

IN THE SUPREME COURT OF THE STATE OF WASHINGTON

LARRY MICHAELS and DEBBIE)	
MICHAELS, husband and wife and the)	
marital community comprised thereof; DAN)	
EVANS, a single person; and KATHY D.)	
CMOS, individually and as the)	
Administratrix and Representative of the)	
Estate of Mike P. Cmos, Jr.,)	En Banc
)	
Respondents,)	No. 84168-3
)	
v.)	
)	
CH2M HILL, INC., a Florida corporation;)	
and KELLY IRVING,)	
)	
Appellants.)	Filed May 26, 2011
_____)	

CHAMBERS, J. — There was a catastrophic failure at the Spokane wastewater treatment plant. One man was killed, two others were severely injured. The survivors successfully sued an engineering firm that was working with the city at the time. We must decide whether that firm enjoys Industrial Insurance Act immunity under RCW 51.24.035. The appellants also challenge the trial judge’s rulings on duty, cause in fact, legal cause, superseding cause, and 26 specific

findings of fact. Finding no error, we affirm.

FACTS

On May 10, 2004, a digester dome at Spokane's sewage treatment plant collapsed. The collapse dropped Mike Cmos into sewage sludge, where he drowned. The trial judge observed that "Mike Cmos arguably suffered one of the most disgusting and terrible deaths imaginable." Clerk's Papers (CP) at 3048. Cmos's body was removed from the digester days later by the Spokane Fire Department. Dan Evans was thrown from the top of the dome and drenched with sewage sludge and Larry Michaels, who was on the ground, was knocked down by the wave of cascading sludge. Evans, Michaels, and Cmos's family sued CH2M Hill Inc. for negligence.

The collapse took place at the Spokane Riverside Park Water Reclamation Facility. This plant was built in 1977 and had three sewage digesters. Ex. 57 (after accident report of the Spokane Fire Department). These "digesters" have been described as resembling a small domed sports stadium. *Id.* Digester 3, where the accident happened, had a capacity of 2.25 million gallons. *Id.* "The purpose of the digester is to take raw solids [and] circulate[] the solids for 20 to 40 days at approximately 100 degrees Fahrenheit in an anaerobic process until they are stable and able to be used as commercial fertilizer." *Id.* Generally, one digester was used as a primary digester, one as a secondary digester, and one for storage for times when "the biosolids land application process is hindered by unfavorable weather conditions." Ex. 11.

CH2M is an engineering firm. It had been hired by the city in 1998 as an engineering consultant for a 10-year capital improvement project to upgrade and retrofit the sewage plant. The plant was to continue operating during the improvements. Among other things, CH2M was hired to “design and manage an upgrade to and redesign of the recirculation and heating systems for the digesters. During the anticipated 10 year retrofit, CH2M also contracted to “provide ‘on-call’ services for plant operations.” CP at 3110 (Finding of Fact (FOF) 15). Kelly Irving, an engineer and CH2M employee, acted as the on site program manager for CH2M. He is also a named defendant in this action.

It seems that the plant had been struggling to keep the digester tanks warm enough for necessary bacterial activity, especially as the density of biosolids in the digesters increased. Instead of heating the tanks directly, sewage was circulated through heaters and back again to the tanks. Cold raw sludge was also fed directly into the digester tanks. As an interim fix for the temperature problem, Irving suggested separating the incoming unheated sludge flow from the heated sludge flow. On May 3, 2004, one week before the collapse of the digester, this option was discussed at a regularly scheduled meeting of sewage plant employees. Irving suggested using valves to separate the flows. These valves would redirect sludge through a previously unused pipe into a newly isolated line, which had originally been designed as a suction line for removing sludge from the digester, and to close off the intersection between the recirculation line from the heater and the incoming raw feed. City employees suggested using “skillets” instead of valves “because it

would be more expedient and less expensive.” CP at 3113 (FOF 32). The trial court found, in a challenged finding of fact, that “Irving and CH2M accepted the suggestion.” CP at 3113 (FOF 33).¹ The trial court found that the skillets performed the same essential function as a valve.

Irving made recommendations as to where the skillets were to be placed. The changes to the pipes were made over the next few days. The trial court found that Irving and CH2M did not perform “any engineering analysis of the effects the flow separation and the skillets would have upon the City’s operation of the digesters” and that they did not prepare a written analysis of the changes. CP at 3115 (FOF 40). The installation of the skillets did not merely change some regular pattern of flow: it also necessitated a change in the valving used by plant operators to transfer sludge between the digesters. Unfortunately, neither the plant superintendent, operations supervisor, nor the maintenance supervisor was aware that the installation of the skillets would change the valving used by the city plant operators for the transfer of sludge between digesters.

