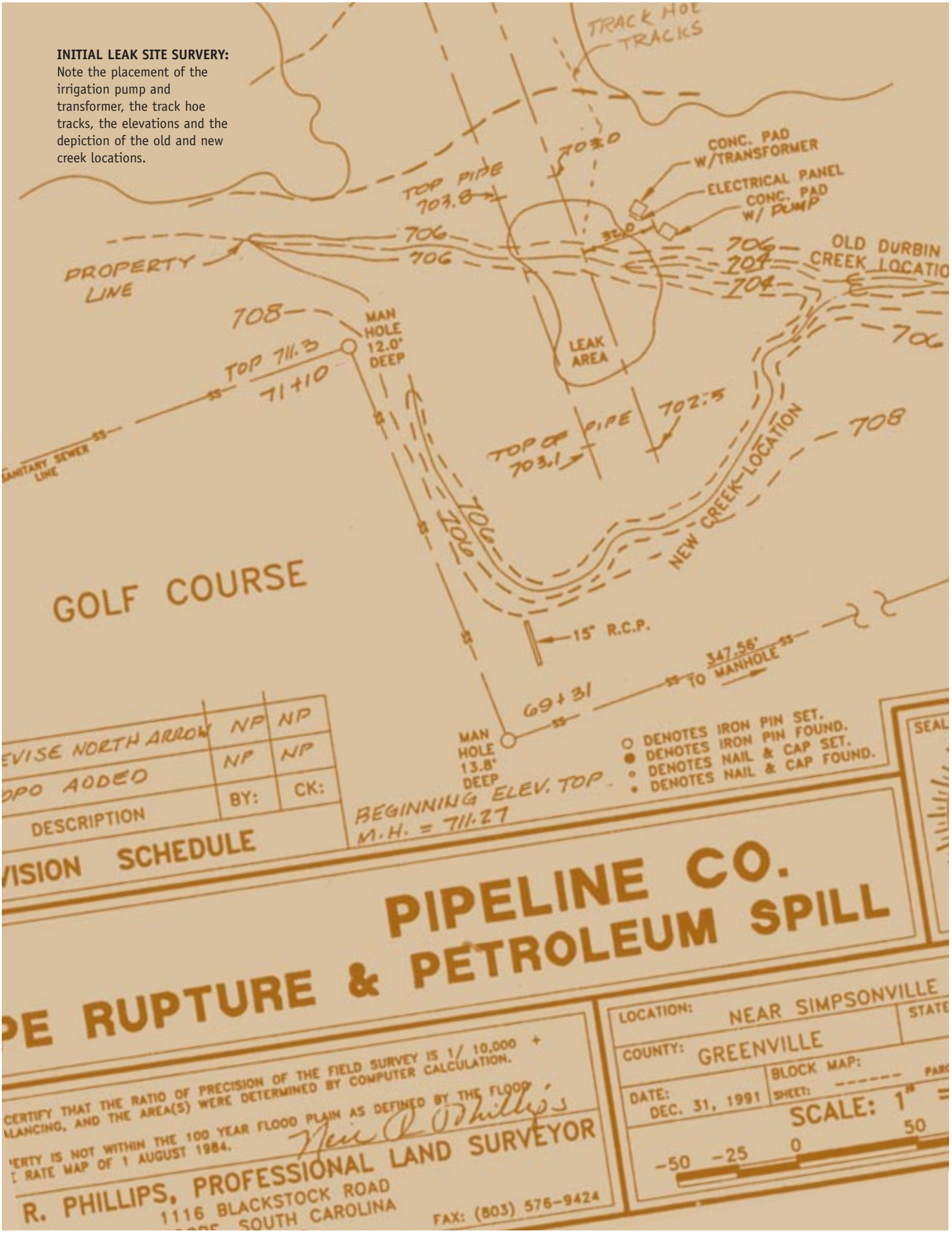

INITIAL LEAK SITE SURVERY: Note the placement of the irrigation pump and transformer, the track hoe tracks, the elevations and the depiction of the old and new creek locations.

