IN THE SUPREME COURT
OF THE
STATE OF SOUTH DAKOTA

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Appeal No. 27368

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MARK AND MARILYN LONG,
ARNIE AND SHIRLEY VAN VOORST,
TIM AND SARA DOYLE, TIMOTHY
AND JANE GRIFFITH, AND MICHAEL
AND KAREN TAYLOR,

Plaintiffs/Appellees,

vs.

STATE OF SOUTH DAKOTA,

Defendant/Appellant.

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Appeal from the Circuit Court
Second Judicial Circuit
Lincoln County, South Dakota

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HONORABLE PATRICIA C. RIEPEL

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# APPELLANT'S BRIEF

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## PRELIMINARY STATEMENT

The State of South Dakota will be referred to as "the State." Mark and Marilyn Long, Arnie and Shirley Van Voorst, Tim and Sara Doyle, Timothy and Jane Griffith, and Michael and Karen Taylor will be referred to collectively as "the Appellees." The City of Sioux Falls will be referred to as "the City." Pages of the settled record will be cited as (SR __.) References to the court trial transcript will cited as (TR1__ ), (TR2 __ ), or (TR3 ___ ), for volumes one, two, and three of the court trial transcript, respectively. Trial exhibits will be cited to the appropriate exhibit number or letter as (Ex. ___ ).

## JURISDICTIONAL STATEMENT

The Order denying the State's motion for summary judgment on the basis of sovereign immunity was signed and filed on December 20, 2011. (SR 98.) The State's petition for discretionary appeal of the order denying summary judgment was denied on March 7, 2012. (SR 113.) The Judgment of Liability was filed on July 11, 2014. (SR 857.) The State's petition for discretionary appeal of the Judgment of Liability was denied on October 2, 2014. (SR 871.) The Final Judgments were filed on January 22, 2015. (SR 1429-1437.) The State timely filed its Notice of Appeal on February 17, 2015. (SR 1878.)

## STATEMENT OF THE ISSUES

I. Whether the Appellees' claims against the State are barred by the doctrine of sovereign immunity because the Appellees' claims arose out of the State's engineering and design of a public roadway.

The circuit court concluded the Appellees' claims were not barred by the doctrine of sovereign immunity.

*Hansen v. S.D. Dep't of Transp.*, 584 N.W.2d 881 (S.D. 1990)
*King v. Landguth*, 2007 S.D. 2, 726 N.W.2d 603
*Truman v. Griese*, 2009 S.D. 8, 762 N.W.2d 75
*Wilson v. Hogan*, 437 N.W.2d 492 (S.D. 1991)

SDCL § 21-32A-1
SDCL § 21-32A-2

II. Whether the construction of South Dakota Highway 11, with accompanying culverts intended to facilitate drainage of a natural water course, constituted a compensable taking or damaging under S.D. Const. Art. VI, § 13, where a flood caused by an intense and rare rain event caused damage to the Appellees' properties.

The circuit court concluded the legal cause of the flooding and damaging of the Appellees' properties was the blockage by the Highway 11 roadbed owned by the State.

*Rupert v. City of Rapid City*, 2013 S.D. 13, 827 N.W.2d 55
*Krier v. Dell Rapids Tp.*, 2006 S.D. 10, 709 N.W.2d 841
*Knodel v. Kassel Tp.*, 1998 S.D. 73, 581 N.W.2d 504
*Smith v. Charles Mix County*, 182 N.W.2d 223 (S.D. 1970)

S.D. Const. Art. VI, § 13

III. Assuming, in the alternative, that the Appellees established a compensable taking or damaging under S.D. Const. Art. VI., § 13, whether the State is

entitled to contribution or indemnification by virtue of its cross-claim against the City of Sioux Falls as a result of the Appellees' settlement with the City.

The circuit court concluded the State had no legal or equitable right to contribution or indemnity from the City and dismissed the State's cross-claim.

*Schick v. Rodenburg*, 397 N.W.2d 464 (S.D. 1986)
*Warner/Elektra/Atlantic Corp. v. County of DuPage*, 771 F. Supp. 911 (N.D. Ill. 1991)

SDCL Ch. 15-8

IV. Assuming, in the alternative, that the Appellees established a compensable taking or damaging under S.D. Const. Art. VI., § 13, whether the State is entitled to a permanent drainage easement in the Appellees' properties where the jury found the taking to be permanent.

The circuit court rejected the State's proposed judgment that included such an easement.

*Heezen v. Aurora County*, 157 N.W.2d 26 (S.D. 1968)
*Rupert v. City of Rapid City*, 2013 S.D. 13, 827 N.W.2d 55

## STATEMENT OF THE CASE

On November 3, 2010, the Appellees filed a Joint Complaint against the State and the City of Sioux Falls seeking damages and injunctive relief. (SR 3.) The Appellees alleged that their respective properties had been damaged during a flood that occurred on the night of July 29-30, 2010. (SR 3.) The Appellees alleged that the State's construction of Highway 11 was an obstruction across the Spring Creek Tributary. (SR. 3.) The Appellees also alleged that the City developed and

maintained unreasonable drainage structures, which drained surface water from the City into Lincoln County where the Appellees' properties were located. (SR 3.) The Appellees brought claims for negligence, trespass, and inverse condemnation. (SR 3.)

On September 9, 2011, the State moved for summary judgment on the basis that the Appellees' claims were barred by sovereign immunity, because the claims arose from the State's engineering and design of a public roadway. (SR 40.) The Honorable Judge Lawrence Long denied the State's motion, concluding that sovereign immunity did not bar the Appellees' claims. (SR 98.) On September 13, 2013, the Appellees filed their Second Amended Joint Complaint, which omitted the prior negligence and trespass claims and preserved only the inverse condemnation claim against the State and the City. (SR 193.)

This case was bifurcated into two phases. The first phase was a bench trial held by the Honorable Judge Patricia Riepel to determine whether a taking had occurred as a matter of law. The circuit court concluded the State was liable for damages on the Appellees' inverse condemnation claims. The second phase was a jury trial to determine whether the taking was permanent or temporary and to determine damages. The jury found the taking was permanent and fixed the damages for each individual Appellee in separate verdict forms.

## STATEMENT OF THE FACTS

In 2010, Sioux Falls received the greatest amount of precipitation ever recorded. (TR3 28:2-4.) According to the National Weather Service ("N.W.S.") data kept at the Sioux Falls Airport, the month of July set a new record for precipitation at 8.5 inches. (Ex. 24.) In contrast, the historic average for the month of July in Sioux Falls was 2.5 inches. (Ex. 24.) The previous summer of 2009 was relatively cool and followed by a wet fall. (TR3 16:11-17:13.) The winter of 2009-10 produced ample amounts of snow, which resulted in substantial amounts of runoff. (*Id.*)

As a result, by July 2010, the soil in southeastern South Dakota was saturated. (TR3 17:11-13.) Typically, soil is pervious, meaning it is able to absorb or contain water. (TR2 121:14-22.) Impervious surfaces, such as concrete or asphalt roofs, are unable to absorb or contain water. (TR2 121:14-17.) When soil is saturated, however, it behaves as if it is impervious. (TR2 121:21-122:1.) This means the soil cannot absorb or hold any more water, so water runs off as if the soil were concrete or blacktop. (*Id.*)

An intense and rare rain event occurred on the night of July 29-30, 2010, which caused flooding of the Appellees' properties. A total of 2.95 inches of rain was recorded at the Sioux Falls Airport. (Ex. 24.) Based on the hourly data recorded by the N.W.S., it rained 2.43 inches between midnight and 6 a.m. on July 30th. (TR1

44:14-16; Ex. 24.) Other measurements in the southeastern region of Sioux Falls documented even greater amounts of rainfall. In the 24-hour reporting period from 7 a.m. on July 29 to 7 a.m. on July 30, there were numerous reports of precipitation levels over 4 inches. (TR3 22:19-23:7; TR 26:24-5; Ex. H, fig's 1 and 2.) Other measurements included 3.53 inches and 3.99 inches, respectively. (*Id.*)

Based on the amount and intensity of the rainfall observed at various locations, Donald Harmon opined that the two-hour precipitation totals for the area surrounding the Appellees' properties exceeded a one-hundred-year rainfall event.[1] (Ex. C at 39:12-14; 43:18-20.) The Appellees' properties received more rainfall within a period of three hours than the historical average of the entire month of July. (Ex. 24.)

South Dakota State Highway 11 is a State trunk highway running roughly north and south through Minnehaha and Lincoln counties. (Stipulation ¶ 1.) Highway 11 runs along the east side of the Appellees' properties, which was undeveloped farmland in 1949 when Highway 11 was constructed. (Stipulation ¶ 2.) In 1949, the Department of Transportation ("DOT") graded Highway 11 and installed various culverts along the road. (Stipulation ¶ 3.) The DOT installed two 48" culverts at

[1]A one-hundred-year rain even refers to rainfall totals that have a one percent probability of occurring at that location in that year. There is a 1 in 100 or 1 % chance that a rain event will reach this intensity in any given year. Likewise, a fifty-year rain event has a 1 in 50 or 2 % chance of occurring in a year.

"station 234+24" to accommodate flows from a tributary to Spring Creek. (Stipulation ¶ 4.) The Spring Creek tributary flows from southeast Sioux Falls down through the village of Shindler. (*Id.*) There, it passes through the twin 48" culverts from west to east through Highway 11. (*Id.*)

The Appellees' properties are all located on the west side of Highway 11, north of the intersection of Highway 11 and 85th Street, in what is referred to as the village of Shindler or Elmen Acres. (Stipulation ¶ 11.) The properties are located within the Spring Creek tributary drainage basin, which extends northwest into Sioux Falls. (Stipulation ¶ 19.) The Appellees' dwellings were constructed between 1974 and 1982. (Stipulation ¶¶ 6-10.) Except for minor sump pump failures, none of the Appellees' properties experienced any surface flooding prior to July 29-30, 2010. (TR1 149:12-150:1; TR1 32:7-33:2; TR1 18:1-19:14; TR1 66:8.)

In 2010, the existing twin 48" culverts were reset and repaired when Highway 11 was resurfaced. (Stipulation ¶ 12.) Leaky joints on the 48" culverts were addressed, and the same concrete culverts that were installed in 1949 were reset in the same location in 2010. (*Id.*) The culverts were reset slightly lower, which improved the amount of flow through the culverts. (TR1 85:9-13.) Notwithstanding this resetting, the topography of Highway 11 has remained unchanged since its construction

in 1949. There was no change to Highway 11 that would have affected the drainage characteristics of the Spring Creek Tributary basin. (TR 1 117:18-119:2.)

## STANDARD OF REVIEW

An appeal regarding the infringement of a constitutional right is an issue of law to be reviewed under the *de novo* standard of review. *Benson v. State*, 2006 S.D. 8, ¶ 39, 710 N.W.2d 131, 145. "Under the *de novo* standard of review, we give no deference to the circuit court's conclusions of law." *Id.* "[T]he ultimate determination of whether government conduct constitutes a taking or damaging is a question of law for the court." *Rupert v. City of Rapid City*, 2013 S.D. 13, ¶ 29, 827 N.W.2d 55, 66.

## ARGUMENT

### I. The circuit court erred when it denied the State's motion for summary judgment, because the Appellees' claims arose out of the State's engineering and design of a public roadway and are barred by sovereign immunity.

The Appellees' initial theory of recovery was based on their negligence, trespass, and inverse condemnation claims. The Appellees' claims sounded in tort and clearly implicated the engineering and design of Highway 11. Accordingly, the State moved for summary judgment on all of the Appellees' claims on the basis of sovereign immunity. The circuit court erred by denying the motion.

"Sovereign immunity is the right of public entities to be free from liability for tort claims unless waived by legislative enactment." *Truman v. Griese*, 2009 S.D. 8, ¶ 9, 762 N.W.2d 75, 78. "It is well settled that whether sovereign immunity applies is a question of law." *Id.* at ¶ 10. Generally, sovereign immunity may be waived two ways. First, the public entity may enter into a contract which implicitly gives the other party the right to sue. *Wilson v. Hogan*, 473 N.W.2d 492, 494 (S.D. 1991). Second, it may specifically waive sovereign immunity through a legislative enactment such as SDCL § 21-32A-1.

Here, the Appellees brought their claims solely against the State. As such, they cannot claim the benefit of SDCL § 21-32A-2, which expands the potential waiver to State employees, officers, or agents. Moreover, several cases demonstrate the State is immune from claims arising from the design, construction, and maintenance of its highways. *See Wilson v. Hogan*, 437 N.W.2d 492, 496 (S.D. 1991) ("[S]overeign immunity shielded [the] state from any liability in tort arising from the construction and maintenance of public roadways[.]"); *High-Grade Oil Co. v. Sommer*, 295 N.W.2d 736 (S.D. 1980) (holding sovereign immunity was applicable to bar tort action brought against the State for alleged negligent design and construction of a highway).

Even assuming, for the sake of argument, that the Appellees brought their claims against State employees, officers, or agents, their claims are still barred by sovereign immunity. Sovereign immunity is waived "only to the extent of participation in a risk-sharing pool or the purchase of liability insurance." *Hansen v. S.D. Dep't of Transp.*, 584 N.W.2d 881, 883 (S.D. 1990). Thus, to establish a tort claim against the State, its employees, or its public entities, it must be allowed in the coverage document.

The Participation Agreement Between the Public Entity Pool For Liability Memorandum Of Liability Coverage to the Employees of the State of South Dakota excludes from coverage torts "[a]rising from or contributed to in any manner by acts, errors, or omission in the engineering or design of any public roadway or pubic transportation project." Here, the circuit court concluded that the "legal cause of the flooding and damaging of [Appellees'] real and personal property was the blockage by Highway 11 roadbed owned by the State of South Dakota." (SR 855.) The Appellees also argued the culverts were of insufficient size to drain the natural watercourse. This implicates the design and engineering of Highway 11 and, therefore, the claims are barred by sovereign immunity.

Even if coverage for the engineering or design of a public roadway was not excluded from coverage by the PEPL Agreement, coverage would be excluded because

"[s]tate employees are cloaked in sovereign immunity when performing discretionary acts because such discretionary acts participate in the state's sovereign policy-making power." *King v. Landguth*, 2007 S.D. 2, ¶ 11, 726 N.W.2d 603, 607. In short, if the task or act engaged in by a State employee or official is discretionary as opposed to ministerial, then it is excluded from PEPL coverage and sovereign immunity bars the claim.

This Court has defined a ministerial act as "absolute, certain, and imperative, involving merely the execution of a specific duty arising from fixed designated facts or the execution of a task imposed by law prescribing and defining the time, mode and occasion of its performance with such certainty that nothing remains for judgment or discretion[.]" *Truman*, 2009 S.D. 8, ¶ 21, 762 N.W.2d at 80-81. A ministerial act "envisions direct adherence to a governing rule or standard with a compulsory result." *Id.* "It is performed in a prescribed manner *without the exercise of judgment or discretion as to the propriety of the action.*" *Id.* If the duty does not fall within these definitions, they are not ministerial and "thus are discretionary for this is the limits of the abrogation of sovereign immunity authorized by the Legislature." *Id.*

Here, the decisions regarding the placement, engineering, and design of Highway 11, along with the decisions regarding the placement, engineering, and design

of its culverts, were discretionary acts by employees within the DOT. This conclusion is bolstered by this Court's decisions in *Hansen*, *King*, and *Truman*.

In *Hansen*, the plaintiff alleged that the DOT breached its duty to inspect, maintain, and repair interstate bridges under SDCL § 31-5-1,[2] where the plaintiff was injured after driving over a hole on a bridge that was left unmarked and unguarded. 1998 S.D. 109, ¶ 21, 584 N.W.2d at 885-86. This Court held that the duties under SDCL § 31-5-1 were discretionary, not ministerial. *Id.* at ¶ 29. This Court explained that the statute did not provide "a readily ascertainable standard by which the action of [the DOT Secretary] may be measured." *Id.* "When applied to a position that supervises hundreds of employees and thousands of miles of highways, it certainly calls for discretion, judgment or skill." *Id.*

In *King*, the plaintiffs brought a negligence action against the DOT alleging that DOT employees were negligent in marking a cement box culvert. 2007 S.D. 2, ¶ 1, 726 N.W.2d at 605. In analyzing whether sovereign immunity barred the plaintiffs' negligence claim on the basis that marking the box culvert was a discretionary function, the Court identified seven relevant factors to consider. *Id.* at ¶ 11. The

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[2]SDCL § 31-5-1 provides, "The department of transportation shall maintain, and keep in repair all highways or portions of highways, including the bridges and culverts thereon, which highways have been constructed or improved by the department and are on the state trunk highway system."

plaintiff alleged that the decision to place only two markers around the culvert instead of four was ministerial. *Id.* at ¶ 14. This Court disagreed, holding that "[a]ny decision regarding the installation of additional markers at this culvert was a discretionary function." *Id.* at ¶ 21. As such, sovereign immunity barred the claim. *Id.*

Finally, in *Truman*, the plaintiffs brought a wrongful death action against the DOT alleging that the DOT breached its duties under SDCL § 31-28-6 by failing to post additional traffic control signs at a highway intersection. 2009 S.D. 8, ¶ 7, 762 N.W.2d 75, 78. This Court disagreed, holding that any decision regarding the installation of additional traffic signs was discretionary. *Id.* at ¶ 32.

