

ALBERTA ENERGY AND UTILITIES BOARD

Calgary Alberta

APPLICATION BY AEC WEST LTD. FOR PERMIT TO CONSTRUCT A NATURAL GAS PIPELINE IN THE LA GLACE/SEXSMITH AREA

**Decision D 96-10
Application No. 960589**

1 INTRODUCTION

1.1 Application

AEC West Ltd (AEC West) applied to the Alberta Energy and Utilities Board (EUB) pursuant to Part 4 of the Pipeline Act for a permit to construct approximately 1.89 kilometres of steel pipeline with an outside diameter of 114.3 millimetres. The pipeline is to transport sweet natural gas from two wells located at Legal Subdivision 4 of Section 20, Township 74, Range 7, West of the 6th Meridian (Lsd 4-20-74-7 W6M), and Lsd 6-29-74-7 W6M to a tie-in point to an existing pipeline at Lsd 9-29-74-7 W6M.

1.2 Interventions

Mr. and Mrs. Walter Pol (the Pols), who own the land in question, submitted an intervention to the application. The Pols expressed a concern with past construction activities and were objecting to the addition of more pipelines on their property until satisfactory conditions regarding erosion prevention and top soil protection were agreed upon.

1.3 Hearing

A public hearing was originally scheduled to commence 14 August 1996. In response to a request to re-schedule the hearing to allow for additional preparation time, the Board directed the hearing be re-scheduled to commence 20 August 1996 in Grande Prairie, Alberta. The application was considered by Board members B.F. Bietz, P.Biol., G. Miller, and acting Board member K.G. Sharp, P.Eng.

Those who appeared at the hearing are listed in the following table.

THOSE WHO APPEARED AT THE HEARING

Principals and Representatives
(Abbreviations Used in Report)

Witnesses

AEC West Ltd. (AEC West)
P. Quinton-Campbell
R. B. Brander

A. Johnson
G. Schulhan
J. Biegel
I. McNary

Mr. and Mrs. Walter Pol (the Pols)
J. D. Carter

Mr. Walter Pol

Alberta Energy and Utilities Board staff
D. Garvin
M. Vandenbeld

2 ISSUES

The Board considers the issues respecting the application to be:

- the need for the pipeline,
- the pipeline route and tie-in point,
- environmental impacts, and
- construction methodology.

Each issue is addressed in the following sections.

3 NEED FOR THE PIPELINE

3.1 Views of the Applicant

AEC West stated that the pipeline is needed to transport natural gas from two gas wells, producing from the Bluesky formation, located in Lsd 14-20-74-7 W6M and Lsd 6-29-74-7 W6M respectively. The pipeline would transport the natural gas to a tie-in to the existing Saddle Hills sweet gas gathering system at a point in the NE $\frac{1}{4}$ of Section 29-74-7 W6M and would permit AEC West to produce reserves which it believes are being drained by other producers in the area.

3.2 Views of the Intervener

The Pol's did not question the need for the proposed pipeline.

3.3 Views of the Board

The Board is satisfied that there is a need to produce the reserves from the subject wells and that a pipeline is needed to transport the natural gas.

4 ROUTE AND TIE-IN POINT

4.1 Views of the Applicant

AEC West submitted that it had attempted to negotiate a right of way and had re-surveyed the proposed pipeline route three times in order to accommodate changes requested by the Pols. These changes, AEC West said, included agreement to an underground tie-in to the 219.1mm main gathering line in order to accommodate the Pols' farming operations. When questioned, AEC West stated that it preferred, from a safety, access, and maintenance point of view, that the tie-in and valve be located above ground.

While not necessarily a routing concern, AEC West stated that it had received a complaint from the Pols concerning the depth and number of survey pins associated with the three pipeline surveys. AEC West submitted that the survey pins are part of a legal survey which is governed by the Canada Survey Act and are required when there is a deflection in the pipeline right of way direction. AEC West acknowledged that an unusual number of survey pins were used due to the numerous surveys conducted and that some survey pins, due to winter conditions, may not have been buried deep enough into the clay subsoil. AEC West committed at the hearing to identify and remove from the Pol's land those survey pins not required by legal statute or deemed necessary in identifying the proposed pipeline right of way.

4.2 Views of the Intervener

The Pols submitted that the reason they requested changes to the proposed route of the pipeline was due to their concern that the original surveyed route would disturb existing topsoil which had been stripped from and stored at each wellsite. They felt that this would result in mixing of the top soil and sub-soil and thus defeat the purpose of the soil storage. The Pols provided photographs indicating survey pins at or close to the surface and indicated that these represented a significant risk to their farming operations.