WHEN THIRD PARTIES CAUSE ACCIDENTS ON RIGHTS OF WAY

BY GARY L. GLANCZ

EXPANDING THE USE OF RIGHT OF WAY PERSONNEL

Natural gas and liquid pipeline statistics indicate that the most common cause of pipeline accidents is third party damage. One-Call statutes have reduced the amount of reported incidents, but there remain a significant number of unreported incidents that go undetected when the damage inflicted does not result in an immediate rupture. It is only logical that an excavator guilty of failing to make a One-Call notice is not going to report damage that does not rupture a pipeline immediately. All too often dents and scrapes from excavation equipment are covered up, creating a time-bomb that ticks as corrosion and operating stresses continue to fatigue the damaged steel until it gives way.

When latent, third party damage is the cause of a rupture the delay between the time, damage occurred and rupture can be years. When delays of this magnitude occur the task of finding the guilty party becomes quite difficult and is compounded when the toxic, explosive product released requires immediate attention.

ONSET OF CLEANUP: Note the irrigation pump and transformer in the background.

IN THE COURSE OF MY CAREER as a right of way attorney I have dealt with these issues at 38 incidents, five of which were classical circumstantial evidence investigations that led to full or partial reimbursement of the cost of the incident. Without the assistance of company and contract right of way personnel, our successes would have been minimal.

CREATING A HEADSTART

To achieve reimbursement from excavators who cover-up and run after damaging pipelines, there are pre-event preparations that will pay off long before the investigator receives the phone call requesting his services at the accident scene. An investigator can increase the odds that a responsible party other than the pipeline operator can be identified and persuaded to pay up when:

- The investigator obtains HAZMAT training and response-approved protective clothing, thereby allowing him/her access to the accident scene in the early stages. Nothing works quite as well as walking up to the incident commander wearing your steel-tipped boots, hard hat and sporting your HAZMAT certification badge on your shoulder.
- The investigator can utilize company employees and investigation subcontractors that are recognized by the industry or are familiar to the operator. Cooperation is enhanced, and the likelihood that valuable evidence will be preserved is greatly improved.
- The investigator can persuade the pipeline operator to include in its drills an investigator and an investigation team made up of right of way employees and agents. I used the contacts made at drills to leverage early access to accident scenes and to persuade responders to assist me when their cooperation did not conflict with their response duties.
- In significant pipeline incidents a surveyor is eventually required to memorialize the changes to the operating system. Similarly, an investigator can memorialize facts at an accident scene. By using a surveyor familiar with cause investigations, or by providing a survey script to follow, a surveyor can recreate the accident scene. Also, a surveying firm that the pipeline operator is familiar with will typically be allowed early access.

Emergency response plans rarely consider a cause investigation or the destruction of evidence. It probably would be a good bet that most responders would tell you that response work and cause investigations are incompatible, leaving the investigation objectives to give way to the needs of the responders. Notions such as these are typical for companies that have never tried to combine response and investigative forces. To illustrate how both objectives can be accomplished the following is an account of what occurred when all of the above conditions were present at the time of the incident and the operating company had an investigator and a right of way staff properly prepared.

NOTES FROM AN ACTUAL CASE STUDY

THE EARLY MOMENTS

I got the call at 5:00 a.m. on a Saturday, December 19. The chief legal counsel of a pipeline operator was notified that a rupture had been confirmed at 3:00 a.m. Initial reports indicate that pipeline operations preceding the incident were normal. It was also confirmed that an inspection tool that identifies pipeline anomalies (flaws, corrosion and exterior damage) had been run in the pipe two years prior to the incident and found no potential flaws that would lead to a rupture. We expected third-party damage.