A few days later, the sewage plant shift supervisor, Terry Headley, a city employee, “became concerned that Digester 3 was too full” and ordered his subordinates to transfer some of the sludge to Digester 2. CP at 3116 (FOF 46). Headley knew that the skillets had been installed and where. However, Headley had not been instructed on “the effects of the installation of the skillets on the

¹ CH2M makes much of the fact that it initially recommended installing valves, not skillets. The significance of this is not apparent to us. It appears the skillets performed the same function as closed valves. Once installed, they blocked off the flow of the sludge. No evidence has been called to our attention that the skillet failed to operate as intended.

valving employed by the plant operators for pumped transfers of sludge.” CP at 3117 (FOF 49). The workers on shift “twice attempted to trace the piping of the digesters to determine how to valve a pumped transfer from Digester 3 to Digester 2, checked and rechecked their work and believed they had valved correctly for such a pumped transfer in light of the installation of the skillet.” CP at 3117 (FOF 51). Unfortunately, the configuration of valves and skillets they chose created a “‘deadhead,’ and the recirculation pumps were not pumping sludge out of Digester 3.” CP at 3118 (FOF 56). Exacerbating the situation, one of Digester 3’s overflow systems had been disabled, the other was off, and the internal “SCADA”² sensors were malfunctioning. CP at 3119 (FOF 59). There was evidence that someone had welded a metal plate over the fail-safe overflow pipe shortly after the plant became operational and that the release valves in the “supernatant tree” overflow system were all closed at the time of the accident. 14 Report of Proceedings (RP) (Sept. 29, 2008) at 2077; Ex. 71 at 65.

Meanwhile, it appears that foam from the sludge was beginning to leak out of pressure relief valves at the top of the dome and run down the outside of Digester 3. The superintendent of the plant, Timothy Pelton, was worried about the sludge entering the Spokane River, and asked Cmos, Evans, and Michaels to help him divert it. Cmos and Evans climbed the dome with a fire hose to siphon off the foam while Pelton and Michaels guided the other end of the hose into a drain.

² “SCADA” is an acronym for “Supervisory Control And Data Acquisition.” CP at 3316 n.11. It appears at the sewage plant, the SCADA consisted, at least in part, of “sensors [that] measure pressure[.] . . . [T]he pressure is converted to height with knowledge of the fluid specific gravity.” Ex. 71, at 61.

All the while, the digester continued to fill with sewage sludge. The city employees knew that Digester 3 was getting dangerously full but believed that the fastest way to relieve the pressure was to continue to do what they were doing. Unfortunately, they were wrong, and Digester 3 continued to fill until it collapsed. The trial judge found that Cmos was alive and conscious when he dropped into the 100 degree sewage sludge and that he died in “excruciating physical pain . . . in darkness, pain and utter helplessness.” CP at 3123 (FOF 81). He left behind a wife and 12-year-old daughter. Evans suffered “a fractured pelvis, fractured tibia, fractured ribs, serious back injuries including compression fractures of vertebrae, [and] sludge aspiration causing a permanent 20% reduction in lung capacity,” and Michaels suffered serious knee and back injuries, among other things. CP at 3125 (FOF 85).

The city hired an engineering firm, Exponent, to investigate the disaster. Exponent concluded that the dome actually floated up on the rising sludge and rotated, fracturing the anchors that had held the dome to the digester walls and cracking the dome. It concluded that there were three main causes of the accident: the blocked overflow pipe; a malfunctioning monitoring system inside the digester; and the final, failed attempt to transfer sludge out of the digester. Exponent also concluded that “[t]he pumping of liquid beyond the maximum design level and into the dome was the principal and sufficient cause of the accident.” Ex. 71, at 33.

The plaintiffs filed a negligence action against CH2M and Irving. The city of Spokane, as the employer of the plaintiffs, was immune under the Industrial

Insurance Act. All parties agreed that the city was negligent. The issue at trial was the negligence, if any, of CH2M, not the city. After a three week bench trial, Judge Austin ruled for the plaintiffs. The Court of Appeals certified the case to this court.

ANALYSIS

We review de novo questions of law, including the meaning of immunity statutes, duty, and legal cause. *Soltero v. Wimer*, 159 Wn.2d 428, 433, 150 P.3d 552 (2007) (citing *Nordstrom Credit, Inc. v. Dep't of Revenue*, 120 Wn.2d 935, 942, 845 P.2d 1331 (1993)); *Schooley v. Pinch's Deli Mkt., Inc.*, 134 Wn.2d 468, 478, 951 P.2d 749 (1998). Cause in fact is a factual question left to the trier of fact unless reasonable minds could not differ. *Hertog v. City of Seattle*, 138 Wn.2d 265, 275, 979 P.2d 400 (1999) (citing *Sherman v. State*, 128 Wn.2d 164, 183, 905 P.2d 355 (1995)). We review findings of fact for substantial evidence. *Soltero*, 159 Wn.2d at 433.

1. Industrial Insurance Immunity

CH2M contends that it and its agents enjoy Industrial Insurance Act immunity under RCW 51.24.035. This statute has not been considered in any published Washington court opinion. However, the Industrial Insurance Act itself is regularly before Washington courts, and there is a body of law to guide us. The legislature has instructed us that the act “shall be liberally construed for the purpose of reducing to a minimum the suffering and economic loss arising from injuries and/or death occurring in the course of employment.” RCW 51.12.010. To accomplish the legislative objective, our ““guiding principle in construing provisions of the

Industrial Insurance Act is that the Act is remedial in nature and is to be liberally construed in order to achieve its purpose of providing compensation to all covered employees injured in their employment, with doubts resolved in favor of the worker.” *Cockle v. Dep’t of Labor & Indus.*, 142 Wn.2d 801, 811, 16 P.3d 583 (2001) (quoting *Dennis v. Dep’t of Labor & Indus.*, 109 Wn.2d 467, 470, 745 P.2d 1295 (1987)). The act is “the product of a grand compromise” between workers and employers. *Birklid v. Boeing Co.*, 127 Wn.2d 853, 859, 904 P.2d 278 (1995) (citing *Stertz v. Indus. Ins. Comm’n*, 91 Wash. 588, 590-91, 158 P. 256 (1916), *abrogated in part by Birklid*, 127 Wn.2d 853). “Injured workers were given a swift, no-fault compensation system for injuries on the job. Employers were given immunity from civil suits by workers,” with exceptions not relevant here. *Id.* The benefits to injured workers, while comparatively quick and sure, are often far less than would be available to them in tort. *Minton v. Ralston Purina Co.*, 146 Wn.2d 385, 390, 47 P.3d 556 (2002).