In sum, the circuit court erred by denying the State's motion for summary judgment on grounds of sovereign immunity. The State did not waive its sovereign immunity for the Appellees' claims arising from the design and engineering of Highway 11 and its culverts, and, therefore, the claims should have been barred.

## II. The construction of South Dakota Highway 11, with accompanying culverts intended to facilitate drainage of a natural water course, did not constitute a compensable taking or damaging under S.D. Const. Art. VI, § 13, where a flood caused by an intense and rare rain event caused damage to the Appellees' properties.

The United States Constitution provides that private property shall not "be taken for public use, without just compensation." U.S. Const. amend. V. The South

Dakota Constitution provides that, "[p]rivate property shall not be taken for public use, or damaged, without just compensation[.]" S.D. Const. Art. VI, § 13. Under the United States Constitution, a plaintiff must assert one of four types of takings:

> (1) a *per se* physical taking under *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419 [(1982)] . . . (2) a *per se* regulatory taking which deprives a landowner of all economically viable use of his property pursuant to *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003, 1014 [(1992)] . . . (3) a regulatory taking under *Penn Central Transportation Co. V. City of New York*, 438 U.S. 104 [(1978)] . . . or (4) a land-use exaction violating the standards set forth in *Nollan v. California Coastal Commission*, 483 U.S. 825, 831-32 [(1987)].

*Krier v. Dell Rapids Tp.*, 2006 S.D. 10, ¶ 22, 709 N.W.2d 841, 846.

Here, the Appellees did not prove a compensable taking under the Fifth Amendment. Instead, the Appellees relied on South Dakota's takings clause, which this Court has interpreted to offer greater protection to plaintiffs than the Fifth Amendment. "[O]ur Constitution requires that the government compensate a property owner not only when a taking has occurred, but also when private property has been 'damaged.' " *Rupert v. City of Rapid City*, 2013 S.D. 13, ¶ 9, 827 N.W.2d 55, 60. As such, "where no part of an owner's land is taken, but because of the taking and use of other property so located as to cause damage to an owner's land, such damage is compensable." *Id.*

However, where, as here, a plaintiff seeks compensation under the damages clause, the plaintiff must satisfy the "consequential damages rule." *Krier*, 2006 S.D. 10, ¶ 26, 709 N.W.2d 841, 847-48. "A plaintiff can recover under the consequential damages rule if he or she can prove 'the consequential injury is peculiar to their land and not of a kind suffered by the public as a whole.' " *Id.* (quoting *State Highway Comm'n v. Bloom*, 93 N.W.2d 572, 577 (S.D. 1958)). Furthermore, the injury "must be different in kind and not merely in degree from that experienced by the general public." *Id.* at ¶ 26.

The most recent articulation of the elements necessary to prevail on an inverse condemnation claim alleging only a damaging and not a taking of property comes from this Court's decision in *Rupert*. There, landowners brought an inverse condemnation action for damage to their trees caused by the city's use of deicer on the abutting street. 2013 S.D. 13, ¶ 1, 827 N.W.2d at 58. Based on *Rupert* and the facts of this case, the Appellees here were required to show (1) the State caused water to invade their land; (2) the invasion effectually destroyed or impaired the land's usefulness; and (3) the consequential injury was peculiar to the land and not of a kind suffered by the public as a whole.

**1. The State did not cause water to invade the Appellees' land.**

Although South Dakota's inverse condemnation jurisprudence does not expressly state that a plaintiff must show both actual and proximate causation (legal cause), such a requirement is implicit. Without both an actual and proximate cause requirement, any event in the chain of causation (a but-for cause) relating to the damaging of property would be grounds for compensation. The requirement that the plaintiff show something more than actual causation is supported by other jurisdictions and scholarly commentary.

"To present a proper claim in an inverse condemnation action, the plaintiff must demonstrate that the 'public improvement constitutes a *substantial cause* of plaintiff's damage.' " 9 PATRICK J. ROHAN & MELVIN A. RESKIN, NICHOLS ON EMINENT DOMAIN § G34.03[1] (3d ed. 2015); *see Steuben v. City of Lincoln*, 543 N.W.2d 161, 163 (Neb. 1996) ("As a result, in order to make their inverse condemnation claim actionable, the Steubens have the burden of proving that the City's approval, development, and maintenance of the plats, park, and golf course was the proximate cause of their damages."); *Halverson v. Skagit County*, 983 P.2d 643, 650 (Wash. 1999) ("To have a taking, some governmental activity must have been the direct or proximate cause of the landowner's loss.").

This Court has defined proximate cause as "a cause that produces a result in a *natural and probable sequence* and without which the result would not have occurred."

*Hamilton v. Sommers*, 2014 S.D. 76, ¶ 39, 855 N.W.2d 855, 867 (emphasis added). This Court has further defined proximate cause as "an *immediate cause* and which, in natural or probable sequence, produced the injury complained of." *Id.* (emphasis added). "Furthermore, for proximate cause to exist, the harm suffered must be found to be a foreseeable consequence of the act complained of." *Id.*

Here, the evidence adduced at trial did not establish that the State's construction of Highway 11, along with accompanying culverts, was the proximate, substantial, or immediate cause of the flood that damaged the Appellees' properties. Instead, the evidence showed that several other events were the primary and proximate causes of the flood.

### A. Climate conditions in 2010 combined with a rare and intense rain event the night of July 29-30, 2010, caused the flood.

Both the Appellees' arguments before the circuit court and the circuit court's findings of fact and conclusions of law ignore the climate conditions that preceded the flood as well as the intensity of the rain event that occurred the night of the flood. It was undisputed that 2010 was the wettest year on record in Sioux Falls. (TR3 28:2-4.) In July alone, Sioux Falls received 8.5 inches of precipitation, also a new record. (Ex. 24.) Notably, the historic average for July was 2.5 inches. (*Id.*) The previous summer of 2009 was relatively cool and followed by a wet fall. (TR3

16:11-17:13.) The winter of 2009-10 produced ample amounts of snow, which resulted in substantial amounts of runoff. (*Id.*)

Consequently, the soil in southeastern South Dakota was saturated in July 2010, meaning that the soil behaved as if it was an impervious surface such as concrete or asphalt. (TR3 1711-13; TR2 121:21-122:1.) This means that the soil cannot absorb or hold any more water, and thus water travels faster downstream. In other words, there is "vastly increased runoff." (TR2 51:18-20.)

In addition to record setting precipitation in July and saturated soils, there was a rare and intense rain event the night of July 29-30, 2010. Even the Appellees' weather expert, Arthur Umland, testified that 2.95 inches of rain fell over the 29th and 30th at the Sioux Falls Airport. (TR1 44:6-25.) That was more than the entire historic average for the month of July. (Ex. 24.) Umland opined that the 2.23 inches of rain that fell over the twenty-four-hour period on the 30th was somewhat less than a ten-year event. (TR1 45:20-24.)

Umland's opinion was problematic for two reasons. First, as Umland explained in his testimony, the document Umland relied on to find the precipitation amounts was based on Central Standard Times. (TR1 44:6-16.) "They're not adjusted to Central Daylight Time. So there's an hour difference there." (*Id.*) As such, the N.W.S. data relied on by Umland showed that approximately 2.43 inches of

rain fell between midnight and 6 a.m. on July 30th, not 2.23. (TR1 44:14-16.) Second, because Umland's analysis looked at the entire 24-hour period instead of the smaller period when it was actually raining, it failed to account for the intensity of the rainfall. Umland himself explained that rain probability statistics are based both on the "amount of rain but also the duration." (TR1 42:11-14.)

Umland's opinion regarding the intensity of the rain event on the 29th and 30th was contradicted by the State's two experts, Dr. Dennis Todey and Donald Harmon. Both Dr. Todey and Harmon opined that greater precipitation amounts fell in Minnehaha County and further opined that, based on the amount of rain and its duration, the two-hour precipitation totals in the Shindler area exceeded a one-hundred-year rainfall event. However, in its findings and conclusion, the circuit court failed to even mention Harmon, found Dr. Todey's testimony to be of "little credibility," and found the CoCoRaHS data that supplemented precipitation measurements to be "not scientifically reliable." (SR 850.) To the extent this Court concludes that such findings must be given any deference, the State challenges the findings as clearly erroneous, as argued below. (*See* § I(1)(A)(i).)

Harmon's deposition testimony was admitted into evidence as Exhibit C. (TR2 95:2-8.) Harmon served as the chief meteorologist in charge of the N.W.S. office in Sioux Falls for twenty years. (Ex C, 6:15-19.) Harmon opined, "So I'm

confident that in northeast Lincoln County, in the Shindler area, that the two-hour precipitation totals there exceeded the hundred-year flood event." (Ex. C, 43:18-20.) Harmon's opinion was based on the same technical paper relied upon by Umland, which provided that 3.8 inches of rain in two hours would be considered a one-hundred-year event. (Ex. C, 39:14-18.)

Based on his research, Harmon found there was over 4.5 to 5 inches of rain for the July 29-30 event in northeast Lincoln County. (Ex. C., 39:14-18.) Dr. Todey found numerous reports of rainfall greater than 4 inches, including measurements of 4.39 and 4.29 inches, based on the CoCoRaHS reports for the 24-hour period before 7 a.m. on July 30th. (TR3 26:19-20.).

Harmon's opinion as to the duration and intensity of the rainfall was based on the USGS gauging station located at 57th Street[3] and Western Avenue in Sioux Falls. (Ex. C, 39:8-13.) The USGS is an automated gauging station that provided data every fifteen minutes. (Ex. C, 40:2-4.) As such, Harmon was able to determine the duration and intensity of the rain event in Shindler and to opine that the two-hour precipitation totals exceeded a one-hundred-year event. Indeed, according to

[3]57th Street is the dividing line between Minnehaha County and Lincoln County in Sioux Falls.

Technical Paper 40 relied upon by Umland, even 4 inches of rain in six hours is a one-hundred-year event.

### i. Dr. Todey's testimony was credible and was based on scientifically reliable CoCoRaHS data.

Dr. Todey is an associate professor at South Dakota State University and is also employed as the State Climatologist. (TR3 3:14-18.) Dr. Todey has both a bachelor's degree and a master's degree in meteorology. (TR3 3:21-25.) He also has a Ph. D. in agricultural meteorology from Iowa State University. (*Id.*) In his role as State Climatologist, Dr. Todey tracks and measures precipitation in South Dakota. (TR3 5:22-25.) His office also coordinates the South Dakota chapter of the Community Collaborative Rain, Hail, and Snow Network ("CoCoRaHS"). (TR3 5:1-6.) CoCoRaHS is a network of volunteers who provide daily reports of precipitation measurements online. (TR3 7:6-15.) The data is archived by the National Climatic Data Center, a federal agency. (TR3 7:14-17.)

The CoCoRaHS data is regularly reviewed by climatologists such as Dr. Todey in measuring and recording precipitation levels. (TR3 11:1-3.) In fact, both Dr. Todey and Umland are CoCoRaHS observers. (TR3 11:4; TR1 52:3-4.) CoCoRaHS observers report their measurements every morning at the same time.

(TR3 11:14-16.) They use uniform gauges and are provided guidelines that they are to follow to measure precipitation and place their gauges. (TR3 10:13-15.)

Climatologists use CoCoRaHS data as auxiliary data to help supplement the N.W.S. measurements. (TR3 7:20-8:6.) For example, the sole N.W.S. station in Sioux Falls is located at the airport. (TR1 38:12-16.) However, it is well known, both as a matter of common experience, and as a fact within the scientific community, that precipitation can vary distinctly even in "small geographic distances." (TR1 55:2-7.) For example, there are variations between the two gauges at the Sioux Falls Airport, even though the gauges are less than two miles apart. (TR1 54:5-55:1.) Even Umland acknowledged that there were substantial variations between the measurement at the airport and his own measurements at his home at Wall Lake. (TR1 55:8-14.) In order to fill in the gaps that are created by relying solely on N.W.S. data, both Dr. Todey and Harmon relied on CoCoRaHS data in order to paint a more complete picture of precipitation.

The circuit court found that the CoCoRaHS data was unreliable because it was not "specific as to the component of time." (SR 850.) This finding is unsupported by the evidence and, indeed, is contradicted by the evidence. The CoCoRaHS data is specific to 24-hour time periods, just like the 24-hour time periods identified in Exhibit 24 relied upon by Umland. (Ex. 24.) Moreover, no witness, including Umland,

provided any basis upon which the circuit court could have based this finding. Umland did not give an opinion regarding the reliability of the CoCoRaHS data. Umland testified that CoCoRaHS volunteers "report their information daily, and that goes to a computer out in Colorado." (TR1 39:6-8.) The only other two witnesses who were competent to testify to the reliability of the data, Dr. Todey and Harmon, both testified that the data was reliable and relied upon by climatologists. Therefore, the circuit court's finding that the CoCoRaHS data was unreliable because it was not specific as to the component of time was clearly erroneous.

The circuit court also found that Dr. Todey's testimony was "of little credibility" because he "failed to even include a map or data for Lincoln County–the location of Plaintiffs' properties." (SR 850.) This finding is extremely problematic for several reasons. First, given that the Appellees' properties are barely two miles south of the border between Minnehaha and Lincoln counties, it is obvious that rain measurements in southern Sioux Falls, which happen to be in the southernmost reaches of Minnehaha County, would be probative of rain measurements at the Appellees' properties. Under the circuit court's logic, rainfall measurements taken in Canton, which is almost fifteen miles away from the Appellees' properties but is located within Lincoln County, would be probative, but measurements taken two miles away in Minnehaha County would not.

Second, and perhaps more importantly, the circuit court's finding completely ignores the fact that the runoff that travels through the Spring Creek Tributary comes from Minnehaha County. The drainage basin surrounding the Spring Creek Tributary is located along the southeastern edge of Sioux Falls on the Minnehaha-Lincoln county line. (Ex 46, pg 1, Table 5; TR2 10:14-24.) The basin ordinates in Minnehaha County near 49th Street and Bahnson Avenue and drains into Lincoln County near Shindler. (*Id.*) It is this drainage basin that was studied by the Appellees' hydrology expert, Mark Mainelli. (*Id.*) As Dr. Todey explained, "I'm trying to represent what happened as best we can say over the whole southern Sioux Falls area that would lead to runoff in the Shindler area." (TR3 26:10-13.)

Third, Dr. Todey's testimony clarified that he did not provide a Lincoln County map in his report (which was admitted as Exhibit H), because at that time there were only three CoCoRaHS locations in Lincoln County. (TR3 12-14.) Table 1, included in Exhibit H, showed three measurements for Lincoln County of 3.58, 3.75, and 4.26 inches. (Ex. H, tbl. 1.) Therefore, the circuit court's finding that Dr. Todey's testimony was of little credibility because it did not include data for Lincoln County was clearly erroneous.

### B. Increased runoff from the City of Sioux Falls contributed to the flood.

Throughout this case, the Appellees proceeded with their claims against the City under the theory that the expansion of southeast Sioux Falls, which took place without adequate storm water drainage, was a contributing factor to the flood that damaged their homes. Specifically, in their Second Amended Joint Complaint, the Appellees alleged that surface waters had been collected and allowed to flow from the City to their properties. (SR 194.) The water from the City flowed through an eight-foot box culvert built to haul the water away from the City to the drainage basin surrounding the Appellees' properties. (*Id.*)

At trial, both testimony and exhibits demonstrated that increased "urbanization" in the southeastern region of Sioux Falls increased peak runoff and vastly increased the risk of flood to the Appellees' properties. In 1990, the City received the "Storm Water Drainage Tributary Spring Creek Watershed" report prepared by Stockwell Engineers, Inc. ("Stockwell study"). (TR2 52-3-7.) The Stockwell study was admitted as Exhibit 46. (TR2 64:8-12.) The Stockwell study only accounted for development in the City north of 57th Street. (TR2 52:3-7.)

The Stockwell study analyzed information on the drainage basin surrounding the Spring Creek tributary. (Ex. 46, pg. 1.) The drainage basin begins in the City near 49th Street and Bahnson Avenue and drains south into Lincoln County. (Ex. 46, pg. 1.) The existing development within the 1990 City limits had increased

stormwater runoff in the upper reaches of the basin, and the purpose of the study was to provide the City with estimates of stormwater runoff and improvements necessary to meet immediate and future drainage requirements. (Ex. 46, pg.1; tbl. 5.)

The Stockwell study demonstrated that the City was aware of the rural residential development of approximately thirty homes, including the Appellees' homes, that were being built along Highway 11 abutting the drainage channel for the basin. (Ex. 46, pg. 5.) The study stated, "Most of these homes are walk-out type construction which could result in flooding of lower levels during high flow conditions in the drainageway." (Ex. 46, pg. 5.) Local homeowners cleaned and regraded the drainage channel in Elmen acres. (*Id.*)

The City was aware that the homes were protected to a high water level approximately four feet above the flowline of the two 48" culverts, which required the City to "severely limit the available headwater for the drainage structures under Highway11 thereby reducing the culverts' capacity." (Ex. 46, pg. 5.) The study assumed that there would be no significant change in land use south of 57th Street, and warned that if significant development occurred, channelization and filling of natural wetlands would encourage higher flow rates to downstream areas (i.e., the Appellees' properties) "with potential for flooding." (Ex. 46, pg. 27.)

