

# Penticton Cemeteries Master Plan

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Penticton Cemeteries Master Plan

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# EXECUTIVE SUMMARY

## INTRODUCTION

The City of Penticton's cemetery system is approaching an important threshold. Fairview Cemetery is closed to new burials, and it is expected that Lakeview Cemetery will reach capacity within six years. The City has commissioned this Cemeteries Master Plan to ensure that there will be sufficient capacity to meet the interment and commemoration needs of the area residents over the next 25 years.

The methodology used for this study included a series of interviews with key staff and stakeholders, followed by an analysis of demographic, interment, and financial background information. The results of this process are summarized below.

## KEY FINDINGS

### DEMOGRAPHICS AND TRENDS

Lakeview Cemetery can expect an average of approximately **256** interments per year over the next 25 years. Of this average of 256 interments each year:

- Approximately **69** (27%) will be traditional in-ground burials;
- Approximately **164** (64%) will be in-ground interments of cremated remains;
- Approximately **22** (8%) burials will be interments of cremated remains in columbaria niches, and
- Approximately **one** interment every **two years** will take place in a mausoleum.

### CEMETERY LAND NEEDS ANALYSIS

Key findings from the land needs analysis include:

- There is no remaining burial capacity at Fairview Cemetery;
- **By 2019**, existing traditional in-ground burial capacity and in-ground cremation capacity will be exhausted at Lakeview Cemetery;
- Additional burial capacity could be developed at Lakeview Cemetery to fill community needs over the next 25 years, and
- **Beyond 2035**, additional burial capacity will be required at another location.

## SITE ANALYSIS

Key findings from the site analysis include:

- Lakeview Cemetery has potential for significant additional burial capacity on land in the southwest corner;
- Past ground subsidence has left sinkholes at Lakeview Cemetery in areas with unstable subsurface conditions;
- The irrigation system at Lakeview Cemetery is inefficient, outdated and should be replaced as part of a strategy to reduce the risk of future subsidence;
- The main entry to Lakeview Cemetery lacks visual prominence;
- The pedestrian linkage to the Kettle Valley Railroad (KVR) Trail requires improvement, and
- The condition of many graves in Fairview Cemetery is poor, and the overall landscape requires refurbishing.

## SUMMARY OF RECOMMENDATIONS

### BURIAL EXPANSION RECOMMENDATIONS

To ensure adequate burial space for the community over the next 25 years, it is recommended that the City

- Begins a phased expansion of burial capacity at Lakeview Cemetery in 2017 on land in the southwest corner;
- Secures and retains the 10 acre property at Munson Mountain for future cemetery development purposes, and
- Begins the process of creating new burial capacity at Munson Mountain at least five to seven years before Lakeview Cemetery is expected to reach capacity.

### FINANCIAL RECOMMENDATIONS

To move the cemetery service towards cost recovery, it is recommended that the City:

- Increases prices by 15% every year for five years to cover operational costs and the interest debt on the columbaria garden development. Increase prices by the rate of inflation every year thereafter;
- Continues to fund the principal amount required to construct the columbaria garden from sources outside of the cemetery budget;
- Continues to finance cemetery capital improvements and the expansion of burial areas from tax revenues, following the same funding model used by other community services;
- Make capital injections to boost the Perpetual Care Fund when funding permits, and

- Invest the minimum statutory amounts into the PCF derived from interment sales. **If and when** there are net operating profits, those could be placed in a Cemetery Development Reserve to reduce future requirements for tax based capital funding.

## SERVICE DELIVERY RECOMMENDATIONS

To improve service delivery at the cemeteries, it is recommended that the City:

- Continues to use the current service delivery model for site operations;
- Improves the level of landscape maintenance at Fairview Cemetery;
- At this time, enhance the status quo service delivery model with a dedicated member of Staff to administer the cemeteries, and renewed emphasis on marketing and promotion in order to meet the ambitious financial goals;
- Bring all cemetery service and cemetery operations functions under the control of one City Department;
- Establishes a dedicated family room or quiet, comfortable “flex space” at City Hall, where customers can meet with Staff in a comfortable, undisturbed setting, and
- Commissions an individual business case analysis, and hold further conversations with Council to explore the optimum cemetery delivery model to serve the community.

## PRODUCT AND MARKETING RECOMMENDATIONS

To improve public awareness of Penticton’s cemetery system, increase customer satisfaction and increase cemetery revenues over time, it is recommended that the City:

- Increases the range of interment and memorialization options available;
- Permits pre-need sales of lots;
- Begins selling monuments and markers;
- Develops a marketing strategy that includes the following initiatives: make recommended site improvements; undertake cemetery promotions, programs and events; utilize printed, digital and social media, and
- Update the cemetery webpage to promote Lakeview Cemetery and provide complete and concise information about the services offered and associated fees.

## PHYSICAL PLAN RECOMMENDATIONS

### Fairview Cemetery

Fairview Cemetery should be retained as a cultural landscape, dedicated to commemorating local heritage, and providing space for passive recreation and quiet reflection. Expansion of the burial capacity at Fairview is not proposed.

Proposed physical improvements include:

- Restore graves and monuments;
- Replace the perimeter chain-link fence with a black, wrought iron-style fence;
- Replace the irrigation system;
- Install new benches and waste receptacles, and
- Upgrade interpretive signage and site information available on site.

### Lakeview Cemetery

Lakeview Cemetery should continue to serve as the active cemetery, with the following physical improvements:

- Expand burial capacity in phases on land in the southwest corner of the cemetery;
- Replace the existing irrigation system;
- Upgrade the main entry feature and pedestrian linkage from the KVR trail;
- Screen the operations yard and crematorium;
- Implement a way-finding strategy that includes directional signage, informational and interpretive signage, and
- Stabilize the existing bank along Lower Bench Road pending engineering advice.

## IMPLEMENTATION SCHEDULE

An implementation schedule is found in Appendix 9, which identifies all of the recommended improvements in the Master Plan in order of priority.

## ESTIMATED CAPITAL COSTS

The order of magnitude cost estimates required to implement the recommendations in this Master are:

▪ Burial expansion at Lakeview Cemetery:	\$675,500
▪ Upgrades to existing burial areas at Lakeview Cemetery:	\$409,500
▪ Upgrades to Fairview Cemetery:	\$ 61,000
▪ Design consultant fees:	\$ 165,000
▪ <b>TOTAL COST</b>	<b>\$1,311,000</b>



# 1. INTRODUCTION

The City of Penticton's cemetery system is approaching an important threshold. Fairview Cemetery is closed to new burials, and it is expected that Lakeview Cemetery will reach capacity within six years. The City has commissioned this Cemeteries Master Plan to ensure that there will be sufficient capacity to meet the interment and commemoration needs of the area residents over the next 25 years.

Fairview Cemetery is the City's original cemetery and the former site of St. Saviour's Church. The cemetery has a park-like character with mature trees. Some of the earliest members of the community are buried here. Distant views of the mountains are available from within the cemetery.

Established in 1910, Lakeview Cemetery is the City's active cemetery. Lakeview is characterized by open lawn with avenues of maple and western red cedar trees. A columbaria and mausoleum garden was added to the cemetery in 2009. The site has spectacular views across Okanagan Lake to the mountains beyond.

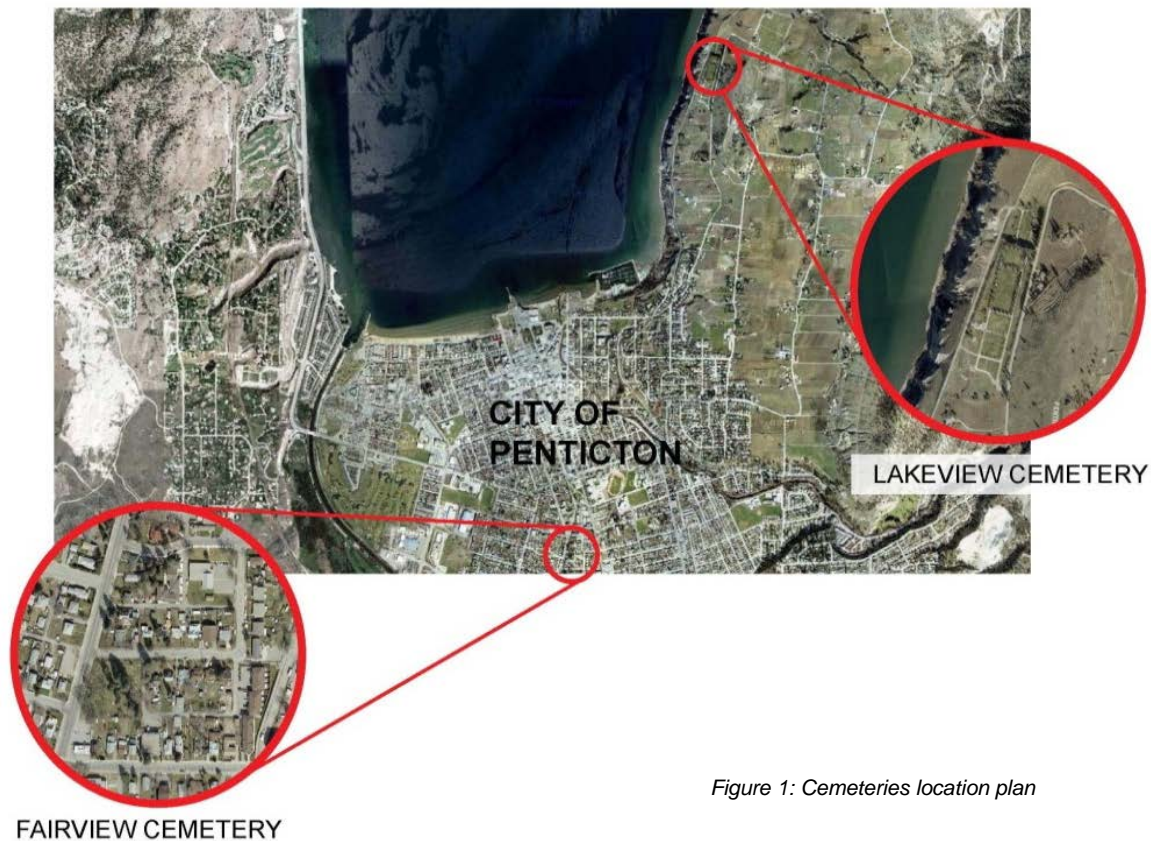


Figure 1: Cemeteries location plan

There is room for significant expansion of burial capacity at Lakeview Cemetery; subject to addressing the geotechnical issues and reducing the risk of future ground subsidence. Besides

the geotechnical issues, a number of other considerations were reviewed as part of the master planning process. These included:

- Demographic trends;
- Additional burial capacity required to meet future needs;
- The cultural, historical, and amenity value of the cemeteries;
- Opportunities and constraints at the cemeteries;
- Existing infrastructure;
- The potential to expand burial capacity at the cemeteries, or at alternative locations;
- The financial position of the cemetery system;
- The cemetery service delivery model, and
- Cemetery products and services and a cemetery marketing strategy.

These considerations were analyzed in light of how they might guide future development, use and the provision of cemetery services over the next 25 years. Results of this process are incorporated into this Cemeteries Master Plan, whose objective is to assist the City of Penticton with ensuring that its cemetery system continues to be embraced and welcomed by the community in the short and the long term.

This Master Plan includes:

1. **The Penticton Cemeteries Master Plan;**
2. **Conceptual and detailed design** for expansion lands, complete with phasing and budget estimates, and a
3. **Design Report** that will follow the Penticton Cemeteries Master Plan.

This report addresses the Penticton Cemeteries Master Plan, in the following sections:

- Section 1: Introduction;
- Section 2: An overview of rates of disposition and the history of interment at the City's cemeteries;
- Section 3: Projections of future need for interment capacity over the next 25 years;
- Sections 4 to 6: An overview of the opportunities and constraints for enhancing Penticton cemeteries, and the potential to expand their burial capacity;
- Section 7: The business plan and recommendations, in relation to the financial sustainability of the cemetery system;
- Section 8: A review of service delivery including site operations and customer service;
- Section 9: Recommendations regarding the provision of additional products, and an overall marketing and promotion strategy, and
- Section 10: An explanation of the physical plans developed through the course of reviews by the community, Staff, and Council. A phasing plan and an estimate of costs to implement the master plan are included at the end of this section.

## 2. DEMOGRAPHICS AND TRENDS

The purpose of this section is to identify relevant death and burial trends that will guide recommendations in relation to burial capacity and the range of interment options to be provided in Penticton, principally at Lakeview Cemetery.

### ACTUAL DEATHS

#### City of Penticton Population Growth and Death Rates (2004 - 2011)

The table below shows the population growth and death rates in the City of Penticton over the 10 year period 2002-2011<sup>1</sup>.

Year	City of Penticton Population	Annual population increase %	Number of Deaths	Annual Death rate per 1000 population
2004	32868	1.07%	458	13.9
2005	33061	0.59%	505	15.3
2006	34669	4.86%	461	13.3
2007	34002	-1.92%	430	12.6
2008	32933	-3.14%	484	14.7
2009	33250	0.96%	523	15.7
2010	33078	-0.52%	437	13.2
2011	33098	0.06%	465	14.0

Table 1: City of Penticton Population Growth and Death Rates (Source: BC Vital Statistics)

Over the period 2002 - 2011:

- The average annual population growth rate was **0.25%**;
- The average annual number of deaths was **471**, and
- The average death rate was **14.1** per 1000 people.

Over the period 2002-2011, although fluctuating slightly, the population of Penticton increased from 32,868 to 33,098, representing an annual increase of 0.25%. The number of deaths in the City also fluctuated over the same period but with a slight, upwards trend. The average number of deaths was **471** per year, and the average death rate was **14.1** per 1000 people.

## EXPECTED DEATHS

### City of Penticton Predicted Population Growth and Death Rates (2012-2036)

Population growth and death rate projections for the City in the upcoming 25 year period are shown in the table below. (These figures have been aggregated according to population and death rate projections for the Penticton Local Health Area [LHA 15] from data published by BC Stats in “P.E.O.P.L.E 2012”<sup>ii</sup> P.E.O.P.L.E. stands for “Population Extrapolation for Organizational Planning with Less Error” and is an acronym used by BC Stats for its annual cycles of sub-provincial projections.)

<b>Year</b>	<b>Population</b>	<b>Annual population increase %</b>	<b>Number of Deaths</b>	<b>Annual Death rate per 1000 population</b>
2012	33289	0.58%	493	14.8
2013	33493	0.61%	508	15.2
2014	33662	0.50%	515	15.3
2015	33867	0.61%	520	15.4
2016	34093	0.67%	524	15.4
2017	34346	0.74%	521	15.2
2018	34615	0.78%	528	15.2
2019	34884	0.78%	529	15.2
2020	35162	0.80%	534	15.2
2021	34652	-1.45%	533	15.4
2022	35727	3.10%	535	15.0
2023	35996	0.75%	538	14.9
2024	36264	0.74%	542	14.9
2025	36530	0.73%	546	14.9

2026	36801	0.74%	550	14.9
2027	37058	0.70%	558	15.1
2028	37305	0.67%	569	15.3
2029	37539	0.63%	579	15.4
2030	37759	0.59%	588	15.6
2031	37961	0.53%	601	15.8
2032	38153	0.51%	606	15.9
2033	38334	0.48%	616	16.1
2034	38506	0.45%	621	16.1
2035	38675	0.44%	628	16.3
2036	38839	0.43%	635	16.3
<b>Total Expected Deaths Over the Next 25 Years (2012- 2036):</b>			<b>13,929</b>	<b>Predicted Average Annual death Rate: 15.4</b>

Table 2: City of Penticton Predicted Population Growth and Death Rates 2012- 2036 (Source: Statistics presented for the City have been aggregated based on P.E.O.P.L.E 2012 Local Health Area 15 Population Statistics for Penticton published by BC Stats)

In the upcoming 25 year period (2012-2036 inclusive):

- The total number of deaths is projected to be **13,916**;
- The average number of deaths per year is projected to be **557**;
- The average death rate is projected to be **15.4** per 1000 people, and
- The average population growth is projected to be **0.64%** per year;

The predicted average annual number of deaths is expected to rise from 471<sup>1</sup> to **557** in the upcoming 25 year period. The average annual death rate is also expected to increase from 14.1 to **15.4** per 1000 people. This is in line with both the PEOPLE 2012 Projection figures which show an increasingly elderly population through to 2036.

This trend towards an increasingly aged population is further confirmed by the City's own figures prepared by Small Business BC, which shows that there will be an increase of 18.2% in residents who are 64 - 74 years of age in the upcoming 25 year period.

<sup>1</sup> Actual average number of deaths of the 2002-2011 period (Source LEES+Associates)

## DISPOSITION TRENDS

### PROVINCIAL RATES OF DISPOSITION

Canadian trends in disposition indicate that cremation is becoming the preferred option nationwide. The following table shows cremation rates across Canada from 2001 to 2011. Over the last decade BC's cremation rate has been the highest in Canada and is predicted to remain the highest in the coming years. The rate of cremation in the majority of other Provinces is expected to continue gradually rising.

#### Percentage of Deaths in Canada Resulting in Cremation—Projected to 2016

The total percentage of cremations resulting from deaths reflects the number of cremations and/or the rate of cremations that were provided for each province. Those figures do not include data from provinces that were "Not Available" (NA).

Province	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2016
Alberta	53.3%	54.5%	55.4%	58.0%	58.8%	59.9%	60.9%	62.0%	64.0%	65.5%	66.1%	71.6%
British Columbia	75.5%	76.5%	76.7%	77.9%	78.5%	78.6%	79.7%	79.6%	80.7%	81.4%	80.6%	82.1%
Manitoba	48.9%	50.6%	50.7%	52.1%	52.8%	94.0%	54.3%	57.5%	58.2%	59.6%	60.7%	68.9%
New Brunswick	26.0%	27.3%	29.7%	30.8%	35.1%	36.8%	38.6%	39.4%	43.8%	46.1%	48.2%	58.6%
Newfoundland & Labrador	12.0%	0.0%	0.0%	0.0%	18.1%	19.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Northwest Territories	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Nova Scotia	37.9%	41.1%	42.8%	49.5%	50.5%	54.6%	57.9%	58.0%	60.8%	63.2%	65.9%	79.3%
Nunavut	4.4%	0.9%	1.0%	2.1%	0.0%	0.0%	1.5%	1.6%	1.4%	0.6%	6.3%	0.8%
Ontario	41.8%	42.5%	46.3%	47.4%	48.7%	50.1%	51.0%	51.7%	52.6%	53.1%	54.2%	59.4%
Prince Edward Island	9.8%	10.5%	11.0%	11.3%	13.5%	15.2%	16.3%	17.8%	19.8%	20.9%	22.2%	28.5%
Quebec	35.3%	36.1%	66.8%	61.0%	69.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Saskatchewan	39.7%	41.4%	42.4%	45.7%	47.1%	48.1%	49.3%	51.7%	53.5%	54.7%	56.3%	64.4%
Yukon Territory	59.8%	46.5%	60.7%	54.7%	60.1%	55.2%	58.6%	54.7%	64.2%	62.8%	63.5%	55.3%
<b>Canada Total</b>	<b>47.2%</b>	<b>48.1%</b>	<b>50.3%</b>	<b>52.1%</b>	<b>53.6%</b>	<b>57.3%</b>	<b>55.5%</b>	<b>56.3%</b>	<b>57.4%</b>	<b>58.2%</b>	<b>59.0%</b>	<b>63.9%</b>

2006-2011 Canadian data excludes Quebec as the Institut de la Statistique du Québec is no longer able to provide these figures.

Table 3: Cremation Trends across Canada (Source: Cremation Association of North America, 2011)

The table above indicates that the cremation rate in BC is projected to rise to 82.1% by 2016.

**RATES OF DISPOSITION IN BC**

The table below shows the rates of cremation in BC over a period of 26 years between 1986 and 2011. The average annual rate of cremation during this period was 72.5%. In 2011 82.3% of people in BC chose cremation and 17.7% chose traditional in-ground burial.

**METHOD OF DISPOSITION OF DECEDENT**

BRITISH COLUMBIA, 1986-2011

Year	Burial		Cremation		Other	N. S.	Total
	Number	Percent	Number	Percent	Number	Number	
1986	8,204	39.0	12,686	60.4	98	21	21,009
1987	8,211	38.0	13,279	61.4	104	25	21,619
1988	8,319	37.2	13,926	62.3	96	17	22,358
1989	8,061	35.4	14,616	64.1	81	28	22,786
1990	8,208	35.1	15,088	64.4	91	29	23,416
1991	8,035	33.7	15,675	65.8	75	36	23,821
1992	7,818	32.0	16,512	67.5	97	36	24,463
1993	7,989	31.2	17,213	67.2	151	251	25,604
1994	7,712	29.9	17,888	69.2	177	55	25,832
1995	7,615	29.0	18,361	70.0	187	63	26,226
1996	7,640	27.9	19,546	71.4	196	12	27,394
1997	7,360	27.0	19,652	72.1	214	46	27,272
1998	7,198	25.9	20,379	73.3	227	9	27,813
1999	7,063	25.3	20,635	74.0	200	-	27,898
2000	6,469	23.6	20,696	75.7	191	1	27,357
2001	6,692	23.7	21,331	75.5	227	1	28,251
2002	6,542	22.8	21,979	76.5	193	3	28,717
2003	6,608	22.7	22,363	76.7	188	-	29,159
2004	6,381	21.5	23,162	77.9	187	-	29,730
2005	6,282	20.9	23,634	78.5	186	-	30,102
2006	6,363	20.8	24,016	78.6	168	-	30,547
2007	6,148	19.8	24,803	79.7	169	-	31,120
2008	6,313	19.8	25,396	79.6	197	-	31,906
2009	5,844	18.7	25,201	80.7	199	-	31,244
2010	5,537	17.8	25,359	81.4	255	-	31,151
2011	5,362	16.9	26,155	82.3	259	-	31,776

Note: Percent is based on total deaths in the specified year.

Other includes remains not recovered and donations as per will of deceased.

N.S. - Not stated.

Non-residents are excluded.

Table 4: Methods of Disposition in British Columbia, 1986 to 2011 (Source BC Stats – Table 49, Annual Review Report)



### RATE OF DISPOSITION IN THE LOCAL HEALTH AREA

There are 373 Local Health Areas (LHA's) in BC. The City of Penticton is located within LHA 15 which also includes Kaleden, Naramata and the rural areas.

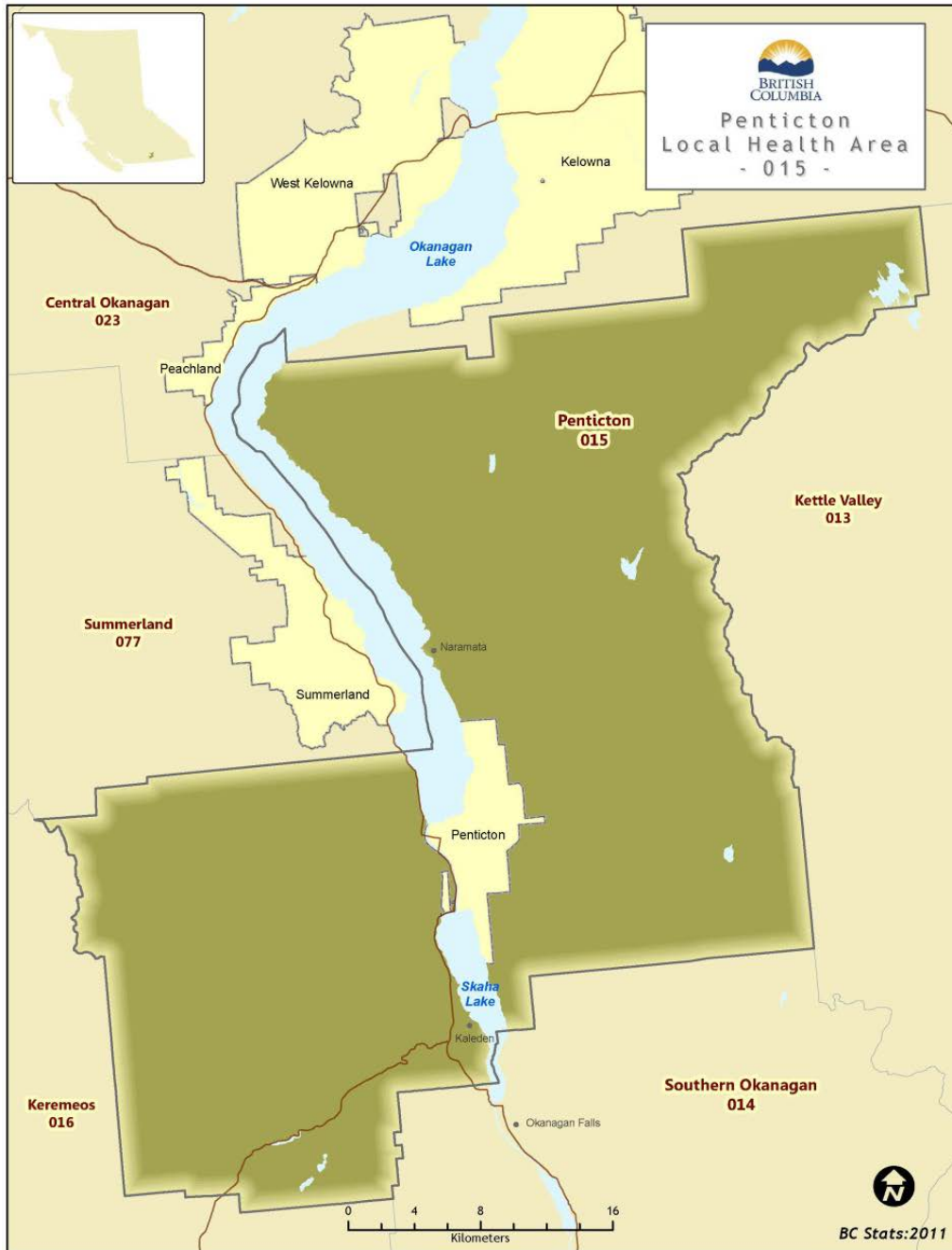


Figure 2: Penticton Local Health Area 15 (Source BC Stats)



The number of in-ground burials and cremations within the Local Health Area between 2004 and 2011 are set out in the table below.

<b>Local Health Area</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>Average</b>	<b>Average %</b>
<b>Cremation</b>	433	477	437	402	459	499	430	456	<b>449</b>	<b>86%</b>
<b>In-ground burial</b>	76	79	77	72	81	73	66	61	<b>73</b>	<b>14%</b>
<b>Total</b>	<b>509</b>	<b>556</b>	<b>514</b>	<b>474</b>	<b>540</b>	<b>572</b>	<b>496</b>	<b>517</b>	<b>522</b>	<b>100%</b>

Table 5: Rate of Disposition in the Local Health Area (Source: BC Stats)

The average rate of cremation in the Local Health Area was 86% during the 2004-2011 period. This is 86% of total deaths and is 6.2% higher than the BC average over the same period.

#### RATE OF DISPOSITION IN THE CITY OF PENTICTON

<b>City of Penticton</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>Average</b>	<b>Average %</b>
<b>Cremation</b>	390	433	392	365	411	456	379	410	<b>405</b>	<b>86%</b>
<b>In-ground burial</b>	68	72	69	65	73	67	58	55	<b>66</b>	<b>14%</b>
<b>Total</b>	<b>458</b>	<b>505</b>	<b>461</b>	<b>430</b>	<b>484</b>	<b>523</b>	<b>437</b>	<b>465</b>	<b>471</b>	<b>100%</b>

Table 6: Rate of Disposition in the City of Penticton (Source Vital Statistics)

Statistics for the proportion of cremation to in-ground burial rates for the City of Penticton are not available. Therefore it was assumed that the same rates for the Local Health Area were applicable to the City of Penticton.

Therefore, the average rate of cremation in the City was estimated to be 86% during the period 2004 - 2012. This is 86% of total deaths and is 6.2% higher than the BC average over the same period.

The average number of traditional in ground burials recorded in the City is 66. The average number of interments of cremated remains recorded in the City is 405.

## HISTORY OF INTERMENT AT FAIRVIEW AND LAKEVIEW CEMETERIES

The table below shows the number and type of interments that have taken place at Fairview and Lakeview Cemeteries during the 2004-2011 period.

	2004	2005	2006	2007	2008	2009	2010	2011	Subtotal
<b>Lakeview Cemetery</b>									
Traditional In-ground Burial (casket)	70	68	59	61	67	54	47	45	<b>471</b>
Mausoleum (casket)	0	0	0	0	0	0	1	0	<b>1</b>
In-Ground Cremation Interment	126	144	147	133	152	121	138	134	<b>1095</b>
Cremation Niche (columbaria)	16	12	12	11	8	39	25	23	<b>146</b>
Ossuary (cremation)	0	0	0	0	0	1	0	1	<b>2</b>
<b>Fairview Cemetery</b>									
In-ground Cremation	1	1	1	1	0	0	1	1	<b>6</b>
<b>TOTAL</b>	<b>213</b>	<b>225</b>	<b>219</b>	<b>206</b>	<b>227</b>	<b>215</b>	<b>212</b>	<b>204</b>	<b>1721</b>

Table 7: Rate of Interment at Fairview and Lakeview Cemeteries 2004-2012 (Source: City of Penticton)

### History of Interment at Fairview Cemetery

Fairview Cemetery has reached capacity for traditional in-ground burial. During the period 2004-2011 period the cemetery received 1 interment of cremated remains per year, with the exception of 2008 and 2009 where no interments of any type took place.

### History of Interment at Lakeview Cemetery

The table below sets out the average annual number of interments by type that have taken place at Lakeview Cemetery over the period 2004-2011.

Type of Interment	8 year average (2004-2011)	
	Number	Percentage
Traditional In-ground (full body, earth burial)	59	27.41%
Mausoleum (crypt entombment)	1	0.06%
In-Ground Cremation (cremation earth burial)	137	63.74%
Columbarium Niche (cremation inurnment)	18	8.48%
Ossuary (cremation comingling)	1	0.31%
<b>Total Interments</b>	<b>217</b>	<b>100%</b>

Table 8: Average Annual Rate of Interment by Type at Lakeview Cemetery (Source: City of Penticton)

The average annual number of interments that have taken place at Lakeview Cemetery over the period 2004-2011 was 217. Of these, the average annual number of traditional in-ground earth burials was **59**. This represents approximately 27% of interments.

The average annual number of interments of cremated remains was **137**. This represents 73% of interments at Lakeview Cemetery. Of this figure, approximately 64% were in-ground burials of cremated remains and 8% were interments of cremated remains in columbaria niches.

Only one casket interment in the mausoleum had taken place since the introduction of this interment option in 2009. The option for cremated remains to be interred in an Ossuary was also introduced in 2009. One interment took place in 2009 and one interment took place in 2011, for a total of two to date in the ossuary.

**MARKET SHARE**

Market share is the number of interments that actually take place at a cemetery each year in relation to the number of deaths that take place within a community in that same year. The table below sets out the annual average market share of interments that occurred in Fairview and Lakeview Cemeteries as a proportion of the total average number of deaths in the City.

<b>Average Annual Number of Total Deaths, City of Penticton</b> (2004-2011 period)	<b>471</b>
<b>Fairview and Lakeview Cemeteries Market Capture</b> (based on a combined average annual interment total of <b>217</b> (2004-2011 period))	<b>46%</b>
Market capture of traditional in ground burials that take place in the City	89%
Market capture of cremations that occur within the City	39%

Table 9: Fairview and Lakeview Annual Average Market Share 2002-2011 (Source BC Stats and City of Penticton)

The following graph summarizes the overall trend of population growth and number of deaths, in relation to the in-ground burial (casket) and cremation markets and cemetery capture rates.

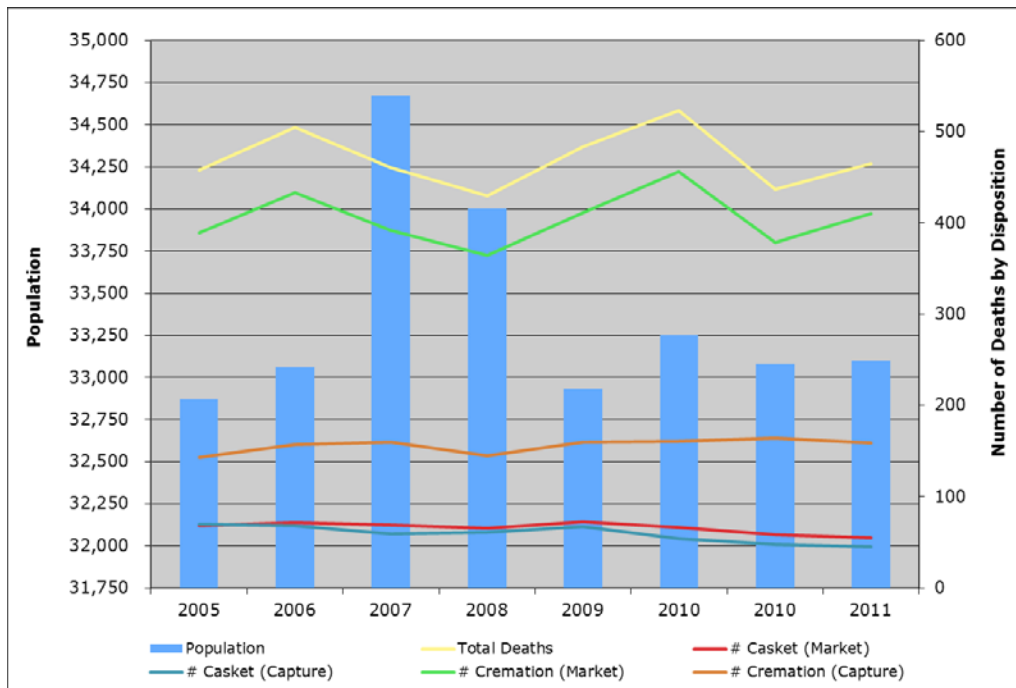


Figure 3: Defining the Market - City of Penticton (Source: LEES+Associates)

Comparing statistics for the total average annual number of deaths in the City with the average annual number of interments that took place at Fairview and Lakeview Cemeteries produced an average market share of 46%. This percentage reflects the number of people choosing locations other than interment at Fairview and Lakeview Cemeteries, such as interment or scattering at other locations.

