

EXECUTIVE SUMMARY

Background

The entity known as Canadian Forces Base (CFB) Edmonton, or more commonly now as Edmonton Garrison, is composed of several sites dispersed within and around the periphery of the City of Edmonton. The two largest sites are Griesbach and Namao.

As a result of Federal Budget announcements in 1994 and 1995, Edmonton Garrison has been transformed from an airforce base to an army garrison with operational, support and training facilities. The decision was made to consolidate Edmonton Garrison entirely into the Namao site, allowing for the eventual disposal of the Griesbach parcel of land.

Mandate

The Griesbach site has been marked for closure with its remaining activities to be relocated to the Namao site. The purpose of this report is to present a land use plan for the siting of five of these activities into the Namao footprint. The five activities are Private Married Quarters (PMQs), Clothing Stores, Land Force Western Area Headquarters (LFWA HQ), Service Detention Barracks (SDB) and Works Company.

Method

The method of analysis in this report consists of problem identification, analysis of goals and objectives, site and user needs analysis, selection and comparison of available sites, and recommendations and implementation. Existing available sites are assessed using Department of National Defence (DND) land use planning principles and selected evaluation criteria from the work of well-known land use planner, Kevin Lynch.

Goals and Objectives

A review of relevant DND policy resulted in identifying the goal of formulating a land use plan that allows each of the five selected Griesbach activities to be relocated to an optimum Namao site. The corresponding objective is to identify the best Namao sites within the appropriate DND land use areas. In the case of the activities being relocated from Griesbach, the appropriate DND land use areas are Domestic, Technical Services and Administration.

Existing Conditions

Natural Environment

The Namao site lies just north of the City of Edmonton. It is a large, roughly rectangular tract of land encompassing an area of 2,535 hectares. The general topography of the region is flat with shallow surface gradients of less than five percent. Roughly 70 percent of the land area is in natural or agricultural condition and is potentially available for future development. This undeveloped land does not present any significant natural constraints to future development.

Built Environment

Approximately 30 percent of the Namao land area is developed. Existing development consists of a variety of buildings, ranging from single family housing to light industrial buildings. The buildings are arranged into functional land use areas such as Domestic, Technical Services and Administration, as defined by DND. Within these functional land use areas, there are vacant parcels of land that are potential sites for the

activities relocating to Namao from the Griesbach site. Nine potential sites are identified: two within the Domestic land use area, suitable for PMQs; four potential sites within the Technical Services land use area, suitable for Clothing Stores or Works Company; and three potential sites within the Administration land use area, suitable for LFWA HQ or SDB.

Use analysis

Each activity is examined in detail to determine area requirements and orientation relative to existing activities at Namao. The dominant need(s) for each activity are identified. Proximity to the existing community services is identified as most important for selecting a site for new PMQs. Proximity to customers is identified as a critical need for selecting a new site for Clothing Stores. For Works Company, the key need is co-location with existing operations elements already located at Namao. Security and accessibility are identified as important needs for LFWA HQ. Relative isolation and physical security are seen to be the most important needs to consider in selecting a site for the SDB.

Assessment of Available Sites

Planner, Kevin Lynch, provides a set of site evaluation criteria in his book, *A Theory of Good City Form*. His criteria are used to assess spatial form of cities, but can also be applied to specific sites. Lynch's evaluation criteria are shown to embody DND site planning principles. The points of similarity between Lynch's criteria and DND site planning principles are shown in Table A.

Table A: Mapping of DND Principles to Lynch's Site Planning Criteria

<i>DND Principles</i>	Vitality	Sense	Fit	Access	Control	Efficiency	Justice
<i>a. Flexibility</i>					x		
<i>b. Cost</i>						x	
<i>c. Building Optimization</i>			x				
<i>d. Needs Satisfaction</i>		x		x	x		
<i>e. Ease of Implementation</i>						x	
<i>f. Quality of life</i>	x						x
<i>g. Public and Statutory Expectations</i>	x						x
<i>h. Plus/ing</i>					x	x	

The nine potential sites are assessed using Lynch's criteria to determine the best site for each of the five activities being relocated from Griesbach. The site with the highest score for each activity becomes the recommended site for that activity.

Recommended Relocation Sites

The recommended sites for each activity are illustrated in Figure A. The sites are outlined in black with the corresponding activity titles. Complete implementation of this plan is estimated to take at least five years and is summarized in Table B.

Table B: Implementation Timeframe and Cost Estimates

Timeframe (years)	Construction (gross area)	Cost	Remarks
Short term (1-2)	Clothing Stores building @ 1690 sq m	\$1,690,000	\$1000/sq m
Mid-term (3-5)	Works Company building @ 2886 sq m (existing minus 30 %)	\$2,886,000	\$1000/sq m
Mid-term (3-5)	LFWA HQ building @ 2200 sq m (existing minus 43 %)	\$2,200,000	\$1000/sq m
Mid-term (3-5)	SDB building @ 3184 sq m (existing unchanged)	\$3,209,000	\$1000/sq m \$25,000 for an exercise enclosure
Long-term (5 +)	400 PMQs	\$37,856,000	Based on 112 sq m per unit and \$845/sq m

* Source: Edmonton Garrison - Works Company Facilities Use Table - 1999

Figure A: Optimum Relocation Sites

