



CITY OF COQUITLAM: 2019-2039 CEMETERY SERVICES PLAN



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The City of Coquitlam acknowledges Urban Systems for their leadership of the research, business modelling, concept design and stakeholder engagement process that led to the development of this strategy.





Context

The City of Coquitlam operates one cemetery, Robinson Memorial Park Cemetery (the Cemetery). The entire cemetery site is approximately 3.4 hectares (8.5 acres), with 2.8 hectares (7 acres) developed for interment services. In the Robinson Memorial Forest, around 0.78 hectares (1.5 acres) at the north end of the property, burials or cremated remains interments are currently not permitted as per the Robinson Memorial Forest Bylaw.

The Cemetery has limited remaining inventory and land base, particularly for full burials. Even with further development of the Cemetery within the current footprint, previous projections showed that the inventory of full burial sites would be depleted within the next 10 to 15 years. Riverview Cemetery is the only other cemetery in Coquitlam, but it is not available for interments following closure of the provincial facilities at Riverview Hospital decades ago and it has never been available to the general public.

The Cemetery operates on a direct cost-recovery basis, with interment and other service pricing generally consistent with other municipal cemeteries in the Lower Mainland. The financial model approved by Council in the past is designed so that the fees collected for services cover the annual operating costs and infrastructure debt repayment.

The City of Coquitlam has reached a key juncture in the development and management of its Cemetery. The significant population growth, increasing cultural diversity, limited remaining cemetery space, and outdated financial model for cemetery planning (from 1997) require the City to reconsider the future of its cemetery services. The City therefore initiated a process to prepare a Cemetery Services Plan.

PROJECT GOAL

- ▶ Prepare a comprehensive, 20 to 30-year plan for cemeteries that builds on existing cemetery assets to meet the interment needs of residents of Coquitlam.

PROJECT OBJECTIVES AND PROCESS

The project objectives include the following:

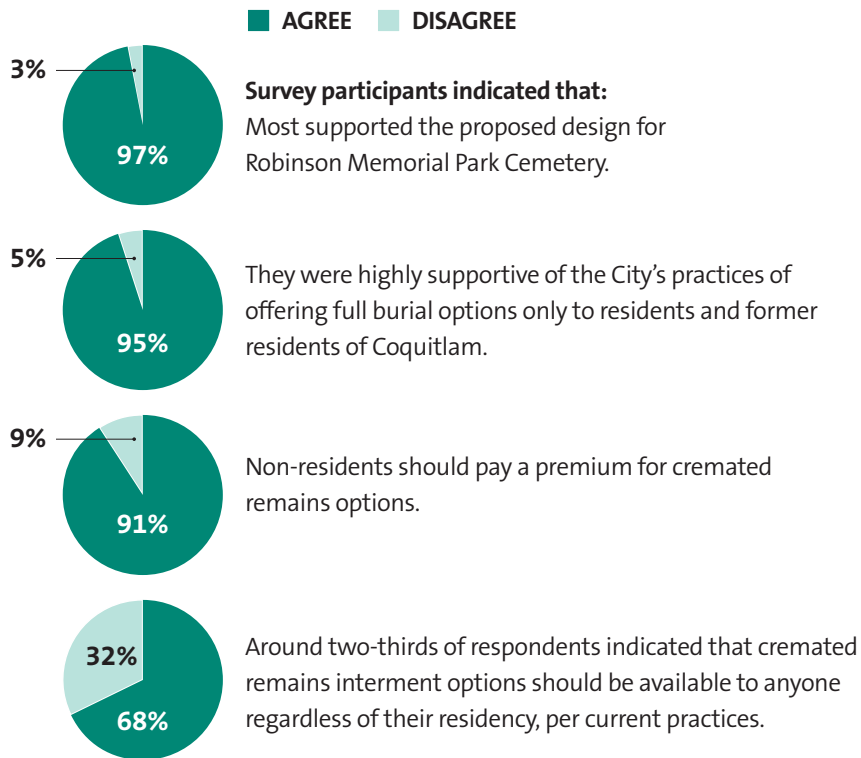
- ▶ prepare a long-term, visionary plan;
- ▶ base the plan on projections and trends;
- ▶ consider alternate cemetery sites;
- ▶ determine the capacity of Robinson Memorial Park Cemetery and prepare a concept plan to optimize its use;
- ▶ explore opportunities in the Riverview Cemetery;
- ▶ prepare a business planning and service delivery model; and
- ▶ prepare capital and operating cost estimates and an implementation plan.

