Executive Summary

This report provides an overview of some of the best practices for security design and planning, using the Parliamentary and Judiciary Precincts in Ottawa, Ontario as case studies. The purpose of this research is to examine how these best practices can be applied so that appropriate levels of protection for sensitive sites are provided. Also important is the minimization of the impact these measures may have on things such as historical character and public access. More specifically, the research questions posed in this report seek to determine whether best practices for security design plans have been implemented for the subject sites and what design improvements could be made in order to increase the security of these areas.

The context and significance of this report is rooted in the response of cities to terrorist attacks in the United States and Europe over the past decade. These events prompted many cities to implement security measures to protect sensitive government sites, financial centres and important landmarks. However, many of the measures implemented in cities such as New York and Washington immediately following the terrorist attacks of September 11, 2001 were rather crude and often had the effect of restricting access to traditional public spaces and creating a feeling of fortification in those areas. Efforts have been made to address these shortcomings through planning policy and design guidelines, one particularly notable case being the security design plans for Washington, DC. Given the relative high profile of Parliament Hill and the surrounding federal buildings being evaluated in this report, it seemed appropriate to analyze the these sites to determine how secure they were and if the design strategies reflected best practices.

The methodology of this report is a case study of sensitive government sites in Ottawa, Ontario. Some of the methods, basic theories and evaluation criteria used in the report are based on another master's report wherein a similar evaluation and analysis was performed. A review of relevant literature, analysis of planning policy and an examination of recognized security design guidelines helped provide the information needed to perform a critical analysis. This research resulted in the use of the popular and well-respected theory of Crime Prevention Through Environmental Design (CPTED) as the basis for the report's evaluations and recommendations. CPTED principles of Territoriality, Surveillance, and Access Control formed the three categories used to evaluate the subject sites and make design proposals.

In evaluating the sites, vulnerability to attack and the potential consequences were critical aspects to consider as they provided guidance as to what baseline security measures should be in place. The vulnerability of each site was determined using a CPTED-based evaluation, which drew on information gathered from a site visit, photographs and other research. After performing the evaluation, an overall risk assessment was conducted for each site. The rationale for an attack, the site's vulnerability and the potential consequences of an attack were considered when conducting this assessment. Some sites, such as the Centre Block building in the Parliamentary Precinct and the Supreme Court of Canada building in the Judiciary Precinct were rated as having a higher overall risk and significant areas of vulnerability were identified. The other subject sites, the East and West Block buildings and the Confederation and Justice Buildings, were also identified as being vulnerable to attack, though their risk was not as high.

The recommendations made for the sites are based on best practices, including design elements and strategies used in the security design guidelines for Washington, DC and Canberra, Australia. These best practices provide context-sensitive design strategies which are used in the report to address the shortcomings identified by the risk evaluation conducted for each site. The scope of the recommendations depends on the level of risk assigned for each site. The Centre Block and the Supreme Court of Canada buildings were deemed to be at higher risk relative to the other sites, so the associated design changes for those sites are more extensive. Similar to the evaluation structure, recommendations are grouped under the three CPTED principles to provide a logical framework under which the various policies, recommendations and practices analyzed in the research could be applied.

The results of the site evaluations identify the strengths and weaknesses of the security design measures in place, including how well these measures reflect best practices. While there is some evidence of good design at these sites, the security analysis revealed some serious shortcomings. The design recommendations provide some possible remedies to these problems, taking into account the character and users of the sites so that the elements and strategies suggested will protect not only buildings but also the atmosphere of freedom and safety valued by the society which built them.