In the years since the Stockwell study was published in 1990, substantial development occurred in the southeastern portion of the City. (TR2 120:8-15.) By 2010, there was substantial development south of 57th Street, which acted to connect the basin area south of 57th Street with the "storm water master plan" developed by the City. (TR2 52:11-13; TR 54:15-17.) In 2008, Lincoln County GIS sent a letter to the Appellees to notify them of their potential to be required to have flood plain insurance. (TR1 113:2-7; Ex. B.)

The City's development, also known as urbanization, increased peak runoff, because developed property contains more roadways and rooftops, which greatly reduces the amount of pervious land to absorb water. (TR2 120:16-121:5.) In turn, this increased peak runoff has consequences for downstream properties, because more water arrives sooner. (TR2 121:6-10.) In fact, the studies obtained by the City showed that development caused increased runoff, which increased both the volume of water and the speed at which the water progressed. (TR2 62:23-63:4.) In short, as a result of the City's development south of 57th Street, peak flow of drainage from the City increased and was reached much faster than it would have if the land had remained in its natural state. (TR2 63:10-14.)

The City's "storm water master plan" called for detention ponds within and adjacent to the Sioux Falls city limits, but these ponds were not constructed by July

29-30, 2010. (TR2 52:14-18; 52:19-23.) Specifically, detention pond 7.4, which was contemplated in the master plan, was not constructed. (TR2 52:20-22.) Development in southeastern Sioux Falls increased runoff rates. The five-year event runoff rate, without detention pond 7.4, went from 900 C.F.S.[4] pre-development to 1273 C.F.S. post-development. (TR2 53:3-8.) The one-hundred-year event runoff rate went from 1940 C.F.S. pre-development to 2644 C.F.S. post-development. (*Id.*) Essentially, peak flow increased by 30 percent pre-development to post-development. (TR2 53:9-11.) Critically, the Appellees' own expert, Mainelli, testified that had detention pond 7.4 been constructed, "the peak flow would have been reduced to the predevelopment level." (TR2 53:24-25.)

As such, regardless of whether the rainfall on the night of July 29-30 statistically was a five-year event or a one-hundred-year event, the peak flow that drained from the City to the drainage basin around the Appellees' properties was 30 percent more than it had been before land was developed south of 57th Street. Notably, as stated above, none of the Appellees' properties experienced flooding prior to 2010, i.e., prior to the urbanization south of 57th Street. The City's own storm water master plan strongly suggested that the City construct detention facilities to

[4]Cubic feet per second.

address the increased post-development runoff, but these facilities were not constructed. (TR2 61:2-25.) The State played no role in causing the increased runoff that flowed in the Spring Creek tributary, and, therefore, did not cause the flood that damaged the Appellees' properties.

### C. The State did not intentionally decide to pool water near the Appellees' properties to avoid overtopping Highway 11.

The circuit court's conclusions of law regarding the State's culpability for the flood was based on several findings indicating that the State intentionally decided to pool water behind Highway 11. These findings were based upon proposed findings from the Appellees and were not supported by the evidence.

For example, the circuit court found that the State design pushed water into the closed basin to avoid overtopping of Highway 11. (SR 852.) This finding was based on Appellees' proposed finding of fact 45. The proposed finding was a misstatement of Mainelli's testimony, who provided no testimony regarding the State intentionally designing the culverts to push water in the basin to "avoid overtopping of Highway 11."

Similarly, the circuit court found "the decision was made to pool water behind Highway 11 to delay the water's arrival to downstream locations." (SR 853.) This finding was based on Appellees' proposed finding of fact 46. The testimony cited by

the proposed finding did not reference a decision to pool water to "delay the water's arrival to downstream locations." Instead, it stated that resetting and lowering the flowline of the existing culvert "will raise the overtopping frequence to eight-year flood." (TR1 96:21-22.)

Moreover, both the circuit court and the Appellees' arguments ignored the functional restrictions on the State when it comes to altering or modifying culverts under State trunk highways. Even if the State had wanted to change the culverts in Highway 11, it would have been "impractical and imprudent" to make such a change before downstream alterations were first made. (TR2 77:14-18.) Making changes on upstream bridges and culverts creates problems for downstream landowners. (TR2 87:6-10.) Additionally, the Appellees' properties are located in an established FEMA regulatory floodway, which further restricted the State's actions. (TR1 92:1-9.) The State was prohibited from raising water levels downstream. (*Id.*)

From a broader perspective, it is impractical to assume that the State through the DOT can constantly monitor every mile of the thousands of miles of highways in South Dakota. *See Hansen*, 1998 S.D. 109, ¶ 29, 584 N.W.2d at 888. Typically, drainage issues are handled by municipalities and counties. Under South Dakota law, Lincoln County and the City are responsible for managing drainage projects outside of

the DOT's highway right-of-way in southeastern Sioux Falls and the Shindler area. *See* SDCL § 46A-10A.

Specifically, counties are authorized to establish boards or drainage commissions to prepare a county drainage plan. SDCL § 46A-10A-16. Counties and municipalities may also provide for joint county-municipal drainage activities under SDCL § 46A-10A-13. Given these functional and legal restrictions on the State's ability to control the relevant drainage systems at issue in this case, it can hardly be said that the State caused the flood merely by constructing Highway 11 in 1949.

### D. The State's design of the twin 48" culverts met with engineering standards and was reasonable.

Generally, whether the State's actions were reasonable do not affect a takings analysis. *See Rupert*, 2013 S.D. 13, ¶ 10, 827 N.W.2d at 61. However, much testimony was elicited on the issue at trial, and the circuit court concluded that the culverts through Highway 11 were "of insufficient size to handle the drainage needs of Spring Creek Tributary." (SR 848.) Additionally, this Court has previously explained, "As a road may alter a natural flow of surface water, townships are obliged to *reasonably accommodate* the area's natural drainage." *Knodel v. Kassel Tp.*, 1998 S.D. 73, ¶ 14, 581 N.W.2d 504, 509 (emphasis added).

In *Knodel*, this Court concluded that a township's unplugging of a culvert that resulted in flooding of the plaintiff's land was reasonable, and, therefore, the plaintiff was not entitled to an injunction based on a taking. *Id.* at ¶ 16. Here, there is no evidence that the State diverted surface waters into unnatural watercourses. Instead, the evidence shows that the Appellees' properties were located in a natural drainage basin and that the flood risk to their properties was raised by the increased runoff from the City.

The State's construction of Highway 11 with its accompanying culverts reasonably accommodated the natural drainage of the basin by exceeding design standards. The circuit court's conclusion that the State provided insufficient drainage was premised on two findings. First, that the twin 48" culverts were sized to handle an eight-year storm event. (SR 848.) Second, that the hydraulic standard was to keep the hundred-year flood elevation beneath the top of the highway. (SR 852.) Both findings were erroneous.

**i. The twin 48" culverts were sized to handle a fifty-year storm event.**

The first finding was based on the Appellees' arguments regarding Exhibit 16, which was a Hydraulic Data Sheet compiled by the DOT prior to the resetting of the twin 48" culverts in 2010. However, the data sheet does not state that the culverts

were sized to handle an eight-year storm event. Instead, it stated that there would be overtopping of the first approach at an eight-year event.[5] Goeden explained, "that first home entrance to the south of the pipe location, that's the ditch block that we're referring to [in exhibit 16]. That is a little bit below the highway, and that was the overtopping that we're talking about here at the eight-year occurrence." (TR1 88:8-15.)

Mainelli's testimony paralleled Goeden's testimony in this respect. Mainelli agreed that the first ditch block[6] would overtop at 275 C.F.S., which was an "eight-year drainage event." (TR2 33:20-35:3.) The Appellees' theory of the case was not that the 48" culverts in isolation would cause water to overtop Highway 11. Instead, as explicated by Mainelli, the Appellees contended that once the southern ditch blocks overtopped, there was insufficient drainage in the sub-basin to prevent flooding

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[5]As explained by Kevin Goff, an engineer for Clark Engineering, the data sheet "identifies that at 275 cubic feet per second it overtops the basin, overtops into the sub-basin to the south by overtopping Julie Drive, but it wouldn't indicate the extent of any of that flooding." (TR2 74:1-7) (emphasis added). In other words, even if it was true that the first approach overtopped at an eight-year event, it does not follow that the Appellees would be flooded by an eight-year event.

[6]This is yet another example of how attenuated the causal connection between the flood and the State's actions in this case were. In other words, the twin 48" culverts were only allegedly insufficient because of the existence of the ditch blocks and approaches to the south, including Julie Drive, which in turn created a sub-basin within the Spring Creek Tributary drainage basin with insufficient drainage.

to the Appellees' properties. "Therefore, the State *knew or should have known* that an eight-year event and above would cause flooding to Plaintiffs' property as a result of the Highway 11 blockage of the natural drainage." (SR 849.)

Even if the Appellees' arguments regarding the sub-basin are persuasive, it must also be noted that the eight-year probability statistic was based on a particularly conservative "steady-state" analysis of the drainage basin. (TR1 88:16-21.) A steady state analysis takes the peak flow at a site and applies that rate of flow as a constant, independent of time. (TR1 123:14-124:10.) The steady state analysis also assumes a constant volume of water. (*Id.*) In this case, a peak flow of 803 C.F.S., meaning 803 C.F.S. was the peak flow the culverts would experience based on a one-hundred-year flood event. (*Id.)*

A steady state analysis is essentially a "worst case scenario" analysis that does not take into account any routing or storage of water that may occur in a given drainage basin. (TR1 124:13-18; Ex. A.) Mainelli also agreed that a steady state flow rarely occurs in nature in a real-life environment. (TR2 85:11-13.) That is because in a typical rainfall event, water volume does not remain constant. (TR1 124:8-12.) Instead, it varies with time following a normal hydrograph shape, similar to a bell-shaped curve. (*Id.*)

Conversely, a "dynamic state" analysis is a more detailed analysis. (TR2:118:5-15; TR2 119:4-9.) It examines the entire basin and different reaches, and accounts for water being routed through streams and channels. (*Id.*) The dynamic state analysis is "more realistic" than a steady state analysis in this particular basin. (*Id.*)

Clark Engineering ("Clark") prepared a study using the dynamic state analysis. Clark was employed by Lincoln County to develop plans to mitigate potential floods in the Shindler area and to apply for funding through FEMA to create improvements to the watershed basin. (TR2 69:1-7.) The Clark study concluded, "Flood events over a 50-year event proceed over this substantial barrier [the first approach] and then over Julie Road and then over a series of driveway along the westside of the highway in to a basin area served by one two-foot culvert." (TR2 88:1-8.)

**ii. The twin 48" culverts met the applicable industry standard of a twenty-five year flood event.**

Both Kevin Goff, a civil engineer employed by Clark, and Chad Hanisch, a civil engineer with Infrastructure Design Group, testified that the twin 48" culverts met applicable industry standards. Goff testified, "[t]he roads that I generally work on, the county road, the design storm that we usually design for is a 25-year event." (TR2:5-7.) Hanisch testified that the design standard for a state highway would be for

a twenty-five-year flood event. (TR2 114:25-115:5.) As such, the circuit court's finding on this point was clearly erroneous.

### E. The intensity of the flood was a supervening cause.

When intense rain or flood waters overwhelm the design capacities of drainage structures, it has been held that the intensity of the rain or the flood waters is a supervening cause that precludes liability by the government entity. "If the flood or rains exceed the design capacity [of a flood control system], the government entity responsible for the structure can assert a defense of supervening cause. 9 PATRICK J. ROHAN & MELVIN A. RESKIN, NICHOLS ON EMINENT DOMAIN § G34.03[2][e][I] (3d ed. 2015). "[W]here it could be shown that the damage would have occurred even if the [flood] control project had operated perfectly, i.e., where the storm exceeded the project's design capacity . . . such an extraordinary storm would constitute an intervening cause which supersedes the public improvement in the chain of causation." *Belair v. Riverside County Flood Control Dist.*, 7654 P.2d 1070, 1075 (Cal. 1988).

More recently, the California Court of Appeals expanded on the concept of a supervening cause in *Gutierrez v. County of San Bernardino*, where the plaintiffs sued the county for inverse condemnation based on flooding of their properties after rainstorms. 198 Cal. App. 4th 831, 836 (Cal. Ct. App. 2011). There, the plaintiffs alleged that the county's construction of "K-rails," which were intended to prevent

flooding damage from runoff from neighboring mountains, failed and permitted the properties to be flooded. *Id.* The court held there was no inverse condemnation because the flooding would have occurred regardless of the installation of the K-rails. *Id.* at 850. The court reasoned, "[T]he public improvement did not expose plaintiffs' properties to a risk of flooding that did not otherwise exist." *Id.*

A similar result should be reached by this Court in this case. The culverts beneath Highway 11 were overwhelmed by flood waters. The intensity of the rain event, combined with the increased runoff from the City, combined to create a supervening cause, because the twin 48" culverts did not expose the Appellees' properties to a risk of flooding that did not otherwise exist.

### F. The State's construction of Highway 11, along with accompanying culverts, was not the proximate, substantial, or immediate cause of the flood that damaged the Appellees' properties.

Several events caused flooding to the Appellees' properties. First, there was an intense and rare rain event on the night of July 29-30, 2010, that qualified as a one-hundred-year event. Second, there was substantial urbanization of southeastern Sioux Falls that greatly increased the peak flow of flood waters to the Appellees'

properties. Third, because soils were saturated, more water reached the Appellees' property faster. These were all necessary and proximate causes of the flood that damaged the Appellees' properties. The causal connection advanced by the Appellees between the State's actions and their damages is too attenuated to rise to a taking or damaging under South Dakota's constitution.

An example of an actual direct and proximate cause of flooding by a government entity comes from *Smith v. Charles Mix County*, 182 N.W.2d 223 (S.D. 1970). There, the plaintiffs brought an action against the county after their crops were damaged by flood waters. *Id.* at 223. The plaintiff's crop land was abutted by a county highway running east and west. *Id.* The plaintiff's crop land was to the south of the highway, and the property on the north side of the property was known as the Ramsdell land. *Id.* Approximately one-half mile east of the property, the highway crossed Spring Creek. *Id.* On June 17, 1967, there was an unusually heavy rainfall in the area which raised the level of water in Spring Creek. *Id.* at 224. Some of the water was diverted by the highway, which then flowed west along the north ditch. *Id.* The highway acted as a dam causing water to back up and flood the Ramsdell land. *Id.*

To save the highway grade, the county installed two large culverts in the highway abutting the plaintiffs' land. *Smith*, 182 N.W.2d at 224. As the impounded

water on the north side was released through the culverts, the water level on both sides of the road was fairly equaled, which resulted in the flooding of the plaintiff's crop land. *Id.* This Court concluded that such evidence was sufficient to award damages against the county. *Id.*

This Court essentially applied South Dakota's law relating to the drainage of surface waters in rural areas, and held that those principles applied to a county in the construction, improvement, and maintenance of its highways. *Smith*, 182 N.W.2d at 224. "In the performance of such work a county cannot [1] divert surface waters into unnatural watercourses or [2] gather water together in unnatural quantities and then cast it upon lower lands in greater volume and in a more concentrated flow that natural conditions would ordinarily permit." *Id.* "Damages caused thereby constitute a compensable taking or damaging of private property for a public use under Section 13, article VI, S.D. Constitution." *Id.*

Unlike the county in *Smith*, there was no evidence in this case that the State intentionally diverted surface waters into unnatural watercourses or gathered water in unnatural quantities and then cast it upon lower lands. The State constructed Highway 11 in 1949, prior to any of the Appellees' houses being constructed. The State's culverts met industry design standards and reasonably accommodated the natural drainage in the area for over 60 years. The culverts, however, could not

handle the impact of extraneous and supervening causes, including the City's failure to manage upstream storm runoff caused by urbanization, and the historic rainfall and soil saturation in July 2010 combined with an extreme rain event on July 29-30, 2010.

If this Court accepts the Appellees' theory of the case, as well as the circuit court's rationale as found in its findings and conclusions, then the State, as well as all other governmental bodies, will essentially become an insurer for all floods that result from drainage structures being overwhelmed by intense and rare rain events. If the State is not an insurer against all floods, then the question becomes, what level of protection must the State provide? Must all culverts and other drainage structures such as storm drains be able to withstand one-hundred-year storm events? The Appellees' expert testified that the construction of a triple-barrel ten-foot by six-foot structure that he claimed would mimic the natural drainage (i.e., what the water would do if Highway 11 did not exist) was an "economical feasible solution." (TR2 37:7-19; SR 852.) Perhaps whenever a public roadway crosses a natural drainageway, such structures must be built to mimic the natural drainage?

The purpose of these rhetorical questions is to illustrate the impossibility of such a standard of care. Thousands of miles of roadways cross numerous drainage basins in this state. Under the Appellees' theory of the case, every governmental entity responsible for those roadways are strictly liable for any flood that damages

abutting property. Unless the governmental entity purposely discharges water on an individual's land, or fails to make an effort to reasonably accommodate natural drainage, there can be no taking or damaging under the South Dakota constitution.