Planning Process

The process involved detailed analysis and working with City staff to understand existing practices, needs, and trends. A stakeholder workshop was held with representatives of the funeral industry, First Nations, faith-based groups, and the Province (related to Riverview). Two online surveys asking the same questions, a Viewpoint panel survey and an open community survey, yielded 583 responses. Council input was received prior to release of the public surveys, and following public consultation, the draft Cemetery Services Plan was presented to Council for consideration.

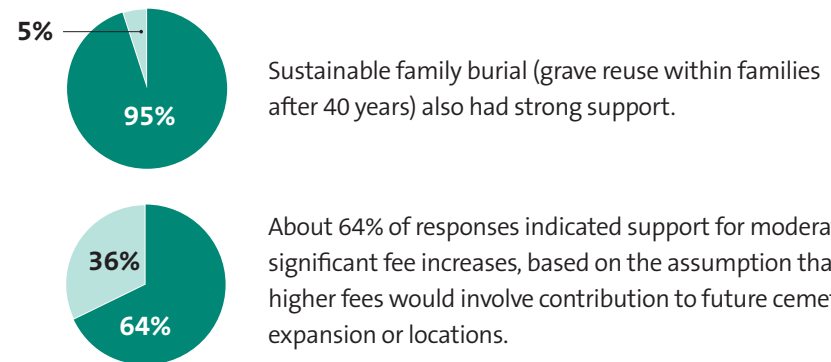
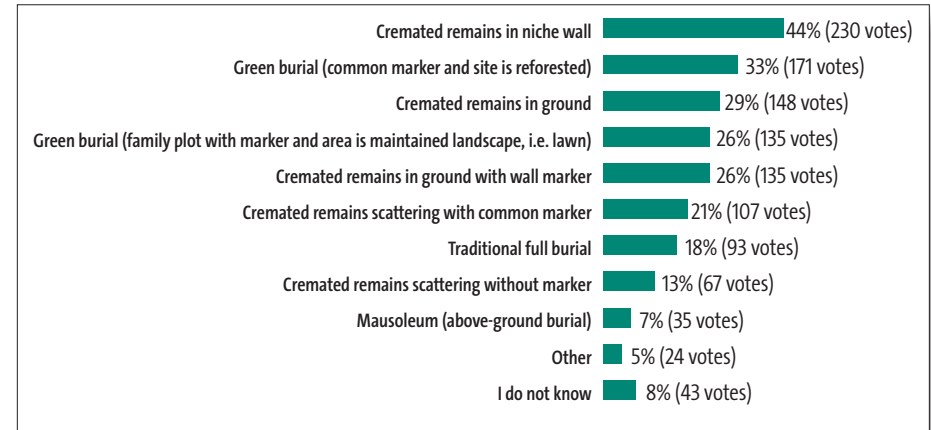
COMMUNITY INPUT

Participants in the online survey almost all live in Coquitlam (97%). Around 46% of respondents had visited Robinson Memorial Park Cemetery, the most common uses being to visit a loved one, walking, and quiet reflection.



Survey respondents were interested in a wide range of interment options as shown below. Cremated remains in a niche wall had the highest interest (44%). Two types of green burial were preferred by more respondents than traditional full burial.

Q: Please rate your top three interment preferences



Trends

The key national trends that affect the planning of the City's cemetery services are the following:

- increase in cremation over the past few decades, with cemeteries offering multiple methods for interring cremated remains;
- green burial as a growing interest, with interments shifting from cremated remains to green burial; and
- interment densification, with the key practices being sustainable family burial and tiered interments.



