety Company, providing safety services by Certified Safety Professionals.

Maintaining Your Certification

In order to retain your certification, you must:

- Inform BCSP when your mail or email address changes
- Pay your annual fee
- Complete Recertification requirements

Changing Your Name. If you change your name through marriage or other court proceedings, you may request a name change by contacting *bcsp@bcsp.org*. Additionally, you must provide a copy of the court record or marriage certificate in order for BCSP to register the change.

Paying Your Annual Renewal Fee. The authority to use the CSP title is valid for one year. It must be renewed annually. You will receive a prorated fee for the remainder of the year in which you pass the examination. Each following year, BCSP will send you a notice when your annual renewal fee is due. BCSP gives you several options for paying the fee online via a credit card or by phone. After receiving your payment, BCSP will send you a wallet card and a receipt. For a list of current fees, visit www.bcsp.org/Safety-Certifications.

Meeting Recertification Requirements. The Recertification program helps CSPs keep up with changes affecting professional safety practice. The program complies with requirements of BCSP's national accrediting organizations.

Every five years (one cycle) you must achieve 25 points. There are eleven categories of activities, each providing points toward meeting that goal. Keep in mind, there is no limit to the number of points in some categories, while other categories have annual and/or total point limits.

At the end of the five-year period, you must submit the points you earned during that cycle. Only points earned during a Recertification cycle count toward that cycle. BCSP randomly selects 5% of those who submit their points for an audit. While documentation to prove points is not required with the initial submission, the audit procedure requires you have proof of the points claimed. It is important that you keep records to verify your Recertification activities.

Additional details of the Recertification program appear in the *Recertification Guide*. You may download the *Recertification Guide* on the BCSP website to help you through the process. You will want to refer to the website regularly for the most up-to-date information.

Reinstatement

If you fail to pay your annual renewal fee on time or fail to achieve the required Recertification points every five years, BCSP will send you a notice that your credential has been invalidated and you no longer hold the CSP.

You may seek reinstatement by contacting BCSP. Reinstatement must be by 12/31 of the same year you are invalidated. Reinstatement includes paying a reinstatement fee and complying with the current Recertification requirements. Otherwise, you will be required to apply as a new candidate and meet all of the requirements in place at the time of your application.

Career Interruptions

While holding the CSP credential, you may face situations which affect your ability to maintain your certification. You may experience an interruption in your safety career, such as moving to a job which is not in the safety profession, taking time out to be a parent, student or soldier, having an extended health problem, or being unemployed. BCSP has established some options to help deal with these types of situations.

Leave of Absence and Extensions. You may seek a leave of absence or an extension if a career interruption will affect your ability to meet Recertification requirements. Please refer to the *Recertification Guide* for detailed information.

Annual Renewal Fee Waiver While Unemployed. If you become unemployed and are unable to pay your annual renewal fee, you may request in writing a one-time waiver of the annual renewal fee.

Retired CSPs

There is not a retired status for the CSP, however, retired CSPs can list the certification and the dates that they held it behind their name.

Examples:

- Robert A. Smith, Retired, CSP 1981-2012
- Robert A. Smith, Retired, Certified Safety Professional from 1981-2012

CSPs who have retired may not actively use the Certified Safety Professional credential.

Protecting the CSP Credential and Logo

Because BCSP has registered its logos and titles, it has a solid position for challenging BCSP title and/or logo infringement. There are several legal theories and considerations involved. Registration itself does not provide absolute protection from others using similar acronyms or titles. BCSP does not have exclusive use of the acronym. BCSP continually challenges those uses which can be confusing to the public or for which there are legal grounds to make such challenges.

Individuals Using the CSP Credential Without Authority

BCSP has established procedures for challenging individuals known to use the Certified Safety Professional credential without having obtained it or after they lost it for failure to pay annual renewal fees or meet Recertification requirements.

In order to establish someone is using the credential without authority, BCSP must have the original document (or a copy)

showing where the individual is using the title. Most often the unauthorized use occurs online, on a business card, resume, business letterhead, brochure or similar publication, or with a signature. To initiate action against the individual using the credential without authority, BCSP also needs the individual's current mailing address.

BCSP relies on those finding potential unauthorized uses to report them and provide the documentation showing the use of these titles. BCSP will not disclose the name of the person or organization reporting potential unauthorized uses.

After receiving documentation of a potential unauthorized use case, BCSP takes steps to challenge that individual and seeks to correct any record-keeping error on the part of BCSP. Legal counsel for BCSP may participate in the procedures.

Those who have used BCSP titles without authority may be barred from pursuing the CSP certification for five years. Their names are also published on the BCSP website. Other penalties may be applied. BCSP reserves the right to use the courts in protecting use of the CSP credential.

Criminal Convictions

BCSP's criminal conviction policy appears on the BCSP website. It applies to certificate holders. The policy also covers convictions by other certifications and licensing bodies for unauthorized use of designations. It requires CSPs to report new convictions which can result in BCSP disciplinary proceedings.

Discipline Procedures

BCSP authorizes individuals to use the CSP credential when they meet requirements for achieving and retaining the credential. BCSP also has a responsibility to withdraw that authorization when individuals fail to pay annual renewal fees, fail to meet Recertification requirements, or when they violate *BCSP Disciplinary Action Policy* or the *BCSP Code of Ethics*. The *BCSP Disciplinary Action Policy* contains rules on disciplinary procedures and grounds for action. The complete *BCSP Disciplinary Action Policy* is on the BCSP website.

Appeals

You may appeal decisions related to earning and maintaining BCSP credentials. Requests for appeal must be submitted to the Chief Executive Officer in writing and in accordance to the current appeals policy located online at www.bcsp.org/About_BCSP.

Promoting the CSP

BCSP uses several methods to promote the CSP credential and to encourage safety professionals to pursue it. You may volunteer to assist in these activities. Please contact BCSP or visit the BCSP website to determine available materials.

Request a Returnable Banner Display. Use of BCSP banner displays helps promote BCSP and the CSP certification. They are ideal for meetings, local and regional conferences or educational programs of local professional groups and companies. BCSP pays for shipping to and from events. Some instances may earn Recertification credit for promoting the CSP. To request a display, fill out the Display and Literature Request Form located on the BCSP web page or contact BCSP to determine availability of these displays.

Promotional Materials. There is a variety of complimentary literature about all of the BCSP credentials, qualifications and procedures, and examinations. Most BCSP publications are available on the BCSP website as downloadable PDFs. To request literature, please fill out the Display and Literature Request Form located on the BCSP web page or contact BCSP.

To encourage individuals to pursue a career in safety, BCSP offers a PDF of the *Career Guide to the Safety Profession*, co-produced with the ASSE Foundation, and a Career Paths in Safety brochure in PDF and print. These PDFs are available on the BCSP website.

Presentation Materials. PowerPoint presentations about the safety profession and the BCSP credentials are located on the BCSP website at www.bcsp.org.

Mentor Program. Created specifically to recognize certificants' roles in assisting the career development of others, the mentor program helps bring current credential holders and those looking to pursue certification together.

The mentor program rewards those who become mentors and ensures safety professionals who perform quality work are certified. By having your mentee fill out the Professional Advancement Mentor Form and submit it by fax or email at the time that they apply online, BCSP recognizes sponsors and their work with their peers, colleagues, and other safety professionals. More information can be found at www.bcsp.org.

Maintaining Your Mail and Email Address

As a CSP, you are solely responsible to keep BCSP informed of your current mail and email address. If either address changes, you must notify BCSP. You could lose the CSP certification if annual renewal notices and other important information do not reach you.

Chapter 8
The GSP Designation

Chapter Abstract

This chapter provides detailed information about the GSP designation and how it can assist in achieving the CSP certification. You may download this chapter as well as other chapters of the *Complete Guide to the CSP* from the Board of Certified Safety Professionals (BCSP) website at www.bcsp.org.

Visit www.bcsp.org for the most current version of this guide.

GSP General Information

Understanding the Graduate Safety Practitioner Program

The Graduate Safety Practitioner® (GSP®) is an additional path to the CSP available to safety degree graduates from degree programs which meet BCSP Qualified Academic Program (QAP) standards. Those awarded the GSP designation meet the requirement of holding a BCSP approved credential. The GSP designation is not a certification. It denotes graduation from a QAP and indicates progress toward the CSP certification.

Purpose of the GSP Program

The purpose of the GSP program is to recognize that an independently accredited academic program in safety, health and environmental practices meets BCSP QAP standards and that its graduates are prepared for entry into (or advancement in) professional safety practice.

Benefits for Qualified Students

- Meets the CSP eligibility requirement of holding a BCSP-approved credential.
- Recognition for the level of preparation for professional safety practice.
- A certificate awarding the GSP designation.

How to Apply

If you have graduated from a QAP during its accreditation period, you must submit a GSP Application and a copy of your transcript using 'My Profile' at www.bcsp.org. For information on QAP's visit www.bcsp.org/GSP.

Definitions

Graduate Safety Practitioner. The Graduate Safety Practitioner (GSP) designation is not a certification. It is awarded to qualified individuals to mark their completion of an independently accredited academic program meeting BCSP QAP standards. The GSP designation recognizes students graduating from QAP's who develop suitable knowledge and skills for entry into (or advancement in) professional safety practice. The GSP designation also denotes participation in a path leading to the CSP certification.

Qualified Academic Program. A Qualified Academic Program (QAP) is an academic degree program in safety, health and environmental practices meeting BCSP standards for participation in the GSP program. Currently, BCSP defines a QAP as a bachelor's or master's degree program in safety, health and environmental practices holding program accreditation by the Accreditation Board for Engineering and Technology-Applied Science Accreditation Commission (ABET-ASAC) or the Aviation Accreditation Board International (AABI) whose curriculum has been evaluated by BCSP.

QAP Coordinator. A Qualified Academic Program (QAP) Coordinator works with BCSP to coordinate applications and to ensure BCSP receives a validated list of graduates. Most likely it will be a member of the faculty for the QAP. It may also be someone on the staff of the QAP program who handles student records.

The Certified Safety Professional. The Certified Safety Professional® or CSP® is a certification awarded by the Board of Certified Safety Professionals (BCSP). More information about the CSP and BCSP can be found at www.bcsp.org.

Qualifications

GSP program qualifications include the following.

- You must have graduated from a QAP during its accreditation period. A full list of QAP's eligible to participate in the GSP program are on the BCSP website at www.bcsp.org/GSP
- You must fill out a GSP application through 'My Profile' at www.bcsp.org
- You must submit an official copy of a conferred transcript with degree awarded and date conferred

Time Limits

The following time limits apply to the GSP designation:

- Those holding the GSP designation must meet the experience requirements and apply for the CSP within ten years of receiving the GSP.
- Once a GSP has applied for and become eligible for the CSP, they must then meet the time limits associated with the CSP certification.
- Once a GSP has achieved the CSP, the GSP designation expires.
- GSPs must maintain active status until the CSP is achieved.

- GSP candidates who lose their GSP status will have to achieve the ASP certification or another BCSP-approved credential to qualify for the CSP certification, but cannot reapply for the GSP.

Retaining the GSP

The following conditions will result in the loss of the GSP designation:

- Failure to pay an annual renewal fee ($140).
- Failing to complete the CSP within the 10-year time limit.
- Violating the *BCSP Code of Ethics* (see www.bcsp.org/pdf/BCSPcodeofethics.pdf)

Maintaining Your Mail and Email Address

As a GSP, you are solely responsible to keep BCSP informed of your current mail and email address. If either address changes, you must notify BCSP. You could lose the GSP designation if annual renewal notices and other important information do not reach you.

Protecting the GSP and CSP Credentials

BCSP acts to challenge those who use the GSP and CSP credentials without authority from BCSP. Penalties may include being barred from pursuing BCSP certifications and publishing the names of violators.

A directory of those holding certification from BCSP, and those who have used BCSP designations without authority, appear at www.bcsp.org.

Disciplinary Action

BCSP has a disciplinary action policy. Disciplinary actions may include any of the following:

- Reject or suspend an application
- Terminate or suspend a candidate's eligibility
- Issue a reprimand
- Suspend, refuse to renew or revoke the ASP or CSP
- Terminate or suspend any status with BCSP

The Disciplinary Action Policy is located at www.bcsp.org/ About_BCSP and provide detailed procedures for bringing charges and for hearings related to disciplinary charges.

Annual Renewal Fees

All who achieve the GSP must pay a GSP annual renewal fee that is pro-rated for the remainder of the year that their GSP designation was awarded. The current GSP annual renewal fee is listed at www.bcsp.org/Safety-Certifications.

Other fees may apply upon achieving the CSP designation. For example, individuals who pay their annual renewal fee late may incur a late charge or a reinstatement fee if BCSP has acted to terminate certification.

Unemployed certificants may request a one-year waiver of the annual renewal fee in writing only once during their history with BCSP.

Features and Benefits of Obtaining BCSP Credentials

Wall Certificate. When you achieve the GSP designation, BCSP issues a wall certificate suitable for framing. Should you lose or damage your wall certificate, BCSP will replace it for a nominal fee. Visit "My Profile" on the BCSP website to order.

Access to BCSP's Career Center. Many employers post open job positions seeking qualified safety professionals. With a BCSP credential, you may post your resume online and employers have access to view your resume and contact you if you wish.

BCSP eNewsletter Subscription. As a BCSP certificant, you will receive the quarterly BCSP eNewsletter. The BCSP eNewsletter contains information about important changes which may affect BCSP certifications and designations, information about certificate holders, and professional safety practice information. Current issues and back issues are located on the BCSP website. GSP candidates can also sign up for BCSP's Collegiate eNewsletter, which includes articles appealing to faculty, students and recent graduates.

BCSP Annual Report. The BCSP Annual Report is another important publication you will receive electronically. It contains summarized data about BCSP certifications and the annual audited financial report and can be found on the BCSP website at www.bcsp.org/About_BCSP.

BCSP Directories. BCSP publishes directories of individuals who currently hold BCSP certifications and designations. An abbreviated format, containing names, cities, and states, appears on the BCSP website and allows viewers to confirm if a person currently holds a BCSP certification or designation.

eSafetySource Registration. BCSP offers the opportunity for BCSP certification and designation holders to register on the electronic safety source registry, indicating their areas of specialization.

Mail Lists. Organizations and companies providing valuable services to safety professionals may purchase a list of BCSP certificant names and addresses. Use of the list is restricted and all list sales are approved by BCSP. Restrictions limit the sale to uses which are of value in professional safety practice (i.e. notices of upcoming conferences or professional publications). Sales are not approved for promotion of general merchandise or services or for resale or distribution to third-party organizations. GSPs may specify at any time that their names not be included on mail lists by selecting that option in under "My Profile" online.

Moving Beyond the GSP Designation

Qualifying for the CSP Examination

CSP candidates must have four years professional safety experience to sit for the CSP exam. Professional safety experience must meet the following criteria to qualify:

- ☐ Professional safety must be the primary function of the position. Collateral duties in safety are not counted.
- ☐ The position's primary responsibility must be the prevention of harm to people, property, or the

environment, rather than responsibility for responding to harmful events.

- ☐ Professional safety functions must be at least 50% of the position duties. BCSP defines full-time as at least 35 hours per week. Part-time safety experience is allowed if the applicant has the equivalent of at least 900 hours of professional safety work during any year (75 hours per month or 18 hours per week) for which experience credit is sought.
- ☐ The position must be at a professional level. This is determined by evaluating the degree of professional charge by which there is a reliance of employees, employers or clients on the person's ability to identify, evaluate and control hazards through engineering and/or administrative approaches.
- ☐ The position must have breadth of professional safety duties. This is determined by evaluating the variety of hazards about which the candidate must advise and the range of skills involved in recognizing, evaluating, and controlling hazards.

Once a GSP has met the above criteria for the CSP, they can fill out an application online by following the instructions provided in Chapter 3, "Application Instructions".

Professional Advancement Mentor Program

Over the years, many certificants encouraged, assisted, or required fellow safety professionals to pursue certification to advance their careers. BCSP has a program that traces the role certificants play in assisting aspiring safety professionals' career development and then recognizing their contributions. Applicants and mentors can participate in this program by completing a Professional Advancement Mentor Program Form and submitting it around the time the candidate's application is submitted. Forms and more information are located at www.bcsp.org.

BCSP | Board of Certified Safety Professionals

Code of Ethics

This code sets forth the code of ethics and professional standards to be observed by holders of documents of certification conferred by the Board of Certified Safety Professionals. Certificants shall, in their professional activities, sustain and advance the integrity, honor, and prestige of the profession by adherence to these standards.

Standards:

1. HOLD paramount the safety and health of people, the protection of the environment and protection of property in the performance of professional duties and exercise their obligation to advise employers, clients, employees, the public, and appropriate authorities of danger and unacceptable risks to people, the environment, or property.

2. BE honest, fair, and impartial; act with responsibility and integrity. Adhere to high standards of ethical conduct with balanced care for the interests of the public, employers, clients, employees, colleagues and the profession. Avoid all conduct or practice that is likely to discredit the profession or deceive the public.

3. ISSUE public statements only in an objective and truthful manner and only when founded upon knowledge of the facts and competence in the subject matter.

4. UNDERTAKE assignments only when qualified by education or experience in the specific technical fields involved. Accept responsibility for their continued professional development by acquiring and maintaining competence through continuing education, experience, professional training and keeping current on relevant legal issues.

5. AVOID deceptive acts that falsify or misrepresent their academic or professional qualifications. Not misrepresent or exaggerate their degree of responsibility in or for the subject matter of prior assignments. Presentations incident to the solicitation of employment shall not misrepresent pertinent facts concerning employers, employees, associates, or past accomplishments with the intent and purpose of enhancing their qualifications and their work.

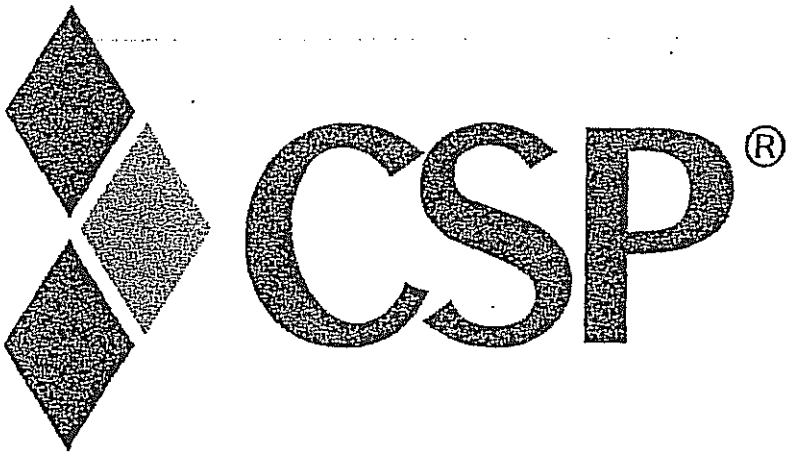
6. CONDUCT their professional relations by the highest standards of integrity and avoid compromise of their professional judgment by conflicts of interest. When becoming aware of professional misconduct by a BCSP certificant, take steps to bring that misconduct to the attention of the Board of Certified Safety Professionals.

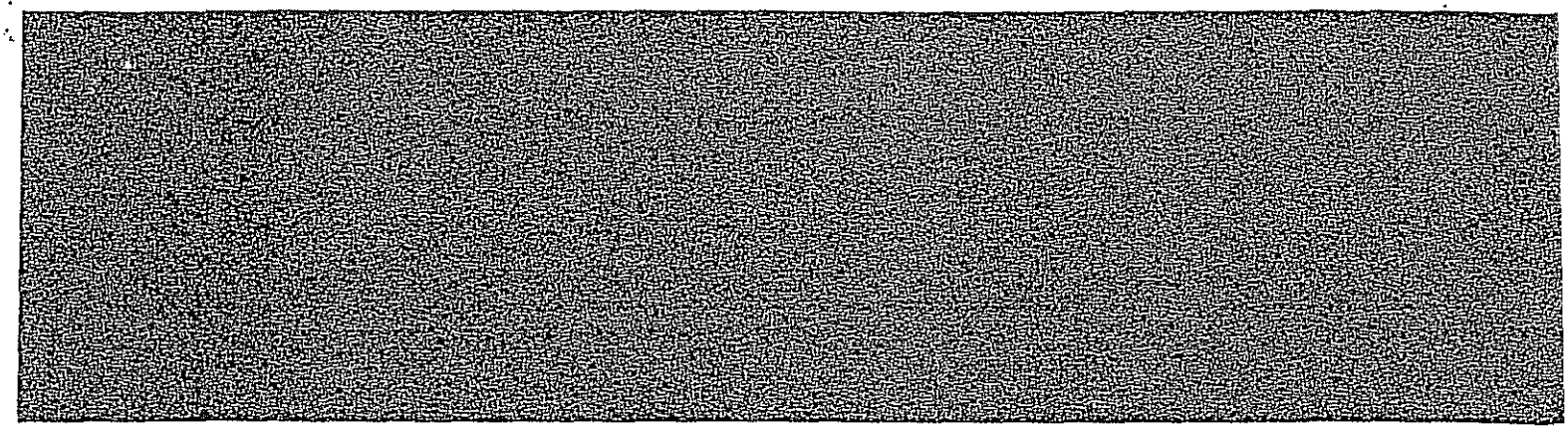
7. ACT in a manner free of bias with regard to religion, ethnicity, gender, age, national origin, sexual orientation, or disability.

8. SEEK opportunities to be of constructive service in civic affairs and work for the advancement of the safety, health and well-being of their community and their profession by sharing their knowledge and skills.

Approved by the BCSP Board of Directors November 2, 2012
Effective January 1, 2013

Notes:





ANSI Accredited Program
PERSONNEL CERTIFICATION

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08/14

EXHIBIT F

In The Matter Of:

Tenezaca v Toll Brothers, et al.

Timothy J. Carlsen, P.E.

