

Rocky View County Cemetery Master Plan

Prepared for: Rocky View County 2461



G.P. Rollo & Associates Ltd. Land Economists

October 30, 2009

Contact information

LEES+Associates 509-318 Homer St. Vancouver, BC V6B 2V2

T: 604-899-3806 F: 604-899-3805 elees@elac.bc.ca

TABLE OF CONTENTS

Executive Summaryi			
1. Intro	duction	1	
2. Cont	lext	5	
2.1.	Introduction	5	
2.2.	The Regional Context	7	
2.3.	The Local Context	8	
2.4.	The Garden of Peace – Current Conditions		
3. Gard	len of Peace: Conceptual Site Plan		
	Design Principles		
3.2. (Conceptual Site Plans		
3.2.1.	Preliminary Conceptual Site Plan	16	
3.2.2.	Final Conceptual Site Plan		
3.2.3.	Interment Areas	21	
3.3. (Components of the Plan		
3.3.1.	Cemetery Buildings	27	
3.3.2.	Parking		
3.3.3.	Vehicle and Pedestrian Circulation		
3.3.4.	Planting and Vegetation	38	
3.3.5.	Ponds and Water Features	40	
3.3.6.	Irrigation		
3.3.7.	Lighting	41	
3.3.8.	Cemetery Equipment		
3.3.9.	Landscape Structures	43	
3.3.10			
3.3.11	5 5 5		
3.3.12			
	eting Plan		
4 .1. I	Products and Services		
4.1.1.	Non-Revenue/Value Added		
4 .1. 2 .	5		
	Geographic Focus		
4.3. Pricing			
4.4.	Promotions and Communications	54	

4.4	.1. Rename the Garden of Peace	56		
4.4	.2. Communicate the Cemetery's Purpose	56		
4.4	.3. Promote the Cemetery through Appropriate Media	57		
4.4	.4. Host Community Events	58		
4.4	.5. Host Educational Events	59		
5. Organizational Plan61				
5.1.	Introduction	61		
5.2.	Human Resources	62		
5.2	.1. The Staff Team	62		
5.2	.2. Leadership	64		
5.2	.3. Customer Service	64		
5.2	.4. Resources	65		
5.3.	Operations Manual	65		
5.4.	Bylaw and Policy Updates	66		
6. His	6. Historic Cemeteries			
6.1.	Dalemead Cemetery	67		
6.2.	Bottrel Cemetery	72		
6.3.	Managing Pioneer Cemeteries	75		
7. Financial Plan				
7.1.	The Changing Community and Local Context	77		
7.2.	Perpetual Care Fund	79		
7.2	.1. Cemetery Operating and Capital Costs			
7.2	.2. Operating Revenue Projections	83		
7.2	.3. Estimated Cash Flow	85		
8. Im	plementation			
8.1.	Priority Development Areas			
8.2.	Implementation Plan: 10 Year Timetable			
9. Co	nclusion	91		
Appendix I: All Active Cemeteries Rocky View County Vicinity				
Appendix II: Xeriscaping				
	Appendix III: Site Furnishings			
	Appendix IV: Precedent imagery			

, .

Executive Summary

Over the last 3 years, Rocky View County has conducted a thorough review and analysis of the publicly owned cemeteries within its boundaries. There are three active cemeteries and one inactive pioneer cemetery in Rocky View County that remains on private property.

These sites include:

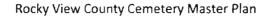
- Garden of Peace Active
- Dalemead Active
- Bottrel Active
- Whiteside Family Cemetery at Langdon Inactive Pioneer

This Master Plan is the result of consultations with the community, funeral homes, Council and Administration, and reflects the market and infrastructure assessments previously undertaken by LEES + Associates. The Cemetery Master Plan integrates recommendations for physical changes to the site (reflected in the Conceptual Site Plan) and recommendations arising from the business case analyses. These are supported by marketing and organizational recommendations.

Summary of the Master Plan

The conceptual site plan on page 4 of the Executive Summary provides for both short and long term interment, infrastructure and amenity needs. It is based on the following recommendations:

- 1. Maximize the capacity of the already-developed portion of the Garden of Peace Cemetery with infill and redevelopment before breaking new ground to the south;
- 2. Concentrate on upgrading existing columbaria and cremated remains gardens;
- 3. Develop a campus of buildings to accommodate administration, customer service, product display and a non denominational "Celebration Hall" at the geographic centre and high point of the site;
- 4. Widen key roads to minimize damage to graves and turf and enhance parking;
- 5. Redevelop the main entry;
- 6. Upgrade and create a consistent style of infrastructure, interment elements and amenities to create a sense of quality, identity and permanence in the cemetery;
- 7. Incorporate design measures to mitigate the impacts of Hwy 1 (The Trans Canada Highway), and



8. Anticipate the future value of the Garden of Peace for passive open space recreation to the surrounding, growing communities;

Key marketing recommendations that will enhance the profile of the cemeteries in the County reference pricing and promotion. They include:

- 9. Establish pricing policies that are at, or just below, those of private and other public sector cemeteries;
- 10. Rename the Garden of Peace;
- 11. Communicate the Cemetery's purpose to the community;
- 12. Promote the Cemetery through appropriate media;
- 13. Host community, cultural, religious and educational events, and
- 14. Focus on attracting families that choose cremation while enhancing relationships with existing clients, including religious groups.

Organizational enhancements will be required in order to meet the objectives in the Master Plan and to reduce the tax-based and grant funding that is currently required to provide this service. Those enhancements are included in the following recommendations:

- 15. Create a robust and committed team of cemetery professionals that are comfortable with, and trained in, bereavement counselling, cemetery maintenance and records management;
- 16. Adopt a business-like approach to providing cemetery services and maintaining the County's cemeteries;
- 17. Develop an operations manual, and
- 18. Provide the necessary policy and bylaw changes that synchronize with the Cemetery Master Plan.

There are 3 historic cemeteries in the Rocky View County, two of which are still active. Key recommendations include:

- 19. Promote Dalemead and Bottrel Cemeteries as places of interment for nearby residents, while maintaining their rural character, and
- 20. Manage and maintain pioneer cemeteries as cultural landscapes, and acquire other pioneer cemeteries as resources permit.

Financial projections that integrate the interment needs, operating and capital budgets and a Perpetual Care Fund have been developed using the Cemetery Business Case Analysis Tool developed by our team. Outcomes of those projections have resulted in the following recommendations:

- 21. Institute contributions to the Perpetual Care Fund in 2012, ramping up from 5% to 20% over a 5 year period;
- 22. Analyze operational costs to ensure accurate maintenance and administration charges.

ii Ale e

- 23. Increase prices at an average annual minimum of 3.5% sustained each year.
- 24. Commit to a blend of tax based and grant funding and use of the existing resources in the operating fund to provide adequate resources for conservative growth and infrastructure improvements.
- 25. Integrate the capital plan with the RVC 3 year capital plan, using an average of the last 5 year's capital works as a benchmark;
- 26. Defer construction of a new reception centre and administration building for 6-8 years following adoption of the Master Plan.

The following graph shows the anticipated financial performance in terms of cash flow, not including capital expenditures for the cemetery system.

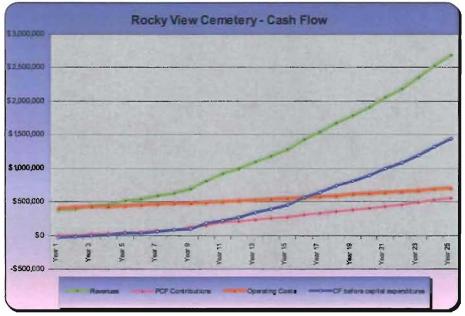
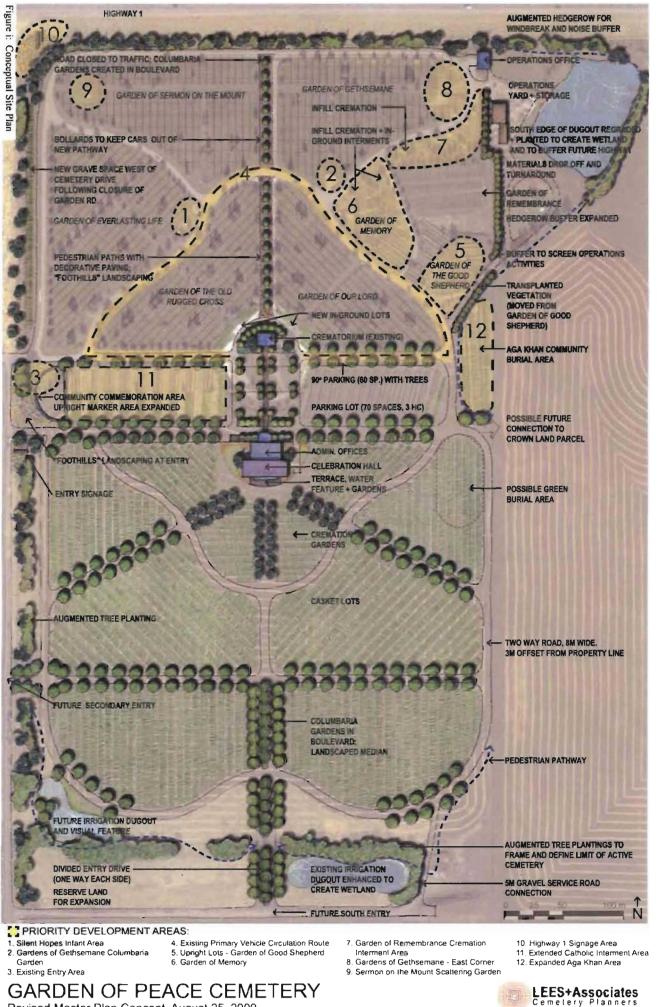


Figure iii: Cash flow projections.

The Implementation section of the Master Plan identifies priority development areas as follows:

- Silent Hopes Infant Area;
- Gardens of Gethsemane Columbaria Garden;
- Existing Entry Area;
- Existing Primary Vehicle Circulation Route;
- Upright Lots in the Garden of the Good Shepherd;
- Garden of Memory;

- Garden of Remembrance Cremation Interment Area;
- Gardens of Gethsemane east corner;
- Sermon on the Mount Scattering Garden;
- Highway 1 Signage Area;
- Extension of the existing Catholic Interment Area, and
- Expansion of the Aga Khan Area.



Revised Master Plan Concept August 25, 2009

1. Introduction

In 2006, Rocky View County embarked on a review of the cemetery system with the commissioning of the "Cemeteries Market and Business Assessment Report" (LEES + Associates, 2006), followed by a review of cemetery infrastructure conditions and governance options – "Cemetery Infrastructure, Services, and Organizational Capacity - Assessment" (LEES + Associates, 2007). During this period, Council considered the advantages and disadvantages of continuing the cemetery service, weighing the social benefits and economic costs of interring and memorializing County residents, primarily at the Garden of Peace Cemetery. In 2008, Council directed County Administration and the consultants to prepare a Master Plan to integrate the previous assessments with a comprehensive conceptual site plan and business case analysis. This document is intended to guide the planning, development and operations of the County's cemeteries.

Early in the master planning process, the following vision statement was developed for Rocky View County's cemetery system. The intent was to summarize the broader, more community-oriented vision that would underpin the long-term strategies proposed by this document:

To provide a socially, environmentally and financially sustainable community service, offering meaningful environments for interment and commemoration. The objective of the RVC cemetery system is to enhance the local quality of life by enriching the area's recreational, ecological, cultural and historic resources.

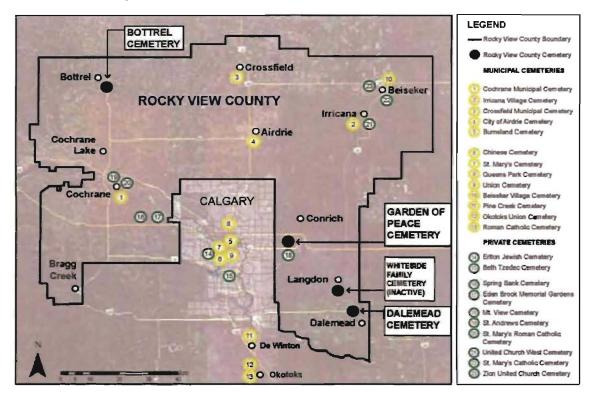


Figure 1: Rocky View Cemetery System

Chapter 3 describes the proposed physical plan for the Garden of Peace and provides recommendations under these headings:

- 3.2. Interment options
 - o In-ground Burial Options
 - o Cremated Remains Interment Options
- 3.3. Infrastructure Improvements
 - o Cemetery Buildings
 - o Parking
 - o General Circulation Recommendations
 - Equipment & Fixtures
 - o Irrigation
 - o Necessaria
 - o Lighting
- 3.4. Amenity Improvements
 - Planting and Vegetation
 - o Ponds and Water Features
 - o Hardscapes and Structures
 - Site Furnishings and Signage
 - Iconography and Monuments

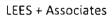
The marketing strategies used at the Garden of Peace emerged as a significant deficiency in the analyses undertaken for the Market and Infrastructure assessments. This Master Plan therefore includes a chapter on marketing recommendations (Section 4), which are based on an *education-based* approach to marketing rather than a conventional sales-based strategy. The intent is that the recommendations will not only result in physical and operational improvements, but will also result in a greater understanding and appreciation within the community at large that the County's cemeteries are valuable places of interment, memorialisation and culture. The recommendations outlined in this section address pricing, target markets, and methods of promotion. including a series of potential marketing events.



Figure 2: Current entry signage for Rocky View Garden of Peace Cemetery Photo credit: LEES + Associates

Chapter 5, the Organizational Plan, provides a series of recommendations to improve the cemetery system's efficiency, professionalism, and organizational capacity. The profession of cemeterian is underpinned by a need to meet the needs of bereaved families across a range of cultural and religious traditions. The same interpersonal skills are required, to some extent, in outside staff as well, beyond the appropriate levels of technical and horticultural skills. Attention to detail and a commitment to high quality customer service need to be instilled in the cemetery staff team. The organizational plan addresses the need for a continuously improving service cycle, enhanced leadership, and a new cemetery bylaw. Once implemented, this framework will provide the foundation upon which cemetery services in the County can become financially sustainable.

Council has emphasized to Administration and our consultant team that the cemetery services need to move towards full cost recovery. This will require increasing revenues and a great efficiency in cemetery maintenance operations. Towards that end, a financial business case analysis was undertaken (Section 7 Financial Plan) to project 10-year trends in population, burial, cremation and interment. The financial plan addresses capital and operating costs/revenues, pricing, inventory and the perpetual care fund, culminating in detailed cash flow spreadsheets. The Cemetery Business Case Analysis Tool will be submitted under a separate cover. The master plan concludes with an implementation table, prioritizing the compiled list of recommendations (Section 8).



2. Context

2.1. Introduction

Rocky View County's decision to undertake a master planning process for its cemeteries was based on the need to develop a conceptual site plan to supplement the recently completed Market and Infrastructure Assessments. Of particular interest was the integration of a 34 acre parcel to the south of the currently active cemetery at the Garden of Peace and how the phasing of this development should proceed. As noted in the LEES + Associates Final Report of the "Cemetery Infrastructure, Services, and Organizational Capacity Assessment" (July 2007):

The land presently leased to the south of the developed part of Garden of Peace will be sufficient to meet the (County's) needs for at least the next 2 and possibly 3 generations. This is primarily due to the growth in cremation and the anticipated number of (County) residents (and others) that will patronize the cemetery. In the near future, additional lands will have to be developed to meet the needs of fraternal and religious organizations as well as the general public. It is expected that the lands to the south will have to be considered during the planning for this expansion. This and other cemetery development opportunities will mean that the cemetery will be able to provide a much greater range of services, in different settings.

Rocky View Council and Administration decided that the master planning process should include the two rural cemeteries located in Dalemead (to the south) and Bottrel (to the north). Both former "pioneer cemeteries" remain open for interments and are attracting interest from people in the surrounding areas, as well as from others who appreciate the qualities of a rural, prairie cemetery. A fourth site included in the scope of this work is Whiteside Cemetery, a small, inactive family cemetery near Langdon, just south of Dalemead. This site was once the property of the Whiteside pioneer family, and is not open to future interments. These four sites (Garden of Peace, Dalemead, Bottrel, and Whiteside Family Cemetery) currently make up the County's cemetery system.

This chapter summarizes the priorities to be implemented over the coming years and decades and is based on the following recommendations:

- Maximize the capacity of the already-developed portion of the Garden of Peace before breaking new ground to the south;
- Concentrate on upgrading existing columbaria and cremated remains gardens;
- Develop a campus of buildings to accommodate administration, customer service, product display and a non denominational "Celebration Hall" at the geographic centre and high point of the site;

- Widen key roads to minimize damage to graves and turf and enhance parking;
- Redevelop the main entry;
- Upgrade and create a consistent materials palette for infrastructure and interment elements and amenities to create a sense of permanence, reverence and interest in the cemetery;
- Incorporate design measures to mitigate the impacts of Hwy 16/Trans Canada Highway, and
- Anticipate the future value of the Garden of Peace as passive open space recreation to the surrounding, growing communities, such as Conrich.

An overview of the primary context and existing landscape conditions is followed by descriptions of recommended interment options, infrastructure improvements and amenity enhancements. These are represented in the chapter, "Conceptual Site Plan."

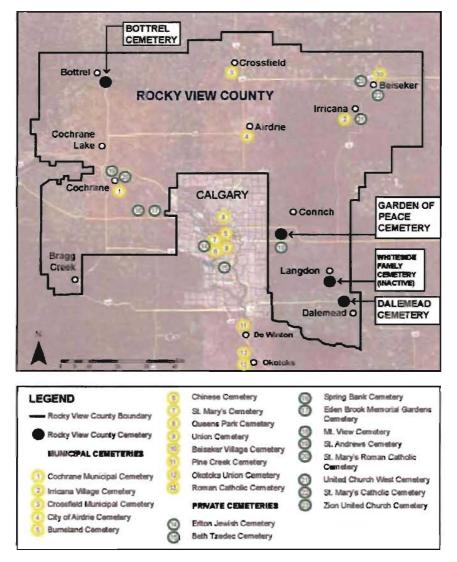


Figure 3: The Rocky View County Cemetery System

2.2. The Regional Context

Rocky View County's population is dispersed and not readily identifiable as a discrete "market." As shown in Appendix 1, the area is geographically well served by cemeteries. Updating the demographic and growth information regarding population changes and anticipated growth centres has revealed the importance of cemeteries within Rocky View and the City of Calgary. The Garden of Peace cemetery has significant capacity (38 acres are still undeveloped) and is located near Calgary's northeast neighbourhoods – neighbourhoods that are increasingly popular to New Canadians, many of whom have expressed an interest in, or are already using, the Garden of Peace. Recent improvements to the Provincial highways and anticipated improvements to other nearby roads will result in much shorter driving distances from the City and its surroundings to the Garden of Peace cemetery.

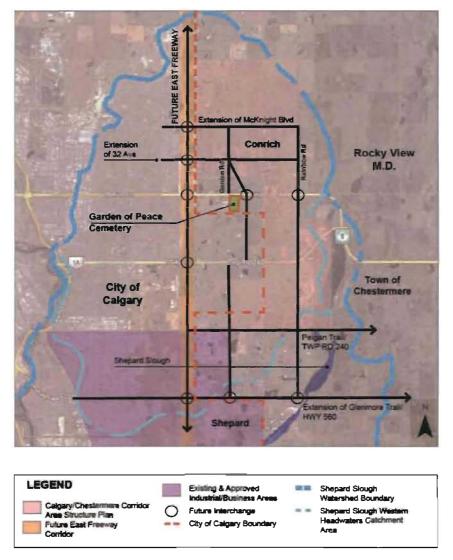


Figure 4: Garden of Peace Cemetery – Existing and future regional context

2.3. The Local Context

While the infrastructure surrounding the cemetery will be improved, direct access to the site will become more difficult. Garden Road at Highway 1 will be closed, and the building of a new interchange east of the Gardens of Peace (Figure 5) will allow access only from Garden Road.

