1.0 INTRODUCTION

As per the April 27, 2000 Terms of Reference from Manitoba Transportation and Government Services, Dillon Consulting Limited (Dillon) in partnership with Westdal and Associates has prepared this study addressing the economic justification for an All-Weather Road from P.T.H. No. 10 to Pukatawagan. The study area is located in northwestern Manitoba and primarily affects the communities of Pukatawagan First Nations and Sherridon and to a lesser degree, Lynn Lake. Pukatawagan is currently serviced by air, rail, winter road (Kississing Lake to Pukatawagan), as well as an existing pioneer road (P.T.H. No. 10 to Sherridon). The absence of an All-Weather Road has imposed costs on individuals, communities, government, and industry with respect to freight and transportation costs, as well as the stress related to a system that is in part dependent on weather.

1.1 Scope

The potentially high capital cost of building an All-Weather Road requires a long-term commitment from all stakeholders. This study sets out to assess the transportation costs of all modes associated with the present system, assess future costs and benefits that would come with an All-Weather Road, determine stakeholder benefits, and examine other indirect spin-offs that might accrue from an All-Weather Road. The determination of the most appropriate roadway corridor location was not the intent of this study.

Our approach to this study involves building a database which will allow us to define the existing transportation system (modes/service levels/costs/risks), the All-Weather Road system (essential components and service levels/costs/risks), the added benefits/opportunities of the All-Weather Road, and the potential environmental/social impacts of the project.

Stakeholder input is key to this evaluation, as well as accurate information and statistics. Stakeholders who are expected to have a vested interest in the outcome of this study include:

- Pukatawagan First Nations
- Sherridon Community
- Hudson Bay Railroad (HBRR) (Omnitrax)
- Freight Haulers
- Air Transporters
- Tolko Industries Ltd.
- Lynn Lake

To the extent possible, we have used actual costs of transportation for the existing system in terms of annual expenditures/freight rates/air flight rates, etc., however, that data is limited, and it has been necessary to

establish costs by inference from budgetary programs (e.g., percentage of budget related to travel/remote locations, etc.).

Key factors relevant to this study are future population growth and future economic development initiatives. An analysis of area demographics, and historical development was necessary to determine the key issues affecting Pukatawagan/Sherridon.

1.2 Context

Historically, transportation networks in northern Manitoba have served to meet two requirements. That is to provide reliable, regular transportation into and out of isolated and semi-isolated communities, as well as to provide bulk transportation to meet the demands of major resource development. The existing highway and road transportation system in northern Manitoba is confined to those areas where resource developments have advanced sufficiently to warrant the major investment involved in All-Weather Road construction. The present and future resource development in the area is a critical factor in the justification on such a project.

The development of a transportation system in northern Manitoba has generally began with aircraft playing the pioneering role in northern exploration. This was followed by roads or railways when larger communities were established. Smaller settlements continue to be served by float and ski-equipped aircrafts and/or winter roads.

The concept of adequacy is a key consideration in transportation system development. A transportation system that might be adequate relative to the movement of commodities may still be entirely inadequate relative to the movement of people. Adequacy must therefore embrace availability of service, standards, and rates within an affordable system.

The overriding principle of public convenience and the necessity to the specific area in question is important when establishing standards and criteria. Additionally, the creation of an available, uninterrupted system with reasonable rates and service levels is a concern for any transportation system.

In carrying out the technical evaluation and stakeholder consultation process, it was necessary to:

- Assess the costs of various travel modes associated with the present transportation system.
- Assess future costs and benefits that would be derived from an All-Weather Road.
- Define stakeholder benefits.
- Examine other indirect spin-off benefits that might accrue from an All-Weather Road.
- Gauge stakeholder support for the construction of an All-Weather Road.

1.3 Report Organization

In order to present an effective and comprehensive assessment of the economic justification of an All-Weather Road from P.T.H. No. 10 to Pukatawagan, this study is structured in the following manner:

- Synopsis and Study Findings precede this Introduction.

- Section Two **"Community Profile"** presents the population forecasts for the stakeholder communities of Pukatawagan and Sherridon/Cold Lake. This section will also include a description of the winter road, railway, and air systems.

- Section Three, entitled **"Existing Transportation System"** outlines the community freight figures on the winter road, railroad, and air freight systems. This section will also describe passenger traffic.

- Section Four projects the **"Future System Forecasts and Costs"** for road, air, railroad, and individual travel to communities.

- Section Five details the specific **"Reliability Constraints"** of the reoccurrence of unusually mild winters, other weather issues impacting on winter roads, as well as the factors impacting on air travel and rail transportation.

- Section Six, entitled **"Economic Spin-off Benefits"** evaluates spin-offs within the context of forestry, commercial fishing, mining and resource development, tourism, the service sector, as well as other benefits accruing through the development of an All-Weather Road.

- Section Seven presents a **"Comparison of All-Weather Road and Winter Road System Costs".** This section outlines the basic cost assumptions made in this report, develops an economic analysis, presents the 20-year present value benefits, as well as describing other benefits.

- Section Eight presents **"Alternative Alignments and Strategies",** which identifies significant project issues and cost consequences for different conceptual alignments and alternative lower cost strategies.

- Section Nine entitled "**Stakeholder Identification"** defines the relative benefits and potential cost allocations that might be appropriate for the various parties having an interest in the development of an All-Weather Road.

- Section Ten entitled **"Community Interests and Concerns"** identifies the local community issues that would support or oppose the constraints of an All-Weather Road, and includes the minutes for the January 15, 2001 Steering Committee Meeting.

- Section Eleven entitled **"Identification of Environmental and Social Concerns"** examines the areas of potential environmental and social impacts that would result from an All-Weather Road.