TYPES OF INTERMENT

Full Burial – traditional in-ground burial of a casket, often done in Coquitlam with a vault and/or liner around the casket to reduce ground subsidence at the surface, which is mowed lawn

Green Burial – return of a body as naturally as possible to the earth; there are variations on how “green” this can be; at a minimum there is no embalming and a biodegradable shroud or casket; vegetation is usually planted to naturalize instead of grass; names can be inscribed on a common marker or plaque; double or triple depth burials (consecutive or not) can maximize the use of land

Cremated Remains Burial – cremated remains in a vessel or urn can be interred in small plots for this purpose, over full burial plots, or in other specified locations; memorials can be individual or common; the Cemetery currently offers interments in small plots (also called in-ground niche), over full burial plots, and at the base of memorial walls; these options are proposed to continue

Columbarium or Niche Wall/Pedestal – columbaria are small secure boxes built into walls, pedestals or monuments where cremated remains are placed

Scattering Gardens – garden beds where cremated remains can be directly interred, without an urn or box; there can be no marker, individual markers, or common markers that contain multiple names

Sustainable Family Burial – new remains are interred in an occupied plot after a set time period, usually within the same family

Mausoleum – large structures built above ground to contain caskets

Defining the Market

The Coquitlam Local Health Area (LHA 043) is projected to see net population growth of nearly 173,000 over the next 50 years. During that time over 175,000 deaths are projected, an average of 9.77 deaths per 1,000 population annually.

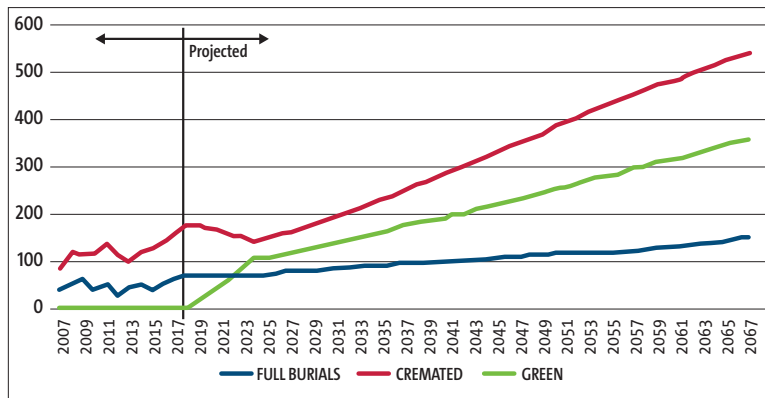
To forecast disposition needs in the City of Coquitlam, the following assumptions were made:

- mortality and disposition trends at the LHA level will be mirrored in the City of Coquitlam;
- Coquitlam will maintain a static share of LHA population over time (60%);
- some Coquitlam disposition needs will be met outside of Coquitlam; at the same time, there will be some demand for disposition in Coquitlam among former and non-residents; and
- green burial may over time draw market share from traditional and cremation interments as follows:
 - 5% of demand that would otherwise go to traditional full burial will shift to green burial
 - 30% of demand that would otherwise go to cremation will shift to green burial.

Between 2018 and 2067, there is a projected need to accommodate over 31,300 interments in the City of Coquitlam as follows:

- approximately 51% (15,900) are expected to be cremated remains interments;
- approximately 33% (10,250) are expected to be green burial interments; and
- approximately 16% (5,200) are expected to be traditional full burial interments.

Annual Projected Interment Needs in Coquitlam, 2018 to 2067



PLANNED CAPACITY

As of early 2018, Robinson Memorial Park Cemetery had 638 combined plots and niches available for interments. Based on the projected needs, this capacity will be exhausted in the following time frames:

- Full burials 4 years
- Cremated remains plots 3 years
- Columbarium niches 11 years
- Cremation in ground with wall* 6 years

* urns are typically interred and the name is placed on a wall plaque

The inventory for cremated remains plots is based on availability in currently allocated areas, but additional spaces could be added.

The plan developed for expansion of Robinson Memorial Park Cemetery will allow for the addition of 4,701 plots and niches, as follows:

Existing and Projected Interment Capacity in Robinson Memorial Park Cemetery

Type	Available	Planned
Full Burial Plots	104	1,070
Green Burial w/Marker	0	522
Green Burial with Common Marker	0	698
Cremation Plots	57	1,131
Columbarium Niches	390	820
Cremation in Ground with Wall	87	100
Scattering with Common Marker	0	360
Total	638	4,701

Additional capacity is planned in three phases, with phase 1 beginning in 2019, phase 2 occurring in 2024, and phase 3 beginning in 2030. The total cost of capital improvements to accommodate this capacity is estimated at approximately \$6.1-8.6 million.¹ This will allow the Cemetery to offer the above interment options for 22 to 31 years

¹ Costs and revenues have been escalated at 2% per year. All reported dollar figures are current as of the year they are quoted (i.e., nominal or current dollars).

