

LIVERPOOL CITY COUNCIL

PLANNING AND GROWTH

ORDINARY MEETING

30/10/2013

ITEM NO:	GMPG 01	FILE NO:	2013/2409
SUBJECT:	CEMETERIES AND CREMATORIA - DRAFT AMENDMENT TO LIVERPOOL DEVELOPMENT CONTROL PLAN 2008 AND DRAFT AMENDMENTS TO LIVERPOOL LOCAL ENVIRONMENTAL PLAN 2008		
COMMUNITY STRATEGIC PLAN REFERENCE:	LIVEABLE SAFE CITY		

EXECUTIVE SUMMARY:

Sydney's population is growing and ageing and with that comes pressure to provide additional cemeteries and crematoria to meet future demand. However, over the past few years Council has received multiple development applications for cemeteries and crematoria in locations which jeopardise primary agricultural land and planned future residential growth areas.

In response to the Department of Planning and Infrastructure rejecting Council's proposal to prohibit cemeteries and crematoria across the LGA, Council officers have undertaken a thorough review of the current planning controls, relevant policies, strategies and best practice guidelines for cemeteries and crematoria. This also included an investigation into: demand for burial spaces; supply of burial spaces; potential environmental and health impacts; and preferred siting requirements.

Based on this investigation, which found that Liverpool City Council now has surplus burial space to meet the needs of Liverpool and the south west region until well past 2031, draft amendments to the Liverpool Local Environmental Plan 2008 (LLEP 2008) and Liverpool Development Control Plan 2008 (LDCP 2008) are being proposed. These will ensure that any cemeteries and crematoria proposed in the future are appropriately sited and designed.

The proposal is to make cemeteries and crematoria permissible within all industrial zones, whilst making them prohibited in all rural, business and recreational zones. Additionally cemeteries and crematoria are proposed to be included as additional permitted uses on all existing and approved cemetery sites. It is recommended that the Planning Proposal be forwarded to the NSW Department of Planning and Infrastructure for Gateway determination and that the Draft Development Control Plan be endorsed for public exhibition.

DETAILED REPORT:

INTRODUCTION

There are important factors to consider in the siting and layout design of cemeteries and crematoria to ensure environmental and health impacts are appropriately managed.

This report presents the findings arising from the review of cemeteries and crematoria in the broader New South Wales, Sydney Metropolitan, South Western Sydney and local contexts, and provides recommendations for their land use permissibility or prohibition in the Liverpool Council local government area (LGA). The proposed changes will also ensure that Liverpool's planning controls align with current best practice.

BACKGROUND

Since 2010 Council has received multiple development applications for cemeteries and crematoria. There are currently 80,000 approved burial plots and over 45,100 approved ash interments in rural zonings located around Greendale and Bringelly. This is significantly in excess of the amount of burial space required to meet the needs of both Liverpool and the South Western Region till 2031.

The four development applications which have been approved since 2010 are highlighted below. Further information on each individual application is found in the appendix to the planning proposal, attachment 1.

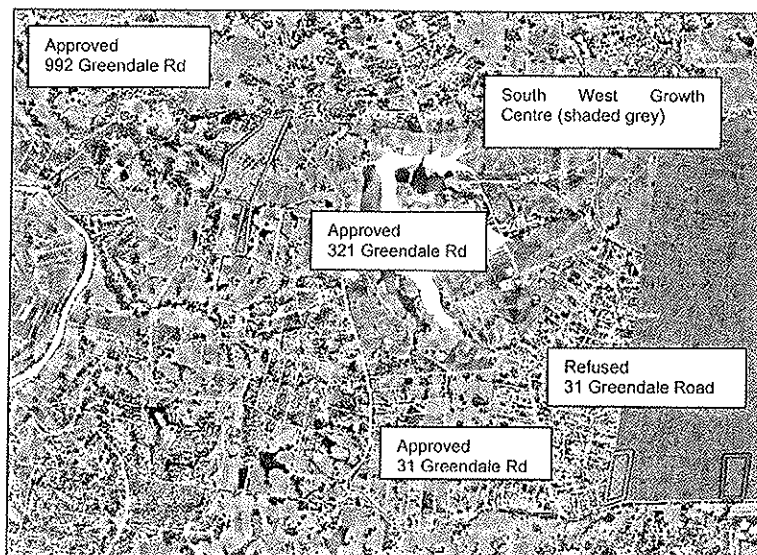


Figure 1: Location of Cemetery/Crematoria Development Applications

In response to these applications, in March 2012 a planning proposal to amend Liverpool Local Environmental Plan 2008 (LLEP 2008) was prepared to prohibit the development of cemeteries and crematoria in primary agriculture rural areas. This was submitted to the Department of Planning and Infrastructure (DP&I) but was not supported due to insufficient consideration of broader planning issues.