Lakeview Cemetery attracts an average of 89% of Penticton families that choose traditional, in-ground (earth) burials and approximately 39% of families that choose cremation in the City. (Municipal cemeteries across BC typically expect to receive approximately 20% of cremated remains that take place within the region they serve).

## KEY FINDINGS

- The total number of deaths that occurred in the City over the 8 year period (2004 - 2011) was **3,763**;
- The average number of deaths per year in the City over the 8 year period (2004 - 2011) was **471**;
- **86%** of total deaths resulted in cremation. This is **6.2% higher** than the BC average over the same period;
- Approximately one interment of in-ground cremated remains takes place at Fairview every two years;
- Overall, Lakeview Cemetery has a market share of **46%** of deaths that occurred in the City during the period 2004 - 2011;
- Lakeview Cemetery serves approximately **89%** of Penticton families that choose traditional full-body earth burial;
- Lakeview Cemetery captures approximately **39%** of families that choose cremation;
- Lakeview Cemetery captured an average of **217** interments per year in the period 2004 - 2011. Of these:
  - **59** (27%) interments were traditional in-ground burials;
  - **137** (64%) burials were interments of in-ground cremated remains;
  - **18** (8%) were interments of cremated remains in columbaria niches;
  - **One** interment took place in a mausoleum over the period 2004-2011, and
  - **Two** cremated remains were interred in the Ossuary.
- The total number of deaths projected to occur in the City over the upcoming 25 years (2012 - 2036) is **13,916**;
- Theoretically, Lakeview Cemetery can expect approximately **6,400** interments in the upcoming 25 years. (This figure is an estimate based on multiplying the projected total number of deaths in the City by the cemetery's current market share of 46%), and
- Lakeview Cemetery can expect an average of approximately **256** interments per year in the upcoming 25 years. It is estimated that out of annual 256 interments:
  - Approximately **69** (27%) interments will be traditional in-ground earth burials;

- Approximately **164** (64%) burials will be interments of in-ground cremated remains;
- Approximately **22** (8%) burials will be interments of cremated remains in columbaria niches.
- Approximately **one** interment every **two years** will take place in a mausoleum.
- Approximately **one** interment of cremated remains will take every **two years** in the Ossuary.

These findings inform the Business Plan, and the Recommendations of this Master Plan.

### 3. CEMETERY LAND NEEDS ANALYSES

The City of Penticton wishes to ensure that it can meet local demand for interment and memorialization products and services over the next 25 years. The columbaria facilities at Lakeview Cemetery are projected to satisfy the demand for this type of interment for many years to come; however, additional in-ground capacity for both full body and cremation interments is expected to be required over this time frame. The key questions addressed in this section are:

- What is the existing interment capacity at Lakeview and Fairview Cemeteries?
- How long will the remaining, existing in-ground capacity serve the demand for this type of interment?
- What are the future interment needs over the next 25 years?
- How much additional capacity is needed to accommodate the range of interment options offered over the next 25 years?
- How much additional capacity could be developed on land within the City's existing cemeteries?
- By developing additional in-ground capacity, how long can City cemeteries continue to provide the range of interment options currently offered?
- Is there a potential demand for future additional interment options to be offered at City cemeteries?

#### EXISTING INTERMENT CAPACITY

The existing capacity for full-body earth burials at Fairview Cemetery has been exhausted. There is existing capacity remaining for earth burial of cremated remains only (on cremation lots).

The table below shows the estimated remaining interment capacity at Lakeview Cemetery and the estimated time before existing capacity for the other types of interment offered is exhausted.

<b>Type of Interment</b>	<b>Existing Capacity (number of lots or niches)</b>	<b>Average number of interments per year</b>	<b>Estimated number of years of capacity remaining</b>
Traditional in-ground burial	348	59	6
In-ground cremation	485	138	3.5
Columbaria	1377	22	63
Mausolea	43	0.5	86
Ossuary	1200	0.5	2400

*Table 10: Approximate Existing interment capacity at Lakeview Cemetery, March 2013 (Source: City of Penticton)*

Note that the above table excludes traditional in-ground earth burial lots that have been reclaimed by the City. A total of 107 lots were identified through an audit of sales of interment rights undertaken by the City in 2008; however, their availability for resale requires clarification. City Staff has also determined that access to 352 in-ground cremation lots in Sections 34 - 44 cannot be used, as visitor access to these lots has been deemed too difficult.

Based on the annual average number of interments recorded over the period 2004 – 2011, there is **less than 6 years** of capacity for traditional, in-ground burials, and a minimum of approximately **3.5 years** of capacity for in-ground cremation interments remaining at Lakeview. As Lakeview Cemetery is the primary municipal cemetery in the Penticton area, the development of additional in-ground interment capacity is urgently needed.

## FUTURE INTERMENT NEED

Based on the demographic and trends analysis in Section 2, the City of Penticton can expect approximately **6,400** interments in the next 25 years (see Key Findings in Section 2: Demographics and Trends).

The future need, by interment type, for the next 25 years is set out in the table below. The breakdown by interment type has been estimated according to the history of interments by type over the last eight years at Lakeview Cemetery (see Table 7: History of Interment at Lakeview Cemetery, Section 2: Demographics and Trends).

Type of Interment	Average number of interments per year	Estimated total burial need (2012- 2036)
Traditional in-ground burial	69	1725
In-ground cremation	164	4100
Columbaria	22	550
Mausolea	1	13
Ossuary	1	13
<b>TOTAL</b>	<b>256</b>	<b>6400</b>

*Table 11: Estimated future burial need by type of interment in the upcoming 25 year period 2012-2036 (Source: LEES+Associates)*

Note that the average number of interments in the mausoleum and the ossuary is one of each every two years.



## ADDITIONAL INTERMENT CAPACITY REQUIRED TO MEET THE FUTURE NEED

The additional interment capacity required to meet the future need in the next 25 years is shown in the table below:

Type of Interment	Existing Capacity (number of lots or niches)	Total number of interments (2012-2036)	Additional Capacity Required
Traditional in-ground burial	348	1725	<b>1377</b>
In-ground cremation	485	4100	<b>3615</b>

Table 12: Additional capacity by type of interment required in the upcoming 25 year period (Source: LEES+Associates)

In addition to the 348 traditional in-ground burial lots currently available at Lakeview Cemetery, it is estimated that a further **1,377** lots will be required from **2018**, to ensure capacity until 2036.

In addition to the 485 in-ground cremation lots currently available at Lakeview Cemetery, it is estimated that a further **3,615** lots will be required from **2015** to ensure there is capacity until 2036.

There is approximately **63** years of existing capacity in the columbaria (assuming only one interment per niche), and **86** years of existing capacity in the mausoleum at Lakeview Cemetery.

## EXPANSION OF INTERMENT CAPACITY AT LAKEVIEW CEMETERY

There are two small areas at Lakeview Cemetery where it would appear relatively straightforward to expand burial capacity. The areas, Section A and a small area along the boundary with Lower Bench Road between Section 'X' and the Columbaria Garden, are identified on the Lakeview Cemetery Site Analysis Plan in Appendix 3.

The table below sets out the estimated potential number of lots for traditional in-ground burial and in-ground cremation that could be accommodated within each area listed above:

Location	Traditional In-Ground Burial Lots	In-ground Cremation Lots
<b>Section A</b>	112	210
<b>Area between Section X and the Columbaria Garden</b>	90	280
<b>TOTAL</b>	<b>202</b>	<b>490</b>

Table 13: Future Expansion of Capacity at Lakeview Cemetery (Source: LEES+Associates)

,Burial expansion in Section A and the area between Section 'X' and the Columbaria Garden would provide approximately **3 years** of additional traditional in-ground burial lots and in-ground cremation lots.

(Note the number of lots was estimated by overlaying an accurate air photo of Lakeview Cemetery with the current lot sizes and lot layouts. Actual capacity within each area should be verified on site by the City).

## ESTIMATED INTERMENT CAPACITY ON LAND IN THE SOUTHWEST CORNER OF LAKEVIEW CEMETERY

**Beyond 2019**, additional burial capacity will be required at the City's cemeteries. Burial capacity at Lakeview Cemetery could be expanded by remediating land in the southwest corner of Lakeview Cemetery, or at another location in the City.

## EXPANSION OF BURIAL CAPACITY AT FAIRVIEW CEMETERY

There is a thin strip of land along the northern boundary of Fairview Cemetery where additional in-ground cremation lots could be accommodated without compromising the mature trees (see the Site Analysis plan in Appendix 3). However, we recommend that this cemetery remains as a cultural landscape, as:

- It is possible to meet all future interment need in the next 25 years by expanding capacity at Lakeview Cemetery, and
- In our view, expansion of burial capacity at Fairview risks disproportional damage to the special, historic character of this cemetery while yielding very few additional lots.

## KEY FINDINGS

- In-ground cremation lot capacity at Lakeview Cemetery will be exhausted in a minimum of approximately **3.5** years;
- Traditional in-ground burial will be exhausted at Lakeview Cemetery in approximately **6** years;
- Columbaria capacity will be available for at least **63** years;
- Mausoleum capacity will be available for approximately **86** years;
- An **additional 3 years** supply of traditional in-ground burial and in-ground cremation could be developed within the existing cemetery until 2019, when the existing inventory is expected to be exhausted;
- **Beyond 2019**, additional in-ground burial capacity could be developed on land at the southwest corner of Lakeview Cemetery that would provide:

- Approximately **1,375** traditional in-ground burial lots, which would enable Lakeview Cemetery to continue to provide this service for the next **25** years, and
- Approximately **2,900** in-ground cremation lots, which would enable Lakeview Cemetery to continue to provide this service until the end of next **24** years.

**Beyond 2035**, additional capacity will need to be available on land elsewhere in the City as all interment capacity at Lakeview Cemetery will have been exhausted.

## 4. SITE ANALYSIS

On March 4<sup>th</sup> 2013, LEES+Associates and members of the City's Project Team visited Lakeview and Fairview Cemeteries. The purpose of these site visits was to identify opportunities and constraints for development and enhancement of the cemeteries.

This section of the report is set out under the following headings:

- Overview of the Cemeteries, and
- Site Opportunities and Constraints.

### OVERVIEW OF THE CEMETERIES

#### LAKEVIEW CEMETERY

Lakeview Cemetery is situated just north of the City on Lower Bench Road, above the eastern shore of Okanagan Lake. It is surrounded by vineyards at the foot of Munson Mountain. The Kettle Valley Railway (KVR) Trail runs adjacent to the western boundary of the cemetery. A plan of the existing cemetery is found in Appendix 2.

#### Hardscape and Softscape

The cemetery comprises a series of undulating grass burial areas accessed by asphalt roads and lined with alternating avenues of maple and western red cedar trees. Upright markers are a feature of the Old Section, whereas flat markers characterize the newer sections of the cemetery. A columbaria garden and a mausoleum were opened in 2009 at the southeastern corner of the site.



Figure 4: Columbaria and mausoleum (Source: City of Penticton)

## Views

Views out across Okanagan Lake to the mountains beyond are spectacular, and are a major asset for the cemetery.



Figure 5: Main burial area (Source: Lees+ Associates)



Figure 6: Figure 6: View from Lakeview Cemetery to Okanagan Lake (Source: LEES+Associates)

## Land in the Southwest Corner of the Cemetery

Land in the southwest corner of the cemetery is scarred by former uses, including as a landfill. This area has been colonised by self-seeded scrub and grasses. The City has previously initiated proposals to expand burial capacity on land in the southwest corner of the cemetery; however, the City deferred these proposals until the completion of this Cemeteries Master Plan project.



Figure 7: Land in the southwest corner of Lakeview Cemetery (Source: LEES+Associates)

## Ground Conditions

The land at Lakeview Cemetery is susceptible to subsidence and sinkholes developing in some areas of the site. City Staff continuously monitor any minor depressions that appear, and address them as soon as it is safe and effective to do so. There have, however, been several instances of subsidence over the past 20 years that have required significant remedial work.

A summary of the history of the subsidence issues at Lakeview Cemetery, based on previous correspondence between Golder Associates, Stantec and the City, is provided in **Section 5**.





*Figure 8: Sunken ground in burial areas - appear as visible depressions in the centre of the photo (Source: LEES+Associates)*

### Irrigation System

The existing irrigation system at Lakeview Cemetery is old, inefficient and susceptible to breakage. The system tends to overwater some areas of grass while under-watering other areas. The challenge is to ensure all lawn areas receive adequate water, without saturating the ground and inadvertently initiating subsidence or the development of a sinkhole. A more efficient irrigation system at Lakeview Cemetery is required to address these issues.

## FAIRVIEW CEMETERY

Fairview cemetery is located at Fairview Road and Regina Avenue, in a residential neighbourhood to the south of the City's main shopping and commercial district. An existing plan of Fairview Cemetery is found in Appendix 2.

### Hardscape and Softscape

The cemetery is characterised by a grass burial area with mature deciduous and coniferous trees. A deciduous hedge and a chain link fence define the perimeter. Visitor access is through the simple metal gate on Fairview Avenue, while maintenance access is from Regina Avenue. There are no defined roads or pathways within the cemetery.



*Figure 9: A sunken grave at Fairview Cemetery Source LEES+Associates)*



*Figure 10: Unscreened residences adjacent to Fairview Cemetery (Source LEES+Associates)*

## Views

Good views of the mountains on the western shore of Okanagan Lake are visible under the high tree canopies.

## Burial Ground

Fairview Cemetery is the City's original cemetery. The footprint of the original Anglican Church of St. Saviour's (erected in 1882) is defined by granite curbs set flush with the lawn. Some of the earliest members of the community are buried in this cemetery, memorialised with diverse styles of headstones. Cremated remains are still occasionally interred at this cemetery, which was closed to traditional, full-body burials when it reached about half of its capacity. Unfortunately some graves have been vandalised and others have been adversely impacted by their proximity to large trees and shrubs, and the effects of time.

# SITE OPPORTUNITIES AND CONSTRAINTS

Site opportunities and constraints are summarised below, and described on the site analysis diagrams found in Appendix 3.

## LAKEVIEW CEMETERY: OPPORTUNITIES

### Hardscape and Softscape

- Way-finding signage to the cemetery is insufficient and should be improved;
- The arrival experience at the cemetery entry is small and undistinguished and should be upgraded;
- The Cemetery maintenance yard and garage requires screening;
- The concrete retaining structure behind the in-ground cremation section is unsightly and should be improved;
- The crematorium impedes what should be spectacular views over Okanagan Lake to the mountains beyond should be screened;
- There is an opportunity to replace the turf with drought-tolerant grass species that would require less irrigation over the summer months;
- The landscape setting of the Veterans' Area near the main entrance merits improvement;
- The cemetery would benefit from selective removal of some of the trees that line the roads, and
- The connection from the cemetery to the KVR (Kettle Valley Railroad) Trail would benefit from an investment in renovation.

### Infrastructure

- The irrigation system is old, inefficient and should be replaced, and
- The office could be expanded and renovated for use as a cemetery administration office.

### Expansion of Burial Areas

- There are opportunities for immediate expansion of burial capacity in:
  - Section A, and
  - A small area along the boundary with Lower Bench Road, between Section X and the Columbaria Garden.
- Land in the southwest corner of the cemetery could be remediated for the expansion of burial capacity, subject to geotechnical constraints and financial viability;
- The Pioneer Burial Area to the west of the KVR Trail is not marked or celebrated, and
- Land to the west of the KVR trail could be used as an area for “Green Burial” (see Appendix 7 for definition), pending further site investigation.

## LAKEVIEW CEMETERY: CONSTRAINTS

### Hardscape and Softscape

- Land across the cemetery is vulnerable to subsidence and the appearance of sink holes due to over-irrigation and the resultant settlement of fill materials.

### Expansion of Burial Areas

- 352 In-ground cremation lots in sections 34 - 44 are not useable due to constrained access to the area behind the concrete retaining structure to Lower Bench Road, and
- Expanding burial areas on land to the west of the main cemetery would be challenging as it is outside the cemetery boundary. It is also separated by the KVR Trail and is at a lower elevation than the main cemetery.

### Access and Circulation

- Cars occasionally damage the flat markers at the edge of lawn areas where roads are narrow, and
- Access and circulation can be difficult when large numbers of people attend funerals.



## **FAIRVIEW CEMETERY: OPPORTUNITIES**

### **Hardscape and Softscape**

- The mature deciduous and coniferous trees gives the cemetery its beautiful, historic character and should be enhanced;
- Some trees and shrubs require removal to prevent further damage to graves;
- The perimeter chain link fence and waste receptacles are aesthetically inappropriate for this historic site;
- The lack of screening of adjacent properties along the southern and eastern boundary of the cemetery should be addressed;
- The boundary hedge provides a strong sense of structure and containment, but this is undermined by gaps and thin areas;
- The main entrance gate requires maintenance, and
- The addition of new benches would enhance visitors' enjoyment of the cemetery.

### **Expansion of Burial Areas**

- There is a limited amount of space along the northern perimeter of the cemetery that could be utilised for additional in-ground burial of cremated remains.

### **Graves and Monuments**

- Many graves need restoration, especially those that have been vandalized.

### **Interpretation**

- An interpretative sign is located within the cemetery, adjacent to the outline of the original Anglican Church, but there is no interpretative signage at the street entrances, where people pass by, and
- Some of the earliest settlers in the history of Penticton are buried in the cemetery and this should be highlighted.

## **FAIRVIEW CEMETERY: CONSTRAINTS**

- Existing graves and mature trees prevent any significant expansion of burial capacity, and
- Cemetery monuments are subject to occasional vandalism.

### **Infrastructure**

- The irrigation system is due for replacement.

## CULTURAL AND HISTORICAL CONTEXT OF THE CEMETERIES

The purpose of this section is to affirm the importance of Lakeview and Fairview Cemeteries in the evolution of the City of Penticton, and to consider ways in which to raise the community's awareness and appreciation of the cemeteries and their cultural significance.

### FAIRVIEW CEMETERY

Fairview Cemetery was the City's first cemetery and it is historically and culturally significant in the evolution of the City of Penticton. The cemetery's origins are directly linked to the establishment of the original Anglican Church of St. Saviour's in 1892 by Tom Ellis and his family, who were the first non-native settlers to the area. The church and cemetery mark the beginning of the Anglo Saxon community in Penticton.

St. Saviour's Church was registered in the Diocese of Kootenay in 1905 and consecrated in 1918. The original church was expanded in 1906 to accommodate a larger congregation, as migrants continued to settle in Penticton and become active members of in the church.



Figure 11: St Saviour's Church, 1908 (Source: Penticton Museum)

In 1934, the chancel of St. Saviour's was relocated from the original site at Fairview Cemetery (formerly part of the Ellis Family homestead), to become part of the current Anglican Church at the corner of Winnipeg Street and Orchard Avenue. The Ellis Memorial Chapel still stands at St. Saviour's, and is Penticton's oldest building. St. Saviour's is the oldest extant Protestant congregation in the South Okanagan<sup>2</sup>.

<sup>2</sup> History of St Saviors Anglican Church website : <http://www.stsaviourspenticton.ca/history.htm>

In 1964, the City of Penticton assumed ownership of Fairview Cemetery as an “historical site.” The report of the Archdeacon P.S Catchpole included: “*The old Penticton Cemetery has been handed over to the City of Penticton to be developed as a Park with proper care being given to the graves.*”<sup>3</sup>

Today, the footprint of the Church outlined in granite is the only reminder that St. Saviour’s Church once stood on this site. Fairview Cemetery contains the graves of many of the early settlers in Penticton. The life stories of the people buried here are part of the history of Penticton. Early residents of Penticton with fascinating life stories who are buried in the cemetery include:

- Thomas Ellis Jr., son of the first non-native settler;
- William Zimmerman, Penticton’s first murder victim;
- Alfred Wade, the first Reeve (Mayor);
- Geoffrey Aston, Penticton Police Officer, killed in 1912;
- Amos Barnes, the second hotel owner in Penticton, and
- 6 year old Minnie Zhuelkie, the first person to be interred at the cemetery.

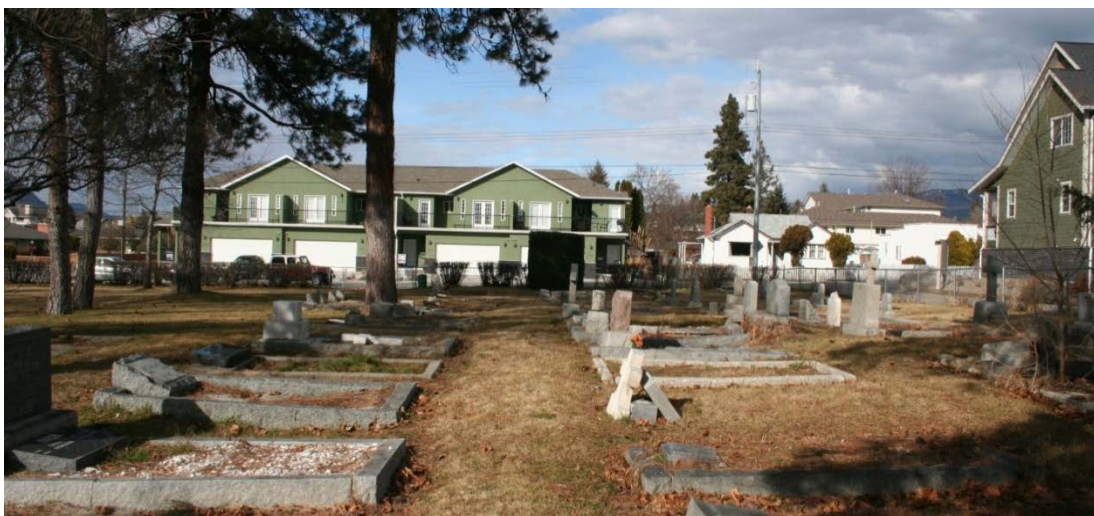


Figure 12: Fairview Cemetery, March 2013 (Source LEES+Associates)

Unfortunately, many of the graves and monuments are now in poor condition due to vandalism and the effects of time. A small interpretation sign stands by the footprint of the Church but this signage is not visible and readily accessible to passers-by on the street.

It is essential that improvements in the standard of care of Fairview cemetery are undertaken, especially the restoration of the monuments. In this way the City will promote the cemeteries and demonstrate to the community that it *cares* about its cemeteries. This positive message should give residents considering interment additional confidence in the City’s cemetery service.

In addition, the City could raise community awareness of Fairview Cemetery by forming a working group of local residents and stakeholder groups to assist in the grave restoration and upkeep of

<sup>3</sup> *Ibid*

the cemetery. This would galvanise a sense of community ownership and pride in the cemetery. A shared sense of ownership could also reduce the incidence of vandalism.

A stronger long term relationship between the community and the cemeteries could be achieved through the development of a simple program of events such as a festival of light. These events would build upon activities which already take place such as the Penticton Haunted History Tour which incorporates a visit to Lakeview Cemetery guided by Randy Manuel (local historian and member of the Heritage Advisory Committee).

## LAKEVIEW CEMETERY

The Penticton Heritage Registry provides the following summary of the history of Lakeview Cemetery:

*Lakeview Cemetery is valued as the City's civic burial ground. It was established in 1910 and has evolved over the last century to reflect the growth in the community, maturing of civic and community roles, and shifting social values.*

*The site is a testament to the perseverance of early City Councils and community groups who worked to create a public cemetery, starting with The Board of Trade, which initiated the drive for a civic cemetery as early as 1905 when the Anglican Church of St Saviour's (now known as Fairview Cemetery) announced that it no longer had room for burials of citizens who were not members of its congregation.*

*The first five acres of the site was acquired from the Southern Okanagan Land Company in 1910, by a City Council which had only been in existence for two years, and was concerned that the cost of productive orchard land was too much to be spent on a cemetery. An "artistic plan" was approved later that year, including a 30 foot entrance road and a circular avenue around the 2 acres of burial plots. Two years later the Council negotiated with the Kettle Valley Railway to permit it to build its right of way through the easterly portion of the cemetery. New trees were planted, paths were improved, and new roads added. In 1916 a new survey led to the laying out of 2000 plots in 3 sections, including a section for "paupers". Sections were reserved for groups such as Chinese and members of the Oddfellows Lodge, although the Chinese-designated area was outside the proper boundaries of the Cemetery. In 1917 schoolchildren "beautified" the cemetery under the guidance of the Civic Improvement League.*

*The first restoration of overturned gravestones occurred in 1927. By 1928, the cemetery was filling up and additional parcels of farmland were acquired. Over time improvements were made, such as the addition of concrete gates and the planting of poplar and spruce trees in 1928. Maintenance was an ongoing issue and, when a new section was laid out in 1945, it was planted as lawn and vertical markers were not permitted.*

*Lakeview Cemetery is also valued as the final resting place of many Penticton citizens and is therefore an evocation of the history of the community. The first burial was of a man killed in a logging accident, and later burials included soldiers from the First and Second World Wars, in addition to prominent citizens like architect and Mayor Robert Lyon and Dr. McGregor. Chief engineer of the Kettle Valley Railway, Andrew McCulloch, and his secretary A. A. Swift are buried in the Old Section, which is appropriate given that the route of the former railway (now the KVR Trail) runs alongside the cemetery.*



*The many original headstones and memorials are a physical expression of the values of past generations. They include carved monuments in granite, marble, sandstone, and concrete displaying names and dates of burials as well as an array of traditional Christian symbols. Portions of the cemetery contain markers in Chinese and Japanese, reflecting the ethnic diversity of Penticton.<sup>4</sup>*



Figure 13: Headstones in the Old Section, Lakeview Cemetery (Source: LEES+Associates)

Figure 14: Ice candles on Christmas Eve, Kenora Cemetery, Kenora ON (Source: City of Kenora)

Despite its rich historic and cultural value, there is no interpretative signage at Lakeview Cemetery. Information about the heritage of the cemeteries can be found through a variety of sources, but this requires considerable time to research. A dedicated web page would make access to the heritage of each cemetery much easier for the local community. Public access to the history of those buried at the cemeteries could be enhanced through the employment of cemetery mapping and records software.

## RECOMMENDATIONS

As part of the marketing and promotion of the cemeteries the City should undertake the following in order to raise the community's awareness of the cemeteries historic and cultural significance:

- Restore the graves and monuments at Fairview Cemetery;
- Explore the feasibility of forming a working group of local residents and stakeholder groups to assist in the grave restoration and upkeep of the cemetery;
- Improve the interpretative signage at Fairview Cemetery and Lakeview Cemetery;
- Develop a webpage dedicated to the heritage of each cemetery, along with photographs, and a selection of the stories of people buried there;
- Consider facilitating public access to the history of those buried at the cemeteries by utilizing the cemetery records and mapping software, and
- Develop a program of events to encourage use and enjoyment of the cemeteries.

<sup>4</sup> Penticton Heritage Registry Phases 1 to 4 July 2009

## 5. GROUND CONDITIONS AT LAKEVIEW CEMETERY

### BACKGROUND

The following is a summary of the history of the subsidence issues at Lakeview Cemetery, based on previous correspondence between Golder Associates, Stantec and the City.

The land at Lakeview Cemetery is susceptible to the formation of depressions and sinkholes. City Staff continuously monitor the formation of depressions in the lawn areas, and address them as soon as it is efficient and effective to do so. There have, however, been several instances of subsidence over the last 20 years that required significant restoration of the cemetery, including one that involved approximately 100 lots sink between 1- 2.5m.



Figure 15: Effects of subsidence in 1997 (Source: City of Penticton)



Figure 16: Restoration of the 1997 subsidence (Source: City of Penticton)

In 1984, Golder Associates looked into the cause of ground subsidence and sinkhole development in sections of the cemetery. Between 1984 and 1997, additional subsidence and sinkholes appeared in the south undeveloped portion of the cemetery.

In 1997, Golder Associates undertook an investigation to explore the cause of the continued ground subsidence and sinkhole formation, and provide recommendations for remedial measures. The following is a summary of the underlying factors and likely causes of the continued ground subsidence issues as determined by Golder Associates.

- The cemetery is situated on native silty soils;
- Information about the site prior to 1958 is not available. Extensive infilling of the gullies within the south part of the site was undertaken between 1967 and 1968. The gully was initially used by the City of Penticton as a sanitary landfill site. The majority of the undeveloped area is underlain by the landfill materials. Subsequent to Golder's 1984 report, additional fills were placed to re-grade the area as a whole;
- Surface runoff from the Lower Bench Road was permitted to flow freely onto the cemetery property;

- The waterline in the Lower Bench Road right-of-way broke approximately 20 - 25 years ago, causing major subsidence along the east side of Section P, adjacent the south undeveloped portion;
- The irrigation system experienced a number of breaks and leakage each year, with major breaks occurring in 1995 and 1996. A break or leak in one of the irrigation lines in the mid-1990s took place in the south undeveloped part of the cemetery property, resulting in subsidence of this area. Irrigation of this area was subsequently stopped;
- Storm water drainage lines at two locations generally consist of catch basins and outlet lines discharging to sinkholes on the west side of the old KVR right-of-way. In 1997, at the time of the Golder review, standing water was observed at the bottom of the catch basins at depths of 0.7 and 1.5m below the ground surface, and drainage pipes were partially clogged with soil and debris;
- Subsidence of grave sites in both the old and new sections have resulted in an ongoing maintenance issue;
- Infiltration of water into the loose silt fill materials has likely caused the fill materials to consolidate under their own weight, resulting in localized subsidence. Some of the ground subsidence in the south portion of the cemetery was determined to be the result of decomposition of sanitary landfill materials, and
- New sinkholes are likely the result of downward migration of the silty soils into the voids of the underlying landfill materials and /or into the existing pipes or sinkholes that have been in-filled.

The City carried out the following remediation measures recommended by Golder Associates:

- Remediation Measure 1 – All water mains and irrigation lines should be checked for leaks/breaks. All pipe joints should have flexible connections and pipes should be able to withstand extension/tension and differential movements;
- Remediation Measure 2 – Irrigation should be reduced to a minimum with high importance on xeriscape strategies;
- Remediation Measure 3 – Surface runoff from Lower Bench Road and upslope should be prevented from discharging onto the cemetery property., Either re-grade the roadway and/or construct a ditch along the east side, or alternatively, a curb with catch basins on the west side carried in solid pipes to a suitable discharge point;
- Remediation Measure 4 – Surface runoff from the cemetery access roads controlled as described above in RM3;
- Remediation Measure 5 – Existing storm sewers should be checked, cleaned and repaired to ensure they are leak proof, and
- Remediation Measure 6 – Existing storm sewers discharge into sinkholes located on the west side of the KVR right of way. Continuing to allow this to happen could result in a catastrophic failure along the lacustrine slopes. It is recommended that the existing storm water discharge pipes and any new ones be extended to the base of the slope.

Golder provided further advice in relation to the remediation of land at Lakeview Cemetery as follows:

- Given the thickness of the fills, total sub excavation and replacement with compacted fills is not considered practical or economical – however if the upper portion of the fills are treated as recommended, burial plots and access road construction can proceed in the south portion of the cemetery property – with the intent to minimize, not eliminate, future problems related to subsidence and /or sinkhole formation;
- It is recommended that areas underlain by landfill materials more prone to subsidence and sinkhole formation not be developed as grave sites – construction of access roads over these areas is permissible, but subject to continual maintenance, and
- Two options for treating the proposed cemetery expansion both involve construction of a 1.5m thick reinforced and compacted soil zone in or on which graves and roads can be located:
  - **First option** – The compacted soil zone, would be constructed on a layer of woven geotextile;
  - **Second option** – The compacted soil zone, would be constructed on an impermeable reinforced geotextile membrane. With the intent of the impermeable membrane to prevent water from infiltrating through the fills and carrying material into the landfill voids and /or existing pipes or sinkholes – under-drainage system constructed on top of the membrane would permit water that has infiltrated through the upper soils to be carried away to a suitable discharge point. The under-drainage system would require to be encapsulated in to a suitable geotextile to prevent clogging. Pockets of methane could exist or develop from the decomposing sanitary landfill

## GROUND REMEDIATION

In 2006, following the provision of geotechnical advice by Golder, the City undertook ground remediation work to a portion of the cemetery immediately the south of the Columbaria Garden, in preparation for future burial ground expansion.

In 2007, the City moved forward with proposals to expand burial capacity on land in the southwest corner of Lakeview Cemetery, but this work did not proceed pending the completion of this Cemeteries Master Plan Report.

## KEY FINDINGS

### Control of Water Ingress

The City adopted the following water management protocol recommended by Golder Associates:

- The control of water ingress into the ground at Lakeview Cemetery, as crucial in the reduction of risk of future sink events, and
- Irrigation should be used as sparingly as possible.



## RECOMMENDATIONS

- The existing irrigation system is inefficient and should be replaced;
- The full extents of the land in the southwest corner of Lakeview Cemetery be remediated in preparation for the expansion of the in-ground burial area;
- Specialist geotechnical expertise should be retained by the City to provide design, specifications and site services through the remediation process of land in the southwest corner of Lakeview Cemetery, and
- Xeriscape principles should be followed for plant and turf management, including the use of mulches and turf which uses less water.

## 6. BURIAL EXPANSION STRATEGY

### INTRODUCTION

Having established the need to increase interment burial capacity within the Penticton Cemeteries system in Section 3, this section establishes the rationale for where this should occur, according to the following headings:

- Expansion of interment capacity on land in the southwest corner of Lakeview Cemetery;
- Estimated cost of remediation of land in the southwest corner of Lakeview Cemetery;
- Cost comparison of expanding burial capacity at Lakeview Cemetery, and
- Recommendations.

### EXPANSION OF INTERMENT CAPACITY ON LAND IN THE SOUTHWEST CORNER OF LAKEVIEW CEMETERY

There are two small areas within Lakeview Cemetery that would be efficient and cost-effective for increasing interment capacity to meet the community needs over the **next 6 years**. These area and expansion opportunities are described in Section 3 Cemetery Land Needs Analysis.