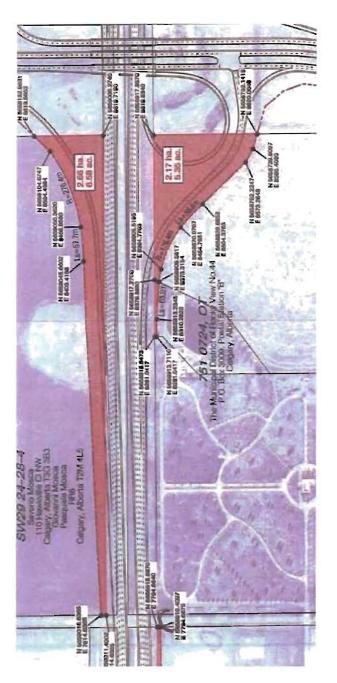


Figure 5: Proposed future interchange east of the cemetery

This decreased connection to the site, along with the construction of the new interchange, will likely have a negative impact on cemetery operations. An additional challenge facing the cemetery is its impending inclusion in a County precinct, with lands recently annexed by Calgary, the Prince of Peace community and future commercial land uses (Figures 4,6). This change will make it more difficult to market the cemetery, to integrate it with adjacent residential uses, and to link it with the active transportation, green space and a trail network.

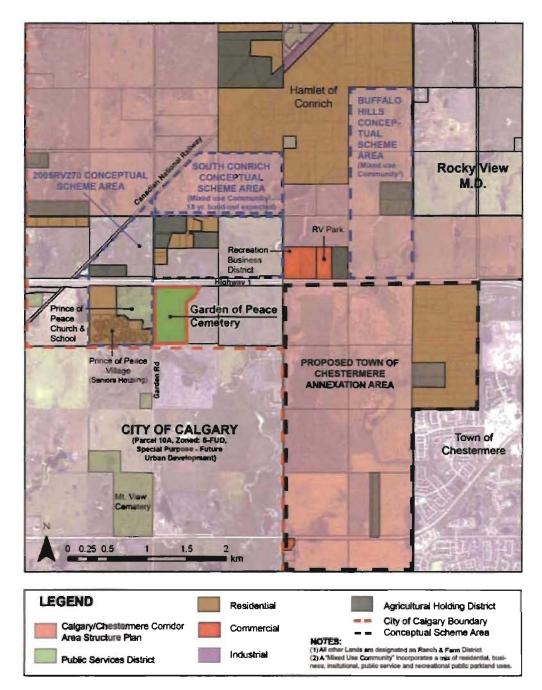


Figure 6: Garden of Peace Cemetery: Surrounding land uses & future development

2.4. The Garden of Peace – Current Conditions

The Garden of Peace Cemetery is located on a rectangular, 72.58 acre property aligned north-south, extending along its north edge from the right-of-way of Highway 1 (TransCanada Highway), to a gravel service road that terminates at its south east corner. The west edge of the site is bounded by Garden Road and the east edge by a 74.24 acre parcel of provincial crown land. At the north east corner of the Garden of Peace property is a 4.3 acre wedge of land, the site of a large, rectangular irrigation dugout, and the cemetery operations/storage yard (shown in Figure 9).

The northern 38 acres of the property are fully developed for cemetery use. The transition point between the developed and undeveloped areas of the site is clearly demarcated by the limit of maintained turf. South of this edge, the land has a rural character. Along with Crown land to the east, this portion of the cemetery property is cultivated by a local farmer under an annually renewed lease. The site slopes up gently from Highway 1 to the chapel and crematorium building, where there is a broad, shallow knoll (Figure 8). From this point, the land slopes down to the south, falling approximately 8 metres over 385 metres for an average gradient of less than 3%.



Figure 8: View from south towards existing chapel area

The diagrammatic site analysis shown in Figure 9 illustrates major site features and immediate context while highlighting development opportunities and constraints.

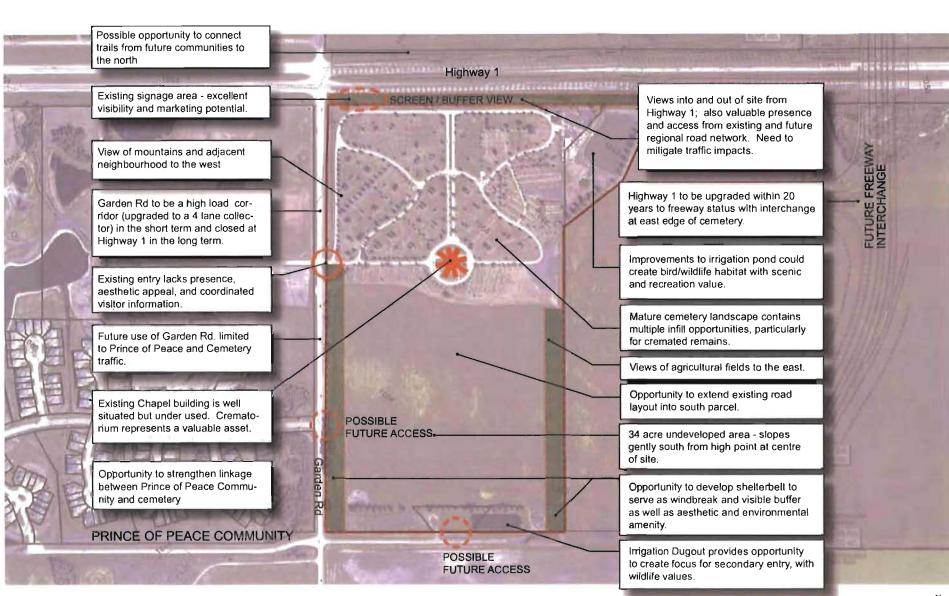


Figure 9: Opportunities and constraints

The original plan for the developed area dates back to the early 1960s and remains apparent today (Figure 10). It reflects what is known as the "Garden Style" of cemetery design - popular in North America in the 19th and early 20th century, and originally developed as an alternative to a more formal, grid pattern that characterized the enclosed, churchyard cemeteries once common throughout Europe. The style is characterized by a park-like, naturalistic landscape, embellished by ornamental trees and shrubs with curvilinear roads designed to create more pleasant drives by responding to topography and views of a more open landscape.



Figure 10: Air photo of the Garden of Peace Cemetery Photo credit: Google Earth

The layout of the cemetery (Figure 10) consists of a curvilinear road network of two loosely concentric, semi-circular loops around the central chapel area demarcating eight cemetery "gardens" of 2 to 4 acres each. The most significant feature of the original Garden of Peace design is the semi-circular shape of the circulation pattern. This geometry strongly suggests that the original designers intended this layout to be mirrored on the south half of the site.

In addition to physical features and attributes, every cemetery has a certain inherent feel, or ambience that gives it a "sense of place." Although this quality is often understood intuitively, it is important that long-term plans and small-scale designs consciously build on and enhance this quality over time. Section 6 (Historic Cemeteries) describes the factors that give the rural and pioneer cemeteries their own unique characters.

3. Garden of Peace: Conceptual Site Plan

3.5. Design Principles

Natural and designed attributes have guided the location and site layout of the Garden of Peace. This should be maintained and reflected in new developments in the following ways:

- 1. Focus future development at the topographic high point of the site, taking advantage of its centrality within existing and future development areas, and its natural aspect over the Rockies, the agricultural lands to the south, and distant views to the City of Calgary.
- 2. Orient buildings, amenities, and lots towards Calgary and the Rocky Mountains. Solar gain is important at this latitude, thus sunlight from the south and west should also be considered in siting these features.
- 3. Exploit the "borrowed" views to adjacent farmland to link the experience at the Garden of Peace with the agrarian history of the County (Figure 11). "Borrowed landscapes" should be considered as roads are built and buffer areas are planted.



Figure 11: "Borrowed" view to adjacent farmland Photo credit: LEES + Associates

- 4. Design measures to mitigate the negative impacts of traffic along Hwy 1/Trans Canada Hwy.
- 5. Screen views of the Prince of Peace community on the west side of Garden Road (Figure 12), while taking advantage of the close proximity of the development to engage local users with the site for passive recreation.



Figure 12: Prince of Peace campus development immediately west of the Garden of Peace Cemetery. Photo credit: Google Earth.

- 6. As the population of the nearby community of Conrich grows, anticipate increased demand for use of the Garden of Peace site for passive, open space recreation.
- 7. The symmetrical road layout and the original idea of "gardens within the garden" (see Figure 13) have led to the creation of rooms within the landscape, although this idea has not been fully realized in the existing developed area. This idea should be revisited and explored in the future development area.



Figure 13: Garden rooms created by planting material, Sweden Photo credit: LEES + Associates

One of the basic principles shaping this plan is the idea that there needs to be some physical separation between the communal experience of memorials and the actual burial area. A sequence of delicate transitions are experienced by the bereaved as they enter the cemetery, experience the funeral or memorial service and burial, and then leave the cemetery. This experience is often repeated at each visit to a grave by family or friends. With this in mind, the following principles have been applied to this conceptual site plan:

- 8. Create a sense of transition from "profane" to "sacred" landscapes with careful design interventions that respond to the context and offers the appropriate attention to detail, thereby instilling the sense of transition in visitors.
- 9. Create a separation of the entry experience from the burial areas.
- 10. Design and construct a memorial/Celebration Hall that looks and feels connected to the surrounding land and distant views, as well as to nearby burial plots.
- 11. Establish planted buffers and structures that physically and visually separate the memorial/burial experience from the adjacent land uses.

3.6. Conceptual Site Plans

3.6.1. Preliminary Conceptual Site Plan

A preliminary Conceptual Site Plan (Figure 14) was presented to Council and Administration on March 30th and 31st, 2009. It is shown on the following page.

GARDEN OF PEACE CEMETERY:

Character defining elements

Relatively open, gently sloping, spacious-looking landscape visible from TransCanada Hwy Distant views of the Rocky Mountains to the west. Foreground views over grain fields to the east

Park-like, curvilinear circulation system designed in the tradition of picturesque cemeteries. Symmetrical orientation around a central chapel building, located at the high point of the site. An axial, central landscaped boulevard extending north from the chapel building Features (columbaria, signage, benches and plantings etc) concentrated at road intersections.

Predominantly flat markers in older sections.

Scattered mixed evergreen and deciduous trees

Section names sandblasted onto stone slabs set on edge

Allèes of deciduous trees along some roads/perimeter areas.

Dense, well-clipped hedges define pedestrian access points into in-ground burial areas. Mature specimen shrubs at road intersections, often used as a backdrop to section signage.

History

Incorporated as the "Calgary Garden of Memories" in 1960, located 5 miles east of the intersection of Hwy 1 with Hwy 2. In 1963, the entire property was transferred at no cost via a "Management Agreement" to

the Calvin Presbyterian church of Calgary. It was ultimately transferred to the MD in 1965. The cemetery was "...made available...to all other Protestant denominations, so that the ideals of integrated church control influence and management could be achieved...with

benefit to all and hardship to none. Physical and operational approach was based on the belief that cemetery should "reflect the spiritual and religious life of the community." It was held that the cometery should "offer lower costs to buyers...with no distasteful comparison between wealth and poverty." The

*preservation of the overall landscaped beauty of the property itself" was also cited. This cometery currently contains 72 acres of land: 38 developed acres (with approximately 17,000 burial lots) and 34 undeveloped acres.

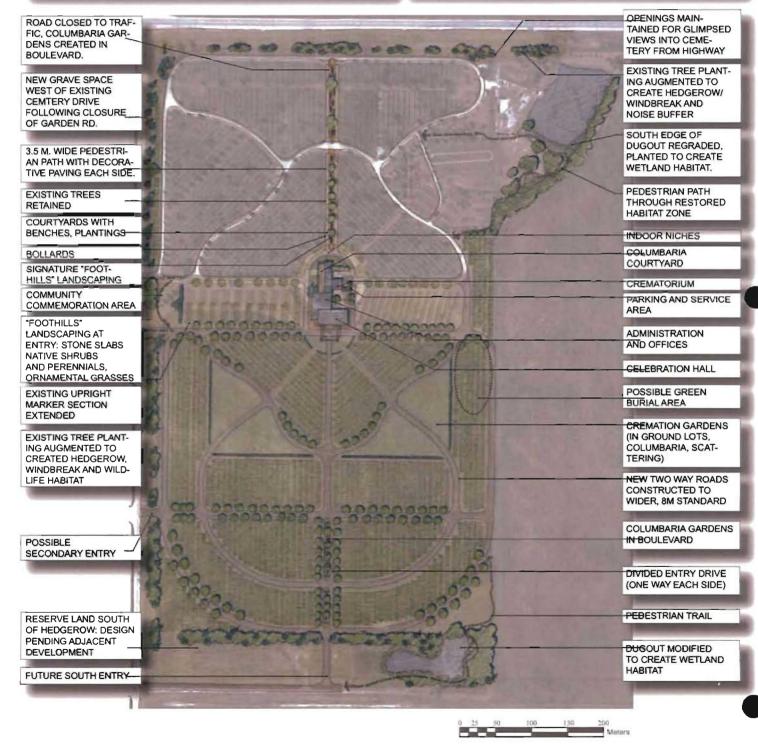
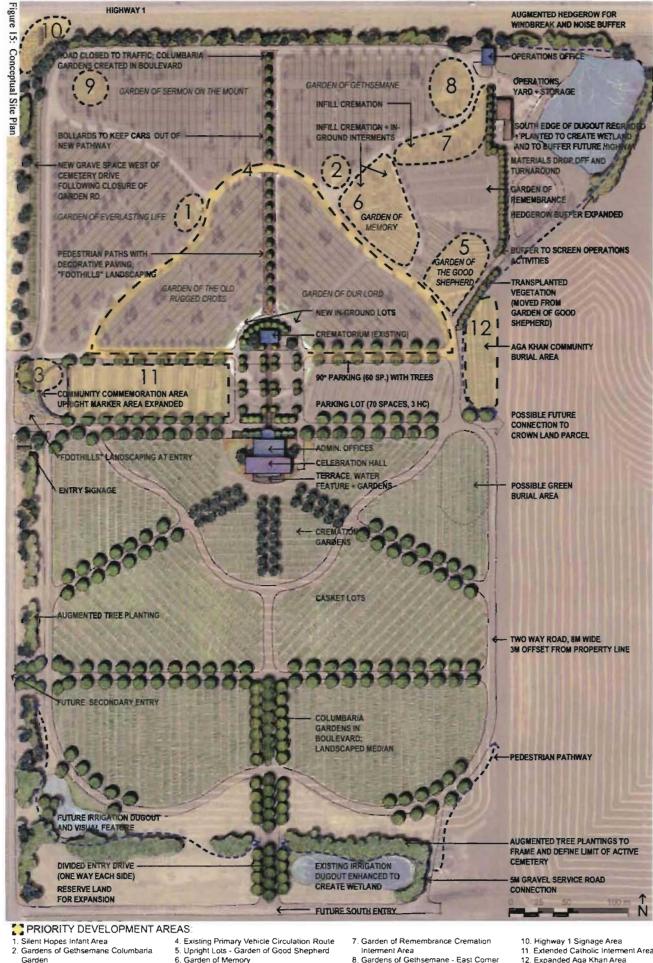


Figure 14: Preliminary Conceptual Site Plan (March 2009)

3.6.2. Final Conceptual Site Plan

The final conceptual site plan (Figure 15) is described in further detail in the following sections: Interment Areas and Components of the Plan.



Garden 3. Existing Entry Area

GARDEN OF PEACE CEMETERY Revised Master Plan Concept August 25, 2009

- 8. Gardens of Gethsemane East Corner
- 9. Sermon on the Mount Scattering Garden
- 11. Extended Catholic Interment Area 12. Expanded Aga Khan Area
- - LEES+Associates Cemetery Planners

The following comments and suggestions were made by Council and staff during the review of the Draft plan, and subsequently addressed in the revised conceptual plan:

- Ensure that buildings can accommodate gatherings of 150-200 people. It was agreed that while some events may require a larger venue, this size of facility would be most flexible for the proposed range of events. Depending on the final configuration of buildings, their floor plans and programming, the footprint of buildings indicated would be able to accommodate at least this number of people.
- Provide a dedicated parking lot for the proposed campus of buildings Parking for 70 cars is proposed in a central landscaped parking lot. In addition, 90 degree stalls are proposed along the entry drive, including three handicapped spaces immediately west of the arrival area that would be connected to the buildings by an accessible sidewalk. The revised concept also provides the opportunity for a covered drop-off at the building entry, after which drivers would be able to loop back into the parking lot.
- Separate the crematorium from the admin/public use buildings The crematorium was separated and screened with plantings on three sides, and was revised to include a private service access on the east side.
- *Provide a possible future connection to the Crown Land parcel to the east* The potential for a connection to this land was noted on the plan, with access proposed from a new service road along their common property lines.

The following additional revisions were also made:

• Relocation of the celebration/administration buildings to the south side of the entry drive.

The potential for traffic congestion at these buildings was addressed by extending the development area southward and providing roads and a parking lot accessible to visitors before they drive past the main entry. This has the further benefit of orienting the Celebration Hall onto the cemetery expansion area, where outdoor amenities such as a patio and reflecting pool could also be located.

- Elimination of proposed columbaria garden in the north boulevard. A review was undertaken to assess the area available for future columbaria to be installed at a variety of locations around the existing developed area. This review has resulted in the recommendation that that location would not be as desirable as smaller sites further away from the noise and other impacts caused by Highway 1. The idea of developing the north boulevard as a pedestrian precinct has been retained, and the revised concept plan suggests the closure of the adjacent roads to traffic, the installation of bollards and decorative paving and the development of a landscaped garden in the boulevard with opportunities for the installation of memorial plaques.
- Addition of a service access road from the south end of the cemetery up to the materials storage area.
 This area is large anough to access models the turning rodii of large delivery.

This area is large enough to accommodate the turning radii of large delivery vehicles. Existing trees and large shrubs at the entry will need to be relocated into the storage yard; however these and other screening plants can be placed where they can provide a visual buffer between the yard and adjacent interment areas.

• Widening of the primary road loop in the existing, developed cemetery. The inner looped road is the most heavily used and will remain so for some time. Its paved section is less than 4 metres wide, resulting in unsightly road edges and ongoing turf repair due to tire damage from passing vehicles (see Figure 16). A survey to establish the limit of graves along the paved area will be required; however the widening of the inner loop is indicated on the revised concept plan.



Figure 16: Road damage from passing vehicles Photo credit: LEES + Associates

• Reconfiguration of road geometry proposed in the undeveloped area The initial curvilinear road layout was revised to reduce road construction, and to equalize the distances that pallbearers would have to walk from the nearest paved surface. The standard of 45 metres was achieved over most of the site, and no more than 55 metres was required anywhere in the revised concept.

3.6.3. Interment Areas

The interment areas at the Garden of Peace have been planned with consideration of market requirements, infrastructure and amenity needs, and the financial capability of the County. In addition, we have worked with stakeholders, Council and Administration to identify priority interment initiatives to be undertaken over the short and medium term.

The conceptual site plan is sufficiently flexible that it can respond to a changing market, and the availability of capital and preference trends over the long term. As the implementation section of this report explains, it is advisable to balance the amount of new interment with the capital available and a consideration of the economies of scale. Doing so will avoid "over-building" (creating too much inventory) or, conversely, will avoid paying too much per unit of interment space without being able to offer customers a range of location and price options. Figure 17 denotes the current number of plots available in the various sections within the Garden of Peace cemetery.

	# of plots available
Old Rugged Cross	1833
Sermon on the Mount	548
Gethsemane	1665
Our Lord	1768
Everlasting Life	1938
Columbarium	95
Remembrance	25
Parklawn	3
Memory	12
Chinese Section	121
Roman Catholic	99
Good Sheperd	82
Total	8189

Figure 17: Interment capacity.

This section summarizes the primary physical changes to interment options (in-ground and cremated remains) that are recommended for the Garden of Peace Cemetery. These changes have been synchronized with the capital planning component in the Financial Plan.