To address the DP&I's concerns, Council officers have undertaken a further review of cemeteries and crematoria planning controls considering the broader metropolitan context and current best practice.

DEMAND FOR BURIAL SPACE

In the Sydney Metropolitan Area there are eight Crown cemeteries, around 100 local government cemeteries, eight private cemeteries, and 10 crematoria providing a combined total of 680,000 burial spaces. It is estimated that by 2020 around 435,000 burial spaces will still be available in the existing cemeteries. However, by 2035 all eight Crown land cemeteries are expected to be full.

In the South Western region of Sydney over the next 18 years around 16,115 burials and 32,000 cremations are expected, of which 5,000 burials and 10,000 cremations will be in the Liverpool area. Given that 80,000 burial plots have been approved within the Liverpool LGA alone, it is very unlikely that additional burial space will be needed over the next 30-50 year period to meet the needs of the South West region.

There is now a clear over-supply of cemeteries and crematoria in the LGA to meet the needs of Liverpool and the South West region.

An explanation of these calculations and the current legislative environment that surrounds cemeteries and crematoria are included in the planning proposal, Attachment 1.

STRATEGIC CONSIDERATIONS

The draft Metropolitan Strategy for Sydney 2031, and the Metropolitan Plan for Sydney 2036, both identify cemeteries and crematoria as important social infrastructure.

The South West Subregional Strategy provides more specific detail on the planning of cemeteries and crematoria. It indicates that the Department of Lands has the lead responsibility for the State Government's role in the supply and management of burial space and will work with the DP&I to establish site selection criteria.

The draft South West Subregional Strategy also states that the resource lands are to be protected, particularly given the contribution of rural activities and the agricultural industry to regional economies and their important in terms of lifestyle and community identity.

As cemeteries and crematoria generally utilise the land in perpetuity, the potential for other land uses on these sites in the future is limited. It is noted that surplus cemeteries and crematoria are located within the business zone B6 and on primary agricultural areas. The intent of primary production land is to promote the use of rural land for sustainable primary industry production. Cemeteries and crematoria uses do not correlate with the short, medium and long term objectives of rural areas on prime agricultural lands.

In addition to restricting primary agricultural land, recent cemetery approvals are adjacent to residential uses, including one within a designated growth centre. This will undoubtedly create land use conflicts. Furthermore, the Subregional Strategy identifies half the region as a water supply catchment. This should place strict environmental controls on areas where cemeteries and crematoria are permissible.

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The best practice and literature review found that it is appropriate to separate cemetery and crematoria uses from residential uses for environmental, health and amenity reasons. Given this, because residential uses are permissible in B6 Enterprise Corridor (as shop top housing), RU1 & RU4 primary production zones, and in RE 1&2 public and private recreation (as camping or caravan grounds) it is proposed to remove cemeteries and crematoria as permissible uses in these zones.

The proposed changes will not result in a shortage of burial space as Liverpool has no short, medium or even long term need to provide additional burial space. Also, because cemeteries and crematoria will remain permissible with consent within all industrial zonings there is provision to meet any future demand.

The proposal also includes the addition of cemeteries and crematoria as additional permitted uses on all existing and approved cemetery sites, which will allow their continued function and potential future redevelopment.

Proposed Development Control Plan Provisions

To complement the proposed amendments to LLEP 2008, best practice planning principles are also proposed to be implemented through a draft amendment to Liverpool DCP 2008, attachment 2. These will give proper consideration to environmental, health and amenity issues. These controls for cemeteries and crematoria will supersede the current controls and are intended to be publicly exhibited concurrently with the planning proposal. They will include controls which:

- Ensure principal access is from an arterial or collector street
- Provide for essential off-street parking provisions.
- Establish and maintain appropriate landscaping and screening consistent with abutting residential uses.
- Mitigate any adverse impacts through restrictions on hours of operation, lighting and signage.
- Encourage sustainable and environmentally friendly practices ('green burials').
- Promote the importance of cemeteries and crematoria as cultural and community places.