The Pols stated that they were concerned with erosion and the impact of run-off from a slough area in the NE¼ of section 29 and suggested that the pipeline tie-in point should be located south of an existing drainage ditch. They cited their experience with the previous pipeline crossing in the quarter section and provided additional photographs showing the erosion caused by the pipeline construction and the impacts on their land. They were concerned that the proposed

routing would again exacerbate this problem. The Pols did not comment or provide any advice on their preference for a surface or subsurface tie-in. At the conclusion of the Pol's evidence they did indicate that they were prepared to meet with AEC West personnel on site to discuss potential routing issues and location of the tie-in point.

4.3 Views of the Board

The Board notes that AEC West did attempt to discuss possible routes with the Pols and revised its original pipeline route a number of times in order to accommodate concerns raised. The Board agrees that any routing of the pipeline should avoid the soil storage pits at the two well sites and that it should take into account the special site specific drainage concerns raised by the Pols. The Board acknowledges that following the hearing both parties visited the site and subsequently advised the Board that they had come to an agreement as to the location for an above ground tie-in and the routing near the drainage ditch.

With the evidence submitted at the hearing and the subsequent communications by both parties confirming agreement on tie-in and routing, the Board is satisfied that the routing is appropriate. With regards to the matter of the improperly placed survey pins, the Board expects AEC West to honour its commitment to identify and remove those survey pins which are not required and to make whatever corrections are necessary to the remaining pins to ensure there is no impact on the Pol's farming operation.

5 ENVIRONMENTAL IMPACTS

5.1 Views of the Applicant

AEC West conceded that there have been erosion problems from two previous pipeline projects in the NE¼ of Section 29. AEC West stated that factors such as soils susceptibility to erosion, uncharacteristic spring weather conditions, slope of the land, top soil restoration delays, and the failure by the original contractor to complete the project, when combined, all contributed to the erosion problem. AEC West confirmed that these erosion problems are the subject of two Alberta Environmental Protection (AEP) Conservation and Reclamation Notices, CR0125 and CR0552 which require specific remedial actions. AEC West submitted that they have complied with the first notice and were in the process of complying with the second.

AEC West stated that it believed that erosion problems similar to those which had occurred in the NE¼ of Section 29 would not occur on this project because the land has less relief and the location is situated away from the drainage area to the north-east. AEC West also committed to having an environmental consultant on location until completion of the pipeline construction and stated that it intends to closely monitor the pipeline right-of-way this spring (1997) for erosion problems.

When questioned about weed control methods, AEC West acknowledged that there was a previous problem with weed infestation on the NE¼ of Section 29 pipeline right-of-way and

lease access roads on the Pol's land. AEC West stated that they have adopted and currently administer a regional weed policy that was developed by the former Conwest Exploration and that this policy would be applied to this pipeline project.

5.2 Views of the Intervener

The Pols provided pictorial evidence of weeds, uneven construction, top and sub-soil mixing, and erosion problems that they experienced on the previous pipeline project by AEC West in the NE¼ of Section 29. The Pols expressed a concern with their dealings to date with AEC West and noted that AEC West's weed policy was not working on their land. The Pols stated that their experience with the previous pipeline project in the NE¼ of Section 29 did not give them any confidence that the same situations would not be repeated. In closing argument, concerns about the administration of environmental guidelines and an apparent gap in requirements for environmental protection were also raised.

5.3 Views of the Board

The Board recognizes AEC West's views that a number of unforeseen factors led to the erosion problems experienced in the NE¼ of Section 29 and that the proposed new pipeline would be within an area that differs in both topography and drainage. However, the Board is concerned with the extent of erosion which was allowed to develop on the Pol's land and that the company apparently had not identified the unique features of the previous location or closely monitored the route after construction. The differences associated with this project do not eliminate any potential for erosion problems given the right mix of conditions. AEC West's commitment to have an environmental consultant on location during construction and to closely monitor the right-of-way this spring (1997) will help minimize any impacts, but the Board believes that AEC West must consider all contingencies prior to commencing construction and have a plan in hand. The Board also expects AEC West to comply with any conditions outlined in the Alberta Environmental Protection Conservation and Reclamation Notice CR0552 and to work more closely with the local Conservation and Reclamation officer to minimize future problems.

