

## Introduction

### A Guide to this Report

The Halifax-Dartmouth metropolitan area (also referred to as Metro or the greater Halifax area) can be defined as the area of concentrated population within the Halifax Regional Municipality (HRM). In addition to the cities of Halifax and Dartmouth, the area also includes several smaller centres such as Bedford, Sackville, Cole Harbour and Spryfield. The growth and prosperity that has taken place in this urban/suburban district over the last several decades has created a dilemma for the development of aggregate resources in the region. Although the community has a tremendous need for these stone construction materials, rapid expansion is threatening future resource development in the area. The socioeconomic and environmental consequences of this situation will have a major impact on the region in the future.

This report examines the concerns associated with Metro's aggregate resources and looks at possible solutions. In recognition of the potential for a broad range of interests in this report, it has been divided into three parts. Part 1 is a general overview of the conditions which lead to this study. It examines Metro's aggregate resources in the context of the issues that affect future resource development and explores the impact that this will have on the region. This section also discusses quarrying near an urban centre and will be of interest to those who question the wisdom or need for future extractive resource development in the region. Part 2, the focus of the research, is a geotechnical discussion of aggregate resource potential near Metro, which may offer the opportunity for future quarry development. This section assesses the engineering merits of the stone and subdivides the study area based on a number of technical parameters. Part 3 provides a discussion on resource development considerations related to the study area. It also examines socio-economic and environmental issues in the context of potential development locations and offers suggestions that would help minimize impacts on the community. Finally, there is a discussion of exploration techniques that should be considered when assessing the area for aggregate potential.

