Complexities of Pipeline Easement Damages on Midwest Farmland

BY JOHN SCHMICK

As the population of this country grows, there is an increased need to bring energy supplies (such as natural gas) to the cities and towns experiencing that growth. The delivery of natural gas by underground pipeline is one method of meeting those energy needs. This presents a challenge to the right of way professional who is assigned the task of determining damages. It is often necessary to use eminent domain laws to take private property for permanent pipeline easements and temporary construction easements. The recent experiences of farmers between Fairmont and Hutchinson, Minnesota, illustrate the difficulty in meeting the energy needs of a growing population, and highlight the complexity of damages caused by an underground pipeline.

In general, eminent domain cases involving utility construction projects may be viewed as following either a positive approach or a negative approach. Using a positive approach, the condemning authority maintains open lines of communication, works with property owners to minimize project impact, and offers compensation considered sufficient by the property owner to avoid litigation. In the negative approach, the condemning authority is more likely to issue statements and orders, develop the project without input from property owners, and attempt to buy easements as cheaply as possible. The process often involves low initial offers and uses eminent domain actions as weapons in negotiations. Whether intentionally or not, the statements and testimony of property owners in the Hutchinson pipeline case made it clear that this project was not viewed as a positive process.

In Minnesota, eminent domain actions are initially heard by commissioners appointed by the district court. Each group of commissioners typically includes one attorney and two real estate professionals. An informal hearing is held with witnesses, testimony and cross-examination. Attorneys for the property owner and condemning authority decide jointly if they want a court reporter to make a record of the hearing, but it is not a requirement. Decisions by the commissioners may be appealed to the district court for a formal trial. (In this article, the terms court, trial and hearing refer to the commissioners' hearing of the case.)

History of the Case

In 2003, the City of Hutchinson, Minnesota, acting through the Hutchinson Utility Commission, constructed a 91-mile underground natural gas pipeline from approximately the Iowa/Minnesota border, north to the city of Hutchinson, Minnesota. (For our purposes, the City of Hutchinson and the Hutchinson Utility Commission are referred to jointly as Hutchinson.) To facilitate the project, Hutchinson began the process of acquiring easements from property owners in six different counties. Hutchinson's initial action was to send a right of way agent to sign up as many property owners as possible. The majority of these owners either farmed the land or rented it to others for farming operations. The predominant field crops were corn and soybeans planted on a rotating basis.

Payments made to those who accepted the initial offer were based on approximately $2.50 per linear foot of pipeline easement on the property. However, since the exact route of the pipeline had not been selected and surveyed, only an estimate for payments due under this process could be made. In addition, these initial easement requests were "blanket" easements which covered the entire field rather than the 50-foot width needed for the pipeline. The routing permit granted to Hutchinson provided a corridor varying in width up to 1.25 miles within which it could locate its pipeline. Ultimately, one group of property owners, citing a lack of information and compensation, rejected the initial offer and forced the start of eminent domain proceedings. Because of the number of property owners in the group, it was decided that holding hearings on all of the properties would cause an unreasonable burden on both sides. Seven representative properties from the group were selected and hearings were held on those parcels. It was anticipated that the commissioners' decisions on those seven properties could be used to settle all claims with two or three exceptions for properties that were ripe for development or had other unique issues that needed to be addressed separately.


Erosion of soil in easement area.

The following is a discussion of some of the more significant physical and legal issues presented during the Hutchinson pipeline project.

Physical Impacts

Crop Loss: While neither the property owner nor the condemning authority disputed the need to compensate farmers for crops lost during the construction of the pipeline, there was some discussion as to how to estimate those damages. Actual construction occurred between July and November of the 2003 growing season. The value of those crops, and therefore the payments owed, were still not determined until the final hearings in the spring of 2006. At issue was the question of whether the value should be set as of the date of taking in July 2003 or when the farmers would normally have marketed that year's crops. Testimony indicated that crop value is cyclical, and most area farmers sell their crops in the spring when prices are higher. In addition, should the price be based on local grain elevator prices, co-op prices, or the price in a published index? It was difficult enough for the property owners to see their crops being plowed under, often with little notice, but to wait two years to be paid for the crops was generally considered unacceptable by the owners.