**Beyond 2019**, additional burial capacity will be required at the City's cemeteries. Burial capacity at Lakeview Cemetery would be expanded by remediating approximately **2.9 acres** of land in the southwest corner of the cemetery.

Geotechnical studies have confirmed that existing ground conditions mean that the land in the southwest corner of the cemetery is vulnerable to subsidence. Before the land can be used for burial purposes, geotechnical consultants previously advised the City that the land should be remediated to **reduce the risk** of sink events occurring.

The decision on whether to expand capacity on this land should be based on:

- The cost of remediation, and
- Whether the cost of remediation represents good use of the City's resources, compared with developing additional burial capacity on City-owned property at Munson Mountain, or purchasing another property.

## ESTIMATED COST OF REMEDIATION OF LAND IN THE SOUTHWEST CORNER OF LAKEVIEW CEMETERY

Land in southwest corner of the cemetery comprises the following:

Land in the Southwest Corner of Lakeview Cemetery	Approximate Area
The nursery area	0.7 acres
Land at existing grade	1.4 acres
Excavated land below existing grade	0.8 acres
<b>TOTAL</b>	<b>2.9 acres</b>

Table 14: Breakdown of Areas of Land in the Southwest Corner of Lakeview Cemetery (Source: LEES+Associates)

In 2006, the City remediated approximately 0.45 acres of land immediately west of the columbaria garden at a cost of approximately \$41,000<sup>5</sup>. In 2005, cost estimates to remediate land in the southwest corner were provided by consultants. These cost estimates have been extrapolated on a cost-per-acre basis for comparison purposes, and are shown in the table below:

Source of Cost Estimate	Estimated Cost of Remediation Per Acre
City of Penticton remediation costs (2006)	\$130,500 <sup>6</sup>
Golder Associates (2006)	\$145,500
Sustainable Systems (2005)	\$208,500
Average cost (includes cost escalation at 3% (to 2013))	<b>\$161,500</b>

Table 15: Average estimated cost of remediation per acre of land in the Southwest Corner of Lakeview Cemetery (Sources are identified in the table)

Based on the average cost-per-acre, it is estimated that it would cost approximately **\$339,000** to remediate **2.1 acres** of land comprising the nursery area and land at existing grade.

Approximately **0.8 acres** of land requires the grade to be lifted to tie in with adjacent areas. This could be achieved by gradually importing suitable fill material from local development sites as it becomes available. It is estimated that it would cost approximately **\$62,500** (assuming cost escalation at 3%) to lift the levels by approximately 3 metres, based on the cost of this component of work that was undertaken in 2006.

In 2013, the total cost of remediating the entire **2.9 acres** of land in the southwest corner of the cemetery was estimated at approximately **\$401,500**.

<sup>5</sup> Cost excluded purchase of fill material as this was delivered to site at no cost to the City.

<sup>6</sup> Estimated cost includes the price of fill material, the cost of placement and compaction of the fill material.

Once the land has been remediated, additional costs will be involved in developing the land for cemetery purposes. These include: the development of interment areas, amenities, and associated infrastructure such as soil, grass, trees and shrubs, paths, benches and irrigation.

## COST COMPARISON OF EXPANDING BURIAL CAPACITY AT LAKEVIEW CEMETERY

In order to gauge whether expanding burial capacity on land in the southwest corner of Lakeview Cemetery represents good use of City resources, it is necessary to compare these costs against alternative options.

The table below compares the estimated cost of expanding burial capacity on **2.9 acres** of land in the southwest corner of Lakeview Cemetery with the costs associated with developing future burial capacity at an alternative location, such as:

- At property already owned by the City at Munson Mountain, or
- By purchasing new land in the City.

### Assumptions:

- Comparison is based on **2.9 acres** of land;
- No ground remediation is required at the Munson Mountain property or at a new property;
- Purchase of new property suitable for use as a cemetery in Penticton is estimated to be an average of \$100,000 per acre (Source: Land Manager, City of Penticton);
- Average cost per acre to develop a cemetery on a new site is estimated to be \$130,000<sup>7</sup>, and
- Average cost per acre to develop burial areas on remediated land at Lakeview Cemetery is estimated to be \$90,000<sup>8</sup> per acre.

	Lakeview Cemetery	City owned property at Munson Mountain	Purchase of new property in the City
Land purchase cost	\$0	\$0	\$290,000
Land remediation cost	\$401,500	\$0	\$0
Cemetery development	\$261,000	\$377,000	\$377,000
<b>TOTAL</b>	<b>\$662,500<sup>9</sup></b>	<b>\$377,000<sup>10</sup></b>	<b>\$667,000</b>

Table 16: Comparison of Estimated Cemetery Development Costs

The least-cost option in terms of capital outlay would be to develop burial capacity at Munson Mountain for future need beyond 2019. However, the decision as to where to develop additional

<sup>7</sup> Source: LEES +Associates. Note the cost per acre excludes new buildings.

<sup>8</sup> Source: LEES+Associates

<sup>9</sup> Total estimated cost is further refined in Appendix 9: Class D Cost Estimates

<sup>10</sup> Excludes new buildings.

burial capacity is more complex than the simple cost comparison scenario illustrated in Table 16, above.

There are a number of downsides if the City does not first remediate land in the southwest corner of Lakeview Cemetery:

- The condition of the landscape in the southwest corner of the cemetery would remain very unsightly;
- There is no obvious alternative use for the land in the southwest corner that is mutually compatible with the cemetery;
- If additional burial capacity was developed at another site, operational costs of the cemetery service would increase due to the inefficiencies associated with maintaining three separate cemetery sites, and the Perpetual Care Fund (PCF) would be further strained;
- The opportunity to increase the value of PCF through the sale of additional burial capacity at Lakeview would be forfeited, and
- Due to the limited land base in Penticton, and for the purposes of adopting a sustainable approach, it is likely that the City will wish to continue maximizing interment space at Lakeview Cemetery prior to developing burial capacity elsewhere. In this way, the cemetery landscape at Lakeview would be completed and leave a beautiful legacy for residents of Penticton.

It may be possible for the City to source and stockpile suitable fill material at no cost in advance of remediation work. This could mean that the cost of remediation would be lower than that illustrated in Table 16.

## RECOMMENDATIONS

The City is facing a shortfall in burial capacity. To address this shortfall, it is recommended that the City carries out the following:

- Begin remediation of land in the southwest corner of Lakeview Cemetery as part of a phased program of burial expansion;
- Establish a budget and carry out geotechnical investigative work and detailed site designs;
- Identify sources of suitable fill material at no charge to the City, which can be stockpiled, ready for use in each phase of burial expansion;
- Secure and retain the 10 acre property at Munson Mountain for future cemetery development, and
- Begin the process of creating new burial capacity at Munson Mountain at least 5 - 7 years prior to when Lakeview Cemetery is expected to reach capacity for traditional, full body and in-ground cremation interments.

## 7. BUSINESS PLAN

### INTRODUCTION

This section of the report provides an analysis of the current financial position of the cemetery system, and recommendations to guide the City in its decisions to ensure that the cemetery system is financially sustainable for the upcoming 25-50 year period.

This section is set out under the following headings:

- Financial Analysis;
- Financial Plan;
- Financial Scenarios;
- Pricing, and
- Recommendations.

### FINANCIAL ANALYSIS

This phase of the project included a review of key financial documents and factors including:

- Revenue reports (2008-2012);
- Operating budgets (2008-2012), and
- Columbaria garden capital costs and interest.

The following sections reflect the key findings from the empirical quantitative analysis of the City's current operating accounts.

#### TOTAL COSTS

The total costs of cemetery services include the following:

- Cemetery Service Expenses:
  - Costs related to the care and maintenance of the cemeteries and opening and closing of graves.
- Administration Expenses:
  - City Staff time to administer the cemetery service.
- Columbaria Garden Debt Expenses:
  - Interest and Principal payments to service the debt incurred developing the columbaria garden.

Together, the City of Penticton's Cemetery Service expenses and Administration expenses make up the total Operating Cost of Penticton's cemeteries.

The total costs of cemetery service over the last 5 year period are summarised in the table below:

<b>Historical Costs</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<i>Cemetery Services Expenses</i>					
Lakeview Cemetery	\$112,690	\$143,013	\$140,421	\$144,055	\$138,200
Fairview Cemetery	\$5,448	\$9,695	\$6,670	\$8,289	\$9,808
<b>Sub-total</b>	<b>\$118,138</b>	<b>\$152,708</b>	<b>\$147,091</b>	<b>\$152,344</b>	<b>\$148,008</b>
<i>Administration Expenses</i>					
City Staff Costs @ 18%	\$21,265	\$27,487	\$26,476	\$27,422	\$26,641
<b>Total Operating Cost</b>	<b>\$139,403</b>	<b>\$180,195</b>	<b>\$173,567</b>	<b>\$179,766</b>	<b>\$174,649</b>
Interest paid to service columbaria garden debt	\$0	\$128,750	\$128,750	\$128,750	\$128,750
<b>Total Costs including interest</b>	<b>\$139,403</b>	<b>\$308,945</b>	<b>\$302,317</b>	<b>\$308,516</b>	<b>\$303,399</b>
Principal paid on debt	\$0	\$ 83,954	\$ 83,954	\$ 83,954	\$ 83,954
<b>Total Cost including interest principal paid on debt</b>	<b>\$139,403</b>	<b>\$392,899</b>	<b>\$386,211</b>	<b>\$392,410</b>	<b>\$387,350</b>

Table 17: Total Costs (Source: City of Penticton)

Total Operating Cost represents the cost for service delivery, maintenance and administration for Fairview and Lakeview cemeteries. Total costs represent the expenses that would be reported on City of Penticton income statements. Cash out-flow includes total costs, plus capital development spending that does not appear as an expense line on City statements.

The maintenance contract for Lakeview Cemetery is renewed every 5 years. When the contract was last renewed in 2008, annual cemetery service expenses for Lakeview Cemetery increased from approximately \$113,000 to \$143,000 in 2009. This represents an increase of approximately 27%. Expenses have remained relatively constant since 2009 and the maintenance contract is due for renewal again in 2013.

The annual cemetery expenses for Fairview Cemetery have remained relatively constant over the last 5 year period, ranging between approximately \$5,500 and \$10,000. Annual expenses have fluctuated slightly depending upon the extent to which particular aspects of the cemetery need attention each year. For example, in 2009 expenses for turf maintenance were approximately \$1,600 higher than in 2008.

Based on discussions with the City's Chief Financial Officer (CFO), the costs of City Staff administration time are approximately 18%, in addition to the costs of care and maintenance, and the costs of opening and closing of graves.

Starting in 2009 the City has made annual interest payments of \$128,750 and principal payments of \$83,954, to service the 20 year loan for the development of the columbaria garden. Since 2009, the interest expense alone has increased total costs to over \$300,000 per year, including all the debt servicing, maintenance, and opening/closing of graves.

## TOTAL REVENUE

Total revenue for cemeteries includes the following components:

- Operating Revenue from cemetery sales:
  - All revenue collected from in-ground and cremation lot and interment sales, as well as other cemetery services and products, and
  - Includes the Care Fund portions from cemetery sales, later invested in the Perpetual Care investment fund).
- Capital Contributions:
  - Contributions from the cemetery capital reserve fund.
- Perpetual Care Fund accrued interest income.



The table below shows the total revenues for cemetery services, recorded over the last 5 years.

<b>Historical Revenue Sources</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
Accrued Interest - Cemetery	\$22,990	\$3,394	\$1,134		
Lots sales (traditional In-ground burial and cremation lots)	\$20,337	\$20,124	\$20,999	\$19,088	\$17,321
Grave digging	\$58,593	\$59,273	\$53,910	\$55,088	\$45,831
Grave marker maintenance (Permits)	\$19,872	\$19,440	\$19,764	\$19,838	\$18,423
Grave Liners	\$18,300	\$16,470	\$14,640	\$14,370	\$11,200
Care Fund (capital contributions paid by families- not interest accrued on PCF investments)	\$13,009	\$38,725	\$25,292	\$21,275	\$18,622
Reservation fee	\$853	\$824	\$713	\$1,589	\$1,046
Columbaria niche sales	\$4,800	\$162,885	\$127,140	\$77,790	\$89,262
Lantern concrete tablet sales	\$250	\$246	\$164	\$574	\$2,248
Cemetery capital reserve fund contribution		\$54,515			
<b>Total Operating Revenue</b>	<b>\$159,004</b>	<b>\$375,896</b>	<b>\$263,756</b>	<b>\$209,612</b>	<b>\$203,953</b>
Interest received from Perpetual Care Fund invested capital	\$34,967	\$35,209	\$13,304	\$13,691	\$15,331
<b>Total Revenue</b>	<b>\$193,971</b>	<b>\$411,105</b>	<b>\$277,060</b>	<b>\$223,303</b>	<b>\$219,284</b>
Care Fund Portion	-\$13,009	-\$38,725	-\$25,292	-\$21,275	-\$18,622
<b>Total Cash In-flow</b>	<b>\$180,962</b>	<b>\$372,380</b>	<b>\$251,768</b>	<b>\$202,178</b>	<b>\$200,662</b>

Table 18: Total Revenue and Cash In-flow 2008-2012 (Source: City of Penticton)

Operating revenue represents all the revenue generated by service delivery and maintenance at Fairview and Lakeview cemetery (including Care Fund fee portions). Total revenue includes operating and investment revenue reported on City of Penticton financial statements. Cash in-flow includes total revenues, without the Care Fund portion that gets reinvested in the Perpetual Care Fund.

## THE CURRENT FINANCIAL POSITION

The purpose of this section is to outline the current financial position of the cemetery system. Review of City of Penticton account records and feedback from the Chief Financial Officer (CFO), tells us, that over the last five years the City of Penticton operating revenues have been strong, consistently exceeded operating costs.

Up until 2009, total revenue coming into the cemetery system has exceeded total expenses. In 2009, cemetery revenues rose dramatically with the opening of the new columbaria garden due to latent demand from families wishing to inter cremated remains. Since then, revenue from the sales of columbaria niches has gradually fallen back as latent demand has increasingly been satisfied.

In an analysis of **total cash flow**, outflows for operating costs, and the principal and interest payments for the columbaria garden have exceeded cemetery sales revenue since 2009..

Since 2010, the cemetery service has incurred operating net balance loss of approximately \$84,000 per year, due to the addition of columbaria garden interest expense.

Add in the principal capital payments to service the debt expenses and the cemetery system tax subsidy requires **\$185-190,000** of tax dollar support per year (allowing for some variation in annual costs).

The graphs below sets out the total revenue, operating expenses, interest expense and net cash outflow (including principal payments and care fund investments) over the last 5 year period.

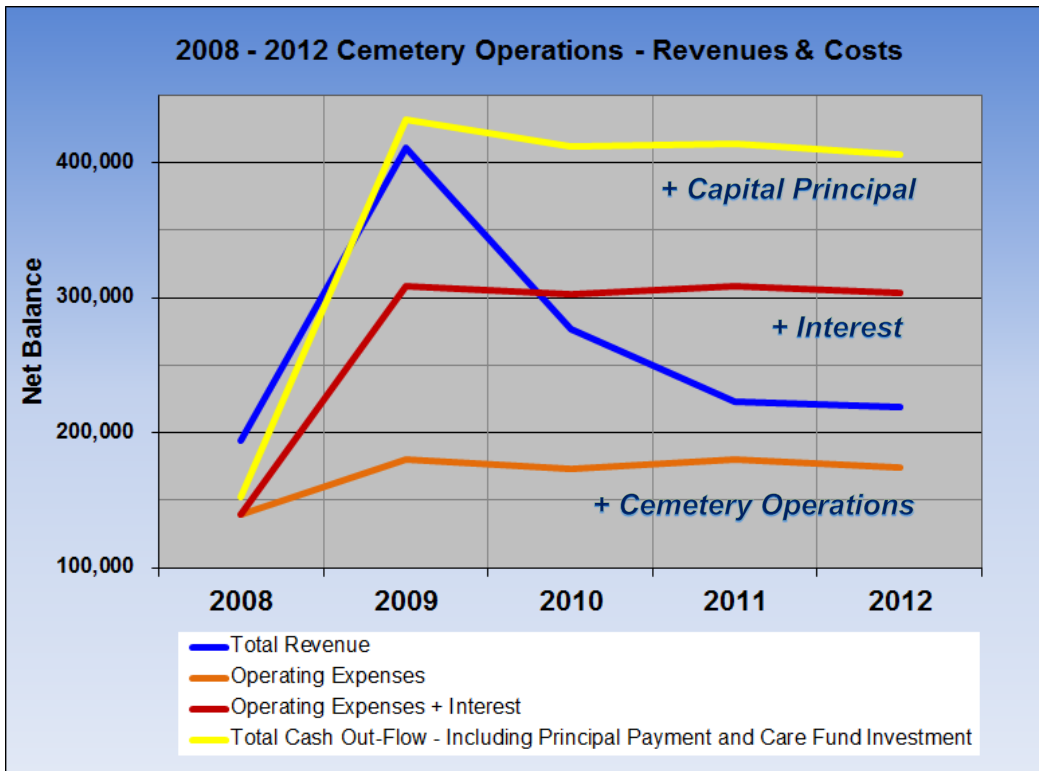


Figure 17: Total Revenue, Operating Expenses and Cash Out-Flow - 2008 to 2012

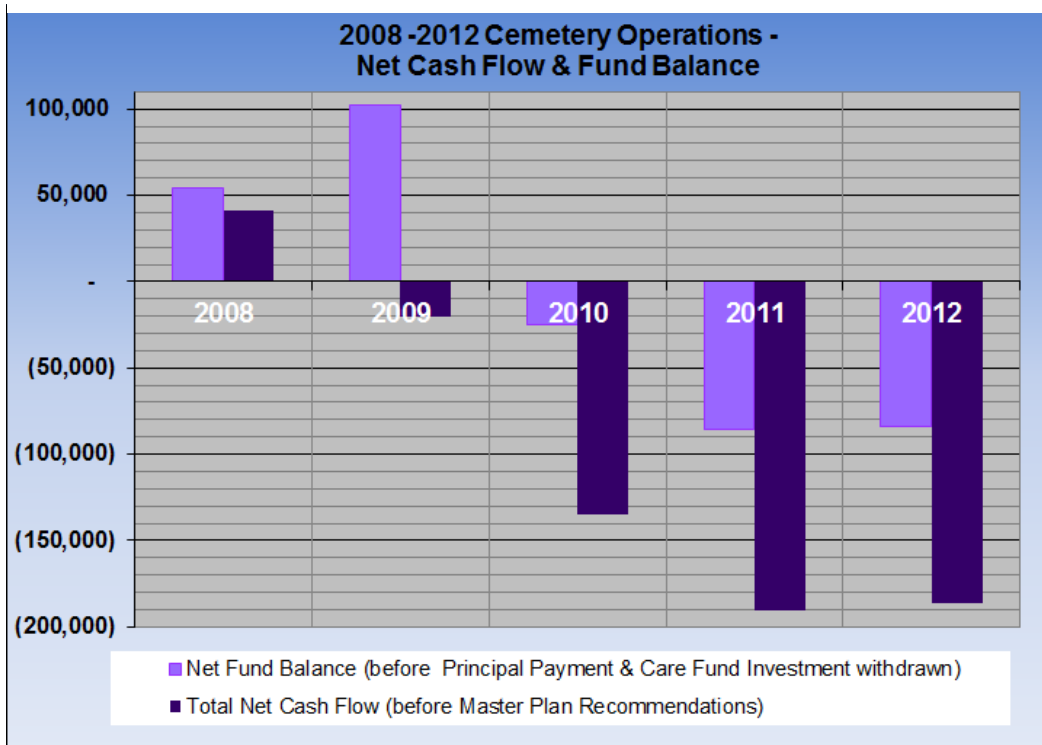


Figure 18: Fund Net Balance, 5 Years (before & after Principal Payments & Care Fund Investment)

## FINANCIAL PLAN

### PHILOSOPHY

One of the key factors, if not THE key factor in moving the City's cemetery system towards financial sustainability is determining the extent and pace at which the City expects the cemetery system to be self-sufficient, or possibly even function as a profit centre.

The three primary financial models for the delivery of a cemetery system include:

- Tax supported model;
- Cost recovery model, and
- Profit model.

From discussions with City Staff including the Chief Financial Officer (CFO), our understanding is that the City would like the cemetery system to move towards cost recovery.

### FINANCIAL SCENARIOS

This section presents a financial projection for the status quo (current values) as well as three scenarios for achieving a more financially sustainable cemetery system. This section of the report is set out under the following headings:

- Moving towards cost recovery;
- Financial Scenario summary table;

Detailed analysis of four financial scenarios is provided as follows:

- Scenario 1: Maintain Status Quo;
- Scenario 2: Achieving Cost Recovery in 1 Year;
- Scenario 3: Achieving Total Cost Recovery (Operating, Interest and Principal Capital costs) in 5 Years, and
- Scenario 4: Achieving Cost Recovery of Operating Costs and Interest in 5 Years.

### MOVING TOWARDS COST RECOVERY

In order to identify options for the City to move the cemetery system towards cost recovery, four financial scenarios (including maintain the status quo) have been generated in this report.

These potential scenarios were developed based on a demographic and market trend analysis, LEES+Associates professional experience and knowledge of similar municipal cemetery operations and discussions with City Staff.

Each scenario relies on the following data and assumptions:

- Demographics and disposition trends data and forecasts based on provincial and federal government statistics and growth projections;

- Market capture (number of local decedents who chose to be interred at the City's cemeteries) is expected to continue to be consistent with historic market capture rates;
- Cost escalation of 1.5% due to inflation;<sup>11</sup>
- Cost escalation of 7.5% every 5 years due to the renewal of the maintenance contract (assuming 5 year period compensation for inflation);
- Decrease of 30% in the typical price for a mausolea niche in year 1 of the plan being implemented in all scenarios, and
- A unique set of price increases are defined in the first year or first 5 years, followed by consistent annual price increases of 3% (twice the cost of inflation) to offset cost escalation due to inflation and changing demographic and disposition trends.

Cemetery service price is the only variable that changes in the scenarios presented below. Changes to the price of opening and closing and to the PCF fund contribution are assumed to be proportionate to the change in pricing.

It is important to acknowledge that depending on the scenario, the degree of price increases may potentially be accompanied by the risk of decreased market capture and sales revenue, as customers may look to nearby communities for lower rates.

The following tables and graphs illustrate the key aspects of each scenario. Annual projected revenues, expenses and subsidies required over the next 25 years of operation are shown.

<sup>11</sup> *Extrapolated from the forecast Consumer Price Index average rate of inflation 2002-2012 period published by Statistics Canada, CANSIM Table 326-0021 <http://www.bcstats.gov.bc.ca/StatisticsBySubject/Economy/ConsumerPriceIndex.aspx>*

**SCENARIO SUMMARY**

The following table provides an overview of all financial scenarios generated in this report. A more detailed analysis of each scenario follows this summary table:

<b>Scenario Summary</b>	<b>Scenario 1: Maintain Status Quo</b>	<b>Scenario 2: Total Cost Recovery in 1 Year</b>	<b>Scenario 3: Total Cost Recovery in 5 Years</b>	<b>Scenario 4: Operating Cost + Interest Expense Recovery in 5 Years</b>	<b>Ongoing Rates after each Scenario Period</b>
<b>Assumptions*:</b>					
Price Increases* - All other products	0.0%	125.0%	25.0%	15.0%	3.0%
Cost Increase* - Cost of Inflation	1.5%	1.5%	1.5%	1.5%	1.5%
Cost Increase every 5 yrs* - Contractual Care and Maintenance	7.5%	7.5%	7.5%	7.5%	7.5%
<i>(Next Change expected in 2014) - 0.00% change in between periods</i>	0.0%	7.5%	7.5%	7.5%	1.5%
Price Increases* - Cremation Burial Services Only	0.0%	225.0%	25.0%	15.0%	3.0%
Price Increases* - Casket Related Services Only	0.0%	150.0%	25.0%	15.0%	3.0%
Price Increases* - Columbarium Niche Only	0.0%	0.0%	0.0%	0.0%	3.0%
Price Increases* - Mausolea Only	0.0%	-30.0%	-30.0%	-30.0%	0.0%
PCF Interest Rate* Compound Interest, No Annual Withdrawals	1.61%	1.61%	1.61%	1.61%	1.61%
<b>Results:</b>					
Revenue 2013	226,110	429,598	271,428	282,712	
Costs 2013	407,544	428,795	410,275	337,024	
Subsidy 2013	<b>(181,434)</b>	<b>803</b>	<b>(138,847)</b>	<b>(54,312)</b>	
Revenue 2017	230,126	480,776	467,663	369,084	
Costs 2017	420,173	446,448	442,638	349,350	
Subsidy 2017	<b>(190,047)</b>	<b>34,328</b>	<b>25,025</b>	<b>19,733</b>	
Revenue 2022	260,617	552,846	534,631	403,187	
Costs 2022	434,624	468,098	463,396	368,575	
Subsidy 2022	<b>(174,007)</b>	<b>84,747</b>	<b>71,235</b>	<b>34,613</b>	
Revenue 2032	287,176	798,197	763,776	591,808	
Costs 2032	255,762	312,850	305,259	289,868	
Subsidy 2032	<b>31,414</b>	<b>485,347</b>	<b>458,516</b>	<b>301,940</b>	
Revenue 2036	300,460	933,940	892,759	681,704	
Costs 2036	273,179	342,988	334,007	311,779	
Subsidy 2036	<b>27,281</b>	<b>590,952</b>	<b>558,751</b>	<b>369,925</b>	

Table 19: Summary of Financial Scenarios (Source: LEES+Associates)

**SCENARIO 1: MAINTAIN STATUS QUO**

At the present time, the total City’s cemetery costs currently exceed total revenues due to debt servicing for the columbaria garden. The cemetery system currently requires an annual subsidy of approximately \$185-190,000 in tax dollar support. With no changes, the amount of tax support required (if no other price or volume increases occur) will continue to increase due to cost escalation (See Figure 19 below).

In 10 years, the tax based subsidy will have to increase to approximately \$200,000. By year 2028, after the columbaria garden and mausolea debt is paid, the tax, the City of Penticton will no longer require a tax subsidy, unless there ARE plans to further finance additional columbaria or mausolea on the cemetery site.

**Financial Forecast – Maintain Status Quo**

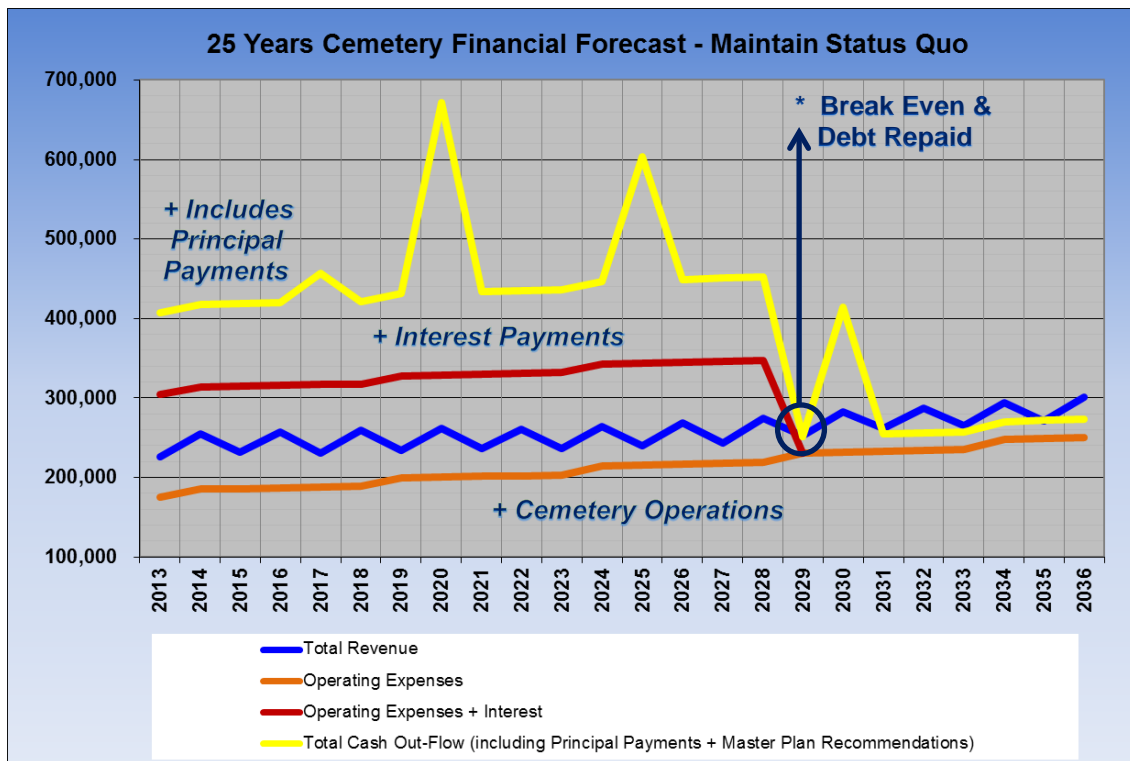


Figure 19: Maintaining Status Quo, Financial Forecast for Cemetery Operations, 25 years

The peaks and troughs in the trend lines for ‘Total Revenue’ reflect our assumption that there will be one interment in the mausolea every second year.

The gradual steps in the trend lines for ‘Operating Expense’ and ‘Operating Expenses + Interest’ represent the expected increases in cost due to the renewal of the care and maintenance contract for Lakeview Cemetery every 5 years.

“Total Cash Out-Flow” includes Care Fund contributions being invested in the Perpetual Care Fund, as well as all expected capital expenditures as cash out-flows. The sharp peaks in the trend line for “Total Cash Out-Flow” highlight the periodic capital development costs recommended in this Master Plan. These recommendations are summarized as follows:

Burial Expansion at Lakeview Cemetery	Estimated cost
Phase 1 – 2017,	\$56,000
Phase 2 – 2020,	\$242,500
Phase 3 – 2025,	\$176,000
Phase 4 – 2030, Land below grade	\$200,000

Table 20: Estimated Total Cash Out-Flow per Phase

Cash Flow Forecast – Maintain Status Quo

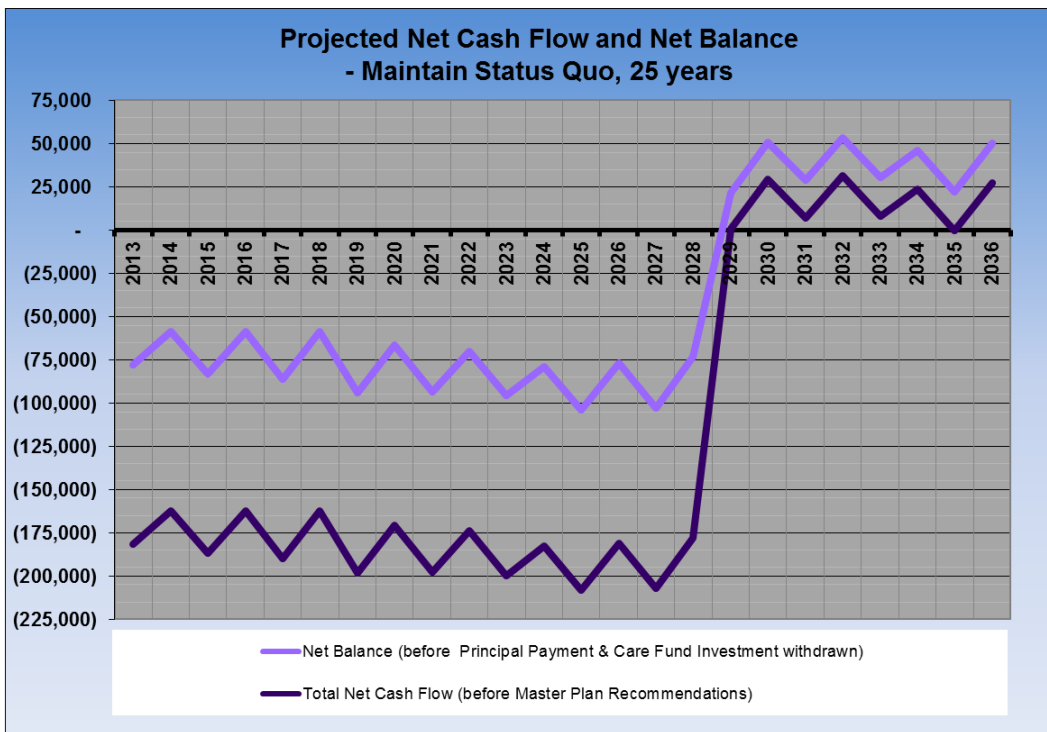


Figure 20: Projected Status Quo – 25 Years, Comparison of Cash Flow and Net Balance Forecast (Source: LEES+Associates)

The above graph shows the difference between forecast cash flows generated by maintaining the status quo cemetery operations, and the cash flows that include the principal payments for servicing the existing columbaria garden debt. The difference between the two cash flows is approximately \$100,000 until 2029 when the columbaria garden debt is paid off.



