Part Two



Along with Part I (Right of Way, September/October 1998) this article was originally presented to the Rocky Mountain Mineral Law Foundation Special Institute on Rights of Way, Denver, Colorado May 4 & 5, 1998.

Setting Value on a Gas Pipeline Easement

Case Studies of Potential Damages

By William R. Lang, MAI and Brett A. Smith

The damage appraiser's task is to find market evidence that would be useful in discerning damages, if any, to residential land because of a high-pressure natural gas pipeline located on or near a residential site. The accepted method of approach is to find a residential area that has a high-pressure natural gas line near or on residential properties.

The objective is to find sales of lots which are near a gas line (to simulate the subject after condition) and compare them to similar lots in the same locality that are not near a gas line (to simulate the before condition of the subject parcels). In that way, we can see if the market indicates a penalty for the gas line being on or near specific parcels.

The most desirable market data would be pertaining to vacant land. It is preferable to find undeveloped lot sales in these conditions, rather than lots that have been improved with residences, because of the differences in value caused by variations in the dwellings on the total sale price. When vacant lot sales are used, it reduces the number of variables and the differences in value are more easily attributed to the impact of the gas line, if any. Our first study area was acreage for a subdivision near the block "U" by the University of Utah. We had information on file of acreage sales in that area and were familiar with the location of pipelines in that area. One of the pipelines in that subdivision was a high-pressure Mountain Fuel Supply natural gas line. There were two Chevron crude oil lines.

The 20-inch Mountain Fuel Supply line was found to pass between the Tomahawk Drive properties and did not affect the sale of those lots according to the developer. We spoke with one owner, an attorney, who lives on Tomahawk Drive. The Mountain Fuel Supply pipeline runs adjacent to his home. (The same gas line comes down Emigration Canyon in another case, which follows.) The owner built alongside the pipeline with knowledge of it years ago and doesn't worry about it.

In May 1993, Russ Watts verified the acreage sale description. He explained that although negotiations originated in July 1988, the deal did not close until April 1993. First Charter Development Corporation simply passed title to Watts 89 on the same date at the same price. It contained a 20-foot high-pressure Mountain Fuel Supply gas pipeline and two Chevron crude oil pipelines through the middle. The only other sale on the north bench of Salt Lake City sold for roughly the same price and contained no pipelines. Therefore, no diminution in value may be attributed to the pipelines.

The new subdivision for that parcel has already been platted for 35 lots. The lots range in size from 0.6 to 0.9 acre and are available for \$125,000 to \$190,000 per lot. They have been on the market since the beginning of May 1993 (without an onsite office or even access roads open to buyers) and 10 of them already have offers and should close soon.

Some of the lots under contract of sale adjoin the relocated high-pressure natural gas lines. One of the gas pipelines comes down Emigration Canyon. Together with the Chevron Lines, it passes next to the Children's Center at Medical Drive. The Moran Eye Center at the University of Utah Hospital is less than 100 feet from it. It goes north across the previously mentioned attorney's property on Tomahawk Drive.

The other 24-inch high-pressure gas transmission line goes south out of Emigration Canyon to the pressure reduction station at Bonneville Golf Course. All of the condominiums on Kennedy Drive east of Oak Hills, such as Canyon Crest and Canyon Cove, were built around that gas line.

Mr. Watts said that there is no difference in price or holding period for lots backing onto the gas lines compared with those that do not. He estimates that it will take 12 to 16 months to sell all 35 lots. Again, there seems to be no effect on upscale view lots on the northeast bench of Salt Lake City above Federal Heights from large gas or oil pipelines.

The second area of study was the Emigration Oaks subdivision up Emigration Canyon. In that area, two high-pressure Questar Transmission gas lines continue with an easement across the rear of some lots.

As they come out of Emigration Canyon, one line turns north as a Mountain Fuel Supply transmission line that runs near the block "U" and the other one runs down out of the



canyon past Kennedy Drive to the pressure reduction station.

We also drove 1700 East from Draper into Sandy from 12000 South to Dimple Dell Road. There are many homes along that pipeline with paddles in their backyards. We followed the pipeline from La Caille Restaurant up Wasatch Drive to the Mountain Fuel Supply pump station in Bonneville Golf Course, over 11 miles with thousands of homes along it.