In-ground Burial Options

One of strengths of the County cemetery system is the strong relationship with different religious and ethnic groups that has been nurtured by Staff. The two strongest relationships to date are with the Aga Khan Council of the Prairies and the Roman Catholic Archdiocese of Calgary. The proposed concept plan includes lands designated to fill the needs of these two organizations and their members for the next few decades. There is sufficient flexibility in the plan to allow lands to be dedicated to other organizations, should interest be expressed. Based on recent correspondence, we suggest that part of the County's marketing plan should include overtures to the Asian community, notably the local Korean Church and Buddhist Temples.

The Conceptual Site Plan prioritizes the infill and redevelopment of existing burial areas in order to optimize interments in already-developed lands, and to reduce new demands on the Perpetual Care Fund. We propose the following:

- Work to achieve a yield of approximately 600 graves per acre. Doing so will provide reasonable land use efficiency and still allow room for roads, paths, snow buffers and landscape plantings;
- Infill and use already-developed land before new land is broken and developed, where possible, including the infill of redundant pathways with options for cremated remains, and
- Enhance or re-develop the existing cremation gardens before new cremation gardens are started.

The concept plan includes several in-ground interment options, including:

- In-ground single depth burial (4 feet of cover over the casket);
- In-ground double depth burial (space for 2 caskets deep, with 4 feet of cover over the upper casket);
- In-ground burial with flat/flush markers (headstones), and
- In-ground burial with upright markers (headstones).

As time passes and the currently designated spaces for the Aga Khan and the Calgary Archdiocese reach capacity, new spaces for these families should be created. It is recommended that a minimum of 200 graves be prepared for the Aga Khan and 100 graves for the Archdiocese when new burial areas are developed. Thus, priority in-ground burial areas to develop in the short term include:

- Preparation of a new Aga Khan burial area (200 lots);
- Expansion of the upright marker areas for the Calgary Archdiocese (100 lots), and

• Creation of upright marker areas to supplement the rapidly diminishing capacity in the Garden of the Good Shepherd.

The following are recommended to improve current services:

- Enhance the cemetery's ability to provide a range of traditional in-ground burial options by adopting industry best practices for gravesite opening and closing, and
- Enhance the maintenance of traditional in-ground burial gardens by completing the irrigation system and implementing xeriscape principles for all landscaped areas (see Appendix II).

The concept plan includes several areas within the in-ground burial gardens that could accommodate more intensive uses, such as columbaria for the interment of cremated remains, or the installation of estate mausolea (i.e. stand-alone structures where 2 to 12 caskets are entombed above ground; see Figure 18). Incorporating interment options such as these can not only expand the choices available to the customer, but can also help to create unique garden spaces, enhance the sense of place for the Garden of Peace, and help to break the relentless visual effect of large in-ground burial gardens.



Figure 18: Example of an estate mausoleum, holding two caskets Photo credit: 1 FES + Associates

This Master Plan does not, however, recommend the introduction of mausolea until one or more of the following occurs:

- A viable business case is developed;
- Interment of in-ground and cremated remains are yielding increased revenues, and
- Infrastructure improvements have been completed.

A combination of upright and flat markers for in-ground burials is recommended. This combination uses land efficiently, breaks up the monotony of one type of cemetery landscape and allows for the movement of burial and maintenance equipment.

Green Burial

The Conceptual Site Plan also indicates a location in the northwest corner of the expansion parcel that would be appropriate for development of a green burial area. "Green burial" refers to an approach to interment whereby there is no liner or vault, a fully biodegradable casket or shroud is used and the body is not embalmed. Interment typically takes place in a more natural context and does not include individual grave markers.

While the Garden of Peace has not yet witnessed significant interest in this option from the community, it is prudent to identify an area where this type of interment could be provided in the future. The green burial movement is still relatively small in North America although it is a significant and growing segment of the cemetery business in Europe, particularly in Britain, where it now constitutes up to 10% of burials. The green burial area proposed at the Garden of Peace overlooks the Crown Land parcel to the east, where it could easily be naturalized with trees and shrubs and managed to remain in a more natural condition.

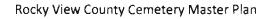
Cremated Remains Interment Options

At present, options for the interment of cremated remains at the Garden of Peace are limited. Interment in niches is primarily in the sloped columbaria wall in the Gardens of Gethsemane—an area that has a reasonable inventory of available niches available, but only because it has not proven popular with potential customers. In addition to niches, the Garden of Peace offers cremation burial lots and scattering interment options. Like the columbaria, the quality of these options is of low to medium quality relative to options provided at other local cemeteries, such as Mountain View or the City of Calgary's Queen's Park.

These options are further highlighted in the Financial Plan (Chapter 7). Given the trend towards cremation and the relatively low cost/high return on cremated remains interment options, the Plan proposes that individual columbaria, cremation borders, cremation urns and a below ground ossuary, as well as small scattering areas, be integrated into the developed part of the cemetery (Figure 19). This would optimize the existing area as well as enliven some of the more vacant areas.

This Master Plan recommends the following options for cremated remains:

- 1. Optimize the already developed interment areas (especially Gardens of Gethsemane and Memorial Rose Garden) to allow for more interment options for cremated remains. This is particularly relevant given the trend towards cremation and the relatively low cost/high return on cremated remains interment options.
- 2. Cremated remains interment options should include cremation borders (i.e. whereby remains are buried in-ground, either in direct soil contact or in vaults), community and family columbaria, large garden vessels for interment of nested sets of cremated remains, and ossuaries.



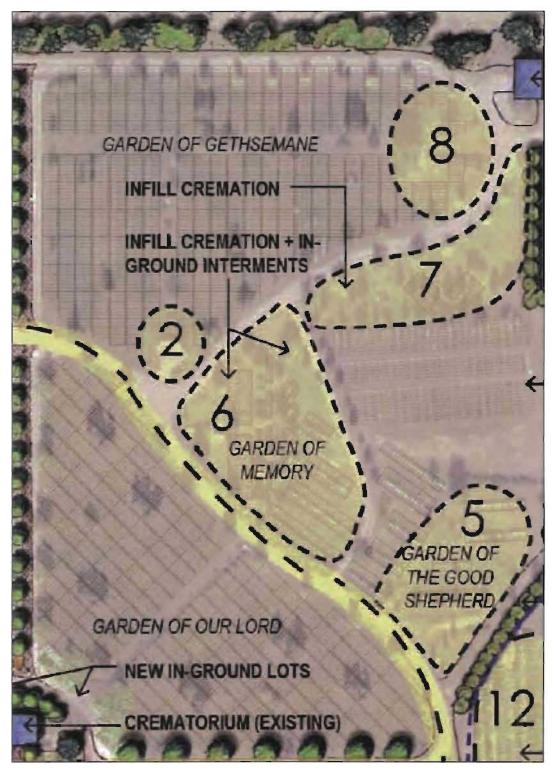


Figure 19: Interment details from the northeast part of the Gardens of Peace Cemetery, showing priority locations for proposed interment.

3.7. Components of the Plan

3.7.1. Cemetery Buildings

The following is a series of recommendations for enhancing the buildings at the Garden of Peace. Figure 20 illustrates the campus of buildings that will ultimately create the central focus and activity area of the cemetery.



Figure 20: Campus of buildings creating central focus and activity area of the cemetery.

Proposed Reception Centre, Administration Offices and Celebration Hall

The Master Plan proposes that a new building, or more accurately, a future *campus* of buildings, be developed at the centre of the site, in the approximate area of the existing chapel and crematorium buildings. The concept is that concentrating all public cemetery functions—including administration, customer service, product display and a non-denominational "Celebration Hall"—at the geographic centre and highpoint of the site will most effectively address the needs of the growing community of Rocky View and will fulfill the vision of the new Garden of Peace Cemetery.

In 2007, the frame house (Figure 21) that currently serves the majority of these functions was moved to the northeast corner of the site, immediately next to the operations and materials storage area. Even with the basic renovations undertaken at that time, the structure remains limited in size and residential in character. The interior space cannot easily accommodate more than one family—or even one large family—at a time. Many of Rocky View's customers are from backgrounds where the entire, extended family is

involved in the funeral and interment planning process. Cemetery staff is currently hard pressed to provide these customers with an appropriate, dignified level of service. The current location of this facility at the distant corner of the site (soon to be facing the Hwy 1 interchange) is too remote to serve the new cemetery, whose focus will be over both the existing gardens and the expansion area to the south. The Master Plan suggests that the current building be retained for use as a lunch and first aid facility for field staff, as well as an operations office and storage facility.



Figure 21: Existing Structure Photo credit: LEES + Associates

The Master Plan proposes that the central campus of buildings and associated parking should provide an attractive architectural feature visible from the new approach along Garden Road. The siting of the campus should take advantage of surrounding views (Figure 22).



Figure 22: View from the high point of the site—location of the proposed campus of buildings.

The character of the new buildings should fit the model now emerging in Rocky View County of developing progressive, sustainable civic facilities. Likewise, the design of the buildings should reflect the regional character and context of the surrounding prairie and foothills landscape. Elements such as large glass panels, covered walkways and generous overhangs are suggested to feature views and provide shade. Incorporation of landforms, solar panels and green roofs are a few of many "green" design strategies and technologies that could be considered.

The concept for the administration/customer service centre includes a retail area for interment products. Many competing cemeteries now offer (and many customers appreciate) "one stop shopping" for the viewing and ordering of products, from vases and urns to headstones, right at the cemetery. The Garden of Peace already offers a limited line of products; having a more attractive display area could result in significantly increased revenues in this area.

The proposed "Celebration Hall" is intended to replace the aging chapel building (Figure 23), whose design and structural deficiencies are apparent to all who visit.

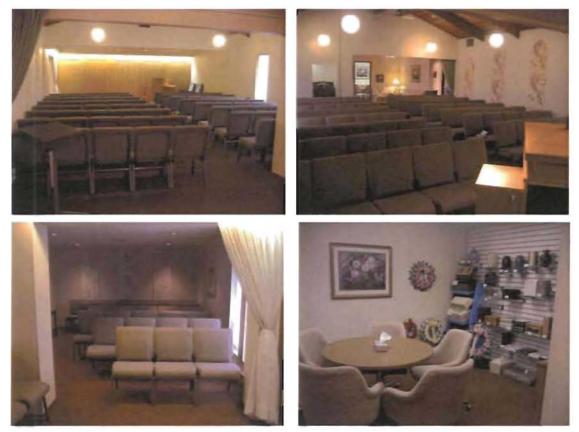


Figure 23: Existing Chapel Photo credit: Pierson's Funeral Service

The increasingly secular and non-Christian demographic of the County strongly suggests that a less traditional, chapel space would be more inviting to the broader community. The intent is that this hall provides a multi-purpose community space that would be an appealing venue for not only funerals and memorials, but also weddings, bar/bah

mitzvahs, anniversaries, community meetings, educational seminars etc. Creating an attractive public facility could eventually create a significant new revenue stream for the cemetery.

It is proposed that the existing crematorium, now located within the chapel building, be relocated a short distance from the core, customer-oriented buildings, at the north edge of the campus. This facility will share the central parking lot but be serviced from the east side. It is proposed that this building be screened with tall trees immediately to the south. Since there has been significant investment by the crematorium operator in the existing crematory over the years, it is recommended that the equipment be relocated and reused rather than replaced, unless there are good operational and financial reasons for doing otherwise.

- 1. A series of new buildings should be planned and designed to replace the existing chapel with a "campus approach," which will also permit phased development. Buildings are recommended to fulfill a variety of programming functions as well as creating an architecturally appropriate focal point for the entire site.
- 2. The new reception centre ("Celebration Hall") should be located approximately on axis with a new main entry where it will serve as a landmark to welcome visitors as they enter the site. This building will house administration offices, a 150 200 seat chapel/celebration space with kitchen, washrooms and outdoor gathering areas. The building should include flexible spaces that can effectively host small groups and families for ceremonial occasions, or hold large community memorials and funerals. A direct service access to the kitchen area is proposed on the east side.
- Besides the reception hall, space for a variety of services should be provided to welcome visitors, provide client care, offer space for ceremonies, prayer and contemplation, display cemetery products and to house administration offices. The space should function for non-funereal functions as well as memorial events, for example, for weddings, art and performance events, seminars, exhibitions and symposia.
- 4. A south facing terrace for special gatherings is proposed. This would include a water feature, decorative paving, perimeter plantings and a manicured lawn area.
- 5. The buildings and associated landscaped areas are envisioned to be architecturally appropriate to the site, simple and timeless in style (Figure 24). The Conceptual Site Plan graphic shows it oriented to the site's natural views to the south and the west. Innovative, sustainable features should be investigated, in keeping with other sustainability initiatives now underway in Rocky View.
- 6. The building and its landscape should be designed to screen views of the adjacent burial areas in order to maximize the building's use for non-cemetery purposes, and to create a safe, comfortable ambience for grieving families.
- 7. The central parking area for approximately 70 vehicles should be designed at the site plan level, but built only when funds are available, and surrounding buildings

are under construction. In the interim, parking for 120 cars should be accommodated along the roads (particularly the widened looped route) and in the 90 degree parking provided along the entry road(s). All parking areas are proposed to be landscaped with trees and shrubs for shade, traffic calming and visual amenity.

8. The site should be fully accessible to those with impaired mobility. Handicap parking spaces are indicated immediately west of the covered arrival area.



Figure 24: Precedent building and architecture imagery from Mountain View Cemetery, Vancouver. Photo credit: LEES + Associates

Reconfiguration of Existing Administration Office, Operations Building, and Storage Yard

The existing administration and operations area should be reconfigured in the following ways:

- Locate the administration offices in the new reception centre;
- Reconfigure the existing operations/storage yard for a single, centrally located access point. Close other access points with fencing compatible with existing materials and open up visual access to the irrigation pond, and
- Plant trees and shrubs along the outside perimeter of the yard.

Relocation of Bulk Storage Yard and Operations Activities

- Use the fill/storage yard for the storage, management and staging of fill material from burials, burial vaults and granite bases. The yard is also to be used as a waste materials transfer station;
- Efforts should be consistently made to minimize the amount of bulk materials stored on site for extended periods. Wherever possible, have material delivered on an "as-needed" basis to minimize storage and inventory costs;
- The yard is to be of sufficient size to contain the above-mentioned materials and to allow ready access by tandem trucks and flat bed tractor-trailers;
- Contain the waste material on three sides with a maximum height of 8 feet. Waste material should not be buried on site, and
- Screen the temporary bulk materials storage area from the rest of the cemetery by planting the perimeter of the yard with evergreen trees.

Reconfiguration of the Existing Chapel

An architectural audit of the existing chapel should be undertaken to assess whether there are any interim measures that might extend its effectiveness and appeal, or whether it would be better to begin planning for its replacement. The conceptual site plan indicates parking on the site of the existing chapel. Timing for this project will be based on a range of variables. It is recommended that the existing crematorium remain in its present location, but be in a separate structure with side service access and columnar trees to screen it from the active cemetery area.

3.7.2. Parking

A phased approach to improving parking should be adopted:

- The first improvement should be the expansion indicated—the north, looped road from the entry to the east side of the site, widened by approximately 1 metre on each side. This road is heavily used, but at only 4 metres in width, is far too narrow for two vehicles to comfortably pass, even when one is parked. The narrow width makes parallel parking unappealing and often results in cars running off the asphalt and onto the adjacent turf, particularly at corners and in bad weather. The unsightliness of tire damage and the cost of on-going turf repair are significant. Widening should include a visual edge, such as a flush/roll-over curb constructed of light-coloured material such as concrete, or preferably, granite. (It is worth noting that granite is the most durable product for this purpose and is a traditional edging material in cemeteries around the world, including those in cold climates). This material would improve the overall aesthetic of this core part of the cemetery, as well as facilitating parking, protecting adjacent graves and reducing maintenance costs;
- The second priority should be the addition of 4 sections of 30 right angle parking stalls installed at 90 degrees along the entry route(s) with landscaping installed between for shade and visual buffer;
- The third priority should be the construction of the central parking lot to serve the campus of cemetery buildings. "Green" parking lot strategies such as permeable unit paving and rain gardens for stormwater management (instead of subsurface drainage systems) should be considered.

3.7.3. Vehicle and Pedestrian Circulation

The system of roads, pathways and entries affect the funeral entourage, visiting families and friends, and the ease of maintenance. The Concept Plan includes the following changes and improvements to the circulation system at the Garden of Peace:

- Address the long-term, on-going problem of roads that are too narrow by widening the primary roadway loop within the existing developed area. Adding approximately 1 metre to each side of the existing paved area will reduce chronic wear and tear and damage to adjacent landscaping, greatly improving the appearance of the site and reducing upkeep;
- Establish a service entry on the south perimeter of the site, with a service road running along the east edge of the property;
- "Mirror" road geometry in the new development. However, ensure that it is simplified and constructed to a wider road section to meet current standards;

- Create a new entry area with aesthetic qualities that fit with the site context and differentiate this cemetery from others in the area, and
- Implement a circulation plan (Figure 25) that is more in character with the "garden cemetery" concept and the natural landscape, with roads that align with landscape and architectural features as well as views. The layout should create a pleasant physical and visual experience for vehicular traffic.



Figure 25: Proposed pedestrian and vehicular circulation at the Garden of Peace cemetery.

Entry and Roads

The following are recommendations for improving entries and roads:

- Create a double entrance (entry and exit) with space for a landscaped median. This will create an impressive entrance and provide a strong street presence on Garden Road. The current single entry is a safety concern due to possible reduced emergency access/egress during large or multiple funerals, or in the event of a natural disaster or other emergency;
- Install gates at the future central and southern entrances to direct traffic to the main Garden Road entrance;
- Design and build the road to a maximum of 20' (6 meters) wide to accommodate parking on the edge of the roadways while still allowing vehicles to pass;
- Consider bollards and curbs to define road edges so that vehicles will not encroach on adjacent turf and landscaping;
- Incorporate a looping layout of roads to reduce the need for vehicles to pass each other on narrow sections of road;
- Use asphalt as roadway paving, but consider the use of other materials, such as tumbled, concrete unit pavers, permeable pavers or stone cobbles in traffic islands, at intersections and building entrances and in the central parking lot. Special paving should be used to define pedestrian and vehicle zones, to calm traffic, define parking stalls, slow traffic at key points and to provide an attractive variety of pavement (see Figure 26). Many special pavers also contribute environmental benefits by permitting rainwater to infiltrate rather than run off and add to the burden on storm sewer systems. With proper installation, the additional cost of installation of modular paving compared to asphalt is often compensated for through longevity and ease of repair;
- Establish an annual budget for road infrastructure maintenance and upgrading (i.e. crack sealing, grading, re-surfacing) to ensure maintenance of asphalt and curbing;
- Install vertical curbs at all road corners to define the driving surface and protect turf and graves from tire damage. Install granite setts (or other light-coloured material) as flush curbs to delineate the vehicle surface, protect adjacent graves and turf, and to facilitate parallel parking, and
- Soften the appearance of parking lots with curbed islands that incorporate trees and shrubs. Incorporate permeable paving (such as permeable concrete unit pavers) into parking lots where possible. Use contrasting colours to delineate stalls rather than painted striping.





Figure 26: Use of paving material to achieve definition of space. Photo credit: LEES + Associates

Entourage Circulation

- Implement a reconfigured road layout to provide funeral processions with the most direct and least complicated access routes to and from burial sites, and
- Facilitate vehicle access to reduce traffic congestion and increase safety.

Emergency Circulation

• Ensure that all new or reconfigured roads, entrance points, and entry gates meet current standards for emergency access.

Operational Circulation

• Build a new operations access road, finished with asphalt, that allows year-round access to the existing storage yard and fill site. This should occur along the east property line. In the long-term, move the bulk storage area to the south-eastern corner of the site. Include a vehicle "tracking area," such as a gravel threshold, to clear mud from tires before trucks enter the main circulation route.