50 Year Forecast – Maintain Status Quo

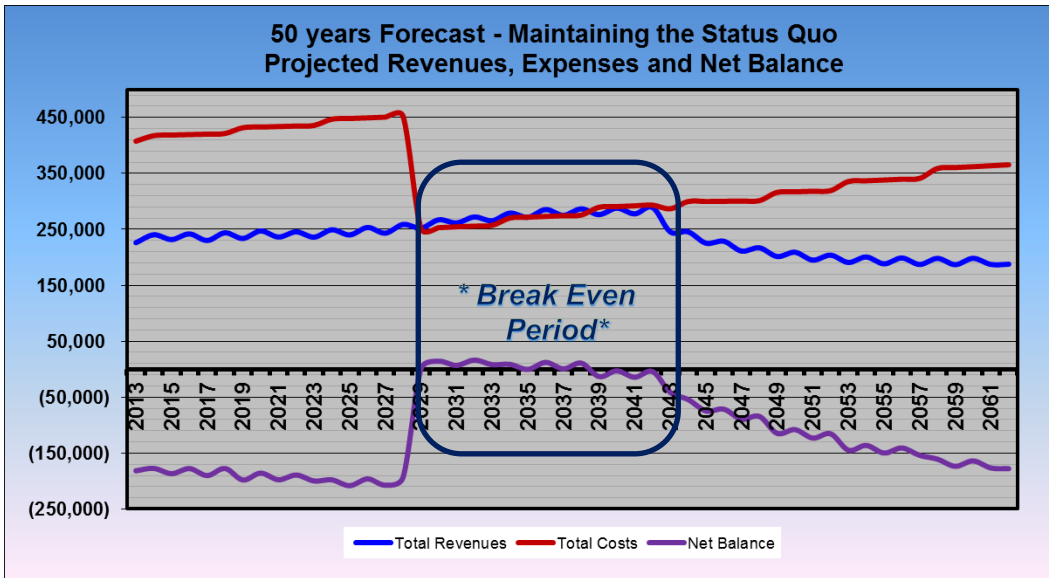


Figure 21: Projected Status Quo – Revenue, Expense and Net Balance Forecast (Source: LEES+Associates)

As demonstrated in the graph above, without any further capital development costs or any further interest and principal payments on the existing columbaria garden, after 2028 operating expenses will begin to consistently exceed operating revenues at around **2042**.

If the debt servicing (interest and principal payments) for the columbaria garden is considered separately, the City’s cemetery operating revenues currently exceed the operating expenses. Therefore, by 2028 when debt expenses are paid off, the City of Penticton would break even on operations and even generate a profit.

Given the status quo scenario, the City of Penticton can expect to breakeven from **2029 to 2041**. The cemetery system will then require increasing amounts of tax support if no other price or sales increases occur.

**SCENARIO 2: FINANCIAL FORECAST - ACHIEVING TOTAL COST RECOVERY IN 1 YEAR**

Scenario 1 is an aggressive financial model which involves significant price amendments for cemetery services in one year, followed by annual price increases of 3% thereafter to keep pace with cost escalation.

Scenario 2 achieves total cost recovery of all operating costs, as well as all current interest and principal payments within 1 year. It does not include cost recovery of the master plan recommendations for future capital development expenditures.

**Financial Forecast – Achieving Total Cost Recovery In 1 Year**

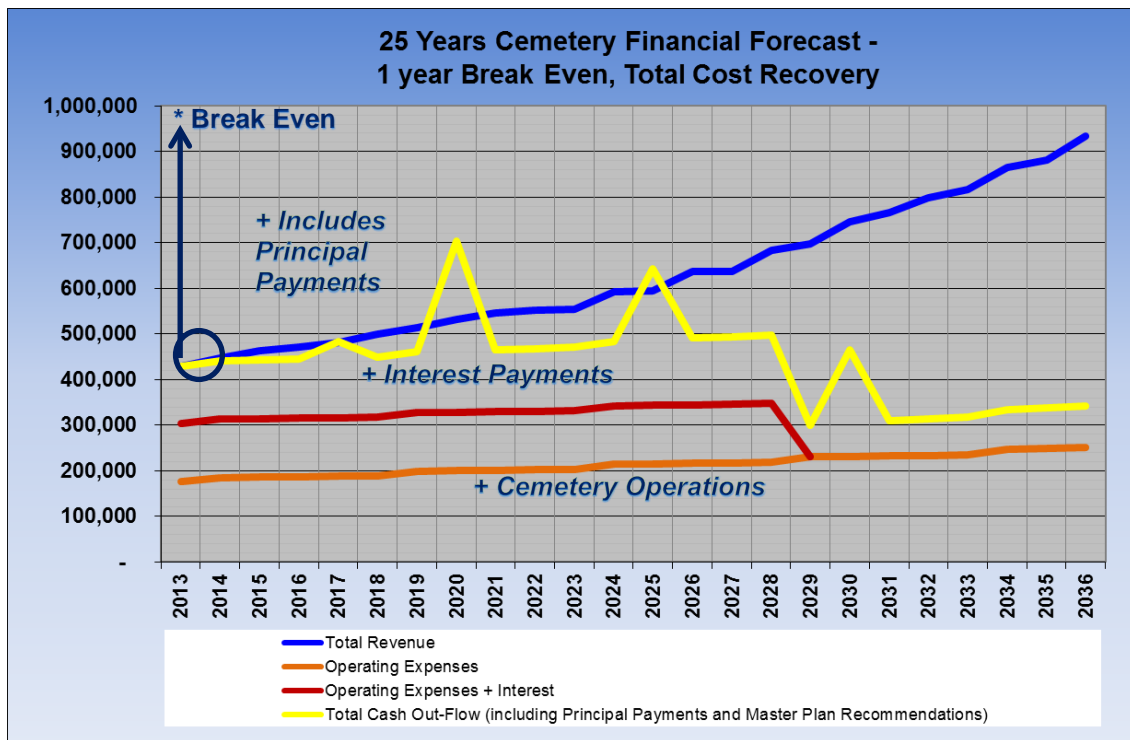


Figure 22: Scenario 2 - Achieving Total Cost Recovery in 1 year (Source: LEES+Associates)

Price increases for a select range of interment services have been applied to achieve this cost recovery scenario. The following rate increases, by interment type, are as follows:

- Traditional In-ground (casket) burial: **+150%**;
- In-ground cremation lot: **+225%**;
- Columbaria: **+0%**;
- Mausolea: **-30%**, and
- Other services and products (e.g. concrete lantern tablet, reservation fee, grave marker permit): **+ 125%**.

Implementation of this scenario would achieve cost recovery in 1 year. Thereafter, the cemetery system would continue to operate at a “profit” with little to no tax based subsidy required to cover costs.

Capital investment costs to implement the master plan recommendations would require a low degree of tax based support, depending on the extent and timing of work undertaken.

**Cash Flow Forecast - Achieving Total Cost Recovery In 1 Year**

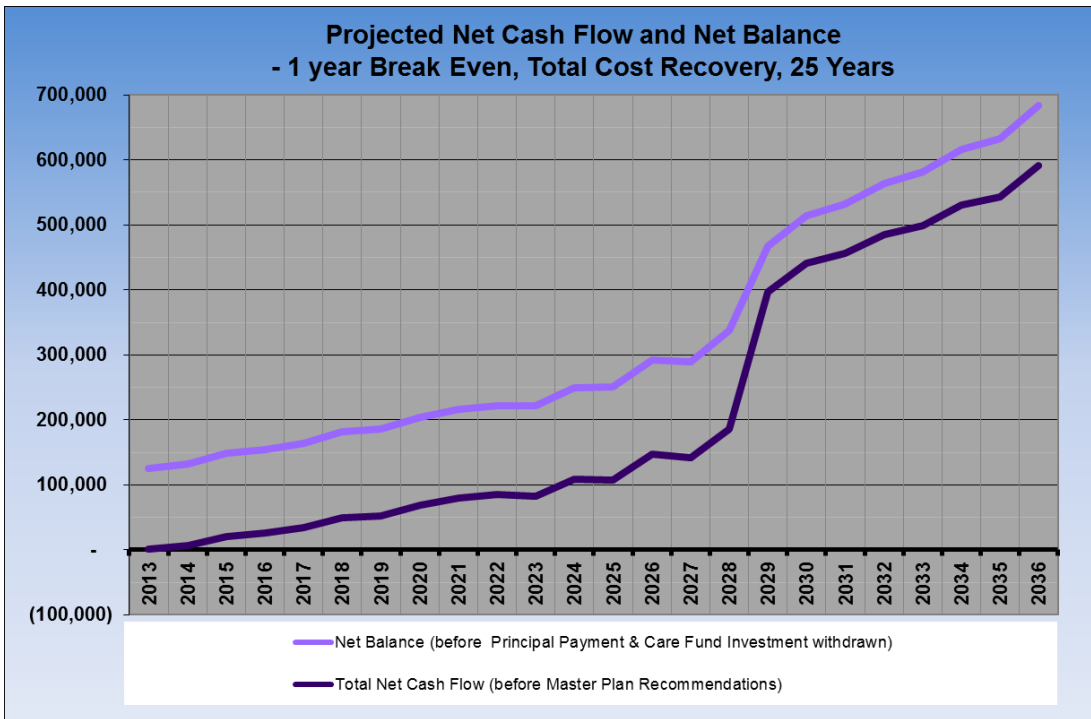


Figure 23: Scenario 2, Cost Recovery in 1 year: 25 Year Cash Flow and Net Balance Forecast,

The above graph is a cash flow forecast of the “1 year cost recovery” scenario expected from cemetery operations, before adding master plan recommendations. The City would break even all operating expenses, interest and principal payment costs within 1 year, generating significant positive cash flows in the following 24 year period.

The defining characteristic of this scenario is that it effectively doubles current revenue in-flows within a single year to achieve cost recovery of both operations and temporary capital costs.

However, this scenario would necessitate price increase that would significantly exceed the current benchmark for cemetery service fee rates in the surrounding area; this scenario therefore, also holds the greatest risk for loss in market capture. It is our position that this scenario would exceed what the market is willing to bear, and as such is likely unfeasible.

**SCENARIO 3: FINANCIAL FORECAST - ACHIEVING TOTAL COST RECOVERY IN 5 YEARS**

Scenario 3 is a moderately aggressive financial model which involves high annual price amendments for cemetery services for five years consecutively, followed by lower annual price increases of 3% thereafter to keep pace with cost escalation.

This scenario achieves total cost recovery of all current and forecast operating costs, as well as all current interest and principal payments within 5 years. It does not include cost recovery of the master plan recommendations for future capital development expenditures. It does not include cost recovery of the master plan recommendations for future capital development expenditures.

**Financial Forecast – Achieving Total Cost Recovery In 1 Year**

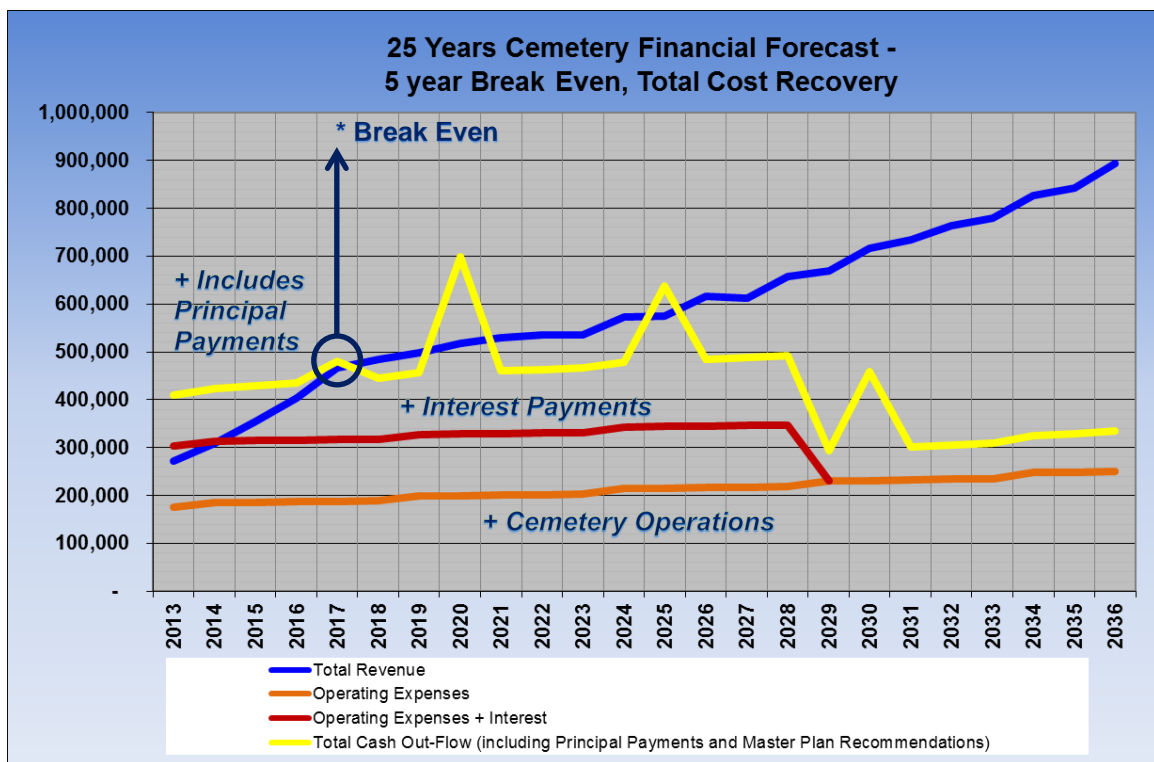


Figure 24: Scenario 3 - Achieving Total Cost Recovery in 1 year (Source: LEES+Associates)

Price increases for a select range of interment services have been applied to achieve this cost recovery scenario. The following annual rate increases, by interment type, are as follows:

- Traditional In-ground (casket) burial: **+25%** each year for 5 years;
- In-ground cremation lot: **+25%** each year for 5 years;
- Columbaria: **+0%** each year for 5 years;
- Mausolea: **-30%** in year 1 only, and
- Other services and products (e.g. concrete lantern tablet, reservation fee, grave marker permit): **+25%** each for five years.

If the City implements this scenario, total cost recovery would be achieved in 5 years. Thereafter, the cemetery system would continue to operate at a “profit” with no tax based subsidy required to cover operating costs.

Capital investment costs to implement the master plan recommendations would require a lesser degree of tax based support, depending on the extent and timing of work undertaken.

**Cash Flow Forecast - Achieving Total Cost Recovery In 5 Years**

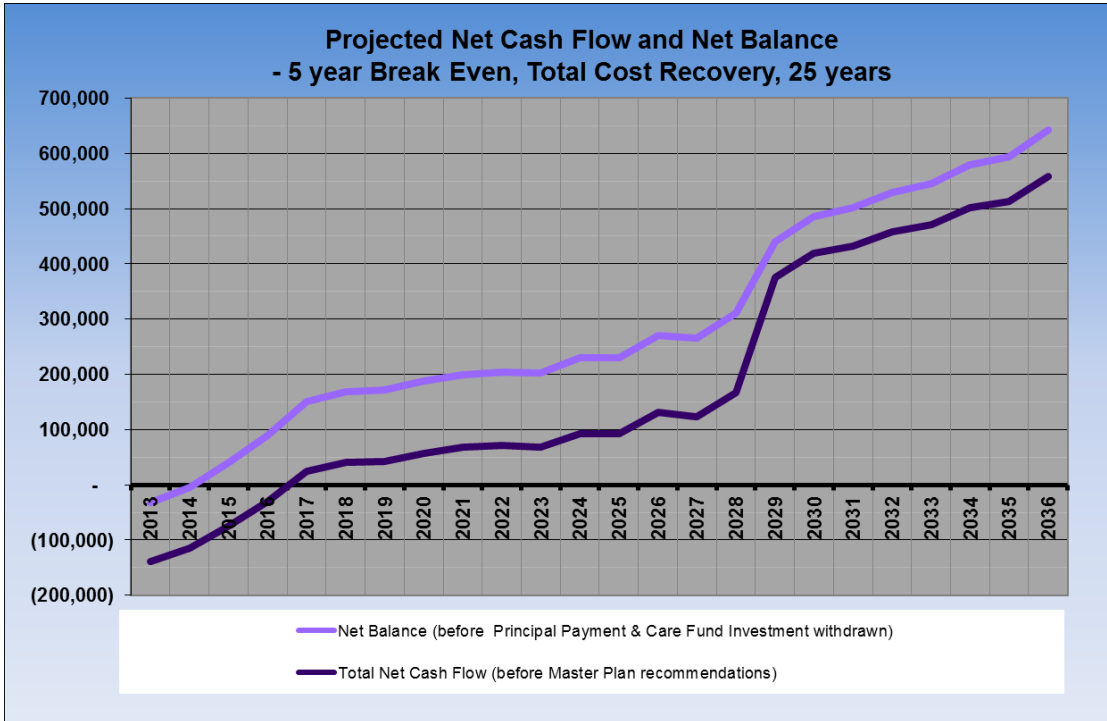


Figure 25: Scenario 3, Achieving Total Cost Recovery in 5 years: 25 Year Cash Flow and Net Balance Forecast (Source: LEES+Associates)

The above graph shows the 5 year total cost recovery scenario cash flows (before master plan recommendations), generated by cemetery operations. The City would break even on all operating expenses, interest and principal payment costs within 5 years, generating positive cash flows in the following 24 year period.

This scenario effectively doubles the current revenue cash in-flows over five years, to achieve cost recovery of both operations and temporary capital costs. However, this scenario would still necessitate price increases that would exceed current benchmark of cemetery service fee rates in the surrounding area, however may be considered more reasonable in five years’ time. This scenario still holds some risk for loss in market capture, but less so than the 1 year recovery scenario.

**SCENARIO 4: FINANCIAL FORECAST - ACHIEVING OPERATING COST + INTEREST RECOVERY IN 5 YEARS**

Scenario 4 is a modest financial model which involves moderate annual price increases over 5 years, followed by annual price increases of 3% thereafter to keep pace with escalation.

This scenario achieves cost recovery of all current and forecast operating costs, as well as all columbaria garden interest payments within 5 years. It does not include cost recovery of current principal payments on debt and master plan recommendations for future capital development expenditures.

**Financial Forecast – Achieving Operating Cost + Interest Recovery In 5 Years**

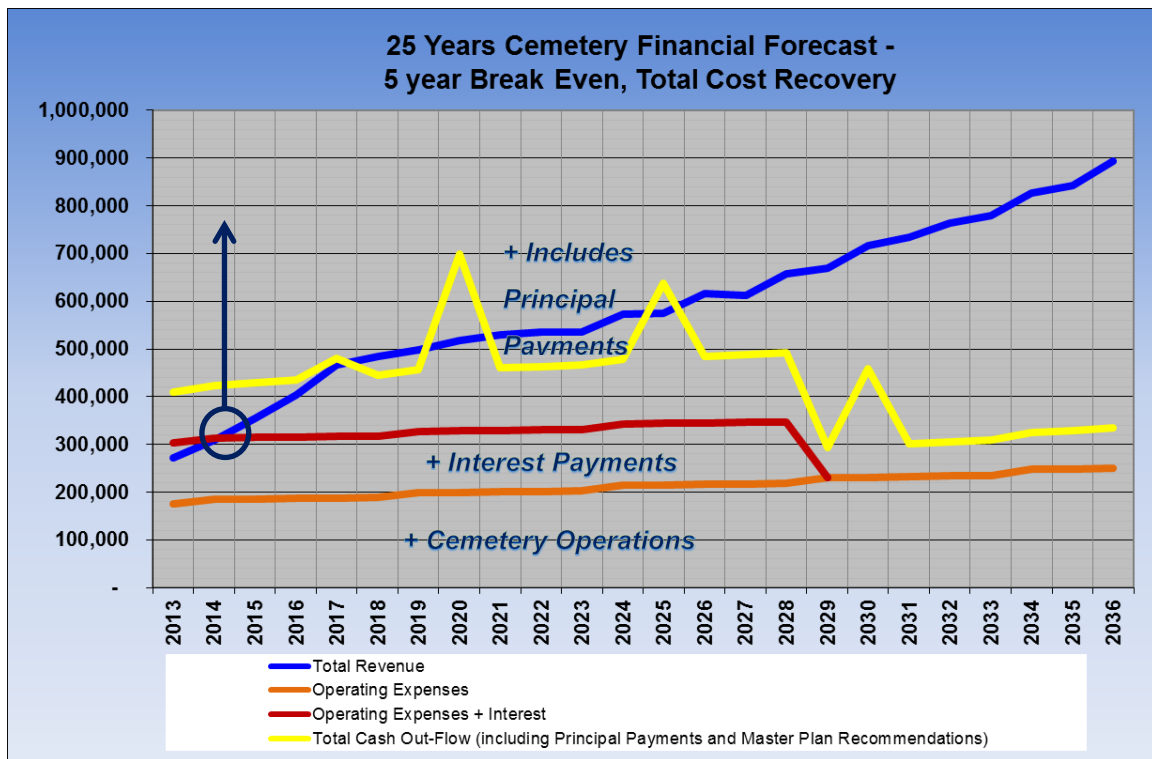


Figure 26: Scenario 4 - Achieving Operating Cost and Interest Recovery in 5 years (Source: LEES+Associates)

Prices for a select range of interment types have been amended by the following percentages in line with prices illustrated in the Table above:

- Traditional In-ground (casket) burial: +15% each year for 5 years;
- In-ground cremation lot: +15% each year for 5 years;
- Columbaria: +0% each year for 5 years;
- Mausolea: -30% in year 1 only, and
- Other services and products (e.g. concrete lantern tablet, reservation fee, grave marker permit):+15%.

If the City implements this scenario, operating cost and interest payments recovery would be achieved in 5 years. Thereafter, the cemetery system would continue to operate at a “profit” with no tax based subsidy required to cover operating costs.

Ongoing capital costs and the new master plan recommendations will continue to require tax based support, depending on the extent and timing of work undertaken.

**Cash Flow Forecast - Achieving Operating Cost + Interest Recovery In 5 Years**

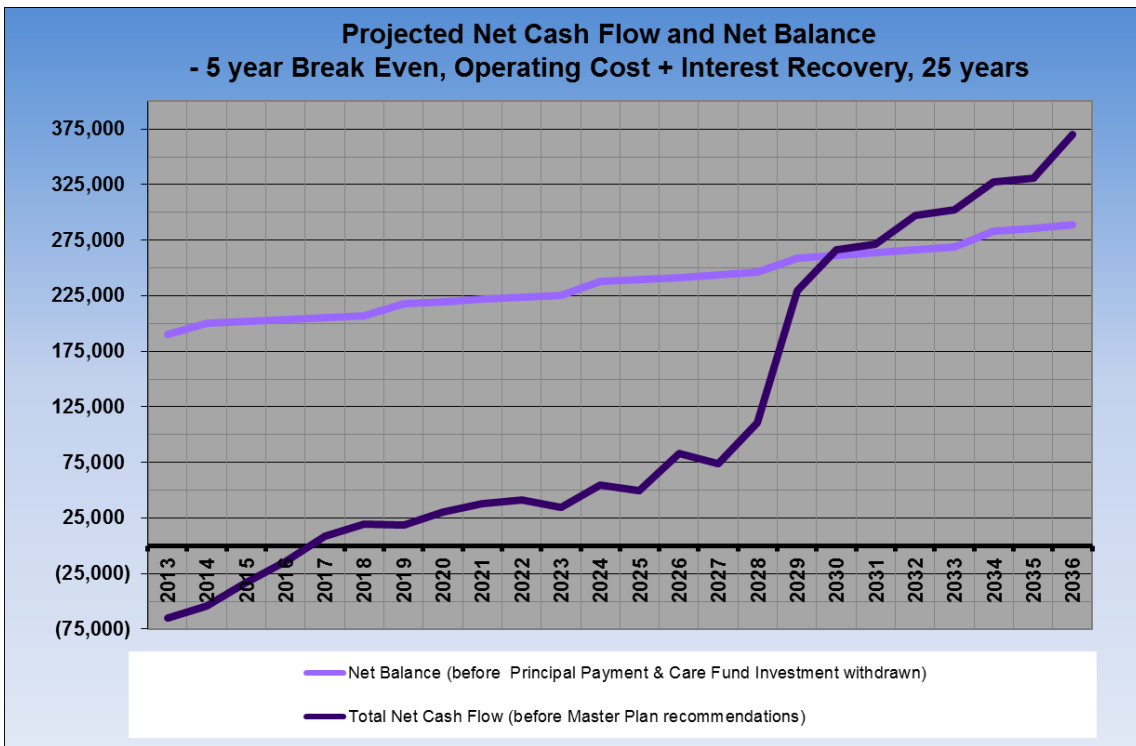


Figure 27: Scenario 1, Cost Recovery in 5 years: 25 Year Cash Flow and Net Balance Forecast (Source: LEES+Associates)

The above graph shows the 5 year cost recovery scenario cash flows, generated by cemetery operations alone, as well as the cash flows that include columbaria garden debt payments and Care Fund investments. The City would break even on all costs within 5 years, generating positive cash flows in the following 20 year period.

This scenario effectively increases current revenue in-flows over five years by 66%, to achieve cost recovery of both operations and temporary interest cost.

This scenario proposes price increases that would adjust City of Penticton rates to match and keep pace with the benchmarked cemetery service fees in the surrounding area. This scenario holds the least amount of risk for loss in market capture.

## PRICING

As described in the financial scenarios to achieve cost recovery, changes to the cemetery services fee structure for cemetery services will be required if the City wishes to move the cemetery system towards cost recovery. This section of the report includes analyses of:

- Pricing of services across a continuum;
- Review of the City of Penticton’s cemetery fees and charges;
- Comparison of fees and charges with other BC cemeteries, and
- Amending prices.

### PRICE OF SERVICES ACROSS A CONTINUUM

The diagram below is a framework where fees for the various services are placed along a continuum that equates the community good versus the commercial good.

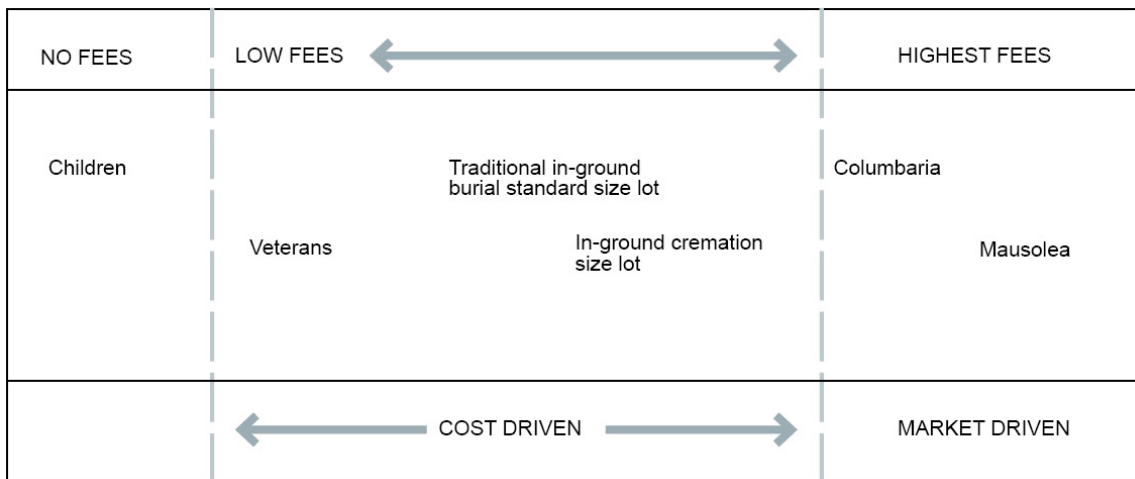


Figure 28: Example Framework of Prices for Services across a Continuum (Source: LEES+Associates)

The City’s philosophical approach to the provision of individual cemetery services is an important component when setting prices for services. For example, the City could decide not to charge for the interment of children or Veterans. In contrast, the City may view the provision of other services such as mausolea as a ‘for profit’ service. The place each service sits along that continuum provides a rationale for deciding which fees should be amended consistent with the goal of moving towards cost recovery. Typically, most municipal fees are based on the cost of the service, rather than what the market will accept.



## REVIEW OF CITY OF PENTICTON'S CEMETERY FEES AND CHARGES

Fees and charges for the City's cemetery services have not been amended significantly since 2002. The result has been that prices have not kept pace with inflation, and the City is currently undercharging for these services when compared to other similar municipal cemetery operators.

In 2002, the base fee for a standard traditional in-ground burial lot was \$395.00<sup>12</sup>. The base fee for the same service in 2013 is \$416.25. The price increase of \$21.25 represents a 0.4% increase in fees per year over the preceding 10 years. Meanwhile, the average annual rate of inflation in BC was 1.18%<sup>13</sup> over the same period.

The prices of some services appear to be undermining the sales of other services. For example, the fee for an in-ground cremation lot is currently \$127.50<sup>14</sup> (\$435.00<sup>15</sup> all-in fee). This price is very attractive to families when compared to the price of a columbaria niche which is typically \$3,150<sup>16</sup> (\$3,385.00<sup>17</sup> all-in fee). The low price for an in-ground cremation lot is likely to be undermining the sale of columbaria niches.

The charge for a mausoleum niche is typically \$26,250<sup>18</sup> (all-in fee), exceeding the price residents are generally willing to pay and in our experience significantly more than similar municipalities charge for this service. For example, the fee for a mausolea niche in Kelowna is approximately \$10,000<sup>19</sup> (\$20,697<sup>20</sup> all-in fee).

<sup>12</sup> Excludes the Perpetual Care Fund (PCF) contribution, fees for opening/closing, and tax.

<sup>13</sup> Consumer Price Index average rate of inflation 2002-2012 period published by Statistics Canada, CANSIM Table 326-0021 <http://www.bcstats.gov.bc.ca/StatisticsBySubject/Economy/ConsumerPriceIndex.aspx>

<sup>14</sup> Excludes the Perpetual Care Fund (PCF) contribution, fees for opening/ closing, and tax.

<sup>15</sup> Although not directly comparable, the 'all-in' price for in-ground cremation includes the lot fee, PCF contribution, opening/closing and monument setting (excluding tax).

<sup>16</sup> Fee for a columbaria niche on Level 1 for a Resident of Penticton (excluding PCF contribution and tax).

<sup>17</sup> Although not directly comparable, the 'all-in' price for a typical columbaria niche on Level 1 for a Resident of Penticton includes the lot fee, PCF contribution, opening/closing and initial engraving (excluding tax).

<sup>18</sup> Fee for mausoleum on Level 2 for a resident of Penticton (excluding PCF contribution and tax).

<sup>19</sup> (Excluding cemetery replacement fund fee, PCF contribution, and tax. Kelowna Memorial Park Cemetery's Fee Schedule "A" 2012 prices.

<sup>20</sup> Although not directly comparable, the 'all-in' price for a typical columbaria niche at Kelowna includes the lot fee, PCF contribution, and one-time opening/closing and initial engraving (excluding tax). Kelowna Memorial Park Cemetery's Fee Schedule "A" 2012 prices.

### COMPARISON OF FEES AND CHARGES WITH OTHER BC CEMETERIES

In 2008, the City of Penticton undertook an exercise to compare prices for a sample of cemetery services with prices for similar services provided by Kelowna and Kamloops. As a result of this analysis, City Staff proposed price increases as shown in the Table below.

<b>2008 Cemetery Full Burial Lot Fees</b>	<b>Kelowna</b>	<b>Kamloops</b>	<b>Penticton</b>	<b>Proposed Penticton Price</b>	<b>% Increase/Decrease</b>
<b>Regular Graves:</b>					
Standard Plots (resident)	\$585.25	\$555.43	\$395.00	\$450.00	13.92%
Standard Plots (non-resident)	n/a	\$648.38	\$525.00	\$600.00	14.29%
Child (resident)	\$141.00	\$268.45	\$134.00	\$141.00	5.22%
Child (non-resident)	n/a	\$329.55	\$259.00	\$184.00	-28.96%
<b>Note:</b> Kelowna and Kamloops costs are averages for the various types of plots sold					

Table 21: Cemetery Rates Analysis by City Staff, July 2008 (Source: City of Penticton)

A review of 2008 full body burial lot fees indicate the rates charged for cemetery services in Penticton were 40% lower than Kamloops and 48% lower than Kelowna, for an equivalent plot and service.

<b>2008 Cemetery Cremation Lot Fees</b>	<b>Kelowna</b>	<b>Kamloops</b>	<b>Penticton</b>	<b>Proposed Penticton</b>
<b>Cremation Graves:</b>				
Cremation Grave - 4 urns (Resident)	\$447.42	\$225.88	\$120.00	\$162.00
Perpetual Care Fund	\$223.83	\$121.63	\$40.00	\$53.00
<b>Total</b>	<b>\$671.25</b>	<b>\$347.51</b>	<b>\$160.00</b>	<b>\$215.00</b>

Table 22: Cemetery Cremation Lot Rates Analysis 2013, (Source: LEES+Associates)

A review of 2008 cremation lot fees indicate the rates charged for cemetery services in Penticton were 117%% lower than Kamloops and 319% lower than Kelowna, for an equivalent cremation plot and service.

Cemetery	Lot Price <sup>21</sup>	PCF	Cemetery Development Fund	Opening and Closing	Grave Liner	Setting of Monument	Total
Penticton	\$416.25	\$138.75		\$680.00	\$320.00	\$150.00	<b>\$1,705.00</b>
Kelowna	\$499.00	\$356.00	\$356.00	\$683.00	\$475.00	\$307.00	<b>\$2,676.00</b>
Summerland (Canyon View Cemetery)	\$495.00	\$165.00		\$575.00	\$275.00	\$160.00	<b>\$1,670.00</b>

Table 23: Cemetery Burial Lot Rates Analysis 2013, (Source: LEES+Associates)

The Table above provides a more recent, traditional casket burial lot price comparison for Penticton, Kelowna and Summerland. The total fee for a standard lot in Penticton is currently 2% more than at Canyon View cemetery in Summerland, and 57% less than Kelowna’s cemetery.

The typical fee for a columbaria niche at the City of Penticton is currently **\$3,045.00**<sup>22</sup> compared to a typical fee of \$1,573<sup>23</sup> in Kelowna. After mandatory contributions to the Perpetual Care Fund and Cemetery Development Fund are applied the typical fee in Kelowna is **\$3,372.00**

Current fees charged at Penticton’s cemeteries for traditional in-ground burial are **low**, and rates for in-ground cremation are **very low** compared with neighboring communities. Fees for columbaria services are **in line** with those charged in Kelowna.

Fees charged for the mausolea service are **high** when compared to fees charged for similar services by comparable municipal cemetery operators in BC.

