TABLE OF CONTENTS

EXECUTIVE SUMMARY

Introduction and Project Description

Provident Energy Ltd. (Provident) is proposing to build, own and operate, an approximately 9.8 km long, 8 inch (219.1 mm) O.D. pipeline to transport natural gas liquids (NGL) from a proposed facility in LSD 13-17-10-28 WPM to a proposed Enbridge pump station in LSD 06-20-09-28 WPM. (Figure 1.1). The proposed Provident pipeline will have a capacity of 200 m^3/hr to 300 m^3/hr.

A proposed new pipeline from the proposed Enbridge pump station in LSD 06-20-09-28 WPM will travel approximately 700 m across cultivated land to an existing Enbridge facility in the SW ¼ of Section 20-09-28 WPM. As per Manitoba Conservation, this proposed 700 m Enbridge pipeline will not require an Environmental Act Licence and therefore is not included within the scope of this Environmental Assessment.

Construction is scheduled to begin as soon as regulatory approvals are obtained (anticipated in mid 2011) and the proposed pipeline is planned to be in-service by the fourth quarter of 2011. Pipeline construction is anticipated to occur during non-frozen soil conditions but Provident has provided for alternative measures should frozen conditions be present.

The following provides a brief summary of the Project.

Regulatory Process

The Project constitutes a Class 2 development as a pipeline which is greater than 10 km in length and/or in areas sensitive to environmental disturbance as defined by the Classes of Development Regulation under the Manitoba *Environment Act* (MEA). It is Provident's understanding that the filing of an Environment Act Proposal Form (EAPF) under the MEA initiates the formal regulatory review process.

Provident anticipates that the Project may be reviewed under the provisions of the *March 2007 Canada/Manitoba Agreement on Environmental Assessment Cooperation*, and Provident would welcome such a cooperative process. The EA will outline other regulatory and legislative approvals required for Project implementation.

This EA includes:

1.0 Introduction: Provides a description of the need and justification for the Project, background information pertaining to the Project, the regulatory framework and the purpose of the document.

2.0 Project Description: Provides a description of the Project components, alternatives to the Project and Project phases.

3.0 Public Consultation: Provides a summary of public involvement activities associated with the preparation of the EA consisting of consultation with provincial and municipal government agencies, nongovernment organizations (NGOs) and other interested parties, where required. Also identifies key environmental and socio-economic issues raised during the consultation program.

4.0 Routing and Siting: Provides a detailed description of the route and site selection process, as well as a brief description of the route options considered.

5.0 Environmental and Socio-Economic Setting: Provides a description of the current environmental and socio-economic conditions present along the proposed pipeline route.

6.0 Environmental and Socio-Economic Effects Assessment: Describes the effects assessment and identifies the potential environmental and socio-economic impacts, mitigation measures and predicted residual effects as well as an assessment of their significance.

7.0 Cumulative Effects Assessment: Provides a description of the potential cumulative effects as well as an assessment of their significance.

8.0 Inspection, Monitoring and Follow-up: Provides a description of the environmental inspection and monitoring policies to be applied during the construction and operation of the proposed Project as well as the proposed follow-up program, if warranted.

9.0 Supplemental Studies: Provides a description of the plans to address knowledge gaps and carry out supplementary environmental studies.

10.0 Conclusion: Provides conclusions related to the significance of potential adverse residual environmental and cumulative effects associated with the Project.

Consultation

Public consultation has been an integral part of the EA development, and will be ongoing through Project advancement. A primary purpose of the consultation program is to ensure that potentially affected parties are aware of the Project and are provided an opportunity to comment. The EA has been prepared in consultation with numerous stakeholders including landowners, as well as municipal and provincial agencies.

Local knowledge of the lands along the proposed pipeline gained through the consultation program assisted in the preparation of the EA. Discussions with the potential landowners along the pipeline right-of-way have been ongoing.

Environmental Setting

The following provides a brief summary of the environmental setting of the proposed pipeline route.

Physical Environment and Soil

The proposed pipeline route generally traverses flat to gently rolling terrain. The EA identifies and describes the soils encountered as well as their respective characteristics and any potential concerns associated with each soil unit. Much of the route traverses clay-textured soils that are prone to rutting and compaction during moist soil conditions. A soil survey will be conducted along the proposed route to further delineate any problem soil areas that may affect construction.

Water Quality, Quantity and Fish

All three proposed watercourse crossings will be bored and therefore in-stream construction will be avoided.

Greenhouse Gases and Air Quality

Air quality in the vicinity of the proposed pipeline route is generally of high quality due to the predominantly rural setting of the proposed alignment and absence of substantial sources of emissions. Operation of construction equipment and vehicles will result in a temporary increase in air emissions during the construction phase; however, an increase in airborne emissions is not anticipated along the proposed route during the operations phase of the Project.

Acoustic Environment

Background noise along most of the proposed pipeline route is primarily caused by vehicle traffic. A temporary elevated level of noise will occur from equipment and traffic during pipeline construction. With the implementation of mitigative measures to reduce the potential for noise impacts during construction the cumulative residual effect on the acoustic environment is considered to be of low magnitude

Wetlands

The proposed pipeline route crosses the Aspen Parkland area and Grassland Wetland area of the Continental Prairie Wetland Region. Efforts were made to avoid wetlands during the route selection process as much as possible.

Vegetation

The proposed pipeline route traverses the Aspen Parkland ecoregion. However, most of the lands along the route have been broken or cleared for agricultural purposes. Remnant native vegetation along the route is primarily located on soils unsuitable for farming or where topographic constraints would restrict farming practices. Remnant native vegetation consists predominantly of treed shelterbelts and grasslands.