Third party tortfeasors are not parties to the grand compromise and injured workers may sue such tortfeasors. RCW 51.24.030; *Flanigan v. Dep’t of Labor & Indus.*, 123 Wn.2d 418, 425, 869 P.2d 14 (1994). If such suits are successful, both the worker and the State benefit as the State has a right to recoup some of its workers’ compensation payments. RCW 51.24.060. We have long held that the right to sue a third party tortfeasor is a “valuable right to the workman, and, to secure it to him, the act should receive the same liberal construction that is required to be given to other parts of the act in order to secure his rights thereunder.” *Burns*

v. Johns, 125 Wash. 387, 392-93, 216 P. 2 (1923) (citing *Carlson v. Mock*, 102 Wash. 557, 173 P. 637 (1918)). Further, we have long noted, albeit in the context of a predecessor to the current private suit provision, that “[t]he industrial insurance fund is provided for the exclusive benefit of the employer and the workman, and we will in all doubtful cases sustain the right of the injured workman against the third party wrongdoer who has not contributed to the fund.” *Mathewson v. Olmstead*, 126 Wash. 269, 273, 218 P. 226 (1923).

With these principles in mind, we turn to the immunity provision before us.

(1) Notwithstanding RCW 51.24.030(1),^[3] *the injured worker or beneficiary may not seek damages against a design professional who is a third person and who has been retained to perform professional services on a construction project, or any employee of a design professional who is assisting or representing the design professional in the performance of professional services on the site of the construction project, unless responsibility for safety practices is specifically assumed by contract, the provisions of which were mutually negotiated, or the design professional actually exercised control over the portion of the premises where the worker was injured.*

(2) *The immunity provided by this section does not apply to the negligent preparation of design plans and specifications.*

(3) For the purposes of this section, “design professional” means an architect, *professional engineer*, land surveyor, or landscape architect, who is licensed or authorized by law to practice such profession, or any corporation organized under chapter 18.100 RCW or authorized under RCW 18.08.420 or 18.43.130 to render design services through the practice of one or more of such professions.

RCW 51.24.035 (emphasis added). Statutory grants of immunity in derogation of the common law are strictly construed. *Plano v. City of Renton*, 103 Wn. App. 910,

³ RCW 51.24.030(1) generally authorizes injured workers to sue third party tortfeasors.

911-12, 14 P.3d 871 (2000) (citing *Matthews v. Elk Pioneer Days*, 64 Wn. App. 433, 437-38, 824 P.2d 541 (1992)).

CH2M argues that the entire plant was a construction project, entitling it to immunity under subsection .035(1). It also argues that it had not prepared design plans and specifications and thus the exclusion from immunity under subsection .035(2) does not apply. The plaintiffs argue that a working sewage plant is not a construction site as contemplated by the legislature and that CH2M *did* negligently prepare design plans and specifications.

A. Construction Projects

The immunity found in RCW 51.24.035(1) is limited by its terms to a design professional performing professional services “on a construction project” or any employee of a design professional assisting or representing the design professional performing professional services on the “site of the construction project.” The trial judge found that “the area of the plant where the skillets were installed was not a construction project nor a construction site within the meaning of RCW 51.24.035(1).” CP at 3128 (FOF 94). Whether or not the area where the act of alleged negligence occurred was a construction site is a question of fact. We review questions of fact for substantial evidence. *See Soltero*, 159 Wn.2d at 433, (citing *Nordstrom Credit*, 120 Wn.2d at 942). CH2M argues that as a matter of law, the immunity statute “unquestionably applies” to any building complex where some construction was occurring and that no reasonable person could fail to find that the accident took place on a construction project or on a construction site. Br. of

Appellant at 43, 45.

Turning first to whether the statute “unquestionably applies,” we note that “construction project” and “site of a construction project” are not defined statutory terms under Title 51 RCW or relevant administrative regulations. Undefined common statutory terms are given their common dictionary meanings unless there is strong evidence the legislature intended something else. *City of Spokane ex rel. Wastewater Mgmt. Dep’t v. Dep’t of Revenue*, 145 Wn.2d 445, 454, 38 P.3d 1010 (2002) (citing *State v. Pacheco*, 125 Wn.2d 150, 154, 882 P.2d 183 (1994)). The first nongrammatical definition of “construction” in *Webster’s* is “the act of putting parts together to form a complete integrated object: Fabrication.” *Webster’s Third New International Dictionary* 489 (2003). “Construction project” is not defined in *Webster’s*, but “project” is defined primarily as “a specific plan or design,” and “site” is defined as “the local position of building, town, monument, or similar work either constructed or to be constructed esp. in connection with its surroundings . . . a space of ground occupied or to be occupied by a building.” *Id.* at 1813, 2128.⁴ Taken together, it appears that a construction site is “a space of ground occupied or to be occupied by a building” that is or will be “put[] . . . together to form a complete integrated object.” A construction project would be the overarching plan and process of so completing a building (or other structure).