The incident scene was in a rural setting about 220 miles from my door. I determined that I could arrive faster by auto than by air. My response bag was pre-packed with my protective gear, cameras, film, response team contacts list, etc. I quickly packed a bag for a week's leave. My cellular phone, charging equipment, laptop and maps were in my vehicle, and I was ready to go. Before I left I called my chief contract right of way investigator and requested he join me at the leak site.

I was on the road by 5:40 a.m. I called the company's pipeline control center to find out the location of the rupture and who was at the incident scene. I was advised the pipeline was shipping fuel oil when it ruptured. I used that call to find out who was at the incident scene. Luckily, I was acquainted with the leak-site commander and called him on his cell phone. It took about six attempts and 20 minutes to get my call through because he was busy taking calls from responders. I asked him if he had his camera. He did, and we were off to a fast start. I asked him if he could perform the 360-degree photo layout that I showed him at a spill drill a couple of years back. He said he thought he could fit it in when it was light enough to see potential evidence.

My next call was at 8:00 a.m. to the surveying company. They said they could have a crew at the scene by noon. I called the incident commander again to let him know that the surveyor was to arrive by noon. But what I really wanted to know was what the scene looked like. He gave me a brief description of a creek crossing at the border of a golf course and a farm. A significant volume of fuel oil was discharged and traveling down the creek. However he said he did not see anything to confirm third party damage and took the pictures that I requested. So far we were off to a perfect start.

After my conversation with the commander I called for two more contract right of way agents to serve as claims adjustors and environmental damage liaisons to cover the downstream product damage created by the fuel oil discharge.

THE INVESTIGATOR ARRIVES AT THE INCIDENT SCENE

I drove onto the golf club property at about 9:10 a.m. A parking area had already been established, along with the hot, warm and cool zones indicating what type of protective gear was required before access to the accident site was allowed. The air was pungent with the smell of fuel oil.

It was readily apparent that I had come upon another stroke of luck. Fuel oil was still seeping out of the ruptured pipe. The drain-down was slow due to the distance from valves and ridges. That meant that the pipeline company's repair equipment had not tracked all over the accident scene. I spotted another pipeline company acquaintance from the main office, the regulatory liaison. He was talking with one of the company's local responders at the scene. According to them the only equipment traffic near the rupture site was rolling a spool of flexible piping they were using to siphon the fuel oil out of the pipeline before it hit the creek.

BEGINNING THE INVESTIGATION

There were no signs of recent excavation activity. Not far from where the pipeline crossed the creek was a small pump-house surrounded by a rusty, chain-link fence that had been breached in several places. I began to videotape the accident scene, reciting my observations as the camera ran. I focused the camera on the close-in terrain, pump house and creek. The ground near the pump house was still dry and crusty from the recent drought, and the grass and weeds were sparse. Amber colored fuel oil had pooled on the ground between the pump house and the creek, revealing a distinct footprint of some type of track hoe or other track type of excavation equipment.

My chief contract right of way investigator arrived on the scene at 10:40 a.m. His first priority was to interview the golf course operator while I interviewed all of the pipeline personnel at the scene. They all said that no motorized equipment got near the creek.

THERE'S A SIGNIFICANT NUMBER OF UNREPORTED INCIDENTS WHEN DAMAGE DOES NOT RESULT IN AN IMMEDIATE RUPTURE.

When I made my own observation of the equipment, I noticed that all were of the rubber tire variety, which the company used for light work, confirming that the tracks at the creek were left by equipment before the pipeline ruptured. I decided to film the creek on both sides, trying to include all angles that may have been missed in the first recording. I followed the track hoe footprints as they led away from the creek. Coincidently the survey crew arrived as I was finishing my assessment. I put the camera away and gave them their instructions. The time was 11:20 a.m.

The company brass arrived at 11:40 a.m. by helicopter. They advised us that the DOT regional director was on his way, and that the National Transportation Safety Board (NTSB) was sending an investigator. We all walked down to the creek side to observe the ongoing activity, and I brought along my tape recorder. The local pipeline personnel gave a verbal account of what they knew or observed. The aerial patrol reports and encroachment logs indicated that the most recent nearby excavation activity occurred during the late summer when a developer on the golf club property was cutting the subdivision roads we traveled on to get nearer to the leak site.