A vegetation survey in the spring/summer of 2011 will be conducted on non-cultivated lands to identify any potential rare or listed plant species along the proposed pipeline route. A weed survey is recommended for late spring of the year of construction.

Wildlife and Wildlife Habitat

The proposed pipeline route does not encounter any designated Critical Habitat for wildlife. A wildlife survey will be conducted in the spring of 2011, along segments of the proposed route where potential habitat for rare or listed wildlife exists, and in advance of any construction activities scheduled from April 1 to July 31 in 2011 and, if warranted, any remaining construction and clean-up activities in the spring and early summer of 2012.

Species at Risk

Numerous aquatic, plant and wildlife species of concern are known to occur in the ecoregion crossed by the proposed pipeline route. However, the proposed pipeline route lies within the range of 14 listed Species at Risk under Schedule 1 of the *Species at Risk Act*. A wildlife reconnaissance will be conducted on lands and watercourses crossed by the proposed route with potential to support species at risk. These surveys will focus on the identification of any critical habitat use or presence of species at risk. Information on the reported presence of species at risk was also gathered from the Manitoba CDC.

Mitigative measures and contingency plans will be developed to ensure that effective mitigation is available in the event of a discovery of critical habitat use by species at risk or other species of concern prior to construction of the proposed pipeline.

Human Occupancy and Resource Use

Small to medium-sized communities located in the vicinity of the proposed pipeline route include Virden and several other smaller communities. All of the lands along the route are privately owned and most are in agricultural land use. The proposed route does not cross any lands under Parks Canada or other lands under federal jurisdiction, proposed or existing provincial parks, Ecological Reserves, provincial forests, recreation areas, Conservation Lands, special conservation areas or other lands with specific dispositions limiting pipeline development.

Heritage Resources

No known heritage sites were identified in the vicinity of the proposed pipeline route. No site investigations will required by Manitoba Culture, Heritage and Tourism. However, contingency measures

have been prepared to ensure that appropriate mitigative measures are available in the event of a discovery of an important heritage site.

Social and Cultural Well-being, Human Health, Infrastructure and Services, and Employment and Economy

Several sections of the EA describe the proximity of communities to: the proposed pipeline route where activities are planned; the workforce; main industries; and existing transportation and services.

Environmental and Socio-Economic Effects Assessment

The potential environmental and socio-economic effects associated with the construction and operations of the Project are not unique and are similar to other pipeline projects located on the prairies. Potential environmental and socio-economic effects associated with the components of this Project relate to biophysical and socio-economic elements including:

- physical elements such as physical environment, soil capability, water quality and quantity, GHG and air quality, and acoustic environment;
- biological elements such as fish and fish habitat, wetlands, vegetation, wildlife and wildlife habitat, and species at risk;
- socio-economic elements such as human occupancy and resource use, heritage resources, traditional land and resource use, social and cultural well-being, human health, infrastructure and services, and employment and economy; and
- accidents and malfunctions.

Several mitigative strategies will be employed to avoid or minimize the impacts of the components of the Project including: avoidance through route selection; scheduling of activities to avoid sensitive periods, development of detailed, practical and effective mitigative and contingency measures to address numerous site-specific and general issues; inspection during construction to ensure that planned mitigation is implemented and effective; and conducting the maintenance and operation of the pipeline system with a high standard of environmental excellence.

With the implementation of the mitigative strategies, the residual effects associated with the construction and operation of the Project on biophysical and socio-economic elements were considered to be not significant.

Environmental conditions such as erosion, flooding, wildfires, changing climatic conditions and severe weather including high winds, heavy/persistent precipitation, or extreme temperatures were considered to have the potential to adversely affect the Project during both construction and operations. However, through routing of the proposed pipeline as well as implementation of contingency plans, the potential impacts of the environment on the construction or operation of the Project are minimized and considered to be not significant.

Cumulative Effects Assessment

Adverse residual environmental and socio-economic effects from the Project identified through the impact assessment process were subsequently subject to a cumulative effects assessment which considered these effects in relation to previous projects and proposed projects in the vicinity of the proposed Provident Pipeline Project.

Most cumulative effects were anticipated to be of low magnitude. With the implementation of the proposed mitigation, the cumulative effects of the Project are considered to be not significant.

Inspection, Monitoring and Follow Up

Environmental Inspectors will be assigned to the construction of the pipeline to ensure that the proposed mitigative measures are properly implemented. Post-construction monitoring will be conducted during the first and second growing seasons to determine the status of unresolved environmental issues following construction and, where warranted, develop measures to resolve any outstanding issues.

Supplemental Studies

Pre-construction surveys of non-cultivated areas along the route for rare or listed wildlife and vegetation will be conducted in the spring/summer of 2011. In addition, a site-specific soil survey will be undertaken along the entire route to help refine soil handling techniques. Information obtained from these surveys will be used to refine and augment site-specific environmental protection planning.

Summary and Conclusions

The environmental concerns associated with the Provident Pipeline Project are routinely encountered during pipeline construction on the prairies/aspen parkland. The EA concludes that the environmental management strategy, which includes appropriate routing, mitigation for residual and cumulative effects, environmental inspection and supplemental studies, will avoid, eliminate and/or minimize potential effects arising from the Project. Therefore, the EA concludes that the residual and cumulative environmental and socio-economic effects of the Provident Pipeline Project are not significant.