**2. The Appellees' claims are barred by the consequential damages rule.**

This Court has made clear that the consequential damages rule applies where a plaintiff seeks compensation for damage caused by an invasion of water. *Rupert*, 2013 S.D. 13, ¶ 10, 827 N.W.2d at 61. In *Krier*, this Court barred recovery for inverse condemnation where the plaintiff failed to show a separate and distinct injury. 2006 S.D. 10, ¶ 10, 709 N.W.2d 841, 848. There, the plaintiff argued that dust and gravel from a newly constructed city street invaded his property and diminished its value. *Id.* at ¶ 27. This Court disagreed, holding that the plaintiff "failed to produce any evidence of a separate and distinct injury." *Id.* at ¶ 28. This Court concluded, "The injury to [plaintiff's] property is the same as the injury to the other properties. It differs only in amount or degree." *Id.*

Here, it cannot be disputed that the Appellees suffered a substantial harm as a result of the flood. There is no question that there was damage to their homes and personal property, as reflected by the amount of damages awarded by the jury. However, while the Appellees suffered a great amount of damage to their property, it arose from the same risk suffered by all members of the public who live in areas

affected by extreme rainfalls. Properly constructed culverts and storm drains can be overwhelmed by intense flood waters, which can cause abutting properties to be inundated and damaged. Government entities should not be held strictly liable for such damages.

## III. Assuming, in the alternative, that this Court affirms the circuit court's judgment, the State is entitled to contribution or indemnification by virtue of its cross-claim against the City of Sioux Falls as a result of the Appellees's settlement with the City.

As explained above, substantial evidence at trial demonstrated that increased runoff from the City was a proximate cause of the flood that damaged the Appellees' properties. (*See* § II(1)(B).) The Appellees settled their claims against the City shortly before trial. Despite the settlement, and despite the uncontradicted evidence showing the City's culpability, the circuit court erroneously concluded the State did not present sufficient evidence of the City's liability and dismissed the State's cross-claim. (SR 854). Thus, the State was precluded from seeking an apportionment from the jury at the damages phase of trial.

In most cases, the right to contribution and offset is clear. "The right of contribution exists among joint tort-feasors." SDCL § 15-8-12. Joint tort-feasors are defined as "two or more persons jointly or severally liable in tort for the same injury to person or property, *whether or not judgment has been recovered against all or*

*some of them*." SDCL § 15-8-11 (emphasis added). "A release by the injured person of one joint tort-feasor . . . reduces the claim against the other tort-feasors in the amount of the consideration paid for the release." SDCL § 15-8-17. Typically, issues of relative fault are reserved for the fact-finder under SDCL § 15-8-15.2, but the State was precluded from presenting the issue from the jury.

Importantly, "a settling party can become a joint tort-feasor even though he has never been judicially determined to be liable or at fault." *Schick v. Rodenburg*, 397 N.W.2d 464, 468 (S.D. 1986). "[I]f a plaintiff sues defendants as joint tort-feasors and settles with them, they are joint tort-feasors." *Id.* "[T]he settling parties, without additional parties, are joint tort-feasors for all purposes including the application of SDCL 15-8-17." *Id.*

While the Appellees will contend that the joint tort-feasors' act does not apply to this case, that argument ignores the fact that their initial complaint sounded in tort. Moreover, their entire theory of the case was based on negligence principles. To permit them to recover for the State's functional negligence, but then preclude the State the benefit of the tort-feasors' act would be inequitable.

Another court facing this issue has likened takings claims to tort claims for purposes of an applicable joint tort-feasor statute. In *Warner/Elektra/Atlantic Corp. v. County of DuPage*, the court held that Illinois' Contribution Act applied to the

plaintiffs' inverse condemnation claim, which entitled the defendant to an offset based on the plaintiffs' settlement with a different co-defendant. 771 F. Supp. 911, 923 (N.D. Ill. 1991). The court was faced with the issues of whether comparative fault and contribution applied to an inverse condemnation claim. *Id.* at 913. The court answered both issues affirmatively, explaining, "although inverse condemnation represents a distinct cause of action, its overlap with tort principles cannot be ignored." *Id.* at 916.

Here, the Appellees initially brought tort claims against both the City and the State, and their theory of the case against the State was based on negligence principles. Therefore, the State should have been permitted to present evidence of the City's liability to the jury to seek an apportionment of damages. If this Court does not reverse the circuit court's judgment on liability, it should reverse and remand the circuit court's dismissal of the State's cross-claim and order the circuit court to permit the State to seek an apportionment of damages.

## IV. Assuming, in the alternative, that this Court affirms the circuit court's judgment, the State is entitled to a permanent drainage easement in the Appellees' properties, because the jury found the taking to be permanent.

The circuit court refused language from the State's proposed judgment that would have given the State a permanent drainage easement in the Appellees' properties. The circuit court's refusal to incorporate such language was error based on this Court's precedent in *Heezen v. Aurora County*, 157 N.W.2d 26, 31 (S.D. 1968).

In *Heezen*, the plaintiffs brought an inverse condemnation action against the county, arguing that the county diverted water onto their farmland. 157 N.W.2d at 28. The plaintiffs sought both damages and injunctive relief. *Id.* This Court affirmed the trial court's conclusion that the county was liable, but reversed the dual award of damages and injunctive relief. *Id.* at 32. This Court noted that the measure of damages awarded by the trial court was the difference in market value of the farmland before and after the flooding. *Id.* at 31. "This is the measure of compensation which governs where part of a tract is permanently damaged or taken." *Id.* "From this it would follow that the county was being required to pay for the right to permanently flood these farms to the extent of the flooding here involved." *Id.*

This Court noted that injunctive relief is inappropriate where damage to the property is permanent, and concluded, "To enjoin a party from causing water to flow onto an area that it had acquired the right to flood permanently flood would create an anomalous situation." *Id.* at 32.

In this case, the jury found the damage to the Appellees' property to be permanent. (SR 1454-1462.) The proper measure of damages for permanent damage is "the diminution in fair market value of the property." *Rupert*, 2013 S.D. 13, ¶ 26 827 N.W.2d at 65. The jury was instructed to award damages based on this method. (SR 1396.)

Given that the damage to the Appellees' properties was permanent, and given that they were compensated for the diminution in fair market value, it follows that they should not again be compensated for future floods. Under this Court's precedent in *Heezen*, the State paid "for the right to permanently flood" their properties. 157 N.W.2d at 31. As such, the circuit court should have included a drainage easement in favor of the State in the judgments awarding damages to the Appellees. Assuming this Court does not reverse the circuit court's judgment on liability, it should remand the case and order the circuit court to include such an easement.

## CONCLUSION

If the Appellees prevail on their inverse condemnation claim, it will mark an unprecedented expansion of inverse condemnation liability in South Dakota. It will mean that any injury with a tangential temporal relationship to a public use project qualifies as a taking or damaging under the South Dakota Constitution. Particularly problematic in this case is the extremely attenuated causal relationship between the State's actions and the flood that caused damages to the Appellees' properties. The State's actions were not the proximate cause of the flood. The flood was proximately caused by an intense and rare rain event that, combined with saturated soils and increased runoff from the city, damaged the Appellees' properties. Under such a scenario, there is no taking or damaging under South Dakota's Constitution.

Based on the forgoing argument and authority, the State respectfully requests this Court to reverse the circuit court's judgments and hold that the State is not liable for a taking or damaging of property. In the alternative, the State asks for the Court to reverse and remand to permit the State to seek an apportionment of damages and to direct the circuit court to include a drainage easement in the judgments.

**The State respectfully requests the privilege of oral argument.**

Dated this 6th day of August 2015.

WOODS, FULLER, SHULTZ & SMITH P.C.

By /s/ Gary P. Thimsen

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## CERTIFICATE OF COMPLIANCE

In accordance with SDCL § 15-26A-66(b)(4), I certify that this brief complies with the requirements set forth in the South Dakota Codified Laws. This brief was prepared using WordPerfect X5, and contains 9,978 words excluding the table of contents, table of cases, jurisdictional statement, statement of legal issues and certificate of counsel. I have relied on the word count of the word-processing program to prepare this certificate.

Dated this 6th day of August 2015.

WOODS, FULLER, SHULTZ & SMITH P.C.

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## CERTIFICATE OF SERVICE

I hereby certify that on the 6th day of August 2015, two true and correct copies of the foregoing Appellant's Brief were mailed by first class mail, postage prepaid to the following:

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# APPENDIX

IN THE SUPREME COURT
OF THE
STATE OF SOUTH DAKOTA

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Appeal No. 27368

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**Mark and Marilynn Long, Arnie and Shirley Van Voorst, Tim and Sara Doyle, Timothy and Jane Griffith, and Michael and Karen Taylor**,
Plaintiffs and Appellees,

v.

**State of South Dakota**,
Defendant and Appellant.

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Appeal from the Circuit Court, Second Judicial Circuit
Minnehaha County, South Dakota

The Honorable Patricia Riepel
Circuit Court Judge

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# APPELLEES' BRIEF

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Notice of Appeal filed on the 17th day of February, 2015


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## PRELIMINARY STATEMENT

The State of South Dakota will be referred to as "the State." Mark and Marilyn Long, Arnie and Shirley Van Voorst, Tim and Sara Doyle, Timothy and Jane Griffith, and Michael and Karen Taylor will be referred to collectively as "the Landowners." The City of Sioux Falls will be referred to as "the City." Pages of the settled record will be cited as (SR __ ). References to the court trial transcript will be cited as (TR1 __ ), (TR2 ___ ), or (TR3 ___ ), for volumes one, two, and three of the court trial transcript, respectively. Trial exhibits will be cited to the appropriate exhibit number or letter as (TE ___ ).

The Trial Court's Findings of Fact will be denoted by letters FOF ___, followed by the number of the finding. The Trial Court's Conclusions of Law will be denoted COL ___ followed by the number of the conclusion. The findings and conclusions are found in the appendix at Appx. 3. Other references to the appendix will be denoted by Appx___.

## JURISDICTIONAL STATEMENT

The Appellees recognize that the Court has jurisdiction of the State's appeal.

## STATEMENT OF ISSUES

**I. Whether the State of South Dakota can be immune from a claim for damage to real estate brought under the state constitution?**

Trial Judge Lawrence Long found the State was not immune and denied State's Motion for Summary Judgment on the issue. (SR 100).

*Rupert v. City of Rapid City,* 2013 S.D. 13, 827 N.W.2d 55.

*Searle v. City of Lead,* 10 S.D. 312, 73 N.W. 101 (1897).

*Hurley v. State,* 82 S.D. 156, 143 N.W.2d 722 (1966).

*Wolff v. Sec. of South Dakota Game, Fish and Parks,* 1996 S.D. 23, 544 N.W.2d 531.

**II. Did the State's obstruction of the Spring Creek Tributaries natural drainage cause damage to Landowners real estate?**

Trial Judge Patricia Riepel found the State's actions were the legal cause of the damage. *Conclusions of Law 5, 6, and 7.*

*Rupert v. City of Rapid City,* 2013 S.D. 13, 827 N.W.2d 55.

*Searle v. City of Lead,* 10 S.D. 312, 73 N.W. 101 (1897).

*Hurley v. State,* 82 S.D. 156, 143 N.W.2d 722 (1966).

**III. Did the trial court err in dismissing the State's cross-claim against the City of Sioux Falls?**

Trial Judge Riepel concluded: The State did not prove that the City committed any action or affirmative act that contributed to the Plaintiff's damages. *Conclusion of Law 8.* The State has no legal or equitable right to indemnity from the city. *Conclusion of Law 9.* The State has no legal or equitable right to contribution from the city. *Conclusion of Law 10.*

*Hurley v. State,* 82 S.D. 156, 143 N.W.2d 722 (1966).

*Wolff v. Sec. of South Dakota Game, Fish and Parks,* 1996 S.D. 23, 544 N.W.2d 531.

*Burmeister v. Youngstrom*, 139 N.W.2d 226, 230 (S.D. 1965)

**IV. Did the trial court err in denying the State's proposed judgement transferring the State an interest in Plaintiff's real estate.**

Trial Judge Riepel did not Order a drainage easement over Landowners property be transferred to the State.

*Rupert v. City of Rapid City,* 2013 S.D. 13, 827 N.W.2d 55.

*SDCL § 31-19-3*

*SDCL §21-35-1*

## STATEMENT OF THE CASE

The Landowners filed a complaint against the City of Sioux Falls and the State of South Dakota. The case was originally assigned to Circuit Court Judge Lawrence Long. The complaint alleged inverse condemnation, negligence and trespass. During the pendency of the case, *Rupert v. City of Rapid City*, 2013 S.D. 13, 827 N.W.2d 55 was decided. The case was re-assigned to Circuit Court Judge Patricia Riepel due to judicial rotation in the Second Circuit. The parties and the court agreed upon the interpretation of the case that the Supreme Court's ruling eliminated recovery by negligence or trespass. The Landowners moved to dismiss the tort and trespass allegations which was granted.

The case was bifurcated for trial. Whether there was a constitutional damaging was tried by the court without a jury, February 18-20, 2014. The court found liability. A jury heard the damage portion of the trial December 15-17, 2014. The Plaintiffs did not allege that a taking of property occurred.

Prior to the court trial on liability, the landowners settled with the City of Sioux Falls.

The State, after being notified of the settlement, moved to amend its pleadings to cross-claim against the City as a joint tortfeasor. The Landowners opposed the use of the Joint Tortfeasors Act in an action that alleged no tort because all tort claims had been dismissed. The Court permitted the State to amend and present evidence against the City. The City did not appear at the trial and landowners defended against the State's claims.

The court trial granted the motion to dismiss the City for failure of the State to prove any liability of the City. The Trial Court found the State 100% liable. Once the Trial Court found no liability of the City, the trial on damages concerned only the State.

A separate jury trial was held. The jury returned a separate verdict for each Plaintiff.

## STATEMENT OF FACTS

### I. Introduction

The Trial Court entered 72 Findings of Fact. The State has not met the requirements of SDCL § 15-26A-60(5) by failing to identify any finding of fact by number or the particulars in which the evidence is claimed to be insufficient. The Court and Landowners are left to guess the specific finding challenged. A number of findings, all unnumbered, are indirectly attacked in the text of the State's brief.

Simply stated, the trial court found: 1) that State Highway 11 blocked the natural drainage of Spring Creek Tributary, 2) the State knew of the blockage when Highway 11 was under repair in 2009-2010, 3) the State's engineering predicted flooding would occur after an 8-year rain event, 4) the State re-built the road knowing a 12.5% chance of

flooding existed for the landowners each year in the future, 5) the State completed the project with undersized culverts in 2010, and 6) the 8-year event occurred the same year in 2010 and landowners were damaged.

## II. Ultimate facts found by the trial court

State Highway 11 runs north and south and connects the east side of Sioux Falls to Canton, SD. (Appx. 1, point A). Landowners' real estate lies along the west side of Highway 11 and north of 85th Street. (Appx. 1, point B). The City of Sioux Falls is located to the north and west. Spring Creek Tributary is a drainageway that runs primarily from west to east (Appx. 1 point C) and crosses Highway 11 to the north of Landowners property. (Appx. 1, point D). Two 48-inch culverts were placed in the Highway 11 roadbed in 1949 to facilitate the drainage of the Spring Creek Tributary under the highway. (Appx. 1, point E).

Landowners' real estate all lies in a sub-basin within the Spring Creek Tributary Basin. This sub-basin is separated from the greater Spring Creek Tributary Basin by the natural lay of the land and a ditch block (or driveway) that is located directly south of the two 48-inch culverts. (Appx. 1, point F). Surface water within the sub-basin drains through a single 24-inch culvert. (Appx. 1, point G). The single 24-inch culvert was not designed to handle surface waters entering the sub-basin from outside sources. (FOF 25).

In 2009 and 2010, South Dakota Department of Transportation planned a project that would resurface 2.1 miles of Highway 11 located in front of Landowner's properties. (TR1 73: 7-11). As a part of that project, engineers for the State were directed to study the twin 48" culverts that carried water from Spring Creek Tributary under Highway 11. Area residents had previously complained the culverts were inadequate to handle the

amount of water which was passing through Spring Creek Tributary. (FOF 27, TR1 73:1-3, TE 23).

State engineers completed a study of the twin 48" culverts in the fall of 2009. The engineers reported their findings in the 2009 Hydraulic Data Sheet. (FOF 28, TR1 73:1-3). The Hydraulic Data Sheet reported the state engineer's conclusion that when water would reach the culverts at a flow of 275 cubic feet per second or greater, water would back up behind the twin 48" culverts. The backup would spill over the ditch block (driveway) to the south. (FOF 28, TR2 115:15-16). In the analysis, engineers determined that 275 cubic feet per second (cfs) would be reached during an 8-year rain event. (Appx. 3,TR2 357-15). An 8-year event statistically means that the event will occur once every eight years. The State concluded in its Hydraulic Data Sheet that statistically there was a 12.5% chance that in any given year, water would back up behind the twin culverts to such a degree that it would pour over the ditchblock to the south.

Appendix Tab 2 shows State's Hydraulic Data Sheet, Exhibit 16, containing the results from the State's analysis of the twin 48" culverts completed December 22, 2009. (TE 16). As depicted in the chart on page 2, Q100 represents the amount of water in cfs that reaches the culverts during the 100 year rain event. (TR 1 86:20-25, 87:1-5). The 100 year rain event is also described as a 1% chance any rain event will amount to this degree of flow at the culvert site. During a 100 year rain event, water at the culverts would be flowing at 803 cfs. (TR1 86:3-4). The hydraulic standard is to keep the 100-year flood elevation beneath the top of the highway. (FOF 58).