INTERVIEW OF WITNESSES AND POTENTIAL PARTIES, COLLECTION OF DOCUMENTS

The expectation of an investigation by the NTSB and their penchant for confiscating evidence placed a heightened focus on discovering evidence and recording it before the NTSB discovered it. I contacted another contract right of way investigator and sent him to the company headquarters to record and copy all evidence of third-party activity near the leak site, aerial patrol reports and pipe inspection records. My contract on-scene investigator and I interviewed all local company personnel that might have any knowledge of third-party activity on the land. I was particularly interested in the footprint from the alleged track hoe hear the pump house. No company employee had information about third-party work near the pump house. I asked the surveyor to collect measurements of the size and configuration of the footprint and to have the tracks precisely located.

At 1:30 p.m. I was advised by the response commander that the company product recovery team wanted to reroute the creek around the pipeline rupture so the repair crews could work on dry land. To avoid losing the exact location of the creek prior to the rupture I instructed the surveyor to capture the "as is" creek location and dimensions as well as the location and distance of the creek banks to the pipeline rupture and to the pump house and track hoe footprints.

By 2:00 p.m. my on-scene right of way investigator had finished his interviews with the golf club management. He reported that the golf club management had no knowledge of the tracks near the pump house. Between us we created an interview plan that included the rest of the golf club employees, the developer of the subdivision located between the golf course and the creek, the landowner on the other side of the creek, and the aerial patrol pilot that inspected the right of way.

The most useful information I received was from the golf club maintenance supervisor. He said he commissioned an irrigation contractor to improve the intake capability of the pump about three months ago, and produced the work order and contacts of the contractor.

By 9:00 a.m. the next day, the pipeline repair contractor had cut out and removed the ruptured section of pipe from the creek. Clearly observable were drag mark scratches and dents from a clawed bucket over the top of the pipe. The drag marks coincided with and were in the direction of a piece of excavation equipment that might have been located where the footprints of the track hoe stopped. I took extensive photographs of the pipe. It was measured and shrink-wrapped for transport to a forensic laboratory that was mutually agreed upon by the pipeline company and the NTSB.

By noon I was in touch with the aerial patrol pilot who recorded the excavation activity near the creek. His reports included an excavation sighting on July 2 near the creek. Bills from the irrigation contractor to the golf club included the use of a Komatsu track hoe for three days beginning on July 1–3. My on-scene investigator contacted the local One-Call system office to collect all of the notices for excavation work on those specific days. No notices were placed for the irrigation work. He then contacted the golf club to determine if they placed a One-Call notice, and they said that the contractors always made the One-Call notices.

I next met the pipeline company employee charged with investigating all aerial patrol report sightings in the area. His notes indicate he arrived at the golf course at 4:00 p.m. on July 3 to follow up, and he did not observe any activity near the creek. He assumed the patrol pilot was observing the subdivision work 500-yards away from the creek.

Before I made an appointment to interview the owner/operator of the irrigation contractor I paid a visit to its local office. In the yard behind the office were various types of excavation equipment, including a Komatsu track hoe. I photographed the track hoe, making sure I recorded its markings, serial number, details of the tracks, hoe arm and bucket. When I interviewed the owner and track hoe operator assigned to the golf club project, they both said they did not perform any work near the pipeline. However, in their statement they reported where the pipeline was located, and that all work was at least 30-feet from the pipeline-warning marker on the golf course side of the creek. I asked if they placed a One-Call notice prior to their irrigation work. Their reply was that the golf club owner said he would place the notice.

By the end of the second day we knew we had extensive environmental clean-up costs and damage claims as well as repair costs that would exceed the company's self insured retention on its insurance policies. I contacted the company risk manager and he invited the insurers to send a claims investigator to join our effort. They chose not to send an investigator, but asked instead that we keep them advised of developments.