Revenue and Operating Costs

REVENUE

To provide context for service fees, comparisons were made with the 2018 fees for residents of other Metro Vancouver municipalities and private cemeteries. Coquitlam's 2018 fees for some services were lower than the average of comparable cemeteries, and higher fees are proposed to bring Coquitlam in line with other municipalities in the region. The fees at private cemeteries were significantly higher in most cases. Total fees shown below include right of interment, perpetual care fund (PCF), and open/close for the first interment.



Service Fee Comparisons

Type of Interment	Total Fee
Adult Plot Double Depth	
Vancouver	\$24,660
Coquitlam (Proposed)	\$10,525
Maple Ridge (requires two singles)	\$9,786
Surrey	\$8,650
New Westminster	\$6,963
Coquitlam (2018)	\$6,789
Port Coquitlam	\$5,492
Cremation Plot Double	
Vancouver	\$5,035
New Westminster (requires two singles)	\$2,850
Maple Ridge (requires two singles)	\$2,465
Coquitlam (Proposed)	\$2,425
Surrey	\$2,300
Port Coquitlam	\$2,242
Coquitlam (2018)	\$2,039
Columbarium Double	
Vancouver	\$4,265
New Westminster	\$4,558
Maple Ridge	\$4,149
Coquitlam (Proposed)	\$3,800
Surrey	\$3,475
Coquitlam (2018)	\$3,376
Port Coquitlam	\$2,977

Perpetual Care Fund (PCF) – As per provincial regulations, the City collects a Perpetual Care Fund fee with each sale of the right to inter. These fees are deposited into a reserve fund to ensure that once the Cemetery has reached capacity, the interest from this fund can be used to maintain the Cemetery in perpetuity.

Revenue projections for the Cemetery were calculated over a 30-year timeframe by examining three pricing scenarios – Status Quo, Planning for Growth, and Private Pricing. The preferred scenario, Planning for Growth, is described here. In that scenario,

fees for cemetery services are adjusted to generate a Capital Reserve Fund sufficient to cover projected costs for future expansion phases at Robinson Memorial Park Cemetery and for expanding the Riverview Cemetery, should the City acquire the site in the future, or for land acquisition if a different site is required.

Perpetual Care Fund (PCF) allocations are adjusted to reflect the PCF interest remaining in the fund rather than diverting the interest to fund annual operations and maintenance, as it is now. Revised fee and PCF allocations result in enough interest from the PCF to cover operating costs for well beyond 25 years after the Cemetery reaches capacity (2073).

The following table shows the 2018 and proposed right of interment fees not including open/close or PCF.

PLANNING FOR GROWTH FEES	2018 RATES			PROPOSED RATES		
	Resident	Former Resident	Non-Resident	Resident	Former Resident	Non-Resident
License						
Infant/Child Burial Plot or Cremation	\$411	\$411	\$411	\$415	\$415	\$415
Single Burial Plot	\$3,734	\$5,638	-	-	-	-
Double Depth Burial Plot	\$4,779	\$7,146	-	\$7,700	\$11,550	-
Double Depth Burial Plot (with upright marker and inscription)	\$7,315	\$10,975	-	\$10,305	\$15,460	-
Green Double Depth Plot with Monument	-	-	-	\$7,700	\$11,550	-
One Interment in a Green Triple Depth Plot with Common Marker	-	-	-	\$2,570	\$3,860	-
Cremation Plot	\$1,230	\$1,230	\$1,230	\$1,500	\$1,875	\$2,250
Columbarium Niche	\$2,697	\$2,697	\$2,697	\$3,000	\$3,750	\$4,500
Cremation in Ground with Wall Marker	\$2,111	\$2,111	\$2,111	\$2,500	\$3,125	\$3,750
Scattering with Common Marker	-	-	-	\$450	\$560	\$675
Scattering with no Marker	-	-	-	\$200	\$250	\$300

Hyphen indicates Right of Interment did not apply, interment option was not available previously, or is no longer offered

Revenues from all sources (excluding PCF contributions and PCF interest earned) are projected to accrue as follows:

- Peak gross annual revenue of \$2.9 million in 2040.
- \$47.7 million revenue accrual over 30 years (2018-2047).