⁴ CH2M draws our attention to definition “3d” of “project” in *Webster’s*, contending it is the most “apt.” “[A] vast enterprise usu. sponsored and financed by a government <demand made for setting up public work [project]s . . . ><the [project], as authorized by Congress . . . provided for a ten-year expenditure of \$88 million . . . >” Br. of Appellant at 44 n.23 (quoting *Webster’s Third New International Dictionary* 1813 (1993)). We find it unlikely that was the definition the legislature had in mind.

While the trial court made no specific, relevant finding of fact, the findings imply, and the evidence supports, that some parts of the sewage plant campus were under construction. Finding of fact 94 tells us that “at all pertinent times prior to and on May 10, 2004, the area of the plant where the skillets were installed was not a construction project nor a construction site within the meaning of RCW 51.24.035(1).” CP at 3128. Timothy Pelton, the administrative superintendent of the plant, testified that the nearest construction was “several hundred feet away.” 8 RP (Sept. 17, 2008) at 1114-15. Thus, it appears that there was construction occurring on the sewage treatment campus. The question is whether the existence of construction somewhere on the campus triggers the immunity of RCW 51.24.035.

We conclude it does not. Clearly, if no construction was occurring on the campus, the immunity provisions of RCW 51.24.035 would not be at issue. CH2M’s contract with the city contemplated at least two main activities. One was to retrofit the Spokane Riverside Wastewater Treatment Plant and the other was to maintain the plant to continue to function as it had on a day to day basis.⁵ The city and CH2M specifically memorialized this by modifying their contract in 2003, “providing, in part, that CH2M would design and manage an upgrade to and redesign of the recirculation and heating system for the digestors, and that CH2M would provide ‘on-call’ services for plant operations.” CP at 3110 (FOF 15). The specific design work done to redirect the sludge to address the temperature problem was part of CH2M’s “on call” contract for plant operations and would have been

⁵ The contract required CH2M to “provide overall program management and preliminary & conceptual engineering service for the City’s 10 year treatment plant [capital improvement plan].” Ex. 1, at 1 (Standard Consultant Agreement).

needed whether or not there was any construction occurring on the campus. We agree with the trial court that the placement of the skillets was not a construction project.

CH2M argues that whether or not the discrete act of alleged negligence was related to construction is immaterial. CH2M argues it has immunity for any professional services rendered on a construction project site and that the entire wastewater treatment facility was a construction site within the meaning of the statute. An aerial photograph of the Spokane wastewater treatment facility shows at least a dozen buildings and several parking lots, not unlike our own capitol campus. The record before us does not suggest that any construction was taking place within the digesters themselves. At trial, the superintendent of the plant testified that at the time, the closest construction “was either the new aeration basin or rebuilding of the link between the administration building and process building . . . several hundred feet away.” 8 VRP (Sept. 17, 2008) at 1114-15. We do not believe that the legislature meant that when construction was performed on one building on a campus, engineering professionals were entitled to immunity everywhere on the campus regardless of the nature of their professional services.

We must read statutes in context with the whole statutory scheme, which in this case includes both the injunction to construe the title liberally in favor of reducing suffering and the private suit provision. *Rivas v. Overlake Hosp. Med. Ctr.*, 164 Wn.2d 261, 266-67, 189 P.3d 753 (2008); RCW 51.24.030; RCW 51.12.010. Taken as a whole, it appears to us that the legislature intended to protect

design engineers from the sort of liability imposed on general contractors for workplace negligence, but not to protect them from their own negligence.⁶ Given that the plaintiffs do not allege that CH2M failed to provide them a safe construction site, and given that there was no construction occurring in Digester 3, we agree with the trial judge that this provision provides the defendants no immunity.

B. *Design Plans and Specifications*

In addition to limiting the immunity in question to professional services on the site of the construction project, the statute also excludes from immunity “*the negligent preparation of design plans and specifications.*” The trial judge found that “[t]he Irving proposal to separate sludge flows referenced above in these Findings constitutes negligent preparation of a design plan within the meaning of RCW 51.24.035(2).” CP at 3128. CH2M contends that since it put no relevant plans or specifications in writing, this statutory safe harbor for actions based on negligent design plans and specifications does not apply. Br. of App. at 45.

A similar argument was rejected by the Kansas Supreme Court under the

⁶ Further support for this appears in the academic literature. At common law,

[w]orkers injured on the job site often sue architects for negligent design or breach of a duty of supervision. The negligent design cases present few theoretical difficulties since the standard of care is well-established and the architect has no argument that others should bear the liability. When the worker alleges breach of a duty of supervision, however, the issues of the existence of a duty and allocation of liability are complicated by the worker’s inability to recover from his employer and by the statutory imposition of supervision duties.

