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.