The Board was also concerned about the apparent lack of knowledge by the witnesses for AEC West of specific documents outlining environmental requirements for the construction of pipelines such as AEP's Guide For Pipelines. The Board expects industry to become familiar with all aspects of these documents when they indicate in their application that the pipeline or facility will be built in accordance with AEP's environmental guidelines and to take responsibility to ensure that their project has minimal impact on the surface owner. Notwithstanding the problems with the previous pipeline on the Pol's property, the Board is satisfied that sufficient and clear guidelines and requirements exist, both through the EUB and AEP, so that a responsible and careful operator who is concerned about its impact on surface owners can construct the pipeline with minimal environmental impact.

The Board recognizes that the Pols have experienced past problems with weed control on previous projects, however, the Board feels that this issue would be best addressed by having

both parties consult with the local Conservation and Reclamation officer concerning the site specific conditions and operating procedures that are causing the problem to occur.

6 CONSTRUCTION METHODOLOGY

6.1 Views of the Applicant

AEC West indicated that industry standard pipeline construction practices would be used for this pipeline project and that it would prefer to construct when soil conditions are dry and non-frozen. Construction in its view would take approximately one week. When questioned as to the method to be used for crossing the North/South drainage ditch within the NE¼ of Section 29, AEC West committed to boring the crossing. AEC West also stated that an 18 metre pipeline right-of-way would be adequate to contain all construction activity related to their pipeline project.

When questioned about construction practices, particularly the three lift stripping methodology outlined in AEP's Environmental Protection Guidelines, AEC West submitted that the applied for pipeline would be categorized as a Class 2, with no soil survey required, and that three lift stripping would not apply in this case. AEC West stated that there currently is no legislative requirement to conduct soil surveys on pipelines that meet Class 2 requirements.

6.2 Views of the Intervener

The Pols expressed a concern with the inexperience of construction workers which they believe has contributed to problems during pipeline construction. The Pols stated that they would prefer that pipeline construction not take place during periods of rain or when conditions are muddy and that AEC West should use a boring technique to cross the drainage ditch and the North/South shelter belt that borders the West and East half of Section 29. The Pols also noted that the company had been unable to carry out all pipeline construction activities within the surveyed right-of-way for earlier pipelines.

When questioned if they had any suggestions as to soil handling methods for the proposed pipeline, the Pols stated that AEC West should use "buggies" to strip the top soil, store the top soil at one of the well site leases and then strip all the sub-soil and also haul this to one of the leases. The Pols also stated that they feel a more formal regulated process is required to provide environmental protection, particularly soil protection for "non-regulated" (Class 2) pipelines and in closing arguments asked the Board to address this perceived shortcoming.

6.3 Views of the Board

The Board accepts the general construction philosophy proposed by AEC West and expects that the proposed 18 metre right-of-way should be adequate for the planned construction. The Board, however, disagrees with AEC West on the interpretation of AEP's Environmental Protection Guidelines as they relate to Class 2 pipelines. Although Class 2 pipelines are generally exempt

from a formal application and review process, they are still required to be constructed in accordance with the guidelines. The guidelines state that it is highly recommended that the operator conduct a soil inventory to guide soil salvage and to provide documentation that would assist reclamation. Once this has been done an operator would be better prepared to evaluate if a three lift method would be necessary. The Board notes that for short length pipelines, many operators may not be doing complete soil inventories, however, operators would be expected to have examined the site to the degree that is necessary to satisfy themselves that their soil handling procedures are appropriate and will minimize impact and to have discussed this conclusion with the local land reclamation officer of AEP prior to any application being made to the EUB for a permit to construct.

Regarding the issue of soil handling/stripping, the Board believes that the soil stripping and handling technique suggested by the Pols' would in fact result in excessive soil compaction and increased handling and construction time and probably result in more impact than the traditional soil handling technique. The Board would therefore expect AEC West to use a soil stripping/handling method that is consistent with the soil conditions that would be present during construction. The Board also expects AEC West to factor in changing climatic conditions which could occur during the construction phase.

7 DECISION

Based on the evidence provided, the Board is satisfied that there is a need for AEC West's proposed pipeline, that it meets all of the Board's regulatory requirements, and that it would be in the public interest. The Board notes and expects AEC West to carry out the undertakings made at the hearing. The Board therefore approves the application and directs that the appropriate permit be issued.

DATED at Calgary, Alberta, on 21 October 1996.