Note, *Architectural Malpractice: A Contract-Based Approach*, 92 Harv. L. Rev. 1075, 1094-95 (1979) (footnotes omitted). Read against this backdrop, the immunity statute makes a great deal of sense. It protects architects and similar professionals from liability for work site injuries not caused by their own negligence, but not for injuries that stem from their own professional work.

Kansas design professional immunity statute.⁷ *Edwards v. Anderson Eng'g, Inc.*, 284 Kan. 892, 894, 166 P.3d 1047 (2007). There, a general contractor had hired an engineering firm to test the quality of pipes used in a project after some failed. An engineer working for the firm directed an employee of the contractor to cut a pipe at specific points for testing. “At some point, shortly after the Anderson engineer had left, the pipe split lengthwise and rolled outward, causing Edwards to fall and be crushed when the pipe rolled back.” *Id.* The design firm argued, among other things, that it had prepared no plans or specifications and therefore could not be negligent in so doing. The Kansas legislature, like its Washington counterpart, had not statutorily defined “design plans and specifications” and the engineering firm “suggest[ed] that the common understanding in the construction industry is that those terms refer to blueprint drawings and written specifications for the quantity and quality of materials.” *Id.* at 903. The court rejected that argument:

⁷ The Kansas statute is substantially similar to ours. It provides:

Except as provided in the workers compensation act, no construction design professional who is retained to perform professional services on a construction project or any employee of a construction design professional who is assisting or representing the construction design professional in the performance of professional services on the site of the construction project, shall be liable for any injury resulting from the employer’s failure to comply with safety standards on the construction project for which compensation is recoverable under the workers compensation act, unless responsibility for safety practices is specifically assumed by contract. The immunity provided by this subsection to any construction design professional shall not apply to the negligent preparation of design plans or specifications.

Kan. Stat. Ann. § 44-501(f). Like Washington’s statute, it provides that design professionals are liable for their own negligence in drawing up plans or specifications, but not, absent a contract so providing, responsible for work site safety. *Cf.* RCW 51.24.035.

Anderson was charged with the responsibility of testing the pipe. In order to perform its professional responsibilities, Anderson required that the concrete pipe be cut into four pieces and gave specific directions on the location of the cut lines. We perceive no appreciable distinction between providing the specifications for pipe cutting through a professional drawing or by physically marking on the pipe.

Id.

We agree with the Kansas Supreme Court and perceive no appreciable difference in recommending a change in the piping of the sludge and the locations of the skillets under CH2M's "on call" service agreement and preparing written plans and specifications to accomplish the same thing. We find it difficult to believe that the legislature intended to allow design professionals to escape liability for negligent work by not writing down their plans or specifications.

2. *Duty*

The plaintiffs brought a negligence suit, requiring them to "establish the existence of a duty, a breach thereof, a resulting injury, and proximate causation between the breach and the resulting injury." *Schooley*, 134 Wn.2d at 474 (citing *Pedroza v. Bryant*, 101 Wn.2d 226, 228, 677 P.2d 166 (1984)). The trial judge found that CH2M "owed these plaintiffs . . . both a contractual and a common law duty to exercise that degree of skill and diligence normally employed by professional engineers or consultants performing the same or similar services at the time said services were performed." CP at 3128-29 (Conclusion of Law 3).

Design professionals have long had a duty of care recognized at law.⁸

⁸ "The Code of Hammurabi of Babylon provided that a builder who constructed a house for a man, but did not make his work strong, with the result that the house that he built collapsed and so caused the death of the owner of the house, should be put to death." Donald M. Zupanec,

CH2M argues that the judge “skipped over the duty question and went directly to the standard of care,” and contends that “[a] tautological ‘duty’ is nothing but a merry-go-round of legal error.” Br. of Appellant at 48, 51. CH2M is correct that the trial judge did not separately say in the conclusions of law (or findings of fact) that “CH2M owed plaintiffs a duty of care,” instead combining that implicit statement with a description of the standard of care. CP at 3128. But the judge implicitly found that CH2M had a duty of care. Professionals, including engineers, owe a duty to “exercise the degree of skill, care, and learning possessed by members of their profession in the community.” 16 David K. DeWolf & Keller W. Allen, *Washington Practice: Tort Law and Practice* § 15.51, at 504-05 (3d ed. 2006); *see also Affiliated FM Ins. Co. v. LTK Consulting Servs., Inc.*, 170 Wn.2d 442, 455-56, 243 P.3d 521(2010); *id* at 461-62 (Chambers, J., concurring).⁹

Historically, there “are two common bases for civil liability of design professionals – negligent supervision of the worksite and negligent design,” at least for work site injuries. Am. Br. Wash. State Ass’n for Justice Found. at 10 (citing

Annotation, *Architect’s Liability for Personal Injury or Death Allegedly Caused by Improper or Defective Plans or Design*, 97 A.L.R.3d 455 § 2[a], at 459 (1980) (citing *Architectural Malpractice Litigation*, 19 Am. Jur. *Trials* § 4, at 231); *see also* Code of Hammurabi 229, 234, available at <http://avalon.law.yale.edu/ancient/hamframe.asp> (last visited May 18, 2011).