Pedestrian Circulation

- Develop a pedestrian pathway system to improve access through the cemetery. The pathway should link interment gardens, ponds, the Prince of Peace community and a perimeter trail around the cemetery;
- Reconfigure pedestrian movement to take advantage of Garden Road once it closes to traffic. Consider developing a pedestrian and cycle path within the Garden Road right of way;
- Promote passive pedestrian recreation opportunities to engage community members with the site. In addition, engage community members by providing

opportunities for public art events, using plinths for temporary art installations, and leading bird watching walks;

- Utilize a variety of pedestrian/vehicle separation techniques where paths intersect roads and/or are next to roads. These would include cast or concrete bollards, low built or planted barriers, grade changes and curbs. These elements should be synchronized with signage and lighting components for consistent appearances;
- Add pedestrian entry points from adjacent developments and from adjacent roads once road improvements are made. This will be especially important when Garden Road closes and the Highway 1 interchange to the east is built;
- Provide focal points and points of interest (i.e. statuary, plant material, ornamental landscaping, landscape structures gazebo, bridges, trellises, arbours) to create a richer visual experience for the visitor;
- Construct walkways with differentiating materials to represent different areas and/or functions of the site. For example:
 - Use tumbled unit pavers or stone cobbles for general walking paths and paths leading to buildings.
 - Use decomposed granite/stone screening with stone edging for paths in natural areas.
 - Use granite pavers in specialty areas and areas of unique commemoration and entries.
 - "Stamped" or coloured concrete/asphalt should *not* be used.
- Ensure that all walkways adhere to standards for universal accessibility (i.e. Alberta Building Code, applicable County codes, and the Americans with Disabilities Act ADA), and
- Integrate the non-motorized forms of active transportation with those to be included in future Parks and Open Space Master Plan(s) to be undertaken by the County.

3.7.4. Planting and Vegetation

Plant materials, particularly trees and shrubs, may also be seen as site materials. In the case of Rocky View, the most distinctive plant materials currently on site include the hedges, clump lilacs and mature spruce trees. The current palette is simple and functional, and it seems logical to continue with this approach as a framework.



Figure 27: Gardens of Peace – characteristic plantings Photo credit: LEES + Associates

Selecting species that are the most likely to thrive at this location is fundamental. Soil, altitude and degree of exposure are key considerations. Likewise, proper horticultural practises and irrigation are required to ensure optimal growth and appearance. The use of native and locally-adapted, hardy non-native (but non-invasive) species is recommended, particularly as they support the desired aesthetic qualities of the site.

The character of plants that grow in the prairie and foothill environments suggests a regional style that has year round presence and a particularly showy and colourful display in summer. Ornamental grasses and tall perennials are excellent performers in this environment and can provide a lush but informal counterpoint to the more rugged, structural character of the site's existing trees and shrubs.

The following are general planting recommendations:

- Use plant materials to create a diversity of spaces throughout the site and to give each garden area an individual identity while maintaining a consistent appearance overall. These spaces should be designed to provide comfort and inspiration to visitors. Plant material should be used to give the spaces form, massing, texture and seasonal / year-round interest;
- Use high quality and hardy trees, shrubs, grasses and perennials in accordance with the best landscape and nursery practices;

- Select plant material with memorial and cultural significance;
- Install "garden court" hedges to identify prestige burial lots. Establish substantial planting beds in these areas;
- Establish substantial planting beds at significant roadway and pathway intersections to establish focal points and to identify areas of importance;
- Create and shape views through the site through the use of shrubs and hedges. Use hedges to give interment gardens a sense of enclosure;
- Lead the eye through the site and create a rich visual experience by planting *allées* (double rows) of broad-canopied deciduous trees along roadways and pathways, where space allows, and
- Establish a program to manage invasive species and enhance native species. Such a program should include:
 - The identification of problem species and their locations;
 - Research and identification of appropriate responses to remove or reduce problematic species;
 - o Re-establishment of native species, and
 - Development of operational procedures to reduce the introduction and spread of invasive species.

3.7.5. Ponds and Water Features

Water has a soothing and calming effect, as well as a screening effect against nearby road noise. The use of water near the reception centre and at other strategic locations should be considered as a priority as areas undergo design development.

3.7.6. Irrigation

All irrigation water currently used at the cemetery is ground water, taken from the existing 6 metre dugout at the northeast corner of the site. The following are recommendations for improving the irrigation system:

- Complete the installation of the automated irrigation system. Incorporate the most current technology to increase efficiency and reduce evapotranspiration;
- Planting design should follow xeriscape principles (Appendix I) in order to achieve the most attractive landscape with the least possible amount of irrigation water, and
- Consider the development of future dugouts at locations indicated on the physical plan to provide capacity for the expanded cemetery. Make the design of dugouts

as naturalistic as possible without compromising irrigation efficiencies or public safety, in recognition that water features can be visual and habitat amenities as well as irrigation facilities.

3.7.7. Lighting

Lighting should be installed at the following general locations:

- At the main entries;
- At primary signage locations;
- At the main parking areas, and
- At the community commemoration sites.

The County of Rocky View has adopted the "dark sky concept," an international initiative to reduce energy usage and the effects of unnatural light on the environment, and to allow for better star gazing opportunities. In general, lighting at the cemetery should be minimized, directional, and only used to mark the entry to the site and guide visitors to the reception centre.

3.7.8. Cemetery Equipment

The County's cemetery system is presently using a conventional array of equipment for opening/closing graves, maintaining turf, and undertaking horticultural and arboricultural maintenance tasks. Staff should incrementally improve the equipment and fleet inventory to maximize fuel efficiency, minimize maintenance costs, minimize carbon emissions and reduce the amount of roads and land that need to be maintained in perpetuity. The following changes to the equipment and fixtures should be implemented:

- Acquire and use purpose-built "equipment mud tracks" that minimize damage to turf in inclement weather. These are ergonomically designed and more durable than plywood;
- Choose the smallest vehicles possible to accomplish the maintenance work required. This will allow more space for roads, pathways, and graves and will reduce possible damage to structures and landscaping;
- Use electric powered vehicles (golf carts or "Gators") with cold-weather capabilities for touring families and for staff travel across the site (Figure 28);
- Use electric thawing mats when required to assist with grave-digging for winter interments;

- Consider acquiring "clam shell" grave digging devices that are used at the side of the grave instead of the head/foot of the grave. This approach can increase the number of graves that can be provided within any given area;
- Ensure that all casket lowering devices are properly maintained and that there is at least one back-up lowering device in good working order, on hand at all times;
- Ensure that grave "greens" (synthetic or natural material mats) are in good condition, clean and properly stored at all times;
- Create a synthetic "green" mat for the purposes of interring cremated remains in ground (Figure 29), and
- Ensure the shoring system meets current Workers Safety standards and industry best practices.





Figure 28: Small, electric powered vehicle with cold weather capabilities, Sweden. Photo credit: LEES + Associates





Figure 29: Examples of "green" mat for interring cremated remains in the ground, Sweden Photo credit: LEES + Associates

3.7.9. Landscape Structures

Walls, Arbours and Shelters

There are many locations where the addition of a landscape structure (see examples) could create focal features, direct views, and enhance the overall experience at the site.

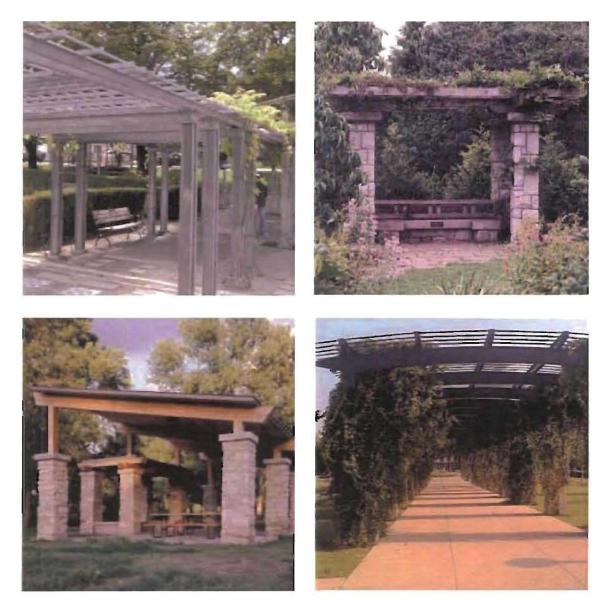


Figure 30: Examples of landscape structures that could be adapted for use at the Garden of Peace. Photo credit: LEES + Associates

The following recommendations pertain to landscape structures:

- Strategically locate architectural landscape structures throughout the site to provide focal features and places of refuge during thunderstorms;
- Create sheltered and restful places for visitors through the use of gazebos and trellises;
- Incorporate seating areas throughout the site, particularly along proposed pedestrian pathways, under arbours, at the proposed reception centre, and in cremation garden areas, and
- Ensure all landscape structure materials are durable and of high quality.

Necessaria

Necessaria are stations located throughout a cemetery for filling vases and disposing of garbage. They often provide watering cans, flower vases, a rake and hand trowels. Necessaria should be located within 60 metres of all graves.



Figure 31: examples of necessaria, including electrical outlets. Photo credit: LEES + Associates

3.7.10. Paving and Hardscape

Hardscape materials

Site materials in this cemetery relate mainly to paving materials. Current paving at The Garden of Peace is inconsistent and in some cases, difficult to maintain or even just to walk on.



Figure 32: Existing hardscape. Photo credit: LEES + Associates

Future infrastructure work should focus on using asphalt as the primary driving surface, with other materials used to enhance the function and appearance of the site. Flush curbs are suggested to both highlight edges as well as keep vehicle tires off of adjacent graves and landscaping. Materials for this can include concrete or granite, as shown in Figure 33.



Figure 33: Edging examples to demarcate between the road and adjacent graves and landscaping. Photo credit: LEES + Associates

Special areas such as intersections, building entrances and parking lots are good candidates for unit pavers, particularly permeable types, which are becoming increasingly attractive, affordable and available. No paving material is maintenance-free, but unit pavers which have been successfully used in many challenging climates - are relatively easy to repair and replace, making the life-cycle cost of this material significantly lower than asphalt, whose main benefit is ease of installation.



Figure 34: Example of unit pavers Photo credit: LEES + Associates

3.7.11. Site Furnishings & Signage

The creation of a consistent visual quality at the Garden of Peace is a key factor in its financial success. As noted throughout this report and previous reports prepared for the County, cemeteries are unique environments, requiring a unique management approach in order to succeed. It is well known within the industry that the three most important criteria influencing a customer's selection of a final resting place are:

- Proximity;
- A tradition of family use, and
- Quality of the physical environment.

The Garden of Peace currently lacks any sense of a clear style, theme or aesthetic. In fairness, management has not previously had the framework, funds or support to achieve this objective. But no level of grounds management can overcome the absence of a coherent, attractive palette of site materials, signage and site furnishings. As apparent on

the photos below, the current quality of these elements is diverse and typically below the standard expected by today's cemetery customer.



Figure 35: Existing site furnishings Photo credit: LEES ÷ Associates

Site Furnishings

A single palette of site furnishings should be identified for use throughout the Garden of Peace in order to create a consistent, locally appropriate aesthetic quality. Materials and forms should be durable, functional, and reasonably priced, especially to withstand the extremes of the Rocky View climate. Integral colours and finishes, ideally "real" materials that can be easily maintained, repaired and acquired over time as needed, are preferred.

Alternatively, materials that are environmentally-produced should be considered, providing they meet a reasonable aesthetic standard. For example, materials such as recycled plastic that are well-made, simple and carefully installed, even if obviously plastic, are preferable to wood-grained, wood-coloured plastic—an obvious imitation of another material. In the case of benches, solid wooden seating is undeniably the most desirable; however simple plastic slats surrounded on all sides by a powder-coated aluminum frame offers a cost effective, appropriate alternative for this context.

Components of any line of furnishings typically include benches, garbage receptacles, picnic tables, bike racks and bollards. Most product lines are available in a variety of frame colours and finishes, and a variety of woods and other slat materials. Due to the diverse character of the cemetery, and the need for one product line to fit into a variety of contexts, a simple, "timeless" style of products is recommended.

The line illustrated below, by Wishbone Industries, is part of a series of products offered by a Canadian manufacturer known for offering quality site furnishings with recycled plastic components. The "Mountain Classic" series surface-mounted bench is available in a range of lengths, and is compatible with other products produced by this manufacturer.



Figure 36: UltraPlast bench

This bench (black paint with grey "UltraPlast" recycled plastic slats) is recommended as the standard for use at the Garden of Peace. Memorial plaques can also be ordered for installation on the back of this bench, making it an attractive offering for the cemetery. Many people are willing to pay to have a bench installed with a bronze dedication plaque in memory of a loved one. (See Appendix III).

Signage

Signage at the Garden of Peace includes site signage (Highway 1 signage), informational signage (at the entry) and way finding signage (section markers). The photos below (Figure 37) indicate the quality and character of the existing signage.



Figure 37: Existing signage Photo credit: LEES + Associates

A comprehensive signage program should be developed as part of the "re-branding" of the Garden of Peace Cemetery. Ideally, this program would be developed as part of a process to fully explore the desired thematic quality of the entire site. The scope of this project would range from the development of graphics to be used on the cemetery website and brochures, to the architectural style of the new buildings. If this initiative cannot be undertaken immediately, a more modest initiative, to select regionally appropriate colours, forms and materials for signage, should be explored.

An effective strategy could include simple slabs of natural stone with creative applications of metal, sandblasted or applied lettering, accented with lighting and large land forming planting beds. The key issue for signage is achieving consistency in style and appearance in order to convey the desired image to the public. Recommendations for signage include the following:

- Establish an improved entrance sign at a new main entrance. The entrance should be inviting and should use a combination of vegetation and built elements (e.g. walls) to signify quality and permanence;
- Erect a new sign and associated landscaping at the corner of Garden Road and Hwy 1. The current sign is not prominent enough, and has become visually lost behind recently installed electrical kiosk poles and other highway-related structures;
- Erect signs at strategic locations throughout the site. Signage should indicate:
 - Location of different interment gardens;
 - Lot layout;
 - Rules and regulations;
 - o Information on available lots;
 - Staff contact information, and
 - Hours of operation.
- Install signage for self-directed way-finding to help funeral entourages and other visitors to find the reception centre, interment gardens and other points of interest, and
- Mount all new signs on consistent frames, using the same colour and a family of fonts to create a professional, coherent visual effect.

3.7.12. Iconography & Monuments

In coming years the cemetery will likely be serving an increasingly secular population. With that in mind, the use of religious iconography needs to be very carefully considered so as not to offend or alienate potential users of the cemetery. In general:

- Keep illustrative iconography (statues) small and integrated within planting beds to avoid overpowering the adjacent area;
- Limit iconography to the individual grave marker rather than as a public display, and
- Develop criteria to guide the selection and use of iconography for the site.

Memorials and Monuments

The following are recommendations for enhancing and installing monuments and memorials:

- Develop guidelines for the size and appearance of memorials and monuments at all cemeteries in the system. These guidelines should be incorporated into a revised bylaw. Guidelines should discourage oversized upright monuments, and
- Where strip footings (concrete "ribbons") are used, install them so that the concrete is not visible above ground. Strip footings should be sufficiently engineered and reinforced to withstand the local climatic and soil conditions. Opportunities for tree and/or shrub planting should be incorporated, with at least one tree/shrub planting every 10 metres. Ideally, a continuous informal or formal hedge or ground cover treatment should be incorporated into the design of the memorial space. Such areas may also be marketed to families as lot borders, where seasonal, live plants may also be installed.

4. Marketing Plan

Through the course of developing this Master Plan, the Market Assessment (2006) and the Infrastructure and Needs Assessment (2007), it became clear that Rocky View would benefit from an examination of the cemetery's existing and future markets, and an evaluation of how to meet the needs of these markets. It became evident that the cemetery pricing structure required a thorough review, and that a promotional strategy was needed.

The Marketing Plan is intended to be used as a framework for action by addressing the following needs:

- Increase the awareness and public perception of Rocky View's cemetery system;
- Provide a strategic framework for new services, and
- Initiate improvements to customer service and marketing.

The following principles emerged after discussions with Council, industry, and other stakeholders, and form the basis of the marketing and financial plans. The Rocky View County Cemetery System will provide services that are:

- Affordable;
- Accessible;
- Professionally delivered;
- Sensitively promoted;
- Provided within the context of an *education-based* rather than a *sales-based* marketing approach, and
- Integrated with the social, economic and environmental objectives of the Rocky View County.

The Cemetery Marketing Plan is described below under the following headings:

- 4.1 Services and Products Non-revenue/Value Added; Revenue-generating
- 4.2 Geographic Focus
- 4.3 Pricing
- 4.4 Promotion and Communications

4.1. Products and Services

The services and products that are offered or proposed are organized below by "non-revenue generating / value-added" and "revenue-generating."

4.1.1. Non-Revenue/Value Added

The following are important products and services that lie beyond the traditional scope of cemeteries, but represent valuable community assets that can be provided by a cemetery system. The following are site resources and amenity opportunities that should be considered in promotional opportunities:

- Historic site interpretation and education;
- Historic site maintenance and stewardship;
- Genealogical resources (at both the family and community level);
- The site of community and cultural rituals and ceremonies; the setting for many significant religious and spiritual rites;
- Environmental, aesthetic and ecological values;
- Horticultural resources, and
- Community recreation.

These value-added services should be recognized as integral to the cemetery system, valuable to cemetery users' experience, and important to the broader community.

4.1.2. Revenue Generating

The following services and products are provided for fees that cover the cost of the service:

- Interments;
- Memorialisations;
- Sale/lease of lots, crypts and niches, and
- Sale of urns, markers and monuments.

These fees also contribute to the Perpetual Care Fund (PCF) which operates as an ongoing trust fund. A percentage contribution from each lot, interment and monument sale is made to the PCF. Interest generated from the fund should be re-invested, creating additional revenue through compounding interest and the principle amount. The principal

on the PCF should not be used for any purpose except possibly to secure an internal loan or line of credit for capital works. As time passes (likely 20 to 25 years) the interest on the PCF could be used to assist with the maintenance of the pioneer cemeteries and gardens at the Garden of Peace that are full to capacity and are no longer generating revenue. It is recommended that the PCF program not begin until clear and demonstrated benefits are evident from the actions shown in the implementation table (Figure 53).

Given the very low principal in the Perpetual Care Fund (PCF) and the high cost of maintaining a cemetery system, the key recommendation of this Marketing Plan (as well as the Financial Plan and Conceptual Site Plan) is to optimize the already-developed area at the Garden of Peace, and to develop new areas only as they are needed. The enhancement of current services and the move toward new services and products should be based on the following recommendations:

- Focus on service to families that choose cremation by entirely renovating the existing columbaria garden, and by expanding and enhancing the scattering garden;
- Enhance collaboration with the Aga Khan Society, the Ahmadiyaa Movement, the Islamic Education Society, the Roman Catholic Diocese, various Asian community representatives and other groups (such as the Buddhist community) that seek to have areas of the Garden of Peace designated for their exclusive use;
- Improve the traditional range of services (provided incrementally as resources permit), prior to the initiating sale of products such as urns or flowers. The sale of markers may continue both given the history of this occurring at the site and the demonstrated need for this option, and
- Integrate options for interment of cremated remains and in-ground burials with memorialisation options (markers, monuments, memorial walls, etc).

4.2. Geographic Focus

Given these geographic considerations, it is recommended that the focus of promotion, market development and customer needs should be on the northeast sector of Calgary, (including the "Calgary-Conrich-Chestermere Corridor,") and on east-central and south Calgary. Signage and other promotional initiatives should focus on these geographic areas. Collaboration with funeral homes and marketing in funeral homes should include discussions about how to reach customers in these areas. The Financial Plan (see following chapter) is based on the population, death rate and disposition patterns for these areas of Calgary and Rocky View County.

