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James H. Anspach, PG (r), Dist.M.ASCE
Cardno – Global Senior Principal
ASCE – President Utility Engineering and Surveying Institute

Musings of an Expert Witness

From a US Perspective; Canada will be slightly different

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From a US Perspective; Canada will be slightly different

Utility damage prevention is supposedly a partnership exercise. That realization led to establishing the Common Ground Alliance. However, most damage cases initially focus only on the premise that the utility mark was correct or not. There is so much more that happens during a case. Project owner, project designer, utility owner, contract locator, contractor, subcontractor and more entities become parties to the case. This talk will highlight the lines of inquiry that an expert witness takes to look at each parties' actions.

Types of Cases $50,000 - $800M

- Death
- Injury
- Personal property damage
- Public property damage
- Environmental damage
- Loss of utility service
- Loss of housing
- Loss of medical services
- Loss of nationwide advertising campaign services
- Loss of rental units
- Loss of equipment
- Loss of retail income
- Loss of wages
- Wide-scale evacuation

Clients

- Private Citizens
- Contractors
- Engineers
- Architects
- Utility Companies
- Contract Locators
- U.S. Government
- Municipalities
- Private Corporations
- Insurance Companies

My Job

- Identify applicable statutes
- Identify applicable standards
- Identify potential parties
- Offer opinions on what went wrong (who, what, where, when, how, and why)
- Identify all potential problems with all sides of the case so that my client isn't blindsided

Who are the Parties?

Who are the Parties?

- Contractor
- Equipment Manufacturers
- Utility Company
- Contractor
- One-Call Center
- Project Owner
- Engineers / Architects
- Innocents

- Public Agency utility engineer
- Public Agency survey section personnel
- Public Agency Property Department
- Railroad Companies
- Public Agency traffic Department
- Design or Planning Consultant hired by the Public Agency
- Survey consultant hired by the Public Agency
- State One-Call Center
- Utility company records personnel
- Utility company engineering personnel
- Public Agency maintenance personnel
- Utility company “locators”
- Utility company “contract locators”
- Private industry “private utility locators”
- Public Agency construction inspectors
- Utility company construction inspectors
- Public Agency consultants for construction inspection
- Utility company consultants for relocation design
- Public Agency utility design or relocation designers
- Public Agency engineers or their consultants
- Federal Aviation Administration (FAA)
- Agency Tenants
- Military
- Federal Highway Administration (FHWA)
- Subsurface utility engineering consultants
- Construction Personnel
- Maintenance Personnel
- GIS departments

General Documents to Evaluate

- State / Federal Law and Regulations
- Construction and Consulting Contracts
- Project Plans and Specifications
- Standards in the Industry
- Practice in the Applicable Community
  - Best Practices

3 “typical” major questions

- Were the utilities marked correctly on the ground?
- (utility owner, contract locator)

Were the utilities shown correctly on the plans?

- **Were there any plans?**
- **Should there have been plans?**
- **What else was on the plans? Specs, e.g.**

Were the utility records detailed and accurate and available?

The Presumption of Guilt is Usually on the Contractor

- State / Federal Law and Regulations
  - State One-Call Law
    - Construction
    - Design
  - OSHA Regulations (Standards - 29 CFR)

OSHA Regulations (Standards - 29 CFR)

- Accident prevention responsibilities
  - It shall be the responsibility of the employer to initiate and maintain such programs as may be necessary to comply with this part.
  - Such 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.
  - The employer shall permit only those employees qualified by training or experience to operate equipment and machinery.

Excavation

The estimated location of utility installations, such as sewer, telephone, fuel, electric, water lines, or any other underground installations that reasonably may be expected to be encountered during excavation work, shall be determined prior to opening an excavation.

Excavation

Utility companies or owners shall be contacted within established or customary local response times, advised of the proposed work, and asked to establish the location of the utility underground installations prior to the start of actual excavation. When utility companies or owners cannot respond to a request to locate underground utility installations within 24 hours (unless a longer period is required by state or local law), or cannot establish the exact location of these installations, the employer may proceed, provided the employer does so with caution, and provided detection equipment or other acceptable means to locate utility installations are used.

Excavation

When excavation operations approach the estimated location of underground installations, the exact location of the installations shall be determined by safe and acceptable means.

In the Contractor's favor? Contracts

- What was the Scope of Work?

DOES THE CONTRACT CONTAIN A DIFFERING SITE CONDITIONS CLAUSE?