Also depicted on the chart is a column for Qot. This represents the overtopping discharge or the amount of flow at the culverts that would cause water to overwhelm the

culverts to such a degree that it would overtop the driveway to the south. This amount is 275 cfs. According to the State's calculation as shown on the lower chart, 275 cfs will be reached during an 8 year event. Put another way, the State predicted that there was a 12.5% chance that such a flow would be reached during any given rain event. (TR1 87:18-25).

The State used the most up-to-date data available, the 2008 Federal Emergency Management Agency Report, FEMA Flood Plain Map, and the accompanying data to complete its analysis of the capacity of the twin 48" culverts. (FOF 66). All drainage sources entering the Spring Creek Tributary, including any increased runoff from the City of Sioux Falls, was included in the data available to the State at the time of its analysis. (FOF 64). The State predicted that once the water flowed over the first ditch block to the south, it would rush into the small sub-basin that contained Landowners' properties. (TR2 32:6-13). The sub-basin could only drain through a single 24" culvert that was sized to handle runoffs of approximately 40 cfs. (FOF 48, 53).

In the spring of 2010, with its Hydraulic Data Sheet in hand, the State removed the 1949 culverts, made some minor repairs, and reset them beneath the highway a few inches lower than their original position but in the same general location. (FOF 33). The State completed the resurfacing project as planned. At this point, the State knew or should have known that an eight year event or above would cause flooding to Landowners property. (FOF 32).

Just a few months later, in the early morning hours of July 30, 2010, four families were awaken to the sound of splashing and banging in their basements. The cause of the commotion was their possessions being lifted and thrusted about by thousands of gallons

of water and sewage. Another family, on vacation, would receive a phone call that they needed to hurry home, something terrible had happened. Five homes had been devastated by flood waters. The five properties were owned by Landowners, Mark and Marilynn Long, Tim and Jane Griffith, Tim and Sara Doyle, Mike and Karen Taylor, and Arnie and Shirley Van Voorst.

The flood waters caused damage to the homes and personal property inside. There were economically feasible alternatives for the State to utilize that would have allowed the natural drainage to flow through the culverts without spilling into the closed basin; however, these alternatives would have increased drainage to downstream landowners. (FOF 54, 55, 56, 57, and 59, TR2 37:1-24, Appx. 3). The alternatives also may have compromised the hydraulic standard of keeping the 100-year rain event beneath the top of the highway. Rather than further exploring these alternatives, the State made the decision to allow water to pool behind the culverts in an amount that any event over an 8-year rain event would direct water into the closed basin. (FOF 59 and 60). In doing so, the State created a condition that peculiarly caused flooding in the sub-basin containing Landowners real estate. (FOF 51).

Almost three inches of rain fell in the 48 hours prior to the flooding, 1.9 of which fell in a two-hour period ending at 3:00 A.M. on the morning of July 30. (FOF 39, TR1 44:24-25, 45:20-24, 48:3-5, 49:23-25). The water that inundated Landowners homes was runoff which ranged in intensity from a five-year event to a ten-year event over the course of the 48-hour period. *Id.* These probability determinations were made using official National Weather Service rainfall data as applied to U.S. Weather Bureau

Technical Paper No. 40: "Rainfall Frequency Atlas of the United States" and National Weather Service Technical Memorandum Hydrology – 35. (FOF 42).

Mark Mainelli testified that the amount of rainfall was less important than the resulting cubic feet per second flow rates created by the rainfall at the critical points of actual drainage. (FOF 43, 44). This is because anything over an 8-year event would cause water to pour into the closed basin and would flood Landowners.

In its natural state, water would have drained from Landowners' real estate to the east; however, the construction of the State's highway on a berm blocked the area's natural drainage. (FOF 46, TR2 22:4-7). The trial court found that the Highway 11 roadbed and the inadequate drainage obstructed the natural drainage of the Spring Creek Tributary watershed and peculiarly damaged Landowners' real estate within the sub-basin. The trial court found that the State of South Dakota's engineer admitted the cause of the flood was water held back by the State's improvements known as Highway 11. (FOF 62).

## REPLY ARGUMENT

### I. The Circuit Court correctly denied the State's motion for summary judgment based on established South Dakota law that the State can never be immune from the Constitution's requirements.

The State's pretrial Motion for Summary Judgment and Motion to Dismiss were denied. Circuit Court Judge Larry Long applied the law to the relatively uncontested facts and ruled that the State was not immune from the claims brought by landowners. The State has appealed to this Court for a de novo review of that ruling without mentioning

the arguments presented at the hearing in 2011 or even citing to Judge Long's memorandum decision.

The State argues that Landowners claims "sounded in tort" and "clearly implicated the engineering and design of highway 11." Appellants Brief, p. 8. However, the State never acknowledges that South Dakota has for over 115 years recognized constitutional damaging cases. *Searle v. City of Lead,* 10 S.D. 312, 73 N.W. 101 (1897). Inverse condemnation was the Third Cause of Action in Landowner's original Joint Complaint filed October 26, 2010. Paragraph 31 of the complaint alleged "Under the Constitution of the State of South Dakota Article VI, 13, the City of Sioux Falls and the State of South Dakota have damaged the property of the Plaintiffs and have not paid just compensation." (SR 1). After the Summary Judgment decision the case was reassigned to Judge Patricia Riepel.

The State is using its appeal as a second attempt at presenting its evidence, but deference must be given to the Judge Riepel who fairly and impartially presided over both the liability and jury trials in this case and who judged the credibility of the witnesses who testified. A complete review of the record supports the findings of the trial court.

**a. Landowner's were successful in their inverse condemnation claim.**

The State's attempt to frame this as a tort case is absurd. Causes of action for trespass, nuisance, and inverse condemnation were pleaded in the initial Complaint filed by landowners. The parties and the trial court agreed following the *Rupert* decision that Landowners could not recover under tort theories and the case proceeded on

constitutional grounds. Plaintiffs dismissed all tort and trespass claims. The case was then litigated and resolved exclusively as an inverse condemnation action.

The State argues, as it did in 2011, that "Sovereign immunity is the right of public entities to be free from liability for tort claims unless waived by legislative enactment." *Truman v. Griese,* 2009 S.D. 8, 762 N.W.2d 75, 78. This principle is simply inapplicable to the circumstances of this case. The settled law as stated in *Rupert,* is "an individual's right to bring an inverse condemnation action stems from Article VI, § 13 of the South Dakota Constitution because Article VI § 13 essentially abrogates sovereign immunity." *Rupert* at 71.

The State cannot be immune from the Constitution. "The legislature is not authorized to restrict the language or take from the citizen the protection the constitution has thrown around him and his property." *Searle* at 105, *Hurley v. State,* 82 S.D. 156, 143 N.W.2d 722, 729 (1966). "Neither consent to sue nor the creation of a remedy by legislative enactment is necessary to obtain relief for a violation of the constitutional provision." *Id.* Article VI, § 13 guarantees the landowner just compensation from the State when state action causes damage to real estate.

Judge Long's memorandum decision dated December 14, 2014 analyzed the State's sovereign immunity claim and explained that sovereign immunity has its limits. The ruling stated:

> In short, the State argues that, irrespective of the nature of Plaintiff's claims, sovereign immunity precludes recovery against the State because the claims arose out of "construction or maintenance of public roadways." I disagree… Claims alleging violation of the State or U.S. Constitutions are not subject to a state sovereign immunity defense. For Example, In SDDS, Inc. v. State, 2002 S.D. 90, 650 N.W.2d 1, the South Dakota Supreme Court

> rejected the state's sovereign immunity defense to a "takings or inverse condemnation action." *Id.* (Appx. 1).

Other South Dakota cases support Judge Long's conclusion that sovereign immunity does not apply to constitutional violations. *Searle v. City of Lead, supra* established that our Constitutional damaging provision is self-executing and requires no abrogation of sovereign immunity for a landowner to recover. The *Searle* Court described the "damaging" provision as "unquestionably a wise and just one" and "well calculated to protect property owners from injustice and wrong on the part of municipal or other corporations or individuals invested with the privilege of taking private property for public use." *Searle v. City of Lead*, 73 N.W. 101 (S.D. 1897) reaffirmed in *Krier v. Dell Rapids Tp.*, 709 N.W.2d 841 (S.D. 2006) and *Rupert v. City of Rapid City*, 827 N.W.2d 55 (S.D. 2013). The damaging clause "should be given a liberal construction by the courts, in order to make it effectual in the protection of the rights of the citizen." *Id.*

In 2013, the *Rupert* Court explained why alleging tort violations are unnecessary in constitutional damaging cases.

> "Our Constitution allows a property owner to file suit to secure "just compensation" for a taking or damaging of his or her property if the public entity does not institute formal proceedings to take or damage the property. No such similar abrogation is found for the torts of negligence and trespass. Because the landowner is already guaranteed "just compensation" from the governmental entity under Article VI, § 13, when there has been a taking or damaging of property by a governmental entity, he or she is entitled to no more. *Rupert,* 827 N.W.2d 55, 71.

Landowners litigated the case as an inverse condemnation damages action. Judge Long must be affirmed on this issue.

**b. The State's argument for sovereign immunity does not cite a single case in which the allegations arise out of damage to real property.**

The State cites five cases in the opening section of its brief to support its argument that it should be immune from Landowner's claims. *Truman v. Griese*, 2009 S.D. 8, 762 N.W.2d 75, and *King v. Landguth,* 2007 S.D. 2, 726 N.W.2d 603 were tort cases involving deadly car accidents. *Wilson v. Hogan*, 473 N.W.2d 492 (S.D. 1991), *High Grade Oil Co. v. Commer,* 295 N.W.2d 736 (S.D. 1980), and *Hansen v. S.D. Dep't of Transp.,* 584 N.W.2d 881 (S.D. 1990) were tort cases involving car accidents that caused serious bodily injuries. These cases lend no real guidance on the review of Judge Long's denial of the State's summary judgment motion in 2011. Judge Long properly found the State cannot avoid liability for damage to real estate simply because it did not formally use its eminent domain power.

## II. The trial court correctly found that the State had caused damage to Landowner's property in violation of the South Dakota Constitution.

The State has requested a de novo standard of review on certain unnumbered legal conclusions. The State also, throughout the bulk of Section II of its brief, indirectly attacks unnumbered factual findings of the circuit court. Factual findings are to be reviewed under a clearly erroneous standard. *In re: Hobelsberger's Estate,* 85 S.D. 282, 181 N.W.2d 455. Judge Patricia Riepel entered 72 Findings of Fact after the court trial in this matter. (Appx. 3).

Findings of fact shall not be set aside unless clearly erroneous, and due regard shall be given to the opportunity of the trial court to judge of the credibility of the witnesses. *In re: Hobelsberger's Estate,* 85 S.D. 282, at 289. The question for the

appellate court is not whether it would have made the same findings the trial court did, but whether on the entire evidence it is left with a definite and firm conviction that a mistake has been committed. *Id.*

**a. Damage to real estate caused by a governmental entity has been recognized as a Constitutional cause of action in South Dakota for over 115 years.**

Based on the evidence presented and the trial court's findings of fact, no reasonable mind could conceive that Landowners failed to prove the State caused the damage to Landowners' real estate by obstructing the natural drainage.

The South Dakota Constitution provides greater protection for its citizens than the United States Constitution because our Constitution requires that the government compensate a property owner not only when a taking has occurred, but also when private property has been damaged. *Krier v. Dell Rapids Twp.,* 2006 S.D. 10*, Rupert v. City of Rapid City,* 2013 S.D. 13.

Under the taking and damaging clause of our constitution…it is a basic rule of this jurisdiction governing compensation for consequential damages that where no part of an owners land is taken, but because of the taking and use other the other property so located as to cause damage to an owners land, such damage is compensable if the consequential injury is peculiar to the owner's land and not of a kind suffered by the public as a whole. *Krier v. Dell Rapids Township,* 709 N.W.2d 841, 2006 S.D. 10.

The Courts interpretation in *Searle* was applied in 2013 in *Rupert*. "In our seminal case of *Searle v. City of Lead,* we held that an action by a landowner for inverse condemnation is maintainable where a governmental entity causes an invasion of the land

by "water, earth, sand, or other matter or artificial structures placed upon it, so as effectually to destroy or impair its usefulness." *Rupert v. City of Rapid City,* (S.D. 2013).

As was the case in Rupert, there was no evidence submitted at trial to refute that Landowner's properties were peculiarly inundated with water. The evidence presented clearly established that these homes were situated in such a way that they would be under water following an 8-year rain event or greater.

**b. Judge Riepel correctly ruled that the State caused water to invade Landowners real estate.**

The overwhelming trial evidence, the testimony of engineer Mark Mainelli, and the admissions by State engineer Kevin Goeden proved that the State's actions caused the water to invade landowners' real estate. The State's brief attempts to create an additional element for inverse condemnation claims. The State argues landowners must prove that the State was the substantial or immediate cause of the flooding. This position is unsupported by South Dakota takings law and is not found in this Court's most recent recitation of inverse condemnation elements in *Rupert v. City of Rapid City,* 2013 S.D. 13, 827 N.W.2d 55.

The *Rupert* Court affirmed that Landowner's burden was to prove that the government's actions were the legal cause of the invasion and that the invasion led to damage. The trial court applied this standard in its analysis of this case. Trial Judge Riepel found, "the State created a condition that peculiarly caused flooding in the sub-basin" and concluded the legal cause of the flooding was the State's Highway 11 roadbed and its insufficient drainage scheme. (FOF 51, COL 5 and 7). Landowners urge the Court affirm the trial court's use of the *Searle* and *Rupert* causation precedents.

### i. Absent the State improvement, water would have flown freely from the properties.

At trial, Landowners introduced the original field notes from when the area at issue was first surveyed in 1884. (TE 1, TT Vol. I 101:9-19). The surveyor at that time described the natural lay of the land as gentle rolling prairie. *Id.* In 1949, the State built a berm across that gentle rolling prairie to support Highway 11. (FOF 3). Landowners' expert, civil engineer Mark Mainelli, PE was found credible by the trial court on drainage matters. He completed a hypothetical study of whether Landowners' properties would have flooded absent the blockage from Highway 11. (FOF 43, TR2 18: 8-15).

Mainelli created a HEC RAS model of both the drainage as it existed on July 29-30, 2010 and the natural drainage as it would have flowed without the Highway 11 blockage. (Appx. 4, FOF 43, TR2 18:8-15, TE 51 and 52). A HEC RAS model is software created by the U.S. Army Corps of Engineers and is commonly used in hydraulic studies. (FOF 43, TR2 18:2-3). He and his team first shot the elevations of the bed and banks of the Spring Creek Tributary and the Highway 11 roadbed. (TR 2 17:21-25, 17:1-4). The team then plugged in the data from the 2008 FEMA study of Lincoln County which concluded that the flow at the culvert location during the 100-year event would have been 803 cfs. (TR2 18:8-19). When the elevation of the obstruction (Highway 11 roadbed) was removed from the model, the water even at 803 cfs stayed in the banks of the tributary. Mr. Mainelli concluded:

> If Highway 11 wasn't there, that water would stay in that tributary and it would not achieve the elevation up to the 800 cfs in FEMA and go over the block just south of the 48-inch. So in the natural, unobstructed condition, the water would not go down the west ditch of Highway 11. *Mark Mainelli Trial Testimony.* (TR2 18:14-19).

Mr. Mainelli's HEC RAS modeling with the highway included painted a clear picture of what had happened on the morning of the flood. (TE 51A). Mainelli prepared what is known as a water surface profile for several different flow rates for 1.) the unobstructed drainage and 2.) the drainage as it existed on July 29th and 30th. (TR2 19:21-22). The difference between two modeled scenarios is ponding. (TR2 19:19). The profiles illustrate that without Highway 11, ponding does not occur because the water is allowed to leave freely. (TR2 19:20-25, 20:8-20, TE 51A). Conversely, the surface water profiles for the obstructed version, which includes Highway 11, illustrate that as flow rates increase, water overwhelms the twin 48's and ponding occurs. (TE 51A, TR2 19:18-20). Mainelli's exhibit showed ponding until the overtopping at 250 cfs, a slightly lesser flow than the State's estimated 275 cfs, but within reason and possibly attributed to construction differences. (TR2 23:4-12).

Mr. Mainelli opined that the twin 48s (Appx. 1, point E) and the single 24 (Appx. 1, point G) are stand-alone drainage systems, "but in this case they're forced to work together because of the overflow." (TR2 28:19-21). He explained that the sub-basin which held Landowners' property was within the greater Spring Creek Tributary drainage basin. (TR2 25:5-10). The only culvert positioned to drain water from the sub-basin was a single 24" culvert that also drained water beneath Highway 11. (TR2 25:14-21). The 24" culvert was designed to drain the sub-basin as its own separate system, but was not sized to accommodate water entering that system from an unnatural source such as the overtopping from the backed-up twin 48's. (FOF 25).

In response to Attorney Meierhenry's question on direct examination, Mr. Mainelli opined that State engineers could have seen this coming:

> Q: Would you anticipate that the engineers for the state, had they taken a look at this, could have reasonably understood that this was a closed basin drained only by the 24-incher?
>
> A:Yes. By the contours and the drainage area, they would know that drains out that 24-inch.

Mr. Mainelli also prepared Trial Exhibit 50 which is a cutaway view of the west ditch known to engineers as a strip map. (TR2 28:21-24). On one end of the strip map is the location and elevation of the twin 48's, on the other end is the location and elevation of the single 24, and in between are the locations and elevations of all ditch blocks as well as the culverts that run underneath the ditch blocks. The strip map routes the water from where it enters the sub-basin from the overflow down to the single 24 where it can exit. (TR2 29:3-17).