Revenue Projections

Revenue Source	2018-2027	2028-2037	2038-2047	30-Year Total
Rights of Interment Revenues	\$8,400,942	\$15,600,709	\$11,442,052	\$35,443,703
Interment Revenues	\$2,200,194	\$4,113,148	\$3,400,318	\$9,713,660
Marker Fee Revenues	\$586,347	\$1,055,956	\$856,835	\$2,499,138
Total Revenues (Gross)	\$11,187,482	\$20,769,814	\$15,699,205	\$47,656,501
Avg. Per Year	\$1,118,748	\$2,076,981	\$1,569,920	\$1,588,550

OPERATING COSTS

Operating costs are assumed to increase at an average annual rate of 2%. While most costs are expected to end when interments largely end in 21 to 31 years, there will be some ongoing operating costs. Those costs are expected to continue to escalate at 2% per year.

Annual operating costs are expected to be approximately \$500,000 in 2019. Annual costs are projected to peak in 2042 at \$1.38 million. Once the Cemetery is at capacity (2048), annual operating costs are expected to fall to approximately \$240,000.

CAPITAL RESERVE FUND

The Capital Reserve Fund, which can be used to fund capital improvements to the Cemetery, had a balance of approximately \$270,000 at the end of 2018. The expansion plans for Riverview Cemetery are estimated to cost \$9.8 million, which would equal \$15.5 million (assuming 2% annual cost escalation) in 2041, the year the expansion would need to begin.

The increased prices in the Planning for Growth scenario would generate a Capital Reserve Fund totaling \$15.4 million by 2041. This projection is based on a conservative annual interest rate of 1.9%; even a slight increase in the rate would positively affect the Capital Reserve Fund balance. The balance would be sufficient to pay for initial expansion costs of Riverview Cemetery, and potential land acquisition. By 2047, the Capital Reserve Fund would total \$17.5 million before any expenditures for Riverview Cemetery.

PERPETUAL CARE FUND

The Perpetual Care Fund (PCF) had a balance of approximately \$2.3 million at the end of 2018. In the Planning for Growth Scenario, fees are increased and the Perpetual Care Fund allocation is set at 10% for columbarium niches and 25% for all other interment types. With these allocations, the PCF would have \$17.1 million by 2047. In 2047, the PCF would generate \$426,000 of interest, of which \$240,000 would be used to cover operating expenses and the remainder would be reinvested for future cemetery maintenance needs. By 2073 (25 years after the Cemetery reaches capacity), operating costs would be \$391,000 and interest from the PCF would be \$536,000.

SUMMARY OF FEE AND SERVICE RECOMMENDATIONS

The following are the fee and service recommendations for the Planning for Growth Scenario:

- › Increase right of interment and interment fees for current and former residents.
- › Offer tiered pricing by residency status for cremation options – 25% increase for former residents and 50% for non-residents.
- › Retain PCF interest in the PCF account rather than diverting it to annual operating and maintenance costs until the cemetery has reached capacity.
- › Adjust Perpetual Care Fund to 10% for Columbarium Niches and 25% for all other interment types so ongoing operations and maintenance fees are covered for at least 25 years after the Cemetery reaches capacity.
- › Discontinue sale of single depth burial plots.
- › Discontinue discounted rates on side-by-side niches.



Principles

Principles for the concept plans were defined based on the City's higher-level vision, mission, values, goals, and strategic directions, as well as analysis of the sites, and input from stakeholders:

- › Maximize interment space and efficiency to provide the cemetery services needed by Coquitlam residents.
- › Offer a variety of ways to inter and honour the deceased.
- › Consider adjacent residential development.
- › Respect the character and beauty of Robinson Memorial Park Cemetery.
- › Consider sustainability in the planning and design of cemeteries.
- › Design the Cemetery to be inclusive of the diversity of cultures and faiths in the City.
- › Support accessibility for all ages and abilities.
- › Provide interment options that address current needs and anticipated future trends.
- › Support opportunities and comfortable spaces for contemplation, walking, seating, and small gatherings to optimize the use of public amenities.
- › Balance the preservation of green space with community use.
- › Design the site with consideration for servicing and maintenance needs.
- › Establish a sustainable funding plan for cemetery capital development, operations, and infrastructure maintenance and renewal.