December 11, 2014

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IN THE SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - ESSEX COUNTY

- - -

FELICIANO TENEZACA, : NO. ESX-L-1262-11

v. :

TOLL BROTHERS, INC.; :
BIG RIDGE DEVELOPERS, LP; :
COUNTRY CLUB OF THE :
POCONOS; COUNTRY CLUB :
OF THE POCONOS COMMUNITY :
ASSOC., INC.; :
COUNTRY CLUB OF THE :
POCONOS CONDO ASSOC., :
INC.; ANCHOR FRAMING :
CORP.; ANCHOR FRAMING, :
INC.; ABC BUSINESS :
ENTITIES 4-20; JOHN DOES :
1-20 :

- - -

Princeton, New Jersey
December 11, 2014

- - -

Deposition of TIMOTHY J. CARLSEN, P.E., CSP, held at the offices of GOLDBERG SEGALLA, LLP, on the above date at 10:50 a.m., before Dolores M. DeFilippis, RPR-CM-CSR.

- - -

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Anchor Framing

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I-N-D-E-X

EXHIBIT	DESCRIPTION	PAGE
Carlsen-1	Curriculum Vitae of Timothy J. Carlsen, P.E.	6
Carlsen-2	Board of Certified Safety Professionals CSP Exam Blueprint	7
Carlsen-3	Authorization to Disclose and Produce Records	71
Carlsen-4	Complete Guide to the CSP, Application and Examination Information, First Edition, August 2014	93
Carlsen-5	Authorizations to Disclose and Produce Records	181

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(Exhibits Carlsen-1 through Carlsen-5 retained by counsel.)

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(It is stipulated by and among counsel for the respective parties that signing, sealing, filing and certification are waived and that all objections, except as to the form of the question, are reserved until the time of trial.)

- - -

TIMOTHY J. CARLSEN, P.E., 777 New Durham Road, Edison, New Jersey, 08817, after having been first duly sworn, was examined and testified as follows:

- - -

MR. SULLIVAN: Prior to --

MR. CLARK: Can we just press pause while you're doing that.

MR. SULLIVAN: Sure.

MR. CLARK: Can I look at his file --

MR. SULLIVAN: Sure.

MR. CLARK: -- while you're putting the statement on.

MR. SULLIVAN: Sure.

MR. CLARK: Thanks.

THE WITNESS: You're welcome.

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MR. SULLIVAN: Previously all parties had agreed to file dispositive motions by December 12th. Those motions would have been filed after the conclusion of all expert liability depositions.

We've had two days of plaintiff's expert Vincent Gallagher's deposition that is yet to be concluded. My understanding is it will not be concluded until, at the earliest, December 17th.

I have yet to have an opportunity to question Mr. Gallagher in detail. As a result of that, and with Mr. Carlsen's deposition being conducted today, on December 11th, I just wanted to advise all parties that I will be filing my motion for summary judgment once those liability depositions are concluded.

MR. CLARK: I'm just focusing on this deposition right now, so I'm not taking a position on the statement that's just been made. I'm reviewing the expert's file.

(Exhibit Carlsen-1, Curriculum Vitae of Timothy J. Carlsen, P.E., and

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Exhibit Carlsen-2, Board of Certified Safety Professionals CSP Exam Blueprint, are marked for identification.)

EXAMINATION

BY MR. CLARK:

Q. All right. Good morning, Mr. Carlsen.

A. Good morning.

Q. All right. You've been deposed many times before in New Jersey. Correct?

A. I've been deposed before. Yes.

Q. All right. So, you understand all the instructions for a deposition, all the standard instructions?

A. I'd like to think so.

Q. Okay. We have your CV here. We marked it as Carlsen-1. You provided a copy here this morning.

Is this CV accurate and complete as far as your relevant background goes?

A. No. I mean, it's as complete as it says that it is.

With regard to relevant background, there's certainly other parts of my

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career that are not on this CV. It's certainly not thorough, but it's a summary of experience, a summary of training.

Q. Is everything that's on here complete and accurate?

A. Yes.

Q. Looking at the Professional section, do you know what year you became licensed as a professional engineer in New Jersey?

A. 1997.

Q. Did you have to take a test for that?

A. Two tests.

Q. And what were the two tests?

Why were there two as opposed to one? Like, what was the nature of the tests in that regard?

A. For professional licensure in New Jersey, once one qualifies to take what's called the Fundamentals of Engineering examination -- that's the first exam. It's an eight-hour examination taken after you achieve an ABET-accredited four-year engineering degree. That tests you on the fundamentals of engineering: math, science, physics, properties

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and materials and similar topics. It's a general test for all engineering graduates -- or it was when I took it, at least. It's changed today.

And the second examination is called Principles and Practices of Engineering. It's taken in your area of specialty. That's taken after you achieve, in my case, four years of experience, plus a master's degree.

And then there's one other examination, actually. It's on ethics and legal statutes in New Jersey regarding professional engineering.

Q. Did you have to fill out an application to get that license?

A. I'm sure I filled out a number of applications a number of points in time at various stages in that process.

Q. Do you maintain files on, for example, your professional engineer licensure, your Pennsylvania licensure, your New York licensure, and the various documents that you filled out and completed to obtain those certifications or licenses?

Do you keep files or records

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on that?

A. I keep my licenses. I don't believe I have kept any of the applications.

Q. Did you ever keep the applications for a period of time and then later just throw them away, or did you just fill them out and send them in without maintaining a copy?

A. No. I would have kept them for some period of time. But after the license was attained, the only legal document that I would need for practicing as an engineer are my licenses.

Q. And when did you get your New Jersey building inspector license?

A. I don't recall the exact year. But it was probably sometime in or about 2002 or 2003.

Q. And what did you have to do to attain that license?

A. The application process for that included a demonstration of my licensure as a professional engineer, by demonstration of a minimum -- I think it was 96 hours of course work with regard to the building codes in the State of

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New Jersey, including the mechanical codes. And that included two examinations.

Q. Was the course work in connection with schooling at UPenn or Notre Dame or was that separate course work specific to getting that license?

A. Separate course work.

Q. And do you know who provided that course work?

Was that a state entity that provided it or are there outside agencies that do that?

A. It was through the Department of Community Affairs, taught through a local community college.

Q. You graduated UPenn in 1992. Right?

A. Correct.

Q. All right. Were you at UPenn for four years?

A. Approximately, yes.

Q. Okay. And during that time at UPenn, did you also have any jobs in the field of engineering?

A. I did.

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Q. Okay. So, why don't you just talk about your four years at UPenn in terms of what outside work you did, you know, for-money work that you did --

A. Sure.

Q. -- during your time in college.

A. I'll include two categories of work there. One will be work through the university and one will be work while outside the university.

Q. Okay.

A. While at Penn, I was a tutor for calculus and physics for engineering students. It was actually a program through a minority advancement program at Penn that I was an instructor for. I believe it was two years.

And outside of the university, I worked engineering summer work. I worked for a company called ABB Power Automation. That was a company in Edison, New Jersey, where I worked on some computer simulations for them on pumping systems and other calculations in concert with a nuclear power plant operating system that they were putting together.

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I also worked --

Q. I'm sorry. If I may just stop you on ABB.

A. Sure.

Q. Was that just one summer?

A. That was. That was summer of sophmore -- completing sophomore year.

Q. 1990 your CV says.

A. Correct.

Q. Okay. Got it.

What other work during the time at UPenn?

A. Completing junior year, I worked for a company called Roy F. Weston. Roy Weston is an engineering consulting company, where I provided services in the field for them doing environmental hazardous waste response work. With Weston I was -- received OSHA training, including OSHA 40-hour hazardous waste operations training, as well as general construction training, and worked in the field for them doing surveying, field sampling, excavation, some demolition work. And then the following year I worked for them as well completing senior year,

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in which I was involved in similar work, but also designed and constructed with them a pilot plant program in the City of New York for a remediation project that they had.

Q. Any other jobs in the field of engineering during the time that you were at UPenn? Or is it just Roy Weston and ABB?

A. And the work through the university. It would be those three.

Q. Okay. And then how long were you in graduate school? Is that a two-year --

A. That -- it was -- for me, I completed that program in about 15 months.

Q. Okay. And did you live in Indiana during those 15 months?

A. I did.

Q. And during those 15 months, did you also have any outside work?

A. I had inside work at the university. I was paid as a teaching assistant as part of a fellowship. So, I worked at the university for those 15 months teaching courses and co-teaching courses with instructors in various topics related to engineering and science.

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Q. But no work outside the university in the field of engineering during those --

A. No.

Q. -- 15 months?

A. No. I worked -- that degree was 15 months because I worked continually through summers and through breaks.

Q. Okay. What was your first full-time job after you completed Notre Dame?

A. The -- I first began working for Seaview Thermal Systems.

Q. Why did you leave Seaview?

A. The company filed for bankruptcy.

Q. And then why did you leave ENSR Corporation? E-N-S-R.

A. ENSR was acquired by a new parent company who decided to get out of the construction business. So, I with one other worker were the two who eventually closed down the construction end of that business.

Q. And then you went to work for Earth Tech?

A. Correct.

Q. And how long were you there for?

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A. About six months.

Q. And why did you leave there?

A. I got the opportunity with Affiliated Engineering, so I went to work for Affiliated at the time.

Q. Tell us about your work history at Affiliated Engineering from 2002 to present, what your duties and responsibilities have been from that time leading to today.

A. In general, in 2002, I was hired as an engineering consultant, which is my current title today. And in that role, I've provided services to various types of clients. I've provided services to clients in litigation, like this matter, where I've consulted with regard to construction safety. I've provided services to clients inside and outside litigation with regard to matters of general construction, building construction. And at times I've been offered up as an expert to provide expert testimony at times of trial and deposition, like today, for matters for which I've been retained.

Q. This is a personal-injury matter that you've been retained in here. Correct?

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A. That's correct.
Q. And you've been retained by the law firm for the defendant, Toll Brothers, in this case. Right?
A. That is correct.
Q. Have you ever written a report on behalf of a plaintiff in a personal-injury construction matter?
A. Yes.
Q. Can you estimate how many times?
A. No.
Q. In personal-injury construction matters, what percent is on behalf of defendants as opposed to on behalf of injured plaintiffs or injured workers?
A. I don't know percentages. I do more work for defendants than I do for plaintiffs. But I have done work and written reports and testified for both defendants and plaintiffs.
Q. Can we agree that the vast majority of the reports that you have written is where you are retained by defendants in construction personal-injury matters?
MR. PERRONE: Objection.

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THE WITNESS: Yeah. The majority of my reports would be on behalf of defendants because the majority of the clients who hire me are defendants.
BY MR. CLARK:
Q. A majority is greater than 50 percent.
What I'm trying to get is, like, can we say that the vast majority is on behalf of defendants in personal-injury construction cases?
MR. PERRONE: Objection.
THE WITNESS: Again, I can't give you any subjective assessment more than I do more work for defendants than plaintiffs.
BY MR. CLARK:
Q. So, is it about 51 percent is for defendants and about 49 percent is for plaintiffs? Is that a fair estimate?
MR. PERRONE: Objection.
THE WITNESS: Again, if I can't give you a number, any number you give me I won't be able to support or give you a response to other than I don't know.

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BY MR. CLARK:
Q. Did you ever know the answer to that question?
So, what I'm getting at is you've been deposed many times before. Right?
A. I've been deposed before, yes.
Q. Okay. And if we go through any of those other depositions, will you ever answer that question with any more detail than you have today?
A. I may have --
Q. Okay.
A. -- depending on the knowledge I had at that time or the type of work I was doing at that time.
The percentages, if you will, subjectively I know vary month to month, year to year. So, it's possible I answered that question at some point in the past, sure -- differently I should say.
Q. Okay. But you can't answer it today with any more detail than --
So, you don't know.
So, as far as you know, like,

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you sitting here, it could very well be 51 percent is on behalf of defendants and about 49 percent is on behalf of plaintiffs in personal-injury workplace --
MR. PERRONE: Objection.
BY MR. CLARK:
Q. -- construction cases?
MR. PERRONE: Objection.
THE WITNESS: Again, the same answer I gave you before. Subjectively are they even? No. Are there more defendants than plaintiffs? Yes. How much more in any given period of time, I don't know. I don't keep statistics like that.
BY MR. CLARK:
Q. The period of time we're talking about is 2002 to present, from working at Affiliated Engineering.
And, so, the question is since you don't know, then it very well could be that about 49 percent of your reports in cases like this are on behalf of injured plaintiffs?
MR. PERRONE: Objection.
He just said, I think at

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least three times, he can't give you a percentage as he sits here today.
BY MR. CLARK:
Q. You've been deposed a lot before. Right?
A. You've asked me that question three times. I've been deposed before, yes. I don't know what "a lot" is.
Q. Okay. You don't know what "a lot" is?
A. Twice a year doesn't sound like a whole lot to me.
Q. Okay. So, it very well could be 49 percent on behalf of plaintiffs because you don't know --
MR. PERRONE: Objection.
BY MR. CLARK:
Q. -- the percentage?
MR. PERRONE: Objection.
Why do you keep asking the same question when he said he can't give you a percentage?
THE WITNESS: Again, I don't keep statistics, so I'm not going -- you're using

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numbers. I'm not going to use numbers. I can't use numbers. I don't keep statistics.
I do more work for defendants than I do for plaintiffs.
BY MR. CLARK:
Q. But you don't know the numbers?
A. Correct.
Q. Therefore, the number could be 49 percent on behalf of --
MR. PERRONE: Objection.
BY MR. CLARK:
Q. -- plaintiffs in cases like this?
MR. PERRONE: Objection.
Don't guess.
THE WITNESS: It would be just a guess.
BY MR. CLARK:
Q. It would be a guess that it could be?
MR. PERRONE: Objection.
You know, I'm going to use your objection of last week, Jerry, where you said I was badgering the witness because I think I asked him what you considered to be the same question twice, maybe three times.

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This question has been asked, I'd say, at least six or seven, so I'll substitute your badgering-the-witness objection and ask you to please move on.
BY MR. CLARK:
Q. Do you feel that I'm badgering you?
MR. PERRONE: Objection.
I just made the statement. Why don't you move on.
THE WITNESS: I can't answer your question any more differently than you've asked it six times already. I don't know if that's considered badgering or not.
BY MR. CLARK:
Q. Okay. Is it possible that 49 percent of the reports that you have written in cases like this have been on behalf of plaintiffs?
MR. PERRONE: Objection.
BY MR. CLARK:
Q. Is that possible?
MR. PERRONE: Objection.
Don't answer the question.
I'm instructing the witness not to answer the question. So, if you'd like to

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move on, great. If you don't, why don't you call the court or make a motion. But I'm instructing the witness at this point not to answer any further. He's already answered the question to the best of his ability, and I would ask you to please move on.
MR. CLARK: I'm not going to argue with you, but it's clearly a different question. The first question in this area was is there a percentage? Can you give me a percentage? The answer was no.
The pending question is therefore, it could be 49 percent, because he doesn't know. That's clearly a different question. And I think it's inappropriate to direct the witness not to answer the question.
MR. PERRONE: Well, I have, so please move on.
MR. CLARK: Could you just please make a tally or a log in the deposition of all the questions that defense counsel has directed the witness not to answer. Thank you.
BY MR. CLARK:
Q. Have you ever had a job where you

worked full time as a safety manager?
A. It's been part of my full-time responsibilities to be a safety manager. Yes.
Q. And where was that?
A. Part of my work with ENSR Corporation and part of the work I do with Affiliated because I'm responsible for the safety equipment used by our personnel.
Q. All right. Tell me all the companies that you have worked at where you have had safety-management responsibilities.
A. I've had responsibilities at Seaview Thermal Systems, ENSR Corporation, and Affiliated Engineering. If you go back to university, I've had responsibilities at Penn for laboratory safety in the labs in which I did my research. There may be others. But as I sit here, that's what I can give you.
Q. All right. What safety-management responsibilities did you have at Seaview specifically?
A. I was responsible for a number of items, including air monitoring for our workers working in buildings where there were elevated

contaminated levels of benzene and other volatile organic compounds.

I was responsible for the indoctrination training of new workers on site. I was responsible for the safety protocols utilized by operating staff at the facility.

I was responsible for the safe handling of the processed and unprocessed soils at the facility. And I was responsible for safety training documentation for some workers at the site.

There were other duties, but those are the ones that come to mind as I sit here.

And that was during operations. I guess you go back to construction and during construction, I had oversight responsibilities in various capacities during the construction phase as well.
Q. Okay. And what safety-management responsibilities did you have at ENSR Corporation?
A. At ENSR I was tasked as a project engineer and project manager for enforcing our

safety program. I was tasked with writing safety programs with our in-house industrial hygienist for our job sites. I was responsible for assuring that our workers were properly trained. I was responsible for holding our weekly meetings at job sites with our subcontractors and my operation staff. I was responsible for heavy equipment maintenance, which would include the safety of that equipment. I was responsible for the safe handling and management of our nuclear testing equipment.

There are other responsibilities, but those are ones that come to mind right now.
Q. During the time that you have been working at Affiliated from 2002 to present, during that time did you hold any other income-producing jobs?
A. Yes.
Q. And what were they?
A. I do -- or have done in the past in that period of time, the accounting and books for a business and maintenance for a business for which I received a salary.

Q. Would that be a family-type business?
A. That's correct. Yes.
Q. What business is that?
A. My wife's business.
Q. What's that business?
A. My wife's a medical professional.
Q. Is she a doctor?
A. She's a dentist.
Q. Okay. You didn't have any safety-management responsibilities with your wife's business, though. Right?
A. No. Actually, I was responsible in part for their OSHA issues with regard to dental office safety: ventilation, guarding of grinders, similar issues that have come up, eye wash stations. I've had involvement with those. Fire extinguishers, you know, uniform fire code inspections, those type of things, throughout the years. And then I oversaw the construction and safety of the contractor during a remodeling job that we did a couple years back.
Q. Would that have been on behalf of the owner of that job?
A. That was on behalf of my wife, as the

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practice.
Q. So, that was the remodeling of the office?
A. Correct.
Q. Did your wife or the business own the building?
A. Yes.
Q. And did your wife or the business hire the general contractor to do that work?
A. Actually, my wife -- the business is owned through an LLC, not owned by my wife, a separate entity. And the business -- my wife's business hired the general contracttor.
Q. And who owns the LLC that owns the building?
A. I'm the managing member of that LLC.
Q. During the construction, were you the 100-percent managing member of the LLC?
A. Correct.
Q. Well, strike that.
What I meant was were you the 100 percent own --
A. I'm the sole member of the LLC.
Q. That's it.

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You worked at the time of the construction?
A. Correct.
Q. And then the LLC leased the building to the dental practice?
A. Correct.
Q. And you managed construction-site safety on the project. Is that right?
A. We had a --
Q. Is that what you said?
A. We had a professional construction manager.
Q. Okay.
A. I involved myself on a daily basis to assure that the job was running safely for the contractor.
Q. And were you doing that on behalf of the LLC entity that owned the building or were you doing that on behalf of the dental practice, or some mixture of the two?
A. There were two parts to the project. The asbestos abatement part of the job and the foundation work and the structural -- repair to the structure I did on behalf of the owner, the

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LLC. And with regard to the renovation of the dental space I did on behalf of the dental office.
Q. Okay. So, both capacities were on behalf of owners in connection with that construction project. Right?
A. Correct.
Q. Now, was that something you were required to do by OSHA?
A. No.
Q. That is, as an owner, oversee the safety management of the project to prevent injuries to workers?
A. No.
Q. So, why did you do it, then?
A. Because it was in my best interest to do so.
Q. Well, can you explain that in a little more detail, what you mean by that?
A. I have genuine interest --
Q. Because we've been at so many depositions and trial testimony where you say, like, the owner doesn't have to do these kinds of things; but, yet, you did it on your own job.

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So, I'm trying to figure out why.
Because you always say that OSHA is the only -- you know, you do it OSHA and that's it; you don't have to do anything else.
But we know that there are all those consensus standards and industry standards that say that they should do the things that you just described that you did. So, I'm trying to figure out why in that sense.
Because you always say in these cases that, Hey, they didn't do anything wrong because they didn't have to do it, but you did it.
A. First, I don't know that I'll agree with your summary of past testimony.
Q. That's fine.
A. It's obviously very general.
But I oversaw that out of the interest -- general interest and safety. I'm a safety professional and that was an interest that I have. And it was in my best interest and the interest of our contractors to make sure the work was done safely.
Q. And it was also in the interest of

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the workers on the job site for you to do that as well. Right?
A. That's what I just testified to, I thought. It was out of the interest of the workers that I be there.
Q. I think you said contractors. So, I was just trying to clarify exactly what you meant.
A. Okay. It means that the personnel. I mean, I know all the workers. And, yes, it was in the interest of everybody on the job site, including each worker and the contractors.
Q. And anyone from the public that might come in or near the job site, it would also be in the community's interest for you to do that safety oversight role that you did.
Would you agree with that?
A. The business was not open to the public at the time. So, it was simply professionals involved in the work, including the contractors and their workers. So, I didn't have that concern to deal with.
I mean, it wasn't as though we had the outside of the building being torn

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apart, say. It was all interior work, so it wasn't -- there was no public hazardous or public safety issue that arose from these projects.
Q. Largely because of the work that you did ensuring the safety on the project. Right?
MR. PERRONE: Objection.
THE WITNESS: No. Simply it did not involve the public. The business was closed. Signage was outside indicating the business was closed. You know, mail was stopped, that type of thing, and the project went forward.
BY MR. CLARK:
Q. But safety on a project like that could affect the public if it's not done right.
Like, for example, if you're doing asbestos removal and you're tearing it off without the proper protections, and then it could get friable, go into the air, and people that might walk by the job could potentially breathe it in. Right?
A. That is correct.
MR. PERRONE: Objection.
THE WITNESS: That is correct. That could pose a concern for

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neighboring properties. That's right.
BY MR. CLARK:
Q. Or, like, anyone that walks down the street, too, perhaps, the sidewalk in front of the building.
MR. PERRONE: Objection.
THE WITNESS: As a hypothetical, yes.
BY MR. CLARK:
Q. So, it was in the best interest of not only the workers that came onto the site, but any members of the public that might come near the site, it was in their best interest that you manage safety on the project as you did.
Would you agree with that?
A. I guess by default, yes.
Q. Just the one example I was thinking of, you said how you oversaw the asbestos abatement.
So, it's important that that's done right, because you can't get it friable in the air and then people breathe it in.
A. That is correct.
Q. Were there any gas lines to the

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building?
A. Sure. Yes.
Q. Was there any work that had to be done in terms of the gas line, in terms of moving gas line or moving lines or bringing gas to a certain part of the building?
A. Natural gas, no. We had no movement of natural gas lines for that project.
Q. Okay. What gas line did feed the building at the time of the construction?
A. Natural gas feeds the building. That didn't have to be modified. There's compressed gas in dental offices that has to be managed as well.
Q. What's the name of the LLC?
A. It's 229 Charles Street, LLC.
Q. And what is the name of the dental practice?
A. I'm not going to give that to you.
Q. What's your wife's name?
A. I'm not going to give that to you either.
MR. CLARK: Let's go off the record.