FINANCIAL IMPLICATIONS:

There are no immediate financial implications arising from this report for Council.

RECOMMENDATION:

That Council:

1. Forwards the Planning Proposal (Attachment 1) to the Department of Planning and Infrastructure for Gateway determination.
2. Endorses the Draft Liverpool Control Plan Plan 2008 amendments "Cemetery and Crematoria" (Attachment 2) for public exhibition.
3. Removes Section 9.13 in Part 5 of Liverpool Development Control Plan 2008 on adoption of the draft amendments.

SIGNED BY:

Toni Averay
Group Manager
Planning and Growth

- Attachments:**
1. Draft Cemeteries and Crematoria Planning Proposal (under separate cover)
 2. Development Control Plan Amendments

Attachment 2: Development Control Plan Amendments

Draft Amendment to Liverpool Development Control Plan 2008

The following draft is to be inserted into Part 1.1 of the Liverpool Development Control Plan 2008. Justification for each section is provided in red.

#. Cemeteries and Crematoria

Applies to:

This part will apply to all existing and proposed cemeteries, crematoria and development ancillary to cemeteries and crematoria within the Liverpool Local Government Area.

Background

Cemeteries and crematoria have significant planning and operational considerations particularly in regards to site selection criteria and environmental and health concerns

Justification: The new statement gives impetus to situational requirements and the environmental concerns arising from decomposition processes impacting onto adjacent land

Objectives

- a) To ensure that the operation of cemeteries, crematoria and funeral chapels does not have an adverse impact on adjoining land uses and the surrounding area;
- b) To encourage sustainable practice and operation of cemeteries and crematoria;
- c) To ensure the eventual incorporation of the appropriate sites of cemeteries into local open space networks;
- d) To ensure cemeteries and crematoria functions are located on appropriate sites;
- e) To ensure amenity and environmental concerns are addressed;
- f) To ensure that uses locate on roads with the capacity to accommodate probable traffic generation;
- g) To encourage these types of developments on larger lots to limit the extent of adverse impacts on neighbouring properties; and
- h) To encourage the expansion of cemeteries in adjacent lots to existing cemeteries or crematoria uses.

Justification: The objectives of the amendment to the DCP are included to promote sustainability and long term functionality, to incorporate the site into open space networks, promote visual amenity, and the community's safety, health and amenity

prosperity, promote traffic safety to avoid the proliferation of numerous small cemeteries in an area

Controls

Statutory Requirement

1. Any Development Application must be forwarded to the NSW Government Agency known as the Cemeteries and Crematoria NSW (the Cemeteries Agency), as established by the current Draft Cemeteries and Crematoria Bill 2013 or updated versions thereof, for comment.
2. The applicant must also demonstrate compliance to:
 - NSW Health Guidelines for the Funeral Industry published in September 2004 that provides advice to the industry on following the Public Health (Disposal of Bodies) Regulation 2002;
 - Office of Fair Trading booklet A Consumer's Guide to Funerals published in November 2004 to provide advice to consumers on organise a funeral;
 - Safe Working Practices in Cemeteries & Crematoria in NSW;
 - Service Standards in Cemeteries and Crematoria;
 - Guidelines on Above Ground Interment in NSW;
 - Guidelines for Planning an Exhumation including Removal of Coffin from Cemetery;
 - Policy for Above Ground Interment;
 - Policy for Compressed Cement Sheeting Liners for Reduced Depth Liners;
 - Guidelines on Cemetery Ornamentation; and
 - Guidelines on Burial or Cremation of Pathological Samples in NSW.
3. The controls contained in this part are in addition to any applicable development controls contained within the Liverpool DCP 2008. Any proposed crematoria activity shall demonstrate compliance with the most recent publication of the Australasian Cemeteries and Crematoria Association's *Environmental Guidelines for Crematoria and Cremators*.