#### AMENDING PRICES TO ACHIEVE COST RECOVERY

The extent and pace at which the City expects the cemetery system to move to cost recovery must be established in order to address the question about how quickly prices for cemetery services should rise. This section assesses the price increases necessary to achieve cost recovery in the timeframes set out under financial scenarios described and analyzed in the financial plan section of this report:

- Scenario 2: Achieving Total Cost Recovery in 1 year;
- Scenario 3: Achieving Total Cost Recovery in 5 years, and
- Scenario 4: Achieving Operating Cost and Interest Recovery in 5 years.

Scenario 1, Maintain Status Quo under the financial plan describes the outcome if no price changes are made to the cemetery service fees, and therefore will be excluded from the price changes analysis.

<sup>21</sup>Standard lot purchase price excludes the Perpetual Care Fund (PCF) contribution, fees for opening/ closing, and tax.

<sup>22</sup> Typical columbaria niche purchase price excludes the Perpetual Care Fund (PCF) contribution, and tax

<sup>23</sup> Typical columbaria niche purchase price in excluding PCF contribution, Cemetery Development Fund Contribution and tax: Kelowna Memorial Park Cemetery’s Fee Schedule “A”

Several factors can influence the extent to which cemetery fees can be raised. These include:

- Prices which Council feels are acceptable to residents;
- The price point the market will bear for a particular service, and
- The financial goal of the cemetery operation (e.g. to move toward cost recovery, or remain as a tax based service).

Moving closer to cost recovery is best accomplished incrementally, although some municipalities have increased prices in large steps. For example, the District of Maple Ridge, BC increased its prices by over 20% for most of its services in one change to bring its prices closer to the market average and its cemetery finances closer to a self-sustaining level.

The following Tables **illustrate the effect on prices** for a range of typical services if they were amended by the percentages used in Financial Scenarios 2, 3 and 4 to achieve cost recovery of the current and expected costs required to support Penticton’s cemetery system and debt costs. The prices in all Tables, exclude PCF contributions, fees for opening/closing and tax.

<b>Scenario 2: Amendments to Prices to Achieve Total Cost Recovery in 1 year</b>					
<b>Type of Interment</b>	<b>Penticton 2013 Price</b>	<b>Annual Change in Price (%)</b>	<b>Penticton 2014 Price (1 year)</b>	<b>Penticton 2018 Price (5 years)</b>	<b>Kelowna 2013 Price for Equivalent Services</b>
<b>Traditional In-ground (casket) Burial lot</b>	\$416.25	+150%	\$1,041	\$1,171	\$898 (average price)
<b>In-ground Cremation Lot (Resident)</b>	\$127.50	+225%	\$414	\$466	\$236 (average price)
<b>Columbaria (Resident Level 1)</b>	\$3,150	+0%	\$3,150	\$3,150	\$1,573 (\$3,372 total price)
<b>Mausolea (Resident Level 2)</b>	\$26,250	-30% in year 1	\$18,375	\$18,375	\$10,087 (\$20,697 total price)

Table 24: Price Amendments for Total Cost Recovery in 1 Year (Source: LEES+Associates)

<b>Scenario 3: Amendments to Prices to Achieve Total Cost Recovery in 5 years</b>					
<b>Type of Interment</b>	<b>Penticton 2013 Price</b>	<b>Annual Change in Price (%)</b>	<b>Penticton 2014 Price (1 year)</b>	<b>Penticton 2018 Price (5 years)</b>	<b>Kelowna 2013 Price for Equivalent Services</b>
<b>Traditional In-ground (casket) Burial lot</b>	\$416.25	+25%	\$520	\$1,270	\$898 (average price)
<b>In-ground Cremation Lot (Resident)</b>	\$127.50	+25%	\$159	\$389	\$236 (average price)
<b>Columbaria (Resident Level 1)</b>	\$3,150	+0%	\$3,150	\$3,150	\$1,573 (\$3,372 total price)
<b>Mausolea (Resident Level 2)</b>	\$26,250	-30% in year 1	\$18,375	\$18,375	\$10,087 (\$20,697 total price)

Table 25: Price Amendments for Total Cost Recovery in 5 Years (Source: LEES+Associates)

<b>Scenario 4: Amendments to Prices to Achieve Operating Cost + Interest Recovery in 5 yrs</b>					
<b>Type of Interment</b>	<b>Penticton 2013 Price</b>	<b>Annual Change in Price (%)</b>	<b>Penticton 2014 Price (1 year)</b>	<b>Penticton 2018 Price (5 years)</b>	<b>Kelowna 2013 Price for Equivalent Services</b>
<b>Traditional In-ground (casket) Burial lot</b>	\$416.25	+15%	\$478	\$837	\$898 (average price)
<b>In-ground Cremation Lot (Resident)</b>	\$127.50	+15%	\$147	\$256	\$236 (average price)
<b>Columbaria (Resident Level 1)</b>	\$3,150	+0%	\$3,150	\$3,150	\$1,573 (\$3,372 total price)
<b>Mausolea (Resident Level 2)</b>	\$26,250	-30% in year 1	\$18,375	\$18,375	\$10,087 (\$20,697 total price)

Table 26: Price Amendments for Operating Cost and Interest Recovery in 5 Years (Source: LEES+Associates)

Significant increases in cemetery service fees, such as those illustrated in Financial Scenarios 2 and 3 may result in decreased market capture, particularly from pre-need sales. Local residents may consider future interment options in neighboring communities with lower rates.

A single rise in prices to achieve cost recovery in one year is not recommended, as it is unlikely to be acceptable to the community. We propose that it is reasonable to adopt a target of 5 years in which to achieve cost recovery.

Amendments to prices for cemetery services in a similar manner to those illustrated in Scenario 4 above would best enable the City to achieve operational and interest cost recovery within a 5 year timescale, while remaining competitive with other municipal cemetery operators such as Kelowna.

In addition to price amendments, revenue may be enhanced by attracting more people to choose interment at the City's cemeteries by means other than price, such as offering diversified and unique service options, and significant community engagement.

Further market capture will depend on initiatives taken to promote awareness of the cemeteries and diversification of interment and commemoration options offered by the City. These options are discussed in the Marketing Plan.

The City can expect to face significant capital costs in the operation of its cemetery system in the short and long terms. The primary costs will include:

- Expansion of burial capacity at Lakeview Cemetery on land which requires remediation;
- Repair and maintenance of monuments at Fairview Cemetery;
- Development of a new cemetery at the Munson Mountain property, and
- A projected deficit in the Perpetual Care Fund (discussed in the PCF section of the report).

All financial scenarios generated show that once current capital development debt payments have been completed, the cemetery system will continue to operate at a profit. Therefore, any price increases implemented to achieve capital cost recovery are expected generate a significant surplus in the long term.

It would be prudent if the City utilized these expected profits to address the capital requirements outlined above through creation of a Cemetery Development Reserve Fund for these purposes.

## KEY FINDINGS

- A single rise in prices to achieve cost recovery in one year is not recommended, as it is unlikely to be acceptable to the community and is likely to have the effect of reducing the cemeteries market capture;
- Adopting amendments to prices for cemetery services in a similar manner to those illustrated in Scenario 4 would best enable the City to achieve operational and interest cost recovery within a 5 year timescale, and
- Following the repayment of the interest and principal payment on the columbaria debt, price increases implemented to achieve cost recovery is likely generate a significant surplus in the long term.

## RECOMMENDATIONS

In order to achieve operational and interest payment cost recovery, it is recommended that the City:

- Adopts **Financial Scenario 4** for planning purposes. Key components include:
  - Setting out a 5 year timescale in which to achieve operational cost and interest payment recovery;
  - Amending prices for cemetery services in a similar manner to those illustrated in Scenario 4 (table 26) in the upcoming 5 year period, and
  - Continuing to increase fees at a rate of 3% annually to keep pace with long term fluctuations in inflation, and the expected demographic and disposition trends.
- **If and when** there are net operating profits, place them in a Cemetery Development Reserve Fund to reduce future requirements for tax based capital funding such as:
  - Burial expansion at Lakeview Cemetery;
  - Repair and maintenance of monuments at Fairview Cemetery;
  - Development of a new cemetery at the Munson Mountain property, and
  - Inject capital into the Perpetual Care Fund.

By addressing the implementation recommendations above, the City of Penticton will be in a good position to move the cemetery service towards financial sustainability.

## PERPETUAL CARE FUND

One of the most important factors in the future financial viability of a cemetery is the adequacy of the Perpetual Care Fund (PCF). Perpetual care costs are those costs incurred in maintaining a cemetery and its infrastructure in perpetuity. This includes landscaping costs as well as maintenance for structures, roads and pathways. If a PCF is not adequately funded, a tax subsidy will be required to maintain a cemetery after it is full.

The City of Penticton collects PCF contributions based on 25% of the price for traditional in-ground burial lots and in-ground cremation lots, and 10 % of the price for columbaria and mausolea. These rates are the minimum as required under the Cremation, Interment and Funeral Services Act. The City's current Perpetual Care Fund balance is approximately \$911,000 with an interest rate of approximately 1.61%<sup>24</sup>. The interest received on PCF investments has averaged \$15,000 in the last three years. The PCF rate of return was higher previous to 2010 and was significantly impacted by global market depression in recent years. The City is currently reinvesting all PCF income back into the PCF to take advantage of compound interest. Other revenue sources such as the sale of lots are used to pay for the care and maintenance of the cemeteries at the present time.

We estimate that Lakeview Cemetery will have burial capacity for the upcoming 30 year period (assuming the land in the southwest corner of the site is utilized). Decedents who purchased pre-need lots will continue to be interred at the cemetery for an estimated additional period of 20 years, after the cemetery is closed to new interments. Based on this projection, all revenue sources generated at Lakeview Cemetery will more or less cease at the end of the 50 year period, while the cost of care and maintenance will continue in perpetuity.

This section presents financial projections for the Perpetual Care Fund based on:

- Scenario 1: Maintaining the Status Quo (to evaluate the City of Penticton's current position);
- Scenario 4: Achieving Cost Recovery of Operating Costs and Interest in 5 Years, the recommended option proposed in the Financial Plan to achieving a more financially sustainable cemetery system, and
- Scenario 5: As per Scenario 4 but with an increase in the proportion of revenue invested into the PCF balance from 25% to 45%.

<sup>24</sup>Three year average rate extrapolated by LEES+Associates from PCF capital and interest amounts provided by the City of Penticton.



**SCENARIO 1: PERPETUAL CARE FUND PROJECTION - MAINTAIN STATUS QUO**

Maintaining the status quo, in Scenario 1 assumes the PCF balance will continue to grow and all PCF contributions paid by families and the interest received from PCF investments will continue to be reinvested into the long term PCF for the next fifty years. Interest income is projected and assumed to continue at the City’s historical five year average rate of return of 1.61%<sup>25</sup> on its PCF investments.

The primary driver of costs is cemetery maintenance. The cost of maintenance is projected to increase in a series of steps, as it is the current policy at Lakeview Cemetery for maintenance costs to be contractually fixed for a five year period. This policy is assumed to continue in the next 50 years. Forecast increases to maintenance costs will occur whenever the maintenance contract is renegotiated. It is expected that the maintenance contract price increases will be based upon the cumulative rate of inflation projected over 5 years (7.5% - 1.5% annually over 5 years).

Assuming the cemetery will become inactive in year 51, the cost of care and maintenance is typically expected to reduce by approximately 50%. This is because some of the major expenses will no longer be incurred such as opening and closings of graves, and the standard of maintenance is normally reduced when a cemetery becomes inactive.

Under the present business model, we estimate that the PCF balance will be approximately \$3.5 million at the end of the upcoming 50 year period.

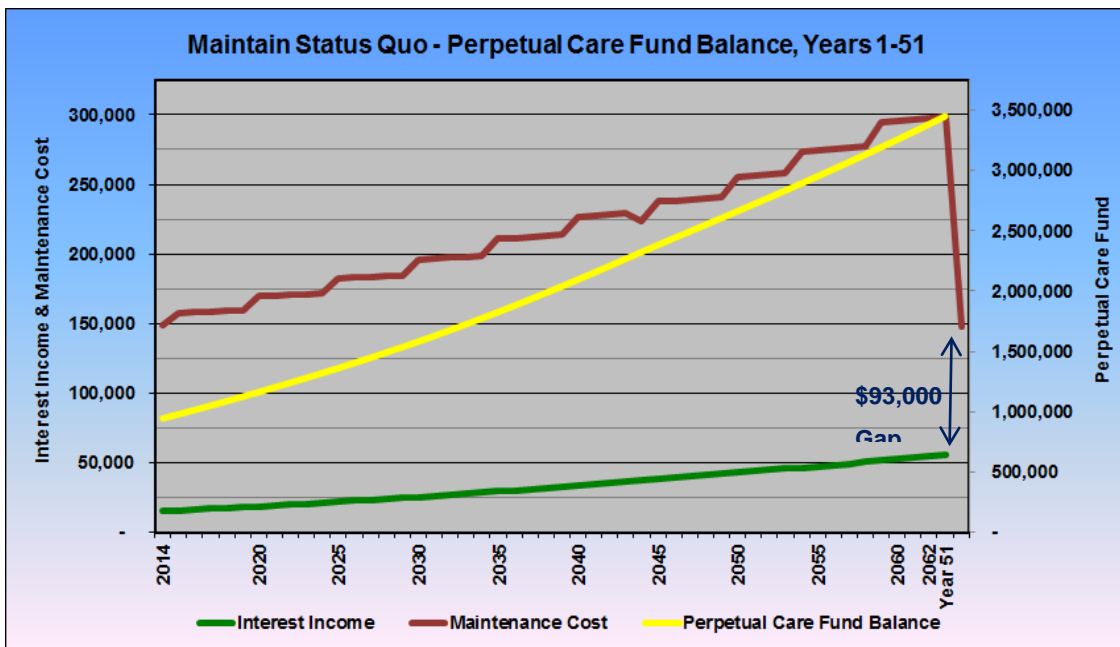


Figure 29: 50 years, Status Quo Scenario - Perpetual Care Fund Balance Projection (Source: City of Penticton and LEES+Associates) hat are

<sup>25</sup>Three year average rate was extrapolated by LEES+Associates based upon PCF capital and interest values provided by the City of Penticton

and maintenance is projected to be \$299,000 by 2062. This means the City would be facing a shortfall of \$243,000 per year.

When the cemetery capacity is reached and there are no further interments, then long term annual maintenance cost is expected to decrease to \$149,000, decreasing the gap to \$93,000 in year 51.

#### **SCENARIO 4: PERPETUAL CARE FUND PROJECTION – ACHIEVING OPERATING COST + INTEREST RECOVERY IN 5 YEARS**

The 5 year operating and interest cost recovery, in Scenario 4 assumes the PCF balance will continue to grow and all PCF contributions paid by families and the interest received from PCF investments will continue to be reinvested into the long term PCF for the next fifty years.

PCF contributions are expected to be larger than in Scenario 1, because the price increases will proportionally increase the size of the City's revenue stream, and subsequently the size of contributions made to the long term Perpetual Care fund. Interest income is projected and assumed to continue at the City's historical five year average rate of return of 1.61%<sup>26</sup> on its PCF investments.

Consistent with "Maintain the Status Quo," Scenario 1, the primary driver of costs is cemetery maintenance. The cost of maintenance is projected to increase in a series of steps, as it is the current policy at Lakeview Cemetery for maintenance costs to be contractually fixed for a five year period. This policy is assumed to continue in the next 50 years, with expected increases to maintenance with inflation being accounted for, each time the contract is renegotiated.

Assuming the cemetery will become inactive in year 51, the cost of care and maintenance is expected to be reduced by approximately 50%. This is because some of the major expenses will no longer be incurred such as opening and closings of graves, and the standard of maintenance is normally reduced when a cemetery becomes inactive.

Price increases for cemetery services in the first 5 year period will enhance the amount of revenue deposited into the PCF, resulting in the PCF achieving a balance of approximately \$5 m by the end of the upcoming 50 year period (\$1.8 million dollars more than in the status quo scenario).

<sup>26</sup>Three year average rate was extrapolated by LEES+Associates based upon PCF capital and interest values provided by the City of Penticton

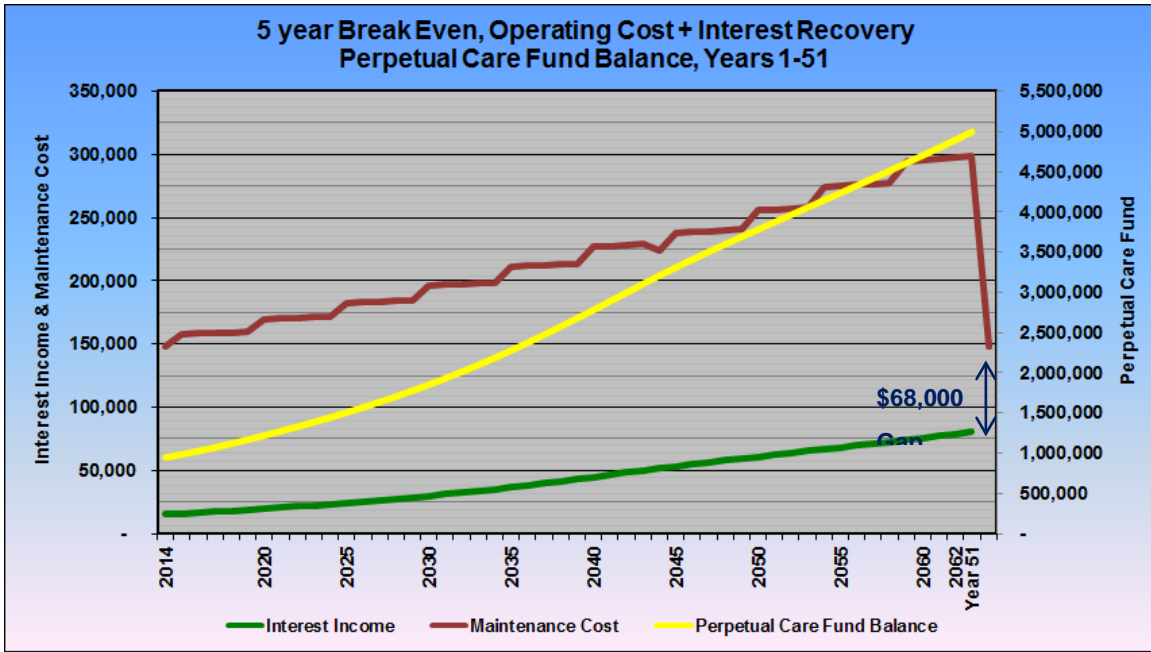


Figure 30: 50 years, 5 year Break Even, Operating Cost and Interest Recovery - Perpetual Care Fund Balance Projection (Source: City of Penticton)

A \$5.0 million Perpetual Care Fund will generate an approximately \$81,000 return in interest revenue that could be used to pay for the care and maintenance of the cemeteries.

As mentioned in Scenario 1, the cost of care and maintenance is projected to be \$299,000 by 2062. This means the City would be facing a shortfall of \$218,000 per year (\$25,000 less gap than in Scenario 1)

Under Scenario 4, when the existing cemetery capacity is reached and there are no further interments, then long term annual maintenance cost is expected to decrease to \$149,000, decreasing the gap to \$68,000 in year 51.

Perpetual Care Fund - Maintenance Subsidy Forecast

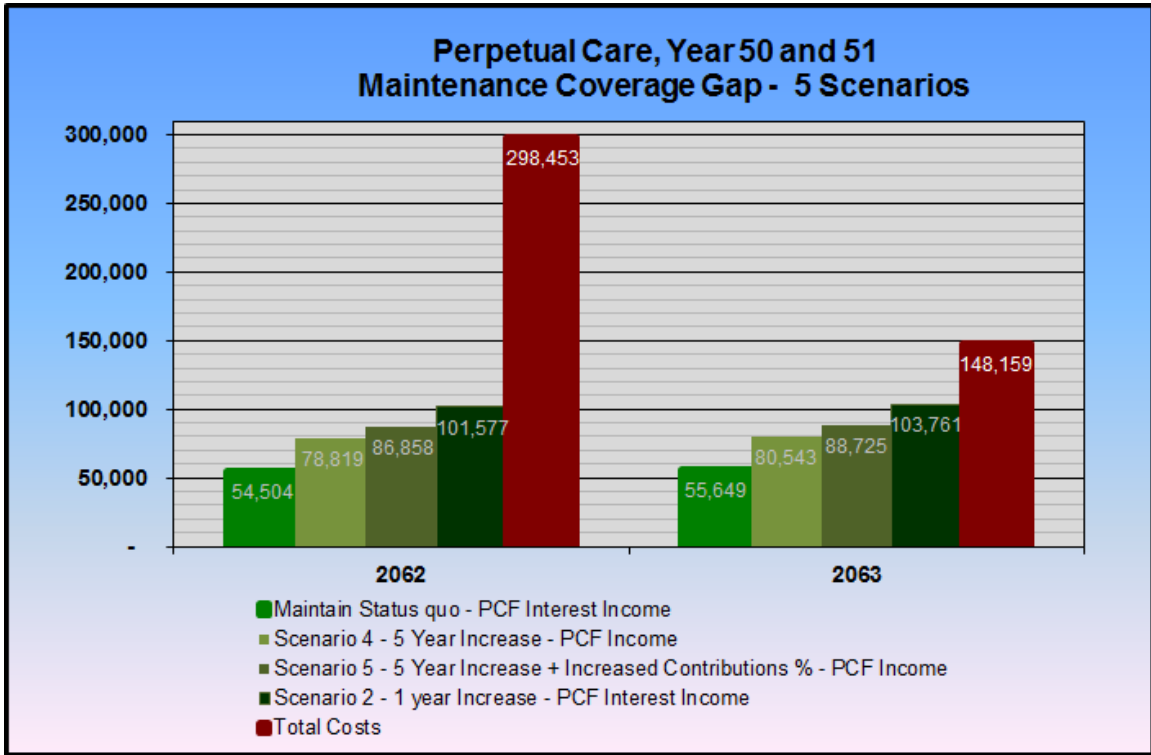


Figure 31: Perpetual Care Fund - Maintenance Cost Coverage Gap, Change from Active to Inactive Cemetery

Figure 31 shows the gap between the projected maintenance cost and projected PCF incomes under the ‘Status Quo’ and four alternate Cost Recovery scenarios. For example, in 2062 the ‘Maintain Status Quo’ scenario would only generate \$54,504 to offset the maintenance cost of \$298,453. When Lakeview closes in year 2063, the maintenance costs will reduce to \$148,159. The revenue gap will be \$92,510

Scenarios 1 through 4 were discussed earlier in this report. The new Scenario 5 is identical to Scenario 4, except that it additionally assumes an increased proportion of cemetery revenue, invested in the PCF.

**SCENARIO 5: PERPETUAL CARE FUND PROJECTION – ACHIEVING OPERATING COST + INTEREST RECOVERY IN 5 YEARS – INCREASING THE PCF CONTRIBUTION RATE**

Scenario 5 shows that if the City chose to increase the proportion of revenue invested into the PCF balance from **25% to 45%** (in addition to raising prices gradually over five years) it is the PCF balance would be \$5.5 m in 50 years’ time.

A \$5.5 million Perpetual Care Fund will generate an approximately \$88,000 return in interest revenue that could be used to pay for the care and maintenance of the cemeteries. This means the City would be facing a shortfall of \$210,000 per year (\$8,000 less gap than in Scenario 4).

Under Scenario 5, when the existing cemetery capacity is reached and there are no further interments, then long term annual maintenance cost is expected to decrease to \$149,000, decreasing the gap to \$60,000 in year 51.

#### ADDRESSING THE PCF SHORTFALL

If the City is prepared to subsidize the cost of care and maintenance of its cemeteries over the long term, then the PCF is not a major issue. If, however, the City wants to reduce the subsidy, then a strategy to increase the PCF is required.

A balance of \$18.6 m would be required up to the end of the upcoming 50 year period (2062) in order to generate enough annual interest to pay for care and maintenance based on the current rate of return on investments at 1.61%, and assuming coverage of all **active** cemetery costs.

When the existing cemetery capacity is reached and there are no further interments or PCF contributions, then long term annual maintenance costs are expected to decrease by 50%, decreasing the final value PCF balance to \$9.3 m required to sustain and maintain the cemetery in an **inactive** status.

Options to increase the PCF balance include the following:

- Make **capital injections** and/or increased **revenue contributions** to boost the PCF to **\$9.3 m** within 50 years, assuming the rate of return remains at 1.6%;
- Explore alternative investment opportunities for the PCF that would yield an **increased rate of return** on the investment that would, in turn, increase the projected fund balance to the target of **\$9.3 m** in 50 years;
- Assuming the City adopts Financial Scenario 4 (see business plan), explore future alternative investment opportunities for the PCF that would yield a future rate of return of **3%** on the projected **\$5.0 m** balance **after** the upcoming 50 year period (2063), and
- Explore options that would reduce future operation costs, including reducing the rate of increase in maintenance contract costs. This would reduce the required PCF interest income need to cover future expenses.

The legislation governing cemeteries in BC does not permit the use of principal amounts invested in the PCF. Rather than increasing PCF contributions as described in Scenario 5, The City would have more control on the proportion of revenue derived from the sale of interments, to deal with future capital improvements. One option is to put the minimum statutory amounts into the PCF. **If and when** there are net operating profits, those could be placed in a Cemetery Development Reserve to reduce future requirements for tax based capital funding. This would mean that the PCF would grow at the rate projected in Scenario 4 described above, and would leave **maintenance cost gap of \$68,000 in year 51** to be filled using tax dollars.

## RECOMMENDATIONS

It is recommended that the City of Penticton:

- Invest the minimum statutory amounts into the PCF. **If and when** there are net operating profits, those could be placed in a Cemetery Development Reserve to reduce future requirements for tax based capital funding;
- Explore alternative investment opportunities for the PCF that would yield an **increased rate of return** on the investment that would increase the projected fund balance to the target of **\$9.3 m** in 50 years;
- Make **capital injections** into the PCF when funding permits, and
- Explore options that would reduce future operation costs, including reducing the rate of increase in maintenance contract costs. This would reduce the required PCF interest income need to cover future expenses.

Implementation of the above strategic direction, as well as the pricing recommendations presented in the financial plan, would move the PCF towards self-sufficiency.

## 8. CEMETERY SERVICE DELIVERY

This section provides an assessment of the City's current service delivery model. The service delivery model is comprised of two main components:

- Site operations, and
- Customer service and administration.

Site operations encompass the physical care, maintenance and interment services that take place at the City's cemeteries. Customer service encompasses customer service and the sale of cemetery goods and services, liaison with families and other service providers; record-keeping and related administrative duties.

### SITE OPERATIONS

#### CARE AND MAINTENANCE OF LAKEVIEW CEMETERY

Under the current service delivery model the care and maintenance of Lakeview Cemetery is provided by a private contractor. This is a 5 year contract administered and supervised by City Staff.

Regular care and maintenance tasks carried out by the contractor include:

- Lawn mowing and edging;
- Irrigation;
- Maintenance of monuments, as well as the mausoleum and columbaria;
- Tree pruning/ removal;
- Seasonal landscape tasks, including spring cleanup, fall leaf removal, and winter snow removal;
- Incidental landscape tasks, such as maintenance of planting beds; weed and pest control, and gravesite leveling, and
- Incidental infrastructure tasks, such as the maintenance of roads and curbs, fencing and signs.

In addition, the private contractor is responsible for:

- The opening and closing of graves, and
- The setting of monuments.

The current site operations model at Lakeview Cemetery is **efficient** and **effective**. It is estimated it would cost the City between 25-40%<sup>27</sup> more than the value of the current contract if the City were to undertake the care and maintenance. The cemetery is maintained to a good standard, which is generally meeting or exceeding public expectations.

<sup>27</sup> Based on over 30 years of experience of cemetery operations and consulting- LEES+Associates

Only a few public complaints have been received recently regarding the standard of care and maintenance at Lakeview Cemetery, and generally, these have been in relation to:

- Dandelions in the grass during spring and summer, and
- Sunken areas and the settlement of graves.

Current maintenance practices specified under the contract do not include the control of dandelions by mechanical or chemical means. The City ceased allowing herbicides to be used at Lakeview Cemetery at the request of the neighboring vineyards. Dandelions are therefore allowed to grow and die back naturally.

Depressions that appear on individual lots are dealt with through the maintenance contract. More extensive sunken areas develop within the lawn burial areas from time to time. These are addressed by City Staff as soon as funding permits.

### **Maintenance Standards and Operating Procedures**

Cemetery maintenance standards are included within the care and maintenance contract, and will be updated by Staff. Staff plans to develop cemetery operating procedures for the purposes of clarifying the roles and responsibilities of the contractor and Staff. These key documents will assist in providing greater clarity to the current maintenance contractor regarding the work required, as well as to future proponents, when the maintenance contract is retendered at the end of the current term.

## **RECOMMENDATIONS**

Overall, the care and maintenance of Lakeview Cemetery is carried out both efficiently and effectively. We recommend that the City:

- Continues using the current service delivery model;
- Updates the cemetery maintenance standards and include the task of controlling dandelions;
- Develops cemetery standard operating procedures, and
- Fully utilize the Stone Orchard proprietary cemetery record-keeping and management software.



## CARE AND MAINTENANCE OF FAIRVIEW CEMETERY

City Staff oversee the care and maintenance at Fairview Cemetery. Care and maintenance tasks addressed within annual operating budgets include:

- Lawn mowing and edging;
- Irrigation;
- Tree pruning/ removal;
- Seasonal landscape items e.g. spring cleanup, fall leaf removal, and winter snow removal;
- Incidental landscape items such as maintenance of planting, grass maintenance, insect, pest and weed control, gravesite leveling, and
- Incidental infrastructure elements such as maintenance of gates, fencing and signs.

Although Fairview Cemetery is considered no longer active, Staff occasionally performs the opening and closing for the interment of cremated remains in existing burial lots.

The site operations delivery model at Fairview Cemetery **is efficient**, but **not effective**, as it is evident that aspects of the care and maintenance of this cemetery fall below acceptable industry standards. Maintenance standards should be enhanced and operating procedures should be developed to address this problem. Key issues include:

- The leveling, repair and restoration of graves and monuments;
- Improvements to the quality of the cemetery turf grass;
- The outdated and inefficient irrigation system;
- The poor condition of the entry gate, and
- Gaps in the perimeter hedge.

## RECOMMENDATIONS

The current care and maintenance of Fairview Cemetery requires improvement to meet accepted industry standards. We recommend that the City:

- Continues using the current service delivery model;
- Develops maintenance standards and operating procedures specifically tailored to the needs of this cultural landscape, and
- Addresses the following maintenance issues as priorities:
  - Repair and restore the graves and monuments;
  - Repair and repaint the entry gate;
  - Replace the irrigation system;

- Upgrade turf management practices, including implementing a program that includes annual core aeration and over-seeding, and
- Infill sections of the perimeter hedge with new plants.

## **ADMINISTRATION OF THE CEMETERY SERVICE**

### **ADMINISTRATION OF THE CEMETERIES**

The responsibility for managing the various functions of the cemetery service is divided between several City Departments:

- The bylaw is administered by the Clerks department;
- Customer service is undertaken by the Accounting Department, and
- The care and maintenance of Lakeview Cemetery is carried out by a private contractor, managed by the Parks Department.

This division of responsibility has, in part contributed to the challenges now facing Penticton's cemetery system. There would be advantages if one City Department was responsible for all cemetery service and operations. This would enable the City to:

- More effectively implement a long term cemetery strategy (including recommendations of this master plan report), and
- And improve the standard of customer service as part of the drive towards cost recovery.

Key aspects of the current service delivery model are analyzed below and include:

- Customer Service, and
- Outsourcing of the administration of the cemetery system.

### **CUSTOMER SERVICE**

The City administers the cemetery service from City Hall. Due to recent reorganisation at the City the role of administering the cemeteries is restricted to a proportion of the duties of one Staff member. Consequently, the individual responsible for Cemetery Administration is available to serve customers and work with funeral homes only weekdays, between 1:00 and 4:30 pm.

The limited availability of Staff has presented problems to some families and funeral homes in need of information or other cemetery services. For example, as the obituary pages of newspapers typically require notification by 2:00 pm, there is only one hour each week day in which to confirm funeral arrangements with the City.

There is a small meeting room at City Hall used for working with bereaved families. As committed as Staff is to meeting customer's needs, the physical setting is a major limitation to the quality of service that can be provided.

In summary, the standard of customer service falls below industry best practice. Significant improvements in the customer service experience are required as part of initiatives to increase revenues, in order to move the cemetery system towards cost recovery.

## OUTSOURCING

The City is increasingly reliant on the maintenance contractor to undertake work beyond the scope of his agreement in order to ensure the smooth delivery of the City's cemetery services.

Discussions have been had regarding whether cemetery service delivery would be improved if administration was outsourced to a private entity, and the conclusion was that a private firm would improve the delivery of the cemetery service by:

- Facilitating communication between families, funeral homes, and the maintenance contractor for graveside funeral preparations;
- Being available to families and funeral homes to make funeral arrangements throughout the working week, and
- Taking control of the coordination of burial preparations, thus reducing the risk to families of something going wrong.

A major disadvantage to outsourcing the administration of the cemeteries is that it would significantly undermine the perceived stability of the cemetery service in the eyes of the public. In addition, the City would need to pay a private firm for administration services.

Key advantages of retaining the administration of the cemeteries "in-house" are:

- Avoidance of fluctuations in the standard of service associated with private firms engaged on term contracts;
- The retention of Staff and the resulting development of in-house knowledge and expertise over time;
- Potentially greater control over the cost to provide cemetery administration services over the long term, and
- Improvements to the stability and standard of service to customers.

Outsourcing the cemetery service delivery represents an alternative service delivery model. It would involve contracting out the whole package of cemetery services. This would necessitate an individual business case analysis and further conversation with Council. At this time we recommend the enhanced status quo service delivery model, with a dedicated member of Staff, and renewed emphasis on marketing and promotion in order to meet the ambitious financial goals.

## RECOMMENDATIONS

Based on the reasons outlined above, it is recommended that the City continue to provide customer service and administration of the cemeteries.