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(Discussion off the record.)

BY MR. CLARK:

Q. Is the dental office an S Corp.?

A. As I understand it, yes.

Q. Okay. So, we'll call that for purposes of questions that we just had the dental office corporation. Is that fair?

A. That's fair.

MR. CLARK: Okay. Counsel, were you directing him not to answer those questions that he did not want to answer there?

MR. PERRONE: I did not direct him to not answer those questions.

MR. CLARK: Okay. I just wondered if we had to add those to the list.

BY MR. CLARK:

Q. Do you still work with the dental office corporation?

A. I do.

Q. Do you currently have any safety-management responsibilities at the dental office corporation?

A. I would say yes.

Q. And what are the safety-management

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responsibilities that you have currently at the dental office corp.?

A. General premises safety, guardrail monitoring, handrails, stairways, snow and ice removal, those types of matters. Typical premises concerns.

I do maintain her equipment. So, when it comes time to modify grinders, remove tools or equipment, I'm typically involved in that as well.

Q. Since working for Affiliated, you've had assignments involving engineering investigations. Right?

A. Yes.

Q. And you have had assignments involving construction-defect matters?

A. Yes.

Q. And can you give us an estimation during the time that you worked at Affiliated what percentage of your assignments have involved engineering investigations? Can you give an estimate in that regard?

A. I can't.

Again, with regard to any

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type of work that I do, I don't track percentages. I don't classify the work other than generally and broadly, so I couldn't give you a percentage.

Q. Have you had any safety-management responsibilities at Affiliated?

A. Yes.

Q. Can you tell us what percentage of your assignments at Affiliated have involved construction defects?

A. No.

Q. During any given time during your time at Affiliated, are you able to give any percentage of the amount of time that you spent on safety-management functions?

A. I'm sorry. Can you repeat the question or rephrase it?

Q. Do you want it read back or me to rephrase it?

A. I think rephrasing it. I don't think I fully understood.

Q. All right. You weren't able to give a percentage in terms of how much is plaintiff's versus defense work.

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Do you remember all that questioning?

A. I do.

Q. All right. And you're not able to give a percentage as to, you know, what percentage of your assignments involved engineering investigations. Right? You just testified to that?

A. Correct.

Q. Okay. Are you able to give a percentage during any given time during your time at Affiliated where your work involved safety-management functions?

A. I'm going to ask to clarify the question.

Are you asking me for the percentage of my time currently that I spend on safety-management functions at Affiliated or are you asking me at any point in time have I ever been able to quantify that time?

Q. Well, let's step back this way.

Can you give us a percentage currently of the cases that you work on that are on behalf of plaintiffs versus defendant?

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A. No.
Q. Can you give us a percentage of the cases that you're working on now that involve engineering investigations?
A. No.
Q. Okay. Can you give a percentage of the cases that you're working on now that involve construction defects?
A. No.
Q. Okay. Can you give a percentage now of the assignments that you have that are assignments from insurance companies or attorneys retained by insurance companies?
A. No. I cannot.
Q. Okay.
A. Again, I don't keep those statistics for any reason, for any purpose, on any matter.
Q. When you say "those statistics," what statistics are you talking about?
Are you talking about statistics dealing with what percentage of your work is in any given area?
A. That's correct.
Q. Okay. And is that true during all

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your time at Affiliated from 2002 to present, that you never kept statistics of those things? Is that true?
A. I never kept statistics. At some point in my career I may have tried to estimate those numbers based upon a time frame. But those statistics have never been kept.
Q. Can you try to estimate that now?
A. No. I answered those questions already.
Q. So, you mean you can't estimate it now or you just won't estimate it now?
A. No, I can't.
Q. You cannot?
A. 12 years of a career is pretty long.
Q. Tell me about it.
A. And it's difficult to identify and recall all that's been in that time frame.
Q. Okay. So, did you ever estimate those statistics during your time at Affiliated?
A. At some point I'm sure if asked at a time when I knew or had a better handle -- maybe there's a point in my career when I was doing a certain amount of work or more work in an

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area -- it was easier for me to estimate.
But right now I can tell you that the work I do is -- I can't answer those accurately for you.
Q. Do you have a specific recollection of ever providing an accurate estimate of the percentage of your projects at Affiliated that involved engineering investigations?
Do you have any specific recollection of ever having provided an estimate of that?
A. No.
Q. Same question with respect to construction defects.
Do you ever remember providing an accurate estimate of the percentage of projects that you worked on at Affiliated that dealt with construction defects?
A. I have no such recollection.
Q. Do you have a specific recollection of ever having provided an estimate of the amount of projects or the percentage of projects that you worked on during any given time where professional safety was the primary function of

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the project or position?
Do you ever recall providing any such percentage?
A. I don't recall that.
Q. All right. And is that because you don't keep statistics and information on that, that you would not have been able to provide an accurate estimate of that? Is that true?
A. No. You asked me if I have a recollection. I don't know if I ever testified to it or not, I think is what your question was, if I ever recall giving that information in some form. And I don't recall that, any specific event.
Q. Okay.
A. Again, at times in the past, I may have given numbers, the basis of which would have been formed by the impressions at that time and based upon what I was doing at that time. But I have no specific recollection of when or where.
Q. And you have never kept accurate statistics or records that would have enabled you to provide an accurate percentage of that in the past. Is that true?

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A. That's correct, that there's no way I could ever create such an accurate percentage breakdown of what it is that is done on a daily, weekly, monthly, annual, decade basis. I just don't know.

Q. Okay. So, for the dental office corp. project that we spoke about earlier, you essentially had a safety-management role on that construction project. Correct?

A. It was a self-appointed safety-management role, as I would consider it.

Q. And when did that construction project take place?

A. 2011, 2012, I believe, that time frame.

Q. Okay. And what was the time period of the project where you were undertaking that self-appointed safety-management role?

A. The same time frame.

Right? Is that the question, with regard to that specific project?

Q. Yes. I'm trying to get a sense of how long the project was.

Was it three months, two

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months, a year, a year and a half, two years?

I'm trying to get a fair estimate in that regard.

A. That's a much easier question to answer.

In total, probably about a four-and-a-half-week project: a week and a half with foundation and asbestos and about three, three and a half weeks of demolition and fit-out work.

Q. And did you take off from Affiliated during that time?

A. I did not. I worked a much reduced schedule during that time.

Q. So, approximately how many hours did you put in in that safety-management role during that four-, four-and-a-half-week period? Approximately.

A. I don't know. A couple hours a day for that period of time.

Q. Would it have been seven days a week or five days a week?

A. We worked the job seven days a week.

Q. Okay. You're much better at math

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than I am, so can you just do that calculation for me?

A. Ninety hours, a hundred hours, give or take.

Q. Okay. Do you think the project was safer because you did that safety-management role on the dental office project?

A. I don't know, to be frank, because I don't know that -- the contractors that were hired --

Q. Let me answer it for you.

You don't know because you don't know what would have happened if you didn't do that; like, even if you didn't do that, they might have done it anyway.

A. Correct.

Q. Is that basically what you were going to say?

A. You answered it better than I could have said. Thanks for testifying.

Q. Fine.

But would you like to think that it was safer because you did that and that you in fact did not waste your time?

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A. I'm glad we got through the project without any injuries. That was my end goal.

Q. And you would like to think that you had a role in the no-injury result on the project; you'd like to think that?

A. My ego is not that large. I don't need to think that.

Q. It's not an ego thing. It's just --

Well, let me ask you this.

Do you think you wasted your time in undertaking that role? Do you think it was a waste of time?

A. No. It was not a waste of time.

Q. Why was it not a waste of time?

A. For a number of reasons: One, it was -- I obviously had involvement in the safety, as well as the engineering side of the project and the management side and the construction methods and means. So, all of my involvement was necessary for the completion of the work satisfactorily.

Q. Well, when I was asking, I wasn't talking about the engineering stuff dealing with how it got built and, you know, that sort of

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thing. I was only focusing on the safety-management aspect of your role.
So, you believe that the safety-management aspect of your role during that dental office corp. job was not a waste of time. You agree?
A. Correct.
Q. All right. And why was the safety-management aspect of your job not a waste of time in your mind?
A. Because the job was completed safely. Every worker -- there were no injuries on the project.
Q. And you believe you had an influence on that?
A. Again, whether I did or didn't, all I know is we got through the job safely. The contractors --
Q. Then it wasn't a waste of time?
A. Again, it wasn't a waste of time.
And that experience of being involved in those projects is always good for a safety professional.
Q. Okay. Do you think you had an

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obligation to undertake that safety-management role in any way?
When I say "obligation," I mean any obligation that you can think of, whether it be a regulatory obligation, an industry-standard obligation, or a moral or ethical obligation.
Do you think you had any kind of obligation to do that?
MR. PERRONE: Objection.
THE WITNESS: No. I didn't have an obligation to do so.
BY MR. CLARK:
Q. And when you say "an obligation," what do you mean by that?
A. In terms of the way you described.
Q. Okay. So, when you said "obligation" there, you weren't limiting it to what the law legally, you know, statutorily required you to do; when you used "obligation," you meant any obligation, whether it be a moral, ethical industry standard. Correct?
A. Right. My personal involvement as an owner, say, of the building was not necessitated

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by an obligation to do so, to actually be there, present physically to do that.
Q. Do you think it was the better choice to do that, what you did --
MR. PERRONE: Objection.
BY MR. CLARK:
Q. -- in terms of the safety-management role?
A. I did so because of my qualifications and my experience and my knowledge of the field.
Q. And this may be speculative, because it's sort of like a hypothetical.
But if you didn't have that expertise, do you think that you should have hired someone to perform that safety-management role that did have the expertise?
A. The contractors that were hired had the expertise --
Q. Okay.
A. -- to fill those roles, in my opinion, had I been a layperson without the knowledge that I had. So, each of the contractors, which there were two primary contractors, were duly licensed, had the

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appropriate knowledge, had the appropriate -- again, I can say this from my experience, right -- had the appropriate gear, training, and safety measures in place to do the work safely.
So, even had I not been as informed as I am, I believe that a lay owner would have had a similar -- would not have needed to hire an independent person like myself to fill that role.
Q. Was a general contractor hired for the project?
A. Yes. For -- there were two contractors, a general contractor for the fit-out and a general contractor for the asbestos work.
Q. And then about how many subcontractors total worked on the project?
You can just estimate it. We don't need it exactly.
A. I'm going to estimate ten.
Q. All right. What was the building used for before it was fit out for the dental office corp.?
A. It was previously a dental office as

well. It's a mixed-use building, dental office and a residence upstairs.
Q. How many square feet?
A. The dental office is maybe 900.
Q. And how many square feet total is the building, approximately?
A. About 2,000.
Q. Okay. And did the renovation encompass all 2,000 square feet or just the dental office on the first floor?
A. The first floor and the basement.
Q. Okay. And, so, you were able to complete that project in four and a half weeks or so. Is that right?
A. Correct.
Q. That's pretty fast. Right?
A. That was a great project --
Q. Yes.
A. -- on a good schedule.
Q. While at Affiliated did you ever have any assignments related to safety management on construction projects, that is, where you performed a similar role of safety management like you described at the dental office corp.

project?
A. Being hired specifically as a safety manager through Affiliated Engineering?
Q. Yes.
A. No.
Q. While at Affiliated did you ever have an assignment where you had to develop a safety program?
A. You know, I don't recall.
Q. So, as you sit here today --
A. Actually, no. The answer is yes.
Q. Okay.
A. I have done that work. Yes.
Q. All right. Can you explain that, like, how many times, how many projects, what it was?
A. One comes to mind. A construction company doing solar panel installation asked for our company's input with regard to a safety program. And I provided input for that safety program.
Q. Approximately when did that occur?
A. I don't recall. I would say sometime in the last six years.

Q. Do you have a copy of that safety program?
A. I do not.
Q. Do you remember the company?
A. It was called American -- no. It was called Green Energy Systems.
Q. So, you were involved in developing the workplace safety manual of Green Energy Systems?
A. Yes.
Q. And did that deal with fall-protection issues?
A. It did. There's all -- it's all flat roof work.
Q. What did you do specifically in connection with that project?
A. Wrote part of the program.
Q. Dealing with fall protection?
A. I don't recall. I believe so.
That's the -- there were two primary concerns -- or three primary concerns: rigging and lifting, fall protection from the flat roofs, and then the electrocution potential for DC energy, which is what solar panels create at high

voltages. So, it was those three aspects.
And my -- I don't recall my exact involvement, but I do recall being involved in it.
Q. Is that company in New Jersey?
A. It is.
Q. Are they still around, do you know?
A. They're out of business.
Q. They went out of business?
A. When the solar panel market imploded, so did they.
Q. Okay. So, when you did their fall protection section of their manual, what did you put in there?
A. It was based around Subpart M of OSHA with regard to working on flat roofs, perimeter flagging systems, controlled access zones, typical things for flat roof work.
Q. So, do you think Affiliated -- we can get a copy of that safety manual? Do you think it's in the computer system still?
A. Even if it were, it would be owned by the company that purchased it from us, if you will, that I provided consulting to. We wouldn't

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be able to produce that for you.
Q. Well, we could deal with that.
But do you think it exists?
Like, let's say --
Do you remember the name of the guy, the president of the company?
A. I don't.
Q. Well, if he called you up and said, Hey, can I get a copy of that, do you know, would Affiliated be able to pull that up from the computers?
A. I doubt it, because it was provided to them.
Q. And do you know how long ago that was that you did that?
A. I believe it was sometime in the last six years.
Q. Okay. So, other than input into that safety manual for Green Energy Systems, can you recall any other instances where you have had an assignment at Affiliated Engineering where you were asked to develop a written safety program?
Can you think of any other instances?

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A. I don't recall specifically anything other than that.
Q. Approximately how much time did you put into that Green Energy Systems manual project?
A. I don't recall.
Q. Would you still have the billing records for that?
A. I don't know.
Q. "You" being Affiliated.
A. I don't know.
Q. Was that, like, a month-long project, that you devoted a month to that?
A. No. It wouldn't have taken that long.
Q. You think probably just a few hours or --
A. Again, I don't recall. If I could give you a better answer, I would. It wasn't a month.
Q. I don't want to badger you. I'm just trying to get some sort of an estimate. That's all.
A. Again, I don't know.

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Again, to write any safety program with regard to flat-roof fall protection, it's probably a few hours to a few days at most.
Q. All right. And when you wrote that section, did you just, like, take the OSHA standard and just kind of pop that right in there, or did you do something more?
A. I don't recall specifically how I went about doing it. It would have been based upon OSHA Subpart M. So, certainly all the elements of Subpart M applicable to the work would have been included.
Q. At a minimum?
A. (Indicating.)
MR. PERRONE: Objection.
THE WITNESS: It would have been included.
BY MR. CLARK:
Q. At a minimum, question mark?
Like, OSHA is a minimum standard. Right?
MR. PERRONE: Objection.
THE WITNESS: OSHA is the industry standard for that work. So, it would

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have included that, yes.
BY MR. CLARK:
Q. Well, I know we've done this before.
But when you say "the industry standard," are you saying it's the only industry standard?
A. It is the industry standard for that work.
Q. Let me ask you a question.
When you took the test to be a Certified Safety Professional --
By the way, did you take a test?
A. Yes, I did.
Q. All right. Did you fill out an application?
A. Yes.
Q. All right. And are you in fact a Certified Safety Professional by the Board of Certified Safety Professionals?
A. I am.
Q. And there's nothing inaccurate on your CV about that?
A. That's correct.

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Q. And all the information you submitted to the Board of Certified Safety Professionals in your written application, was it all correct and accurate?
A. Of course.
Q. And you did not misrepresent anything in there?
A. Correct.
Q. Would you have any problem with us getting a copy of your application from the Board of Safety Professionals?
A. I would.
Q. Why?
A. You're not entitled to it.
Q. Well, but why as you sit here would you have a problem with us getting that?
A. I don't see any need for me to present that for any purpose.
Q. Okay.
A. The Board of Certified Safety Professionals found my application, my test scores, my experience to be suitable.
Q. And you stand behind everything you put in that application?

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A. Absolutely.
Q. Okay. And everything you put in that application is true and correct?
A. I think I just answered that. Absolutely.
Q. Okay. But you don't want us to see the application.
Is that what you're telling us?
A. You do not need to get a copy of any application for any of my societies, my licenses, my memberships, anything. You do not.
Q. Well, you say I don't need to. That's a different question.
The question very simply is you don't want us to get it. Right? You don't want us to see that?
A. I do not feel obligated to give you the permission to obtain that application. That's correct.
Q. Okay. And that's because you're concerned about what might be in there in relation to what you've testified to here or previously?

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MR. PERRONE: Objection.
THE WITNESS: No.
BY MR. CLARK:
Q. Okay.
A. I don't think I need to give you any further explanation.
Q. And is that because you don't have any further explanation?
A. There's no need for a further explanation.
Q. Well, there is if I ask you in a deposition.
A. I've given you the most complete answer I can give you. No. I will not give you permission to acquire my application to the Board of Certified Safety Professionals.
Q. Okay.
A. I won't give you authority to obtain any of my applications for anything that I've done.
Q. And one might say that's because there might be a question about what's in there as an explanation.
Do you have any other

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explanation as to why you don't want that other than you just don't want it?
MR. PERRONE: Objection.
THE WITNESS: It's not a publicly available document. It's between the board and me. And there's no reason for you or anyone else to acquire it.
BY MR. CLARK:
Q. Well, let's just take hypothetically. Let's talk about it hypothetically for a bit. Let's remove you from the scenario. Let's just take -- we'll call him expert X. Okay?
Let's say expert X is offered as a safety expert in a workplace safety case. Okay? And let's say that expert X, when he is asked about his qualifications in front of a jury who has to determine expert X's credibility, says that, Part of my credentials and part of the reason I should be able to testify as an expert is because I am a Certified Safety Professional by the Board of Safety Professionals.
And let's assume for the hypothetical that expert X misrepresented his qualifications and misrepresented things like

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what percentage of his work was as a safety-management function during a relevant time period. Let's say that expert X puts on the application that a certain percentage was that. And let's say expert X later testified that he doesn't know what the percentage was. And let's say that expert X misrepresented his qualifications in order to get that certification. Let's assume that that's the case.

Don't you think a jury who is determining that expert X's credibility and a judge who is determining whether or not he should allow expert X to testify as a safety professional, don't you think they should have the benefit of the knowledge that the information that was provided to the board was inaccurate or falsified and that's how he got that certification?

MR. PERRONE: Objection.

BY MR. CLARK:

Q. Don't you think under that scenario or hypothetical the judge or the jury should have the benefit and be entitled to know that in

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determining their assessment of that expert X?

MR. PERRONE: Objection.

THE WITNESS: I don't know that I understand your question.

However --

BY MR. CLARK:

Q. Okay. I'll clarify it, then.

A. Okay.

Q. I am a ship captain. Okay. And I have all the certifications of a ship captain. But I falsified the information I gave to the ship captain certification board to become a ship captain.

Don't you think someone who is trying to determine whether they should believe what the ship captain expert is saying should be entitled to know whether or not that ship captain falsified the information to become a certified ship captain?

MR. PERRONE: Objection.

THE WITNESS: Just let me understand.

If I understand you correctly, it's very offensive what you're

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implying.

Second, you are implying that the application process to a board such as the Board of Certified Safety Professionals is somehow corruptible. And, in fact, what you're imposing is obviously something along the lines of a criminal proceeding.

Am I incorrect here?

BY MR. CLARK:

Q. Are you incorrect in what?

A. Am I incorrect in understanding that you're implying that there's a fraudulent possibility and that the board process for BCSP is corruptible and in fact is not to be relied upon under any circumstance?

Q. First of all, I'm not answering questions at a deposition today. I'm just asking you questions. And I'm not --

MR. PERRONE: And answering some of them.

BY MR. CLARK:

Q. And I'm not implying anything.

I am simply asking you a very simple question, which is, if expert X at trial

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holds herself out as a Certified Safety Professional by the Board of Certified Safety Professionals and expert X provided incorrect or inaccurate information to the board and had the board known that information was incorrect, they would not have certified expert X, don't you think the judge or jury should be entitled to know that?

MR. PERRONE: Objection.

THE WITNESS: If the board has a proceeding against me for a fraudulent application, that's between the board and me. If that becomes a problem between the board and me, then that information may be something that's discussed.

But as I sit here here today, your implication is offensive to me.