⁹ The lead opinion, representing the view of two justices, held that “the measure of reasonable care for an engineer undertaking engineering services is the degree of care, skill, and learning expected of a reasonably prudent engineer in the state of Washington acting in the same or similar circumstances.” *Affiliated*, 170 Wn.2d at 455 (lead opinion). The concurring opinion, representing the views of four justices, held that “Professionals, including engineers, owe a duty to ‘exercise the degree of skill, care, and learning possessed by members of their profession in the community.’ 16 David K. DeWolf & Keller W. Allen, *Washington Practice: Tort Law and Practice* § 15.51, at 504-05 (3d. ed. 2006).” *Id.* at 462 (Chambers, J., concurring).

Note, *Architectural Malpractice: A Contract-Based Approach*, 92 Harv. L. Rev. 1075, 1094 (1979)). The immunity statute at issue addresses both historical bases for liability; it protects design professionals from general liability for work site safety (unless assumed by contract) but clearly recognizes common law liability for negligent design. CH2M contends that the trial judge erred by imposing on CH2M the city's duty to ensure a safe workplace. *E.g.*, Br. of Appellant at 48-52. It suggests that *Burg v. Shannon & Wilson, Inc.*, 110 Wn. App. 798, 43 P.3d 526 (2002), mandates reversal. In *Burg*, a landslide damaged or destroyed several homes. An engineering firm had warned the city that the slope was unstable and the city was attempting to stabilize the slope at the time. Several homeowners sued the firm, contending that it had an independent duty to warn them of the danger. *Id.* at 804. The court below disagreed, ruling that the firm had no duty to the individual property owners. *Id.* at 811. CH2M contends that the same principle applies here: that it had no duty to protect the plaintiffs from the negligence or bad acts of others. Having so framed the issue as a duty to supervise the work site and warn of dangerous conditions created by others, CH2M argues that it had no legal duty to supervise the workplace and that it did not assume that obligation by contract. But the plaintiffs did not allege negligent supervision of the work site. The plaintiffs argued and the judge ruled that CH2M should be liable for its own active negligence. Judge Austin also specifically, and more pointedly, made challenged finding of facts in the "standard of care" section of his findings that CH2M had a duty to exercise "the degree of skill and diligence employed by a reasonably prudent

professional engineer or consultant in the State of Washington providing engineering services under the same or similar circumstances,” to “perform an engineering analysis of the ways in which the modification involving the flow separation may affect use and operation of the plant,” to “inform the plant supervisors of the results of such engineering analysis, and to put that engineering analysis in writing.” CP at 3114 (FOF 37-39). Nowhere in *Burg* did the court consider the duties that attached to the engineers’ own work. The other cases cited by CH2M also related to the duty to inspect and supervise the work of others rather than the design professionals’ own negligence.¹

We recently held that an “engineer’s duty of care extends to safety risks of physical damage to the property on which the engineer works.” *Affiliated*, 170 at Wn.2d at 456 (lead opinion); *id.* at 460-61 (Chambers, J., concurring). *Affiliated* did not include a claim for personal injury. At least since the time of Hammurabi’s code, construction design professionals had a duty not to cause injury or death because of a collapse of a building and we see no reason why tort law would give

¹ See Br. of Appellant at 53-54 (citing *Hertog*, 138 Wn.2d at 275-76) (State had a duty to adequately supervise sex offender and could be held liable to child raped by said offender); *Taylor v. Stevens County*, 111 Wn.2d 159, 759 P.2d 447 (1988) (public duty doctrine barred suit against county for negligently administrating its building code); *Peck v. Horrocks Eng’g, Inc.*, 106 F.3d 949, 952 (10th Cir. 1997) (under Utah law “an engineer with construction inspection responsibility over a construction project owes no duty to an independent contractor’s employees” (citing *Peterson v. Fowler*, 27 Utah 2d 159, 162, 493 P.2d 997 (1972))); *Hobson v. Waggoner Eng’g, Inc.*, 878 So. 2d 68, 76-77 (Miss. Ct. App. 2003) (engineering consultant had no duty to ensure worker safety on construction site of a waste lagoon and concluding that plaintiff had pleaded insufficient facts to show any negligence in design); *Herczeg v. Hampton Twp. Mun. Auth.*, 766 A.2d 866 (Pa. Super. Ct. 2001) (no duty to warn of someone else’s unsafe practices); *Jones v. James Reeves Contractors, Inc.*, 701 So. 2d 774 (Miss. 1997) (same).

less protection to workers on that property than to the property itself. *See supra* n.8. This is in accord with the general principle that “[a]n actor ordinarily has a duty to exercise reasonable care when the actor’s conduct creates a risk of physical harm.” Restatement (Third) of Torts: Liability for Physical and Emotional Harm § 7(a) (2010). In this state, “[w]hen a duty is found to exist from the defendant to the plaintiff then concepts of foreseeability serve to define the scope of the duty owed.” *Schooley*, 134 Wn.2d at 475 (citing *Burkhart v. Harrod*, 110 Wn.2d 381, 395, 755 P.2d 759 (1988)). Of course, “[a]n actor’s liability is limited to those harms that result from the risks that made the actor’s conduct tortious,” Restatement (third) of Torts, *supra*, § 29, but that will be considered more below.

We hold that design professionals have a duty of care to “exercise the degree of skill, care, and learning possessed by members of their profession in the community.” 16 DeWolf & Allen, *supra*, § 15.51, at 504-05. That duty flowed, at the least, to those working on the property at the time the designs were being implemented.