Damaged Drain Tile: Soil in the southern part of Minnesota is generally of such good quality that drain tile is commonly used to facilitate removal of excess moisture before it can cause root damage to plants. Most fields contain an extensive network of drain tiles to protect those areas that are susceptible to retaining excess water. Testimony indicated that during construction, work crews made no effort to locate and preserve the existing drain tile system. Rather, they cut right through the tiles, patching the tiles after the pipeline construction was completed. However, the work crews used non-slotted pipes for the drain tile patches, laying it across the pipeline trench. Unfortunately, a drain pipe with no holes or slots for water does not encourage drainage. Instead, water must flow to either end of the non-slotted pipe area and into the existing slotted pipe before it can drain away. As a result, normal water flow was disrupted and drainage hindered. This led to inadequate drainage, plant root damage and lower crop yields.

Soil Compaction: Because pipeline construction requires the use of heavy equipment, it is common to find that soil on either side of the trench suffers some degree of compaction. The Hutchinson pipeline compaction was measured to a depth of approximately 24 inches. The effect is that plant roots may not be able to successfully penetrate the compacted soils, resulting in a "pancake": the flattening of the roots at shallower depths which leads to lower crop yields. The degree of soil compaction is also affected by weather conditions during construction. One study cited by a soil expert indicated that wet construction conditions can lead to greater compaction. In another study by this same expert, crop yield loss was measured for as long as 14 years after construction on a major pipeline in this same area.

Soil compaction has a negative impact on crop yields, but in some cases it can be mitigated by a technique called ripping the soil. In this case, however, there was testimony that existing equipment (in the area) could rip to a depth of only 12 to 14 inches. Consequently, the soil compaction problem at a depth of 24 inches could not be resolved.

Lack of Soil Compaction: Soils disturbed during the trenching process generally have a greater mass because more air is contained in the soil. Over time, this fill soil can settle as much as 30 percent. In this case, soil was returned to the trench after construction of the pipeline, but it was not adequately compacted. This created a number of problems. One farmer reported that his harvesting equipment became mired in the pipeline trench because of soft soils, and he had to be pulled out. Several farmers indicated they felt a dip every time their harvesting equipment passed over the trench. One farmer suffered substantial equipment damage when the front of his harvesting equipment tipped into a low spot in the trench area and struck the bank on the other side, breaking several nose points. His cost to repair this during harvest time was more than $4,000 in labor and parts.

Normal farming activity accelerated the settling process and changed the contour of the land. This in turn impacted the normal water flows or drainage on the field. Water tends to take the path of least resistance. As the trench area settled, water followed the depression or channel created in the trench. In some areas, this created new wet spots in the field and was expected to increase erosion over time. One property owner had to have a berm built to divert water and control erosion. This took land out of production and interfered with established planting and harvesting patterns.

There was an additional concern that the pipeline trench, with its soft soils locked between the compacted soils of the trench sides, would act as a water collector – allowing water to follow the trench to areas where it would pond or otherwise saturate the soils. In some cases, additional drain tile will need to be installed to address new areas of excess water. What can be concerning is that some of these water problems may not show up for several years. How do right of way professionals and commissioners determine compensation based on anticipated future damage?

Construction road through farm field creates soil compaction.