In order to improve the standard of service and to optimize revenues, it is recommended that the City:

- At this time, enhance the status quo service delivery model with a dedicated member of Staff to administer the cemeteries, and renewed emphasis on marketing and promotion in order to meet the ambitious financial goals;
- Bring all cemetery service and cemetery operations functions under the control of one City Department;
- Increase the number of hours when a Staff member is available to serve the needs of families, especially during weekday mornings;
- Establish a dedicated family room or quiet, comfortable flex space at City Hall, where bereaved customers can meet with Staff in a comfortable setting with minimal disturbance, and
- Following the initiation of the recommendations above, commission an individual business case analysis, and hold further conversations with Council to explore the optimum cemetery delivery model to serve the community.

The implementation of these recommendations should enable the City to make changes to the administration of the cemetery service in order to deliver necessary improvements in the standard of service provided to the community.

## 9. PRODUCTS AND MARKETING

Through the preparation of this Master Plan, it became clear that the City of Penticton would benefit from an examination of the cemetery's existing and future interment options and an evaluation of how the City can position itself to meet the diversifying needs of Penticton area residents and families over the next 25 years. It also became clear that a promotional strategy is required.

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

- Increase revenue;
- Increase the awareness and public perception of Penticton's cemetery system;
- Provide a strategic framework for new products and services, and
- Initiate improvements to the marketing strategy.

The Products and Marketing Chapter is described below under the following headings:

- Interment and Memorialization Options;
- Services, and
- Marketing.

## INTERMENT AND MEMORIALIZATION OPTIONS

### CURRENT INTERMENT OPTIONS

At the present time, the range of interment types and memorialization options available at Lakeview Cemetery are as follows.

- Traditional, in-ground (full body) burial – flat markers only;
- In-ground cremation – flat markers only;
- Interment in a columbarium niche,
- Interment in a mausoleum, and
- Interment of cremated remains in the ossuary.

### ADDITIONAL INTERMENT AND MEMORIALIZATION OPTIONS

#### Open House Feedback

A public Open House was held on May 28, 2013 to solicit public feedback on the proposed physical plans for Lakeview and Fairview cemeteries. This event was well publicized in advance through local media and the City's website.

A questionnaire was available in printed format at the Open House and digitally on-line. The questionnaire invited the public to provide feedback whether or not they would consider the following additional interment types and memorialization options, should they be made available at Lakeview Cemetery (See Appendix 7 for definitions of terminology):

- Green burial;
- Muslim burial;
- Scattering gardens;
- Memorial walls;
- Garden urns, and
- Family vessels.

Despite comprehensive publicity, only 11 feedback questionnaires were completed during the Open House, and via the on-line survey. City Staff concluded that there was not enough response to warrant the use of the feedback to influence the range of interment types and memorialization options that should be recommended by this Master Plan.

Following the approval of the final cemeteries master plan document, it is recommended that the City provide a second opportunity for the public to comment on the range of interment types and memorialization options proposed at Lakeview Cemetery. At this time, the detailed design of interment zones for proposed burial expansion areas will have been developed. Feedback from local funeral homes and, where appropriate, families who use the City's cemeteries, would be particularly useful to confirm the final design of interment options prior to the development of expansion areas at Lakeview Cemetery.

### **Rationale for Additional Interment and Memorialization Options**

Despite the limited response to the questionnaire, there are other compelling reasons to expand the range of interment and memorialization options offered at Lakeview Cemetery. These are in direct response to the following challenges faced by Penticton's cemetery system:

- Disposition trends across Canada predict that the rate of traditional in-ground burial will continue to fall, while the rate of cremation will continue to increase<sup>28</sup>;
- A universal business challenge facing all cemetery operators is how to encourage more families to bring cremated remains to cemeteries, rather than scattering at alternative locations, such as on mountains or in lakes;
- Families are demanding more choice of interment memorialization options, and are becoming more selective regarding burial plot location, and the nature of cemetery surroundings. There is also a trend towards stronger and more meaningful memorialization options, and
- Revenue coming into Penticton's cemeteries needs to increase in order to move the cemetery system towards cost recovery.

<sup>28</sup> Section 2, Table 3, Provincial Rates of Disposition

Municipal cemetery operators who have successfully increased the range of services they offer in response to similar challenges faced by Penticton include the District of North Vancouver BC, the District of Maple Ridge BC, and Rocky View County AB.

To this end, the following additional interment and memorialization options are proposed for inclusion as part of the detailed design phase of expansion of burial areas at Lakeview Cemetery, in preparation for further public consultation and refinement:

**Additional Interment Types:**

- Green burial;
- Muslim burial;
- Scattering gardens;
- Family vessels, and
- Cremation garden urns.

**Additional Memorialization Options:**

- Upright markers for traditional casket burial lots;
- Upright markers for in-ground cremation lots;
- Memorial walls;
- Family estate plots for traditional casket burial;
- Family estate plots for in-ground cremation, and
- Cremation gardens (which can include scattering gardens, family vessels, garden urns, and family estate plots with flat or upright markers).

A description of each proposed memorialization type and interment option is provided in Appendix 8. Images for these options are illustrated below:



*Figure 32: Green Burial ceremony*



*Figure 33: Green burial communal marker*

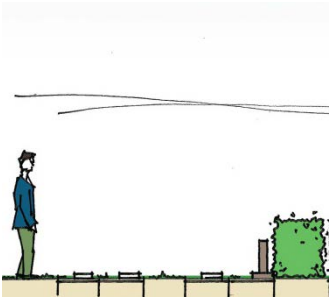


Figure 34: In-ground cremation -flat and upright markers

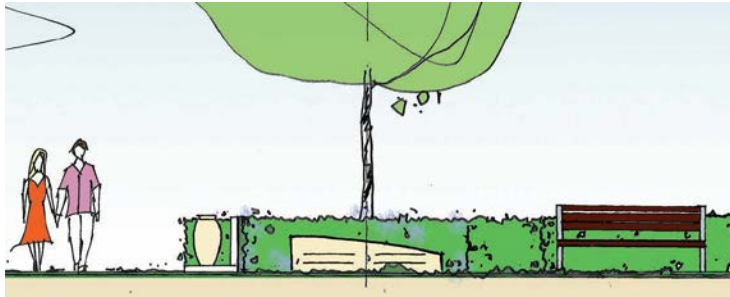


Figure 35: Family estate plot with an upright marker- traditional in-ground (casket) burial

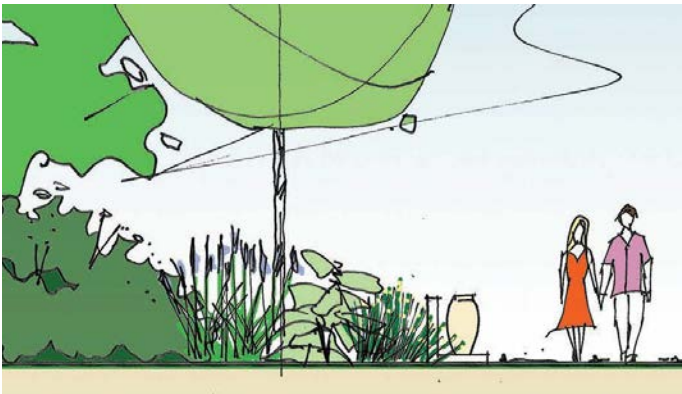


Figure 36: Scattering garden



Figure 37: Scattering garden precedent image



Figure 38: Family vessels



Figure 39: Cremation urns





Figure 40: Examples of cremation gardens



Figure 41: Examples of memorial walls

### Optimum Mix of Interment and Memorialization Options

The expansion of burial capacity at Lakeview Cemetery is likely to occur in phases, so to provide families with optimum choice; it is recommended that each phase incorporates the widest possible range of interment and memorialization options. Sales trends should be monitored closely to gauge the success of the types of interment and memorialization options offered to families, their appeal in terms of price, and to determine whether or not they should be included in future phases. The objective should be to achieve a reasonable level of sales of each of the options offered by the City through their promotion in a cemetery marketing strategy.

## ADDITIONAL SERVICES

### Graveside Canopy Service

During the stakeholder consultation process, funeral home representatives suggested a number of ideas to enhance the service and experience provided to families attending funerals at Lakeview Cemetery.

The plywood boards placed on the ground around a grave are difficult to walk on for some people attending funeral services. Better access to the area around graves would be welcomed by families.

At present, no shelter or seating is provided for families attending funeral services. A fabric canopy would clearly indicate the location of the funeral to the funeral cortege, family and friends. It would also provide much needed shelter, particularly from the sun during the summer. Comfortable chairs would be a welcome addition, especially to those who have difficulty standing for periods of time.



*Figure 42: Example of a canopy at a graveside set-up, Abasand Cemetery (Source: Regional Municipality of Wood Buffalo)*

### **Sale of Monuments and Markers**

The sale of monuments and markers is another potential revenue area that the City should explore. This may however, trigger some reaction from private companies that currently provide this service.

## **MARKETING STRATEGY**

Through the course of developing this Master Plan it became evident that a promotional strategy is needed for Penticton's cemeteries.

One of the keys to moving the City's cemetery system towards cost recovery is to approach all aspects of the service as a business unit. This is not to say that the cemeteries should operate as businesses. This would be virtually impossible, given the City's mandate, and the fact that it exists as a result of past tax-based investments in property acquisition, development and management. However, the City can operate its cemetery system in a business-like manner. To this end, business-like approaches are warranted, including the implementation of a marketing strategy.

This section addresses aspects used by public, private and religious cemeteries across Western Canada in the marketing of their services.

Penticton's cemetery system faces limited competition in the Okanagan. As a result, creating distinctions between cemetery service providers is not so much the priority as ensuring the range of services and products available meet to the needs of customers. This is especially true for friends and families that choose cremation, but it also holds true for those that choose traditional in-ground burial. The following initiatives should be considered and kept up-to-date over time:

- Product and service development and refinement;
- Pricing adjustments;
- Cemetery enhancements, and
- Promotion strategies.

Product and service development is discussed under the sections "Interment and Memorialization Options," and "Additional Services," in the preceding paragraphs. Recommendations in relation to pricing adjustments are set out within the Business Plan section.

## CEMETERY ENHANCEMENTS

The best marketing a cemetery can do is to maintain a beautiful, welcoming, efficient site and customer service experience. In the absence of proper upkeep and improvement, all other aspects of the cemetery operation can be first rate and the cemetery business unit will still not excel.

## PROMOTION

The City does not actively promote the cemeteries or the interment and memorialization options available. The cemetery webpage does not effectively communicate the beautiful setting of Lakeview Cemetery, and information regarding the services available and prices is only partially complete.

There are a number of things the City can do to ensure that current and future customers are aware of the products and services available: These include:

- Know your customers;
- The right media/ the right time;
- Creating programs;
- Using the press and other media outlets, and
- Engaging the religious community.

### Know Your Customers

It is increasingly important that proper cemetery software be fully utilized, and that customer surveys are conducted to acquire accurate information about *who* is choosing to use the City's cemeteries, and *why* they are—or are not—doing so. The City has Stone Orchard cemetery software and its use should be optimized to enable Staff to better track the at-need versus pre-need ratios, customers by place of residence and a host of other criteria that will facilitate a much

more sophisticated approach to promotion. As well, the software should be integrated with geo-referenced maps of the cemetery plots. In this way the software and mapping tools will enable the analysis of current sales and land use patterns at a standard closer to industry best practices.

The City could also consider working together with three or four other municipalities on an omnibus survey of resident preferences for cemetery services, as has been done using the services of the Vancouver-based Mustel (Research and Marketing) Group. This type of survey can yield valuable, specific data that can provide a higher level of confidence in decision-making than relying on data from Open Houses or unsolicited resident comments.

### The Right Media/ The Right Time

Many different types of printed and digital media are available that can be excellent tools for City Staff in administering and promoting cemetery services. A well-designed set of printed materials, including a brochure with easy-to-follow directions to the cemetery, a walking route linking with site, section and plot plans, and a brochure depicting the range of services offered at Lakeview Cemetery as well as historic tours, events and programs, and the location of significant gravesites should be planned. Print and digital media should be a part of a future **way-finding** strategy that would eventually extend to the installation of improved site and interpretive signage. Such materials would not only assist customers, visitors and suppliers trying to find Lakeview Cemetery, but it could also have ancillary sales benefits.

This same content should be readily available on the cemeteries webpage, linked to the City's Home Page. Facebook is increasingly used by cemeteries in the private and religious sectors and is becoming a trend in municipal sectors as well. The City, including the Staff responsible for cemetery administration, should monitor its use and become conversant with this type of social media and its promotion capabilities.

### Creating Programs and Events

One of the most effective ways to promote cemetery services is to attract more people to the cemeteries for events and programs, such as:

- Mother and Father's Day;
- Christmas and Easter;
- Remembrance Day services;
- A "Night for All Souls" event,
- A "Festival of Light;"
- Historic walking tours;
- Bird watching and "Dawn Chorus" walks;
- Horticultural tours, and
- Visits by school groups.



Figure 43: Christmas Eve, (Source: City of Kenora)



Figure 44: An historic tour held in a cemetery

Staff should be encouraged to work with and/or find community “champions” that can assist with these tours. Such people are often more than willing to take their experience at the Historic Society, the Legion or Hospice groups in to the cemetery. These types of events are often very attractive to the press, as well.

### Using the Press

One of the benefits of considering a new Green Burial option is that the press has proven extremely interested in new forms of interment. Green Burial is the topic of the day, but as time progresses, Cemetery management should be constantly vigilant to see trends from adjacent communities and across North America. For this reason alone, attendance at Provincial and National cemetery conferences and training facilities is invaluable. The City’s Communications Office should be brought on-board and a strategy for working with local print and digital media should be developed.

### Engaging the Religious Community.

Religious organizations in the community should be engaged as the cemetery system moves towards greater cost recovery. The Sikh and Muslim populations, the Christian community and others should be approached with an eye to ensuring that their needs and wishes are heard and understood.

## RECOMMENDATIONS

As a part of the drive to move the cemetery service towards cost-recovery, it is recommended that the City actively promotes its existing services, increases the range of products and services available, and develops an appropriate marketing strategy. The following is a list of recommendations to help achieve this objective:

- As a priority, actively promote the cemeteries and the existing range services available. Update the cemeteries webpage to promote the beautiful setting of Lakeview Cemetery, and provide complete and concise information regarding the existing services available and associated fees;

- Increase the range of interment and memorialization options offered at Lakeview Cemetery following the detailed design phase of expansion of its burial areas and further public consultation and refinement;
- Promote a graveside canopy service to families (for an additional fee);
- Develop and implement a marketing plan that includes the following components:
  - Printed materials about the cemeteries, including a brochure that promotes the products and services available and provides easy-to-follow maps, details of programs and events, and illustrates the locations of significant graves.
  - An updated cemetery web page to reflect the additional printed material described above;
  - A series of events and programs to be held at Lakeview and Fairview Cemeteries;
  - Consultations with the religious community to ensure that their needs and wishes understood. Plan future cemetery expansion with their needs in mind;
- Fully utilize the Stone Orchard cemetery mapping and records-keeping software, obtain geo-referenced maps for each cemetery and integrate the software into cemetery sales and marketing efforts;
- Promote the cemeteries through physical improvements to the condition of Fairview Cemetery, and the expansion of burial areas at Lakeview Cemetery, and
- Continuously improve and refine the delivery of cemetery services and products.



# 10. CEMETERIES MASTER PLAN

## INTRODUCTION

As the previous chapters in this report have shown, Lakeview Cemetery and Fairview Cemetery are rich with opportunities, and constrained by a few key elements. The intent of the Master Planning process is to capitalize on those opportunities in a manner that respond to the financial objectives of the City and the community's interests.

This chapter explains the physical plans that have been developed through the course of community, Staff, and Council reviews. The physical plans for Lakeview Cemetery and Fairview Cemetery are provided in this section.

## LAKEVIEW CEMETERY MASTER PLAN

The Master Plan for Lakeview Cemetery is based on the following principles:

- Expansion of burial capacity at the cemetery, and
- Improving the infrastructure of the cemetery, including replacing the irrigation system and upgrading the pedestrian linkage to the KVR Trail.

The Master Plan for Lakeview Cemetery is presented below and in Appendix 5.

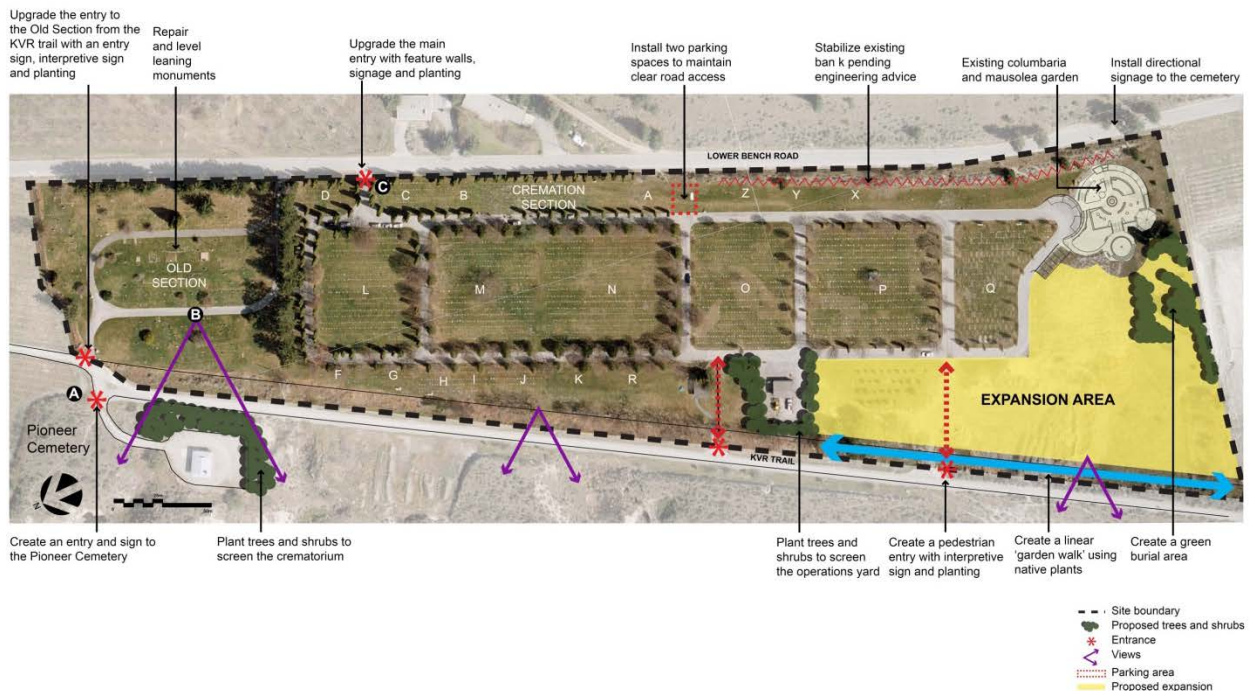


Figure 45: Lakeview Cemetery Master Plan

A description of the recommended key site changes is set out below under the headings:

- Infrastructure;
- Interment and Memorialization Options;
- Burial Expansion Phasing Plan, and
- Implementation.

## INFRASTRUCTURE

### Way-finding Strategy

Lakeview Cemetery, located on Lower Bench Road, can be difficult to find by car for families or funeral home staff visiting for the first time. A strategy is needed to direct visitors to the cemetery in a clear manner. We recommend that a series of signs be designed and installed to direct people to Lakeview Cemetery from the following key road intersections:

- Tupper Ave and Lower Bench Road;
- Tupper Ave and Middle Bench Road;
- Munson Ave and Upper Bench Road North, and
- McMillan Ave and Naramata Road.

Directional signage to the cemetery should be incorporated into the KVR trail’s “suite” of signage at key points along its route.

A brochure and web page that includes easy-to-follow directions to the cemetery is recommended as a component of the way-finding strategy. This aspect of the way-finding strategy is described as a part of the Marketing Strategy in Section 9.

Finding Lakeview Cemetery has been identified as a challenge for new and occasional visitors to the cemetery—and this is even more problematic when it is also difficult to find one’s way once inside the cemetery. The following signage elements are therefore recommended:

- Replace the main site information sign, and
- Add section markers throughout the site.

There is currently an information sign that illustrates the general layout of the cemetery; however, it is located adjacent to the site operations yard, is utilitarian in style and now badly weathered. Upon arrival at the cemetery from Lower Bench Road, and from the KVR trail, site information signs should be included as a part of the proposed entry upgrades.



Figure 46: Existing information sign

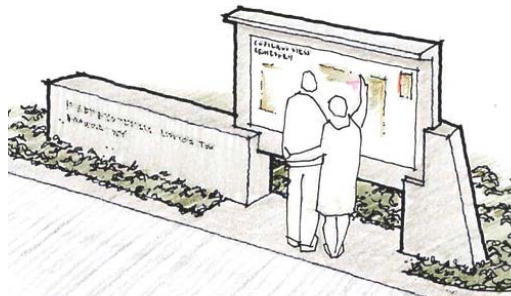


Figure 47: Proposed information sign (indicative example)



The developed areas of the cemetery are divided into Sections designated by alphabetical letters. For those attempting to find a grave, one must understand the layout of sections to find where each is located. The absence of markers in some sections makes this challenging for those not familiar with the cemetery. Additional section markers should therefore be incorporated across the cemetery.

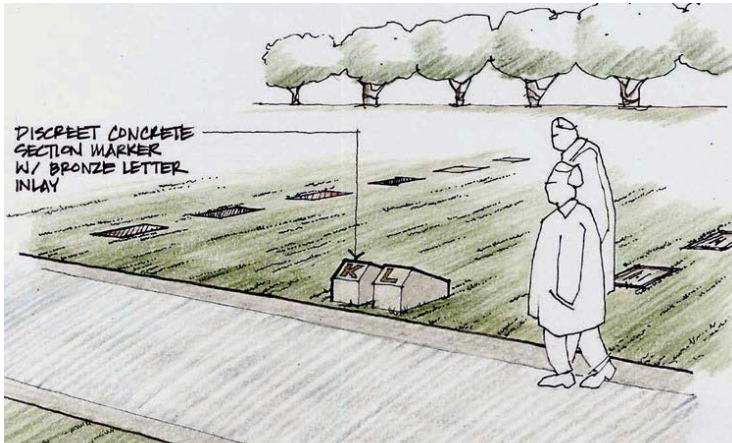


Figure 48: Proposed section markers (indicative example) (Source: LEES+Associates)

### Interpretive Signs

A single interpretive sign is located at the steps that lead up from the KVR trail to the rear of the site office. There is however, no interpretive signage within Lakeview Cemetery.



Figure 49: Existing interpretive sign on the KVR Trail Source: LEES+Associates

As part of the City's desire to raise awareness of the cemetery's historic and cultural significance, new interpretive signs should be installed at the following key locations:

- The main entry on Lower Bench Road;
- The proposed pedestrian entry from the KVR trail;
- The Columbaria Garden, and
- The Old Section.

## Main Entry Features

Linked to the objectives of the signage strategy, the main entry to Lakeview Cemetery on Lower Bench Road merits a stronger visual presence. New Stabilized Rammed Earth (SRE) entry feature walls with simple gates and planting are proposed. The different colored bands of earth within the rammed earth walls will reflect the colours and topography of the mountains viewed from the cemetery, and would provide a clear visual and literal indication of the main entry.

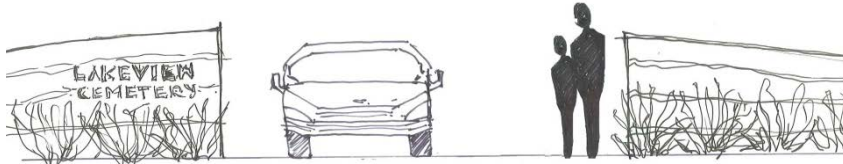


Figure 50: Proposed rammed earth main entry feature



Figure 51: Typical wall detail

As part of the strategy to encourage more visitors into Lakeview Cemetery, it is proposed that a new pedestrian entry be created to connect the cemetery to the KVR trail. Consistent with the proposals for the main entry feature, smaller Stabilized Rammed Earth entry walls with gates and planting are also proposed at this entry.

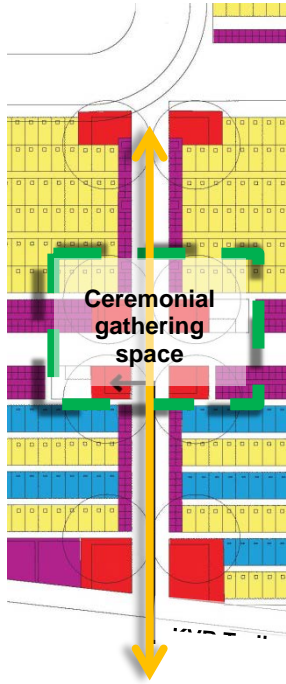
The entry into the Old Section of the cemetery from the KVR trail also requires upgrades. A new black, wrought iron-style gate is proposed to replace the existing vehicle barrier.

A new entry feature is proposed to celebrate and mark the Pioneer Cemetery. This entry feature will consist of boulders and native planting, accompanied with a new interpretive sign.



Figure 52: Proposed entry feature to the pioneer burial ground

### Ceremonial Gathering Space

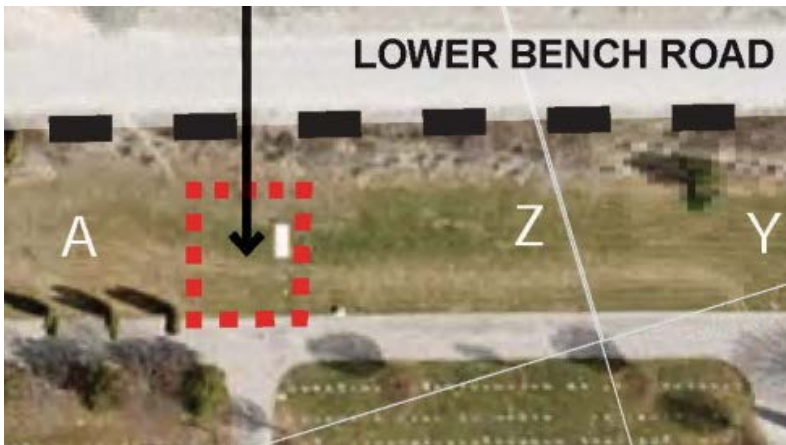


A ceremonial gathering space is proposed along the new pedestrian walkway from the KVR Trail through the proposed burial expansion area. When not being used for ceremonial purposes, the flowering plants and trees in this reflective space can be enjoyed while sitting on the benches provided

Figure 53: location of the proposed ceremonial gathering space

### Parking

Visitors to the cremation section often park their vehicles along the adjacent roadway, which occasionally causes congestion. Two new parking spaces between sections A and Z are proposed for visitors to the cremation section. This will allow the roadway to remain clear of congestion at this pinch point, especially when a funeral is underway.



*Figure 54: Proposed new parking spaces*

## **Roads**

The layout of roadways through the developed areas of the cemetery will not be amended as part of the master plan. The proposed burial expansion areas will be serviced by the existing adjacent roadway.

## **Paths**

Pathways within the expanded burial areas will be turf grass, for consistency with the rest of the cemetery. The new pedestrian entrance and pathway into the cemetery from the KVR trail will be surfaced in gravel.

## **Seating and Waste Receptacles**

New seating and waste receptacles are proposed for the new burial areas. The style of these site furniture components should be consistent, and coordinate with the desired aesthetic of the cemetery.

## **Ground Remediation**

Prior to the development of new burial areas in the southwest corner of Lakeview Cemetery, the majority of the ground will require remediation to reduce the risk of sinkholes developing in the future. Remediation of the ground should take place in phases, and be coordinated with the phased expansion of burial areas.

## **Soft Landscape**

The Master Plan proposes soft (planted) landscape elements as part of key enhancements to the developed areas of Lakeview Cemetery, as well as a comprehensive landscape scheme for the expanded burial areas. Planting design principles have been developed to guide the design of the soft landscape. These include:

- Incorporating native and drought-tolerant plant species;
- Developing planting schemes that take account of the character of surrounding landscapes;
- Retaining and enhancing views out to Okanagan Lake;
- Allowing access for visitors and site operations, and
- Developing planting schemes with minimal maintenance requirements.

New plantings proposed as part of the key enhancements to the developed area of Lakeview Cemetery include:

- Screen planting to the Operations Yard;
- Screen planting to the Crematorium, and
- Formal planting to entry features.

Critical to the success of the expanded burial areas will be the soft landscape design associated with the following key elements:

- The linear garden walk;
- Cremation Gardens and in-ground cremation areas;
- Family Estate plots;
- Scattering Gardens;
- The ceremonial gathering space;
- The southern boundary of the cemetery, and
- The Green Burial area.

Screen planting to the operations yard will comprise of a mix of deciduous and evergreen trees and shrubs. Views of the crematorium will be screened with dense plantings of native evergreen trees, shrubs and grass.

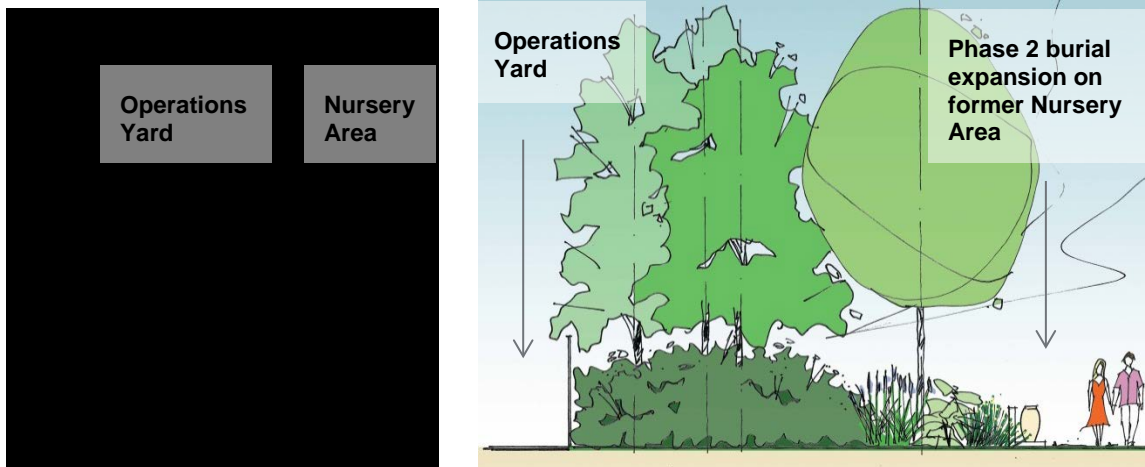
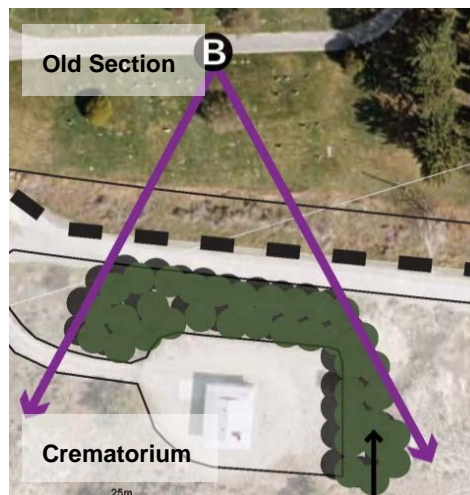
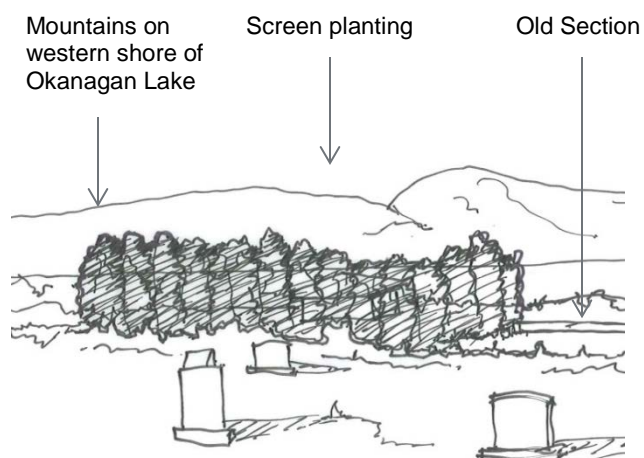


Figure 55 and 56: Vegetative screening proposed for the Operations Yard (Source: LEES+Associates)



Figures 57 and 58: Screening concept for the crematorium (Source: LEES+Associates)

New cemetery entry features will be enhanced with formal planting schemes of flowering shrubs, perennials and ornamental grasses.

The burial expansion areas will be defined by avenues of trees that tie into the developed areas of the cemetery. Trees will be selected in relation to the following qualities:

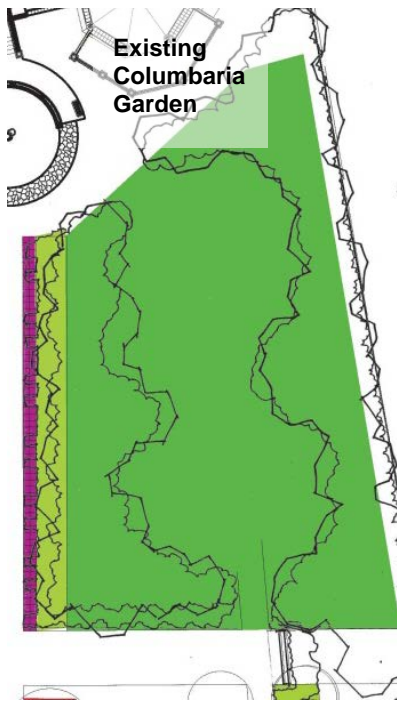
- Drought resistance;
- Ability to cast summer shade, and
- Ability to be successfully “limbed up” for access below as they mature.

A range of interment types and memorialization options will be incorporated within each burial expansion area, and enhanced with planting, for example:

- Low flowering shrub borders will form the backdrop to in-ground cremation sections;
- Family estate plots will be set within borders of flowering shrubs, perennials and ornamental trees;
- Scattering gardens and cremation gardens will include native and ornamental flowering shrubs, perennials and ornamental grasses;
- The main burial grounds will be planted with a grass mix requiring less water, and
- Linear planting comprised of drought resistant native trees and shrubs will define the extents of the southern edge of the expanded burial area.