Note: If cremators are proposed to be used for purposes other than the cremation of human remains, such as the incineration of biomedical or cytotoxic wastes, operation considerations may require maintenance of higher chamber temperatures, increased buffer zones and implementation of specialised pollution control mechanisms.

Justification. These are the mandatory and recommended Australian & New South Wales Guidelines thus their demonstrated compliance is necessitated in all development applications of this type

Site Suitability for Cemeteries:

1. Cemeteries are preferably sited in locations that have:
 - i. A gentle slope;
 - ii. Are with deep acid soil with an intermediate range of properties such as a clayey sand or sandy clay;
 - iii. Where the base of all burial pits will maintain a minimum of one metre clearance above the highest level of the natural water table.

- with any variability of the water table taken into account. If in course sandy or gravelly soils an increase to 2 metres is required.
- iv. That the base of all burial pits maintain a minimum one metre of subsoil below the bottom of the burial pit (i.e. the base of the burial pit must be at least one metre above solid rock).

The most useful soil type to maximise retention of degradation products is a clay-sand mix of low porosity and a small to fine grain texture. Sites with this soil type are to be encouraged.

2. Cemeteries must not be located on any land subject to inundation in a 1 in 100 year flood, on floodplains, swamps, cliff lines, on the lowest part of catchment areas, on shallow soils or near drainage areas to lakes and waterways.
3. Cemeteries should locate on a site with a minimum of 15ha available for burial plots and memorial walls. Landscaped areas, setbacks, parking, driveways and turning areas, internal congregation areas, places of public worship, and areas where ground water is within 3m of the surface will not be counted toward the minimum 15ha site area.
4. A geotechnical, geo-hydrological and analysis detailing soil typology, flood liability, proximity to water courses and ground water and variances in water levels, and estimated travel path and lifespan of bacteria and viruses from the decomposition process, as well as an analysis of the proposed site is to be provided with the Development Application.

Justification: These controls have been drafted in accordance with the recommendations of the literature review to enable assessment officers to assess the full breadth of impacts sufficiently.

Setbacks

1. A minimum buffer zone of 100 metres is to be provided between a crematorium's emission stack and residential uses. This minimum requirement can be expanded to 200 metres subject to the assessment of dispersion models (see Noise and Air pollution for further details).
2. Cemetery buildings and burial plots are to be sited at least 20m from a public street and at least 15m from any side or rear boundary.
3. A non-buildable separation of 5 metres shall be observed for cemetery projects located next to commercial, industrial or residential zoned land or uses.
4. For cemeteries adjacent to waterways or swampland a separation of at least 20 metres is to be used.
5. Human or animal remains must not be buried within 250 metres of any well, borehole or spring from which potable water supply is drawn.
6. Places of interment should be at least 30 metres away from any other spring or watercourse and at least 10 metres from any field drain.

7. No burials should lie at the cemetery boundary- a separation zone between the site boundary and burial pits applying to the whole of the site will be applied according to:
 - i) 15 metres in sandy soils, if the boundary is one a down gradient or in a topographic low than 20 metres separation is to be used.
 - ii) If located in sandy soils with a steep gradient a minimum distance of 25 metres is to be used.
 - iii) 10 metres in clayey soils, if the boundary is down gradient or on a topographic low than 15 metres is to be used.
 - iv) 5 metres in heavy clay soils, if the boundary is down gradient or on a topographic low a separation distance of 10metres is to be used.

Justification: These controls have been drafted in accordance with the recommendations of the literature review to enable assessment officers to assess the full breadth of impacts sufficiently

Landscaping and Fencing

1. A berm is to be provided around the property and must be 1m high and 3m wide Landscaping is to be provided over the top of the berm.
2. Any proposed cemetery must have an adequate water supply to ensure the ongoing maintenance of landscaping and to assist in the operation of the site.
3. The site plan submitted with any Development Application must show areas allocated for the planting of trees, shrubs, plants and for other functional and decorative elements such as monuments, sculptures, fountains and benches.
4. No more that 60% of the site area shall be used for underground interment in order to retain a park-like character.
5. Appropriate road, pedestrian and car parking networks shall be incorporated into the planning design an shown on the site plan.
6. Native deep-rooting plants and border plants are to be included within the design as well as within and around the cemetery site to decrease the water table, reduce runoff, absorb viruses and bacteria, and provide a type of visual screening
7. No separation zone or setback shall be used for parking areas or the like.
8. All landscaping and fencing is to be consistent with the character of the area.
9. Retain as much existing vegetation on site as possible.
10. Wherever on-site ponds, lakes or water features are proposed they are to be lined with impermeable linings and ensure that overflow does not occur They should be located fully on-site.
11. All in-cemetery artificial ponds, lakes and dams are to be located at least 20 metres from the nearest interment to prevent build-up of potential pathogenic organisms.