PURPOSE OF DIFFERING SITE CONDITIONS CLAUSE

"The purpose of the changed conditions clause is thus to take at least some of the gamble on subsurface conditions out of bidding. Bidders need not weigh the cost and ease of making their own borings against the risk of encountering an adverse subsurface, and they need not consider how large of a contingency should be added to the bid to cover the risk. They will have not windfalls or disasters…

(continued)

…

The Government benefits from more accurate bidding, without inflation for risks which may not eventuate. It pays for difficult subsurface work only when it is encountered and was not indicated in the logs."

Foster Constr. C.A. & Williams Bros. Co. v. United States, 193 Ct. Cl. 587, 435 F.2d 873 (1970)(emphasis added)

DOES THE CONTRACT CONTAIN DISCLAIMERS (EXCULPATORY) CLAUSES?

- Contractor's Obligation to Investigate Utilities
- Engineer's disclaimer of utilities
- Notes on Utilities on plans and specifications

A DSC takes precedence over attempts to restrict its effectiveness through broad exculpatory language denying owners liability for express or implied representations in the contract.

IMPLIED WARRANTIES

- Adequacy of the plans and specifications,
- Duty of good faith and fair dealing,
- Reasonableness of the time allotted for performance, and
- Access to the site.

IMPLIED WARRANTY OF SPECIFICATIONS

When the Government furnishes project plans and specifications, it has impliedly warranted that those documents are accurate and suitable for their intended use.

United States v. Spearin (U.S. Supreme Court 1918)

THE IMPLIED WARRANTY OF PLANS AND SPECIFICATIONS IS BREACHED BY DEFECTS WITHOUT A SHOWING OF NEGLIGENCE

". . . when a contractor was delayed because defendant's specifications were deficient, such contractor was entitled to recover the extra costs resulting from delay due to the mistakes in the plans . . . As the court stated, defendant warrants the adequacy of its plans and specifications. If they are defective, defendant is as [sic] fault. It is irrelevant whether defendant was or was not negligent in the preparation of them."

Carl M. Halvorson, Inc. v. United States, 461 F.2d 1337 (1972) at 1344-1345

THE CONTRACTOR HAS NO OBLIGATION TO ITSELF DETERMINE THE ADEQUACY OF THE OWNER'S PLANS

"Courts have held many times that a bidder need not verify the correctness and adequacy of the Government's specifications prior to bidding." *Consolidated Diesel Electric Corp.*, ASBCA 10486, 67-2 BCA ¶ 6669 (1967)

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- What happens when the plans (utility depictions) are different from utility markings on ground?
- Inadequacies of One-Call statutes?

Project Owners / Engineers

- Standard of Care

Jury Instruction BAJI 6.37.

Duty of a Professional

In performing professional services for a client, an (engineer) has the duty to have that degree of learning and skill ordinarily possessed by reputable (engineers), practicing in the same or similar locality under similar circumstances. It is their further duty to use the care and skill ordinarily used in like cases by reputable members of their profession practicing in the same or similar locality under similar circumstances, and to use reasonable diligence and their best judgment in the exercise of their professional skill and the applications of their learning,

Note the following three important points in BAJI 6.37:

- "care and skill ordinarily used"
- "practicing in the same or similar locality"
- "under similar circumstances"

When faced with the issue of whether an engineer has met the "standard of care," the attorney seeks the opinion of another professional. We must remember that the attorney is not usually seeking an unbiased professional opinion. The attorney is an advocate for his or her client's position (right or wrong) and the attorney is seeking a professional's opinion that will support his or her advocacy. Attorneys will search until they have found that supporting opinion. Occasionally, an attorney finds an engineer who believes that he or she also has been retained to be an advocate.

Illinois Court Expands Engineer's Duty of Care Beyond the Terms of the Applicable Contract

The Illinois Appellate Court recently held that an engineer's duty of care may extend beyond the scope of the terms of the applicable contract to include a duty to recognize and address potentially unsafe conditions, when the contract at issue calls for the "degree of skill and diligence normally employed by professional engineers or consultants performing the same or similar services." [Thompson v. Gordon, et al., 2009 WL 3969619 (Ill. App. 2 Dist. 2009).]

An industry standard of care must be built to reflect those conditions which existed at the point in time when the work in question was executed. Therefore building a standard of care is best described as a focused discovery process composed of sequential, logical steps:

- The industry task is identified;
- The relevant time period is established;
- The industry conditions are established (time and location);
- The industry information resources available are identified (time and location);
- The appropriate industry information applicable to the task is identified (codes, association publications, etc.);
- The appropriate industry standard of care for that task is built utilizing the information available at that time and in that location.

In the end, the expert is looking to establish:

- What was known about the technology and/or systems at the point in time when the Project was executed?
- Who had that knowledge?
- Was it reasonable for the Engineer to have that knowledge at that time?
- Did the Engineer have that knowledge?