There are pipelines alongside Alta View Hospital, St. Marks Hospital and Shriners Children's Hospital as well as University of Utah Hospital. The whole urban landscape is crisscrossed with pipelines fronting businesses ranging from REI outdoor gear retailers to McDonalds restaurants as well as homes, apartments, retirement residences, nursing homes and condominiums. Most of the owners would only know of the pipelines by investigation, although many properties like the hospitals have paddles alongside.

Emigration Oaks Subdivision

Based on the three locations studied, the best source of market data regarding the impact of a high-pressure natural gas pipeline on residential properties was found in the Emigration Oaks Phase 1A subdivision. We were able to locate many sales of sizable, vacant, residential lots. Some of the lots sold had easements with two high-pressure natural gas pipelines and two large petroleum pipelines across the rear portion of them.

Other lots have an AT&T easement for a fiber optics line running through them. There are sales of several similar lots in the same subdivision with which to compare these various lots to check for any differences in market value resulting from the easements. The area of the easement is marked and trees have been removed within the parameters of the easements.

The plat shows the location of the various lots in what is called the

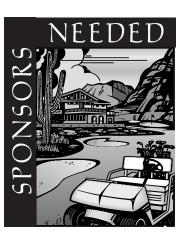
Emigration Oaks Phase 1A subdivision. There is a pipeline easement approximately 100 feet wide for the Questar natural gas lines and the Chevron petroleum pipelines. There is also an easement for the AT&T telephone line. All of the lots are reported as sold with the exception of Lot 35, though information was available on only 23 of them.

Lots 36, 37, 38, 39 and 40 all have the natural gas and petroleum pipelines easement along the rear of the lot. Lots 1, 2, 5, 6, 7, 11, 35 and 36 are impacted by the AT&T telephone line. It is necessary to examine the sales with a natural gas easement and compare them with sales of other lots in the subdivision to see if the market indicates a disadvantage for the existence of these easements.

Tim Blackham with Questar was contacted to find out about the two natural gas pipelines. He explained that the first pipeline was laid around 1929 and was 18 inches in diameter. Then, in the 1950s, a 24-inch pipeline replaced the first line and an additional 20-inch line was laid about 10 feet away, parallel to the first. It is interesting to note that the easement and pipelines were in place years before the Emigration Oaks subdivision was developed, indicating that the developers did not purposely avoid developing near the easement.

Mr. Blackham explained that the Department of Transportation might be changing their standards regarding the thickness of the pipeline walls required for high-pressure natural gas pipelines in residential areas. That creates a problem for the older pipelines running through the Emigration Oaks subdivision because they will not meet the new standards, when they are approved. Mr. Blackham said that, to his knowledge, the new standards were still not approved as of May 1993.

There is a regulating station near the mouth of Emigration Canyon, near Bonneville Golf Course, which reduces the pressure in the main lines and distributes the gas into distribution lines for the areas they serve. Should the new standards be approved, the regulating station will likely be moved up the



THE RIGHT OF WAY EDUCATION FOUNDATIONS 1999 ROADRUNNER CLASSIC

Friends of the Right of Way International Education Foundation and Canadian Right of Way Education Foundation are hosting a golf tournament on June 23rd in Albuquerque, New Mexico In conjunction with the 1999 Annual International Education Seminar. The tournament proceeds will benefit the Foundations for use in developing educational materials and promoting professional development for the right of way profession.

We are seeking companies, agencies, and individuals that would like to help make this tournament a big success by signing up for one of the seven levels of sponsorship or donating prize items. Sponsor names will be displayed at the tournament as well as the Seminar site so we may recognize and show our appreciation to those who contributed.

We are expecting 144 golfers. Sponsorship is a great way to get name recognition in the right of way field and benefit a very worthwhile organization at the same time. Special recognition will be given to the Diamond. Gold and Silver contributors at the Seminar Site and at the Golf Course.

1999 ROADRUNNER CLASSIC Sponsorship Form

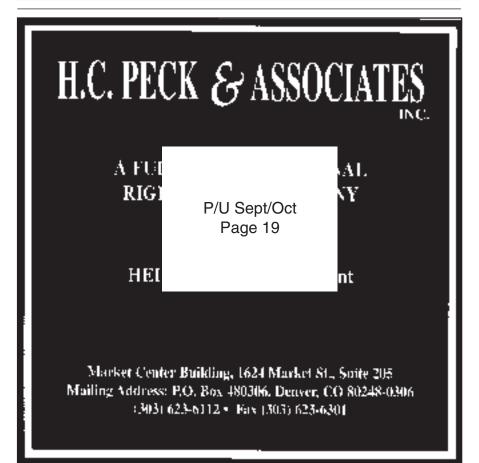
	Diamond	\$1,500
	— 🗆 Gold	\$1,000 to \$1,499
	□ Silver	\$500 to \$999
	🔲 Scoreboard Sponsor	\$750
	Hors d'oeuvre Party Sponsor	\$ <i>6</i> 00
	Hole in One Sponsor	\$500
		\$300

nank you in advance for your generous support. If you have any questions, please call Dennis Werkmeister at 612-887-1735. Please indicate your response by Wednesday, June 9, 1999. Make checks payable to RWIEF, and detach and return this form to: RWIEF c/o Dennis Werkmeister, Enron Corp, 1600 West 82th Street, #210, Minneapolis, MN 55431



Mustang Engineering, Inc. P. O. Box 4848 Monroe, Louisiana 71211 (318) 322-3000 Pax 316-322-3440

Mustang Engineering, Inc. 16001 Pack Ten Place, Ste. S0 Houston, Texas 77084 (715) 215-8000 Fax (713) 215-8506



canyon near Little Mountain, so that the pressure will be reduced before it gets to the residential areas. In that way, the lines may continue their service since they are considered to be in "good shape" according to Mr. Blackham. In that case, Mountain Fuel Supply (an affiliate of Questar that originally maintained the natural gas lines) would resume maintenance of them rather than Questar.

While we had him on the telephone, we took the opportunity to interview Mr. Blackham on the subject of impacts on residential areas from natural gas pipelines. He explained that most of the cases he is familiar with show no marked difference in market value of lots with natural gas pipelines as compared to those without them. However, he said that there have been cases where the pipeline has gone through the most developable portion of the lot and has, in effect, severed the buildable area. In such cases, he said that they typically purchase the entire lot.

He also explained that where an easement is taken, "it is a given that at some time in the future there will be work done" within the easement. In most cases, if work needs to be done, their company will attempt to repair or replace any damages to property or minor improvements within the easement, unless other specifications have been made with the property owner.

An example is the subdivision east of Hogle Zoo on the south side of 800 South, which has a 30-foot easement running through the rear of several lots. Mr. Blackham said that they have been very lenient about allowing property owners to put improvements on the land included in the easement (such as swimming pools or tennis courts). However, the property owners must understand that if they have to come in and tear out the improvements to work on the pipeline, Mountain Fuel Supply would not replace the improvements.

We asked Mr. Blackham if he had any personal experiences, or was aware of any study in which the question of the impact of a natural gas line easement to the remaining parcel was quantified. He said that he was unaware of any such study and that they have not gone through subdivision in the past 10 years. He said that he also would be interested in the results of such a study.

For comparative background, we spoke to George Adams of Chevron Pipeline Company about their petroleum pipelines that parallel the natural gas lines through the Emigration Oaks subdivision. He explained that they are 10.75-inch lines and the one was laid in 1949 and the other was put in around 1953. Therefore, these lines were also there before the subdivision was developed. The Chevron lines conduct crude oil into the Salt Lake Valley and are not considered a risk for an explosion. The biggest problem caused by a break on one of these lines would be the environmental hazard of an oil spill, which would be the responsibility of Chevron to clean up.

We asked Mr. Adams if he was aware of any studies relating to the impact of easements for pipelines on residential property. He said that he was not aware of any studies of that nature, but said that from his experience, there is generally no impact from such an easement. He also said that he would be interested in the results of such a study.

We made an in depth study of the lot sales in Emigration Oaks subdivision. We categorized them according to various physical characteristics. Separate charts were made for lot sales with the natural gas line and those without it, in order to assist in our study of market data showing the impact, if any, of the easement. We contacted the listing agent, Dick Moffat of the Boyer Company as well as several buyers, to verify the sales data and to interview them on their impression of the impact of the natural gas line easement.

Correlation of Market Data General Indications

The lots in Emigration Oaks range in size of about one half acre to over three acres. Topography, access, tree cover, shape and frontage vary widely on the various lots, though several lots are similar to

OUR PEOPLE MAKE THE DIFFERENCE

As one of the largest coordinated land and right-of-way acquisition firms in the nation, Universal Field Services offers unrivaled professional project experience.

Meet Linda Kitchen-Peck, strawa Project Manager

Linda Kitchen-Pack has more than 24 years of land acquisition experience including 17 years at the management level and 2% years as the Assistant Chief of the Right of Way Division for the Oklahoma Department of Transportation.

Linda's experience with Universal Field Services has included numerous assignments

as Project Man responsible for acquisition, relirelocation and oversight. In a for the oversigisurvey, mappir included the Liof Houston Dep Oklahoma Dep-Michigan, Ohio

Linda is a grad

Finance/Manap

International B



NEW FILM

Projects have contation, City : Trust. (ansas, Iowa,

ration degree in fol the re Chairman

and Chairman. El the the descention, control of the entrol of the entrol



Corporate Headquarters: PD Box 35655, Tu sa, Oklahoma 74153-0566 (918) 494-7600 • Cell Tell Free: 1-800-447-5191 • FAX: (918) 494-7650 www.ubarw.com

DIVISION DEFICES:

Tempe, A2 (602) 736-0944 * Concert, CA (925) 827-3672 * Irvine, CA (949) 251-1634 Supramento, CA (916) 554-9960 * Concerdo Springs, CD (719) 260-9645 * Brooksville, HL (352) 848-1158 Attanta, GA (770) 455-5715 * Oklahoma City, OK (405) 946-6570, 11:800-890-5237 * Salom, OP (503) 395-5002 Devini, FA (610) 971-1650 * Oallas, TX (972) 687-9154 * Houston, TX (713) 977-7770 * Kirklend, WA (425), 738-2178 AN EQUAL OPPORTUNITY EMPLOYER

GAS PIPELINE EASEMENT



each other. As previously mentioned, all but one of these lots have sold, so there is a considerable amount of market data available for study. We looked at the lot sales in a general way initially, to see if there were any apparent differences in the unadjusted averages of the two types of lot sales (with and without the natural gas easement). Our first observation was the unadjusted average of each set of sales. The sale price of all the lots without the easement has an unadjusted average of \$77,761 with 23 samples, while the unadjusted average of the lot sales with an easement is slightly lower at \$74,300 with five characteristics of the lots. These are close, considering the variety of physical characteristics of the lots. The unadjusted price per square foot of both the lots, with or without the easement, is \$1.43 per square foot. The average size of the two types of lot sales is also close. Our first impression of the general data, before adjustments, is the impact of the easement along the rear of a residential lot has little, or no, impact on the overall lot market value.

Refining the data slightly by taking out the high and low of the unadjusted averages resulted in a total sale price of \$76,476 for the lot sales without the easement and \$76,500, for those with the easement. These are very close to the same value, indicating that with refinements to the market data, the averages tend to support the concept that there is little, or no impact from the natural gas easement.

We can take the same concept several steps further by refining the average of the lots without the easement to more closely resemble the lots with the easement. Since the lot sales with the easement (Lots 36, 37, 38 and 39) are all rectangular in shape, contain over one acre of land, are wooded with oaks, have average to good access and mild to medium slopes, we took the average of the lots without the easement, which had all of these same characteristics. That narrowed the sample down to only four sales without the easement, but indicates an adjusted average of \$75,275. That is only slightly higher than the unadjusted price of all the sales with the easement of \$74,300, and less than the unadjusted average of the lot sales with the easement at \$76,500, minus the high and low. Again, after these refinements, intended to more accurately compare to the lot sales with the easement, there appears to be little or no damage caused by the natural gas line easement.

Paired Sales

Another way to make comparisons between the lots is to use paired sales of lots with and without the natural gas line easement, adjusted for any other characteristics. If done correctly, the remaining difference, if any, would indicate the impact of the easement.

We made specific adjustments to numerous paired sales for condition of sale, time, size, shape, topography, oak cover and access to refine the sale prices of the various lots to reflect a difference attributable to the gas line easement alone. We were fortunate to have many sales to work with, which enabled us to make market supported, paired sale adjustments for the various differences in the lots. However, after making several paired sale comparisons to each of the lot sales with the easement, we found no pattern indicated from the market to show the impact of the natural gas easement.

In the course of our investigation, we spoke to several market participants, including the listing agent, Dick Moffat and several of the buyers of lots in Emigration Oaks. Mr. Moffat said that the easements, for both natural gas and AT&T, did not have much impact on the absorption of the lots, but that the clearing of the right of way on the AT&T easement after the lots had been sold did cause problems. He described a specific case involving Lot 7 in which the AT&T fiber optics easement parallels the road, just inside the property line.

The lot was purchased with the easement there and no diminution of value was apparent when purchased, but then AT&T came through clearing the right of way within the easement. The path is easy to follow through the subdivision because of the long, narrow cut through the trees. In doing so, they took out some scrub oak trees on Lot 7 and caused other problems with the land-scaping resulting in a cost to cure of \$7,000. The owner was apparently very upset by that.

Another market participant purchased two lots in that subdivision, one with and one without the natural gas line easement. The most recent sale was a lot with a natural gas line easement, Lot 39. We verified the sale with him. He said that he purchased the lot for \$83,000, cash and that he felt it was an arm's length transaction (or market value). He bought another lot without the natural gas line easement for \$88,000, Lot 32. These lots are similar in most characteristics. They were purchased only three months apart, in late 1990.

Mr. Dean, did not feel that the natural gas line easement had any bearing on the value paid for Lot 39 and that difference in value was attributable to other physical characteristics. Our comparisons of that lot with other sales were inconclusive as to the impact of the easement on lot values, so most weight is given to the opinion of the buyer that the pipeline did not impact his price paid for Lot 39.

Lot 38 is adjacent to Lot 39 and has the same easements along the rear portion. It sold in September 1988 for \$84,000, cash. We compared the lot with several sales that most resembled it, but the market evidence did not show any impact of the easement. It supports the price paid for Lot 39.

Lot 37 is another lot with the natural gas line along the rear. It is a corner lot that sold to an architect in June 1986 for \$76,500, cash. The buyer said that the price was discounted down from \$85,000 for cash and he was trying to resell it again for \$85,000 in January 1991. He explained that he wasn't selling it because of the pipeline, but because of personal conditions. He hoped to be able to build if things still work out for him. The owner explained that he was careful to make sure that the improvements he planned for the lot (including a three-car garage) would fit with the gas line before buying that lot. He had no problem working around the easement and he felt it had no impact on its value.

The owner is quite happy with the

lot and feels that he paid market value for it. He said the clearing along the easement improved his view down the Canyon and that the deer came along the easement past the lot. Our comparisons of the lot with other paired sales were inconclusive. Therefore, most weight is given to the buyer's opinion that the high-pressure gas lines had no



impact on its value.

We later contacted that owner to see if he was successful in marketing his lot. He told us he had, indeed, sold the lot in June 1991 for \$85,000. That was 11 percent higher than what he had paid for it five years earlier. He said that the lot sold without much difficulty and with no impact caused by the pipeline. The new buyer was fully informed about it and had no concerns.

Lot 36 is the last sale of a lot with the natural gas line easement we were able to find. The most recent sale of the lot occurred in October 1987. It sold at that time for \$70,000, cash, appreciating 20.69 percent in two years, or 10.34 percent per year from a previous sale of the lot in November 1985 for \$58,000. The lot has the natural gas easement across one rear corner and the AT&T easement along another property line. We compared it to other lot sales that are similar to it in most physical characteristics and closest to the same sale date. There were no patterns showing any impact from these easements.

The remaining lot with the natural gas line easement in the rear is Lot 40. It sold, but both the seller and buyer declined to disclose the price. However, the buyer is an appraiser and head of the loan operation of a major local bank. He allowed us to ask his opinion of the impact of the easement on what he paid for the lot. He explained that he paid the market value of the lot in his opinion and that existence of the natural gas line easement along the rear of the lot caused him no concern and had no impact on the amount paid.

Summary and Findings

The Block "U" Tomahawk Drive study shows no damage to high end acreage or lots next to a high-pressure gas line either before or after publicity about the Kern River line.

The Emigration Oaks study had an abundance of market data available. The general market data, with both unadjusted and adjusted averages, indicates no impact resulting from the natural gas line easement. The market data is inconclusive when paired sales are used and adjusted for other variable factors. That very point indicates that the pipeline is not a distinct issue for buyers in the lresidential market.

There is not enough emphasis given the easement by enough people in the market to be able to derive specific adjustments for it. Even when all factors are precisely adjusted for except for the easement, no damage is apparent from a variety of examples for residential property with a natural gas line easement that runs along the rear of a residential lot. The "no impact from the easement" concept is supported by the interviews with buyers of lots with the easement who by common consent agree that the natural gas line easement has no impact on the market value of the lots in the subdivision.

Contact was made with the seller or seller's agent on all sales. Contact was made with the buyer from three of the five lots with the natural gas easement. In those cases, the buyer claimed to be able to work around the easement and that its existence did not damage the lot value. That view is also supported by interviews with Questar and Chevron representatives.

Inversely, if an easement infringes on the buildable portion of a subject lot, or runs along the front of a lot, damages might appear, based on the opinions of the Questar and Chevron Pipeline representatives interviewed at the outset of the Emigration Oaks study. That position is supported by the views of Dick



ROSTER OF Approved Appraisers

The Florida Department of Environmental Protection, Division of State Lands, Bureau of Appraisal, invites interested appraisers to be listed on its roster of approved appraisers for appraisal activities in the State of Florida. Minimum qualifications are 1) that

the appraiser hold a professional designation membership in an approved appraisal organization (approved appraisal organizations are those which are **appraisal sponsors** of the Appraisal Foundation) and) holds an active, current Florida real estate appraiser's license.

INTERESTED APPRAISERS MAY APPLY TO: John A. Santangini, MAI, SRA Florida Department of Environmental Protection Division of State Lands, Bureau of Appraisal 3900 Commonwealth Boulevard, M.S. 110 Telephone: 850.488.9025 Fax: 850.922.6233



The 1999 Officers of the Foundation Board of Trustees are:

Chair James Van DerWerff, Omaha, NE Vice Chair J. Michael Hill, Dallas, TX Secretary Tharrell Ming, Bakersfield, CA Assistant Secretary D. Allan Beatty, Saskatchewan, Canada Treasurer John F. Fiene, Fort Wayne, ID Assistant Treasurer Robert Tarvin, Arroyo Grande, CA Moffat of the Boyer Company as well as our own. The only evidence from the market is the apparent cost of \$7,000 (or 9 percent of the sale price) as a cost to cure the landscaping impact of the AT&T easement in the front portion of Lot 7.

Damages for specific lots would have to be estimated on an individual basis. If a lot is ruined for development by the location of the pipeline in the buildable area, it should either be purchased in fee simple or damaged down to undevelopable land values, the difference in the before and after value being the compensation due. If the pipeline is at the rear of a site, or located so as not to disrupt the developable area, then we feel that no damages occur to the remainder. That assertion gives the most significance to the Emigration Oaks study.

Dr. William N. Kinnard, Jr., President of the Real Estate Counseling Group of Connecticut, Inc. (REGC), reviewed our studies. He had been making an in depth multiple regression study of 1,171 sales of houses in 10 towns within one-half mile of three natural gas pipelines in Southern Connecticut. His firm used a 100 percent sample of all reported sales between January 1986 and February 1991. The high-pressure pipelines were built in the 1950s. One pipe was 26 inches in diameter. One was 30 inches and the other was 16 inches.

Dr. Kinnard's study (Measuring Residential Price Impacts from Proximity to Natural Gas Transmission Lines, REGC Inc., June 1991.) showed no difference in results between properties that abutted the pipelines and properties up to 200 feet distant. Our research was referred to in Dr. Kinnard's work. He concluded that, "It is highly likely that the research findings and conclusions developed in this market research study are transferable to other market situations involving proximity to an existing or proposed high-pressure natural gas transmission line. The conclusion stems from the generally consistent, stable and statistically robust results of the market research analysis."

Therefore, we maintain that no damages exist for residential property from proximity to typical high-pressure natural gas transmission lines. ■

President of Lang, Smith & Boice, Inc., William Lang is an independent fee appraiser and Certified General Appraiser in the state of Utah. A graduate of Stanford University with more than 30 years experience in real estate appraisal, Mr. Lang is an IRWA instructor and member of IRWA Chapter 38.

Vice President of Lang, Smith & Boice, Inc., Brett Smith is an independent fee appraiser and Certified General Appraiser in the state of Utah. A graduate of the University of Utah, Mr. Smith is a member and past officer of IRWA Chapter 38.

Paragon New Film