BY MR. CLARK:

Q. But, nevertheless, the question remains unanswered.

If expert X holds herself out as an expert in the field of construction-site safety and part of that holding herself out as an expert is that they have a certification from the

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Board of Certified Safety Professionals, don't you think the judge or jury should be entitled to know what information was provided to the board to get that certification?
MR. PERRONE: Objection.
THE WITNESS: No.
BY MR. CLARK:
Q. Okay. That's fine. If that's your answer, got it, no problem.
A. That means that the person who -- that means that this certification is not recognized in the industry. That's what it would mean. And that's not the case.
Q. Well, do you hold yourself out as an expert in the field of construction-site safety?
A. I do.
Q. And is part of the basis for your holding yourself out as such an expert that which is listed as the fourth item -- fifth item on the Professional section of your CV, which is Certified Safety Professional?
Is that part of the basis for your holding yourself out as an expert in that field?

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A. No.
Q. It's not?
A. If I didn't have that, I would still consider myself to have expertise in construction-site safety. It's not my ability to testify as an expert in construction, which I have prior to and after this certification. They're independent. It is an additional qualification. It's not why I'm able to testify as an expert in this area.
Q. Well, I didn't say why in the sense of that's it. I said is that part of it. And I think you answered that by saying it's a qualification.
A. As of today, it's part of my qualifications. Without it, I'm still qualified to testify with regard to construction-site safety matters.
Q. Do you want to stipulate today that you will not, moving forward in this case, tell anyone, including a judge or a jury, or -- hold yourself out as a Certified Safety Professional?
Do you want to stipulate that that's going to be removed from your CV in the

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case and that would end the inquiry?
MR. SULLIVAN: Objection.
BY MR. CLARK:
Q. Do you want to do that?
MR. PERRONE: Objection.
THE WITNESS: Of course not.
MR. CLARK: Okay.
(Exhibit Carlsen-3, Authorization to Disclose and Produce Records, is marked for identification.)
BY MR. CLARK:
Q. I've marked as Carlsen-3 an Authorization to Disclose and Produce Records to the Board of Safety Professionals. That's where you are giving the board authorization to disclose your records, including your completed application, your testing documents, results and certifications. I'm going to provide that as an exhibit at the deposition and ask that you execute that authorization form. I'll provide that to Mr. Perrone.
And, again, just so we're clear, as you sit here today, you refuse to execute that authorization. Correct?

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MR. PERRONE: Objection.
He did not say he refused to execute this authorization that was just provided to me.
I will represent to you, Jerry, that I will take this under consideration and I will respond appropriately to your request for an authorization.
MR. CLARK: Can you just please read back the pending question.
(Pertinent portion of the record is read.)
MR. PERRONE: Objection.
THE WITNESS: I'll discuss it with my client whether or not that's meritorious or not.
BY MR. CLARK:
Q. What will you discuss with your client? What are you going to ask him?
A. The exhibit you just passed across the table.
Q. Okay. Well, here, take a look at it. I'll ask you to take a look at Carlsen-3.
(Pause.)

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A. Okay.
Q. All right. And, so, will you sign that?
A. I'll take it under advisement with my client.
Q. And what will you ask your client?
A. They're matters that are not privy to you.
Q. Why? Why would they not be privy to me?
A. Conversations with my client.
Q. You can take however much time you need and have a conversation with him now.
A. I'm not prepared to have that conversation today.
Q. What would you need to have that conversation, to prepare you?
A. Mr. Clark, at this point in time I don't know. I'm just not prepared to execute this at this point in time unless I discuss it further with my client.
Q. You could discuss it with him. Go ahead.
MR. PERRONE: Jerry, I will

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look at the authorization that was just handed to us, you know, 20 seconds ago and, as I said, I will respond appropriately to you. But we're not going to do it right now, and I'm not going to take a break right now to do it.
MR. CLARK: Okay. Can you please read back the pending question.
(Pertinent portion of the record is read.)
THE WITNESS: Time.
BY MR. CLARK:
Q. How much time?
A. I don't know.
Q. Do you have a concern about what is in your application?
A. No. I'm still offended by the implication of your questioning along this line. And I don't believe that anything anybody asks for they should get.
Q. If an employee fell from a broken ladder and sustained a fractured arm, in evaluating the management system in place when the accident occurred, which is considered a root cause? A, the ladder had a broken rung; B, the

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ladder's repair log was not attached to the ladder; C, the employee was not trained in ladder use and how to recognize unsafe ladder conditions; or, D, the maintenance employee did not inspect the ladder before issuing the ladder to the employee.
MR. PERRONE: Objection.
Are you reading from something?
MR. CLARK: Does he need it in front of him?
MR. PERRONE: I think so, Jerry. I mean --
MR. CLARK: That's fine. It's on page 15.
MR. PERRONE: It's a compound question. I don't know what you're reading from.
Maybe what you should do --
MR. CLARK: No. It's a multiple-choice question.
MR. PERRONE: Okay. Maybe what you should do, though, is identify for us what you're actually reading from.
BY MR. CLARK:

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Q. Go ahead. What's the answer to that?
MR. PERRONE: Well, wait a minute. What are you reading from so I can look at it also and what page?
You don't want to identify it?
MR. CLARK: I'll tell you what. Hand it to me. I'll get you to the page.
MR. PERRONE: I'd like you to identify it so we know what we're doing here.
All right. I'll identify it, then, if Jerry doesn't want to.
Do you want to identify it, Jerry, or not?
MR. SULLIVAN: Has it been marked?
MR. PERRONE: No.
MR. CLARK: There's nothing to mark or identify.
Do you need the question read back? If you do -- it's right there. It's number one on page 15.
MR. PERRONE: Let me do it.
Mr. Clark appears to be

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reading from something that's identified as the Complete Guide to the CSP Application and Examination Information, dated first edition August 2014. It appears to be some kind of examination sample questions. He appears to be reading question three from page 15.
BY MR. CLARK:
Q. It's question one.
Are you ready to answer that question now?
A. Are you asking me to take a quiz during my deposition? Is that what you're asking me?
Q. Do you need the pending question read back?
A. I just want to understand the nature of the question. This is a quiz now that you'd like me to take?
Q. Do you need the pending question read back?
A. Is it question one on this page 15?
Q. Do you have any problem --
Let me withdraw the question without prejudice.

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Do you have any problem with us getting your test results from the Certified Safety Professionals test?
A. Yes. You're not entitled to any tests of any part of my career.
Q. All right. I now want to reinstate the previous question which was not answered.
Do you need it read back?
A. I can read question one, if that's the question you're asking me.
Q. Yes. I was reading off that. So, if you want to do it that way, or I can read it back into the record.
A. You're asking me to provide you an answer from this multiple-choice test?
Q. I'm asking you to provide an answer to the pending deposition question, which I can restate if you want me to.
A. So, give me time to read, if you will, the background for this sample test and I'll give you an answer to your question.
(Pause.)
MR. PERRONE: Take all the time you want to answer the question. And if you

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have to go back and look at anything, you can feel free to do so. This is honestly --
BY MR. CLARK:
Q. Here, I have the manual --
MR. PERRONE: Do you want him to take a test, Jerry? Is that what you're doing?
BY MR. CLARK:
Q. Do you need help? I mean, here, we have Scaffolding Use in the Construction Industry.
Do you need some books to look at to answer the question?
A. Mr. Clark, allow me to please read what this document is you've asked me about so I can understand the nature of the question and the nature of the document.
Q. Have you ever read that document before, any similar document?
A. I've never read this document before this moment.
Q. Any similar document?
A. As I sit here, I don't recall.
Q. Okay.

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MR. PERRONE: All right. Let's take a break. We're going to take a break. The witness is going to take his time, study the document that Jerry has placed before him, and he'll answer the question.
MR. CLARK: Can we just note the time where the question was asked was at 12:13 today, the pending question that was asked.
MR. PERRONE: That's fine.
And why don't we also note that next time I show up for Mr. Gallagher's deposition, I'll bring him a multiple-choice test and let's see how he does.
You'd have no objection to that; would you, Jerry?
MR. SULLIVAN: Are we on the record or are we --
MR. PERRONE: We're on the record, yes, I assume.
MR. CLARK: I think our time best spent today is in asking Mr. Carlsen questions and getting responses from him.
MR. PERRONE: Okay.
MR. SULLIVAN: Are we going

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to break now?

MR. PERRONE: Yes. Let's take a break.

(A short recess is taken.)

(The following was read back by the court reporter:

"Q. If an employee fell from a broken ladder and sustained a fractured arm, in evaluating the management system in place when the accident occurred, which is considered a root cause? A, the ladder had a broken rung; B, the ladder's repair log was not attached to the ladder; C, the employee was not trained in ladder use and how to recognize unsafe ladder conditions; or, D, the maintenance employee did not inspect the ladder before issuing the ladder to the employee.")

MR. PERRONE: Objection.

And I'm going to direct the witness not to answer the question because this appears to be a question from an examination sample item on page 15 of a document that we just identified, the Complete Guide to the CSP.

I don't think it's proper to

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present a quiz to an expert during a deposition when the focus of the deposition is to ask him about the opinions as set forth in his report, which he, of course, will answer every question you want to ask him with respect to his opinions in this case. But I think it's improper to present a witness with a test and ask him to take a test during the course of a deposition.

(Off the record.)

BY MR. CLARK:

Q. Okay. Are you going to follow the direction of Mr. Perrone and not answer that question?

Sometimes experts, especially experts who are confident in their positions and confident in their field of expertise, will say, That's okay, Mr. Perrone, I can go ahead and answer this question.

What are you going to do?

A. I'm going to follow his guidance.

Q. Okay. And are you able to answer that question? Do you know the answer to that question, or you don't know?

A. I'm not going to answer that because

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I think that is contrary to the guidance given to me.

MR. CLARK: Okay. Can you please read back the pending question.

(Pertinent portion of the record is read.)

MR. PERRONE: Objection.

THE WITNESS: You want a different answer than I gave the first time?

BY MR. CLARK:

Q. Oh, I'm sorry. That's the question that you did not answer -- well, that's the second question you did not answer.

MR. PERRONE: He did answer it. He said he's not going to answer it.

THE WITNESS: She didn't read back my answer.

(Pertinent portion of the record is read.)

BY MR. CLARK:

Q. Okay. So, you're not going to answer that question, meaning the last question?

A. Correct.

Q. Okay. Do you understand that in a

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deposition, unless you're directed by your -- well, he's not even really your attorney.

But unless you're directed by counsel that has retained you, unless you're directed by him to not answer the question, do you understand at a deposition you have to answer the questions?

A. I do.

Q. Okay. So, since he did not direct you to not answer that question, please go ahead and answer it.

MR. PERRONE: Objection.

Don't answer that question. It's the same thing.

BY MR. CLARK:

Q. Is there --

MR. PERRONE: He's not going to take a test today, Jerry. You've obviously asked for the number of the judge. I have no problem with you calling the judge. And that's fine. I have no objection to that.

But at this point I'm telling him not to answer the question because he did not come here to take an examination.

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MR. CLARK: Is there a basis to not answer the question? Is there a privilege being asserted?
MR. PERRONE: The basis is I believe it's improper to ask an expert witness who is here to offer opinions with respect to his report to take a test that you have presented to him.
MR. CLARK: Is there a privilege being asserted to the pending question?
MR. PERRONE: No. It's not a privilege. No, Jerry, it's not a privilege.
MR. CLARK: And we can agree there's no previously entered court order limiting the questioning of this witness. Right? I mean, we can stipulate to that?
MR. PERRONE: Yes. There's no court order entered limiting the questioning of any witness, including your witnesses.
But I don't think you'd appreciate me coming with a test for Mr. Gallagher next week either.
(Off the record.)
BY MR. CLARK:

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Q. Are you ready for another question?
A. Yes.
Q. Okay. In the development of an incident data collection and management system, what is the most important first step? A, to differentiate between human error and design error; B, to define the subsequent use of the data; C, to establish accident reporting responsibilities; or, D, to codify data to conform to existing data sources.
What's your answer to that question?
MR. PERRONE: Objection.
Don't answer the question.
It's the same thing. You're just reading off your test.
MR. CLARK: Is there a privilege being asserted?
MR. PERRONE: No, Jerry. I already told you he's not here to take a test. And all you're doing is you're reading in examination sample items from a test.
You have a call to the judge. If the judge orders him to answer the questions,

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then of course he's going to answer the questions.
But I believe it's proper to object and instruct the witness, who is not here to take a test, to then answer your questions that are just taken from a test.
BY MR. CLARK:
Q. Are you able to answer that question? Do you know the answer to it, or you're not sure?
A. I know the answers to your questions.
Q. You do?
A. I just am not here or prepared to take a test.
Q. Okay. I just want to get your answer to the previous question correct, because you had your hand covering your mouth and I'm not sure we got it.
Are you able to answer that question? Do you know the answer?
A. I do.
Q. Okay. And, similarly, do you feel that you know the answer to the other multiple-choice question dealing with the hypothetical of the employee who fell off the

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ladder and broke an arm?
A. I do know the answer to that question as well.
Q. Okay. Great. Thank you.
So, we'll just wait to hear from the judge to compel you to answer those two questions, unless you just want to go ahead and do it. As I said, some experts, particularly ones who are experienced and have been around the block before, would say, It's okay, Counsel, I can go ahead and answer the question.
MR. CLARK: So, we're off the record, I guess, unless someone wants to say something on the record.
- - -
(Luncheon recess.)
- - -
BY MR. CLARK:
Q. So, what is your answer to the hypothetical question dealing with the employee that fell from the broken ladder and fractured his arm?
A. The answer would be letter C.
Q. And can you explain that, why you say

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that's the right answer?
A. That's the correct answer.
Q. Is there such a thing in the field of construction-site safety called a root cause analysis?
A. There is.
Q. And what is a root cause analysis?
A. It's an analysis that typically goes through an incident, either one resulting in injury or not, that breaks down in subsequent layers, if you will, all the direct and indirect causes of that event.
Q. And under this hypothetical, the root cause there would have been that the employee was not trained in ladder use, as compared to the other choices?
A. The question asks for the management system root cause or a root cause. Letter C is the appropriate answer.
Q. And how about the next question dealing with the development of an incident data collection and management system, what is the most important first step? What is your answer to that?

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A. It would be B, to define how one wants to use the data that you collect so it's meaningful.
Q. And how about question seven dealing with construction sites frequently having multiple companies on a single work site and what is the first step for ensuring that owners, prime contractors and subcontractors work together to achieve a safe work site? What is the answer to that?
A. The answer would be B.
Q. Do you agree with that answer?
A. I do.
Q. Wouldn't the first step, though, be to select competent contractors, and that would take place before contracts were reviewed?
I know you say B is the first -- or probably the best answer to the choices given.
You think B is the best answer to the three choices given. Right?
A. You asked me for the answer to question seven. The answer -- my answer would be letter B.

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Q. Okay. But taking away those choices, what if choice E was to select safety-competent contractors? Do you think that would be a better answer than B?
A. No. Because the question asked was the first step to ensure that everyone works together. And that is across businesses, if you will.
Q. But I guess that also assumes that the workers have already been selected, the contractors have already been selected.
A. That's the question that's asked, yes.
Q. Okay.
A. The question presupposes that you have selected all of your contractors. And your owner is set, obviously.
Q. But you do think it's important, though, when we talk about construction-site safety for safety-competent contractors to be selected. Do you agree with that?
A. Contractors need to be safe. That is one selection criteria for selecting them.
Q. When you worked on the dental corp.

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project, were you involved in selecting the general contractors?
A. I was.
Q. Okay. And did you take any steps to interview them or look into their safety procedures or their safety competency before you hired them?
A. I interviewed all three and all three were found to be competent with regard to safety.
Q. Did you look into their workers' compensation experience rating at all?
A. I don't believe I did, no.
Q. Did you do a search on OSHA's website to see if they had prior incidents?
A. I don't recall if I did or did not.
Q. Is it important for safety-competent contractors to be selected on projects like that?
A. It's always important. But it may not be the only criteria that one uses. It may affect how you manage the project based upon the contractor's history.
Q. Did you review this document?
MR. CLARK: Why don't we mark this.

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(Exhibit Carlsen-4, Complete Guide to the CSP, Application and Examination Information, First Edition, August 2014, is marked for identification.)
BY MR. CLARK:
Q. So, we've marked as Carlsen Number 4 the Complete Guide to the CSP. And it appears to be a 28-page document. The last numbered page ends at page 23 and then after that there are some Notes pages.
Did you review this document before answering these questions, questions one, two, and seven?
A. I read the page numbers up to your first question.
Q. Okay. Did you read anything after?
A. I did not.
Q. Did you notice that the answers were two pages later, on page 17?
Did you look at --
A. How did I do?
Q. No. I'm just asking, did you know the answers were on that page?
A. After I selected my answers, I

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recognized when I turned to page seven that the correct answers were also listed there.
Q. Okay. So, you did see where the correct answers were before you just answered them. Right?
MR. PERRONE: Objection.
That's not what he said at all.
THE WITNESS: I answered the questions. And as I turned the page to look at seven for you, I noticed we have correct answers here.
BY MR. CLARK:
Q. And you did that before you answered the questions on the record. Right?
MR. PERRONE: Objection.
That's not what he said.
BY MR. CLARK:
Q. I thought I saw before the break that you were looking at page seven and looking at the box on the left of page 16 --
A. I'm sorry.
Q. -- which has the answers.
MR. PERRONE: Objection to

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what you saw.
THE WITNESS: What I --
BY MR. CLARK:
Q. My question --
MR. CLARK: Can I ask a question before it gets --
MR. PERRONE: Of course. I'm likely to object.
BY MR. CLARK:
Q. So, my question is did you look at the box of answers on page 16 before you answered the questions one, two, and seven on the record here moments ago?
A. In terms of time frame, yes. I selected my answers --
Q. That was my question.
A. -- to your questions prior to recognizing that we had answers on the top right corner of page 16.
Q. Got it. Okay.
While at Affiliated have you ever had an assignment to perform a workplace assessment to identify hazards on a construction site by way of preventing injuries on a

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construction site, as opposed to, you know, responding to an injury that already happened?
A. I don't understand your question.
Q. Well, when you worked at Affiliated, did you ever have an assignment where you had to assess a workplace to identify hazards to prevent workers from getting injured? Did you ever do that?
A. That is the -- that is the sole reason for the retention? Is that what you're questioning?
Q. In this case, the injury happened and you get retained years later. Right?
A. In this case, yes.
Q. All right. And you've had many cases like this where you're retained as an expert on a construction-injury case, like, for example, the Fernandes case.
Remember the Fernandes case, Rolando Fernandes?
A. Now that you show it to me, yeah, that's familiar.
Q. So, in these cases you're retained after the fact of the injury. Right?

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A. Correct.
Q. All right. So, have you ever had an assignment at Affiliated where you had to go to a work site and do a job hazard, you know, analysis or workplace assessment to identify hazards before an injury happens to prevent the injury from happening?
A. I've done that as part of my engagements with Affiliated, yes.
Q. Can you give any details on that as to when or what jobs they were?
A. Sure. I mean, I'm involved in a number of projects that have nothing to do with litigation where, as the engineer, I'm involved with scaffold-safety matters, fall-protection matters and the like and, as part of my engagement, providing consultation services to the -- those companies with regard to how work should proceed safely.
Q. Can you think of any particular example in that regard?
You gave one example on the previous question dealing with Green Energy Systems where you say you helped craft their

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safety manual.
Can you give any specific example where you have been assigned a project of going to a job site and doing a job hazard analysis to prevent injury to workers?
A. My answer I told you is as part of an engagement for work I've done that role.
There are -- there is a project currently in South Jersey which I'm involved with where there's scaffolding being used for demolition and reconstruction. As part of my involvement I've provided guidance to my client with regard to safe scaffold erection and usage.
With regard to another project for a different client in Jersey City, I designed with them a self-supporting five-story scaffold system and the fall protection for that system when used for repairs on that building.
That's part and parcel to my engagements in a lot of matters that are not litigated.
Q. So, you gave the one particular example in South Jersey.

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What's the name of that project?
A. I can't disclose that.
MR. CLARK: Are you directing him not to answer that question?
MR. PERRONE: No, I am not.
BY MR. CLARK:
Q. Okay. Why can't you disclose it?
A. Because of the confidentiality agreement with my client.
Q. Any other -- well, can you give the name of your client?
A. No.
Q. Is the client a developer?
A. It is, yes.
Q. Okay. Any other particular examples where you have gone on to a job site and done a job hazard analysis to prevent injuries to workers?
A. Actually performed a JHA with Affiliated? I don't believe I've completed a JHA for a contractor in that -- as part of Affiliated engagements.
Q. And by "JHA" you mean -- that's an

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acronym for job hazard analysis. Right?
A. That was the acronym for the words you used. Yes.
Q. Okay. And when did the secret South Jersey project start?
MR. PERRONE: Objection.
THE WITNESS: My retention in that began sometime in 2013 and it's ongoing.
BY MR. CLARK:
Q. You talked about how at the dental corp. project that you had a safety-management role over the project.
My question is have you ever been assigned any similar projects at Affiliated where your job was to manage safety oversight on a construction project?
A. You've asked that question earlier. The answer is no.
Q. How many work assignments or projects do you get per year at Affiliated?
A. I don't know.
Q. Can you estimate or approximate that?
A. I cannot.
Q. Did you speak with Mr. Perrone at all

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during the break about the deposition?
A. I asked him where the bathroom was.
Q. Well, when I say speak to him, I mean speak to him about the case, the questions or any of that stuff.
A. I did not.
Q. Did he help you answer the test questions?
A. No.
Q. What percentage of your assignments at Affiliated are in the area of personal-injury litigation where you are being asked to respond to harmful events or injury events?
A. I don't know.
Q. Did you ever know that at your time at Affiliated?
A. I don't recall.
Q. Over the past ten years, can you give us an estimate of what percentage of cases or projects that you worked on at Affiliated did not involve litigation?
A. Two things: One, I don't know percentages of anything, as we've discussed earlier; second, it is not in litigation. I

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wouldn't refer to it as a case.
MR. CLARK: I'm sorry. I didn't get the last part of that.
(Pertinent portion of the record is read.)
THE WITNESS: You asked me how many cases are not in litigation. I just call it a project.
BY MR. CLARK:
Q. Let me, like, clarify the question, then.
Over the past ten years, what percentage of your projects at Affiliated did not involve litigation cases?
A. I don't know a percentage.
Q. Okay.
A. And, again, you use the word "cases." A case to me implies it's something litigated. It would just be a project.
Q. Right. I'm trying to figure out. You know, some of your cases are lawsuit/litigation cases and some are other consulting projects. And I'm trying to get an estimate of what percent would be cases that are

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not involved in litigation, were there other consulting cases. That's the nature of the question.
A. Okay. I don't use the term "case" in any of my work. That's why I made the clarification.
Q. Can you give us any examples of cases that you worked on that involved environmental remediation in the last ten years -- environmental remediation projects?
I'm sorry. This is --
A. I'm -- you're --
Q. Hold on. Let me withdraw the question.
Generally at your office you don't use the term "case," you use project?
A. I use project or file.
Q. Okay. Got it.
All right. So, can you give me an example of projects or files that you worked on involving environmental remediation during your time at Affiliated?
A. I don't understand your question.
Q. Have you worked on any projects or

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files that dealt with environmental remediation at Affiliated Engineering?
A. What element of environmental remediation?
I don't understand your question.
Q. Any element of environmental remediation, whether it be pump and treating contaminated groundwater, you know, brownfield remediation, removing tanks from an unlined pit.
Anything like that?
A. I've worked with matters dealing with oil tank removal, asbestos abatement, lead abatement matters. I think those would fall in -- I worked on a landfill matter. That -- I believe that's responsive to your question.
Q. Were those litigation cases or non-litigation? Or did they vary?
A. Some were litigated. But I don't know if they all were in litigation or not.
Q. Do you remember the non-litigation assignment that required you to work the most time on at Affiliated?
A. I could not. At this point in time I

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couldn't fathom that. I don't have any such statistics.