In order to accurately ascertain the roles and responsibilities of each party to the Project, it is necessary to analyze the Project from two foundation sources: the *contract document sets* which existed between the various parties; and the applicable, recognized *industry standards of care*. The contract document sets established the roles, responsibilities and scope of work for each of the parties to the Project.

Hierarchy of Documents

Types of Information I seek

- What utility owners were contacted for records?
- What records were received?
- What effort was made to obtain better records?
- Were the records interpreted correctly?
- Were the records complete and accurate?
- Was record data transferred adequately to the plans?
- What did any notes on the plans say?

- What kind of utility investigation was performed by fieldwork?
- Were the field technicians/surveyors trained in utility field identification? (CEUs, PDHs, courses, OTJ documentation)
- Did the surveyor/engineer review the CAD work adequately?
- Were the records correlated to existing field features correctly?
- Were all utility features correctly identified and accurately depicted?

- Did anyone mark utilities in the field?
- What were their qualifications? (proof?)
- Were discrepancies addressed between records and field markings?
- Is ASCE 38 / CA 250 S11 in play?
- if so, was it followed correctly?
- What other industry standards of practice may be involved?

- Names, addresses, and contact data of any engineers, technicians, or other employees billing to this project
- Corporate Quality Assurance plan and checklists
- Project Quality Assurance plan, checklists or other documentation
- Educational and work history background of engineer in responsible charge of this project
- Continuing education credits / PDH hours relative to project design, planning, and construction and/or damage prevention for engineer in responsible charge of this project
- List of all engineering design standards or guidelines used for the planning, design, or construction of this project
- List of local, regional, or national professional societies or associations for the engineer in responsible charge of this project and the Company

- Training records of any representative, foreman and crew members on the project specific to damage prevention and/or construction inspection.
- Documentation of training in state one-call regulations for representative, foreman and engineers on the project.
- All documentation requesting data from utility owners
- Documentation of, and all information received from, utility owners pursuant to a request for their records
- Corporate history of any past claims regarding design or construction
- Documentation of any meetings, correspondence, or phone conversations with utility owners, and other parties regarding planning, design, or construction of this project
- Contracts between all the parties

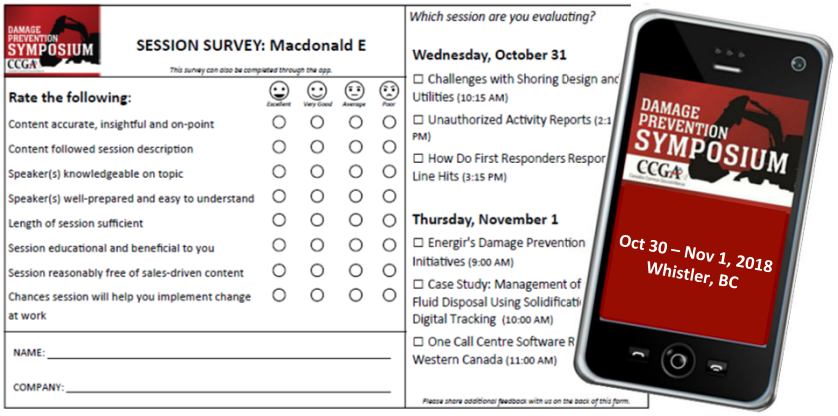
All cases are different

- Almost every One-Call statute has vague and ambiguous language
- In every case, it is possible to point the finger at many parties
- A good project starts with a good design and documentation of base conditions
- Every party needs to do a better job of documenting its efforts

Questions

- James.Anspach@cardno.com

Before You Leave…



DAMAGE PREVENTION SYMPOSIUM
CCGA

SESSION SURVEY: Macdonald E

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Content accurate, insightful and on-point	○	○	○	○
Content followed session description	○	○	○	○
Speaker(s) knowledgeable on topic	○	○	○	○
Speaker(s) well-prepared and easy to understand	○	○	○	○
Length of session sufficient	○	○	○	○
Session educational and beneficial to you	○	○	○	○
Session reasonably free of sales-driven content	○	○	○	○
Chances session will help you implement change at work	○	○	○	○

NAME: _____

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Which session are you evaluating?

Wednesday, October 31

☐ Challenges with Shoring Design and Utilities (10:15 AM)

☐ Unauthorized Activity Reports (2:1 PM)

☐ How Do First Responders Respor Line Hits (3:15 PM)

Thursday, November 1

☐ Energir's Damage Prevention Initiatives (9:00 AM)

☐ Case Study: Management of Fluid Disposal Using Solidificati Digital Tracking (10:00 AM)

☐ One Call Centre Software R Western Canada (11:00 AM)

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