Cemetery Concept Plans

ROBINSON MEMORIAL PARK CEMETERY

The concept plan for the expansion of Robinson Memorial Park Cemetery includes the following key features:

North Portion of Cemetery

- new narrow, one-way asphalt road connecting the existing road and Robinson Street through the Robinson Memorial Forest;
- three types of full interments in the north portion of the site: traditional burial plots, green burial triple-depth plots with native vegetation and common marker, and green burial double-depth plots with individual marker;
- infill of traditional burial plots where space is available in Cedar Garden and Hemlock Garden;
- cremated remains plots under street trees (eight plots per tree), which could be sold as family estates;
- new columbarium walls along the west perimeter in front of a hedge;
- new columbarium pedestals set within trees;
- seating area with concrete pavers and two benches;
- path looping around green burial area; and
- a storage area enclosed by a solid wood fence.

South Portion of Cemetery

- removal of Road C and development of traditional burial and cremated remains plots;
- infill of pallbearer walkways with traditional burial plots where space permits, and cremated remains plots between walkways that are too narrow for full burials;
- two memorial walls with space for names for scattering and cremation (urn) interments;
- memorial boulders for cremated remains; and
- narrowing of Road A to a walkway and replacement with traditional burial plots.

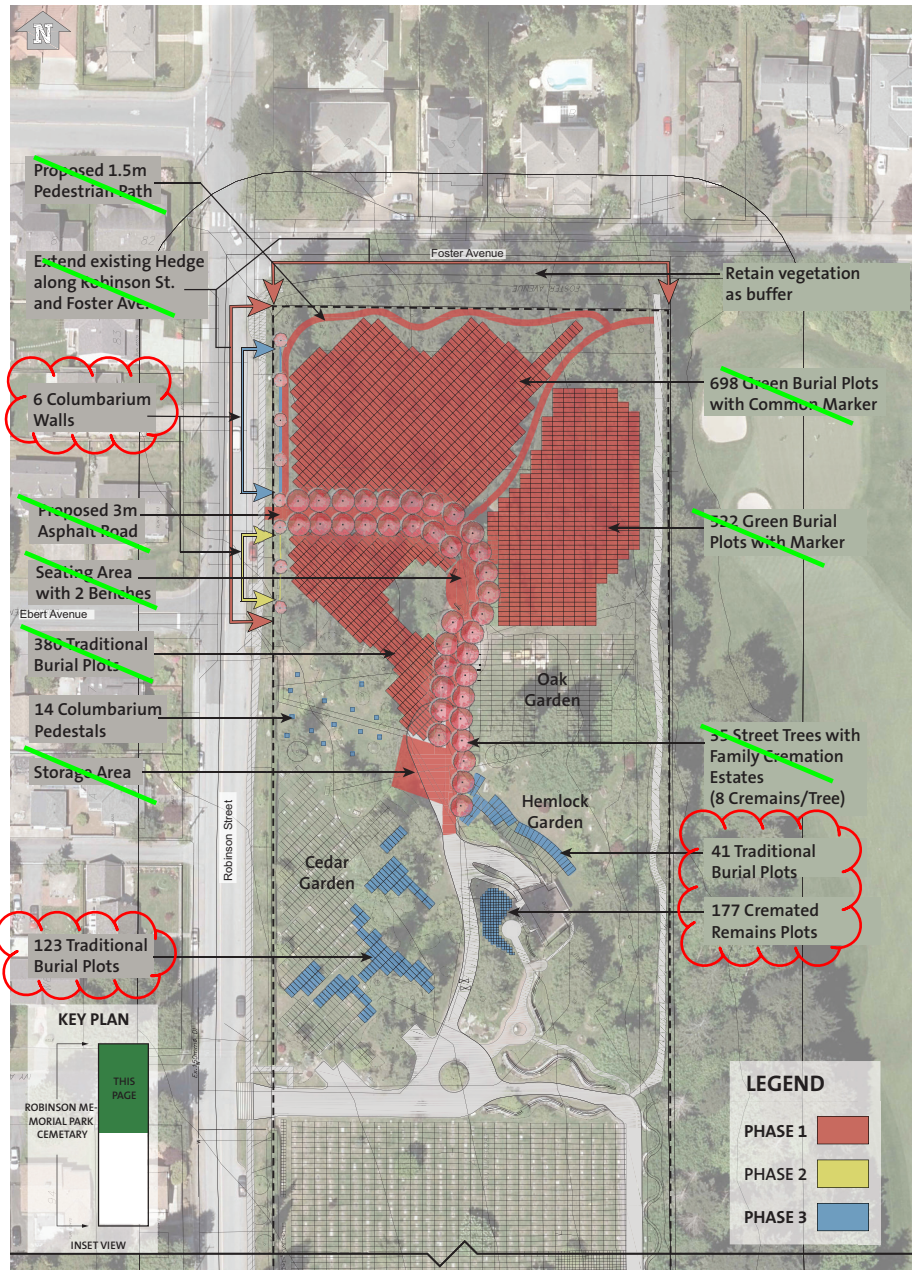
The current cemetery administration building is in excellent condition, and is expected to require minimal reinvestment over the remaining life of the Cemetery. At capacity, the City may choose to accommodate further interments on the site of the cemetery building.