4.3. Pricing

The price of services offered at Rocky View's cemeteries has historically been at or below the levels charged by nearby cemeteries (i.e. City of Calgary's Queen's Park Cemetery and Arbor Memorial's Mountain View Cemetery). Price increases at these sites appear imminent, particularly as the City of Calgary reassesses its role in providing public cemetery services, while seeking new cemetery lands to acquire and develop within the next few years. In order to maintain a competitive level and offer a fair price to customers, local price adjustments for cemetery services in the Calgary area should be reflected in the prices at Rocky View's cemeteries. There is room to gradually increase fees given Council's commitment to continue the provision of cemetery services, and given the cemetery's goal of increasing levels of care and management. Until site improvements are well underway and there are clear and demonstrated results arising from the implementation of this plan, prices should only increase in step with inflation. The Financial Plan is based on this approach.

In reviewing the current schedule of prices for services provided by Rocky View, it has been difficult to identify clear pricing policies and patterns of decision-making. A pricing policy should be developed to help County Administration to evaluate the merit of providing special pricing for group purchases. A rational pricing policy could also help with setting and raising prices. It is important for cemetery services to function in a business-like manner, though not necessarily as a solely profit-driven business. A corollary to that approach is the principle that the long-term sustainability of the cemetery system is predicated on a viable perpetual care fund.

The following pricing policies are recommended within this context:

- Pricing of Rocky View's services and products should generally be within a 10% price of similar services provided at Mountain View Cemetery and at Queen's Park cemeteries;
- Annual price increases equivalent to or greater than Alberta's Cost of Living Index should be incorporated into annual Fees and Charges bylaws, typically early in the year;
- There should not be any discounts for cemetery land except for the graves of Veterans and one spouse, and
- Contributions to the Perpetual Care Fund should be shown to the customer and mentioned as a nominal fee or as a percentage of the "base" price for services, land and products.

The implementation of this Master Plan will result in Rocky View's cemetery system being managed and operated at or above current industry recognized standards. The land base for cemeteries is increasingly scarce as the demand for quality service continues to grow. The long period of economic prosperity in Alberta, even with the current economic downturn, suggests that the vast majority of people can afford basic cemetery services, and there is no reason for prices for quality products or services to be offered at a discount.

4.4. **Promotions and Communications**

Promoting cemetery services and products is a sensitive initiative that needs to be undertaken within the context of the organization's overall marketing strategy, the vision for the cemetery's services, and applicable provincial laws.

The Government of Alberta's Cemeteries Act ("the Act") includes three sections that address the sale of cemetery products and how the selling of these products is to be conducted. These include Section 43, Section 51, and Section 70:

- Section 43: A licence to operate the cemetery is required and is in place. If the County is going to sell pre-need contracts for opening and closing then this must be undertaken by a representative licensed by the Province. Although, Rocky View County does not have a sales force, the Act states that a representative needs to hold a pre-need contract sales licence, issued by the Cemeteries Branch of the Government of Alberta in order to solicit individuals with the intent of entering into a pre-need contract. The Act's definition of cemetery products, or cemetery supplies, "includes the sale, lease or rental of a lot, plot, compartment, crypt or other space in a cemetery, columbarium or mausoleum or in a proposed cemetery, columbarium or mausoleum" (Section 43.1).
- Section 70: This section of the Act is concerned with "contracts entered into through direct contact." No direct contact, concerning the provision of cemetery services or cemetery supplies is permitted either by telephone or appearing at a person's home without first obtaining their permission to do so. In other words, "the individual has requested the presentation" (Section 70.3). A representative may, however, solicit an individual by mail, advertising in the media or through Internet communication.
- Section 51: If the Director deems that an owner or salesperson has contravened the Act or the regulations he may refuse to issue or renew, suspend or cancel a licence (Section 51).

Regardless of the statutory restrictions, it is imperative that Rocky View County's Cemetery system be understood and made available through the use of education-based messages, not consumer or sales-based messages. *Education-based promotion* will enhance the use and recognition of the cemeteries as community resource centres, where genealogical, community and family histories are available. Promoting the cemetery system in this manner will enhance the understanding of the sites and services where a broad spectrum of community values and physical resources are managed. This will ultimately result in the perception of the cemeteries as social and cultural places as well as for their traditional, functional purposes.

The promotion of Rocky View County's Cemeteries should comprise the following elements, further detailed below:

- Rename the Garden of Peace;
- Communicate the Cemetery's purpose to the community;
- Promote the Cemetery through appropriate media;
- Host community, cultural, religious and historic events, and
- Host educational events.

4.4.1. Rename the Garden of Peace

In order for the County's cemetery system to move toward financial sustainability and become an integral part of the social fabric of the community, it needs to be updated to meet the current and future needs of its customers and the community. It is imperative that Rocky View County's cemeteries move quickly to establish a strong and positive market presence, distinct and fully separated from cemeteries run by Arbor Memorial and the City of Calgary.

In collaboration with the County's communication's staff, an effective branding process must be strategically designed, adopted and consistently implemented year after year – but most especially in the next two years. The Garden of Peace has the reputation of a middle to low-end facility that provides reasonable service, but is dated and focused on traditional and/or budget-minded customers. In addition, while the Christian origins of the site and the concept behind its original layout (small, 2-4 acre "gardens" with biblical section names) remains of historic interest, the cemetery's current name sounds dated, and is not reflective of a modern and progressive facility. To overcome this image and harmonize the cemetery system with the progressive approach being taken by Rocky View County as a whole, it is recommended that the name of the Garden of Peace cemetery be changed.

A variety of names are possible, but the following are recommended as they retain a link with the historic name and so may cause less confusion in the future:

- Rocky View Memorial Garden
- Rocky View Memorial Park
- Memorial Plains
- Foothills Memorial Gardens

4.4.2. Communicate the Cemetery's Purpose

The purpose of Rocky View's cemetery system needs to be articulated, repeated and emphasized in all the services, points of contact with users, through appropriate media and at all events. To this end it is recommended that Rocky View County:

- Adopt and Implement a Mission Statement or Cemetery Vision;
- Adopt annual customer service objectives;
- Integrate the service objectives through performance plans, and
- Implement annual progress reports to Council, users and the community.

4.4.3. Promote the Cemetery through Appropriate Media

As previously indicated, one of the over-arching principles of this Master Plan is that Rocky View's Cemetery System should be operated in a business-like fashion, but not necessarily *as* a business. This is a primary distinction between the private sector and most public sector cemeteries. It is also a direction that the current and previous Councils provided to Staff and the consultant team. Consequently, commissioned salespeople should not be used at the Rocky View Cemeteries. Aggressive advertising should not be used and the maximization of all things "sale-able" should be avoided. It is evident however, that many people living in Rocky View County and in the north, east and northeast Calgary neighbourhoods are not sufficiently aware of the cemetery and of the memorial services available to them. Clearly, if the Rocky View County cemetery system is to be sustainable over time, education across the community is required. The promotion of the services available through appropriate media is a key tool in the system achieving financial self-sufficiency.

A diversified, strategic promotion program should be developed in step with Rocky View County's Communication Strategy to enhance the cemeteries, improve interment services, and promote cultural and educational events. In this way, the cycle of activities in the cemeteries and profile of the sites in the community will place the Rocky View County's cemeteries "top of mind" for local families when the time comes for them to seek cemetery and memorialisation services.

The promotion of Rocky View County's cemeteries should include the following initiatives:

• Establish, update and monitor the Rocky View County cemeteries website. This should include a link on Rocky View County's Homepage, a searchable database for locating graves and headstones, a listing of upcoming events, interment service and availability of monuments, pricing and links to hospice, bereavement and memorialisations sites;

- Publish a monthly hard copy and electronic (email) newsletter, circulated to all local funeral homes, recent customers, memorial and cemetery product suppliers;
- Circulate press releases when new services or products are developed, when new Staff are hired, and as new buildings, burial grounds and gardens are opened;
- Work with the Reeve's office to incorporate Rocky View's cemetery service during the "Reeve on the Range" and other radio and media opportunities;
- Attend local funeral homes and cemetery industry gatherings, such as the Western Canada Cemetery Association annual conference, and
- Establish and promote historic walking tours with a brochure about the history of the three cemetery sites, their notable gravesites, natural and cultural histories.

4.4.4. Host Community Events

In order for the County's cemeteries to become integrated with the community's social fabric, the many and varied events, rituals and ceremonies practiced in Rocky View should be welcomed at the Garden of Peace and the pioneer cemetery sites. Funeral, burial and memorialisations ceremonies need to be incorporated into site design and should become a key part of the program of promotional activities.

Several annual community events, including an annual interdenominational memorial service and an infants celebration, are currently held at the cemeteries. New buildings should be designed with multiple uses in mind in order to incorporate events. Future events could be added incrementally in the following years and could include the following:

- Host an evening of remembrance at the end of October or early November, similar to Vancouver's Mountain View Cemetery's "Night for all Souls" (which is based on the Mexican tradition of The Day of the Dead);
- Encourage New Canadians of Asian ancestry to celebrate Ching Ming (April 2nd through April 5th), the annual visitation and tending of ancestors' graves;
- Celebrate Fathers Day and Mothers Day with events and flowers available at the cemetery;
- Celebrate Easter with seasonal music and nature walks;
- Work with school children, the Legion and the Commonwealth War Graves Commission to decorate all veterans' graves and the Cross of Sacrifice in the week leading up to Remembrance Day (November 11th);
- Continue to support the Infant Grave Memorial Services by upgrading and expanding the "Silent Hopes" area to better serve bereaved parents at the twice annual events held there;

- Participate in the "Honour a Life" services each June and December, collaborating with hospice societies in Calgary and Rocky View County, and
- Work towards the creation of a site and building facilities where weddings, bar/bah mitzvahs, christenings and other rituals would be welcomed and appreciated by the community.

4.4.5. Host Educational Events

Educational events held at the County's cemeteries will serve to enhance the profile of the system by bringing people into the cemeteries (especially first time visitors). The promotional power of people visiting any of the County's three cemetery sites and having a memorable experience should not be underestimated. Visitors to an historic, environmental or interpretive event at a cemetery site are receptive to learning about what the cemetery has to offer as a place of interment, commemoration or of celebration of lives lived in the immediate vicinity.

Many communities are now adopting the model of a cemetery as a community oriented facility, allowing for many functions and roles. Educational events could occur under the banner of history, personal growth or purposes unrelated to death and bereavement. For example, guided and self-guided tours of the cemeteries could be developed to reflect the history of the communities, note-worthy figures and interesting lives. Or, buildings at the Garden of Peace could host seminars on writing wills, bereavement, hospice and palliative care, and retirement planning. Other educational seminars could include the use of cemetery buildings and could attract residents to the site for such activities as gardening, habitat enhancement, watercolour classes, yoga, toastmasters, or passive personal development classes. Facilities would, of course, have to be planned and designed for these uses.

It is recommended that:

- Interpretive panels be designed and installed at each of the four cemeteries depicting the social, agricultural and interment histories;
- Guided and non-guided historic tours be developed for each cemetery;
- Partnerships with genealogical societies, schools and others be developed to assist in the delivery of the tours, and
- Partnerships with the Alberta Health Services (Calgary Area) and others in the delivery of bereavement, hospice and related classes be developed and delivered at the Garden of Peace.

In order to meet the intent, as well as the letter of the Act, pertinent sections need to be understood by Staff. The staff must be made aware of the limits imposed by the Act; who can solicit and enter a contract and under what circumstances. Before an event, the workers, volunteers and cemetery staff should be briefed on the "do's and don'ts" when conversing with the public. Visitors at the event should not feel they were invited for the purpose of solicitation as they may feel that they were invited on false pretences and make them reluctant to attend future events. Staff can speak of the product if asked. The intention is for the event to promote the cemetery system, not directly sell the service.

The marketing of Rocky View County's cemetery services goes beyond advertising and promotion. It involves the provision of services required by the community by people trained in this specialized profession, concentrating on specific neighbourhoods, at prices that meet their needs, and with educational messages that attract their patronage while enhancing the social fabric of the Rocky View County.

It is imperative that these recommendations be considered during budget discussions, strategic planning and performance planning, and implemented as soon as possible following Council's adoption of the Master Plan. To delay further will exacerbate the present state of the Perpetual Care Fund, weaken the perception of the cemetery among Funeral Home professionals and will result in an ever steeper climb to achieve financial sustainability and social relevance in Rocky View. The Marketing Plan, in combination with the Financial Plan, Organizational Plan and the Conceptual Site Plan, provide Rocky View County with a road map towards operating a cemetery system that meets the community's interment and memorialisations needs, enhances habitat and is increasingly financially viable.

5. Organizational Plan

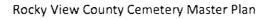
5.1. Introduction

The adoption and implementation of a visionary master plan requires the accompaniment of strong organizational and marketing plans. This chapter provides an organizational framework within which the Planning and Community Services Department can create a team of professionals dedicated to the provision of high quality cemetery and memorialisations services. This chapter also includes recommendations on bylaws, procedures and practices. The framework focuses on the following overarching recommendations:

- Create a committed team of cemetery professionals that are comfortable with and trained in bereavement, cemetery maintenance and records management;
- Adopt a business-like approach to providing cemetery services and maintaining the County's cemeteries;
- Develop an operations manual, and
- Provide the necessary policy and bylaw changes that synchronize with the Cemetery Master Plan.

A coordinated organizational plan is required. This plan should be focused on meeting customer needs, ensuring appropriate resources and management, and should help the cemetery to function in a more business-like manner. The staffing approach needs to ensure that the number of staff and their skill sets meet the specialized needs of cemetery operations and administration. It is crucial that management, office and field staff are committed to continuous improvement. Cemetery staff should have specific and relevant training and experience, and should continue to be involved in ongoing professional development comparable to that commonly found in other cemetery operations. Ideally, these professionals will have the personalities, interests, aptitudes, training, and commitment suited to serving bereaved families.

The organizational plan of the cemetery system should be sufficiently robust to support temporary illnesses, maternity leaves, and other staffing interruptions without affecting customer service, records management and invoicing. As such, staff should be crosstrained with the ability to fill multiple roles, as needed (for at least the short term). Financial, information technology and administrative staff should be sufficiently knowledgeable in all aspects of cemetery operations so that immediate concerns (e.g. quality control, inventory control) and administrative issues can be resolved quickly and effectively, without waiting for any one individual with the sole authority or skill to deal with problems.



The organizational plan should be based on techniques recognized by the industry as the most efficient, effective and up-to-date for cemetery systems of this size and geographical separation. The Financial Plan for Rocky View County's cemetery system addresses the historic anomalies and brings forward areas that warrant additional scrutiny for cost control purposes.

5.2. Human Resources

The cemetarian's profession is fraught with emotional and societal challenges. Meeting the needs of bereaved families requires a unique and sensitive team of individuals with an understanding of the legal, moral and practical dilemmas that affect how we bury our dead. The human resource is critical to customer satisfaction, quality control and quality assurance, and becomes even more important as Rocky View County's cemeteries move toward a modern, sophisticated operating model.

Given the dynamics of the current and anticipated labour market, the creation and enhancement of the team that will lead Rocky View's cemeteries for the next 20 years is likely to be an ongoing challenge that the Planning and Community Services Department will continue to face.

5.2.1. The Staff Team

The strategic enhancement of cemetery services for residents of the Rocky View County and the City of Calgary needs to be delivered by a team of cemetery professionals. This is crucial, as it addresses some of the issues identified by Council and our team during development of this Master Plan and in previous reports.

The following customer service issues have been identified:

- Rocky View County has an image as a civic facility that is not managed with a customer focus;
- There is a historic perception that the cemetery system may not be operated by the County for the long term;
- Rocky View County's cemeteries have a reputation within the funeral home industry as having "second-class" facilities and customer service;
- Competing cemeteries have strong reputations for customer service, reliability and site maintenance, and
- The image, attitude and expertise conveyed by cemetery staff are crucial aspects of customer service and the successful promotion of Rocky View's Cemeteries. Standards of performance, attire and behaviour are required for enhancing customer service and promoting Rocky View County's Cemeteries.

The following recommendations address the "people" side of the service equation:

- Recruit and develop committed management, sales and field staff with a natural aptitude in the area;
- Continue to enrol at least one management, office and field staff member in the Western Canada Cemetery Association (3 in total) annual conference;
- Provide a training allowance for one management person to attend a professional development conference each year outside of Alberta;
- Enroll the senior manager in the International Cemetery, Cremation and Funeral Association "Cemetery University;"
- Develop job descriptions for outside workers that include courses on cemetery operations from the Ontario Diploma in Horticulture at Guelph;
- Establish standards for work attire to be worn by all staff: uniforms for field staff and business attire for sales and management staff. Provide standardized items such as outdoor jackets and windbreakers with rigid name tags/other suitable identification, and develop simple but consistent dress policies for indoor staff, and
- Review staffing levels on an ongoing basis to ensure they meet or slightly exceed industry "best practices" for cemetery systems of this type.

In order to address the need for a robust cemetery management team within this context, the following tenets are recommended:

- Seek individuals committed to exemplary customer service;
- Work to attract individuals with experience in cemetery management, sales and site maintenance;
- Address gaps in cemetery experience through training and/or out-sourcing via consultants;
- Adopt a "continuous improvement" attitude that ensures cemetery service and site maintenance best practices are applied, and
- Develop job descriptions that have sufficient crossover to address planned and unplanned absences and vacant job positions.

The application of these tenets needs to occur within an organizational milieu that recognizes the need to operate cemeteries in a business-like manner, provides sufficient financial support and checks and balances, and recognizes that the delivery of cemetery services can require degrees of latitude that may not apply to other municipal services.

The Rocky View County cemetery team should include the following skills, expertise and background.

5.2.2. Leadership

The Rocky View County cemetery system will soon be undergoing a significant transformation that will see enhanced services, changes to customer service patterns, automation of records and mapping, and increased scrutiny from providers of funeral and cemetery services. In order to meet these needs, leadership of the Cemetery System will be crucial. It is not expected that all of the leadership responsibilities should come under one job description, but it is important that the new management be led by an individual with a passion for service and a desire to hone the skills (technical skills, "soft" skills) of a cemetery manager.

The following skills and areas of expertise need to be acquired, developed and inculcated, primarily in the office of the Municipal Lands Supervisor. It is recommended that these skills be incorporated in current or future job descriptions for the position that is charged with leading the Cemetery Services Section:

- The ability to build, retain and develop a cohesive team;
- The ability to motivate and problem solve a diverse team that includes field workers, seasonal workers, front counter staff and financial staff;
- The ability to take direction within the County bureaucracy and at once be self sufficient;
- The experience or willingness to learn the statutory, moral and best practices related to cemetery management;
- The experience or willingness to learn to manage a land-based service that is simultaneously a business unit, a social enterprise and an environmental asset;
- The ability to manage projects that have business, aesthetic and bereavement components, either through staff or through consultants, and
- The ability to effectively manage crises that arise through the course of funerals, burials, records management and staffing.

5.2.3. Customer Service

Although the County has slowly been moving towards improved customer service, there is a perceived need for significant improvement. As the Marketing Plan indicates, striving for and reaching a high degree of customer service is crucial. A culture of high quality customer service is needed if Rocky View County's cemetery system is to meet user needs and move towards financial sustainability. This culture needs to extend from the Director through the Section right into the ranks of the seasonal workers. Every aspect of the customer service cycle needs to be professional, courteous, precise and timely. The role of the Supervisor is critical, but the responsibility for high quality customer service should be the responsibility of all employees. The following actions are recommended:

- Formalize the importance of customer service in all job descriptions;
- Include specific, measurable customer service responsibilities in performance plans;
- Ensure the customer experience is considered in the use and development of sales processes, payment methods, follow up communication and all documentation;
- Integrate grave opening, closing, site maintenance and horticulture activities to meet a high standard of customer service; these practices should be formalized in written best/improving practice manuals;
- Ensure customer service training is provided for employee orientation;
- Introduce and reinforce a "how can I help?" attitude with all permanent, contract and seasonal staff. Train all staff to be able to provide basic assistance (grave finding, location of today's funerals etc) for any visitor, and
- Ensure the horticulture, turf management, burial and exhumation procedures meet or exceed industry best practices.