Q. When was the last project or file that you worked on that involved environmental remediation?

A. I don't recall.

Q. Have you ever worked in any job where your full-time duties were as a safety professional?

A. I considered my full-time duties as a project manager as a safety responsibility --

Q. And where was that?

A. -- when I worked for ENSR -- when I worked for ENSR Corporation.

Q. Your resume indicates under the ENSR Corporation, Professional Experience, that it took place from 1995 to 2001. Is that right?

A. Correct.

Q. And there it says that, among other things, you performed on-site engineering design and construction management --

A. Correct.

Q. -- which included building construction, demolition, concrete construction,

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and other construction activities.

Do you see that?

A. I do.

Q. And what you're saying is that, if I understand you, as part of those types of responsibilities, you also had certain safety responsibilities. Is that right?

A. That's correct.

Q. But you were not a dedicated safety management professional in that role where your job was to primarily --

Or strike that.

But although you had some safety responsibilities in that role, your job was not limited to where your primary focus was to manage safety as a safety professional, rather, it was a general project manager.

Would you agree with that?

A. No. At ENSR the role of project manager was also fully responsible for safety. We had safety technicians who worked for us. But I was responsible for them with regard to the data they collected, the monitoring that they did. So, I was answerable to our corporate

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safety director with regard to safety on my projects.

Q. But your role as a project manager for ENSR was not dedicated to or devoted to the role of a safety manager, rather, you had other overall construction-site project-management responsibilities like design and how things would be built, that sort of thing?

A. Can you define for me what you're using as the term "safety manager"?

Q. I'm always hesitant to answer questions at depositions or to, you know, define terms that one ordinarily would think would be understood by the witness, given the topics we've been talking about. So, you know, I don't know.

Do you know what a safety manager is? I mean --

Well, let's do it this way.

In this case you've read the depositions of the various people from Toll Brothers. Right?

A. I have, yes.

Q. All right. And who was the person most responsible for safety at Toll Brothers that

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was deposed?

A. David Klonicke.

Q. And what was his title, do you recall?

A. I think it was corporate safety director or vice-president of safety, something like that.

Q. Yes.

And you recall from his deposition that his responsibilities were essentially devoted to safety, OSHA compliance, preventing injuries to workers.

Do you recall that?

A. Right. But he wasn't a site safety manager. He was a corporate safety director.

Q. What is a site safety manager?

A. The person on site who is responsible for overseeing the safe completion of the work.

Q. All right. And as a site safety manager, you would expect that that person's role would be limited to safety issues and preventing worker injury. Right?

A. Again, that's why I asked you.

When I worked in that role as

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a project manager at ENSR, I was also the safety manager for the projects. So, as such it was indistinguishable for us.
Q. What are you holding yourself out as an expert in in this case?
A. I don't know that I've been offered as a particular type of expert yet.
Q. Well, you issued a couple of reports. Right?
A. I have, yes.
Q. Okay. So, do you consider those expert reports?
A. I understand the court considers them, yes.
Q. I'm sorry. Do you consider those expert reports?
A. For me I consider them to be my reports.
Q. Are they expert reports or no?
Do you want to stipulate they're not expert reports?
A. No. As I said, I understand the court determines them to be expert reports, as I've been offered up as an expert on behalf of

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Toll Brothers.
Q. The question isn't asking you to predict what the court will or will not do.
The question is simply asking you do you consider those to be expert reports?
A. For the sake of litigation, yes, they are considered expert reports.
Q. Okay. In what field of expertise?
A. They include a varied set of areas. One includes certainly construction-site safety --
Q. Okay. Let's limit it to that for now. I know for the record I just interrupted you.
Your CV produced for this case, I mean, Carlsen-1, is your CV that you intend to rely upon in this case. Right?
A. Correct.
Q. All right. And under ENSR it doesn't say anything about safety in that section. Right?
I mean there's no word "safety" there or any synonym for the word "safety" in there?

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A. Correct.
Q. Okay. When did you take your CSP test to become a Certified Safety Professional?
A. I don't recall. It was sometime around 2011 or 2012.
(Pause.)
Q. When you are retained in litigation cases like this, such as a construction-injury matter, and you write a report, you're responding to an injury that already occurred. Right?
A. Yes.
Q. Okay. And when you do that work, it's not your responsibility in those matters to prevent harm to people, property or the environment, rather, you're responding after a harmful event already occurred. Right?
A. Reread the question, please.
MR. CLARK: Sure. We'll just have it read back.
(Pertinent portion of the record is read.)
THE WITNESS: Correct. I'm providing analysis of that incident based upon my training, education and so on.

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BY MR. CLARK:
Q. And during your time at Affiliated from 2002, when you started, to 2012, what percentage of your time was your primary responsibility to respond to injury events that already occurred, as opposed to where your primary responsibility would be to prevent harm to people, property or the environment?
A. As I said, I don't know as I sit here.
Q. Did you ever know that?
A. Possible, yes.
Q. What information would you need to answer that question?
A. It depends upon the time frame and my knowledge at that time regarding that time frame.
Q. From the time that you started at Affiliated in 2002 through 2012, was 50 percent or more of your time having the primary responsibility to prevent harm to people, property or the environment?
A. I don't have percentages. So, as I sit here, I can't answer the question.
Q. Have you ever been retained in a case

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where a worker was injured and you were retained by the defense and your report concluded that your client actually was at fault and had responsibility for the worker injury?
A. When I reach those conclusions, I'm usually not asked for a report. So, the answer is no, I don't believe so. All those determinations, clients don't typically want reports.
MR. CLARK: What was the last part of the answer?
(Pertinent portion of the record is read.)
BY MR. CLARK:
Q. How many hours a week do you work at Affiliated? Like, what are your hours that are expected?
A. There's no expectation. My hours vary.
Q. Are you paid by the hour or salary or something also?
A. I'm salary.
Q. Has it always been that way?
A. It has.

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Q. And what is your salary at Affiliated?
A. I'm not going to answer that question.
MR. CLARK: Is he being directed to not answer that question?
Certainly compensation is --
MR. PERRONE: I did not direct him not to answer that question.
MR. CLARK: Okay. I would just note that compensation is a well-recognized area for cross-examination for an expert in a case like this.
THE WITNESS: I'm currently compensated $335 per hour through the company. That's the company's billing rate for me. And the company bills by the hour.
BY MR. CLARK:
Q. And what is your salary?
A. Again, I'm not going to answer that.
Q. All right. Well, I can't twist your arm. I can only make an application to the court. But I think that's certainly fair testimony; the law is very clear on that.

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And, in fact, Mr. Perrone is not directing you not to answer that.
MR. CLARK: So, could you just mark that in the log in the beginning as to questions refused to answer. We'll have one for questions directed not to answer and then questions refused to answer, if you could just put that in the list. Thanks.
BY MR. CLARK:
Q. Have you ever been asked that before in your depositions?
A. Occasionally.
Q. Do you ever answer it?
A. No, I do not.
Q. Okay.
A. Not that I recall, at least.
Q. How many hours a week do you typically work at Affiliated?
A. Again, I wouldn't say there's any typical. But it's a full-time job for me.
Q. So, how many hours?
A. I didn't give you hours. It's full time for me. So, it varies. It could be 60 one week, it could be 20 the next.

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Q. Well, how much vacation time do you get?
A. It varies.
Q. Do you bill hours?
A. Four to six -- about four to six weeks a year.
Q. Do you bill your time? Do you bill your time?
A. My time is billed by the hour, correct, to clients.
Q. So, do they tell you at the end of the year how many hours you billed?
A. Yes. I can find that out.
Q. Do you have a minimum amount of hours that is expected each month and each year?
A. No.
Q. Do you get bonuses at all at the end of the year sometimes or --
A. Yes.
Q. And what is the bonus based on?
A. My understanding is it is based on the cumulative production of the company.
Q. Well, is there any billing expectation about how many hours you're expected

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to bill or how much income you're expected to bring in?

A. They expect -- basically expect us to work full time.

Q. But what's full time? Is that 35 hours or 40 hours a week?

A. It can vary. But about 40 hours a week is typical.

Q. Okay. That wasn't too hard.

Okay. So, full time is about 40 hours a week.

And you get about four to six weeks' vacation?

A. Correct.

Q. And what about sick time? PTO or --

A. As needed.

Q. -- designated sick time?

A. As needed.

Q. Do you have an employee manual that spells that out?

A. I don't know that we do. We're a small company. It's never become an issue.

Q. When you say "a small company," what's, like, the -- you know, is it a

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million-dollar company, 5 million, 10 million, 15, 500,000?

A. I'm not going to answer those questions.

Q. Why?

A. Because I don't believe it's relevant to this matter or my report or the testimony that I'm going to offer.

Q. So, you think the compensation of Affiliated Engineering and its income, that sort of thing, you believe is not fair game in a case like this where you're offered as an expert?

A. Our compensation for this matter is based upon my hourly rate times the hours that have been billed against working on it, plus expenses.

Q. But let me ask you this.

If Affiliated Engineering does primarily defense work and they make an X amount of dollars each year doing that defense work, you don't think that's fair cross-examination, like, in a case like this at trial for the jury to know what this company makes each year doing this kind of thing?

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A. My answer is going to be I don't know the answer to your question.

Q. Oh.

A. And furthermore, if I did, it wouldn't be something I'd be able to disclose.

Q. Your answer previously was you're not going to tell me, but your answer now is you don't know?

A. You changed the question, so I had to answer properly.

Q. Why don't you just explain it.

What is it that you will not answer but you know the answer to and what is it that you don't know the answer to and can't answer in this area?

A. You asked me about how much income Affiliated derives out of doing work, as you said, for those clients, defendants. I have no information whatsoever about that --

Q. Okay.

A. -- to give you.

So, with regard to what you want to offer at time of trial with regard to income, there's no answer I can provide you,

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whether I wanted to or not. That was my answer.

Q. Okay. So, then, the other question is is Affiliated a $500,000-a-year company, you know, a million dollars, 3 million, five, ten, 15, 20 million?

You know how they say, like, you know, Apple is a God knows how many hundred-billion-dollar company and, you know, Coca-Cola is a whatever?

A. Sure. Publicly traded companies, those valuations are known.

Q. Yes.

A. Affiliated is not a public company.

Q. No. I get you on that.

But, also, you know, someone may say at a cocktail hour, you know, We're a painting company and we're a $2 million company. And it's often asked.

So, that's what I'm trying to get is what are Affiliated's, I guess, gross annual billings?

A. I'm not going to answer that.

Q. But you do have an idea of what the answer is?

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A. I have an idea, yes.
Q. All right. Do you have more than an idea where, you know, it's something that's well known or that you know more than just simply an idea?
A. I have an idea.
Q. Okay. But you refuse to answer that?
A. That's correct.
MR. CLARK: All right. Can you add that to the list. Thank you.
BY MR. CLARK:
Q. Who are the owners of Affiliated?
A. It's a group of directors who own the company.
Q. And how many are there?
A. I believe there are eight or nine.
Q. You've read Vince Gallagher's depositions in the past. Right?
A. I have read some of Mr. Gallagher's deps in the past, yes.
Q. And he's asked those questions dealing with, you know, Safety Research, Inc., you know, what's the income and where is it derived from and what's the total amount and how

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much do you make.
Do you recall that he's typically asked those questions at deposition and trial?
A. I've never read a transcript of Mr. Gallagher with that information in it.
Q. All right. Well, I'll represent to you that I've sat in on depositions where he's asked that. And it may even have been asked in this case that he's asked that sort of thing; in fact, I can almost -- I could probably pull it out and find it.
Were you aware of that or not really?
A. I've not read any testimony of Mr. Gallagher in this case.
Q. Okay. What percent of your work at ENSR was devoted to prevention of worker injuries as opposed to, you know, constructing design and actual construction work?
A. I can say a hundred percent.
Q. A hundred percent of your work was devoted to what?
A. Your question, you asked how much is

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regard to preventing employer or employee injuries, worker injuries. A hundred percent.
Q. A hundred percent --
A. Every piece of work done with that company was to make sure it was done safely to prevent injury to the workers.
Q. How come you don't say that in the ENSR section on your resume? It doesn't say anything about that.
A. It's not necessary.
Q. Even though it was a hundred percent of your work?
A. There's a lot of other things that is not in my CV include that. It's part and parcel to the work. If you understand the work that's done, it's part and parcel to it.
Q. Is it possible to separate it out and give a percentage of what portion of your professional work at any time was devoted to safety management and safety prevention?
Is it possible to give a percentage out of that on any of these jobs you've had?
A. I could come up with percentages --

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Q. Or would it just be that it's always a hundred percent?
A. No. I could come up with percentages based upon the exact inquiries, speaking with other colleagues, people I've worked with, pulling up old project forms. It's possible to probably narrow those numbers to a set of percentages.
Q. Okay. So, what's the percentage of your projects or job duties during your time at Affiliated that were devoted to preventing worker injuries as opposed to responding to injuries that already happened, such as your role in this case?
A. I think you asked me that question before. As I sit here, I can't answer that question.
Q. I know. The only reason I asked it again is because you just said that you could come up with a percentage. That's why I sort of figured maybe you were ready to do that now.
A. No.
MR. PERRONE: Objection.
THE WITNESS: I have no

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additional information since an hour ago.
BY MR. CLARK:
Q. Do you have the paperwork that you submitted to the Board of Certified Safety Professionals in connection with your certification?
Do you have that application and the supporting documentation?
A. No, I do not have it.
Q. Well, when I asked, you looked down at your file. I didn't mean in your file. I meant do you have it in your possession, custody or control somewhere?
A. I may.
Q. Where would that be kept, at the office or at home or somewhere else?
A. I don't know. I'd have to look for it.
MR. CLARK: Okay. For the record, I'll call for production of all documents that Mr. Carlsen submitted to the Board of Certified Safety Professionals in connection with his becoming a member of that organization, including the application, any supporting

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documentation.
MR. PERRONE: And we'll take that under advisement, then, and get back to you on that.
BY MR. CLARK:
Q. Are you ready to sign the authorization for that stuff yet?
I know you've had more time to think about it now and I thought it was still left open. We have the authorization attached as -- I guess we marked it as Exhibit 2 today. Or was it 3?
A. My answer is unchanged.
Q. Okay. And what is that answer again?
A. I think the record has my answer.
Q. Which is that you're not going to sign it?
MR. PERRONE: No. I said, Jerry, I would look at it and I would talk to the witness. But I haven't looked at it yet or talked to the witness about it. But I will do that, and I will get back to you promptly.
BY MR. CLARK:
Q. Do you agree with the code of ethics

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of the Board of Certified Safety Professionals?
A. Yes.
Q. And do you adhere to that code of ethics?
A. Yes.
Q. When we speak about construction-site safety and preventing injury to workers and others that may come in or near a job site, is it important for the OSHA safety rules to be followed?
A. Of course.
Q. When we talk about construction projects and preventing needless injury to workers and anyone else that may come near a job site, is it important to consider relevant published literature in the field of construction-site safety?
A. Can you read that question contiguously, please.
(Pertinent portion of the record is read.)
THE WITNESS: Okay. I don't understand your question.
BY MR. CLARK:

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Q. Okay. Fine.
In developing benchmarks for assessing an organization's safety and health performance, is it important to consider published literature in the field of workplace safety?
A. Can you reread that question, please.
(Pertinent portion of the record is read.)
THE WITNESS: For benchmarking? Yes.
BY MR. CLARK:
Q. And why is that?
A. To see where you fall with regard to your peers.
Q. And is that important to prevent worker injury?
A. It's not important to prevent worker injury. It's important to understand where you stand in the industry with regard to your program.
Q. And in your view, is it better to stand closer to a safe work site or better to stand closer to an unsafe work site on a spectrum

of safety?
A. A safe work site.
Q. Do you agree that management on a work site should have a goal of no accidents and lower operating costs?
A. Yes.
Q. And in achieving the goal of no accidents and lower operating costs, is it important for management to consider published literature in the field of construction-site safety or should management just look at the OSHA standards and that's it?
A. You're limiting it to those two elements and I don't think that's all -- that's appropriate to limit the question to. So, I can't answer your question.
Q. You cannot answer the question?
A. The way it's phrased. Correct.
Q. Okay. What are consensus standards in the area of workplace safety? What are they?
A. Those are documents put forth by an organization, a body, that has reached, not unanimity, but have reached a point where all objections and approvals of that standard have

been accounted for and the standard has been put forth after accounting for those objections and approvals.
Q. And in reaching the goal of no accidents and lower operating costs, is it important for management to consider consensus standards in the area of workplace safety?
A. They can. But it's not necessary to achieve that goal.
Q. You're familiar with the Associated General Contractors of America Manual of Accident Prevention. Right?
A. I am, yes.
Q. Is there anything you disagree with in this manual?
MR. PERRONE: Objection.
THE WITNESS: I'd have to review the entire manual to give you an answer on that. So, as I sit here, I don't know.
BY MR. CLARK:
Q. You are familiar with it, though. Right?
A. I am familiar with it, yes.
Q. Okay.

A. I know what the document is.
Q. And based upon your familiarity with the document, is there anything that you recall that you disagree with in the document --
MR. PERRONE: Objection.
BY MR. CLARK:
Q. -- as you sit here today?
A. I can't recall what I do and don't agree with in that manual as I sit here without going through it.
Q. You agree that planning and controlling are basic functions of management? Do you agree with that?
A. I do.
Q. You agree that accident prevention is a part of both functions, assisting management to reach the goal of no accidents and lower operating costs? Do you agree with that?
A. Yes.
Q. In your view, did Toll Brothers exercise control over this work site?
A. They were the controlling employer, as definitions are given with regard to site safety.

Q. Did you review anything that Toll Brothers trained the employees of Anchor Framing in this case?
A. I'm not aware other than the quarterly safety meetings where there was any training of Anchor employees by Toll Brothers.
Q. Did you review anything in this case in your view that Toll Brothers told Anchor employees how to perform their job?
A. No. I'm not aware that they controlled how Anchor performed its work.
Q. In your view, are you aware of anything in the case that would indicate that Toll gave any directions at all to Anchor employees on this job?
A. They did, yes.
Q. And what directions did it give to Anchor employees on this job?
A. Directions were given to make corrections to conditions that needed repair for safety purposes during their safety meetings and during their safety inspections. So, directions were given to Anchor to make those corrections.
Q. The directions -- I think what you're

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referring to are the safety inspections that were done and where they found deficiencies?

A. That's correct. And they were directed to correct those deficiencies.

(Pause.)

Q. Do you have any information in your view that Toll Brothers gave direction to Anchor Framing workers as to how to perform their work tasks?

A. No.

Q. Do you have any indication that Toll gave direction to Anchor Framing workers in the sense of urging them to complete their work in a timely manner?

Do you have any information in that regard in this case?

A. I don't have anything specific. I think it would be typical that one would expect the work to proceed in an appropriate schedule.

Q. But no information that Toll gave specific direction to Anchor Framing workers in that regard as far as you know?

A. The only thing that comes to mind is in the Zuna matter was a request within a week's

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time to make a repair to a window. That's the only recollection I have with regard to time or schedule pertaining to Anchor's work.

Q. In your view, did Toll Brothers assume control over the manner in which Anchor performed its job tasks?

A. I've offered no such opinions.

Q. So, do you have an opinion one way or the other whether or not Toll exercised control or assumed control over the manner in which Anchor performed its work?

A. I don't believe they did.

Q. When you talk about the job site in your report, are you talking about the particular condo and house that was being built at the time, or are you talking about the job site of the greater community that was there?

A. Can you put it in context again for me? I mean, you asked a question a little bit ago about job site and --

Q. Sure. Let's just take a look at -- we can look at the OSHA -- if you want to look at the OSHA file.

The first incident was

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Tenezaca. Right?

A. Correct.

Q. It happened on February 25th, 2009?

A. That's my understanding, yes.

Q. And the second incident was Zuna. Right?

A. Correct.

Q. It happened on March 4th, 2009?

A. 3rd or 4th. Yes.

Q. All right. And Zuna happened at 13 West Lake Drive, Marshalls Creek, Pennsylvania?

A. That's sounds correct.

Q. All right. So, with regard to Zuna, would you view that as the job site, meaning 13 West Lake Drive, Marshalls Creek, Pennsylvania, or in your view, do you view the job site as the overall community that was being developed, the name of which I believe is the Reserve at Pond Lake?