A linear garden walk is proposed to define the western edge of the expanded burial area. Planting will include a mix of low growing drought-tolerant native shrubs and ornamental, flowering shrubs. Seating will be placed along the linear garden walk from which to enjoy views out to Okanagan Lake.





The green burial area will be created by planting native deciduous and evergreen trees, shrubs and grasses, to create a natural wooded glade for burial purposes. The establishment of the planting should be carried out in the initial phases of development to allow as much time as possible for the vegetation to reach sufficient maturity that green burial can commence

Figure 59: Green Burial Area Zone  
(Source: LEES+Associates)

### Views

The selection and arrangement of trees and shrubs, and other components of the expanded burial areas, will be selected and arranged to preserve and enhance the spectacular views out to Okanagan Lake and the mountains beyond. Views of the operations yard and crematorium will be screened with planting.

### Irrigation

The existing irrigation system at Lakeview Cemetery is old, inefficient and susceptible to leakage and breaks. It tends to over-water some areas while under-watering other areas. The challenge is to ensure that all grass areas receive adequate irrigation to promote a consistent lawn, without saturating the ground and inadvertently accelerating a subsidence or a sinkhole.

The existing irrigation system needs to be replaced with a new, efficient irrigation system throughout the entire developed area of the cemetery. The new system should be designed so that it can be expanded in phases as new burial areas are developed. The optimum irrigation design should accommodate various interment types and memorialization options, and the planting designs proposed for each phase of development. The use of new technologies, such as rain sensors, is suggested to take advantage of water-conserving capabilities.

### Monument Repair and Restoration

A number of monuments in the Old Section are leaning, or in need of restoration. It is recommended that the City develop a program to restore these monuments in priority order as part of planned capital expenditure.

## **INTERMENT TYPES AND MEMORIALIZATION OPTIONS**

### **Burial Expansion Areas**

The expansion of burial capacity on land in the southwest corner of Lakeview Cemetery will be developed in several phases, likely with several years between each phase of expansion. All proposed interment types and memorialization options should therefore be included in each phase of expansion, to provide families with optimum choice from the outset.

The rationale for including the range of interment types and memorialization options, along with a description of each, is provided in Section 8. The types of interment and memorialization options proposed as part of burial expansion areas include:

- Traditional in-ground burial with flat or upright markers;
- Traditional in-ground burial- Family estate plots with flat or upright markers;
- Green burial;
- Muslim burial;
- Children's section;
- Cremation:
  - In-ground cremation with flat or upright markers;
  - In-ground cremation – Family estate plot with flat or upright markers;
  - Family vessels and garden urns;
  - Scattering gardens;
  - Cremation gardens (including scattering gardens, family vessels, family estate plots, flat and upright markers), and
- Memorial walls.

There is sufficient capacity in Lakeview Cemetery's existing mausoleum and Columbaria Garden to last well beyond the cemetery's inventory of in-ground interment lots, so no additional mausoleum crypts or columbaria niches are proposed as part of this expansion.

### **BURIAL EXPANSION PHASING PLAN**

In order to develop the appropriate number and type of interment lots in each phase of the development, it is critical for the following key variables to be brought into balance:

- The cost of each phase of development;
- The amount of each type of new interment capacity, and
- The period of time between phases when there is no construction activity disturbing the cemetery.



The development of additional burial capacity has therefore been split into four phases, as shown in the diagram below:

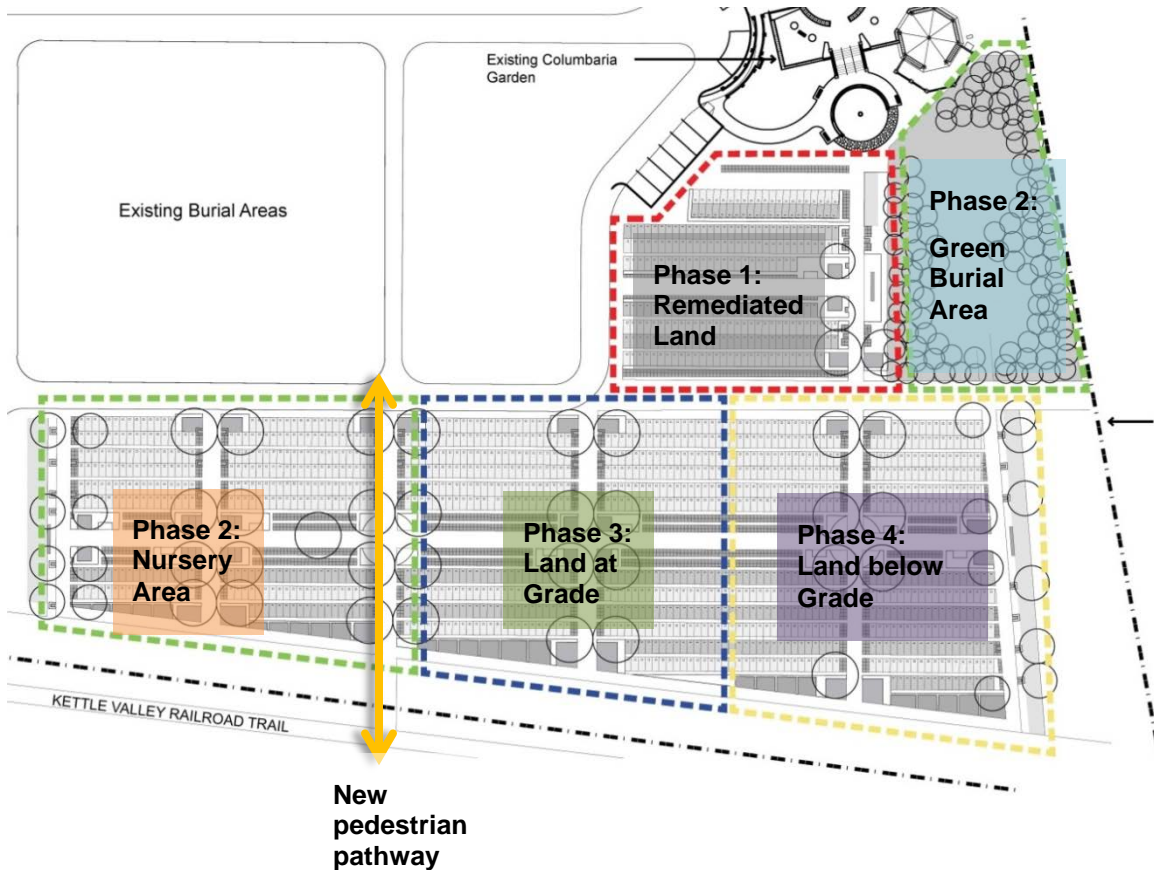


Figure 60: Burial Expansion Phasing Plan on Land in the Southwest Corner of Lakeview Cemetery

Further detail of the rationale for expanding burial capacity in the phases shown on the plan is set out below:

#### Phase 1: Remediated Land

This area has already been remediated in preparation for expanding burial capacity. It is likely that additional grading will be required to integrate the area into the overall finished grades of the site's five phases.

To ensure continued availability of burial lots, this first phase of additional burial capacity must be available to families **by 2019**, based on the estimate of approximately three years of in-ground cremation interment capacity currently remaining in the developed part of the cemetery.

#### Phase 2: Nursery Area and Green Burial Area

The expansion of burial ground on the former Nursery Area should include the new pedestrian pathway into the cemetery from the KVR Trail. This is the logical breakpoint with Phase 3.

The establishment of planting in the green burial area should commence as soon as possible to allow plantings to establish and become more tolerant of active use. To facilitate construction access, it is recommended that the green burial area be developed in sequence, before Phases 3 and 4.

### **Phase 3: Land at Grade**

Development of this area is a logical step following completion of the former Nursery Area. The natural breakpoint of the Phase 3 area is at the edge of the Phase 4 land, which is currently below grade. The Phase 3 - Phase 4 edge can be defined with a temporary pedestrian path and shrub planting. These can be removed, or be retained and integrated with Phase 4 when this area is developed.

### **Phase 4: Land Below Grade**

The Phase 4 site is approximately 4 meters below the grades its adjoining phases, making it the best area to develop last. The Phase 4 area is a convenient site for stockpiling fill material that will be used for remediation of the initial three phases. Developing land in Phase 4 as a final phase will give the City maximum time to source suitable fill material (ideally at no charge to the City), which will be required for its remediation and development of burial lots.

### **Interment Type Yield by Burial Expansion Phase**

The table below shows the inventory by interment types per phase of burial expansion proposed on the Lakeview Cemetery Master Plan.

To ensure that the detailed design and the proportion of interment types can be tailored to current demand, it is critical that sales patterns, current trends in demand, and any new products that come onto the market be monitored and recorded by Staff.

Penticton Cemeteries Master Plan

<b>Interment Type</b>	<b>Phase 1</b>	<b>Phase 2</b>	<b>Phase 3</b>	<b>Phase 4</b>	<b>Total</b>
Traditional In-ground burial: Flat marker	116	278	330	279	<b>1003</b>
Traditional In-ground burial: Upright marker	90	59	96	114	<b>359</b>
In-ground Cremation: Flat Marker	274	745	675	617	<b>2311</b>
In-ground Cremation: Upright marker	85	111	150	133	<b>479</b>
Family Estate Plot: Traditional In-ground burial	2	8	2	2	<b>14</b>
Family Estate Plot: In-ground cremation	8	17	42	41	<b>108</b>
Family Estate: Family Vessel	6	48	32	30	<b>116</b>
Muslim Burial	42				<b>42</b>
Green Burial		240			<b>240</b>
Scattering Garden	393	344		240	<b>977</b>
<b>Estimated Approximate Cost (including ground remediation)</b>	\$56,000	\$242,545	\$176,246	\$200,800	<b>\$675,591</b>

Table 27: Interment Type Yield and Cost by Phase of Burial Expansion

### Burial Expansion Area Estimated Years of Capacity

It is recommended that the City begins the planning and development of each new phase of burial expansion at least two years prior to when the inventory of available lots is expected to be exhausted.

The Master Plan for the expansion of burial areas in the southwest corner of Lakeview Cemetery would provide approximately:

- **20** years traditional in-ground (casket) burial capacity, and
- **18** years in-ground cremation lot capacity.

### Total Estimated Years of Burial Capacity

Taking into account the existing remaining capacity at Lakeview Cemetery, it is estimated that total potential capacity is:

- **29** years traditional in-ground (casket) burial capacity, and
- **24** years in-ground cremation lot capacity.

## IMPLEMENTATION OF KEY SITE CHANGES

The key recommended site changes arising from the Lakeview Cemetery master plan have been prioritized as High, Medium and Low Priorities:

### High Priorities:

- **Recommendation #1:** Develop additional burial capacity in phases in the southwest corner of Lakeview Cemetery. Provide additional in-ground cremation and traditional in-ground casket burial capacity **by 2019** on the remediated land as part of burial expansion in Phase 1;
- **Recommendation #2:** Incorporate the full range of proposed interment types and memorialization options as part of burial expansion in Phase 1, and in all future phases;
- **Recommendation #3:** Replace the existing irrigation system with a more efficient system that can be expanded to serve each new phase of burial expansion;
- **Recommendation #4:** Upgrade the main entry feature with rammed earth walls and a new gate;
- **Recommendation #5:** Create an entry feature and pedestrian path from the KVR Trail into the cemetery in Phase 1, taking into account to the layout of future adjacent burial areas in Phases 2 and 3;
- **Recommendation #6:** Provide two new parking spaces between sections A and Z to enable the roadway to remain clear at this pinch point, and
- **Recommendation #7:** Begin a program of sourcing suitable fill material for the remediation of the land in the southwest corner of the cemetery at little or no charge to the City. This will help reduce the overall cost of burial area expansion.

**Medium Priorities:**

- **Recommendation #8:** Screen the Operations Yard with tree and shrub planting as part of the development of new burial areas in Phase 2;
- **Recommendation #9:** Screen the Crematorium Area with tree and shrub planting;
- **Recommendation #10:** Repair and restore damaged and leaning monuments in the Old Section, and
- **Recommendation #11:** Implement the way-finding strategy as follows:
  - Install new directional signage at the key highway intersections identified;
  - Install new directional signage to the cemetery as part of the KVR trail signage;
  - Replace the existing information sign with an updated sign and relocate to the main entry;
  - Add section markers to each section of the cemetery;
  - Provide new interpretive signage at the following key locations within the cemetery:
    - The main entry on Lower Bench Road;
    - The proposed pedestrian entry from the KVR trail;
    - The Columbaria garden and,
    - The Old Section.

**Low Priorities**

- **Recommendation #12:** Upgrade the entry gates to the Old Section on Lower Bench Road and the KVR Trail;
- **Recommendation #13:** Install new entry and interpretive signage at the entry to the Old Section from the KVR Trail, and
- **Recommendation #14:** Install a new entry feature and interpretive signage to the Pioneer Cemetery.

## FAIRVIEW CEMETERY MASTER PLAN

The master plan for Fairview Cemetery is based on the following principles:

- No expansion of burial capacity at the cemetery, but
- Retain and enhance the cemetery as a cultural landscape, to commemorate local heritage, and provide a space for passive recreation and quiet reflection.

The master plan for Fairview Cemetery is presented in the Figure below, and in Appendix 4.

The majority of issues facing Fairview Cemetery relate to the standard of care and maintenance applied over the years. The recommendations below will assist the City with upgrading the cemetery to an appropriate standard as a cultural landscape, to commemorate local heritage, and to provide a space for passive recreation and quiet reflection.

The master plan for Lakeview Cemetery is described under the following headings:

- Infrastructure, and
- Implementation.



Figure 61: Fairview Cemetery Master Plan



## INFRASTRUCTURE

### Monuments and Markers

A number of graves and monuments at Fairview Cemetery are in need of significant repair and restoration. It is recommended that the City develop a program to restore these monuments in priority order as part of the overall planned capital expenditures.



Figure 62: Existing condition of graves and markers

### Gates and Railings

The character of the existing chain link fencing around the property is inappropriate for this unique and historic, cultural landscape. It is proposed that the site operations entry gate and chain link fence are replaced with black wrought iron-style gate and railings.



Figure 63: Replace the existing chain link fence



Figure 64: Proposed 'wrought iron-style' fencing (indicative image)

The existing entry gate on Fairview Avenue requires painting but not replacing, and should be incorporated as part of the upgrade of the perimeter railings.



Figure 65: Repaint the main entry gate



Figure 66: Existing sign over the main entry gate

### **Benches and Waste Receptacles**

There are currently no benches provided at Fairview Cemetery, which discourages visitors from staying to enjoy the site. Two new benches are proposed; both aligned to the west for the enjoyment of mountain views and the late afternoon sun.

The waste receptacles currently on-site are not in keeping with the character of this quaint and scenic cemetery. Two new waste receptacles should be provided, in a style that coordinates with the new benches also proposed for this site.

### **Grass and Hedges**

The condition of the grass should be improved to meet standards appropriate to inactive cemetery. The grass suffers stress, particularly during the summer, as a result of heat, tree root competition, low soil PH, inadequate irrigation, and the lack of optimal turf management practices including core aeration, top dressing and over-seeding. It is recommended that maintenance standards are revised to address these issues and that new standard operating procedures are developed and implemented.

The condition of the perimeter hedge is a visual indicator to the public about the standard of care and maintenance provided to the cemetery. It is recommended that:

- Sections of the perimeter hedge along Fairview Road and Regina Ave are filled in with new hedge plants, and
- A new hedge, of the same species, is planted along the eastern and southern perimeter of the cemetery to strengthen its character, and to screen views into adjacent properties.



*Figure 67: Infill gaps in the hedge with new plants*





Figure 68: Plant a new hedge to the southern boundary



Figure 69: Establish a new hedge along the eastern boundary

### Tree Management Strategy

The mature canopy of deciduous and evergreen trees is a defining heritage characteristic of the cemetery. It is recommended that the City develop a tree management and replacement strategy to maintain and enhance the cemetery's mature tree structure over the long term. A select number of small self-seeded trees and shrubs should be removed as part of the restoration of graves and monuments.



Figure 70: Maintain and enhance the mature tree canopy

### Views

The views out to the mountains are a key quality of Fairview Cemetery. The preservation and enhancement of these views should be considered as part of the tree management strategy.



Figure 71: Retain and enhance views to the mountains

### Information and Interpretive Signage

As part of the goal of raising the profile of the City's cemeteries, an information sign should be installed at main entry so it can also be read by people walking along Fairview Avenue.

Combined with the information sign, a new interpretive panel should be installed on Fairview Avenue, near the main entry into the cemetery. In this way, more people will have easy access to information about the cultural and historical significance of Fairview Cemetery.

In addition, the information within the existing interpretive panel relating to the site of St. Saviour's Church requires upgrading, and the panel itself requires painting.

### Irrigation

The existing irrigation system at Fairview Cemetery is in fair condition, but as it is estimated to be 36 years old, it is due for replacement. The system does not provide good coverage to all areas where water is required. It is recommended that the existing irrigation system is replaced with a more efficient system that can better meet the needs of the turfgrass, trees and the perimeter hedge.

### IMPLEMENTATION OF KEY SITE CHANGES

The key recommended site changes arising from the Fairview Cemetery master plan have been prioritized under the following headings: High Priorities and Medium Priorities.

#### High Priorities:

- **Recommendation #1:** Develop a phased program for the restoration of graves and monuments;
- **Recommendation #2:** Infill sections of the existing perimeter hedge with new plants; and plant a new hedge along the southern and eastern boundaries to screen views into adjacent properties;
- **Recommendation #3:** Replace the chain link fence and site operations entry gate with a black wrought iron-style gate and railings;
- **Recommendation #4:** Repaint the main entry gate and incorporate as part of upgrades to the perimeter railings, and
- **Recommendation #5:** Replace waste receptacles and provide two new benches of similar style and character.

#### Medium Priorities

- **Recommendation #6:** Provide a new information sign and interpretive sign by the main entry on Fairview Road. Upgrade the existing interpretive panel information and paint the sign by the footprint of St. Saviour's Church;
- **Recommendation #7:** Develop a tree management and replacement strategy to maintain and enhance the cemetery's mature tree structure, while retaining key views to the mountains, and
- **Recommendation #8:** Replace the irrigation system.

## MASTER PLAN PROPOSALS: SUMMARY OF ESTIMATED CAPITAL COSTS

A summary of the estimated costs of the proposed physical enhancements shown in this plan to Lakeview and Fairview Cemeteries is presented in the following table: A detailed breakdown of the cost estimates can be found in Appendix 10.

<b>Lakeview Cemetery</b>	
<b>Burial Expansion Areas</b> (including ground remediation costs)	
Phase 1	\$56,000
Phase 2	\$242,545
Phase 3	\$176,246
Phase 4	\$200,800
<b>Sub-total</b>	<b>\$675,591</b>
Upgrades to the existing cemetery	\$409,500
<b>Sub-total</b>	<b>\$1,0385,091</b>
<b>Fairview Cemetery</b>	
Upgrades to the existing cemetery	<b>\$61,000</b>
<b>Total</b>	<b>\$1,146,091</b>
<b>Soft Costs</b>	
Design Consultancy Fees @ 15% of estimated capital costs	<b>\$165,000</b>
<b>TOTAL</b>	<b>\$1,311,091</b>

Table 28: Summary of Estimated Capital Costs (Source: Lees + Associates)

## 11. CONCLUSION

This report summarizes the results of a six month master planning process for the City of Penticton's Cemetery System that engaged a spectrum of stakeholders, including: City Staff, local funeral home operators, cemetery customers, and area residents. The Cemetery Master Plan produced by this process consists of:

1. A cemetery needs analysis;
2. A cemetery business plan, and
3. A physical site plan for the City's active site, Lakeview Cemetery.

The Master Plan also includes conceptual detailed design of key cemetery features, an evaluation of the delivery of cemetery services and cemetery operations, recommendations for marketing and promotion, a phasing plan for four stages of cemetery expansion, and an estimate of associated capital costs.

This Master Plan has been built on a rigorous review of demographic and industry trends and projections. In combination with financial analysis, this review determined that the cemetery system can move towards the objective of cost recovery, and that this would be best accomplished by following Scenario 4 of the Business Plan.

This financial scenario accommodates the recommendations for:

- Phased expansion of in-ground burial capacity at Lakeview Cemetery;
- The repair and maintenance of monuments at Fairview Cemetery;
- The future development of a new cemetery at the Munson Mountain property, and
- Increasing the value of the Perpetual Care Fund.

The Master Plan report includes fourteen recommendations for Lakeview Cemetery, and eight recommendations for Fairview Cemetery—the City's historic and now inactive cemetery—and provides schematic diagrams, precedent photos and data tables to guide the implementation of these recommendations. The Master Plan presents a suite of information that, in combination, fully equips the City to serve the community in a fiscally, environmentally and socially sustainable manner for the next 25 years, while providing a full range of cemetery services to the residents of Penticton.

## APPENDIX 1: STAKEHOLDER FEEDBACK

On March 4<sup>th</sup> 2013, LEES+Associates and the members of the City's Project Team conducted a series of interviews with internal and external stakeholders.

The purpose of these interviews was to gain insights into how the cemetery service and the cemeteries themselves could better address the needs of stakeholders, the groups they represent, and their wider community.

Internal stakeholders interviewed included:

- Parks Department Staff responsible for the operation of the cemeteries;
- The maintenance contractor at Lakeview Cemetery, and
- The Chief Financial Officer to the City.

External stakeholders interviewed included:

- Peter Ord, Manager of Penticton Museum;
- Randy Manuel, Member of the Penticton Heritage Advisory Committee (and former Manager of Penticton Museum), and
- Directors from local funeral homes:
  - Brenda Hamilton, Providence Funeral Homes,
  - Bob Carlton, Hansons' Arbor Funeral Chapels & Crematorium, and
  - Jeff Everden, Everden Rust Funeral Services & Crematorium.

Representatives from the Legion and Veterans Association were contacted but unfortunately attempts to arrange meetings with them were unsuccessful.

## SUMMARY OF STAKEHOLDER FEEDBACK

Key issues raised during interviews with stakeholders are summarised under the following headings:

- Site Operations, and
- Customer Service.

## **SITE OPERATIONS**

### **Complaints about the Care and Maintenance of the Cemeteries**

Lakeview Cemetery is well maintained and only a few complaints have been received recently from the public about their care and maintenance. Generally, complaints have been in relation to:

- Dandelions in the grass during spring and summer, and
- Sunken areas in burial sections at Lakeview Cemetery.

The dandelions are allowed to grow and die back naturally. Current maintenance practices do not include the control of dandelions by mechanical or chemical means. Control of dandelions is not currently specified under the maintenance contract. The City ceased allowing herbicides to be used at Lakeview Cemetery at the request of the neighboring vineyards. Dandelions are therefore allowed to grow and die back naturally.

Depressions that occur to individual lots are dealt with through the maintenance contract. More extensive sunken areas are addressed by City Staff as soon as funding permits.

### **Site Office, Equipment and Storage**

The maintenance contractor provides all the equipment to undertake the maintenance of Lakeview Cemetery. The site office, equipment storage and yard are adequate for the maintenance of the cemetery at the present time.

### **Irrigation**

The existing irrigation system at Lakeview Cemetery is old, susceptible to breakage, and inefficient. It overwaters some areas of grass while under watering other areas. The challenge is to ensure all grass areas receive adequate water, without saturating the ground and inadvertently accelerating subsidence. A more efficient irrigation system at Lakeview Cemetery is needed to address these issues.

### **Grass**

During summer months the condition of the grass across Lakeview Cemetery is inconsistent. This is caused in part by the inefficiency of the existing irrigation system. Park Staff is considering testing grass species that require less irrigation while maintaining a good appearance.

### **Access and Circulation**

Visitors to Lakeview Cemetery generally park along the roads. A pinch point develops when visitors park on the road by the cremation section. Access and circulation can also be difficult for short periods when large numbers of people attend funerals. A few additional parking spaces in the vicinity of the cremation section would relieve congestion.

### **Flat Markers**

Funeral Homes provide the flat markers to families and arranges for them to be delivered to Lakeview Cemetery. The City's maintenance contractor installs the flat markers for which families are charged a fee.

### **Vaults for In-ground Cremation**

The City currently uses urns for the interment of in-ground cremated remains. City Staff are considering the use of pre-installed vaults for in-ground cremated remains as it would make it easier for families to place memorabilia with the remains.

### **Grave Liners**

The City uses grave liners for traditional in-ground (casket) burial. Support was given to the City's policy of not using liners for interment of cremated remains.

### **The Communities served by Lakeview and Fairview Cemeteries**

It was generally felt that the vast majority of people interred at Lakeview Cemetery are from the City of Penticton. A few families choose interment at a cemetery outside of the City such as Kaleden or Summerland.

## **CUSTOMER SERVICE**

### **Administration of the Cemetery Service**

A member of staff at City Hall is available between 1:00 pm and 4:30 pm during weekdays to enable funeral homes to make funeral arrangements on behalf of families. However this limited time presents problems. For example, there is only one hour each day in which to confirm funeral arrangements with the City as the obituary pages often require notification by 2:00 pm.

Some families and funeral homes have experienced difficulties in accessing the Cemetery Service at City Hall.

Due to reorganisation at the City, the standard of service provided by the City occasionally falls below the level deserved by families. The City is increasingly reliant upon on the maintenance contractor undertaking roles (beyond the scope of his agreement), to ensure the smooth delivery of the City's cemetery service. For example the maintenance contractor:

- Is present on site 12 months of the year by choice, when the contract requires him to be present for 6 months of the year (April 1<sup>st</sup> –October 31<sup>st</sup>);
- Liaises between City Hall and funeral homes to clarify the time of funerals and the location of graves to be dug, and
- Responds quickly to prepare for a funeral service when insufficient notice has been provided.

The contractor is a front line representative of the City. His role in dealing with the public and issues as they arise is specified within his contract. The contractor is improving the service to the public by being more readily available for 12 months of the year.

Discussion took place about whether it would be effective and efficient to transfer the responsibility for administration of cemetery services (currently provided at City Hall) to the maintenance contractor at the site office at Lakeview Cemetery.

The perceived advantages were that:

- The contractor would act a single point of contact with families and funeral homes in the organization and preparation of funeral services at Lakeview Cemetery;
- The contractor would provide cemetery services to funeral homes and families during the full working week rather than during restricted hours of service currently provided at City Hall, and
- Due to the contractor's role as a single point of contact and his increased availability, the standard of service would increase and the risk of something going wrong to the embarrassment to the City would be reduced.

There was some support in principle for the idea transferring the administration of the cemetery service to the maintenance contractor. However, it was recognised that a fundamental shift in the way services are provided has significant implications and warrants careful consideration. For example adequate management arrangements would be required to ensure accountability and transparency of the delivery of cemetery services on behalf of the City to the public.

If the administration of the cemetery service were to be undertaken by the maintenance contractor the current site office would need to be upgraded to receive families. This would displace the maintenance crew from using the site office, unless the site office could be extended or the equipment storage modified to accommodate their needs.

#### **Funeral Services**

Stakeholders suggested a number of ideas to enhance the service and experience provided to families attending funerals at Lakeview Cemetery.

The boards placed on the ground around a grave are difficult to walk on for some people attending funeral services. Better access around graves would be welcomed by families.

At present no shelter or seating is available for funeral services. A shade canopy would clearly indicate the location of the funeral to the funeral cortege, family and friends, and provide much-needed shelter from the elements, particularly from the sun during summer time. Comfortable chairs would be a welcome addition, especially to those who have difficulty standing for periods of time.

The placement of a flag pole with a Canadian flag at the graveside to indicate the location of a funeral has proven popular with families at other cemeteries.

Children's sections G - H are full at Lakeview Cemetery. The bylaw defines a child as being between 2 and 12 years old; however there are members of the community who are in one sense considered adult, but are still dependent on parents, such as those with learning difficulties.

#### **Additional Types of Interment:**

Funeral home directors reported some interest in green burial within the community. Approximately 1 in 50 families ask whether green burial is available at the City's cemeteries. It was also suggested that a place to scatter ashes such as a garden of remembrance or rose garden would probably be a popular type of interment with the community.



### **Memorialisation Options**

The current bylaw does not permit upright headstones. Funeral home directors estimated that perhaps 1 in 20 families request upright headstones. Further consideration is required to determine whether upright headstones could be permitted at Lakeview Cemetery as part of new burial sections.

### **Sale of Interment Rights**

Families can reserve a lot by paying an annual fee, but cannot purchase the right of interment for a particular lot of a family plot in perpetuity. The option to purchase the right of interment would be a welcome additional service for some families. For example if a family experiences the death of a child, they may wish to be buried in a family plot with the child. A scheme such as this would need careful and accurate administration by the City.

The City has discretion to permit the interment of cremated remains in advance of a casket burial where spouses who wish to be buried together have different burial requests. The City also has discretion to permit the interment of cremated remains of a child in a traditional in-ground burial lot who predeceases their parents.

### **Fees and Charges**

Funeral directors considered the current level of fees and charges for traditional in-ground burial and in-ground cremation lots very reasonable when compared, for example to fees at Vancouver's cemeteries. Fees and charges associated with mausolea were considered too high.

## **KEY FINDINGS**

### **SITE OPERATIONS**

#### **Complaints about the Care and Maintenance of the Cemeteries**

- Dandelion control needs to be incorporated into the maintenance contract;
- Sunken areas within Lakeview Cemetery is a management and maintenance issue that will need to be continually managed, and
- Stakeholders did not identify complaints from the public about the care and maintenance of Fairview Cemetery, despite the poor condition of some memorials;

#### **Irrigation**

- A new irrigation system at Lakeview Cemetery would assist to:
  - Reduce water consumption and associated costs;
  - Improve the consistency in the appearance of the grass, and
  - Reduce the amount of water entering the ground which is thought to be a contributory factor in the sinkage of areas of the cemetery.

### Grass

- Alternative grass species that require less irrigation but maintain an even and consistent appearance should be tested.

### Access and Circulation

- A few additional parking spaces in the vicinity of the cremation section would relieve congestion at this pinch point, and
- Access and circulation is likely to remain difficult for short periods when large numbers of people attend funerals, but additional on-site marshaling during funerals could assist in addressing the problem;

### Vaults for In-ground Cremation

- Vaults for in-ground cremations should be tested to see if they are efficient and effective, and if they prove popular with families.

### The Communities served by Lakeview and Fairview Cemeteries

- The number of families that choose interment outside of the City was not considered a significant factor for planning future burial capacity.

## CUSTOMER SERVICE

### Administration of the Cemetery Service

- The current system for administering the cemetery service is not robust or dependable enough;
- An enhanced level of service is required;
- The current maintenance contractor has the personality, demeanor and attitude to assume the role of administering the cemetery service in addition to his current role, and
- A fundamental shift in the way the administration of the cemetery service is delivered would have significant implications and warrants careful consideration. For example:
  - The risk to the City if the maintenance contract is not renewed with the same contractor;
  - The capital cost involved for enhancing the site office at Lakeview Cemetery;
  - The annual cost to the City for the administration of the cemetery service by the maintenance contractor, and
  - The extent of training and investment in systems that would be required.

### Funeral Services

- Better access around the grave, comfortable chairs and a shade canopy would improve the experience of families attending funerals.

#### **Additional Types of Interment and Memorialisation Options**

- Further market research is required to establish the strength of demand in the community for additional types of interment and memorialisation options including:
  - Green burial;
  - Scattering gardens, and
  - Upright headstones for traditional in-ground burial.

#### **Children's Section**

- Some standard size graves should be included in any expansion of a children's section.

#### **Sale of Interment Rights**

- In certain circumstances, it would be appropriate to permit families to purchase the right of interment, but this scheme would require accurate record keeping and robust administration.

#### **Fees and Charges**

- Funeral directors considered the current level of fees and charges to be very reasonable. In our experience, they are low relative to comparable municipal cemeteries.