3. Breach

CH2M assigned error to the trial court's findings regarding breach but devoted no specific argument to the issue. We review findings of fact for substantial evidence, and questions of breach are typically reserved for the finder of fact. *Soltero*, 159 Wn.2d at 433; *Johnson v. State*, 77 Wn. App. 934, 937, 894 P.2d 1366 (1995) (citing *McLeod v. Grant County Sch. Dist. No. 128*, 42 Wn.2d 316, 324-25, 255 P.2d 360 (1953)). Briefly, after a three week trial, the court found that CH2M's failure to perform an "engineering analysis" of the impact of the skillets, its failure to "communicate to the City's plant supervisors . . . in writing or otherwise, the effects of the installation of the skillets on the valving," and its failure to provide "written analysis . . . constituted a failure to exercise the degree of skill and diligence normally employed by professional engineers or consultants performing the same or similar services." CP at 3115-16. Based on our review of the testimony, we hold there was substantial evidence to support the court's findings.

4. Proximate Cause

CH2M contends that even if it owed a legal duty to the plaintiffs and breached that duty, it was not the proximate cause of their injuries. Proximate cause can be divided into two elements: cause in fact and legal cause. *Schooley*, 134 Wn.2d at 478. As CH2M challenges both elements, we will discuss them in turn.

A. Cause in Fact

“Cause in fact’ refers to the actual, ‘but for,’ cause of the injury, i.e., ‘but for’ the defendant’s actions the plaintiff would not be injured. Establishing cause in fact involves a determination of what actually occurred and is generally left to the jury.” *Id.* at 478 (citing *King v. City of Seattle*, 84 Wn.2d 239, 249-50, 525 P.2d 228 (1974), *rejected on other grounds by City of Seattle v. Blume*, 134 Wn.2d 243, 260, 947 P.2d 223 (1997) (rejecting the “business judgment rule” of *King*)). The trial court found that “[t]he Defendants’ failure to comply with the applicable engineering standard of care was a proximate cause of the death of Mike Cmos and the bodily injuries of Dan Evans and Larry Michael.” CP at 3129.¹¹

¹¹ Briefly, the trial judge found, among other things, that:

40. Neither Irving nor any other CH2M employee performed any engineering analysis of the effects of the flow separation and the skillets would have upon the City’s operation of the digesters, and failed to understand or discover the skillets would alter valving used by City plant operators

41. The failure of Irving and CH2M to perform such engineering analysis constituted a failure to exercise the degree of skill and diligence normally employed by professional engineers or consultants

42. . . . neither the plant Superintendent, the Operation Supervisor nor the Maintenance Supervisor were aware that installation of the skillets would change valving used by City plant operators

43. CH2M and Irving failed to communicate to the City’s plant supervisors . . . in writing or otherwise, the effects of installation of the skillets

44. The failure of CH2M and Irving to provide the written analysis . . . to the City’s plant supervisors before the installation of the skillets, constituted a failure to exercise the degree of skill and diligence normally employed by professional engineers.

CP at 3115-16.

CH2M contends that “the alleged causation is so implausible as to defy all reasonableness.” Br. of Appellants at 61. Essentially, it asks us to substitute our factual judgment for that of the trier of fact. It contends, and we have no reason to doubt, that if the operators had realized that Digester 3 was filling instead of draining, they could have prevented the accident. *E.g.*, 14 RP (Sept. 29, 2008) at 2076-2106 (testimony of defense expert Anderson).

The difficulty with CH2M’s argument is that there may be more than one cause in fact. Both sides put on their cases. There was evidence that some of the workers did not believe that the installation of skillets required a change in valving. *E.g.*, 6 RP (Sept. 15, 2008) at 803-06. There was sufficient evidence that because CH2M failed to do an analysis of the effect of the valving change, the city workers believed that they *were* transferring sludge out of the digester dome when they were not. *E.g.*, 4 RP (Sept. 10, 2008) at 468-69 (testimony of expert Brugger that “they thought they were effecting a transfer using the most expeditious means”). The trial court was the trier of fact. CH2M fails to show that there was not substantial evidence to support the court’s findings, or that we should substitute our judgment for that of the trial judge.

b. *Legal Cause*

“The focus in the legal causation analysis is whether, as a matter of policy, the connection between the ultimate result and the act of the defendant is too remote or insubstantial to impose liability. A determination of legal liability will depend upon ““mixed considerations of logic common sense, justice, policy, and

precedent.” *Schooley*, 134 Wn.2d at 478-79 (internal quotation marks omitted) (quoting *King v. City of Seattle*, 84 Wn.2d 239, 250, 525 P.2d 228 (1974)). Here, the question is whether we should hold that an engineering firm is potentially liable when it gives engineering advice, people follow its advice, and that advice is a contributing cause of a collapse of a structure. The analysis of whether a duty is owed and legal causation exists are intertwined. “[W]hether liability should attach is essentially another aspect of the policy decision which we confronted in deciding whether the duty exists.” *Hartley v. State*, 103 Wn.2d 768, 780, 698 P.2d 77 (1985) (quoting *Harbeson v. Parke-Davis, Inc.*, 98 Wn.2d 460, 476, 656 P.2d 483 (1983)).