A. There were two, Reserve at Pond Lake and then Country Club of the Poconos. And there was the Tournament townhomes. Right?

Q. Yes. Whatever the names are.

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A. So, with regard to Zuna -- I can't say I differentiated specifically any of my opinions what the site is or isn't. I mean, the whole site of the whole Country Club of the Poconos was a few developers. As I understand it, Toll had a couple of sections, so --

Q. I mean, you could have a site. I mean, Toll Brothers could literally build a town and you could have people living in some of the homes. Right?

A. Correct.

Q. Do you see where I'm getting at?

A. No. That's why I'm trying to probe a little bit here, because I don't fully understand your question. I want to give you an answer that's appropriate.

Q. Well, like, you have these developments. And you drive into the development and they have curbs and they have storm drainage and they have street lights. And it almost looks like you're driving into an actual town.

So, you could have a Toll Brothers development that could be hundreds of homes or it could be thousands of units. Right?

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A. Correct.
Q. So, you know, assuming that this is one such development where you have, you know, hundreds of homes or hundreds of units and you have people living in some and some are under development and some are finished but no one's living there yet and some they haven't even broken ground yet.
In that sort of situation in this case, do you view the job site, for example, in the Zuna case, as 13 West Lake Drive, Marshalls Creek, Pennsylvania, or do you view it as the greater Country Club of the Poconos project? Like, what is the project?
A. The site in that instance, then, would be those areas where construction is actively ongoing.
Q. Okay.
A. So, you would not include in your site those completed lots with homes where people are living. It would be the areas where you have work actively ongoing would be your site. And that site would move as the development moves, if you will.

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Q. So, we talk about prior incidents or, you know, prior notice and knowledge.
I know in your report you focus on, Well, you know, it was only up for so much time and Toll didn't have any opportunity to see the workers without fall protection.
So, in that regard, can't we just say that the site is the greater Country Club of the Poconos, and if they saw fall-protection issues in those other areas on site, that they did have notice and knowledge of fall-protection issues, or in your view, should we just be limiting the site to, in the Zuna example, 13 West Lake Drive, Marshalls Creek, Pennsylvania?
MR. PERRONE: Objection.
BY MR. CLARK:
Q. And if we can view the site as that greater community of houses and stuff being developed, why can't we also view the site as the other Toll Brothers developments which may be a mile down the road?
You know, why not view it as every Toll Brothers site, you know, on the

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Eastern seaboard?
You know, where do you draw the lines of what the construction site is or is not in this regard?
MR. PERRONE: Objection.
BY MR. CLARK:
Q. So, Zuna I believe was at 13 West Lake Drive, in Marshalls Creek, Pennsylvania, and Tenezaca was at 1185 Big Ridge Drive, Marshalls Creek, Pennsylvania. I think that's the address.
MR. PERRONE: Objection.
BY MR. CLARK:
Q. What's the site in your mind there?
MR. PERRONE: Objection.
THE WITNESS: Okay. I don't think --
BY MR. CLARK:
Q. I'm not badgering you; am I? I just want to make sure I'm not.
A. I just can't understand my question.
Q. That's fine.
MR. PERRONE: I never suggested you were.
MR. CLARK: I heard objection

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three times. I just wanted to make sure I wasn't badgering anyone.
MR. PERRONE: You were not.
MR. CLARK: Okay.
MR. PERRONE: And if you want the basis for my objection, it's a compound question that seemed to go on for about a page and a half, with multiple subsections, so --
BY MR. CLARK:
Q. All right. So, why don't we distill it down.
In the Zuna case, is the site at issue 13 West Lake Drive, Marshalls Creek, Pennsylvania, or is it the Country Club of the Poconos?
A. With regard to my opinions, I don't think that issue is at hand.
With regard to this hypothetical discussion, I don't differentiate between the Zuna site and the Tenezaca site with regard to the site. As the project proceeds through, the site will be a function of time, all right, time and space. So, the site on day one is going to be this area and the site on day 600

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is going to be a different area, since his work will be completed.

So, with regard to, again, opinions I've offered, this issue doesn't come at hand.

Q. So, you haven't really been asked to distinguish or give opinions on how we're defining the construction site vis-à-vis this case.

Is that a fair assessment?

A. It doesn't impact the opinions I've offered to date. If something's particular about an opinion with regard to the word "site," I probably can give you a better answer.

Q. In your view, did Toll Brothers have the right to control the work of Anchor Framing or they did not have the right to control the work of Anchor Framing employees on this job?

A. I don't know. That's a legal matter, as I understand it.

Q. What do you mean, it's a legal matter? What does that mean?

A. The term -- I know the term "controlling employer." But in terms of the

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right to control another employer's employees, it sounds to me to be a legal matter.

Q. See, there's always something of a -- you know. Like, you know it's the law to not run red lights. Right?

A. I do.

Q. Okay. And you know it's the law to stop at a stop sign, right, when you're in a car?

A. It's the law to stop at a stop sign, yes.

Q. So, if I say, Mr. Carlsen, does a driver have a legal requirement to stop at a stop sign, like, you can't answer that by saying, Ooh, I don't know, that's a legal opinion. Right?

A. You asked about a stop sign. I gave you a really good answer.

Q. Yes.

A. But I can't answer your question with regard to the right to control --

Q. But, see, that's what I'm saying.

Like, see, as an expert in a case like this, you know, if the expert felt uncomfortable about answering something, he could say, That's a legal opinion, I can't answer that,

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you know. OSHA, that's a law, and I can't --

But then when you are comfortable, like, defining and telling all about what a controlling employer is --

Which controlling employer is in the Federal Register, United States regulations. Right?

A. No.

Q. It's not?

A. It's not.

Q. Isn't that a regulation of some kind?

A. It's part of the Multi-Employer Citation Policy, which is part of the field operations manual currently.

Q. Well, 1926.16 is a regulation. Right?

A. That doesn't apply to this project.

Q. "Apply."

See, it's a law, but you're saying that law doesn't apply? Is that what you're saying?

A. I understand that law. I don't understand the law with regard to one controlling another's employees. That's why I say it's a

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legal matter, a legal matter outside of my scope of knowledge at this point. I don't understand if Toll Brothers had a legal right to control Anchor's employees. I don't know.

Q. All right. Well, let's put aside the legal talk for a bit.

In your view did Toll Brothers have, like, the practical right to control the Anchor Framing workers on this site in your view?

A. No.

MR. PERRONE: Objection.

BY MR. CLARK:

Q. They did not have the right to control? Is that what you're saying?

A. Correct.

Q. Just like at the dentist corp. project, you did not have the right to control the work of the subcontractors on the project. Right?

A. That is correct.

Q. Okay. And in your view, not only did Toll Brothers not -- they did not have the right to control Anchor employees, but as far as you

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know, Toll Brothers also did not exercise any such control over Anchor employees in this case. Would you agree with that?
A. Again, as I understand your question as what I reviewed, I don't see evidence of that in what I reviewed.
Q. Okay. Thank you.
Now, Zuna happened at 13 West Lake Drive, Marshalls Creek, Pennsylvania. Is that right?
A. As I understand it, yes.
Q. All right. And I think you're saying something in your report that Toll Brothers did not have notice or the opportunity to correct the hazardous condition at issue?
A. That's correct.
Q. But isn't it true that Toll Brothers occupied that site, 13 West Lake Drive, and, therefore, they knew or should have known?
MR. PERRONE: Objection.
THE WITNESS: My opinion is predicated upon that Toll Brothers did not observe the condition that led or it was causally related to the accident of Mr. Zuna.

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BY MR. CLARK:
Q. But Toll Brothers occupied the site, though, right, 13 West Lake Drive; they were there?
MR. PERRONE: Objection.
You're talking about the particular house?
BY MR. CLARK:
Q. Or do you disagree with that?
A. Toll Brothers didn't occupy. They owned the property. And it was their part of the project. But I don't have any evidence that Toll Brothers was physically at that premises during that -- the work that led to the accident.
Q. All right. Fine. I'm not going to argue about it.
MR. SULLIVAN: I don't know if this matters. But I believe there was an incorrect date given earlier. The Tenezaca accident occurred on February 23rd. I believe the question was couched as it having occurred on February 25th.
MR. CLARK: Well, I was just reading one page of the OSHA report. It says

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February 23rd. When the first accident occurred, the foreman knew there were two employees on the roof?
THE WITNESS: He said the 25th?
MR. SULLIVAN: He said the 25th.
MR. CLARK: Well, the other part of the OSHA report says the 25th.
MR. SULLIVAN: I know. There had been an error on that. And it was also in plaintiff's answers to interrogatories that was an issue.
BY MR. CLARK:
Q. And in the Tenezaca incident, are you also saying that Toll Brothers did not have notice, knowledge or the opportunity to correct the unsafe condition of the worker being on the roof without a personal fall-arrest system?
A. My opinion is that -- part of my opinion is that Toll Brothers did not have actual notice of Mr. Tenezaca on the roof prior to his accident.
Q. Isn't it true that Toll Brothers was

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occupying the site 1185 Big Ridge Drive, Marshalls Creek, Pennsylvania, and therefore they would have known or had the opportunity to observe that?
MR. PERRONE: Objection.
THE WITNESS: Yeah. I'm not aware of anyone from Toll Brothers physically occupying that space at that time.
BY MR. CLARK:
Q. All right.
A. There may be some legal definition that I'm not aware of. But I'm not aware of anybody physically being there.
Q. In this case we have a series of inspections done in the weeks and months prior to the incident, and then Anchor Framing was issued notices of violations. Right?
A. Yes.
Q. Generally speaking.
Does there come a time where they should be, like, dismissed from the site or other action taken other than just saying, you know, Oops, you know, you had a fall-protection issue and here is a notice of it?

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Like, shouldn't they do more at some point?
A. If the contractor is non-responsive and the notifications are ineffective with effecting change, then that discussion can be held.
Q. Okay. You agree that the general public is often impacted by construction operations; the nature of the work may create concern about potential damage to property and the public?
MR. PERRONE: Objection.
BY MR. CLARK:
Q. Do you agree with that?
A. I'm sorry. The first part of your question again?
Q. Well, here, why don't you just read -- well, why don't you just read page 1-4 of the manual there, I just read it there, and just tell me if you agree or disagree. It's bracketed in purple and starred.
A. You mean 1-15?
Q. Yes.
A. I wouldn't agree that the general

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public is often impacted by construction operations. It all depends. It's site-specific.
So, the general public may be, depending on some kind of work. But I wouldn't agree that that's a general course.
Matter of fact, it's probably not typical of many construction projects where the general public who are not involved on the job are subjected to hazards.
Q. And you would agree that, generally speaking, the more the safety rules are followed, the more likely it is that the general public will not be impacted by construction operations such as the example you gave of the dentist office corp., where you made sure that asbestos was not flying around in the air? Would you agree with that?
A. Again, that's a long question. Could you please either read it back or re-ask it?
(Pertinent portion of the record is read.)
THE WITNESS: It depends on each and every site and each and every act that we're talking about. Some safety measures would

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have no bearing on the public.
BY MR. CLARK:
Q. You agree that general contractors have responsibilities relative to OSHA for ensuring safety on projects. Right?
A. Yes.
Q. And you agree that each tier of management on a construction project has responsibilities for safety? You agree with that generally?
A. Yes.
THE WITNESS: I'm going to need a break in, like, five minutes.
MR. CLARK: Whenever you need, just say so. Fine.
THE WITNESS: All right. Good time?
MR. PERRONE: Whenever you like.
THE WITNESS: Yes. Give me a couple minutes. I'll be right back.
(A short recess is taken.)
BY MR. CLARK:
Q. Okay. So, you're saying that Toll

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Brothers did not control the manner in which Anchor Framing did its work on the site. Right?
A. That's correct.
Q. And was Anchor Framing an independent contractor on this job as far as you understand it?
A. As far as I understand it, yes.
Q. Is that understanding based upon your review of the records in this case and the materials that you listed in your report?
A. Yes.
Q. When you took the test to be a Certified Safety Professional and you answered the questions, did you answer the questions as you thought the test administrator wanted them to be answered or did you answer them because you actually believed those to be correct in practice?
Do you know what I'm saying?
A. You've asked two mutually -- they're not necessarily mutually exclusive answers. So, no. I guess the answer is no, I don't understand how you're asking your question.
Q. Well, when you answered the three

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questions that we did before, I guess, one, three and seven --
A. Right.
Q. -- in addition to answering them correctly as per what the test administrator said was the correct answer, did you also believe in practice that those were the correct answers?
A. Those questions and answers are one in the same. The correct answer is what it is. I mean, I don't know any other way to answer your question.
Q. Got it.
And as best you recall from taking the full test, you did the same thing, that you answered the questions as you thought was the correct answer both from what the test taker was wanting and what in practice was the correct answer?
A. Yes.
Q. Okay.
A. I'm not aware that the test preparer was doing anything other than providing questions that related to actual practice.
Q. Well, it just seems to me that many

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of the questions would be the types of questions you might be asked at trial or at deposition in a case like this, and you and Mr. Gallagher would probably answer those questions differently, even though we all know what the Certified --
A. So, Mr. Gallagher may get --
Q. -- Safety Professional group wants to be the correct answer.
Do you know what I'm saying?
A. So, Mr. Gallagher may not have gotten the three right answers?
Q. Something like that.
Like, the Certified Safety Professional, that's, like, for safety and preventing accidents and doing what's right and preventing injuries.
But in most of the reports you write in cases like this, it's always, like, Hey, the general contractor didn't do anything wrong; it's the fault of the worker; it's not the fault of the employer, they were proactive in safety and all that stuff.
And it just seems to me that because the CSP certification is much based on

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the industry standards and the literature and the consensus standards, as well as OSHA, that by answering those questions, you'd have to, like, agree more with the way Gallagher views the world, because he kind of views it more in line with the industry standards and the literature, as well as OSHA.
Like, for example, there's the exception. Like, you write in your report, in the Zuna report, about how, I guess, Tenezaca didn't require personal fall protection, so everything was okay. But we can all agree that if he actually had personal fall protection on, he wouldn't have fallen, he would have been saved. And you say, Well, OSHA didn't require it because of some compromised, you know, reading of Subpart M and, you know, OSHA's a minimum standard.
But if you look at all of the safety literature and, you know, the National Safety Council and the consensus standard, they would all require personal fall protection so that he would not have actually hit the ground when he fell.

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So, it seems to me by taking the test, you sort of have to agree with all that stuff, as opposed to no, it's OSHA and that's it.
MR. PERRONE: Objection.
I don't think there's a question.
BY MR. CLARK:
Q. Any response to that?
MR. PERRONE: Objection.
BY MR. CLARK:
Q. Do you know what I'm saying?
MR. PERRONE: To what?
THE WITNESS: I didn't hear a question.
BY MR. CLARK:
Q. I'm sorry?
A. I did not hear a question in your soliloquy.
Q. What do you think of my soliloquy? That's the question.
MR. PERRONE: Objection.
BY MR. CLARK:
Q. Do you agree with it, disagree --
MR. PERRONE: Objection.

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BY MR. CLARK:
Q. -- don't understand it?
A. Those are your opinions and you're welcome to hold your own opinions. Those are your opinions and I respect your opinion.
Q. Do you agree with that opinion?
A. I don't think I understand fully your opinion, so I'm not going to comment upon it.
Q. Okay. It just seems to me that there's a dichotomy here, because you and Affiliated Engineering, as it's well known, are primarily a defense engineering company where, you know, Bernie Lorenz says, yeah, the vast majority is on behalf of defense, Mr. Naughton says the vast majority is on behalf of defense. If we look at all your prior transcripts from Affiliated Engineering, they're all going to say the same thing in that regard.
Sure, they might do a plaintiff's personal-injury case here or there -- I've still never seen a report, although I've asked for them -- and they may do some plaintiff subrogation work on behalf of insurance companies who are seeking to collect money from

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another insurance company. And they may say, yeah, we do plaintiff's work there, but that's, again, the same clientele, defense insurance companies.
But the dichotomy here, the kind of disconnect is that you're holding yourself out as a Certified Safety Professional. And it's difficult to hold yourself out as a Certified Safety Professional, to agree with what the exam questions say is the correct answer and to agree with what things like the Associated General Contractors of America say, yet still hold the opinions that you write in these reports.
Do you understand what I'm saying?
MR. PERRONE: Objection.
BY MR. CLARK:
Q. What do you think about that?
MR. PERRONE: I don't think there's a question there.
Objection.
THE WITNESS: Again, I don't think there's a question I can answer there.

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BY MR. CLARK:
Q. Why?
A. I didn't hear a question that's answerable.
Q. The question is what do you think of that?
MR. PERRONE: Objection.
BY MR. CLARK:
Q. I was clarifying my prior question. You said you didn't understand it, so I kind of tried to be more succinct in that.
MR. PERRONE: Objection.
BY MR. CLARK:
Q. And then the question is what do you think of that?
A. I disagree with your patent summarization of what you perceive to be some dichotomy.
Q. Okay. So, do you believe on a construction site like this that Toll Brothers should only follow OSHA and that's it?
Or should they also follow consensus standards and industry standards such as those from the Associated General Contractors

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of America?
A. The standard of care for this job site, Tenezaca and Zuna, are the OSHA standards.
Q. Anything else?
A. Following those yields a safe work site where workers should go home safe at the end of the day.
Q. Anything else that they should follow, or no?
A. Should follow?
Q. Yes.
A. No. The OSHA standards form the basis of all work activity that can be done on that job site and done safely.
And, you know, there are no other technical standards, all these other documents aside, that would provide for Mr. Tenezaca or Mr. Zuna's safety greater than that which was prescribed by OSHA.
Q. And that's what I'm talking about.
You're saying that in this case, you know, and in any other cases the general contractor just should follow OSHA and that's it.

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Is that essentially what you're saying?

A. I'm saying OSHA is the standard of care for them to follow and it provides for the safety of all the workers on the site, without question, without fail.

Q. And should general contractors on job sites follow any other standards or just OSHA when it comes to worker safety?

A. Following OSHA will lead them to --

Well, can you give me examples of other standards you're referring to that I can consider?

Q. And that's where I think the dichotomy comes in. Because you just said a couple of questions ago that OSHA is the standard, I don't recognize any other standards in the United States. But then when I look at what the test -- you're a Certified Safety Professional. What it requires essentially is in order to make workplaces safer, that they also follow literature, consensus standards, things other than OSHA. And that's where the dichotomy comes in.

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MR. PERRONE: Objection.

BY MR. CLARK:

Q. What do you think?

A. For a Certified Safety Professional, yes, my knowledge of a lot of those standards is part of the knowledge base of a Certified Safety Professional.

Q. Right.

A. With regard to Toll Brothers and safety on this job site, following OSHA, which was not followed with regard to these two incidents, would have kept those workers safe. They did not require a higher standard to keep them safe. Or following their safety programs would have kept them safe. There was sufficient measures in place to prevent both of these accidents.

Q. When Toll Brothers repeatedly documented Anchor Framing's fall-protection violations before the Tenezaca incident, under OSHA, did Toll Brothers have to do anything more than simply cite it?

MR. SULLIVAN: Objection to the form of the question.

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BY MR. CLARK:

Q. That is, at some point should they have either kicked them off the job and/or said, That's it?

Because I would note, I think there were about ten or so citations before the Tenezaca incident in the record.

MR. SULLIVAN: Objection to the form of the question.

MR. PERRONE: Objection.

THE WITNESS: My recollection is different from yours. I recall one prior incident that could possibly be related to what facts relate to Mr. Tenezaca with regard to fall protection doing work on or about a roof.

I do not recall any repeated issues with regard to fall protection from roofs of the type that would affect Mr. Tenezaca.

BY MR. CLARK:

Q. But fall-protection principles are not limited to falling from roofs. Right?

A. No. But your question was pertaining to Mr. Tenezaca and his unfortunate fall off of the roof. So, that which pertains to that is

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what would be responsive to your question.

Q. I counted nine reports that noted deficiencies as to Anchor Framing before the first fall of February 23rd, 2009, and an additional one after the first fall, an additional report.

And Tom Brown, I said, Does that sound about right from what we just went through? And the answer was, Yes, based on the package we just looked through. Yes. And the package was the package of the violations.

A. Okay. Again, that's not consistent with my recollection.

Q. Okay. And then I asked Tom Brown, I said, Would you agree with me that there were a lot of deficiency reports as to Anchor Framing before the first fall?

And the witness says, There were a number of reports, yes.

Is that consistent with your recollection or no?

A. That's how I recall he testified. Yes.

Q. So, is there some amount of

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deficiencies that OSHA would want to see before some real action is taken against the contractor, such as dismissing them or suspending them from the site?

A. No. One has to look at each deficiency and its own merits, determine what are the facts around them, determine the appropriate cause of action at each attempt -- each occurrence.

Q. The OSHA safety rules apply throughout the United States. Right?

A. You're saying the OSHA regulations pertaining to construction safety or something different?

Q. That would be 1926, right, is the construction regs?

A. 1926, Subparts C onward, yes, are the construction regulations pertaining to work like this.

Q. And they apply throughout the United States. Right?

A. They do.

Q. Let's pretend. Let's pretend.

Do you know the name of the

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Toll Brothers entity that owned the project or owned the sites?

A. I refer to the grouping of Toll entities that's Toll Brothers.

Q. All right. Let's call it Toll Owner, LLC. We'll call that Toll Owner, LLC. They own the project. Okay?

A. No. When you say "own the project," are we talking about --

Q. We'll say the land.

A. Okay.

Q. All right?

A. Okay.

Q. And then we'll say Toll Construction, LLC leases the land from Toll Owner, LLC.

Okay? How's that sound? All right?