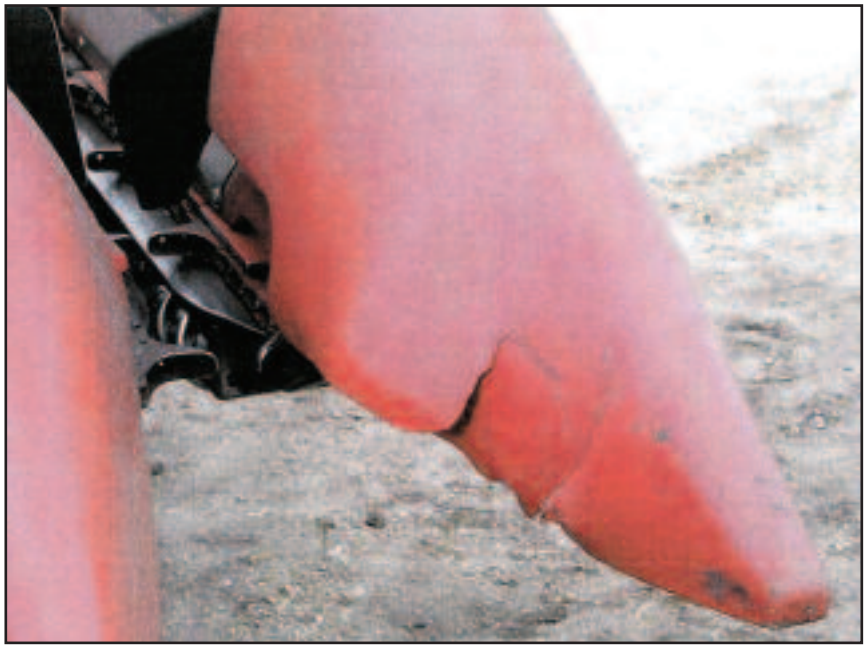
Yield Loss and Additional Costs: All of the problems described above can be expected to lead to a loss of crop yield, not only in the pipeline easement area but in temporary construction areas as well. The degree and duration of crop yield loss are somewhat of a gray area because different experts, using different assumptions, will find and report varying levels of damage. In this case, a study prepared by one soil expert looked at crop yields on a major natural gas pipeline constructed in the area. In that report, the expert was able to measure crop yield losses in the easement area in the fourteenth and fifteenth years after construction, although yield losses diminished over time.

The degree of care used during construction of this project created additional problems. Specifically, there were indications that construction debris was pushed into the pipeline trench and buried. As least one farmer lost a milk cow which ingested a piece of buried fence wire that perforated its stomach. Additionally, in restoring the surface area, there were indications that top soil was mixed with subsoil in some areas. A local newspaper reported on formerly rock-free top soil that was now littered with rock in many areas. Most property owners affected by this pipeline project reported having to use extra fertilizer in an attempt to mitigate the impact caused by soil mixing. This had a direct negative impact on crop yields in those areas which was expected to last for many years. In a direct correlation, if the expected productivity of the field declines, combined with higher production costs, the market's reaction is to discount the value of the field.

Non-Physical Damages

Easement rights: Beyond the physical impact of the pipeline project, there were numerous impacts related to the easement terms and conditions imposed on the land. The blanket easement condition was mentioned earlier, but a more thorough examination of the easement terms is necessary. Initial offers to property owners included an easement description that defined the taking as a 50-foot wide strip of land on the owner's land parcel. However, at no time was the location of the pipeline within that field specifically identified. As a result, the condemning authority took the right to a 50-foot wide strip of land anywhere on the field that it wanted. Furthermore, the easement document gave the condemner the right to move the 50-foot wide strip for any reason it wanted. The end result of this condition was that the condemner took the right to occupy any portion of the field at any time, effectively creating a blanket easement over the entire field. For those property owners who accepted the initial offers, this issue could only be corrected at the owner's expense, as the condemner stated that it had no requirement to go back to those owners and make corrections.

Closely related to the issue of blanket easements is the lack of recordable surveys for the pipeline location. Initially, the construction was done on a fast track schedule where the construction crews basically showed up one day, arbitrarily decided where they were going to trench and then ran their equipment through the field. It was reported that they took occasional G.P.S. readings, but none of this information was shared with the property owners. As the hearing dates approached in the spring of 2006, a full two years after construction had been completed, as-built surveys were still unavailable to the property owners. It was not until a few days before the hearings that surveys of the seven test cases were completed and produced for the property owners. As part of the hearing process, the condemner verbally promised to complete as-built surveys for all of the property owners who were part of the litigation. No property owner who had settled earlier or who was not part of the group challenging the offers would get a recordable survey of the as-built pipeline. As a result, dozens of property owners will someday have to spend the time and money to obtain a recordable survey so that a potential buyer of the land will know where the pipeline is located. Those subsequent owners will not receive compensation for these future costs.