The strip map, coupled with Mr. Mainelli's explanation, paints a clear picture of how the water pouring over the first ditch block south of the twin 48's eventually made its way to the single 24" culvert, overwhelmed it, and caused water to invade landowner's real estate. (Appx. 4, TE 50, TR2 Pgs. 30-33). Once water poured over the first ditch block to the south, it continued to rush southward in the west ditch. It cascaded over each subsequent ditch block as each was slightly lower than the next. It also rushed through the culvers underlying the ditch blocks. *Id.* By the time water reached the 24" culvert, more water was gushing through the culverts under the ditch blocks, which had a capacity of 50-100 cfs, than was capable of exiting through the single 24" culvert with only a 40 cfs capacity. (TR2 33:1-2). Additionally, massive amounts of water pouring over the top of the ditch blocks.

The single 24 was not equipped to handle the excess runoff intentionally pushed into the basin by the State's construction. (FOF 25). Once water began pouring into the

closed basin, it was coming too fast and overwhelmed the 24" culvert. (TT Vol. II 26:4-5). Mr. Mainelli explained that when the runoff from within the basin plus the water pouring in becomes too much for the 24" culvert water will pool within the basin until it gets high enough to spill over the highway. (TR2 28:10-11). By that point Landowners' property has been flooded. *Id.*

Mr. Mainelli then took the State's Hydraulic Data Sheet (TE 16) and compared the State's finding with his independent conclusions. What he found were that the findings were "a little different" but largely reflected the same results. (TR2 23:4-12). When asked by Mr. Meierhenry about his findings as compared with the State's estimates, Mainelli opined that the State has correctly predicted what would happen.

> Q: From your work and now going to the state's hydraulic data sheet, what did you find insofar as the state's prediction at approximately 275 cubic feet per second, did you find and support their finding that the first block would overtop at approximately 275 cubic feet per second?
>
> A: Correct.

At the conclusion of direct examination, Mr. Meierhenry asked Mr. Mainelli his opinion of what caused the flooding.

> Q: Did you form, at the conclusion of all this work, an opinion of whether Highway 11 was the ultimate cause of the flooding of this real estate?
>
> A: After reviewing the studies, the hydraulic capacities, the video evidence from the news casts, the photographs, the depositions from other people, I would say there's no question that the undersized culverts are the culprit of the flooding that occurred…(TR2 37:25, 38:1-9).

**ii. State engineer Kevin Goeden explained the State's analysis of the twin 48s and admitted that the water backed up behind Highway 11 caused the damage.**

Mr. Mainelli's findings coincided with what the State had predicted would happen at an 8-year or greater event. The trial court relied, in part, on the uniform opinion to find "the State knew or should have known that an eight year event and above would cause flooding to Plaintiff's property as a result of the Highway 11 blockage of the natural drainage." (FOF 32). The State's predictions just months before the flood was also relevant to the trial court's finding.

Kevin Goeden is the Chief Bridge Engineer for the South Dakota Department of Transportation, testified at trial to explain the State's examination of Spring Creek Tributary drainage under Highway 11. (TR1 73:1-3). Mr. Goeden explained the overtopping of the ditch block that directed water to area where the flooding took place and confirmed that "the water on the west side of Highway 11 caused flooding to the property" (TR1 99:8-9).

Mr. Goeden on direct-examination by Mr. Meierhenry stated that Highway 11 was built across the natural drainage, that Highway 11 held back water, and that the water flooded Landowner's real estate. (Appx. 5, TR1 Pgs. 80-81).

> Q: Now let's talk right away. It seems pretty self-evident, but this Highway 11 is built across the natural drainage, is it not, of Spring Creek Tributary?
>
> A: Yes. And as well as many other tributaries and streams. Yes.
>
> Q: Correct. And so the drainage from the Spring Creek Tributary basin, basin 7, drains down this marked waterway—…
>
> A: Yes.
>
> Q: And in doing so, since Highway 11 impedes all drainage, natural drainage, you have to put openings somehow through the highway. Correct?
>
> A: That's the reason for culverts and bridges, yes.
>
> Q: So there's no doubt for this case that Highway 11 is built perpendicular

to the natural drainage of the basin 7 or the Spring Creek Tributary basin?

A: There's a little bit of a skew there, but it does go across the basin. Yes.

Q: I forgot I'm asking an engineer. I can't get the angle. But it impedes all drainage on its way to Spring Creek, which is where it all ends up?

A: I don't know if I would classify it as impede, but it does cross that drainage, and that's the reason for the culverts to pass underneath.

Q: Well, and you have researched this issue to know that the highway blocked the drainage and flooded the property. Correct? I mean that was the cause of the flooding is the blockage by Highway 11.

A: Highway 11 held back some water, yes.

Q: And holding back the water flooded the houses?

A: I guess you could say that.

Mr. Goeden described Exhibit 16, Hydraulic Summary, as "basically an overall summary of an analysis that's performed at any given site that identifies various different things such as the drainage area and the flows and so forth and discharges, elevations, things of that nature." (TR1 74:12-16). He explained that as a part of the resurfacing project, attention was brought to the twin 48's and an analysis was prompted. Going through the data sheet, he confirmed the State's finding that:

1. 803 cfs is the expected flow at a 100-year event. (TR1 86:25, 87:1).
2. Water would overtop the ditch block to the south of the culverts at 275 cfs. (TR1 91:16-19).
3. 275 cfs would be reached at an 8-year event. (TR1 91:9-11).
4. After 275 cfs was reached, water would overtop the ditch block and flow to the south. (TR1 90:8-9).

5. At 803 cfs or the 100-year event, water would overtop Highway 11 1000 feet to the south of the twin 48" culverts. (TR1 97:18-23).

**iii. The State was also aware the single 24" culvert was undersized.**

In 2003, the State in response to requests from area residents, took a look at the 24" culvert and found it to be inadequate. Craig Smith, DOT Region Engineer who represented the State at both trials in this case, sent an email to another DOT Engineer Craig Phillips. The message sent December 2, 2003 referred to the single 24" culvert and read in relevant part:

> The concern has been with the existing culvert under SD11 not being large enough and flooding the houses on the west side of SD11. The culvert is located south of the major drainage just north of the section line road, I believe it is a 24" culvert…Could you take a look at this area and respond. (TE 23).

Mr. Phillips responded on December 3:

> If there is a question on culvert capacity in this case, is it our responsibility to analyze this, or should the developer prepare an analysis for our review. That analysis should show that the original design was not adequate, not to today's developed conditions where developers are increasing flows to us. The other issue is if we are found to be too small, what are our responsibilities to downstream property owners if we install larger culverts…(TE 23).

Craig Smith replied on December 9:

> Do we typically re-evaluate drainage issues when problems occur? I don't have a problem not doing anything, but I believe we will continue to get questions. (TE 23).

Mr. Phillips responded that same day:

> How much should we do on this? If we do evaluate the area, to what condition, the original when the road was built or to today's conditions? If today's conditions with development and other changes since the original construction, we may find the need to do a number of upgrades.

Several follow-up emails circulated within the DOT discussing an investigation into the 1949 plans. The emails addressed the inadequacy of the culverts in present day

conditions. (TE 23). Eventually, the e-mail chain ended with no plan to remedy the clearly inadequate drainage situation at the 24" culvert. These emails further supported Judge Riepel's finding that state engineers knew or should have known that allowing runoff to pour into the sub-basin would lead to flooding. (FOF 32).

**iv. Causation was clearly proven.**

"There is no magic formula that enables a court to judge, in every case, whether a given government interference with property is a taking. Instead, the viability of a takings claim is dependent on situation specific factual inquiries." *Rupert v. City of Rapid City,* 2013 S.D. 13, citing *Ark. Game and Fish Comm'n v. United States,* 133 S.Ct. 511, 518, 184 L.Ed.2d 417 (2012).

The evidence was clearly presented by Mark Mainelli and State Engineer Kevin Goeden that State's overall drainage plan in this area was to allow water to pool behind the 48-inch culverts and direct any flow over a 275 cfs over the ditch block to the south. Based on that evidence, the trial court correctly found that the construction of Highway 11 and the inadequate drainage beneath it caused the water to invade Landowner's real estate. Based on these findings the court properly entered the following Conclusions of Law:

> Conclusion of Law 5: The legal cause of the flooding and damaging of Plaintiffs' real and personal property was the blockage by Highway 11 roadbed owned by the State of South Dakota.
>
> Conclusion of Law 6: The State of South Dakota built a roadbed across the drainage area known as the North Spring Creek Tributary with insufficient passageway for drainage of the natural water courses.
>
> Conclusion of Law 7: The State's action as described in Conclusion of Law 6 obstructed the natural flow of the spring creek tributary. (See Appx. 3).

Evidence presented from both sides supported the trial court's conclusions.

**v. Rainfall amounts are less important than the cubic feet per second flow rates present at the critical point of actual drainage.**

The State argues that various factors contributed to the flooding and thus were the cause of the damage. This position ignores two key pieces of information. First, but for the initial construction of Highway 11, water would have freely flowed across the "gentle rolling prairie" away from the real estate and would not have pooled and caused damage. Second, the twin 48's were sized to send all flows over 275 cfs into the sub-basin, which had inadequate drainage.

The State's disagreement with the court's findings concerning rainfall has very little effect on the trial court's conclusion that the State was the cause of the flooding because, as Mr. Mainelli explained, once an 8-year event was reached the properties were already flooding. (TR2 28:10-12). This is why the trial court found rain totals are less important than the runoff present at the critical point of drainage, which clearly exceeded 275 cfs. (FOF 44).

**Judge Riepel found Landowners' evidence to be more credible than the State's evidence.**

Judge Riepel found the rainfall amounts opined by Landowners' expert meteorologist, Arthur Umland. Mr. Umland is a retired meteorologist who worked for the National Weather Service in Sioux Falls for close to 30 years, a portion of which as Lead Forecaster. He testified that the amounts he used were taken from National Weather Service weather station at the Sioux Falls Airport. (TR1 38:10-16). This station is regulated by the federal government and its measurements are published in a report from

the National Climatic Data Center in Asheville, North Carolina. (TE 24, TR1 39:17-25). The government report includes both daily and hourly precipitation measurements. (TE 24 p. 36). Mr. Umland used the hourly totals to calculate intensity.

Mr. Umland also classified the rain events to show probability. Applying the official National Weather Service Data to U.S. Weather Bureau Technical Paper No. 40: "Rainfall Frequency Atlas of the United States" and National Weather Service Technical Memorandum Hydrology – 35, Mr. Umland concluded that the intensities over the 48 hour period hovered between a two-year event and a ten-year event depending on what duration you look at. (FOF 39 and 42)

The trial court found Mr. Umland credible and adopted his opinions as the facts governing rainfall in this case. Mr. Umland used the closest official rainfall amounts recorded by the National Weather Service. (FOF 39). Mr. Umland was the only witness who testified using official rainfall measurements. (FOF 38).

**vi. The State did not appeal the trial court's rainfall amount findings.**

Nowhere in its Notice of Appeal nor its Appellate Brief does the State allege the trial court's findings regarding rain fall amounts were clearly erroneous. Therefore, the rainfall amounts found by the trial court are the facts to be applied in this appeal and any right to a review of these findings is deemed waived *Kanaly v State of South Dakota, et al.,* 403 N.W.2d 33 (SD 1987), SDCL 15-26A-60(5).

The State appears to request a review of two of Judge Riepel's findings of fact, although not designated by the number of the Judge's findings. *Appellants Brief, p. 18 ¶3, p. 19 ¶1.* The first, that the trial court found the CoCoRaHS rainfall data introduced by the state to be "not scientifically reliable as it is not specific as to the component of

time." (FOF 40). The second, that the court found the State's expert, Dr. Dennis Todey's testimony "of little credibility as the witness failed to even include a map or data for Lincoln County – the location of the Plaintiff's properties." (FOF 41).

These findings are of little consequence to the Conclusions of Law in this case; nonetheless, these findings are sound and not clearly erroneous.

CoCoRaHS data is reported once daily, usually in the morning. (TR32:1-20) Rainfall measurements recorded daily are of little use in a case such as this because a component of time is necessary to calculate intensity. This is how statistical events (5-year, 10-year, 100-year, etc.) are calculated. Time and intensity are also necessary to compute flowage rates (275 cfs, 803 cfs, etc.). Landowner's made a Motion in Limine to exclude the evidence arguing the data was unreliable because it lacked a component of time (SR 208). The trial court denied the motion. Despite the trial court's eventual finding that the data was unreliable, the measurements were made part of the record.

The State is wrong to compare CoCoRaHS daily reporting with the National Weather Service Reporting used by Mr. Umland. Page 36 of the Climatological Data Report (Ex. 24) clearly shows rainfall measurements by hour. Hourly amounts are needed to use the U.S. Weather Bureau Technical Paper No. 40: "Rainfall Frequency Atlas of the United States" and National Weather Service Technical Memorandum Hydrology – 35. CoCoRaHS measurements are not reported hourly. For these reasons, the trial court was not clearly erroneous in finding CoCoRaHS unreliable in this scenario.

A complete review of the record shows that Judge Riepel was justified in finding Dr. Todey's testimony in this case had little credibility. Dr. Todey's opinions were based on CoCoRaHS data. Dr. Todey's testimony attempted to apply the intensity at the Sioux

Falls Airport to the unofficial 24-hour measurements taken in other locations. (TR3 24:16-20). The State's chief criticism of Mr. Umland was rainfall can vary by distance. If amounts can vary, certainly intensity can as well. The lack of time sequence of rainfall is fatal to proper scientific measurements.

Landowners moved pre-trial to exclude the evidence of Dr. Todey on the foundational ground that his opinions were based on CoCoRaHS data. (SR 210). The motion was denied and Dr. Todey was allowed to testify. Nevertheless, the State never asked Dr. Todey how much rain fell in Shindler or what rain event occurred. Therefore the testimony the State now argues was improperly disregarded was never actually made a part of the record. Dr. Todey never opined as to what rain event took place in Shindler on July 29 and 30, 2010. Dr. Todey did not include in his report or testimony a map of Lincoln County. (TR3 21:11-20). A view of the record in its entirety validates Judge Riepel's finding that the testimony offered by Dr. Todey in this case was of little credibility. The trial court was not clearly erroneous to do so.

The State has made no appeal concerning the findings of Dr. Harmon. Dr. Harmon did not testify at either trial. His deposition transcript was offered as an exhibit, objected to by Landowners for a lack of foundation, but ultimately admitted into the record. (TE C, TR2 pgs. 92-94). His deposition testimony contained opinions based on CoCoRaHS data which the court found to be unreliable when viewed within the circumstances of this case.

**ix. "Supervening cause" is not defined in South Dakota law.**

The State did not plead "supervening cause" as a defense. (SR 25). The State did not raise the term "supervening cause" as a substantive issue until this appeal. "Before

being permitted to raise an issue on appeal, parties must have presented the issue to the trial court and obtained a ruling. 'This Court will not decide issues the trial court has not had an opportunity to rule upon.'" *Klinker v. Beach*, 1996 S.D. 56, 547 N.W.2d 572, 576; *Hawkins v. Peterson*, 474 N.W.2d 90, 95 (S.D. 1991). The State preserved no issue on appeal because the trial court did not rule on the invented term.

The State argues the intensity of the flood was a "supervening cause." The State cites no case or statute in South Dakota that uses the phrase "supervening cause" in a damage context or gives a legal definition of such a theory.

Nevertheless, for all of the reasons pointed out above, the intensity of this flood would have had no effect on Landowners' real estate but for the State's obstruction. There is no evidence in the record that the intensity exceeded a 100-year event. Mr. Mainelli modeled the 100-year event without the roadbed obstruction and found the water would remain in the banks of the Spring Creek Tributary. (TR2 18:1-19).

Additionally, the facts concerning intensity have not been challenged by the State and are deemed waived. *Kanaly v. State of South Dakota, supra*. The facts governing this appeal, are the facts found by the trial court. The trial court found that the rains on July 29 and 30 fluctuated from a 2-year event to a 10-year event. (FOF 39).

**vii. Runoff from the City would not have entered the sub-basin but for the State's obstruction.**

The trial court's charge was to determine if the State or the City or both was the legal cause of the flooding. Mr. Mainelli testified that but for the State's obstruction of the natural drainageway with Highway 11 and the inadequate culverts passing underneath, the property would not have flooded. (TR2). He also testified in agreement

with Kevin Goeden and the State's Hydraulic Data Sheet, Exhibit 16, that a 275 cfs flow or greater would cause water to pour over the ditch block and invade Landowners' real estate.