THE CLAIM AND RESOLUTION OF THE MATTER

It was now two months since the report of the incident. I determined that we had gathered enough information and circumstantial evidence to place the irrigation contractor at the scene in close enough proximity to the pipeline to have caused the damage. The

PIPELINE REPAIR: Note the placement of the track hoe in the background next to the irrigation pump. This is the exact placement of the Komatsu track hoe in the tracks we discovered. This photo was taken of another manufacturer of track hoe equipment with similar dimensions, and the piece of equipment appearing in the photo was able to swivel toward the pipeline and drag its bucket across the top of the pipeline as depicted. We were unable to photograph an exact depiction for fear we would create additional damage to the pipe or destroy existing evidence of damage.

pipeline repair and clean-up bill was heading toward being over $4 million. We sent letters to the golf club and irrigation contractor along with copies to their insurers detailing our claim and evidence. They denied responsibility and made no counteroffers.

The pipeline operator filed suit against the golf club and irrigation contractor. Before trial the insurers for the defendants offered to pay about 85 percent of the pipeline operator's out of pocket expenses. The case was settled.

The defendants never admitted what convinced them to settle, but everyone on the plaintiff's side was confident it was the testimony of our engineering experts during depositions. The pipeline failure analysis from the lab concluded that the rupture was a direct result of a gouge on the top of the pipe created by a mechanical device consistent with the teeth of the bucket from excavation equipment. They also concluded that the damage was severe enough to be detected by the pipeline inspection tool used by the company 20 months before the rupture. Since the inspection tool did not detect any damage, a window of opportunity was created and the irrigation contractor was the only operator near the creek in that time frame.

Our modeling engineer obtained an exact one-tenth scale model of the track hoe from Komatsu, and then created a model of the leak site to the same scale as the track hoe. The leak site landscape model was made possible from the information gathered by the surveyor. The landscape model was made of plaster and mounted on a 5-foot by 4-foot plywood platform, which included the creek, pipeline, pump house and track hoe footprints. The surveyor placed the model track hoe at the creek bank in the footprints on the leak site model (which matched perfectly) and extended the arm of the hoe toward the pipeline, dragging the clawed bucket across the top of the pipeline. The defendants agreed to settle shortly thereafter.

CONCLUSION

We cannot say for certain what was the determining factor in the success of our case, but we can assume it was the preservation of circumstantial evidence. A lot of things went in our favor that allowed us to preserve an accident scene that was not destroyed by the company's own workers. However, without the pipeline company's recognition that an investigation was not incompatible with a response, I am convinced that no investigation would have taken place before the incriminating evidence was destroyed. The years prior to the incident the company did not discourage multitasking of its right of way personnel to provide investigation support. The company also recognized the value of including contract right of way agents to act as investigation support and claims management.

The photographs taken by the leak site commander, the interview conducted by on-scene contract right of way investigator, and the survey work turned out to be invaluable to our investigation. Before the scale model of the track hoe was obtained and the landscape model engineer employed, their work product made it obvious to us how a true scale model of the scene would be a dynamic piece of evidence to a jury.

The by-products of our investigation were also quite valuable. The company employed the investigation surveyor to complete the as-built drawings, which saved the company the cost of bringing another crew to the site as well as the time to conduct the survey. Our periodic investigation reports were made available to the NTSB and DOT as soon as they were produced. Typically the two agencies would have fined the pipeline operator as the responsible party for the leak, but the evidence we gathered was included in their internal reports, and it was determined to be sufficient to forego the fines and penalties. The news media also picked up on our reports when excerpts were made public. The news articles turned favorable to the pipeline company soon thereafter. ❖

The above was an actual portrayal of a pipeline incident. There was consensus among the response team that the pipeline operator made a wise decision to be "investigation ready," and the company cited this event as its example to any doubters that it is good business to remain investigation ready.