Damage to equipment after sinking in soft soil in trench.

Another interesting term and condition of the easement document was that it granted the right ". . . to enter, from time to time, upon Respondent's Lands, along any routes reasonably convenient to Petitioner ..." While granting access to the easement area is a normal part of any easement, what was unique in this situation is that the condemner also took the right of determining how access would be allowed. In this case, the language allowed the condemner to enter the owner's field at any point, cross any part of the field, and leave by any route it wanted. There was no requirement on the part of the condemner to minimize the impact of its access rights, nor was there any language inserted that required the condemner to reimburse the owner for any crop loss or other damages caused by exercising its access rights. The effect of these access rights was to place all future crops, anywhere in the field, at risk of destruction any time the condemner decided to enter the field for almost any reason with no expectation of compensation and no requirement of advance notice of entry. Consequently, the risk of yield loss was increased for each property burdened by the blanket access condition contained within the easement document.

Finally, the easement document did not indemnify the property owner against claims from others resulting from the construction, operation or removal of the pipeline. Nor was the property owner protected against claims by the pipeline owner/operator for any damage caused by normal farming operations permitted in the easement area. It also allowed the pipeline owner to abandon the pipeline in place when its use was discontinued. These issues are common in most pipeline easements, but the property owner is normally given full indemnification and restoration protection.

Determining the Value

Eminent domain cases in Minnesota follow the federal rule in estimating damages whereby the value Before-the-taking, minus the value After-the-taking equals Damages. Value refers to the whole property (larger parcel), not just the easement area. The significant differences in values concluded by the experts for both the property owners and the condemner highlight how difficult it is to reach a decision on damages. It is instructive to briefly discuss the process that each side used to arrive at its values.

A common but questionable method of measuring easement damages is the percent-of-fee-simple method. The appraiser selects a percentage of the fee simple interest value and applies it to the easement area only. Unfortunately, rarely in the application of the percent-of-fee-simple method is there an offering of market-based support for the percentage rate applied to the fee simple interest unit value. In this case, the condemner's expert used 50 percent of the fee simple unit value, multiplied it by the total easement area and labeled it damages. As it relates to the federal rule for estimating damages (as required by the court in this case), the percent of fee loss was subtracted from the Before-the-taking value to arrive at the After-the-taking value. This creates a circular logic, because the appraiser estimates damages to find the After-the-taking value which is subtracted from the Before-the-taking value to find damages. The estimate of damages based on circular logic does not comply with the federal rule. Furthermore, the idea of estimating damages so that you can find damages is far-fetched at best and unscientific at worst.

Estimating Damages: Federal Rule vs. Circular Logic

Federal Rule	Circular Logic
A = Before Value of the Larger Parcel	A = Before Value: Unit Value
- B = After Value of the Larger Parcel	- C = Percent of Fee Loss (Damages)
C = Damages	B = After Value: Unit Value
	Therefore:
	A = Before Value of the Larger Parcel
	- B = After Value of the Larger Parcel
	C = Damages

This circular logic is illustrated in the table above.

The interesting part of the percent-of-fee-simple method is that it will never identify severance damages, because it is only applied to the easement area. The expert for the condemner looked at dozens of sale transactions and interviewed both buyers and sellers. He concluded that buyers did not attribute any significance to the existence of a pipeline on farmland they purchased. Thus, verbal statements by market participants were used to eliminate severance concerns. This same expert produced a separate study of pipeline impacts that contradicted this conclusion. That pipeline impact study, when subjected to a matched pair analysis, clearly demonstrated that sales of farmland with a pipeline sold for less per acre than did farmland without a pipeline. Consequently, severance was demonstrated in a four-county area studied for this new pipeline. The dilemma for appraisers and decision makers is to decide what carries more weight; verbal statements by market participants or actual matched pair comparisons of transaction data by those same participants.