The trial court was compelled by the fact that the State used the 2008 FEMA study to calculate the 275 cfs overtopping discharge. (FOF 36 and 37). The 2008 FEMA study is the community accepted data source. (FOF 36, TR1 81:13-16). That study derived its flows from all drainage sources within the Spring Creek Tributary Basin, including runoff from development in southern Sioux Falls. (FOF 37). The front page of the Hydraulic Data Sheet states "The design discharges used for this project were taken from the FEMA Flood Insurance Study Report dated April 2, 2008." (TE 16). State engineer Goeden explained "in the case where you have a FEMA-regulated site, Federal Emergency Management Agency, you may just use the drainage flows straight out of the flood insurance study that that was developed from." (TR1 79:23-25, 80:1-2). Goeden testified in direct examination from Mr. Meierhenry that the FEMA data included additional runoff from the City:

> Q: ---correct me if I'm asking you this question wrong. What that means, that 803 cubic feet per second, that was what the hydraulic datasheet presumed the flow was at the hundred-year event at these two twin culverts?
>
> A: that's what we would look at as far as, yes, the expected flow for a 100-year event.
>
> Q: And that would be all the flow, whether from farmland or the City of Sioux Falls, any type of flow from that basin in 2008, the best number known was 803 cubic feet per second?
>
> A: for the 100-year event, yes.

The 1990 Stockwell Report that discussed urbanization was also a public document available to the State in 2009 when it analyzed the twin 48s' capacity. Yet, the State appears to argue it was caught off guard by runoff from the City. The FEMA study was completed in 2008. In 2009, the State calculated the overtopping of the ditch block at 275 cfs based on FEMA. In 2010, the State's predicted result occurred. The State argues that it cannot be responsible for inadequate drainage structures because it was not the source of the water. Landowners urge the Court to affirm the trial court's conclusion that the State's obstruction, not the City, was the cause of the damage.

**viii. The State's attempt to impose an intentional government action requirement is improper in this case.**

In Section F of its Brief, the State argues that an intentional government action is required to satisfy the causation element. The State uses *Smith v. Charles Mix County,* 182 N.W.2d 223 (S.D. 1970) to argue that it needed to purposefully flood the properties in order for Landowner to recover. In *Smith,* the County intentionally diverted water onto private property to save the highway grade. *Id.* at 224.

The State argues "unlike the county in *Smith,* there was no evidence in this case that the State intentionally diverted surface waters into unnatural watercourses or gathered water in unnatural quantities and then cast it upon lower lands." *Appellant's Brief, p. 38.* Mr. Mainelli testified that this is precisely what the State did. (Appx. 4, FOF 59). Judge Riepel agreed when she found based on the data, studies, and information available, the decision was made to pool water behind Highway 11 to delay the water's arrival to downstream locations. (FOF 60). Nonetheless, intent is not an element of an inverse condemnation claim.

In *Rupert,* Rapid City argued the Ruperts had failed to establish their inverse condemnation claim by not proving the dead trees were the result of a direct and substantial action or abuse by a governmental entity. Rapid City relied on *City of Brookings v. Mills,* 412 N.W.2d 497, 501 (S.D. 1987). This Court rejected that argument, stating the City took the requirement out of context. A direct or substantial action or abuse is required in de facto taking cases such as *Mills,* but no such requirement exists in inverse condemnation claims. The *Rupert* Court ruled that Rapid City's use of deicer was a direct and substantial action; however, proving it to be so was not an element of the Ruperts' claim.

Intent is akin to direct and substantial action. The causation standard upheld in *Rupert,* is legal cause. Landowner's burden was to prove that the State caused the damage to their real property. They clearly did so. They also convinced the trial court that the State's actions were intentional; however, they were not required to do so to recover under an inverse condemnation theory.

**ix. Judge Riepel correctly applied the test from *Rupert* to find Landowners' injury was peculiar.**

The State's brief equates Landowners' injuries to the injuries alleged in *Krier v. Dell Rapids Twnshp Sprvsrs,* 709 N.W.2d 841, 2006 S.D. 10. Landowners were required to show their injury was peculiar and not of a kind suffered by the public generally. Judge Riepel found they established this element. Finding of Fact 51 explains "The State created a condition that peculiarly caused flowing in the sub-basin drained by 24"

culvert."[1] The State has not challenged this finding as clearly erroneous. *Kanaly v. State, supra*.

No evidence was presented by the State that the invasion and injury claimed by Landowners was suffered by other area residents or the public as a whole. Attorney for the State, Gary Thimsen, asked each landowner in cross-examination whether they were personally aware of any other properties that were flooded in the Shindler area. Each witness testified they did not. (TR1 20:15-20, 33:4-9, 66:22-25, 67:1, 151:14-19). The State did not present any evidence to refute that these were peculiar injuries.

These five properties were devastated by a horrendous flood on July 30, 2010. The pictures and videos presented at both trials paint a picture of the horror Landowners and their families experienced that morning and the days and weeks to follow. The Long and Van Voorst families can be seen wading through water tainted with sewage desperately trying to save any personal items they could. (TE 35, 36, and 37 TR1 135:18-21). Most personal property that got wet was destroyed because even if it could be dried, they couldn't get rid of the smell. (TE 37). The five families were homeless. (TE 35, 36, and 37). The State of South Dakota compares these injuries to dust from a gravel road, which is the injury this Court held Mr. Krier failed to show peculiarly injured his property. *Krier v. Dell Rapids Tp.,* 2006 S.D. 10, 709 N.W.2d 841.

## III. The State was allowed to file and attempt to prove its cross-claim, but failed to do so.

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[1] FOF 51 was not proposed by either party. The trial court drafted the finding, an essential element of an inverse condemnation claim under *Rupert.*

Despite Landowners arguments this was a constitutional case and not a tort case, the trial court allowed the cross-claim against the City of Sioux Falls under the Joint-Tortfeasor Act. The trial court ruled that the State would be allowed to present evidence against the City and that it would make an apportionment of fault. Under common law and until 1945, no right of contribution existed for any claim. The Joint Tortfeasors Act was passed in 1945. As this Court pointed out in *Burmeister v. Youngstrom*, 139 N.W.2d 226, 230 (S.D. 1965) the act applies to "two or more persons jointly or severally liable in tort." *See SDCL § 15-8-11*. This action was not a tort action and the trial judge was in error to allow its use. However, the State's failure to prove any fault upon the City renders the error harmless. The trial court found the State failed to present any evidence establishing fault on the part of the City.

The State filed its cross-claim weeks before trial following Landowners' settlement with the City. The case had been litigated for over three years to this point without any discovery on the issue of comparative fault. Rather than request time to obtain an expert opinion on the City's liability, the State proceeded to trial. No evidence of the city's portion of fault was presented at trial. (FOF 47, 68). At the trial's conclusion, Landowner's made a motion to dismiss the State's cross-claim.

The trial court found "While the State generally alleges that urban development on the south side of Sioux Falls caused extra run-off and contributed to the flooding at issue in this case, the State failed to present sufficient evidence as to the specific effect of that development on the flooding that occurred in this case. The State failed to present any evidence as to the amount of increased water caused by the urbanization of the City of Sioux Falls. The Court finds the State's expert testimony on this issue unconvincing

and lacking in reliability." (FOF 68).[2] Based on that finding, Judge Riepel concluded "the State's cross-claim against the City is dismissed and the City is no longer a party to this action based on its settlement with the Plaintiffs." (COL 11).

Judge Reipel's dismissal of the cross-claim was proper based on the remedies of contribution and indemnity sought by the State. Indemnity was not a proper remedy based on the posture of the case. Contribution was not proper because 1) this wasn't a tort case, and 2) the State offered no evidence to support any share of fault to the City. For these reasons, Judge Riepel was correct to dismiss the State's cross-claim and the ruling should be affirmed by the Court.

## IV. The State does not have a drainage easement over Landowners real estate.

The State's request for a permanent drainage easement over Landowner's real estate is as bizarre as it is offensive. During five years of litigation, a drainage easement over the property was never pled, never argued, never described, never valued, never noticed, and never even mentioned.

The Landowners' pleadings never use the term "taking" or "taken". The State, prior to the settlement of the verdict forms, never claimed authority or jurisdiction to take Plaintiffs' property. Throughout over 115 years of jurisprudence since *Searle,* the State has never been authorized to effectuate the type of taking it is advocating in its brief.

The word "permanent" damage refers to the method of valuation, not the acquisition of a property interest. This reasoning is consistent across all spectrums of the law including the cases cited in the pattern instruction used by the trial court and this

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[2] FOF 68 was not proposed by either party. The trial court drafted the finding on its own fruition based on its judgment of the evidence presented.

Court in *Rupert v. City of Rapid City*, 827 N.W.2d 55 (S.D. 2013). Clearly South Dakota law provides the theory under which landowners can be compensated for damages caused by the State. Nowhere in state law does it require landowners to surrender a property interest to recover under this theory, even if the damages are deemed "permanent". See *Searle.*

The State's only method to obtain a property interest in landowners' property is to follow the Constitution and statutory procedures in SDCL Chapters 31-19 and 21-35. Without a declaration by the State Highway Commission that it is necessary to exercise the power of eminent domain, the State lawyers nor the Court have the jurisdiction to "take" property from landowners.

No part of the litigation or trial valued any "taking," only damaging. If the State were to somehow have acquired this easement, certainly these properties would have no residual value. The homes and land they sit on would be worthless if the State were allowed to freely flood them. This is not the case that was litigated, tried, and decided because the State never exercised its sovereign power.

There is a very specific statutory procedure in place for the State when it wishes to acquire property. SDCL § 21-35-1 and § 31-19-3 require the State to file a petition in order to obtain any interest in real estate. The State did not follow this procedure. It cannot claim the Court has any inherent power to grant a taking without following the statutory law.

The trial was a damage trial not a takings trial. The State's claim is a millimeter short of frivolous but a meter short of support in legal reasoning.

## CONCLUSION

Judge Riepel fairly and justly presided over two very complicated trials. At the conclusion of each, she applied the proper laws and tests and enforced the Constitution against the State. Landowners respectfully request this Court affirm the findings and conclusions of the trial court, affirm the verdicts of the citizen jury, and affirm the five Judgments of the separate landowners' claims and to the award of reasonable costs.

Respectfully submitted this 6th day of October, 2015.

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## CERTIFICATE OF SERVICE

The undersigned hereby certifies that two true and correct copies of the foregoing Appellees' Brief and all appendices were mailed by first class mail, postage prepaid to:

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Dated this 6th day of October, 2015.

MEIERHENRY SARGENT LLP

*/s/ Christopher Healy*

## CERTIFICATE OF COMPLIANCE

In accordance with SDCL §15-26A-66(b)(4) I hereby certify that this brief complies with the requirements set forth in the South Dakota Codified Laws. This brief was prepared using Microsoft Word, and contains 9,991 words from the Preliminary Statement and State of the Case through the Conclusion. I have relied on the word count of a word-processing program to prepare this certificate.

Dated this 6th day of October, 2015.

MEIERHENRY SARGENT LLP

*/s/ Christopher Healy*

## APPENDIX

IN THE SUPREME COURT
OF THE
STATE OF SOUTH DAKOTA

_____

Appeal No. 27368

MARK AND MARILYN LONG,
ARNIE AND SHIRLEY VAN VOORST,
TIM AND SARA DOYLE, TIMOTHY
AND JANE GRIFFITH, AND MICHAEL
AND KAREN TAYLOR,

Plaintiffs/Appellees,

vs.

STATE OF SOUTH DAKOTA,

Defendant/Appellant.

_____

Appeal from the Circuit Court
Second Judicial Circuit
Lincoln County, South Dakota
HONORABLE PATRICIA C. RIEPEL

_____

# APPELLANT'S REPLY BRIEF

_____

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Notice of Appeal was filed February 17, 2015

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## INTRODUCTION

Instead of addressing the substance of the State's arguments, the Appellees spend a substantial portion of their brief attempting to identify perceived procedural flaws with the State's brief. As will be demonstrated below, the State has properly preserved its arguments on appeal. The circuit court erred by concluding that the State's actions were the legal cause of the flooding that damaged the Appellees' properties under S.D. Const. Art. VI, § 13. Therefore, this Court should reverse the circuit court's judgment and hold that the State is not liable for a taking or damaging of property. In the alternative, the State asks the Court to reverse and remand to permit the State to seek an apportionment of damages between the State and the City of Sioux Falls.

## ARGUMENT

### I. The State properly preserved its arguments on appeal and challenged the circuit court's findings regarding rainfall amounts as clearly erroneous.

The Appellees spend considerable efforts contending that the State failed to preserve its arguments for this Court to review. The Appellees claim that the State failed to provide a satisfactory statement of facts in violation of SDCL § 15-26A-60(5), and seem to imply that this violation means the State cannot challenge any of the circuit court's factual findings. (Appellee's Brief, pg. 4.) Later, the

Appellees curiously assert that the State waived its argument that the circuit court's findings regarding rainfall amounts were clearly erroneous. (*Id.*, at pg. 25.) Neither contention has merit.

The State's brief satisfied SDCL § 15-26A-60(5), which requires a statement of the case and the facts. The State properly presented the facts relevant to the grounds urged for reversal, and stated the facts "fairly, with complete candor, and as concisely as possible." *Id.* Due to the requirement that the statement of facts contain facts - not argument - the State did not argue that any of the trial court's findings of fact were clearly erroneous. Instead, the State identified the facts relevant to the pending appeal along with appropriate citations to the record, including facts that contradicted the trial court's findings of fact.

Contrary to the Appellee's assertion that it waived its arguments regarding the trial court's findings on rainfall amounts, the State expressly challenged the circuit court's findings as clearly erroneous:

> [I]n its findings and conclusions, the circuit court failed to even mention Harmon, found Dr. Todey's testimony to be of "little credibility," and found the CoCoRaHS data that supplemented precipitation measurements to be "not scientifically reliable." (SR 850.) To the extent this Court concludes that such findings must be given any deference, the State challenges the findings as clearly erroneous, as argued below. (*See* § I(1)(A)(i).)

(Appellant's Brief, pgs. 18-19.) *See also* Appellant's Brief at pg. 22 ("Therefore, the circuit court's finding that the CoCoRaHS data was unreliable because it was not specific as to the component of time was clearly erroneous"), pg. 24 ("Therefore, the circuit court's finding that Dr. Todey's testimony was of little credibility because it did not include data for Lincoln County was clearly erroneous"), and pg. 31 ("The circuit court's conclusion that the State provided insufficient drainage was premised on two findings. First, that the twin 48" culverts were sized to handle an eight-year storm event. (SR 848.) Second, that the hydraulic standard was to keep the hundred-year flood elevation beneath the top of the highway. (SR 852.) Both findings were erroneous.")

The State properly preserved its record on the facts at issue by complying with SDCL § 15-6-52(a) by submitting its Proposed Findings of Fact and Conclusions of Law, as well as its Objections to Plaintiffs' Proposed Findings of Fact and Conclusions of Law, both of which were included in the State's Appendix. As provided by Rule 52(a), any decision by the circuit court in making findings of fact or conclusions of law "shall be deemed excepted to." SDCL § 15-6-52(a).

Finally, notwithstanding those findings of fact challenged by the State as erroneous, it should not be forgotten that "the ultimate determination of whether government conduct constitutes a taking or damaging is a question of law for the court." *Rupert v. City of Rapid City*, 2013 S.D. 13, ¶ 29, 827 N.W.2d 55, 66.

"Under the *de novo* standard of review, we give no deference to the circuit court's conclusions of law." *Benson v. State*, 2006 S.D. 8, ¶ 39, 710 N.W.2d 131, 145.

**II. The State's actions were not the legal or proximate cause of the flood that caused damage to the Appellees' properties.**

The Appellees contend that the State is attempting to insert an additional element for their inverse condemnation claim, namely that they must show that State's actions were a substantial or immediate cause of the flood. (Appellees' Brief, pg. 15.) However, the Appellees concede that this Court has held that it is the landowner's burden to prove that the government's actions were the "legal cause" of the invasion that led to damage. (*Id.*)

This Court has used proximate and legal cause interchangeably in several contexts. *See Peterson v. Issenhuth*, 2014 S.D. 1, ¶ 17, 842 N.W.2d 351, 355 ("Proximate or legal cause is defined as a cause that produces a result in a natural and probable sequence and without which the result would not have occurred."); *Kostrel v. Schwartz*, 2008 S.D. 85, ¶ 62, 756 N.W.2d 363, 384 ("[T]his Court adopted 'substantial factor' as the determination of whether an act is the proximate or legal cause for a plaintiff's damages."; *Burley v. Kytec Innovative Sports Equipment, Inc.*, 2007 S.D. 82, ¶ 34, 737 N.W.2d 397, 409 ("While legal or proximate cause is generally a jury question, a causal relationship between the alleged defect and injury is not presumed.").

This Court has defined proximate cause as "an *immediate cause* and which, in the natural or probable sequence, produced the injury complained of." *Hamilton v. Sommers*, 2014 S.D. 76, ¶ 39, 855 N.W.2d 855, 867 (emphasis added). "Furthermore, for proximate cause to exist, the harm suffered must be found to be a foreseeable consequence of the act complained of." *Id.* It is through this lens that this Court must determine whether the State's actions were the substantial or immediate cause, i.e., the legal or proximate cause, of the flood that damaged the Appellees' properties.

## III. The Appellees' brief oversimplifies the underlying facts and mischaracterizes the State's actions.

The Appellees' statement of facts and argument oversimplifies the evidence presented at trial. The Appellees incorrectly claim that the State knew or should have known that flooding would occur after an eight-year event and that the State created a condition that peculiarly caused flooding in the sub-basin surrounding the Appellees' properties by allowing water to pool behind the culverts. Neither contention is supported by the evidence presented at trial.