5.2.4. Resources

The Cemetery Services Section will face steep growth curves in the coming years. There will be significant pressures to make the system financially sustainable, to develop the Staff team, to integrate the pioneer cemeteries, and to meet the increasing expectations of customers. Consequently, a range of options relating to resources and skills should be considered as this Master Plan is set in motion. First and foremost, the new Cemetery and Municipal Lands Supervisor should not assume he/she can or should handle the entire work load. Part of it can be shouldered by the Project Manager and/or the Parks, Recreation and Community Services Manager; another by the Administration Assistant, and some of the implementation of these services, products and systems can be accommodated through the use of consultants. As the demands on the Cemetery/ Municipal Lands Supervisor increase, it will likely be necessary to alter some staff job descriptions and/or add a new position that can lead the business development and marketing responsibilities.

5.3. Operations Manual

The development of a "best practices" manual should be developed for site maintenance, opening, closing and post funeral site works and preparing the site for the funeral entourage (signage, site safety and comfort, use of chairs and tents etc).

5.4. Bylaw and Policy Updates

Rocky View County's cemetery bylaw is outdated and should be replaced with an updated version. The existing bylaw is a mix of regulations and policies, which need to be divided into separate documents. Many sections combine one or more discrete activities or operations, and these section should be separated for clarity. The by-law does not address cremation, green burial, the demographics of Rocky View County, or the operational/interment practices for the Muslim community. The bylaw also needs to incorporate language for Perpetual Care Funds and the trusting of funds on products provided by outside suppliers.

Our team reviewed the by-law in conjunction with the Alberta Cemeteries Act (C-3RSA 2000) and the relevant Provincial Regulations (Reg. 249/98), as well as other public and private cemetery by-laws. We recommend reworking the entire by-law in order to adhere more stringently to the Act and Regulations, as well as to prevent misunderstandings between the County, the customer, suppliers, funeral directors and other stakeholders.

Additional areas that need to be clarified in the bylaw and policy documents include:

- Definitions of terms;
- Policy on cancellations and transferring of contracts;
- Policy on refunds;
- Policy on reclaiming lots;
- Responsibilities pertaining to the installation of monuments and memorials, and
- Policies when moving or removing monuments.

Discussions are required with Administration and the Municipal Solicitor to dovetail the Conceptual Site Plan and Marketing Plan with bylaw and policy updates.

6. Historic Cemeteries

In addition to the Garden of Peace, there are four other cemeteries under the jurisdiction of the County. Dalemead and Bottrel accommodate several burials a year and are regularly maintained by County crews. The other two cemeteries (Whiteside Cemetery at Langdon, Mitford Cemetery) are "pioneer" cemeteries – sites that house the remains of a small number of people, likely dating back 100 years or more. Key recommendations include:

- Promote Dalemead and Bottrel as places of interment for nearby residents, while maintaining their rural character;
- Manage and maintain pioneer cemeteries as cultural landscapes; and
- If discovered, acquire other pioneer cemeteries as resources permit.

This section builds on the assessments previously undertaken and provides:

- An overall approach to site design and maintenance;
- Capacity management recommendations;
- Historic landscape measures, and
- Policy for managing any newly discovered "pioneer" cemeteries.

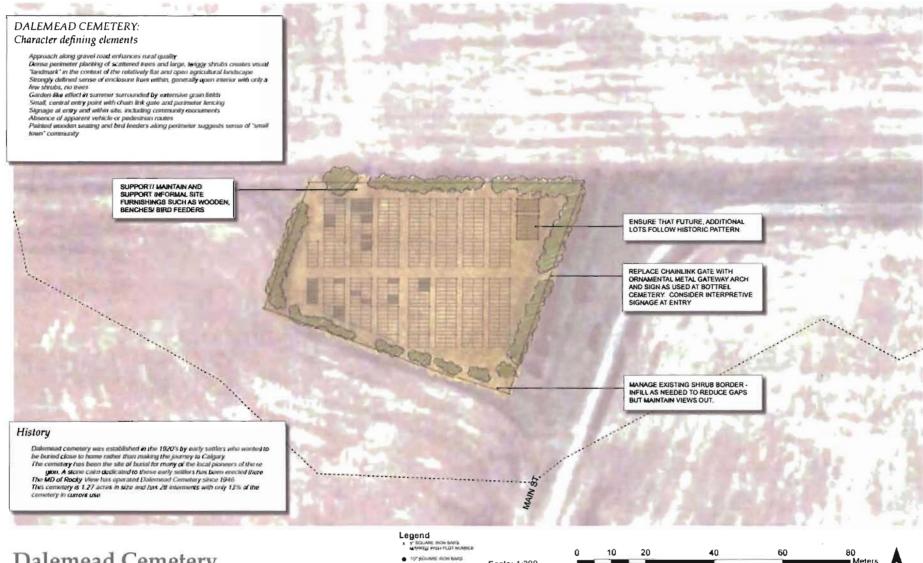
6.1. Dalemead Cemetery

The overall approach to the Dalemead Cemetery should be to preserve its quintessential rural character and to enhance the position of the cemetery on the crest of the hill. As ongoing maintenance and future development occur the following recommendations should be kept in mind:

- Keep the perimeter hedges trimmed so that the cemetery does not feel too enclosed, and to ensure that views to surrounding fields are maintained. Where there are openings to the surrounding fields, keep these views open. Trimming should maintain a relatively loose and informal quality rather than shearing, in keeping with the rural context;
- Create a more significant entrance to replace the existing chain link gateway and small entry sign;
- Maintain the road up to the cemetery, the turnaround and parking area;
- Plant trees along the road where rights of way and space permit;
- Significant capacity exists at Dalemead. Apply efficient lot layouts to optimize the yield of grave space while leaving room for tree planting, access to the cairn, and benches;

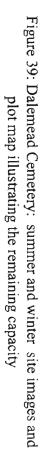
- Create in-ground cremated remains plots as part of an overall detailed interment plan for this cemetery. Given the rural character of this site, columbaria are not recommended;
- Create an interpretive panel that references the history of the cemetery (who built it, who was the first to be buried there and when, etc) and another that tells the story of several of the early pioneers buried there, as well as the story of the lands within view of the cemetery;
- Ensure that the existing cairn is properly repaired and maintained over time, and
- Consider maintaining the turf around existing graves and recently interred graves at a higher standard than the remainder of the site to save on maintenance costs.

See Figure 38 for an overview of the existing character, analysis and recommendations for Dalemead Cemetery.



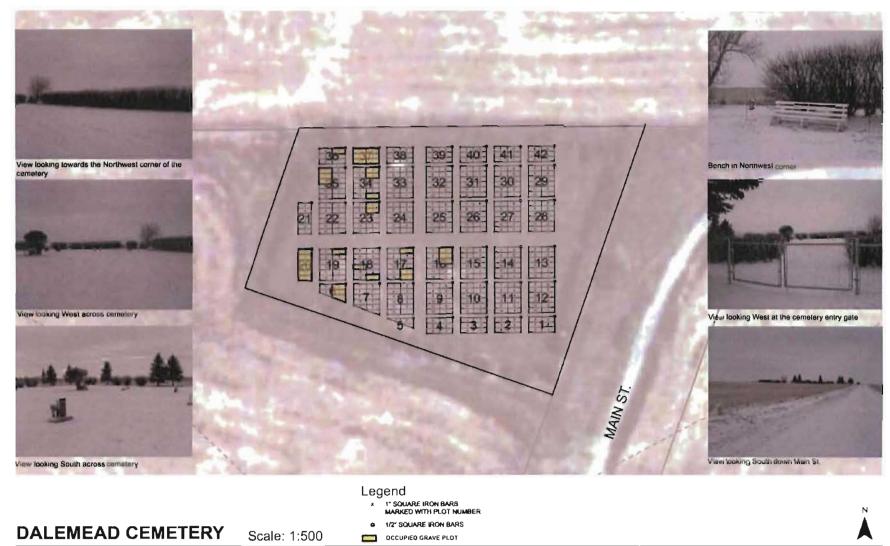
Dalemead Cemetery

Scale: 1:300









6.2. Bottrel Cemetery

The overall approach to this cemetery should be to preserve its rural character and visually "borrow" views of the adjacent farmland and mountains. The following recommendations should guide maintenance and development activity in the future:

- Maintain the informal buffer between the access road and the eastern edge of the cemetery. If the trees need to be pruned for drainage or other reasons, they should be pruned properly and possibly enhanced with replanting in order to keep a "loose," semi-transparent edge condition;
- In order to maintain views of the surrounding landscape, do not plant trees on the southern, western and northern edges of the cemetery;
- Allow trees that are growing in the enclosed family plot at the southern part of the cemetery to continue to grow there. They are now part of the historic landscape and are a poetic example of nature taking hold, over time, even within a confined space. Pruning and/or removal of some of these trees may be necessary over time, but ideally the mini-grove should be managed there for as long as possible;
- Evidence of ornamentation at some sites is evident. Although not yet out of control, monitor to ensure that the intent of the bylaws is being met;
- The Bottrel cemetery gate is a unique feature that is appropriate to this site and provides a clear threshold and entry sequence. The gate should be properly maintained over time;
- Create a pair of interpretive panels to explain the history of the site and the surrounding area, and to tell the story of some of the first people buried there;
- A significant amount of burial capacity remains at Bottrel, especially to the north. It is quite possible that there are people buried in the southern section, even though records may not indicate that those sites are occupied. To be safe, it is recommended that the areas to the north be used first and that as the site capacity diminishes the other areas be used for interment. If, during the course of opening those graves, remains are found, then the County's policy(s) for this eventuality should be followed, and
- Create in-ground, cremated remains plots laid out as per the templates as part of an overall detailed interment plan for this cemetery. In keeping with its rural character the installation of columbaria is not recommended at this location.
- Eliminate 8 most southerly graves along south property line to permit shrub and tree planting along fence for possible future screening of views over private property.

See Figure 41 for an overview of the existing character, analysis and recommendations for Bottrel Cemetery.

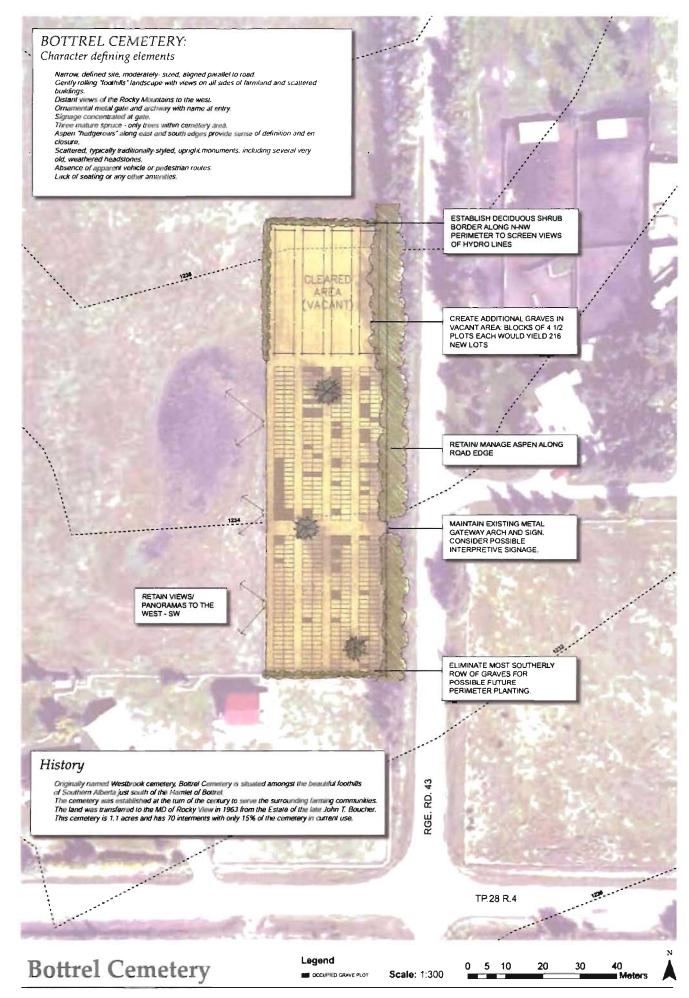


Figure 41: Analysis and Recommendations

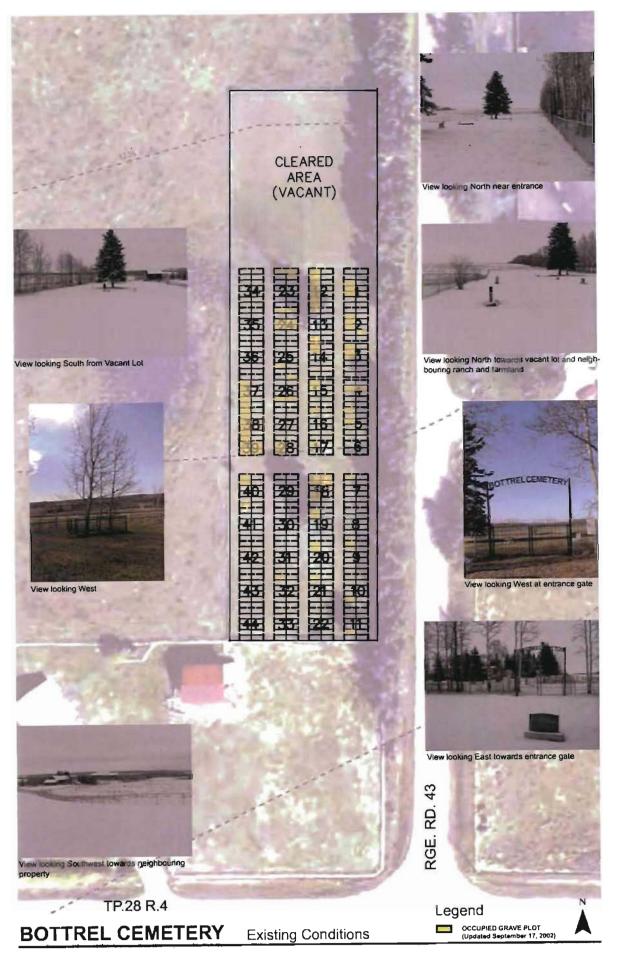


Figure 42: Bottrel Cemetery: site images and remaining capacity

6.3. Managing Pioneer Cemeteries

Pioneer Cemeteries have been identified in Langdon and Mitford. The purchase of the Langdon site is currently underway while the Mitford site remains privately owned and is not presently within the control or jurisdiction of the County. There are likely several others in the County, not presently within the County's land holdings. Once discovered, pioneer cemeteries should be acquired as resources permit, provided current owners are willing to consider public access. This should allow for sufficient lands surrounding the actual graves to facilitate access, reasonable lands around the graves and protection from grazing animals.

These cemeteries are cultural landscapes that warrant the same care and attention as buildings of cultural significance. Interpretation of these sites through on-site display panels and via web based community education mechanisms should occur as part of the County's Cemetery marketing plan.

The pioneer family cemetery at Langdon (Whiteside Cemetery) is a small property accessed via a "pan handle" shaped property. The site should be maintained at a municipal open space standard:

- Grass should be cut early in the spring and then twice before July 15 each year. Depending on the weather, it should be cut at least once before frost;
- Grass around headstones should be pulled by hand (not string trimmers) to protect the markers;
- A black chain link fence should be installed around the perimeter of the property and planted with wild roses;
- Vehicle access should not be allowed except for service vehicles. To that end a gate and discrete sign should be installed at the road, and
- Markers should be maintained as per best practices for historic markers.

When a new site is discovered or brought to the attention of the County it is recommended that the County:

- Ensure that the site is registered with the appropriate Ministry;
- Ensure property owners are aware of the cemetery;
- Offer advice on maintenance, monument and marker repair, and site security, and
- Add the site to the inventory of properties to be acquired (or to acquire the rights of access) as the opportunity arises and as resources exist.

If the property is acquired, the following recommendations should be applied:

- Sufficient land around the cemetery should be acquired to protect the site, to allow for maintenance, and to serve as possible future park use (depending on the quality and nature of the adjacent landscape), and
- Access for public use and maintenance should be acquired unless the site is not suitable for public access.

The County's historic cemeteries (as well as the Garden of Peace and the cemeteries within established communities such as Airdrie and Cochrane) are repositories of community history and culture. They should be designed, developed and maintained with the understanding that the stories and lives represented at these sites are unique to the County and as such, warrant deliberate effort and resources.

7. Financial Plan

The financial component of this plan integrates background demographic, death trend analyses and recent cash flow spreadsheets with projected changes to the range of interment options. This chapter describes the financial planning assumptions and approaches that underpin the cost, revenue and cash flow projections that are summarized at the conclusion of this chapter.

7.1. The Changing Community and Local Context

The financial plan is based on 25-year projections for population, death, burial and cremation. As the community grows and the population ages, there will be an increasing number of families requiring cemetery services. These families represent the total potential customer base for the County's cemeteries. In reality, the proportion of the customer base using the County cemetery is below the total potential market. Of those families that chose cremation, only approximately 5% presently prefer interring the cremated remains at the Garden of Peace. Of those that opted for full depth traditional burial, just over 20% chose to inter at the cemetery.

The presence of Mountain View Cemetery immediately south of the Garden of Peace is a significant challenge when addressing the market share. The property is owned by Arbor Memorial, a sophisticated corporation providing integrated funeral and interment services. Unlike many municipal cemeteries, the presence of Arbor further complicates the City's ability to attract more customers – especially in the burial and interment of cremated remains.

Base Assumptions

The Financial Plan incorporates the foregoing changes anticipated within the community while also identifying the ceiling on additional market capture due to the close proximity of Arbor. It has also incorporated the following base financial planning and management assumptions:

٠	Projected capital and operating cost escalations:	2% per annum (p.a.)
٠	Projected revenue escalations:	3.5% p.a.
٠	Anticipated cost of borrowing:	4% p.a.
٠	Anticipated earned interest rate:	2.5% p.a.

The Cemetery Business Case Analysis Tool (CBCAT) is an integrated financial planning tool developed by LEES + Associates and G.P. Rollo and Associates for tracking interment trends, population changes and planning cemetery services. It incorporates the baseline data, current and projected pricing and costs within a pro forma that can be used for financial and organizational planning and management. The full financial plan has been submitted under separate cover. Key drivers and results of the financial analyses follow.

Market Share

This financial plan projects that a moderate increase in the market share will result if site improvements, enhanced services and products, improved infrastructure and a renewed commitment to managing the cemetery as a business unit are undertaken.

The Garden of Peace currently attracts close to 20% of local families that choose traditional burial (i.e. in-ground, casket). The remaining in-ground burials are likely occurring elsewhere in Calgary, Cochrane and Airdrie and at private cemeteries. In order to attract significantly more of the traditional burial market, the County will need to improve site maintenance and expand the range of interment options (eg. upright marker lots).

In 2008 Calgary's rate of interment by cremation was 71%, up from 65% in 1999. This illustrates the marked increase in cremation as a means of interment, and the need for Rocky View County's cemeteries to increase their intent on capturing this growing market.

Year	Cremation	Cremation percentage	Burial	Burial Percentage
1999	2985	65%	1603	35%
2000	3095	65%	1654	35%
2001	3030	64%	1692	36%
2002	3167	65%	1692	35%
2003	3340	67%	1666	33%
2004	3443	68%	1638	32%
2005	3510	69%	1602	31%
2006	3785	70%	1609	30%
2007	3958	70%	1698	30%
2008	4109	71%	1639	29%

Figure 43: Death Disposition Numbers, Calgary 1999-2008 Source: AB Vital Statistics The interment of cremated remains should be the primary service to focus on at this cemetery over the next 25 years. The current share of the cremation market is only 5%; however, the CBCAT projects an increase to a maximum of over 25% in 25 years. As with the goal of increasing the share of the traditional casket market, these projections are predicated on expanded service quality, interment options and marketing.