The valuation expert for the property owners used a different approach. His study involved 67 comparable sales in a two-county area. Basing the unit of comparison on tillable acreage, the data was analyzed on a bulk basis for trends in pricing related to size, adjacent buyer influences, access road influences (gravel or paved), location and crop equivalence ratings (CERs). CER is a process of rating soil types and characteristics and calculating a weighted point reference for each property in the county. It can be used to compare the expected productivity of a parcel of land for crop production. A buyer, given the choice to buy a field with a CER of 75 points or a field with a CER of 88 points, would know that the higher CER rating would produce a higher crop yield if all other inputs were held constant. Trends in the data supported a sliding scale for land prices positively correlated to the CER ratings of the land.

With all factors considered, the data trend analysis and matched pair analysis used by the property owners' experts clearly demonstrated a loss in value to the entire field when a pipeline was present. Combining the pipeline impact study data by the condemner's expert with the land study by the property owners' experts resulted in a clear pattern. In four of the six counties through which the new pipeline passed, farmland with an existing pipeline sold for substantially less than farmland without a pipeline, sometimes by as much as $400 per acre for the entire field. The range of impact was related to where the pipeline crossed the property. A pipeline that went through the middle of the field had more impact than a pipeline that crossed the corner of a field. Consequently, although the buyers themselves may say that an existing pipeline did not influence pricing of land, the transactional data of those same buyers demonstrates otherwise. Clearly, anything that impacts crop yields, increases risk of ownership, and results in future losses will also impact pricing.

In this case, initial offers to property owners for easement rights were made at approximately $2.50 per linear foot. At the commissioners' hearing, the offers were approximately $4.00 per linear foot. The commissioners awarded a range of $6.00 to $11.00 per linear foot for the test properties and, in an unusual move, imposed conditions for indemnification and responsibility for future drain tile system failures. Thereafter, the two sides mediated a settlement whereby Hutchinson did not oppose release of $150,000 deposited with the Minnesota Department of Agriculture pursuant to a Stipulation Agreement between Hutchinson and the Environmental Quality Board. This raised the cash portion of the settlement, with

Rocks left in easement area after construction.

Construction debris recovered from easement area.

interest, to approximately $9.75 per linear foot. In addition, the mediated settlement included the following conditions:

- Non-emergency access routes designated by the property owner,
- Notification before entry onto the owner's property,
- Compensation for future damages related to pipeline operations,
- Vacation of easement in event of pipeline abandonment and removal as needed per property owner's construction of improvements,
- Restriction of easement to a single pipeline (additional pipelines require additional easements.)
- Provide and grade additional top soil, as needed, to alleviate settling of surface areas in the easement area.

The final award represented a compromise between the valuation testimony given by the experts.

The mediated settlement adds the protection property owners need when a pipeline burdens their property. To put the final award in perspective, during the study period in the area, general land prices, with a few exceptions, were between about $2,000 per tillable acre to $3,400 per tillable acre. Based on a 50-foot wide easement, the initial $2.50 per linear foot offer equates to approximately $2,178 per tillable acre; the $4.00 per linear foot offer at the hearings equates to $3,485 per tillable acre; and the mediated settlement, after commissioners' award, equates to $8,494 per tillable acre. Clearly the award in this case reflected loss in value to the entire field, or severance damages.

Conclusion

This was a pipeline easement case that started out poorly and deteriorated as it went forward. While much has been written about how to make the utility construction/right of way acquisition process go more smoothly, this project was a case study in everything a condemning authority should not do. From the beginning (inadequate offers of compensation and threats of eminent domain taking) to the end (condemning authority found in violation of its own agricultural mitigation plan and commissioners' award), it was a negative experience for all participants.

The duty of a condemning authority in eminent domain is to make the property owner whole. It is not to acquire property rights as cheaply as possible. This is the true meaning of the term "just compensation." There is always a tradeoff between treating property owners fairly and litigation expenses. For the appraiser, there is no substitute for thorough research and common sense analysis. A new pipeline constructed through good quality farmland causes much more damage than can be seen by looking at the surface of the land. Easement terms and construction activities can lead to greater risk in ownership, future crop losses, and a frustrating long-term relationship with an easement owner. ■

Water in the easement area after construction.