Relying on exhibit 16, the Hydraulic Data Sheet compiled by the DOT, the Appellees argue that the State knew or should have known that an eight-year rain event would cause their properties to flood. (Appellees' Brief, pgs. 20, 24.) Similarly, the circuit court found the twin 48" culverts were sized to handle an eight-year rain event. (SR 848.) This argument, and the circuit court's finding based thereon, is based on a misunderstanding of the Hydraulic Data Sheet and the relationship between overtopping the first

approach and a flood.[1] As such, an explanation of the Hydraulic Data Sheet and the sub-basin the Appellees' properties are located in is necessary.

The Appellees provided an overview image of their properties. (Appellees' Appx. 1.) The Spring Creek Tributary can be seen flowing southeast where it eventually intersects with Highway 11 north of Julie Drive. The tributary flows west to east through the twin 48" culverts underneath Highway 11 that are at issue in this case. (Stipulation ¶ 4.) South of the 48" culverts, Highway 11 intersects with Julie Drive. Due to the elevation of Julie Drive, the land south of Julie Drive is a separate sub-basin within the larger drainage basin.

The Hydraulic Data Sheet states that the 48" culverts were designed based on twenty-five year frequency. (Ex. 16.) There simply is no evidence that the culverts were designed to handle an eight-year event. Instead, the Appellees seize on the notation that overtopping of the approach would occur at an eight-year event. (*Id.*) However, overtopping of an approach does not result in flooding. In other words, simply because the first approach was overtopped does not necessarily mean that the Appellees' homes would flood.

[1]The State challenged the circuit court's findings (24 and 58) as erroneous on page 31 of its brief.

This distinction was explained by Kevin Goff, an engineer for Clark Engineering. Goff testified that the Hydraulic Data Sheet "identifies that at 275 cubic feet per second it overtops the basin, overtops into the sub-basin to the south by overtopping Julie Drive, but it wouldn't indicate the *extent* of any of that flooding." (TR2 74:1-7.) In other words, just because Julie Drive overtops at an eight-year rain event, it does not follow that any of the Appellees properties would be flooded.

The Appellees reiterate numerous times in their brief that an eight-year rain event would flood their properties, and that the State knew or should have known this. The Appellees go so far as to contend, "An 8-year event statistically means that the event will occur once every eight years." (Appellees' Brief, pg. 6.) There was no evidence of any other floods dating back to 1949, but the Appellees treat it as a given that their properties would flood every eight years, which is contradicted by the undisputed evidence. The Appellees all purchased their properties between 1974 and 1982. (Stipulation ¶¶ 6-10.) The Appellees testified that their properties had never before experienced surface flooding. (TR1 149:12-150:1; TR1 32:7-33:2; TR1 18:1-19:14; TR1 66:8.)

Thus, it is incorrect for the Appellees to argue that the State "knew or should have known that an eight year event or above would cause flooding on the Landowners' property," and the circuit court's findings based on that argument were erroneous. (Appellees' Brief, pg. 7; FOF 32.)

The Appellees also contend that the State "made the decision to allow water to pool behind the culverts." (Appellees' Brief, pg. 8.) There was no evidence that the State made a decision to pool water behind the culverts. In reality, the construction of the twin 48" culverts pre-dated the construction of Julie Drive. As such, it is illogical to conclude that the State decided to pool water behind an obstruction that did not exist when the culverts were installed, and the circuit court's finding based on this argument was erroneous.

**IV. The circuit court had no basis upon which to find that Dr. Todey or Donald Harmon's testimony was unreliable.**

The Appellees argue that the circuit court properly found the testimony regarding CoCoRaHS data to be unreliable and properly found Dr. Todey's testimony of "little credibility." (Appellees Brief, pg. 27; FOF 40-41.) The Appellees also claim that Dr. Todey failed to provide rainfall amounts for Shindler. The circuit court's findings on these issues were erroneous for several reasons.

The most fundamental problem with the circuit court's findings regarding the CoCoRaHS data was that they were made without any evidentiary basis. Not only were the circuit court's findings unsupported by the evidence, they were contradicted by it. The CoCoRaHS data was specific to 24-hour time periods, just like the 24 hour time periods identified in exhibit 24 relied upon by the Plaintiff's rainfall expert, Arthur Umland. (Ex. 24.) Moreover, no witness, including Umland, provided any basis upon which the circuit

court could have made this finding. Umland did not testify that the CoCoRaHS data was unreliable. Umland himself is a CoCoRaHS observer. (TR1 52:3-4.)

Neither Dr. Todey nor Harmon ignored the N.W.S. data from the Sioux Falls Airport. Instead, they supplemented that data with the CoCoRaHS data. Specifically, Dr. Todey used the rainfall intensity based hourly rainfall at the airport to extrapolate the intensity near Shindler. Harmon also relied upon the USGS recording station at 57th Street and Western Avenue in Sioux Falls, which provided measurements every fifteen minutes. (Ex. C 40:2-4.) Harmon opined that the two hour precipitation totals in the Shindler area exceeded a hundred-year event. (*Id.* at 39:14-18.)

The Appellees wrongly claim that the State made no appeal concerning Harmon's findings. (Appellees' Brief, pg. 27.) Harmon's deposition transcript was admitted as exhibit C. (TR2 95:5.) Instead of having the entire deposition read into evidence, the State offered it as an exhibit, and the circuit court assured counsel that it would read the deposition transcript. (TR2 95:6-10.) Remarkably, the circuit court did not mention Harmon once in its Findings of Fact and Conclusions of Law, despite the fact that the State included proposed findings of fact based on Harmon's deposition. (Appellant's Appendix 013-014.) Far from waving this issue, the failure of the circuit court to even address Harmon's testimony is one of the primary reasons the circuit court's findings on rainfall amounts were erroneous.

**V. When intense rains or flood waters overwhelm existing drainage structures, the intensity of the rain event is a supervening cause that precludes liability by the government entity.**

Yet again, the Appellees attempt to argue that the State waived their argument on supervening cause and only passingly attempt to address the substance of the State's argument. The Appellees claim the State "did not raise 'supervening cause' as a substantive issue until this appeal," and that "the trial court did not rule on the invented term." (Appellees' Brief, pgs. 27-28.) Both contentions are false.

The State raised its argument on a supervening cause both in its Pre-Trial Brief and in its Proposed Findings of Fact and Conclusions of Law. (*See* Proposed Conclusions of Law 13-19; Appellant's Appx. 027-028.) As such, the circuit court had the opportunity to rule on the argument and the argument is preserved for purposes of this appeal.

The concept of a supervening cause is important in this case, particularly given how the Appellees have constructed their argument that the State's actions caused the flood. The Appellees essentially rely only upon but-for causation, stating, "Mr. Mainelli modeled the 100-year event without the roadbed obstruction and found the water would remain in the banks of the Spring Creek Tributary." (Appellees' Brief, pg. 28.) This standard - requiring all public roadways and drainage structures to match the natural drainage - cannot be the basis upon which liability for a constitutional taking or damaging is imposed. Otherwise, a government entity would be liable any time existing drainage structures, whether they be culverts, bridges, or storm drains, are overwhelmed by rare and intense rain events.

Instead, as noted in the State's brief but unaddressed in the Appellees' brief, intense rains or floods supervene any liability by a government entity. "If the flood or rains exceed the design capacity [of a flood control system], the government entity responsible for the structure can assert a defense of supervening cause." 9 Patrick J. Rohan & Melvin A. Reskin, NICHOLS ON EMINENT DOMAIN, § G34.03[2][e][I] (3d ed. 2015). "[W]here it could be shown that the damage would have occurred even if the [flood] control project had operated perfectly, i.e., where the storm exceeded the project's design capacity . . . such an extraordinary storm would constitute an intervening cause which supersedes the public improvement in the chain of causation." *Belair v. Riverside County Flood Control Dist.*, 764 P.2d 1070, 1075 (Cal. 1988).

Here, the Hydraulic Data Sheet showed that the twin 48" culverts were designed to handle a 25-year event, which met applicable engineering guidelines. (TR2 114:25-115:5; TR2 89:5-7.) This estimate was done using the conservative "steady state" analysis, which is essentially a worst case scenario that does not take into account routing or storage of water. (TR1 88:16-21; TR1 124:13-18; Ex. A.) The dynamic state analysis is a "more realistic" and detailed analysis, because it accounts for water being routed through streams and channels in the basin. (TR2 118:5-15; TR2 119:4-9.) The Clark Engineering Study commissioned by Lincoln County employed the dynamic analysis, and concluded, "Floods over a 50-year event proceed over this substantial barrier [the first approach] and then over Julie Road and then over a

series of driveways along the west side of the highway into a basin area served by one two-foot culvert." (TR2 88:1-8.)

As such, under either analysis, the State met or exceeded applicable design standards to accommodate drainage. Due to the amount of rainfall that fell over a short time period, combined with the additional runoff from the of Sioux Falls, the culverts were overwhelmed. Under such a scenario, the intensity of the flood waters precludes any liability on the part of the State.

## VI. If this Court affirms the circuit court's judgment, the State is entitled to contribution or indemnification by virtue of its cross-claim against the City of Sioux Falls.

The Appellees sued both the City and the State, conducted extensive discovery against both, and litigated its claims against both. Now, having settled with the City on the eve of trial, the Appellees want to maintain the fiction that the City had nothing to do with the flooding that damaged their properties. This Court should refuse to participate in this fiction and remand this case so that the State may seek an apportionment of damages with the City.

### A. Procedural background of the Appellees' settlement with the City.

The first phase of trial in this case was originally scheduled to commence on December 2, 2013. (Gary Thimsen Aff. ¶1, SR 256.) On the morning of Thursday, November 21, effectively three business days before the commencement of trial due to the Thanksgiving holiday, State's counsel was informed by City's counsel that the Appellees had entered into a settlement with the City. (*Id.*) On November 26,

2013, the circuit court held a hearing on a pending evidentiary motion. At that hearing, the settlement, though not its terms, was disclosed to the circuit court. (Gary Pashby Aff. ¶ 8, SR 336.)

At the same hearing, the State indicated it had reserved the right to assert a cross-claim against the City, and that it would be exercising that right as a result of the settlement. Counsel for the City indicated it had no objection to the cross-claim. (Gary Pashby Aff. ¶ 8, SR 336.) The State accordingly filed a motion to file its cross-claim on December 13, 2013. (SR 278.) The circuit court granted the State's motion in its order filed on January 9, 2014. (SR 346.)

**B. The State elicited testimony and introduced evidence at trial establishing the City's liability.**

The City did not answer the cross-claim nor defend itself at trial, arguably defaulting. The State elicited substantial testimony at trial regarding the City's culpability for the flood that caused damage to the Appellees' properties, primarily from the Appellees' hydrology expert, Mainelli. The testimony and evidence demonstrated that increased urbanization and development of the southeastern portion of Sioux Falls increased runoff from the City to the Appellees' properties through the Spring Creek Tributary.

The Spring Creek Tributary drainage basin ordinates near 49th Street and Bahnson Avenue in Sioux Falls and drains south into Lincoln County. (Ex. 46, pg. 1.) The existing development in the City in 1990 had increased stormwater runoff in the upper reaches of the drainage basin, and the City commissioned a study by Stockwell Engineering to provide the City with estimates of stormwater runoff and necessary

improvements to meet immediate and future drainage requirements. (Ex. 46, pg. 1; tbl. 5.) Notably, the study only accounted for development north of 57th Street. (TR2 64:8-12.)

The study demonstrated that the City was aware of the residential development in the Shindler area, and the study cautioned the City to "severely limit the available headwater for drainage structures under Highway 11 thereby reducing the culverts' capacity." (Ex. 46, pg. 5.) The study assumed there would be no significant change in land use south of 57th Street. (*Id.* at pg. 27.) The study presciently warned the City that if significant development occurred, channelization and filling of natural wetlands would encourage higher flow rates to down stream areas, i.e., the Appellees' properties, "with potential for flooding." (*Id.*)

It was undisputed at trial that substantial development occurred south of 57th Street in the years after the study was commissioned in 1990. (TR2 52:11-13; TR 54:15-17.) In the most fundamental terms, this development or "urbanization" increased peak runoff to the Appellees' properties. (TR2 120:16-121:5.) In other words, more water flowed at a faster rate from southeastern Sioux Falls to the Appellees' properties via the Spring Creek tributary drainage basin. (TR2 63:10-14.)

As explained by Mainelli, because the City failed construct detention ponds as contemplated by the study, peak flow increased by 30 percent pre-development to post-development. (TR2 53:9-11.) In

other words, as explained by Mainelli, had the detention ponds been built, "the peak flow would have been reduced to the predevelopment level." (TR2 53:24-25.)

It is undisputed that none of the Appellees ever experienced surface flooding prior to 2010. There was no evidence of any floods dating back to 1949, when Highway 11 was initially constructed with its culverts. Unquestionably, a 30% increase in runoff from the City played a major role in causing the flood, and this was undisputed at trial. As such, the State introduced ample evidence to prevail on its cross-claim.

**C. The State was improperly precluded from presenting the issue of apportionment to the jury.**

The issue of determining the percentage of fault is reserved to the jury under SDCL § 15-8-15.2. The State should have been permitted to present evidence to the jury regarding the percentage of fault between the State and the City, but it was improperly prevented from doing so under the circuit court's order. The Appellees do not contest they settled with the City, and instead argue that the Joint Tortfeasors Act does not apply.

The circuit court was fully aware the Appellees settled with the City. As such, the State should not have been required to put on evidence against the City, because they were already a joint-tortfeasor by virtue of their settlement with the Appellees. "[A] settling party can be come a joint tort-feasor even though he has never been judicially determined to be liable or at fault." *Schlick v. Rodenburg*, 397 N.W.2d 464, 468 (S.D. 1986). "[I]f a plaintiff sues defendants as joint tort-feasors and settles with them, they are joint

tort-feasors." *Id.* "[T]he settling parties, without additional parties, are joint tort-feasors for all purposes including the application of SDCL 15-8-17." *Id.*

The Appellees' primary argument is that the Joint Tortfeasors Act is inapplicable because the State and City are not liable in "tort." (Appellees' Brief, pg. 33.) The Appellees' argument is based on their narrow reading of tort, which they do not define or support by any citation. The concept of a "tort" is broad, and may be easier defined by what it is not than what it is. Tort law is most easily distinguished from contract and criminal law. Its separation from constitutional law is much less clear. A tort has been defined as a "civil wrong, other than a breach of contract, for which a remedy may be obtained." BLACK'S LAW DICTIONARY, 1717 (10th ed. 2014). Similarly, a "government tort" has been defined as a "tort committed by the government through an employee, agent, or instrumentality under its control." *Id.*

Other courts have permitted government entities to raise cross claims for contribution or indemnity when they have been sued for inverse condemnation. *See County of San Mateo v. Berney*, 199 Cal. App. 3d 1489, 1494 (Cal Ct. App. 1988) ("[W]e see no logical reason which would serve to prevent a public entity subjected to liability for inverse condemnation from seeking indemnification from third parties whose negligent or fraudulent acts were causative factors in the damaging or taking of private property."; *Warner/Elektra/Atlantic Corp. v. County of DuPage*, 771 F. Supp. 911, 923 (N.D. Ill. 1991).

Throughout this case, the Appellees proceeded with their claims against the City under the theory that the expansion of southeast Sioux Falls took place without adequate storm water drainage and caused the flood that damaged their properties. In their Second Amended Complaint, the Appellees alleged that surface waters had been collected and allowed to flow from the City to their properties. (SR 194.) As such, it was fundamentally inequitable to prevent the State from presenting evidence on apportionment to the jury.

Critically, the State was not required to present evidence on apportionment to the circuit court, because the issue of the Appellees' damages - and any related apportionment thereof - was an issue for the jury. However, the circuit court erred by dismissing the State's cross-claim and preventing the State from doing so. In the event this Court concludes that the State was liable for damaging the Appellees' properties, this Court should remand this matter to the circuit court to permit the State to seek an apportionment from a jury.

## CONCLUSION

In 2010, the city of Sioux Falls received the greatest amount of precipitation ever recorded. (TR3 28:2-4.) The month of July set a new record for precipitation at 8.5 inches. (Ex. 24.) On the night of July 29-30, 2010, the Sioux Falls region, including Shindler, received a rare and intense rain event on top of saturated soils. Even according to the Appellees' rainfall expert, it rained at least 2.95 inches overnight

onto saturated soils. (Ex. 24.) Other reports from the region, including Lincoln County, showed precipitation levels ranging from 3.58 inches to well over 4 inches. (TR3 22:19-23:7; TR 26:24-5; Ex. H figs. 1-2.)

The culverts beneath Highway 11 abutting the Appellees' properties were overwhelmed by this intense and rare flood event, which was caused in part by increased runoff from the city of Sioux Falls. The States actions were not the proximate or legal cause of the flood, and therefore the State is not liable for a taking or damaging of the Appellees' properties under the South Dakota Constitution.

Dated this 26th day of October 2015.

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## CERTIFICATE OF COMPLIANCE

In accordance with SDCL § 15-26A-66(b)(4), I certify that this brief complies with the requirements set forth in the South Dakota Codified Laws. This brief was prepared using WordPerfect X5, and contains 4,134 words excluding the table of contents, table of cases, jurisdictional statement, statement of legal issues and certificate of counsel. I have relied on the word count of the word-processing program to prepare this certificate.

Dated this 26th day of October 2015.

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I hereby certify that on the 26th day of October 2015, two true and correct copies of the foregoing Appellant's Reply Brief were mailed by first class mail, postage prepaid to the following:

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