CH2M contends that any breach of its duty “is too remote or insubstantial to impose liability.” Br. of Appellants at 65 (quoting *Schooley*, 134 Wn.2d at 478-79). For this contention it relies upon two cases that are inapposite. CH2M analogizes this case to *Porter v. Sadri*, 38 Wn. App. 174, 685 P.2d 612 (1984) and *Hartley*, 103 Wn.2d 768. In *Porter*, the builder of a house neglected to use safety glass. 38 Wn. App. at 176. A subsequent owner replaced the window with glass of like quality. A third owner fell through that glass and sued the original builder for using the wrong sort of glass. The court concluded that the scope of the builder’s negligence ended when the window he installed was broken and replaced. *Id.*

In *Hartley*, Janet Hartley was killed by a drunk, but validly licensed, driver. The driver had a long history of drunk driving charges. Her family sued the State and county, reasoning that if the drunk driver’s license had been revoked, he would

not have been driving and she would not have been killed. Applying general principles of proximate causation and the public duty doctrine, a doctrine unique to government entities, we held that the government owed no legal duty to the victim of a drunk driver for failing to revoke the driver's license. We cautioned that "[t]his is not to say that there cannot be more than one party who is legally liable; but here the failure of the government to revoke Johnson's license is too remote and insubstantial to impose liability for Johnson's drunk driving." *Hartley*, 103 Wn.2d at 784 (citing *Kaiser v. Suburban Transp. Sys.*, 65 Wn.2d 461, 398 P.2d 14, 401 P.2d 350 (1965)).

In essence, CH2M contends that its alleged negligence should not be deemed a legal cause of plaintiffs' injuries because those injuries are too remote. But, again, contractors have been potentially liable for their own negligence at least since the time of Hammurabi. Again, the trial court found that CH2M's breach of duty set into motion events that were one of the causes of the collapse of the digester and the cause of the plaintiffs' injuries, and that but for the breach of duty, the collapse would not have occurred. We find no error.

5. Superseding Cause

CH2M also contends that the city's negligent and reckless behavior was an intervening force and a superseding cause. The trial judge did not find the city was reckless.¹² "Whether an intervening act breaks the chain of causation is a question for the trier of fact." *Davis v. Baugh Indus. Contractors, Inc.*, 159 Wn.2d 413, 418, 150 P.3d 545 (2007) (citing *Maltman v. Sauer*, 84 Wn.2d 975, 982, 530 P.2d 254

¹² Defense expert Anderson did testify that the city was reckless. 14 RP (Sept. 14, 2008) at 2106.

(1975)). We generally review for substantial evidence. *Crowe v. Gaston*, 134 Wn.2d 509, 519-20, 951 P.2d 1118 (1998) (citing *Cramer v. Dep't of Highways*, 73 Wn. App. 516, 521, 870 P.2d 999 (1994)). To determine whether the actions of a third party were a supervening cause, we have looked to the *Restatement (Second) of Torts*. As we have noted,

Pursuant to § 447(a) of Restatement (Second) of Torts, even if the intervening act of the third person constitutes negligence, that negligence does not constitute a superseding cause if “the actor at the time of his negligent conduct should have realized that a third person might so act”. In fact,

If the likelihood that a third person may act in a particular manner is . . . one of the hazards which makes the actor negligent, such an act whether innocent, negligent, intentionally tortious, or criminal does not prevent the actor from being liable for harm caused thereby.

Campbell v. ITE Imperial Corp., 107 Wn.2d 807, 812-13, 733 P.2d 969 (1987) (quoting Restatement (Second) of Torts § 449 (1965)).

CH2M contends there were 10 intervening acts of municipal negligence: (1) that the city did not maintain a reasonable fail-safe overflow system, (2) that it had an inaccurate sludge measuring system, (3) that it did not have a good chain of command, (4) that it did not have good standing orders, (5) that it did not activate an emergency gravity overflow system, (6) that it did not stop transferring sludge into the digester when it got to 28 feet, (7) that it did not stop transferring sewage at 2 p.m., (8) that it did not properly set a valve, (9) that it did not stop when things got

bad, and (10) that it put men in harm's way when it should have known better. Br. of Appellants at 68-69. This list, largely speaking, mirrors the testimony of defense expert Anderson. Able trial counsel presented these arguments to the trier of fact who rejected them. *See* CP at 3129. Instead, the trial court found, among other things, that “[a] reasonably prudent engineer in the position of CH2M could reasonably have anticipated” that the plant might have been modified over the years, that the city would take steps to keep sewage sludge from flowing into the Spokane River, and that the SCADA monitoring system might malfunction. CP at 3120-21 (FOF 64, 65, 66). In short, the trier of fact concluded that had CH2M not breached its duty, and had it performed the engineering analysis, the city employees would not have been confused and the collapse would not have occurred. While reasonable minds may differ, this is a question of fact to be left to the trial judge except in the most extreme cases. The trial court's conclusion that there was no independent intervening cause that superseded the negligence of CH2M and Irving is supported by substantial evidence.

CONCLUSION

Finding no error, we affirm the trial court's judgment.

AUTHOR:

Justice Tom Chambers

WE CONCUR:

Justice Mary E. Fairhurst

Justice Charles W. Johnson

Richard B. Sanders, Justice Pro
Tem

Dennis J. Sweeney, Justice Pro
Tem

Justice Susan Owens