# APPENDIX 2:

## FAIRVIEW CEMETERY EXISTING SITE PLAN









LAKEVIEW CEMETERY EXISTING SITE PLAN









# APPENDIX 3:

## FAIRVIEW SITE ANALYSIS PLAN

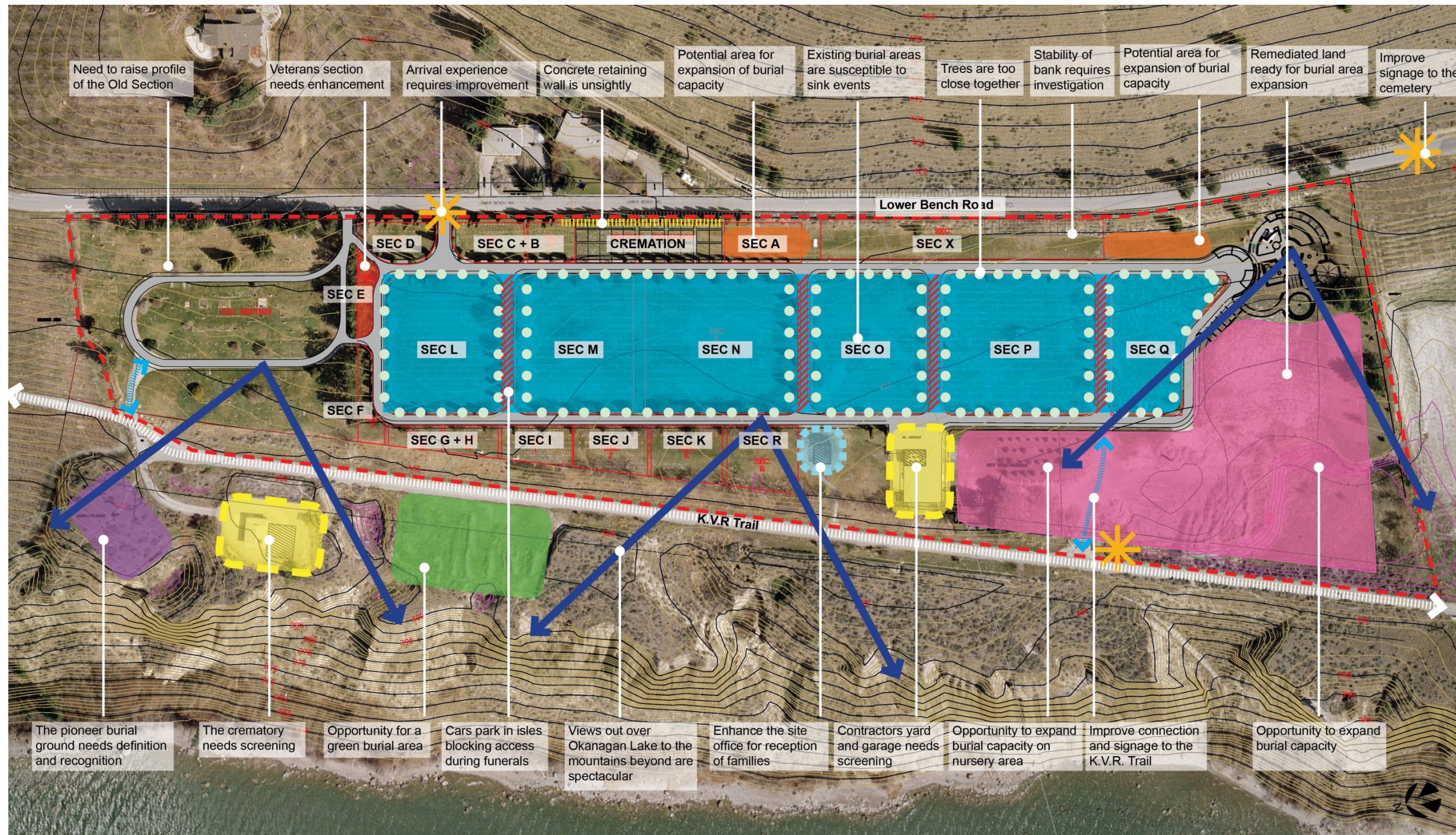








# LAKEVIEW SITE ANALYSIS PLAN







# APPENDIX 4:

## FAIRVIEW MASTER PLAN

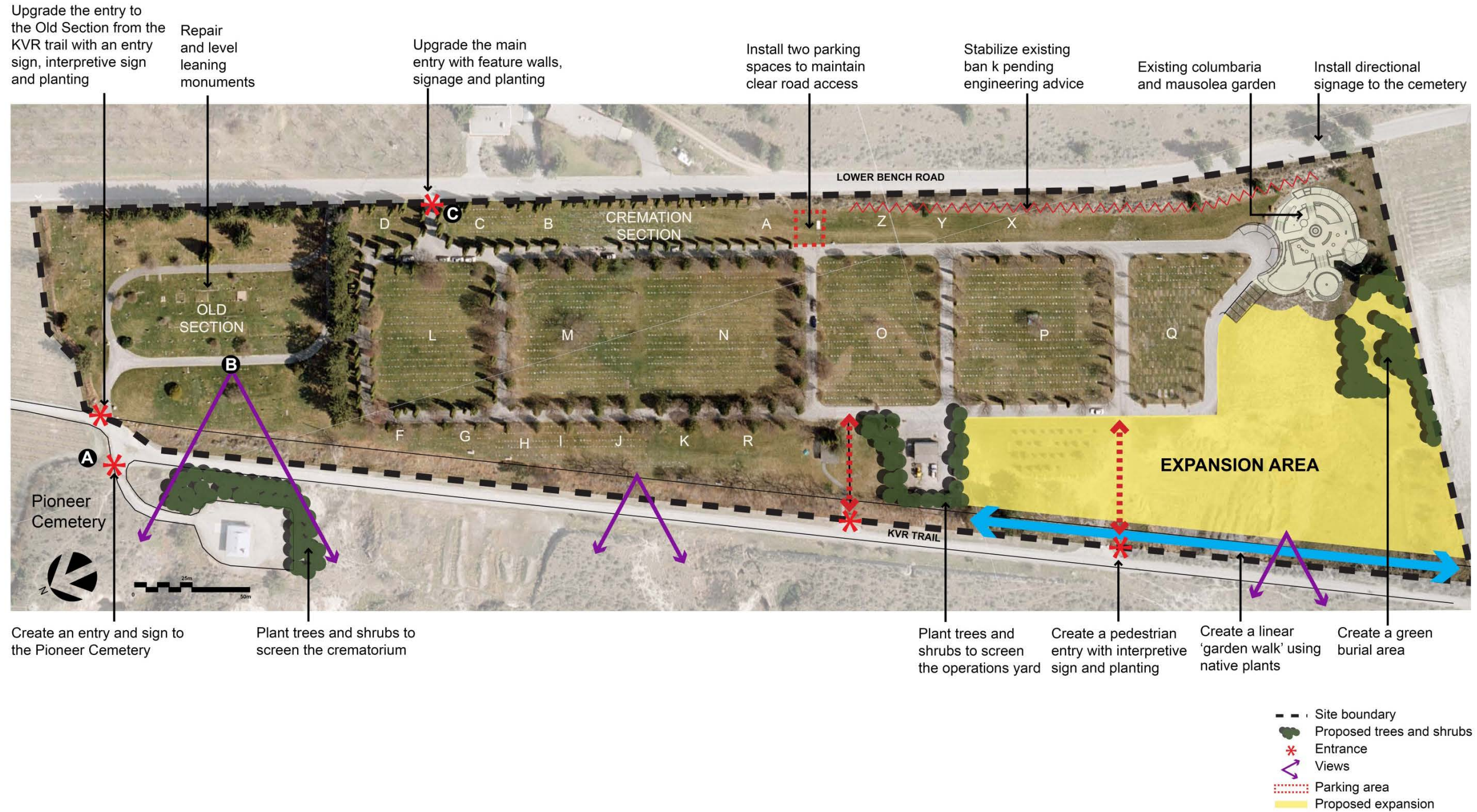






# APPENDIX 5:

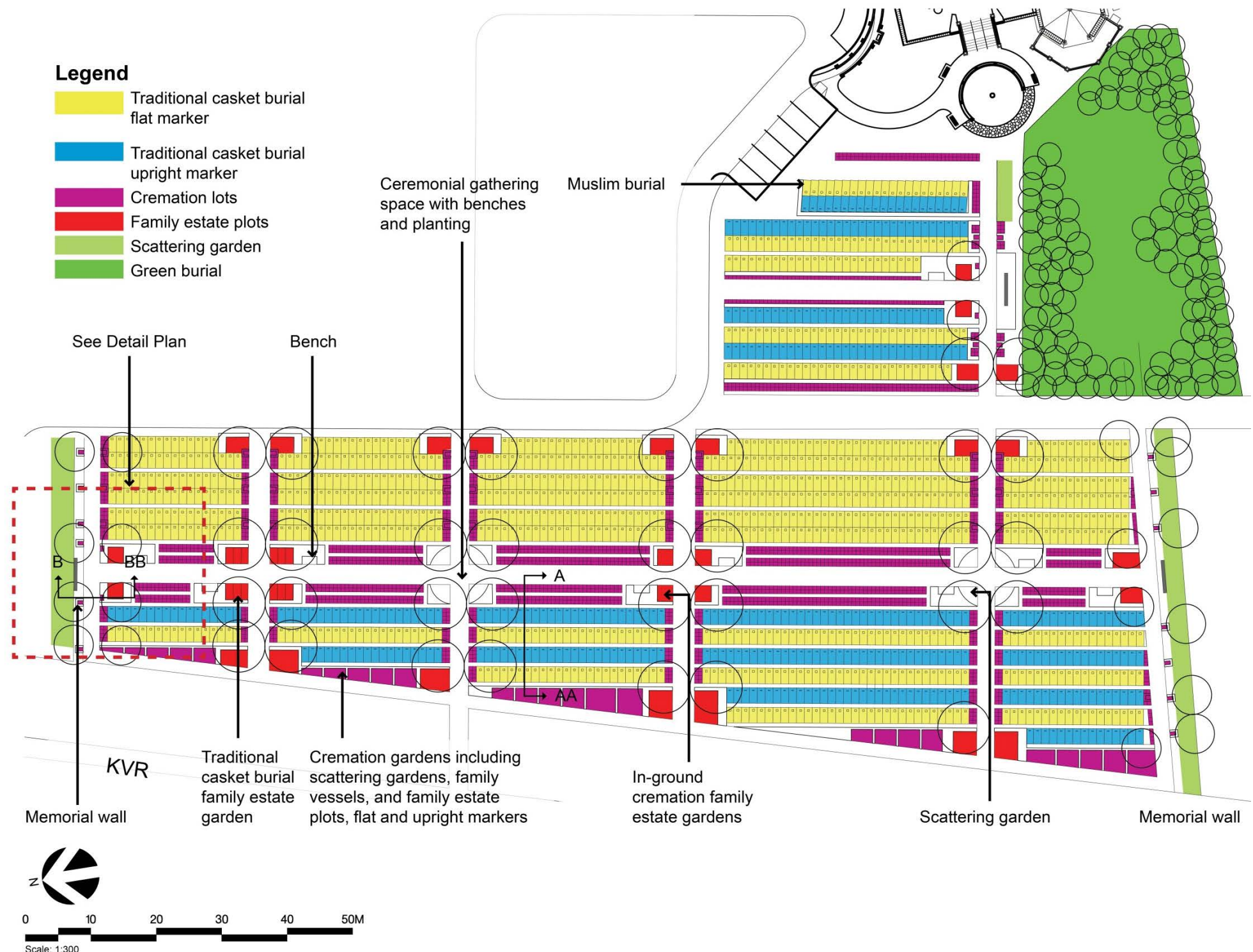
## LAKEVIEW MASTERPLAN







# LAKEVIEW CEMETERY BURIAL EXPANSION PLAN







## APPENDIX 6: OPEN HOUSE QUESTIONNAIRE

### EXECUTIVE SUMMARY

On May 28, 2013, City Staff held an open house event to solicit public feedback on the master plan proposals for Lakeview and Fairview cemeteries. The event was well publicized through local media and on the Councils web pages ahead of the open house.

Despite comprehensive publicity, only six members of the public attended the open house event, and 11 feedback questionnaires were completed during the open house, and via the on-line survey. A copy of the questionnaire, the survey results, and a summary of the key issues can be found below.

General comments about the master plan proposals received during conversations with the public at the open house were very positive.

The questionnaire included specific questions which invited respondents to indicate whether they would consider the following additional interment types and memorialization options if they were made available:

- Green burial;
- Muslim burial;
- Scattering gardens;
- Memorial walls;
- Garden urns, and
- Family vessels.

City Staff however, concluded that there was not enough response to warrant the use of this feedback to determine the direction of the master plan. The rationale for proposing the additional interment types and options is provided in Section 8.

Following the approval of the final cemeteries master plan document, it is recommended that the City provide a second opportunity for the public to comment on the range of interment types and memorialization options proposed at Lakeview Cemetery. By this time, the detailed design of interment zones for proposed burial expansions areas will have been developed. Feedback from local funeral homes and, where appropriate, families who use the City's cemetery service, would be particularly useful to confirm the final design of interment zones prior to the development of burial expansion areas at Lakeview Cemetery.

## SUMMARY OF QUESTIONNAIRE RESULTS

The key issues arising from the results of the questionnaire, and the proposed actions, are summarized in the table below:

Key Issue	Action
<p><b>Scattering Garden:</b></p> <p>54% of respondents would consider choosing a scattering garden for interring cremated remains.</p>	<p>Retain the proposal to include a scattering garden within the Lakeview master plan.</p>
<p><b>Green Burial:</b></p> <p>45% of respondents would consider green burial if it were made available.</p>	<p>Retain the proposal to include green burial within the Lakeview master plan.</p>
<p><b>Memorial Wall:</b></p> <p>36% of respondents would consider a memorial wall for commemoration if it were made available.</p>	<p>Retain the proposal to include a memorial wall within the Lakeview master plan.</p>
<p><b>Dedicated Cemeteries Webpage:</b></p> <p>82% of respondents would not use a webpage dedicated to the cemeteries.</p> <p>In Q12e however, 45% of respondents said a webpage should be included as part of future plans for the cemeteries.</p>	<p>Retain the recommendation to create a dedicated webpage for the cemeteries. It will form the central location on which to add links to various resources, including marketing information relating to product and services, fees and charges, and information such as events.</p>
<p><b>Smart Phone App:</b></p> <p>82% of respondents would not use a smart phone app to locate graves with the cemeteries.</p>	<p>Add as a medium term recommendation. It may to appeal to a younger generation familiar with smart phone use.</p>
<p><b>Friends of Fairview Cemetery:</b></p> <p>Only one respondent would welcome the opportunity to be part of a 'Friends of Fairview Cemetery' group to help steer its restoration</p>	<p>In the master plan report, state that feedback from the open house indicated little interest from the public to participate in a steering group such as a 'Friends of Fairview Cemetery' model. The City should keep local residents</p>

and future care.	informed about work to enhance the cemetery.
<p><b>Shade Structure and Seating:</b></p> <p>27% of respondents would welcome a shade structure and seating as part of graveside services.</p>	Retain the recommendation for a shade structure and seating as part of graveside services.
<p><b>Upright Headstones:</b></p> <p>55% of respondents would welcome upright headstones as a memorialization option.</p>	Retain the recommendation in the master plan for upright headstones.
<p><b>Areas Designated for Faith Groups:</b></p> <p>No responses were received.</p>	Retain the recommendation for a small Muslim burial section within the proposed expansion plans for Lakeview Cemetery.
<p><b>Haunted History Tour</b></p> <p>90% of respondents know about the tour and think both Lakeview and Fairview Cemeteries should be part of tours.</p>	Retain the recommendation to provide the tour on a consistent basis.
<p><b>Events such as a ‘Festival of Light’ or Night for All Souls:</b></p> <p>45% of respondents said an event would appeal to them.</p>	Retain the recommendation to develop an event similar to one of the examples given. If it proves popular, build it into the regular calendar of events at the City.

Table 29: Summary of Questionnaire results

## APPENDIX 7: DEFINITIONS

**Disposition** - the manner in which human remains are interred (buried), for example traditional in-ground burial or in-ground burial of cremated remains;

**Interment** - is the act of burying human remains by for example traditional in-ground burial or in-ground burial of cremated remains;

**Green Burial** - in-ground burial with:

- No embalming / use of other chemical preservatives;
- A fully biodegradable casket or shroud;
- No outer burial container;
- The burial area returned to a natural, or low-maintenance, vegetated state;
- No headstone or minimal memorialisation in the vicinity of the grave, and
- Typically, greater involvement of the family in the burial and disposition process.

**Family vessel** - A large urn for housing the cremated remains of multiple individuals of one family. Remains may be comingled, or may be contained in smaller, individual urns, held within the larger vessel.

**Lot** - a space used, or intended to be used, for the interment of human remains or cremated remains under a right of interment and includes a grave, crypt, niche or plot;

**Ossuary** - a vessel for the interment of two or more cremated remains. Typically, the cremated remains are comingled;

**Muslim Burial** – in-ground, full-body burial in a designated section with grave lots aligned so that the body can be interred facing Mecca (approximately 15 degrees east of True North).

**Scattering Garden** – An area in a cemetery designed to offer an attractive natural or ornamental garden setting specifically for the scattering of cremated remains

## APPENDIX 8: DESCRIPTIONS OF INTERMENT AND MEMORIALIZATION OPTIONS

The following additional interment types and memorialization options are proposed for inclusion as part of the expansion of burial areas at Lakeview Cemetery:

### Additional Interment Types:

- Green burial;
- Muslim burial;
- Scattering gardens;
- Family vessels, and
- Cremation garden urns.

### Additional Memorialization Options:

- Upright markers for traditional casket burial lots;
- Upright markers for in-ground cremation lots;
- Family estate plots for traditional casket burial;
- Family estate plots for in-ground cremation;
- Cremation gardens (which can include scattering gardens, family vessels, garden urns, and family estate plots with flat or upright markers), and
- Memorial walls.

A description of each additional interment type and memorialization option proposed is provided in the following paragraphs:

### Green Burial

There has been interest expressed by members of the public, City Staff and Councilor's in expanding interment options to include "green burial" (also known as natural burial).

The defining characteristics of this type of interment include:

- No embalming;
- Burial of the body directly into the ground;
- A fully biodegradable burial container (a simple wood or wicker casket, or shroud), and
- No use of grave liners or vaults.



While green burial is relatively new in Canada, over 10% of all deaths in the United Kingdom now result in green burial. Canada's first green burial site, The Woodlands at Royal Oak Burial Park in Victoria BC, has been in operation since 2008. There is an average of two interments per month at this site. The increasing interest in green burial is reflected by the attention given to this type of interment by the media. The inclusion of green burial would help differentiate Lakeview from other cemeteries, and would form a powerful promotional tool.

### **Muslim Burial**

A limited number of lots for Muslim burial have been included in the design of burial expansion areas at Lakeview Cemetery. Currently, the Muslim community in Penticton is a relatively small component of the community. The trend across Canada however, indicates that the Muslim community in Penticton will increase. Lakeview Cemetery should plan appropriately to serve the burial needs of this part of the community. The defining characteristics of Muslim burial include:

- A shroud is used (no use of caskets, grave liners or vaults);
- The grave should be always perpendicular (horizontal) to the direction of Qiblah;
- The deceased's body should rest on the right side, and
- (Cremation is prohibited).

### **Scattering Gardens**

Scattering gardens are proposed. Scattering gardens offer families a simple interment option in which cremated remains are tilled into the soil of the garden, shrub border or wooded area. Scattering of cremated remains occurs in such a way that significant amounts of ashes do not accumulate in one location, but rather are dispersed and worked into the ground.

### **Family Vessels and Garden Urns**

Large family vessels provide interment space for nested urns or comingled remains in a large (2-3' high) outdoor vessel. Garden urns are smaller and provide interment space for one or two nested urns. A limited number of places for family vessels and garden urns should be provided within each phase of burial expansion.

### **Family Estate Plots**

There are two principle types of Family estate plots:

- Family estate plot for traditional in-ground (casket) burial, and
- Family estate plot for In-ground cremation.

Family estate plots for traditional in-ground burial typically include between two and four lots side-by-side. Family estate plots for in-ground cremation could be grouped in a square or rectangular configuration. Family estate plots are often defined by flowering shrubs and trees, and a bench is often sited close-by for family and friends who visit the plot. Flat or upright markers can be placed on each individual lot, or a single larger marker can be used to memorialize family members.

This interment type is a premium option and likely to appeal to a limited number of families. None-the-less it is an important component in continuum of additional types of memorialization and interment options that should be provided at Lakeview Cemetery.

### **Cremation Gardens**

Cremation gardens are intimate garden spaces defined with low planting. They can be developed as family plot cremation gardens, or contain unrelated decedents. The cremation garden offers great flexibility as it permits the incorporation of:

- In-ground cremation with flat or upright markers;
- Family vessels;
- Garden urns, and
- Memorialization options such as name plaques on various types of marker.

### **Memorial Walls**

Memorial walls are becoming an increasingly popular option. The size, design and materials of memorial walls can be very diverse depending on the site location, context and demand. Memorial walls offer families the option of commemorating the life of a family member who lived in Penticton, but who may be interred in a family plot in elsewhere.

## APPENDIX 9: IMPLEMENTATION SCHEDULE

		High Priority (Yr 1)	Medium Priority (Yr 2-4)	Low Priority (Year 5+)
<b>1.</b>	<b>BURIAL EXPANSION RECOMMENDATIONS</b>			
A	Begin a phased expansion of burial capacity at Lakeview Cemetery by 2017 on land in south-west corner, or at least 2 years before existing burial capacity is expected to be exhausted – whichever occurs first.	*		
B	Secure and retain the 10 acre property at Munson Mountain for future cemetery development purposes.	*		
C	Begin the process of creating new burial capacity at Munson Mountain at least five to seven years before Lakeview cemetery is expected to reach capacity.			*
<b>2.</b>	<b>FINANCIAL RECOMMENDATIONS</b>			
	To move the cemetery service towards cost recovery, it is recommended that the City:			
A	Increases prices by 15% every year for five years to cover operational costs and the interest debt on the columbaria garden development. Increase prices by the rate of inflation every year thereafter.	*		
B	Continues to fund the principal amount required to construct the columbaria garden from sources outside of the cemetery budget.	*		
C	Continues to finance cemetery capital improvements and the expansion of burial areas from tax revenues, following the same funding model used by other community services.	*		

		<b>High Priority (Yr 1)</b>	<b>Medium Priority (Yr 2-4)</b>	<b>Low Priority (Year 5+)</b>
D	Make capital injections to boost the Perpetual Care Fund when funding permits.	*		
E	Sets up a Cemetery Development reserve fund to reduce future requirement for tax-based capital funding, <b>if and when</b> there are net operating profits.			*
<b>3.</b>	<b>SERVICE DELIVERY RECOMMENDATIONS</b>			
	To improve service delivery at the cemeteries, it is recommended that the City:			
A	Continues to use the current service delivery model for site operations.	*		
B	Improves the level of landscape maintenance at Fairview Cemetery.	*		
C	At this time, enhance the status quo service delivery model with a dedicated member of Staff to administer the cemeteries, and renewed emphasis on marketing and promotion in order to meet the ambitious financial goals.	*		
D	Brings all cemetery service and cemetery operations functions under the control of one City Department.	*		
E	Establishes a dedicated family room or quiet, comfortable “flex space” at City Hall, where customers can meet with Staff in a comfortable, undisturbed setting.	*		
F	Commissions an individual business case analysis, and hold further conversations with Council to explore the optimum cemetery delivery model to serve the community.		*	

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		<b>High Priority (Yr 1)</b>	<b>Medium Priority (Yr 2-4)</b>	<b>Low Priority (Year 5+)</b>
G	Updates the Lakeview Cemetery maintenance standards and include the task of controlling dandelions, and develops maintenance standards and operating procedures specifically tailored to the needs of Fairview Cemetery's cultural landscape.	*		
H	Develop a tree management and replacement strategy to maintain and enhance cemetery mature tree structure.		*	
I	Develops cemetery standard operating procedures.	*		
J	Fully utilizes the Stone Orchard proprietary cemetery record-keeping and management software.	*		
<b>4.</b>	<b>PRODUCT AND MARKET RECOMMENDATIONS</b>			
	To improve public awareness of Penticton's cemetery system, increase customer satisfaction and increase cemetery revenues over time, it is recommended that the City:			
A	Increase the range of interment and memorialization options offered at Lakeview Cemetery following the detailed design phase of expansion of its burial areas and further public consultation and refinement.		*	
B	Permits pre-need sales of lots.	*		
C	Begins selling monuments and markers.		*	

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		<b>High Priority (Yr 1)</b>	<b>Medium Priority (Yr 2-4)</b>	<b>Low Priority (Year 5+)</b>
D	Develops a marketing strategy that includes the following initiatives: make recommended site improvements; undertake cemetery promotions, programs and events, and utilize printed, digital and social media.	*		
E	Update the cemetery webpage to promote Lakeview Cemetery and provide complete and concise information about the services offered and associated fees.	*		
F	Provides a graveside canopy service to families (for an additional fee).	*		
<b>5.</b>	<b>PHYSICAL PLAN RECOMMENDATIONS: Fairview Cemetery</b>			
	Proposed physical improvements include:			
A	Develop a phased program for the restoration of graves and monuments.	*		
B	Replace the perimeter chain-link fence with a black, wrought iron-style fence.		*	
C	Replace the irrigation system.		*	
D	Install new benches and waste receptacles.		*	
E	Upgrade interpretive signage and site information available on site.		*	

F	Repaint the main entry gate and incorporate as part of upgrades to the perimeter railings.		*	
		<b>High Priority (Yr 1)</b>	<b>Medium Priority (Yr 2-4)</b>	<b>Low Priority (Year 5+)</b>
G	Provide a new information sign and interpretive sign by the main entry on Fairview Road.		*	
<b>6.</b>	<b>PHYSICAL PLAN RECOMMENDATIONS: Lakeview Cemetery</b>			
	Lakeview Cemetery should continue to serve as the active cemetery, with the following physical improvements:			
A	Expand burial capacity in phases on land in the southwest corner of the cemetery.	*		
B	Replace the existing irrigation system.	*		
C	Upgrade the main entry feature and pedestrian linkage from the KVR trail.	*		
D	Screen the operations yard and crematorium.		*	
E	Implement a way-finding strategy that includes directional signage, informational and interpretive signage.		*	
F	Stabilize the existing bank along Lower Bench Road pending engineering advice.		*	
G	Provide two new parking spaces between Sections A and Z.	*		



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H	Begin a program of sourcing suitable fill material for the remediation of the land in the southwest corner of the cemetery, at little to no charge to the City (This will help reduce the overall cost of burial area expansion).	*		
		<b>High Priority (Yr 1)</b>	<b>Medium Priority (Yr 2-4)</b>	<b>Low Priority (Year 5+)</b>
I	Repair and restore damaged and leaning monuments in the Old Section.		*	
J	Upgrade the entry gates to the Old Section on Lower Bench Road and the KVR Trail.			*
K	Install a new entry and interpretive signage at the entry to the Old Section and KVR Trail.			*
L	Install a new entry feature and interpretive signage to the Pioneer Cemetery.		*	

## APPENDIX 10: CLASS D COST ESTIMATE

The cost estimates for the proposed physical improvements to Lakeview and Fairview Cemeteries are set out below.

Note the estimated cost of ground remediation for burial expansion on land in the southwest corner of Lakeview Cemetery is **separate to** these costs and is set out in a following table.

The Total Cost for all proposed physical improvements to the cemeteries is illustrated within the last table within this Appendix.

<b>1.0 LAKEVIEW EXISTING SITE IMPROVEMENT COSTS ESTIMATES</b>						
Based on: Drawings dated June, 2013						
Category / Item	Type	Unit	Quantity	Unit Cost	Amount	
<b>OVERALL COSTS</b>						<b>\$409,481.80</b>
<b>1.0 ROAD AND SITE IMPROVEMENTS</b>				<b>SUBTOTAL</b>		<b>\$360,611.80</b>
<b>1.1 Removal + Restoration</b>						
Repair and Restore Graves and Monuments		each	5	\$1,000.00	\$5,000.00	
Tree and Shrub Removal		each	6	\$1,500.00	\$9,000.00	
Irrigation installation		m <sup>2</sup>	33,170	\$7.00	\$232,190.00	
Subtotal					<b>\$246,190.00</b>	
<b>1.2 Parking</b>						
Road surfacing	75mm asphalt w/ 150mm concrete base	m <sup>2</sup>	15.6	\$125.00	\$1,950.00	
Granular base	150mm soil cement base	m <sup>2</sup>	15.6	\$10.50	\$163.80	
Subtotal					<b>\$2,113.80</b>	
<b>1.3 Fencing and Gates</b>						
Main Entry Vehicular Gate	custom	ls	1	\$6,000.00	\$6,000.00	
Pedestrian Entry Gate	custom	ls	1	\$3,000.00	\$3,000.00	
Simple Entry Gate	Wrought iron custom	ls	2	\$5,000.00	\$10,000.00	
Subtotal					<b>\$19,000.00</b>	
<b>1.4 Entry Features</b>						
Entry Sign		ea	5	\$3,000.00	\$15,000.00	
Rammed Earth Main Entry Feature	4m height x 8m length	face m	64	\$1,000.00	\$64,000.00	
Rammed Earth Pedestrian Entry Feature	3m height x 3m length	face m	12	\$1,000.00	\$12,000.00	
Sign Lettering	Aluminum lettering 4" height	ls	4	\$352.00	\$1,408.00	
Entry boulders	Pioneer Cemtery	ton	3	\$300.00	\$900.00	
Subtotal					<b>\$93,308.00</b>	
<b>2.0 SOFTWORKS</b>				<b>SUBTOTAL</b>		<b>\$48,870.00</b>
<b>2.1 Sodding</b>						
Upgrade turf	Veterans Section	m <sup>2</sup>	400	\$18.00	\$7,200.00	
Subtotal					<b>\$7,200.00</b>	
<b>2.2 Plant Material</b>						
1 gal pot		ea	48	\$18.00	\$864.00	
3 gal pot		ea	43	\$32.00	\$1,376.00	
5 gal pot		ea	20	\$55.00	\$1,100.00	
Deciduous Tree	6 cm cal.	ea	28	\$340.00	\$9,520.00	
Coniferous Tree	1.5m ht	ea	52	\$200.00	\$10,400.00	
Subtotal					<b>\$23,260.00</b>	
<b>2.3 Planting bed construction</b>						
Excavation, planting mix and mulch	500mm excavation, 500mm planting mix, 75mm mulch	m <sup>2</sup>	526	\$35.00	\$18,410.00	
Subtotal					<b>\$18,410.00</b>	

Table 30: Lakeview Class D Cost Estimate

**LAKEVIEW CEMETERY ESTIMATED BURIAL AREA EXPANSION COSTS**

<b>Phase 1</b>	<b>Yield</b>	<b>Years of Capacity</b>	<b>Acres</b>	<b>Land Remediation Cost</b>	<b>Burial Expansion Cost</b>	<b>Sub-total</b>
Traditional In-ground (casket) burial	206	3.0	0.40	\$20,000	\$36,000	<b>\$56,000</b>
In-ground cremation	367	2.2				
<b>Phase 2</b>	<b>Yield</b>	<b>Years of Capacity</b>	<b>Acres</b>	<b>Land Remediation Cost</b>	<b>Burial Expansion Cost</b>	<b>Sub-total</b>
Traditional In-ground (casket) burial	345	5.0	0.70	\$113,050	\$63,196	<b>\$176,246</b>
In-ground cremation	873	5.3				
Green Burial	977	40.7	0.30	\$48,300	\$18,000	<b>\$66,300</b>
<b>Phase 3</b>	<b>Yield</b>	<b>Years of Capacity</b>	<b>Acres</b>	<b>Land Remediation Cost</b>	<b>Burial Expansion Cost</b>	<b>Sub-total</b>
Traditional In-ground (casket) burial	428	6.2	0.70	\$113,050	\$63,196	<b>\$176,246</b>
In-ground cremation	867	5.3				
<b>Phase 4</b>	<b>Yield</b>	<b>Years of Capacity</b>	<b>Acres</b>	<b>Land Remediation Cost</b>	<b>Burial Expansion Cost</b>	<b>Sub-total</b>
Traditional In-ground (casket) burial	395	5.7	0.80	\$128,800	\$72,000	<b>\$200,800</b>
In-ground cremation	791	4.8				
<b>TOTAL</b>	<b>Yield</b>	<b>Years of Capacity</b>	<b>Acres</b>	<b>Land Remediation Cost</b>	<b>Burial Expansion Cost</b>	<b>TOTAL</b>
Traditional In-ground (casket) burial	<b>1374</b>	<b>19.9</b>	<b>2.90</b>	<b>\$423,200</b>	<b>\$234,391</b>	<b>\$675,592</b>
In-ground cremation	<b>2898</b>	<b>17.7</b>				

Table 31: Lakeview Cemetery estimated burial area expansion costs

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<b>1.0 FAIRVIEW CEMETERY ESTIMATES</b>						
Based on: Drawings dated June, 2013						
Category / Item	Type	Unit	Quantity	Unit Cost	Amount	
<b>OVERALL COSTS</b>						<b>\$61,130.00</b>
<b>1.0</b>	<b>Site Work</b>				<b>SUBTOTAL</b>	<b>\$30,200.00</b>
	Repair and Restore Graves and Monuments		each	10	\$500.00	\$5,000.00
	Tree and Shrub Removal		each	5	\$200.00	\$1,000.00
	stump grinding		each	1	\$100.00	\$100.00
	paint signs and entry gate		hr	12	\$25.00	\$300.00
	Irrigation installation		m <sup>2</sup>	3,400	\$7.00	\$23,800.00
	Subtotal					<b>\$30,200.00</b>
<b>2.0</b>	<b>Fence and gate</b>				<b>SUBTOTAL</b>	<b>\$16,000.00</b>
	Double gate	wrought iron	each	1	\$2,000.00	\$2,000.00
	Wrought Iron Fencing		lm	70	\$200.00	\$14,000.00
	Subtotal					<b>\$16,000.00</b>
<b>3.0</b>	<b>Site Furnishings</b>				<b>SUBTOTAL</b>	<b>\$9,980.00</b>
	Bench	metal styling	each	2	\$1,845.00	\$3,690.00
	Waste Receptacle	metal styling	each	2	\$1,345.00	\$2,690.00
	Interpretive Sign		each	2	\$1,800.00	\$3,600.00
	Subtotal					<b>\$9,980.00</b>
<b>4.0</b>	<b>Planting</b>				<b>SUBTOTAL</b>	<b>\$4,950.00</b>
	New hedge	5 gal pot	each	90	\$55.00	\$4,950.00
	Subtotal					<b>\$4,950.00</b>

Table 32: Fairview Class D Cost Estimate

## SUMMARY OF TOTAL ESTIMATED COSTS FOR ALL PROPOSED PHYSICAL IMPROVEMENTS

<b>Lakeview Cemetery</b>	
<b>Burial Expansion Areas</b> (including ground remediation costs)	
Phase 1	\$56,000
Phase 2	\$242,545
Phase 3	\$176,246
Phase 4	\$200,800
<b>Sub-total</b>	<b>\$675,591</b>
Upgrades to the existing cemetery	\$409,500
<b>Sub-total</b>	<b>\$1,0385,091</b>
<b>Fairview Cemetery</b>	
Upgrades to the existing cemetery	<b>\$61,000</b>
<b>Total</b>	<b>\$1,146,091</b>
<b>Soft Costs</b>	
Design Consultancy Fees @ 15% of estimated capital costs	<b>\$165,000</b>
<b>TOTAL</b>	<b>\$1,311,091</b>

## APPENDIX 11: END NOTES

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<sup>i</sup> Appendix One - Statistical Summaries by Health Authority, Health Service Delivery Area, Local Health Area, and Community, British Columbia published by BC Stats for each year 2001-2011

<sup>ii</sup> P.E.O.P.L.E 2012 Local Health Area 15 Population Statistics for Penticton published by BC Stats.