Let's assume that you own Toll Owner, LLC and your wife owns Toll Construction, LLC. And you guys decide to develop the property and build these houses and sell them for a profit, and your wife hires you full time to do the types of things that you did for the dentist corp. LLC.

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Are you with me on this hypothetical?

A. I don't think so, to be quite honest with you.

Q. Well, I'll continue with it anyway.

Would you have done anything different than Toll did to prevent what happened here?

A. Which Toll?

Q. Either. Whatever one you were working on with the -- because I think as the dentist office you were working both for the owner LLC and the dental practice LLC. You wanted to make sure that the right sterilization things were in there and that the asbestos got removed.

So, you really had two hats in that one. Right? You had two hats at the dental corp. project?

A. As you say, that's fair to say.

Q. I know we're loosely speaking here.

So, if we can apply that hypothetical to this job in terms of let's assume that you own Toll Owner, LLC and your wife owns,

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you know, Toll Megacorp, LLC, you know, that does this and you have the same kind of role.

Would you have done anything different?

Because you seemed very proactive in the dental office LLC. And you said, Look, OSHA didn't require that, I did it anyway. And you had such a great site and it happened in four and a half weeks and you got it all done and no one got asbestosis or silicosis or anything.

So, like, if you had that same role in this job as you did in that job, would you have done anything different?

MR. PERRONE: Objection.

THE WITNESS: I can't answer your question because I don't fully understand the question.

BY MR. CLARK:

Q. Well, if you had essentially that role on this job, do you think these injuries, incidents would have happened on your watch or you would have done things differently to prevent them?

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A. Based on reasonable care, the unfortunate fact is that these accidents likely still would have occurred.

Q. And is that because of the deficiencies of Anchor Framing and the way they did business?

A. It's because of the circumstances surrounding each accident and the fact that I as the owner, entity, interested party would not have had the opportunity to observe these conditions or have knowledge of them.

Just like when I was on site part time during the renovation project at my wife's office, there may have been things that occurred when I wasn't on site that I would not have had the opportunity to intervene in that would have occurred in a matter of a couple of hours. And I could not have affected the outcome of those sets of circumstances.

So, in the same role as a developer who's making inspections and familiar with writing deficiency reports and the corrections are being made with a responsive contractor and there are no indications but for

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one of a fall-arrest concern on a roof, unfortunately, I don't think I would have been able to prevent either accident using that same level of care.

Q. You're aware that Anchor Framing was terminated from the site after the second incident, you're aware of that?

A. I am.

Q. And if they were terminated prior to the first incident, then these incidents probably would not have happened. Right?

MR. PERRONE: Objection.

THE WITNESS: Terminated prior to the first one?

BY MR. CLARK:

Q. Yes.

A. Yeah. By simple deduction, they wouldn't have occurred. Yes.

Q. And do you agree with the decision to terminate Anchor Framing from the project?

Do you think that was a wise decision or an appropriate decision?

A. I don't have enough information to actually formulate that opinion.

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Q. Okay. In your review of your file and stuff, you never kind of thought about it?

Because I know it was talked about in the depositions and stuff.

You never formed an opinion as to if you thought that was a good idea or not?

A. You know --

Q. Doesn't this whole case really come down to --

I'll withdraw the question.

Doesn't the whole case really come down to whether or not Toll should have terminated them sooner?

MR. PERRONE: Objection.

BY MR. CLARK:

Q. Because eventually they terminated them in the end; they obviously agreed with that. And by all accounts, nothing's happened since they got terminated.

So, doesn't the whole case really come down to that?

MR. PERRONE: Objection.

THE WITNESS: That's an interesting perspective.

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But I will tell you that the goal of having a controlling employer do what they do and having a trusted partner and a professional framing company like Anchor goes a long way to having a safe project.

And by all accounts Anchor is and was a professional framing company. You have an owner who has a safety program in place, who is ten-hour trained. He has the two foremen who are OSHA ten-hour trained. We have evidence of training for workers. We have equipment on site that would have prevented both -- the Tenezaca accident for sure. They had equipment available that would have prevented the Zuna accident. The persons in charge of that work both have knowledge of the right way to do the work at the time, but they both chose not to at that point in time. And to take that long-term relationship where they were making corrections to observe deficiencies, which is expected during any construction project, they're being responsive.

And as Mr. Brown said, they terminated them at the point they did, as I understand it, because they found that something

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had changed at that point in time which was different from the prior experience with Anchor. That appears to be the reason why they made the termination is that they were no longer the same contractor they had been prior to that.
BY MR. CLARK:
Q. I find it interesting. I remember the Fernandes case where we sat across the table and did this for a day or so and then at trial. Like, the Fernandes case was one of the cases where you've got one of these contractors that doesn't do anything. Like, they have no safety, they have no meetings, they have no manual, they have actual knowledge of the hazardous condition which clearly violated OSHA. The trench was too deep, there was no trench protection. And you still, even in that case, came in and said, Yeah, the general contractor was proactive in safety and they didn't do anything wrong and we're all good to go here. Like, I remember that.
A. Well --
MR. PERRONE: Just let me note my objection.
Objection.

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THE WITNESS: Your characterization of both the facts and my opinions are incorrect, so --
BY MR. CLARK:
Q. Well, I have the transcripts. I mean, I remember at the trial in Fernandes I was like, Oh, my God, really? I said --
MR. PERRONE: Objection.
BY MR. CLARK:
Q. The trench was about -- it was five to eight feet deep. And I asked you at trial. And your quote was -- and it had no protection. It was a straight trench. It had no shoring, no benching. And you're like, Yeah, that's okay, OSHA permits that. And I'm like, Really? You know, like, a trench-collapse case. It was over --
MR. PERRONE: There's no question.
BY MR. CLARK:
Q. So, I guess the question is do you see a difference in cases --
Like, see, this is a Toll Brothers job. So, you get the big developer.

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They actually have the window dressing, they have a safety manual, you know, they do inspections.
You know, we can argue whether or not they really did anything and if it was window dressing or not.
But then in a case like this, you then rely on that stuff to say, Yeah, they were good, they did their job, everything is fine and that's why they're not responsible.
But then when we take a case with a smaller developer like in Fernandes or in the Rodriguez case or in the Berth case, and those cases with a smaller developer, where they have none of that safety, you still say they didn't do anything wrong, even when they had actual knowledge and the whole thing.
How does that work?
MR. PERRONE: Objection.
Is that even a question?
MR. CLARK: Yes.
BY MR. CLARK:
Q. How does that work? How do you do that?
Like, how in one case, like a

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Toll Brothers case, where they have the stuff you then rely on, compliance with core safety principles, to say that they're not responsible; but then when we get these other cases, smaller contractors, where they have none of the core safety principles, you still say it's okay and everything is fine, yet you hold yourself out as a Certified Safety Professional?
That's kind of where I see the whole dichotomy coming in.
Do you have any response to that?
MR. PERRONE: Objection.
THE WITNESS: The only response I can offer is your facts are incorrect, your recollection is incorrect. Some of the cases you referenced I don't believe I've been involved in.
And specifically with regard to your issue of, quote, How do you do that, every case is looked at independently and separately for the facts that pertain to those cases. And every opinion that I offer is correct, accurate, technically relevant and

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offered within a reasonable degree of certainty.
BY MR. CLARK:
Q. Because I remember I asked you in the Fernandes case, Assuming that as true, that he worked for Freitas for some three years and he was in hundreds of Freitas DAR trenches, and that most of those were over five feet and that no shoring or trench boxes were ever used, taking that as true, don't you see something wrong there? Question: Don't you see a problem there?
And your answer was, No.
That's on page 33 of that deposition on June 16th, 2010.
And then I asked you, I said -- because I found this astounding. And I submit that some courts reviewing it also found it astounding based upon how they decided the case -- said, Question: Do you think there is anything unsafe with a worker standing in a trench over his head, where the trench is not shored or protected in any way? Do you think there is anything unsafe about that?
And your answer is, It happens. OSHA permits that.

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A. May I read the entirety of the transcript section.
Q. Oh, absolutely.
MR. PERRONE: I object to the form of the question --
BY MR. CLARK:
Q. Like, if those two questions --
MR. PERRONE: -- and the speeches contained within the question.
MR. CLARK: Sorry.
BY MR. CLARK:
Q. If those two questions were on the Certified Safety Professional exam and you answered them like that, do you think you would have gotten credit for those?
Like, do you think they would have marked that with a C, correct, or an X with incorrect?
MR. PERRONE: Objection.
BY MR. CLARK:
Q. I mean, really. Really. I mean, you're under oath. We're honest. I mean, what do you think about that?
MR. PERRONE: Objection.

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THE WITNESS: Am I answering the question three questions ago or answering the question two --
BY MR. CLARK:
Q. It also goes back to, like, Affiliated Engineering, 90 percent is on behalf of insurance companies and defendants, you know, or plus. At least that's what Mr. Naughton says and Mr. Lorenz says. And I think -- was it Mr. Petrella used to say that as well?
But then you say, Well, I can't give a percentage. But everyone knows it's so much for the defense. And then we see stuff like this.
And the question is do you have any explanation for all that?
MR. PERRONE: Objection.
THE WITNESS: Okay. What's the question, then? There were four questions you've asked me without a time for response. So, I'm concerned as to what I'm supposed to answer right now.
BY MR. CLARK:
Q. If you have any explanation for that.

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A. What is that?
Q. I've got to do it again?
Do you want me to go through it again?
Okay. We'll take it step by step.
A. Okay.
Q. Well, why don't you go ahead.
A. Allow me to read this first and we'll see if we can't take it bite by bite. How's that?
Q. Sure.
MR. SULLIVAN: Can we just take a quick break. I have to make a quick call.
(A short recess is taken.)
THE WITNESS: All right. Reading through this, you're offering up a series of hypotheticals and other information.
And with regard to having trenches deeper than five feet, the way I answered it implies -- I don't remember what my thought process was at the time. But my answer implies that the trenches would have been -- or OSHA would have permitted it had it been in

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rock -- rock-type soil that doesn't require shoring, unlike a soil that would be collapsible, say.
(Exhibit Carlsen-5, Authorizations to Disclose and Produce Records, is marked for identification.)
BY MR. CLARK:
Q. Okay. I have marked as Carlsen-5 five additional authorizations to get your records from the International Code Council, the American Society of Civil Engineers, the National Society of Professional Engineers, the New Jersey Society of Professional Engineers, and the American Society of Safety Engineers.
And basically what I would like from these organizations is all the documents and applications that you submitted upon which you were approved to be a member in those organizations, because your CV lists as part of your credentials that you are a member in those organizations.
Do you have any problem signing those and giving us the authorization to get those records?

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A. I'm not inclined to authorize them at this point in time. But I'll speak with counsel about it.
Q. When you say "with counsel," you mean Mr. Perrone?
A. And/or house counsel for our company.
Q. Who's the house counsel for your company?
A. I would have to check to see who we use.
Q. Okay. And why will you not sign those at this time?
A. Again, I'm just not inclined to do so. I've never been asked to do that. I don't know that it's necessary or appropriate. I need to find out if it is in fact necessary and appropriate.
Q. Mr. Lorenz, your colleague, testified that, quote, I would say that any contractor that hires a subcontractor would have an obligation relative to safety. You agree with that. Right?
And he answers, Yes, I do.
My question to you is do you agree with that?

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MR. PERRONE: Objection.
THE WITNESS: Can you reread the question?
BY MR. CLARK:
Q. The question is, You would agree, would you not, that I would say that any contractor that hires a subcontractor would have an obligation relative to safety? You agree with that. Right?
And the answer was, Yes, I do.
My question is do you agree with that?
A. We went through that earlier. Yes.
Q. Okay. Mr. Tenezaca testified that he had no workplace safety training.
Do you recall that testimony?
A. I do.
Q. Do you think he was not telling the truth when he said that?
A. I don't know. I don't offer an opinion about that. What I -- I have seen -- I have seen testimony counter to that, as well as some notes that would be contrary to that

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information.
Q. Just because someone signs a form indicating that they attended a safety meeting does not necessarily mean that they actually in fact attended that safety meeting. Right?
MR. SULLIVAN: Objection to form of the question.
MR. PERRONE: Objection.
THE WITNESS: The reasonable interpretation is that that individual was at the meeting.
If you're asking is there a possibility, of course there's a possibility. But the reasonable interpretation of those records are that the person was there.
BY MR. CLARK:
Q. That's on the face of what the record might indicate, that the person was actually there. Right?
A. That's what I said --
MR. SULLIVAN: Same objection.
THE WITNESS: -- the reasonable interpretation of that.

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One can conjure up any set of circumstances by which they say a signature can arrive anywhere on any document. But --

BY MR. CLARK:

Q. That's what I'm saying.

A. But what I'm saying is in the context of training records and meeting records, it's typical that the person who signs it is the person who attended.

Q. Because you have in your file some training records that might have Zuna's name on them. Right?

A. That is correct.

Q. All right. But just because his name is on the record doesn't mean that he actually attended and had such safety training. Right?

MR. SULLIVAN: Objection to the form of the question.

MR. PERRONE: Objection.

THE WITNESS: Again, unless proven otherwise, the reasonable interpretation and the way I use them is that in fact that person was in attendance.

BY MR. CLARK:

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Q. How about if the person testified, I was not in attendance and, in fact, on one of the forms that's not even my signature?

MR. SULLIVAN: Objection to the form of the question.

BY MR. CLARK:

Q. Would that be sufficient proof in your regard -- in your mind?

MR. PERRONE: Objection.

MR. SULLIVAN: Objection to the form of the question.

THE WITNESS: That would certainly go to discrediting the value of the signature on that document.

BY MR. CLARK:

Q. Because you could imagine that on some work sites they might just say, Hey, sign this form and he signs it and goes home for the day, but they never actually attend a safety meeting.

You can imagine certain scenarios where that could be the reality of what happens. Right?

MR. SULLIVAN: Objection to

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the form of the question.

MR. PERRONE: Objection.

THE WITNESS: Hypothetically you can come up with any number of scenarios I'm sure to discredit a signature on a document.

BY MR. CLARK:

Q. And since these guys speak only Spanish, if they're to get appropriate work-safety training, it should be in Spanish, right, not English?

A. Not "should." It has to be in Spanish.

Q. Mr. Lorenz also testified at a trial that OSHA requires all contractors to perform their work safely and in accordance with OSHA standards.

Do you agree with that?

MR. PERRONE: I'm sorry, Jerry.

Can I have that read back? It was a little fast for me at the beginning. Sorry.

(Pertinent portion of the record is read.)

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THE WITNESS: I do.

MR. SULLIVAN: Jerry, can you just tell us where this is coming from?

MR. CLARK: Sure. This is the transcript in the case of Coronel versus Brigati, Docket Number 8031-08. And it is 4T.

The transcript date is July 18, 2013. And Mr. Lorenz's testimony begins on page -- well, the cross -- the good part, the cross-examination, begins on page 105.

MR. SULLIVAN: What's the docket number?

MR. PERRONE: I think I may have to object to that.

MR. SULLIVAN: What was the docket number?

MR. CLARK: I'm sorry. It is 8031-08.

MR. SULLIVAN: I mean venue.

MR. CLARK: L. L dash -- I'm sorry. It's Essex County, ESX-L.

MR. SULLIVAN: Thank you.

BY MR. CLARK:

Q. Okay. Mr. Gallagher talks in his

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report about --
A. Are we in Tenezaca or Zuna?
Q. Zuna.
Why don't you go to his report on page four, if you don't mind.
A. The February 26th, 2013 report?
Q. Yes.
A. Okay.
Q. So, there's a section there dealing with statistics about the severity of falls in the construction industry.
You don't have any reason to disagree with that; do you?
MR. PERRONE: Objection.
THE WITNESS: I don't.
BY MR. CLARK:
Q. And there's a section dealing with the industry standard Section Roman numeral VIII that begins on page five. And it gives an overview of core safety principles, safety beginning at the top, safety is a shared responsibility.
Is there anything you disagree with in that section of the report?

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When I say "that section," I really mean Roman numeral VIII, generally speaking, the core safety principles.
MR. PERRONE: I was going to note an objection. That goes from page five to page 17, I think.
MR. CLARK: Yes.
MR. PERRONE: And obviously you can answer the question. But you're also entitled to read through it before you answer it. I mean, you just gave it to him, so --
BY MR. CLARK:
Q. I'm trying to avoid having to read it word for word. I'm sure you've read the report word for word in the past, so that's why I'm trying to frame the question in a general way.
So, let me just rephrase the question.
The section of the report that counsel just referred to, these are basically core safety principles. Right?
A. I disagree with the characterization. You say "core safety principles."
These are a number of

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documents Mr. Gallagher has gathered together and provided information on. They don't form the industry standard as he says, but they are safety information from those documents.
Q. Do you agree with that information in there in a general sense?
MR. PERRONE: I'm going to object to the form of the question.
If you have something particular you want to address, I think that would be more appropriate. Otherwise, I don't know how he does this without actually taking the time to look at it. I mean, I don't think he has it committed to memory.
MR. CLARK: I hear you on that. I'm just thinking that he would have already read it in responding to the report. I know he responded to it in his report, so --
MR. PERRONE: I don't disagree with you, Jerry. I'm just saying I don't know that he has it committed to memory for a question of that nature, Is there anything in there.
So, take your time. I

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mean --
THE WITNESS: Can you read back the question, then?
BY MR. CLARK:
Q. Let me just redo it.
In a general sense, do you agree, generally speaking, with those core industry standards that are in there?
MR. PERRONE: Objection.
THE WITNESS: Agree that that's what those documents say?
Some of these -- now, understand, these documents are outdated. Right? So, they -- they say what they say when they said it.
Do they influence today's standard of care? No, not in my opinion. Are they what they are? They are. They are simply what they say from 20 years ago, 18 years ago. They're not the most current versions of those documents. They've changed since he wrote them.
So, it's -- I would not rely upon -- even if it were a usable document, I wouldn't rely upon the editions he relies on,

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since they're older and out of date.
BY MR. CLARK:
Q. Let me ask you this.
Is there any way that you can respond to my question without reading them in detail?
Well, you did. I mean, you talked about some are outdated.
But are there principles in those documents that you agree with?
A. We'd have to go through one by one, then.
Q. All right. I'm not going to do that. That's fine.
MR. SULLIVAN: You are or are not going to?
MR. CLARK: Oh, no. I'm not going to do that today.
BY MR. CLARK:
Q. The Certified Safety Professional certification, you know, indicates that you might want to get this certification to move into a new professional position or to move up in your current organization or move into private

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practice. It gives you opportunities, because you can say, you know, I have the certification.
Why did you obtain the certification? What was your reason for doing it?
A. Because I could. I found the certification to be of value to me professionally.
Q. Do you agree that it's the premier certification in the safety profession?
A. I do.
Q. Do you believe it is an important component to your credentials as a safety professional?
A. "An important component"? It's a component. It's not necessary for me as a professional -- safety professional. But it simply puts a certification where the knowledge previously existed.
Q. Do you believe it is an inimportant (sic) component to your credentials as a safety professional?
A. No.
MR. PERRONE: Objection.

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BY MR. CLARK:
Q. So, two negatives make a positive. Right?
A. You said it is an important part of mine or an in – did you say inimportant?
Q. The first question was, Is it an important component of your credentials? And I did not get sort of a yes-or-no answer. I got some sort of comment about it. So, then I asked it in the reverse by saying, Do you believe it is an unimportant component? And then you said, No. So, I said, Two negatives make a positive. Right?
MR. PERRONE: Objection.
THE WITNESS: All right. Then you confused me with the question as I understood it, so --
BY MR. CLARK:
Q. I did not intend to confuse you.
Let's just ask a very simple question that we all probably learned in high school or grammar school.
Two negatives make a positive. Right?

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MR. PERRONE: Objection.
THE WITNESS: Yes.
BY MR. CLARK:
Q. The Certified Safety Professional component of your credentials as a safety professional, is it unimportant?
A. No, it's not unimportant.
Q. Okay. Would you agree that it's an important component of your credentials as a safety professional?
A. You say "important." I would say it's not unimportant. It's a part of my credentialing. It's one of the many things I've done in my career that influence the work that I do.
Q. The phrase "not unimportant" is a double negative. Correct?
A. Not necessarily.
Q. Okay.
A. Not unimportant to me does not mean important.
Q. And you also don't see a problem with a worker working for a company for three years being directed into hundreds of trenches over

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five feet with no shoring or trench boxes ever used.

You also believe that.

Right?

MR. PERRONE: Objection.

THE WITNESS: Can I please read that section.

BY MR. CLARK:

Q. Sure. It's down on page 33.

A. I'm sorry. Do you have a line and page again?

Q. It's page 33. It's sort of towards the top. It's the question that deals with not having a problem with that hazard.

MR. PERRONE: Objection.

(Pause.)

THE WITNESS: I think the issue with this whole line of questioning is that all those issues were refuted by the employer and others such that the questions being asked were -- you know, you're saying do you see a problem there. No, because the other evidence indicated that was not the case.

BY MR. CLARK:

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Q. The OSHA report narrative says that with regard to the Tenezaca incident, the employees were completing an overhang between the second roof and third roof when one man fell. There was no protection of any type provided to those employees working at the rear section of the roof. An employee fell and suffered severe head injury.

Do you see any problem there with the worker being up there with no fall protection as described in that section of this report?

A. Of course.

Q. The report also indicates that there was never any design in place for a fall-protection system to protect anyone working on the roof.

Do you see a problem there?

MR. PERRONE: I object to the --

MR. SULLIVAN: Objection to the form of the question.

MR. PERRONE: I object to the form of the question as well.

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THE WITNESS: Yeah. I'm not so sure what the exact intent is there in terms of the meaning. But if -- if it's indicating there was never a fall-protection system, the answer is yes, that would be a problem.

BY MR. CLARK:

Q. Okay.

A. But I don't know what the actual intent was.

MR. SULLIVAN: When you say "intent," are you referring to the writing on the paper?