The concept plan is designed to be built in three phases. The following are the estimated construction costs in 2018 dollars:

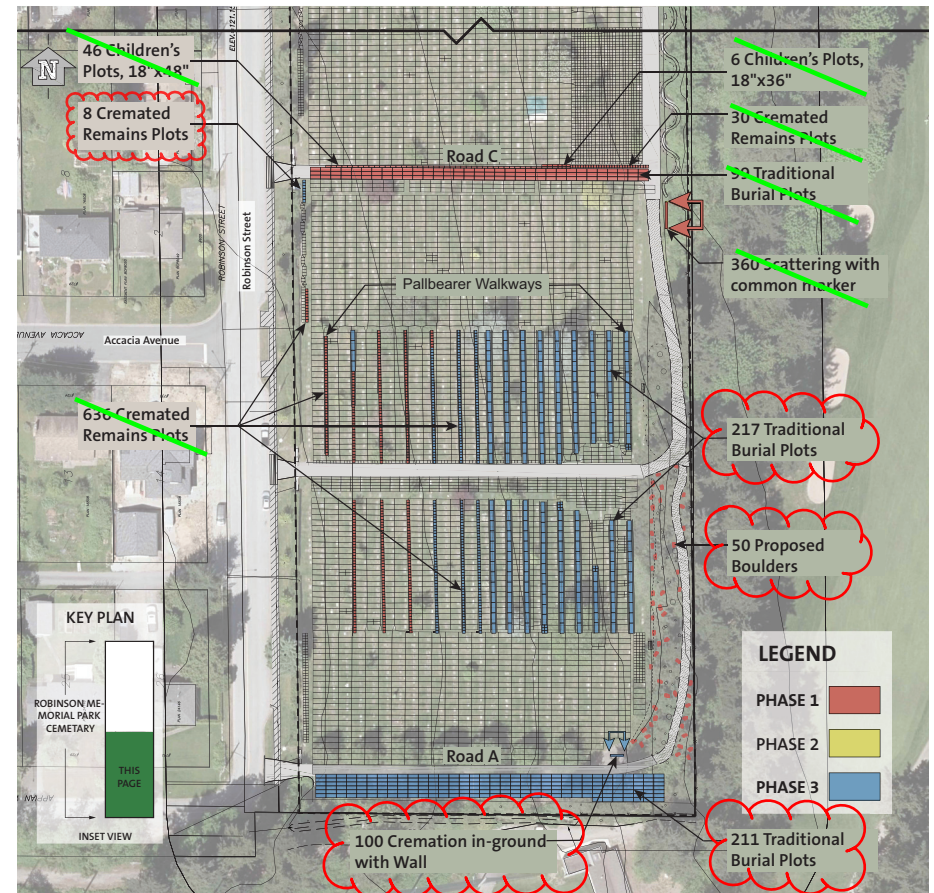
Capital Cost Estimate for Robinson Memorial Park Cemetery Improvements

	YEAR COMPLETE	COST
Phase 1	2020	\$2.8M – \$3.8M
Phase 2	2023	\$300,000 - \$400,000
Phase 3	2030	\$3.0M - \$4.4M
TOTAL		\$6.1M - \$8.6M

Concept Plan for Robinson Memorial Park Cemetery (north)



Concept Plan for Robinson Memorial Park Cemetery (south)



RIVERVIEW CEMETERY

Alternate Cemetery Site Scan

Several key criteria were used for an initial, high-level scan of potential new cemetery sites in Coquitlam:

- ▶ good road access;
- ▶ low to moderate slopes;
- ▶ land that is not environmentally sensitive;
- ▶ reasonable distance from incompatible land uses; and
- ▶ geotechnical stability and permeable surface and subsurface that are easily excavated.