ALBERTA ENERGY AND UTILITIES BOARD



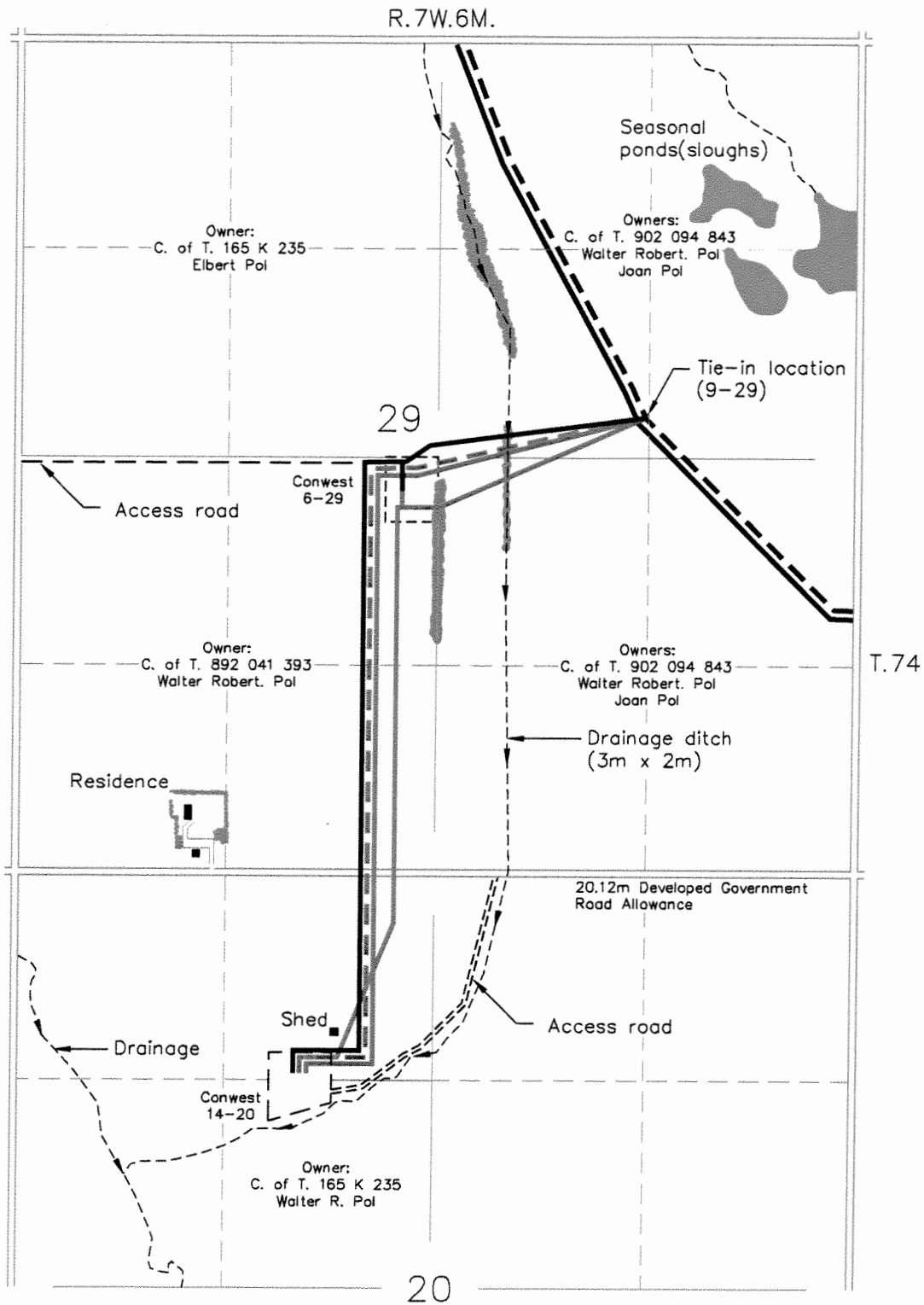
B. F. Bietz, Ph.D., P.Biol.
Board Member

G. Miller
Board Member



K.G. Sharp, P.Eng.
Acting Board Member

* Gordon Miller was not available for signature but concurred with the decision.



La GLACE - SEXSMITH AREA
 Application No. 960589
 AEC West Ltd.

D 96-10
EUB

Legend

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|-------|-----------------------------|-------|-------------------------------|
| ————— | Original route | ----- | Existing 15m AEC West P/L R/W |
| ————— | Revision May 7 | ————— | Existing 18m AEC West P/L R/W |
| ————— | Revision May 23 | | |
| ----- | Applied for route August 29 | | |