THE WITNESS: Yes. I believe there's testimony to the contrary.

BY MR. CLARK:

Q. The OSHA report section indicates in regard to the second accident, The foreman said that Toll Brothers, the GC, was pressuring his boss to get the job done as soon as possible, so he borrowed scaffolding from another contractor. There were scaffold parts available at their shop in New Jersey and he could have had them brought to the site. But in order to save time, he borrowed the scaffolding.

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Do you see any problem there, assuming that's true?

MR. SULLIVAN: Objection to the form of the question.

MR. PERRONE: Objection.

THE WITNESS: A couple of things. The problem is that the testimony bears out that those facts are certainly not accurate.

Toll Brothers, as I understand it, requested that work be performed at least a week before the date of the incident. The owner of the company, the owner of Anchor, testified that they had equipment that was ready and able to be brought to the site within that week's time frame to do the work safely, and then at the eleventh hour the worker for Anchor decided that he was going to perform that work in the way he did not because somebody had required him to do it that day, but because he had failed to plan for the work.

BY MR. CLARK:

Q. What if the foreman intentionally erected the scaffold without the safety features because his boss was being pressured by the

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general contractor to get the job done? What if that is in fact true?

I know in response to the previous question you questioned the veracity of that.

But what if it is in fact true? Do you see a problem there?

MR. PERRONE: Objection.

THE WITNESS: Any contractor who performs his work unsafely because they feel pressure on schedule is still responsible to do the work safely. So, they can't use time or pressure as an excuse to do the work unsafely. So, I would not accept that as being a valid reason to perform the work unsafely.

BY MR. CLARK:

Q. What if they're concerned about their ability to put food on the table, if their choice is to do the work fast and unsafely or not please the contractor and risk being replaced by some other contractor?

MR. PERRONE: Objection.

BY MR. CLARK:

Q. In that hypothetical can that excuse

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be used?

MR. PERRONE: Objection.

THE WITNESS: So, your hypothetical applies to Zuna, are we talking about, with regard to a scaffold being erected unsafely and not taking the 30 seconds it takes to install a guardrail on a scaffold?

I don't see that those two are consistent. It takes no time to put a guardrail in on a scaffold, and it certainly would not be a holdup to getting work done in a timely fashion.

BY MR. CLARK:

Q. Well, let's just take the hypothetical, though.

What if the choice is between putting food on the table and working fast and unsafely or being dismissed from the job for going slower to be safe? What if they're working under those sorts of elements? Is there a problem there?

MR. PERRONE: Objection.

MR. SULLIVAN: Objection to the form of the question.

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THE WITNESS: Sure, it's a problem. You have to work safely, period. You either go home or you do the work unsafely. You do not do the work unsafe.

BY MR. CLARK:

Q. And if a contractor is put in a position where he has to make a choice between feeding his family and working safely, there's a problem there. Right?

MR. PERRONE: Objection.

MR. SULLIVAN: Objection.

BY MR. CLARK:

Q. No contractor should be put in that situation.

Do you agree?

MR. PERRONE: Objection.

MR. SULLIVAN: Objection.

THE WITNESS: Again, under your hypothetical situation every person involved in construction has to make their decision to work safe or unsafe, whatever the pressures are, weather, time, schedule, personal career, whatever the case might be. So, there's no time to do the work unsafe.

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BY MR. CLARK:

Q. And in response to a couple of questions ago, I heard you blame the worker there. You said Zuna could have done something or put the guardrail up or something.

Do you as you sit here know in fact whether or not he was trained? Do you have personal knowledge in that regard?

I thought he testified he didn't have the training.

MR. PERRONE: Objection.

THE WITNESS: Your question implies an answer I did not give, and your question asked about the foreman erecting the scaffold, as I understood the question.

So, with regard to that, that's not what I stated. My understanding is from Mr. Zuna's testimony that he did not have scaffold-erecting training.

BY MR. CLARK:

Q. Okay. Do you blame Zuna for the injuries he sustained?

A. No.

Q. Do you blame Tenezaca for the

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injuries he sustained?
A. Mr. Tenezaca, to the extent that he was trained --
Q. Well, let me just interrupt you. I know I'm interrupting you. But he did testify he was not trained. But go ahead. I'm sorry. I didn't mean to interrupt -- I did mean to interrupt, but please excuse it.
A. I predicated my answer with we have -- I have information in the file that Mr. Tenezaca received training and knew how to use the equipment that would have kept him safe and knew where to find the equipment and keep him safe.
So, to the extent that Mr. Tenezaca was a four-year-experienced framer with Anchor and had the knowledge and the training, then each of those workers who has the training and the knowledge and the equipment does have an obligation to work safely, especially if that's his employer's expectation.
I recognize that his foreman, Victor Lopez, did not enforce that at the time. But Mr. Tenezaca, who had the knowledge, still

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could have worked safely had he chosen to do so, as I understand it.
Q. Tenezaca testified at page 74, You testified that you had no workplace-safety training in connection with working for Anchor. Is that right? And the answer is, Yes.
Do you have information that refutes that?
A. Yes. Victor Rodrigues, who owns Anchor, was emphatic that Mr. Tenezaca in fact had the requisite training.
There are also some handwritten notes from Mr. Klonicke of a March 6th, I believe, telephone conference, a meeting he had, where in those notes it implies that Mr. Tenezaca had training and knowledge of the equipment and how to use it. And Mr. Tenezaca had testified about two years earlier that he in fact, I guess, requested those materials at some point in his career such that at least he knew they existed.
Q. But "those materials" was a rope. Right?
A. It was described as a rope. It was

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through an interpreter. I don't know if he meant a lanyard. I don't know how it was -- but the words, I think, were rope.
Q. Right.
A. And if you're using a positioning system, that could be appropriate.
Q. A rope does not constitute a proper personal fall-arrest system. Correct?
A. If you're using a lifeline with a rope grab for a positioning system, there's no need for an arrester, no need for the special 5,000-pound anchorage. So, that can be used if you're using a restraint system, not a personal fall-arrest system. Different systems.
Q. Are you trying to, like, outsmart me on, like, a you-know-it-better-than-I-do kind of thing?
MR. PERRONE: Objection.
BY MR. CLARK:
Q. Because you know I did ask about a personal fall-arrest system. We're not painting towers here where the guy's only going to fall, like, a foot and it's a restraint system. We're talking about a personal -- that was what the

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question was. It was a personal fall-arrest system.
A. But you asked is a rope part of that system.
Q. No, no, no, no. I asked is a rope --
I'm sorry. I didn't mean to interrupt -- I'm sorry.
A. I answered --
Q. I did mean to interrupt.
A. I'm going to interrupt you.
Q. But please excuse me.
A. I answered the question to the best of my ability given the question I heard.
If I didn't answer your question, please ask me a new question.
Q. Are we doing the lawyers should never, like, wrestle with the expert in his field of expertise thing here?
MR. PERRONE: Objection.
THE WITNESS: I'm answering the question as best I can.
BY MR. CLARK:
Q. All right. Is a rope an appropriate

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personal fall-arrest system?
A. No.
Q. Okay.
A. It's not.
Q. Thank you.
In fact, if a guy ties a rope around his waist and falls, the rope could snap his spine. Right?
MR. PERRONE: Objection.
THE WITNESS: It's inappropriate to use a rope as part of a personal fall-arrest system.
BY MR. CLARK:
Q. And among the reasons, when they did the studies and stuff, was because people were doing that and becoming, like, paraplegics because they would snap their spine at the lumbar area.
MR. PERRONE: Objection.
THE WITNESS: The forces are excessive for the body, so all kinds of bad things can happen.
BY MR. CLARK:
Q. Which is why it has to be a personal

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fall-arrest system that properly arrests the fall?
A. If you're using a personal fall-arrest system, it has to be components designed for that use. If it's going to be something else, it can be something else.
Q. So, the fact that someone said a few years ago he may have asked for a rope is really not significant. Right?
MR. PERRONE: Objection.
MR. SULLIVAN: Same objection.
THE WITNESS: I do find it significant. But that is an element or can be an element of a safe way of working under certain circumstances.
BY MR. CLARK:
Q. We're not going to get another quote now of a six-foot trench over the head, no protection and OSHA permits that.
Are you saying --
MR. PERRONE: Objection.
BY MR. CLARK:
Q. Are you saying that a rope is an

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acceptable personal fall-arrest system now?
A. Do you not understand my answers?
Q. Apparently not. Go ahead.
A. Okay. Like you did on that other trench question, which you didn't understand my answer, I'll give you an answer again.
Q. Okay.
A. A rope is not an appropriate component of a personal fall-arrest system.
Q. Okay.
A. There are other systems that can use ropes.
Q. Okay.
A. Does that satisfy your question?
Q. If it satisfies you, because you're the one that's answering. If you're happy with it, that's really all that matters.
Tenezaca also testified in a question about if he made any complaints about safety or refused to go on the roof until they provided the full body harness and fall protection, you know, and based upon his experience with the company, what was his concern.

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And his concern was, The company fires you from the job if you don't want to do the job. Whatever the boss orders you to do, they will fire you from the job.
Essentially if you don't do what you're told.
Do you see a problem there as it relates to safety --
MR. PERRONE: Objection.
MR. SULLIVAN: Objection to the form of the question.
BY MR. CLARK:
Q. -- where a worker is concerned that if he raises a safety issue, he risks losing his job?
MR. SULLIVAN: Objection to the form of the question.
MR. PERRONE: Objection.
THE WITNESS: Yes. Like I answered previously with regard to his foreman making a poor decision.
BY MR. CLARK:
Q. And if the worker's choice is between putting food on the table or working unsafely,

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that's not a meaningful choice. Right?
MR. SULLIVAN: Objection to the form of the question.
MR. PERRONE: Objection.
THE WITNESS: I disagree. The work has to be done safely.
BY MR. CLARK:
Q. But if the worker's choice is to work unsafely as he's expected to or his other choice is to go home for the day or perhaps not come back to that employer, that's not a meaningful choice. Right?
MR. PERRONE: Objection.
MR. SULLIVAN: Objection to the form of the question.
THE WITNESS: That's a personal choice. And it's an awful choice to be faced with if that in fact is, in your hypothetical, a situation that would occur.
BY MR. CLARK:
Q. Do you have any reason to dispute Mr. Tenezaca's testimony at page 75 -- 74 and 75 where he relates that meaningless choice?
MR. SULLIVAN: Objection to

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the form of the question.
MR. PERRONE: Objection.
THE WITNESS: I have no reason -- if that's his testimony, that's his testimony.
BY MR. CLARK:
Q. Do you have any reason to dispute that testimony as you sit here today?
MR. PERRONE: Objection.
MR. SULLIVAN: Objection.
THE WITNESS: No. I have no reason to dispute it. No.
BY MR. CLARK:
Q. Okay. Do you ever experience any empathy for the plight of some of these workers and what they go through?
MR. SULLIVAN: Objection to form of the question.
MR. PERRONE: Objection.
THE WITNESS: Of course.
When you say "what they go through," do you mean their injuries, their lifestyles?
I mean, I understand it to be

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their injuries.
BY MR. CLARK:
Q. No, no. I mean what we just talked about in terms of this choice to really put food on the table or work in unsafe conditions.
MR. PERRONE: I just want to note my objection to this premise that this condition actually existed, because there's no evidence of it but for Mr. Tenezaca stating it.
MR. SULLIVAN: Same objection.
BY MR. CLARK:
Q. All right. Then let me move on and talk about the evidence of it. And we'll key it to Mr. Gallagher's report, because he talks about it in his report.
And it begins on page 21. It's the Section 10 dealing with Hispanic workers being at a higher risk for workplace injury and death.
A. Are we on page -- the Tenezaca report or the Zuna report?
Q. Zuna, 21.
Do you have any reason to

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dispute the statistics in this section of the report?
MR. PERRONE: Objection.
THE WITNESS: I don't.
BY MR. CLARK:
Q. Do you have any explanation for why Hispanics in the United States on job sites like this appear to be at a higher risk for workplace injury and death?
MR. SULLIVAN: Same objection.
MR. PERRONE: Objection to the extent you say work sites like this, because there's no evidence that this is occurring at a Toll work site. So, I object to your attempt to work that in through your statistics.
MR. CLARK: Well, my response to there's no evidence of this, we have the OSHA report, we have all the testimony of the witnesses, we have the fact that these two Hispanic workers did in fact sustain serious injury, and we also have the testimony from Mr. Tenezaca that we just spoke about in terms of his Hobson's choice.

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MR. PERRONE: Objection.
THE WITNESS: Can you read the question back for me, then, please.
(Pertinent portion of the record is read.)
THE WITNESS: No.
BY MR. CLARK:
Q. Did you ever look into that?
A. No.
MR. PERRONE: Objection.
THE WITNESS: I've never researched that topic.
BY MR. CLARK:
Q. And this is not the first case that you have worked on in a workplace injury where the worker was of Hispanic descent. Right?
A. Correct.
Q. Do you think it has anything to do with that perhaps Hispanic workers appear to be working on more residential construction projects where the safety rules are followed less or not at all?
MR. SULLIVAN: Objection to the form of the question.

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MR. PERRONE: Objection.
THE WITNESS: Again, I have no basis to offer you an answer on these. I don't know the answers.
BY MR. CLARK:
Q. I know you talked about how you agree with the ethics rules of the safety professionals, and you talk about or at least commented that you do have some empathy for the situations that you see.
Was it ever anything that you kind of introspectively thought about and said, Hey, you know, perhaps I can do something to prevent this or is there something that can be done here?
Being that you're a Certified Safety Professional and you seem to have some experience in cases like this, is there anything you ever thought about getting involved in or maybe doing something about --
MR. SULLIVAN: Objection to the form of the question.
MR. PERRONE: Objection.
BY MR. CLARK:

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Q. -- from a philanthropic or a moral standpoint?
MR. SULLIVAN: Objection to the form of the question.
MR. PERRONE: Object to the whole premise of your question. It assumes facts not in evidence.
THE WITNESS: Yeah. This is a hypothetical. And none of the topic you're talking about ever entered into consideration with regard to my opinions of the Toll site. I saw no indication that what -- of what you speak was related to the accidents involving Mr. Tenezaca or Mr. Zuna.
With regard to the discussion, this discussion has been held in my OSHA review courses, my trainer course. We had this discussion with an outreach group that continued to teach the interim fall standards to Hispanic workers, which I raised and protested, but they continue to this day to do so.
That's the extent of my involvement in the matter.
BY MR. CLARK:

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Q. What did you raise in protest?
A. That a group was continuing to teach the interim fall standards to Hispanic workers after the Subpart M requirements went back into effect for residential construction.
Q. What are the interim fall protection standards? Explain that to me in kind of layman's terms if you can. I don't understand what you just said there.
A. The interim fall standards are referenced in my report.
Q. Okay.
A. Those are the group one through four categories of how framing is to be done --
Q. Right.
A. -- which were rescinded in late 2010, early 2011 and, therefore, after that point in time are no longer -- should no longer be taught as part of framing courses, if you will.
Q. And are those standards more stringent than what is currently in place?
A. No.
Q. What are they? Are they less stringent?

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A. They're -- they're different. They don't require conventional fall protection under all circumstances.

Q. They say that slide guards may be enough in certain situations?

A. Correct.

Q. Okay. And the people at the course wanted to keep teaching the standard that required the personal fall protection situation?

A. No. The opposite.

There was a group there that taught Hispanic workers about fall protection. They're part of the OSHA 300 or 500 course. And the group, us, myself, were concerned that they continued to teach the interim standards beyond 2011. And they found them to be the safer way to work.

Q. Is the interim standard the one that requires the personal fall-arrest system?

A. No.

Q. It's the one that says slide guards are okay in certain situations?

A. Yes.

Q. And you wanted them to continue to

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teach what?

A. To teach the actual law as it states as of that time, which was using Subpart M, or writing specific safety programs if you can't comply with that.

Q. And is that the one -- the one that you were in favor of, was that the one that said slide guards are acceptable under certain circumstances?

A. No. Because that wasn't the law at the time the discussion was held.

Q. Which in your mind is the safer way?

A. It depends upon the work you're doing.

Q. Okay. You never worked as an employee of OSHA. Right?

A. Correct.

Q. You never worked as a consultant to OSHA?

A. Correct.

Q. And you never were a contractor for OSHA?

A. Correct.

Q. You never testified before the

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Occupational Safety and Health review commission. Right?

A. Correct.

Q. You never published anything on the policies and procedures that OSHA follows. Right?

A. Correct.

Q. By "published" I mean something that's actually published for wide distribution.

A. On policies and procedures, no.

Q. Okay. Have you ever published any articles regarding construction safety management?

A. No.

Q. Have you ever published any article regarding any aspect of safety?

A. The articles with regard to the demolition of the Vertac facilities may have had a component of safety in them. I don't recall at this time. It's been many years.

MR. CLARK: Okay. I don't have any other questions at this time. Thank you for your time today.

THE WITNESS: Thank you.

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BY MR. SULLIVAN:

Q. Mr. Carlsen, it's my understanding that you authored two reports in this matter?

A. I have, yes.

Q. Okay. One is dated December 16th, 2013, and that relates to Mr. Tenezaca's accident?

A. Correct.

Q. The other is dated December 17th, 2013, and it relates to Mr. Zuna's accident?

A. That's correct.

Q. Have you authored any other reports?

A. I have not.

Q. Okay. Other than the opinions that you've provided for in your reports and your testimony today, have you rendered any other reports with respect to the Zuna accident?

A. I have not.

Q. Okay. Have you rendered any other reports other than what you've testified here to today or what's contained in your report with respect to the Tenezaca accident?

A. No.

Q. Okay. Do you intend to?

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A. I do not, not at this time at least.

MR. SULLIVAN: I have nothing further.

BY MR. PERRONE:

Q. I just have two follow-ups to two questions that Jerry asked you.

Do you have any reason to credit Mr. Tenezaca's contention in his deposition that he had no choice but to work unsafely?

A. No.

Q. And do you have any reason to believe that workers on the Toll job sites were at a higher risk of injury because they were allegedly being pressured to somehow work unsafely?

A. No.

MR. PERRONE: Thank you.

- - -

(Deposition concluded.)

- - -

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CERTIFICATE

SUPERIOR COURT OF NEW JERSEY :

ESSEX COUNTY :

I, Dolores DeFilippis, RPR-CM-CSR, before whom the examination under oath of said witness was taken, do hereby certify that the witness, whose testimony appears in the foregoing examination under oath, was duly sworn, and that the transcribed deposition of said witness is a true record of the testimony given by the witness; that the proceedings herein are recorded fully and accurately; that I am neither attorney nor counsel for, nor related to any of the parties to the action in which this examination under oath was taken; and, further, that I am not a relative of any attorney or counsel employed by the parties hereto, or financially interested in this action.

DOLORES DeFILIPPIS, RPR-CM-CSR
License No. 30X100216300

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EXHIBIT G

AUTHORIZATION TO DISCLOSE AND PRODUCE RECORDS

TO: Board of Certified Safety Professionals

RE: **Timothy J. Carlsen**
c/o Affiliated Engineering Laboratories, Inc.
777 New Durham Road
Edison, NJ 08817

DOB:

You are hereby requested and authorized to disclose, make available and furnish to:

Gerald H. Clark, Esq.
Clark Law Firm, PC
811 Sixteenth Avenue
Belmar, New Jersey 07719
(732) 443-0333
(732) 894-9647 FAX

or said attorney's authorized representative any and all records in your possession related to my membership in your organization including, but not limited to, completed application forms together with all supporting documentation, testing documents and results, certifications, membership status information and any and all other documents in your files about me.

_____
TIMOTHY J. CARLSEN

Dated:

EXHIBIT
Carlsen 3
December 11, 2014
Dolores DeFilippis, RMR-CSR

AUTHORIZATION TO DISCLOSE AND PRODUCE RECORDS

TO: International Code Council (ICC)

RE: **Timothy J. Carlsen**
c/o Affiliated Engineering Laboratories, Inc.
777 New Durham Road
Edison, NJ 08817

DOB:

You are hereby requested and authorized to disclose, make available and furnish to:

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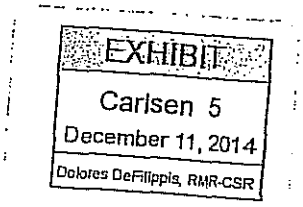
TIMOTHY J. CARLSEN

Dated:



AUTHORIZATION TO DISCLOSE AND PRODUCE RECORDS

TO: American Society of Civil Engineers

RE: **Timothy J. Carlsen**
c/o Affiliated Engineering Laboratories, Inc.
777 New Durham Road
Edison, NJ 08817

DOB:

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TIMOTHY J. CARLSEN

Dated:

AUTHORIZATION TO DISCLOSE AND PRODUCE RECORDS

TO: National Society of Professional Engineers

RE: **Timothy J. Carlsen**
c/o Affiliated Engineering Laboratories, Inc.
777 New Durham Road
Edison, NJ 08817

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Belmar, New Jersey 07719
(732) 443-0333
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or said attorney's authorized representative any and all records in your possession related to my membership in your organization including, but not limited to, completed application forms together with all supporting documentation, testing documents and results, certifications, membership status information and any and all other documents in your files about me.

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TIMOTHY J. CARLSEN

Dated:

AUTHORIZATION TO DISCLOSE AND PRODUCE RECORDS

TO: New Jersey Society of Professional Engineers

RE: **Timothy J. Carlsen**
c/o Affiliated Engineering Laboratories, Inc.
777 New Durham Road
Edison, NJ 08817

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Belmar, New Jersey 07719
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_____
TIMOTHY J. CARLSEN

Dated:

AUTHORIZATION TO DISCLOSE AND PRODUCE RECORDS

TO: American Society of Safety Engineers

RE: **Timothy J. Carlsen**
c/o Affiliated Engineering Laboratories, Inc.
777 New Durham Road
Edison, NJ 08817

DOB:

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Dated: