Pipelining Ain't What it Used to Be

Preliminary Field Activities

by John D. Cale

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The specific requirements of pipeline route selection, survey and right-of-way acquisition vary from region to region and project to project. Methods associated with a coal slurry pipeline in the Western plains are quite different than the methods used in the environs of Baltimore and Washington, D.C. This article is not intended to offer a cookbook recipe with a guarantee of success. It is intended to emphasize the changing requirements of preliminary field activities associated with pipeline route selection, survey and acquisition.

Route Selection and Survey

In the old days the pipeline surveyor may have picked one of the locals at the crossroads general store and used this person as the front man for property owner determination and/or contacts for permission to survey. In the past, surveys in eastern Kentucky and southern West Virginia required a unique awareness on the part of the surveyor. When crossing certain ridges or hollows, the first group of local hands were replaced with kin folk of the family in control of the next territory in order to steer the survey away from the local moonshine operations.

Today, the engineer, surveyor or right-of-way agent is faced with attorneys, developers, mine operators, land owner groups, environmentalists, state, local or federal agencies as part of the process of determining the preliminary route, determining ownership and receiving permission to survey. These first exposures of the public to the pipeline project are critical to the success of a project. The initial contact is frequently made by the surveyor or right-of-way agent. These initial contacts must be made by a person who is knowledgeable, maintains a concern for the rights and interests of the property owner and knows what statements or commitments can or cannot be made. This person must be prepared to respond to questions such as: will the contractor build me a pond, can I get gas service from the line, how will I be paid if my bull gets out and is killed, can the line be relocated for my new house or subdivision, how much will it cost, who will pay. Our engineers, surveyors and right-of-way agents dealing with these situations have been shot at, spit on, swore at and loved. The person responsible for initial contact very often is responsible for the public attitude for the duration.

Many projects require on-the-ground investigations by archaelogists and environmentalists. Permission to conduct these field investigations is best handled when the need arises. Why confuse the land owner by telling him that in addition to the route survey, you would like to have his permission to dig a few holes or maybe excavate a potential site as part of an archaelogical survey.

Having received permission from the land owner or in extreme cases the courts to enter the property, the field survey can begin. Some organizations conduct the field survey prior to right-of-way acquisition, others purchase right-of-way using an office determined route supplemented by aerial and/or ground reconnaissance. Either method ultimately leads to a field stake out.

If you are not already aware, you are now informed that pipeline surveyors or engineers responsible for the field stake out are a breed apart. The skills required for effective pipeline route selection and survey are offered only in part by colleges of engineering. Effective pipeline route selection requires knowledge of and experience in pipeline construction technology, soils, surveying, law, the environment, early cultures and public relations. The pipeline surveyor must enjoy working with people, working out of doors and be able to provide convincing expert testimony. In the old days, the

surveyor was required to at least be able to run the compass and keep the notes after a hard night. Today's pipeline engineer is better educated, must possess varied technical skills and be generally more sophisticated.

Today's pipeline routes, whether developed from aerial photography or field surveys, are the basis for exhibits prepared for government lands, private lands, stream and river permits, road permits, railroad permits, alignment sheets, profile sheets, environmental exhibits, archaelogical exhibits, condemnation exhibits, most of which weren't required in the past.

Survey methods should be consistent with land values and exhibit requirements within the project area. Engineers or surveyors experienced in pipeline route selection should be capable of making judgements concerning the level and amount of field survey data necessary to prepare the required reports and exhibits. Engineering labor costs, acquisition costs and construction cost savings will result.

Public Relations

Public relations in the 50's was a five line article in the second news paper section under the obituaries. Pipeliners in the 60's and 70's experienced a new public awareness and in some cases hostility toward their industry. We were exposed to environmental concerns, historical concerns, economic concerns, energy concerns, safety, etc. The industry's excellent record is generally ignored and we are expected to satisfy everyone's whims. Public relations in the 80's can best be handled by maintaining a low profile, but at the same time giving consideration to the public needs and concerns. Large public meetings are not recommended.

Public meetings provide a forum for radicals and obstructionists who generally disregard the rights of others. The pipeline project should be presented in a controlled environment which can be beneficial to all parties. Controlled introduction of the projects to the public and various agencies is absolutely necessary. Early contacts of public agencies and organizations should be made in order to explain the scope, purpose and impact of a project.

Title Work

Surface rights must be determined after the preliminary route or corridor is established and prior to the field survey. In some jurisdictions, the subsurface owners also have certain approval power and these rights must be dealt with. In the old days we may have simply asked the resident who owned the adjacent property. Today this work is much more complicated. Surface rights are frequently controlled by absentee and/or corporate owners located anywhere in the world. Contacting these owners for permission to survey and negotiation for right of way is becoming more and more costly. County tax records continue to be one of the most convenient sources of ownership information and as the study corridor is finalized, limited abstracts may also be required to determine fee interests. The ownership research must identify previously granted easements or right of ways, liens and encumberances. Title work associated with major fee and lease sites such as compressor stations or major points of delivery requires extensive time and effort and in many cases title insurance is recommended.

Descriptions of the various parcels should be plotted and a complete ownership map with the pipeline study corridor indicated prepared. In the past, this work required large numbers of drafting personnel. Today's graphic computer technology can provide alignment drawings and tract maps showing the right of way take and residue with descriptions. I am aware of projects in which all the property information and pipeline alignment was set up in the computer using aerial photography and public land records, the right of way purchased and permits applied for before the survey crews were on the ground. The facility stake out was completed just days ahead of construction. This method will not, however, work in areas with tangled titles, poor deed descriptions, rough terrain or sensitive environments. Thorough ownership research is critical to the reduction of construction delays, unnecessary condemnation and/or acquisition costs.

Other Facilities

Preliminary field activities also include determining the location of foreign underground facilities and other obstructions. These facilities may have been located with a ditching machine in the past. Today the pipeline engineer's first step is to locate other facilities within the scope of the project. Several states require participation in one call systems which require designers, contractors and operators of underground facilities to advise each other of the existence of underground facilities in the vicinity of a project, to request a facility stakeout and to show the facilities on the appropriate drawings. The second step should be a contact of the operators of underground facilities by the construction contractor in order to confirm the facility locations at the time of construction. The cost of any disruptions of service or tragedies associated with dig-ins far exceed the cost of prevention.

Easement Descriptions

Easement descriptions, whether baseline or perimeter, are subject to considerable debate. Some hold that the description should be general to the extent that the pipeline, as constructed, establishes the easement location. In times past, the easement description only included the property owner names on the north, south, east and west with no specified width. Currently there is considerable pressure by engineers, surveyors title examiners, et al. to adopt guidelines for perimeter metes and bounds descriptions for all easements. Monumentation of all easements and the public recording of all survey information and drawings is recommended by the American Society of Civil Engineers (ASCE) and the National Society of Professional Surveyors (NSPS). If the ASCE and NSPS guidelines are adopted by the gas transmission pipeline industry, our right of way survey costs would increase at least ten fold. The Interstate Natural Gas Association of America (INGAA) whose members operate over 200,000 miles of gas transmission pipelines, support survey and description methods consistent with relative land values within a project area but have voiced strong opposition to the ASCE position of recommending monumentation of the limits of all easements or rights-of-way; surveys to delineate the remainder of residue tracts; descriptions being prepared only by engineers or surveyors blessed with a local registration; and the concept that right-of-ways create new boundary lines. Neither the IRWA Pipeline Committee nor the International Executive Committee endorse the ASCE guidelines. International did endorse a seminar in San Antonio as a forum to discuss the ASCE guidelines, but not the guidelines themselves. The pipeline industry cannot justify nor tolerate unnecessary costs in today's competitive market.

The pipeline industry recognizes that today's land owners are more sophisticated and the land values are increasing. Often owners are represented by attorneys. Owners frequently demand specific descriptions, drawings, location approval and detailed reclamation plans. Our industry can best satisfy these requirements on a case by case basis without being strangled by guidelines and regulations.

Files

Major pipeline projects require ready access to information associated with ownership, chain of title, restrictions, status of permits, etc. These files can be manual or automated, original or microfilm, but they must be complete and well maintained. Effective information management is the key element of cost effective service to a client or completion of company owned projects. Today's right-of-way services market will not tolerate the time consuming labor intensive methods of the past.

Project Management

The final recommendation for a successful pipeline project is to establish control through effective project management in the preliminary stages. Schedules and progress reporting methods must be established. Early implementation of this concept is critical to effective route selection, survey, acquisition, design and construction of a pipeline project. The complexity of today's projects eliminate the seat of the pants or blow and go approach of the old days. I think we are all much better off.

Final Location

The "final" location as determined by engineering studies and easement acquisition considerations is the first stage of facility siting but certainly cannot be considered the last. Twenty years or more ago, pipeline routes were based on engineering and acquisition considerations. Today the route of a facility is influenced by Snail Darters, Eagles' Nests, Black Footed Ferrets, Indians, Indian ancestors, flowers, politicians, bureaucrats, historical societies, funeral directors, air samples, water samples, soil samples, and economic models. The list goes on and on. Today's complex requirements associated with the final routing of a facility are best satisfied when the routing is accomplished by an organization maintaining an awareness of the current regulations and codes of the various agencies or groups which have an impact on routing. Active files describing the requirements of permitting agencies must be maintained.

Preliminary contact should be made to introduce the project to private and public agencies. However, the pipeline designer or operator should have an indepth understanding of the appropriate regulations and should not be caught in the trap of asking an agency what is necessary in order to receive a permit. Public agencies are frequently under the pressure of special interest groups and may require information, reports or hearings in excess of the codes. I am aware of archaelogical surveys being required by an agency simply because the approval of the pipeline construction permit provided a convenient means of forcing the pipeline operator to conduct an archaelogical survey in an area where previous archaelogical data did not exist. It may interest you to know that the $40,000 archaelogical survey didn't provide evidence of one significant site. But, it did add to the cost of natural gas.

I strongly recommend that those persons involved in environmental and permitting decisions have a detailed first-hand knowledge of the regulations affecting a project and not depend on the respective agencies to dictate activities they feel are in the public interest. Depending entirely on the agencies frequently results in problems associated with overlapping jurisdiction, intra-agency politics, etc. If you elect to short cut your preliminary work in today's environmental or permitting situation, your project will surely experience unnecessary delay. Time is money.

Determination of Value

Determination of land values as a basis for right-of-way and damage compensation can be the result of experience in the project area or contract appraisals. The individuals involved in acquisition must know the area and the people.

The agent should be prepared to consider and discuss soil conditions, current crop damage, long term crop damage, hunting, wildlife, streams, soil erosion, sedimentation, land development, individual safety, safety of domestic animals, irrigation, timber, drain tile, access roads, dust, noise, right-of-way maintenance after construction, water wells, litter, fences, pipeline depth, etc. If these and a multitude of other questions are not addressed to the satisfaction of the property owner or his attorney, the right-of-way agreement may not be executed. The cost of time and effort spent in satisfying the concerns of the land owner and determining the true economic impact on the property is money well spent. The number of condemnations will be reduced, and construction extras will also be reduced. Spending a few dollars to establish a fair right-of-way agreement is certainly less expensive than construction extras and completion delays. The days of $3/rod right-of-ways are gone.

The preliminary activity of determination of land values is critical to a cost effective acquisition project. Right-of-way agents, please don't give the land owner the right to pick a pipeline route across the property. He will invariably want it 10' off the property line and through the swamp or in the other locations requiring special construction methods or fittings. These routes can double or triple the per foot cost of construction. I had to establish a pipeline route 5 feet off the property line and the property line location had never been determined. We found ourselves in the midst of a property line dispute.

Tenant *(cont. from pg. 14)*

Title to the property is transferred by Quitclaim Deed with attached inventory or by bill of sale with attached inventory, depending on the nature of the property to be acquired. The Quitclaim Deed is used for property more closely resembling real estate while a bill of sale is used for those items that resemble personalty.

In summary, early identification of acquisition with tenant owned improvements, a clear explanation to the owner and tenant on the tenant owned improvements concept, and an early, accurate, agreement between the owner, tenant or tenants, and the Department on what constitutes the tenant owned improvements is the key to the acquisition of a property with tenant owned improvements.