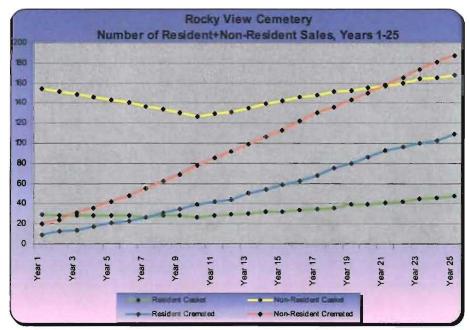


Figure 44: Defining the Market, Years 1-25.

7.2. Perpetual Care Fund

Perpetual Care Funds are set aside by cemetery owners for the future maintenance of the cemetery. If the cemetery ceased operations, and operating revenue were to stop, monies would be required to maintain the cemetery grounds in perpetuity. Maintenance standards could be reduced but would still have to be at a level which respects those interred in the cemetery.

Unlike some other provinces, the Alberta Cemetery Legislation (Cemeteries Act, Chapter C3) does **not** specify a required amount or percentage of sales to be taken for perpetual care purposes. In Alberta, there is no industry-wide, agreed-upon formula for calculating the amount needed in a Perpetual Care Fund. In British Columbia, legislation requires PCF contributions of 10% for mausolea and columbaria and 25% for in-ground graves. Some municipalities in BC have chosen to contribute more than the statutory requirement.

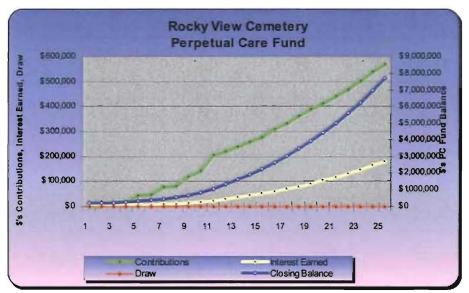
As of December 2008, the amount in the Perpetual Care Fund (PCF) was \$205,908. These funds are invested in short term investments (30 day GICs). The practice in the Municipal District between 1995 and 2002 had been to add to the fund if and when there has been a surplus in the cemetery services. In years when there has been a deficit, the fund has been tapped to support the deficit and reduce the tax based subsidy. Since 2002 the Perpetual Care Fund has remained essentially static.

It is recommended that the Perpetual Care Fund contributions begin when the road and turf improvements are complete and when the Gardens of Gethsemane is re-developed. With these obvious improvements adding to the very public appearance of the site, the introduction of a contribution to the PCF will be more palatable. It is recommended that 2012 be set as the target for contributions to begin on the PCF.

Rocky View County's Perpetual Care Fund is significantly under-resourced. If all net revenue and tax-based subsidies for the cemetery system were to cease, there would not be enough interest generated from the PCF account to complete even a basic level of maintenance, let alone sustain the roads, fences, columbaria or other infrastructure on the three cemetery sites. If the principal in the PCF were used for maintenance purposes the amount would only last for 3 to 5 years.

Recognizing that the initiation of contributions to the Perpetual Care Fund will add to the total cost of interments in the Rocky View cemetery system, and that this increase will affect customers, the following incremental changes are recommended:

- Initiate contributions to the Perpetual Care Fund in 2012;
- Begin contributions at 5% of all interment, plot and marker costs, and
- Increase contributions to the PCF in regular increments at regular intervals (suggested: 5% increments each year until 20% contribution rate is reached).





(Based on a 5% PCF contribution rate, starting in Year 1 and ramping up in each successive year).

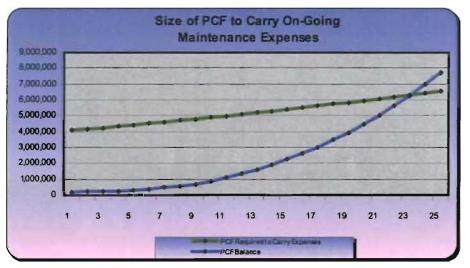


Figure 46: Size of PCF Required to Pay for On-Going "Basic" Maintenance Expenses (Based on a 5% PCF contribution rate, starting in Year 1).

7.2.1. Cemetery Operating and Capital Costs

Operating costs are expected to decrease as the cemetery modernizes, introduces new services, and adopts a business-like approach. The cemetery's current maintenance cost is substantially higher than would be expected for a cemetery system of this size. Although additional resources will be needed for marketing, most of the marginal increases in site and interment costs can be accommodated through improved efficiencies.

The CBCAT financial model has incorporated a \$300,000 deletion in operating costs in lieu of the historic pattern of \$200,000 in capital costs being included in the operating budget and an estimated \$100,000 in non-cemetery related services being included, historically in the cemetery operating accounts.

Capital cost projections have been calculated based on unit costs for interment options, lump sum amounts for site improvements and new building construction. Soft costs of 14% and an 8% contingency for changes during design have been included in the capital costs.

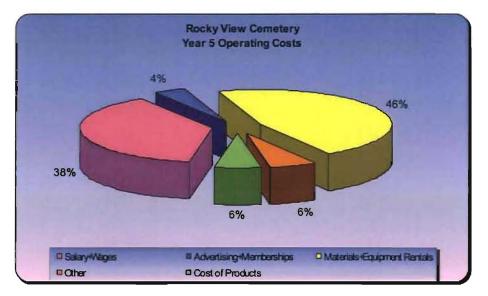


Figure 47: Operating cost, Year 5 Perspective [from all graphs].

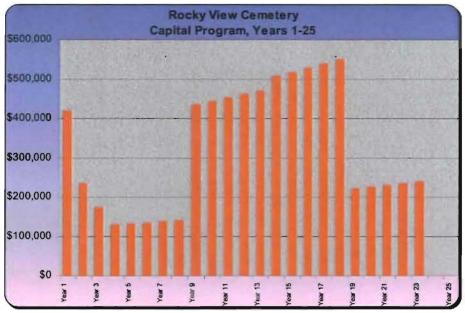


Figure 48: Capital Costs, Year 1 - 25

7.2.2. Operating Revenue Projections

The implementation of the additional service options recommended in this document will attract a greater share of the market and result in additional revenue, increasing incrementally over time. The pricing strategies recommended earlier in this report will result in price increases comparable with the City of Calgary rates.

Pre-need sales, purchases made by a family prior to a death, are especially valuable because other than recovering the cost of land and maintenance of that land, income is generated with little or no ongoing costs attached. The County cemetery system is unique in that very little of the gross revenue is generated through pre-need sales.

Revenue projections are based on the recommendation that annual increases of an average minimum of 3.5% be sustained and applied in each year. These prices do not include the addition of PCF contributions, recommended to begin in 2012.

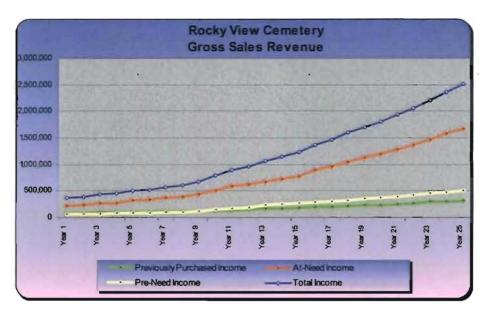


Figure 49: Gross Sales Revenue, Years 1-25

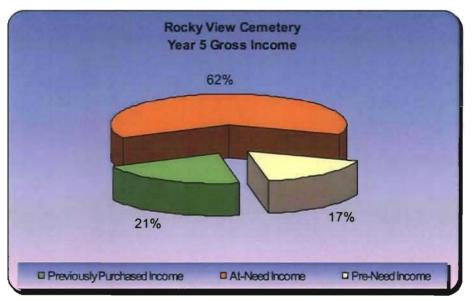


Figure 50: Gross Sales, Year 5 Perspective

7.2.3. Estimated Cash Flow

The cash flow before capital expenditures is projected to remain in a deficit for years 1 - 4. This is primarily due to:

- High cost of cemetery system maintenance;
- Medium level of interment option pricing, and
- Lack of ongoing effective marketing.

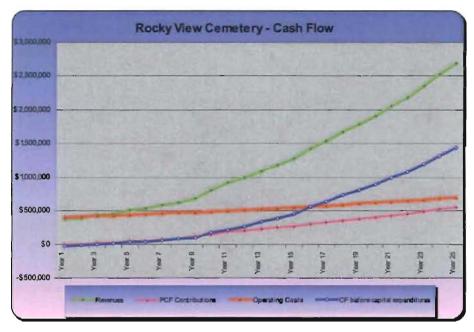


Figure 52: Detailed Cash Flow before Capital Expenditures, Years 1-25.

When the capital program is included, the business case for the County's cemetery system will continue to rely on tax and grant based funding. The net present value of the proposed financial plan over the 25-year period is projected to be \$3,470,388.00 at an 8% discount rate.

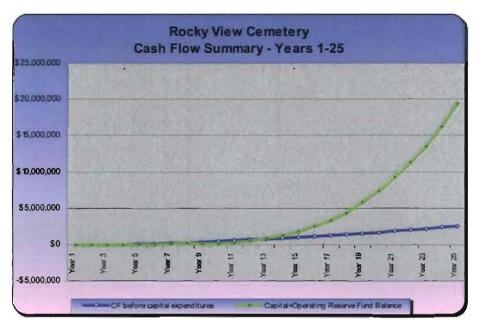


Figure 53: Simplified Cash Flow, 1 - 25 Years

The County Cemetery system is in need of a capital infusion to finance much-needed revenue generating inventory. At the same time, the operating costs need to be analyzed to ensure that costs that presently fall under the heading of Cemetery Operations are being spent on cemetery operations.

We do not recommend the "pay as you go" philosophy for fear that it would result in very little substantial change to the site or services. A blend of tax-based, grants and use of the existing resources in the operating fund will provide adequate resources for conservative growth and infrastructure improvements.

It is important to reiterate that the option of introducing mausolea and indoor columbaria has been included in these analyses to begin at approximately the same time as a new building. A mausolea business case analysis may very well generate revenues beyond those in the above scenario. A business case analysis for mausolea should be undertaken, but only after the basic aspects of cemetery operation and enhancement are in hand and are functioning properly. This would likely be at least 5 - 7 years after the Council's adoption of the Master Plan.

8. Implementation

8.1. Priority Development Areas

The Conceptual Site Plan reflects the needs expressed by the community and Staff for increased capacity and services. They are discussed briefly below and summarized in the implementation table (Figure 53).

1. Silent Hopes Infant Area (Garden of Everlasting Life)

Renovate the existing infant interment area developed for use by Alberta Health Services (Pregnancy Loss Bereavement Program.) The area should be expanded to increase capacity in addition to addressing programming needs for the ceremonies that take place there twice a year.

2. Gardens of Gethsemane Columbaria Garden

Redevelop the columbaria area at the Gardens of Gethsemane. The area should be renovated, the sloped columbaria wall should be replaced and new paving, planting and feature elements should be installed. The families of those interred in this area should be contacted regarding this process and given first choice for new niches.

3. Existing entry way

Upgrade the existing entry area as an interim measure until the redevelopment of the chapel and central campus of facilities has occurred. The existing entry area should be redesigned with low cost upgrades such as expanding planting beds, the removal of elements of inappropriate scale and materials, and the facing of the existing planter wall with stone cladding. New signage is recommended, with improved graphics, basic site information and a map of the existing cemetery.

4. Existing primary vehicle circulation route

Widen the existing looped road from approximately 4 to 6 metres by adding 1 metre of asphalt on each side. This initiative will require the confirmation of adequate space along the entire segment; however, the road loop should be widened as a priority measure before any further landscape improvements take place in this area. Corners should be visually reinforced with stone edging to manage encroachment by turning vehicles.

5. Upright lots in the Garden of the Good Shepherd

Undertake a review of this upright marker area to confirm capacity. Consider how lots may be added to augment the remaining inventory of approximately 82 casket graves. Consider infill options and/or conversion of flat market lots to upright lots to accommodate the higher level of demand for this option. Begin the relocation of scattered shrubs and trees and regrading as required. Design the area for a more efficient arrangement of lots that will also accommodate the proposed service road connection to the south.

6. Garden of Memory

Review options for increasing capacity in this area by redesigning the remaining space in a more rational and efficient manner. Consider how the remaining inventory of approximately 12 lots might be expanded to meet projected demand through infill (using a more efficient lot template), conversion of lot types, adjusting planting and reclaiming unnecessary pedestrian pathways and service corridors.

7. Garden of Remembrance cremation interment area

Consider options for augmenting the remaining inventory of 25 cremation lots through the strategies outlined for the Gardens of Memory and Good Shepherd. If it is determined that no additional cremation lots can be created in this area in a rational and effective manner, undertake a redesign of Area 8, below, to accommodate cremation interment.

8. Gardens of Gethsemane - east corner

Undertake a review of unused capacity in the undeveloped "garden space" along the east side of this section. Develop a plan for infilling this area with cremation lots such that they fit with the existing grave layout. Using the large feature tree as a focal point, align lots as a true "cremation border," whereby the smaller lots line the edges of larger casket lots amidst low plantings. The creation of new cremation lots will require upgrades to landscaping, including new pathway treatments and a new planter edge for the specimen cottonwood.

9. Sermon of the Mount Scattering Garden

Develop a concept plan for the creation of an attractive scattering garden in the central, landscaped area. Consider the inclusion of elements that will mitigate the effects of nearby Highway 1.

10. Highway 1 signage area

Develop a concept plan for the reconstruction of the existing wooden sign at the intersection of Garden Road and Hwy 1 (The TransCanada Highway). Design will

require close collaboration with the Ministry of Transportation and related agencies regarding what will be permitted along this right-of-way. However, it is important that the right to maintain a sign in this location be preserved, particularly as direct access will be removed following the closure of Garden Road, and visual access will be affected by the proposed perimeter shelterbelt/tree buffer to be developed immediately inside the cemetery property. The scale and character of design should be in keeping with proposed development, be simple and timeless in style, and include basic directional information. Low level lighting should be included in the landscape plan.

11. Extend existing Catholic Interment area

Provide a minimum of 100 new lots, utilizing a site layout template that optimizes grave yield and uses a new continuous marker foundation that conceals exposure of any concrete above ground.

12. Expand Aga Khan area

Provide a minimum of 200 new lots in a new section, using a grave layout that optimizes grave space, but avoids more than 40 graves being grouped contiguously without pathways or plantings.

In order to meet the short and long term needs of the County, the action items on the following table are proposed. As an overall approach, it is recommended that these actions be implemented on a "walk before running" basis. In other words, there are significant site, customer service, records system and interment actions that should be implemented as a matter of first priority. Once the basics are in hand, the introduction of products such as flowers, vases and monuments should be considered for additional revenue and service to the community. The realization of the proposed gardens and operation infrastructure will be the result of design development and construction documents completed in conjunction with a design team and Staff.

8.2. Implementation Plan: 10 Year Timetable

The following table (Figure 55) provides an Implementation Plan summary and <u>10-year</u> timeline (2010 to 2020) of the recommended actions.

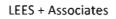
IMPLEMENTATION PLAN				TEN	YEAR	TIM	ELINI	E	1	
	60	2	Ξ	5	2013	4	2	9	12	2018
	2009	2010	2011	2012	20	2014	2015	2016	2017	20
1 INTERMENT AREA					an an					
Renovate and expand Silent Hopes Infant Area (#1)	-	_	<u> </u>		1					
Redesign/renovate Gardens of Gethsemane Columbaria Garden (#2)		11								
Expand Aga Khan area; create min. 200 new lots in new section (#12)		250	100							
Create additional upright lots in Garden of the Good Shepherd (#5)		100.00	520							
Extend existing Catholic interment area; create min 100 new lots (#11)		18	1							
Create new cremation lots in Garden of Memory (#6)										
Expand/upgrade Rose Garden scattering area - Garden of Remembrance		199								
Provide new cremation lots in the Garden of Remembrance (#7.1 #8)	1000									1
Develop scattering garden in Garden of Sermon on the Mount (#9)		11/10		2						
Develop template for more efficient layout of in ground lot layout	200									
Initiate program of maintenance/sales at Rural Cemeteries	Ten T	25			\geq					
Initiate program of maintenance/interpretation at Pioneer Cemeteries	1912	160		;	\geq					
Design and construct Green Burial Area						0.0				
Begin design and layout of Phase I new in-ground lots						100	0.0			
Design and construct Phase I new Cremation Gardens								1000		1
Develop new casket lots along Garden Rd following road closure		1.110								
Consider additional interment options such as in ground ossuary		1000	0		1					
Consider additional interment options such as estate mausolea								151		
SITE INFRASTRUCTURE (ROADS AND SERVICES)				-						
Expand existing primary road loop from 4 to 6 m width (#4)									-	
Undertake a program of annual road repair and maintenance						>				
Construct materials storage area and gravel service road connections				1			-			
Install granite curb barriers (developed area) at problem intersections										
Construct new entry road and first vehicle circulation loop						1. C				
Construct secondary entry off Garden Road				-						_
Construct new south entry into expansion area				-						
									_	
FEATURES AND AMENITIES					1		-	4 - S		
Renovate existing entry area and signage (#3)		-	-	-	<u> </u>	<u> </u>		-	-	-
Replace Highway 1 Signage Area for Gardens of Peace (#10)	-	-		L					-	-
Develop/implement consistent materials palette (walls, paving etc)	-	-	_		\leq	<u> </u>	<u> </u>	<u> </u>		-
Commence installation of consistent site furnishings	-				-					
Design and install consistent section markers and directional signage	-	-	_	-	-		-	-	-	+
Regrade and enhance north irrigation dugout	-	-	1	Constant of	-		-	-	-	-
Reconfigure and enhance south irrigation dugout Create new irrigation/water feature off Garden Road	-			-					-	-
Develop pedestrian path and landscaping along North Boulevard	_	-	-	and an other states				-	-	
Construct water feature and associated patio space			-					-		-
Install entry gate at new primary entry on Garden Road	_	-		-			-	-	-	
Develop pedestrian trail system with signage, seating etc	-					<u> </u>	5		-	<u> </u>
Develop community commemoration area at main entry	_		_							-
bevelop community commemoration area at main and y	-		-	-	-		-			-
LANDSCAPE AND PLANTING						-				
Commence program of tree removals and horticultural management					>					
Begin installation of perimeter buffer/shelterbelt (Hwy 1)										
Begin installation of perimeter buffer/shelterbelt (Garden Rd)										
Street tree planting new entry drives							-			
Create signature "foothills landscaping" at entry areas										
Install vegetative screen for materials storage/access roads								13 P		
BUILDINGS AND SITE FACILITIES					-					
Conduct audit of existing chapel and upgrade as required		1000	100							
Commence of the state of the state of the state of the state of				-	-					
Commence planning and design of new campus of facilities			1					15 9		
Construct new administration bldg/celebration hall and parking										1
Construct new administration bldg/celebration hall and parking Renovate/redevelop crematorium facility in a separate structure										ļ
Construct new administration bldg/celebration hall and parking							1			-

Legend blue fent black font existing developed area
 expansion / future development area
 corresponds to Priority Development Area
 ongoing project #

Figure 53: 10 Year Implementation Plan

9. Conclusion

This Master Plan and accompanying appendices provide the Rocky View County with a framework of prioritized actions that are supported by extensive community, Council and Staff consultations. In order for the cemetery system to reach its potential and meet the needs of Rocky View County residents, significant work is required, supported by commitment to this project over an extended period of time.