Several sites were identified for their potential to serve as an alternate cemetery site. The conclusion of the analysis was that Riverview is the only alternate site worthy of consideration in the medium term. In the long term, other options may become available, potentially through a Crown grant.

The concept plan for Riverview Cemetery provides an approximate indication of its capacity should the cemetery become available for City use. The plan includes memorial monuments related to the cemetery's past, traditional and green burial plots, columbaria, space for scattering gardens, a perimeter loop path, and a small outdoor gathering space.

Concept Plan for Riverview Cemetery





Operating Model Analysis

In the initial stages of this project, as part of the consideration of alternate cemetery sites, the study team considered various service delivery models. The following options were considered but they were dismissed due to lack of interest or feasibility: partnership with another municipality, partnership with a private cemetery operator, partnership with a faith-based institution.

The current administration model includes 1.0 full-time equivalent (FTE) staff person for frontline cemetery administration and 0.5 FTE at the supervisory level. This level of

staffing for administration and sales has been adequate to date, and it is anticipated to be adequate for the next five years.

The current operations model includes 1.6 FTEs to deliver interments and landscape maintenance. When compared with other municipal and private cemeteries in Metro Vancouver, Robinson Memorial Park Cemetery is on the low end of horticulture and lawn maintenance. Considering this, and the planned expansion, additional staffing to improve landscape maintenance and to build capacity should be considered.

Implementation Plan

Implementation Plan Action Items

	Short Term (0 – 10 years)	Medium Term (11 – 20 years)	Long Term (21 – 30 Years)
Capital Projects	<ul style="list-style-type: none"> › Prepare a detailed design for Robinson Memorial Park improvements – Phases 1 & 2 › Construct Phases 1 & 2 of Robinson Memorial improvements › Design and implement improved wayfinding 	<ul style="list-style-type: none"> › Prepare a detailed design for Robinson Memorial Park improvements – Phase 3 › Construct Phase 3 of Robinson Memorial Park Cemetery improvements › Plan for the future of the Robinson Memorial Park Cemetery building 	<ul style="list-style-type: none"> › Implement the replacement or redevelopment of the Robinson Memorial Park Cemetery building › Develop a second cemetery site (Riverview or other site)
Approximate Capital Costs*	\$3.2M - \$4.3M	\$3.1m - \$4.5m	\$6.0m – \$14.0m
	2019 - 2020	Future Priorities	
Cemetery Operations	<ul style="list-style-type: none"> › Enhance landscape maintenance and horticultural displays › Revise the Cemetery Bylaw to allow for new cemetery products and interment requirements** › Adjust current fees and set fees for new products › Move cemetery fees from the Cemetery Bylaw to the City’s Fees and Charges Bylaw › Repeal the Robinson Memorial Forest Bylaw No. 3102 to remove the current restrictions on use of the northern portion of the cemetery site 	<ul style="list-style-type: none"> › Monitor interment trends and sales to adjust inventory requirements, prices and reserve contributions as necessary › Continue to explore options for the City’s use of the Riverview Cemetery with the Province › Revise Cemetery Bylaw as required › Review administrative and operational staffing as well as equipment resource requirements in conjunction with planning for a second cemetery site › Explore opportunities to partner with other communities or agencies for future cemetery sites 	

* Approximate site development costs are in 2018 dollars, not including potential land acquisition costs

** Cemetery Bylaw should address both types of green burial, including casket requirements, burial depths, markers, and surface treatment; cremation family estates and cremated remains scattering with common marker, including depths and markers; cremated remains interments within a full burial plot; and sustainable family burial, as these services become available





CITY OF COQUITLAM

Parks, Recreation and Culture Services
3000 Guildford Way,
Coquitlam, BC V3B 7N2