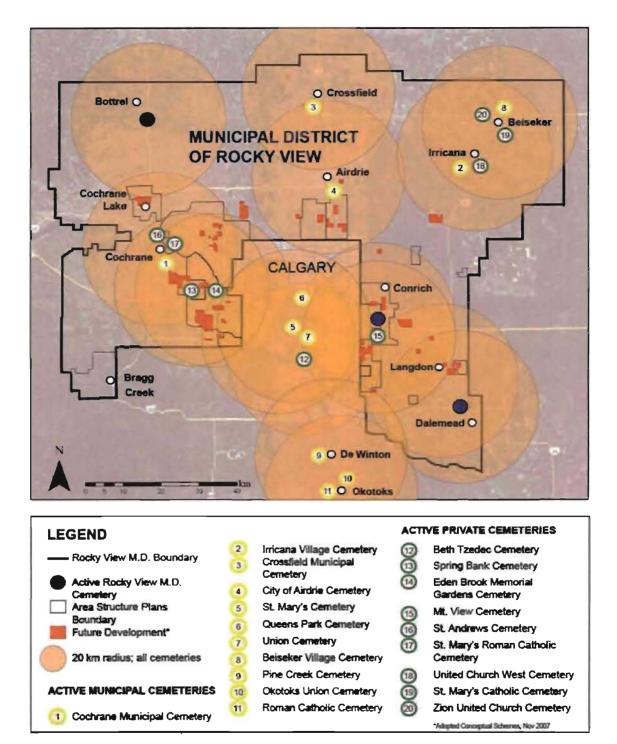






Appendix I: All Active Cemeteries in the Rocky View County Vicinity

All Active Cemeteries in the Municipal District of Rocky View Vicinity- 20 km Radius



Appendix II: Xeriscaping

Primeau, S., Bell, M., Riopel, M., Ewaschuk, E., and Doell, D. 2009. Green Communities Guide: Tools to Help Restore Ecological Processes in Alberta's Built Environments. Land Stewardship Centre of Canada. Edmonton, Alberta.

Copyright © 2009 Land Stewardship Centre of Canada

Xeriscaping (Water Wise Gardening)



 CO_2

Xeriscaping (Water Wise Gardening)

Description

Xeriscaping, otherwise known as "water wise gardening," involves selecting plants that are suited to the moisture conditions of the site. In the arid regions of Alberta, it involves selecting droughttolerant plants that require minimal watering once established. The word "xeriscape" is derived from *xeros*, the Greek word for dry, and landscape.



Xenscaping, involves selecting plants that are suited to the moisture conditions of the site. Selecting native, drought-tolerant plants requires minimal watering once established. Using native plants also provides suitable foraging and nesting sites for native animals. Photo Credit: Sarah Hipkin

Current Practices

Conventional landscaping often includes elements that have high water needs. Watering turf lawns, for instance, can use a substantial part of a municipality's water supply in the summer months. Irrigation demands are typically met by watering lawns and gardens with treated municipal drinking water, sometimes through elaborate irrigation systems.

Recommended Practices

The following are eight general principles of xeriscaping that can be adopted by municipalities and homeowners alike (City of Hamilton, 2007):

- Plan and Design: Design your garden to take advantage of the existing site conditions (sun, shade, moisture, etc.). Plant drought-tolerant plants in dry, exposed areas, and plant more water-loving plants in naturally wet areas or in rain gardens (see "Bioinfiltration Basins, Rain Gardens, and Bioswales" tool).
- 2. Create Practical Turf Areas: Limit the area of lawn to places where it is actually used, and consider replacing lawn with alternative ground cover plants (e.g. clover, chamomile, wild strawberry, and creeping thyme) or expanded garden beds.
- **3. Use Mulches**: Apply a 1-3" layer of mulch to soil to reduce evaporation, keep weeds at bay, enrich soil fertility, and minimize ero-

173

C Land Stewardship Centre of Canada

sion. Locally-sourced organic materials (e.g. shredded bark, straw, ground corn cobs, bark chips, compost, fallen leaves, and grass clippings) are usually the most cost-effective source of mulch. Avoid inorganic mulches (e.g. pea gravel) as they do not help retain soil moisture or enrich soil fertility.

- 4. Irrigate Efficiently: If you need to irrigate, opt for drip irrigation systems that provide water directly to plant roots and reduce water loss to evaporation. The City of Edmonton recommends watering 1" per week; watering more deeply and less often promotes healthy plant root growth. Improve the Soil: Amending soil with compost is an effective way to improve soil fertility and improve water retention. Test soil composition and nutrient levels before amendment.
- 5. Use Appropriate Plants: Choose plants whose moisture needs are compatible with your climate. For most of Alberta choosing drought-tolerant plants will be most appropriate. Often the hardiest plants for a given region are also the native species, since these are already well-adapted to the local climate extremes and moisture conditions. The added benefit of using native plants is that they will provide some habitat values for local insects and wildlife. Choosing climate-appropriate plants helps conserve municipal water supplies and can help protect the aquatic habitat from which a municipality draws its water.
- 6. Maintain Your Landscape and Garden Properly: Healthy plants are more disease resistant and require less pest control. Regular maintenance should including monitoring plants for pests and disease, pruning

when appropriate, and removing invasive species.

7. Capture Rain and Snow Run-Off: Rain barrels, rain gardens, bioswales, and pervious surfaces are all tools that can help capture or infiltrate rainwater on-site. See "Bioinfiltration Basins, Rain Gardens, and Bioswale" and "Rainwater capture" tools for more details on these practices.

Benefits & Costs

- Reduced demand on municipal water supplies. The use of drought-tolerant plants in arid areas of Alberta greatly reduces demand on our municipal water treatment and distribution systems. The water savings from the reduced water use results in more water being kept in our rivers, lakes, and aquifers, and therefore being available to support our aquatic ecosystems.
- Reduced need for pesticides and fertilizers. Selecting hardy native plant varieties reduces the need for pesticides and fertilizers, thereby saving money and reducing the amount of these potentially-harmful substances from washing off our yards and into our local water bodies.
- Cost-savings. Municipal gardens will greatly benefit from adopting a xeriscaped approach, due to the great cost-savings of reduced watering and weeding. Individual home owners will also reap the cost savings from not having to water, fertilize, or otherwise maintain their gardens to the extent that more susceptible plant selections would require.
- Wildlife attraction. Increased use of native plants across our urban landscapes will provide greater opportunities for attracting songbirds and butterflies to our cities.



Special Considerations

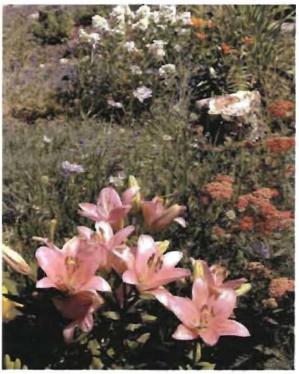
- Some people have the perception that a xeriscaped yard is synonymous with a desert-look, with rock 'mulch' and low, scrubby plants. In fact, xeriscaped yards can be designed in a variety of garden styles. Within each style of gardening plants can be selected for droughttolerance and hardiness, without sacrificing style and aesthetics.
- Annual maintenance of any irrigation equipment is very important, as eliminating the unnecessary waste of leaks can lead to significant water savings.
- Do not buy wild-dug plants or dig plants from the wild. Insist on nursery-propagated native plants.

CASE STUDY 25 Rockyford Urban Xeriscape Demonstration Site

Location: 135 – 3rd Avenue East, Rockyford, Alberta

Project Description:

- The Rockyford Urban Xeriscape Demonstration project was established in 2003, and it highlights urban landscape water conservation. The goal of the site is to serve as a model of reduced reliance on urban water supply and chemical inputs.
- One impetus for the project was several years of drought throughout Alberta.
- Contrary to many people's idea of a xeriscape, the Rockyford Urban Xeriscape demonstration site shows that with the right plants and water capture system, you can have a lush, colourful landscape with minimal outdoor water use.



Day and Asiatic lilies grow well in Alberta and provide a burst of color in July/August. They come in many colours and require little care to thrive. Photo Credit: Claudette Lacombe

C Land Stewardship Centre of Canada



Overcoming Barriers:

- The first barrier was funding and manpower. That was addressed by gaining the support of a local watershed stewardship group and municipal leaders, and by pursuing corporate funding.
- The project received a significant in-kind contribution of 11 workers from Quicksilver Resources (then MGV Energy) to work on the garden for an entire day.

Successes and Outcomes:

- The project has reached a stage of success whereby the owner holds annual "plant digs." The public are invited to visit the site, dig up plants that need dividing, and take them home to try. It appears that many Rockyford residents have been inspired to adopt elements of xeriscaping in their own yards.
- The garden provides the owner, Claudette Lacombe, with enjoyment year-round.
- The strategic placement of hedges and trees has helped to moderate her home's temperature.
- The owner has also observed many wildlife species that benefit from the plantings. Wildlife includes local birds and skunks, who feed on the berry patches. Migrating birds eat the crab apples, and in the past couple of years, the predator birds have taken an interest in the abundant supply of small birds!

Economics:

One cost savings is achieved from not buying fertilizers and pesticides. Instead, the owner receives advice and pest monitoring from the Wheatland County weed inspector and a local horticulturist. She also finds that dense ground covers reduce the establishment of weeds in her garden.

- Additional cost savings have been achieved by growing plants that are suited to the climate, and by using less gas for the lawnmower.
- The owner also saves money by growing her own strawberries, raspberries, herbs, garlic and onions.



Both the day lily and baby's breath thrive in our climate and soils. Baby's breath makes an excellent addition to cut flower arrangements.

Photo Credit: Claudette Lacombe

For More Information:

Claudette Lacombe, Umbel Communications, Website: www.umbel.ca

Recommended Resources:

- A Practical Guide to Ecoscaping in Western Canada: available from EPCOR
 Website: www.epcor.ca > Type into Search
 Field: Ecoscaping
- Evergreen Canada's Native Plant Database:
 Website: www.evergreen.ca/nativeplants
- Xeriscaping and Water Conservation: from the City of Hamilton: Website: water.greenventure.ca/xeriscaping
- Alberta Yards and Gardens: What to Grow: publication by Alberta Agriculture to help landowners select plants best-suited to Alberta's climate.

Website: www.agric.gov.ab.ca > Type into Search Field Agdex 200/32-1 Phone: 1-866-882-7677.

- Alberta Native Plants Council: promotes knowledge and conservation of the native plants and vegetation of Alberta.
 Website: www.anpc.ca
- Consult your local library or plant nursery for additional information about drought-tolerant gardening.

Acknowledgements:

Claudette Lacombe, Umbel Communications

References:

- City of Hamilton. 2007. Eight Principles of Xeriscaping. Green Venture. Available Online at: www.water.greenventure. ca/xeriscaping
- Lacombe, C. 2008. Rockyford Urban Xeriscape Demonstration Project. Umbel Communications.

Available Online at: www.umbel.ca > Rockyford Urban Xeriscape Demonstration







Canada Stewardship Centre of Canada



The main purpose of Land Stewardship Centre of Canada (LSCC) is to promote stewardship as a way to achieve sustainable land and resource use through the application of ecological principles to ensure maintenance of ecological function. Further, LSCC supports individuals and community-based groups trying to improve their local landscapes. LSCC participates in provincial and national initiatives that advance stewardship policy in all sectors of society.

Special Thanks to our Sponsors

Land Stewardship Centre of Canada would like to extend a special thanks to all of our Sponsors, especially the Alberta Real Estate Foundation. The Alberta Real Estate Foundation supports initiatives that enhance the real estate industry and benefit the communities of Alberta, providing generous support over three years towards the development of the Green Communities Guide.

Our Sponsors are an essential component of this project, and we're looking forward to working with you in the future.

For More Information:

If you would like to obtain multiple copies, arrange a presentation for your upcoming event, comment/add to the Guide, or develop a relationship with Land Stewardship Centre of Canada, please contact:

Dawn Doell Green Communities Guide Project Coordinator Land Stewardship Centre of Canada Imrie House, 17503 - 45 Ave Edmonton, Alberta T6M 2N3

E-mail: gcg@landstewardship.org Telephone: (780) 483-1885 Website: www.landstewardship.org Appendix III: Site Furnishings

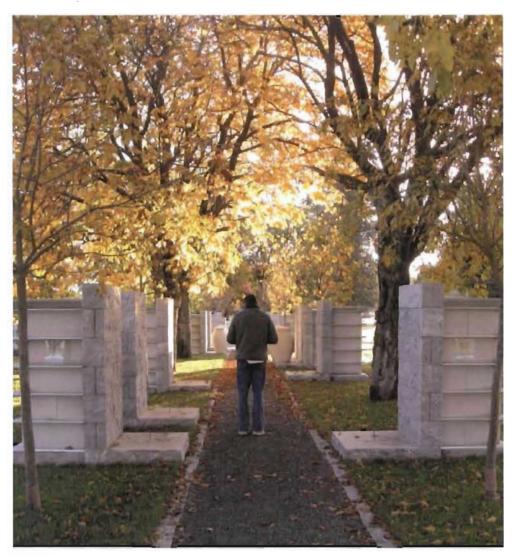
SUGGESTED SITE FURNISHINGS FOR GARDEN OF PEACE CEMETERY

1 Martin

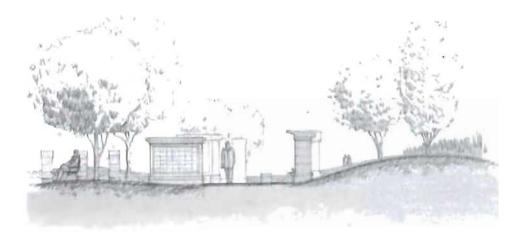


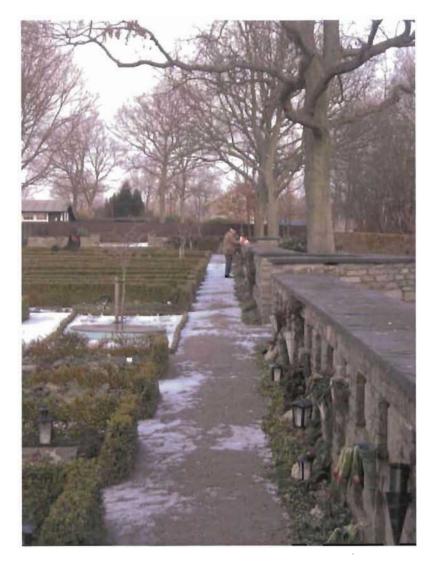
Appendix IV: Precedent imagery





PRECEDENTS COLUMBARIA & MEMORIAL WALLS

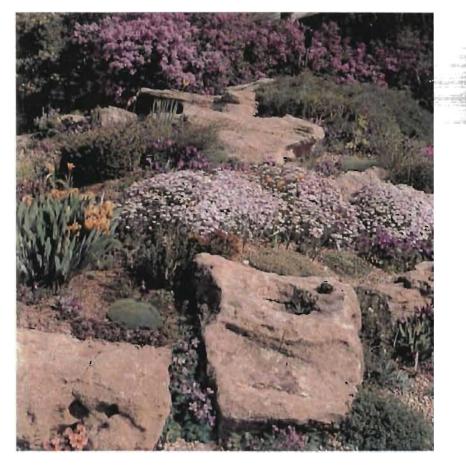




PRECEDENTS

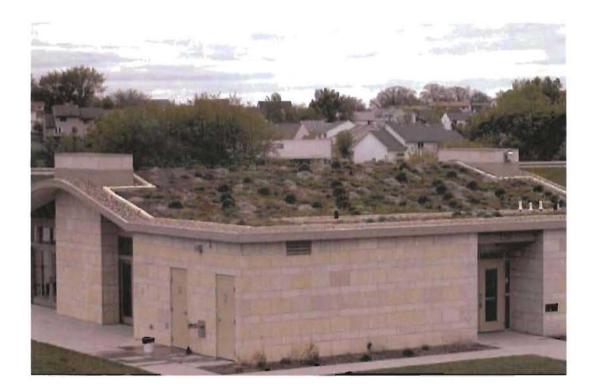
COLUMBARIA

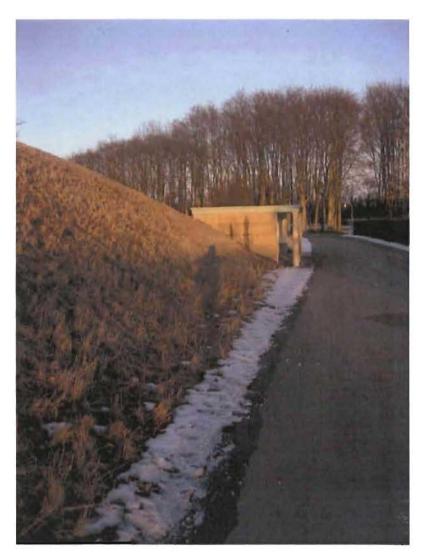


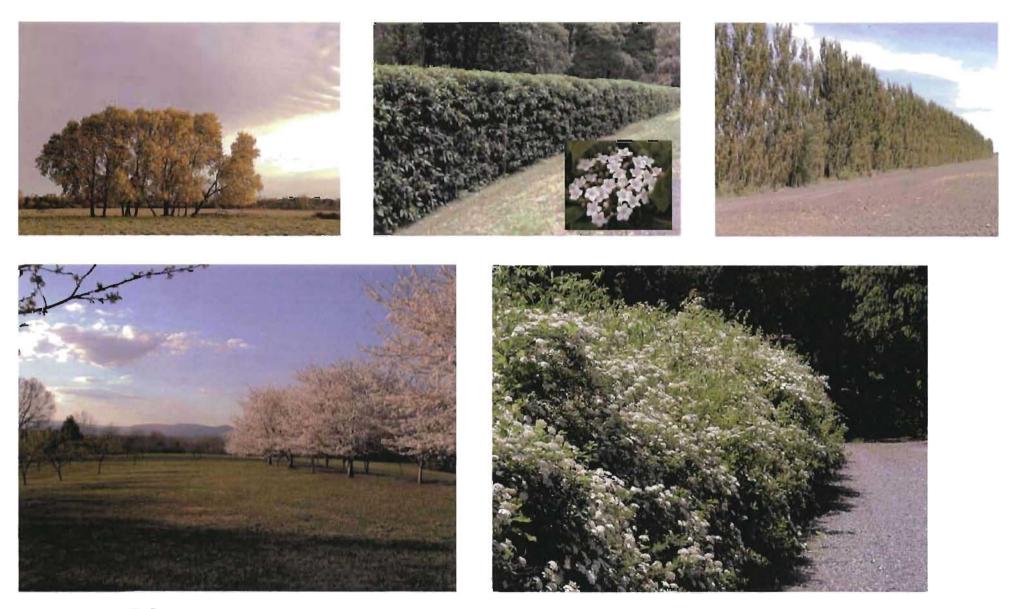


PRECEDENTS COLUMBARIA

PRECEDENTS PRAIRIE & FOOTHILLS LANDSCAPE - GREEN FACILITIES



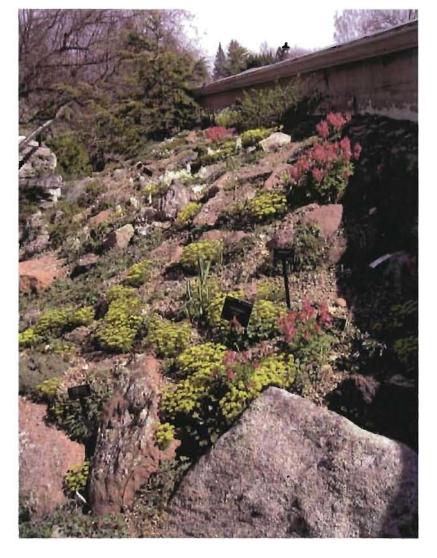


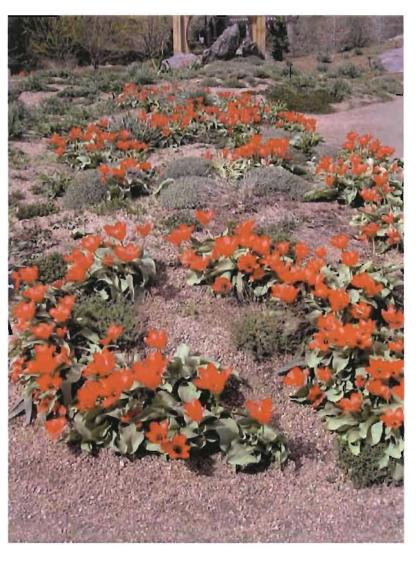


PRECEDENTS PRAIRIE & FOOTHILLS LANDSCAPE



PRECEDENTS PRAIRIE & FOOTHILLS LANDSCAPE





 PRECEDENTS
 PRAIRIE & FOOTHILLS LANDSCAPE



PRECEDENTS PRAIRIE & FOOTHILLS LANDSCAPE - WETLANDS

•