Justification: This landscaping controls have been established to promote a park like character and high amenity value, to promote native vegetation and provide a type

of natural screening to adjacent lots to provide a vegetation barrier to block the path of pathogens and create a visual screening to reduce the risks of water features containing a concentration of substances from decomposition that are considered harmful to the environment.

Layout Requirements

1. Building and built elements of the development including monuments, mausoleums, columbarium walls and headstones should aim to be located on parts of the site where these structures are not visible from neighbouring dwellings, principle private open or from roads.
2. The scattering of cremated ashes is to be located away from the outer parts of the cemetery to prevent off-site migration of viruses, bacteria and heavy metals.
3. The scattering of ashes should not occur on land within an overland flow path. Protection of this area should be provided through the use of bunds or levees.

Justification: These controls have been included to protect and respect the visual amenity for residents and visitors into the area to prevent high levels of metals or phosphorus exiting the site and to provide natural barriers to prevent cremated remains contaminating neighbouring properties

Car Parking and Access

1. A traffic study is to be included with any Development Application for a cemetery or crematorium. This study should determine whether or not a turning lane or slip lane is required to enter the site.
2. Sufficient sectional signage is to be located within the site and signage site plan is to be located at the entrance. Signage is to be detailed in the plans lodged with any Development Application.

Justification: These controls have been included to promote traffic safety and to ensure sufficient signage is provided to facilitate the ease of accessibility and way finding through the site

Noise and Air Pollution

1. Any application proposing a crematorium stack or flue must be accompanied by dispersion modelling detailing the prevailing winds and seasonal conditions, adjacent buildings and uses, local topography, and the likely direction of drift of odour. The minimum buffer zone may be increased from 100metres to 200 metres depending on the assessment of the dispersion modelling. Note: AUSPLUME version 6.0 (or the most updated version thereof) is the approved dispersion model for use in most applications in NSW.
2. Clearly audible noise should not be detectable beyond the site boundaries.
3. Emissions from cremators should comply with the criteria set out the *Environmental Guidelines for Crematoria and Cremators* issued by the Australasian Cemeteries and Crematoria Association.

Justification: These controls have been drafted in accordance with the findings of the literature review to ensure public and environmental health is considered in cemetery and crematorium Development Applications.

Operation and Management

1. The engineering report must address stormwater surface velocity and detail surface drains to intercept run-off water both before entering the subject site and exiting the site.
2. A Plan of Management must be submitted with a Development Application and must include details of the operation of use such as:
 - i) Proposed hours of operation;
 - ii) Population Needs Assessment that further burial space is required;
 - iii) Security measures;
 - iv) Lighting and signage;
 - v) Water supply and irrigation;
 - vi) Toilet and septic facilities
 - vii) In the case of perpetual burials, it must be outlined how the perpetual care would occur
3. The applicant is to demonstrate management strategies within the Statement of Environmental Effects or Environmental Impact Statement which aim to:
 - i) Minimise air pollution from crematoria emissions stack;
 - ii) Measures that prevent odour and smoke;
 - iii) Prevent soil and ground water contamination arising from the disposal of unwanted cremated remains;
 - iv) Minimise environmental health risks, particularly in relation to the potential risks to adjacent land uses.
 - v) Minimise discomfort to neighbours adjacent to crematoria and/or cremation furnaces;
 - vi) Lessen the visible impact of crematoria;
 - vii) Improve efficiency of cremation processes through energy savings.

Justification: These controls have been drafted to ensure requirements of the Cemeteries Agency will be met and to ensure operational issues are identified sufficiently to allow proper assessment to occur

The following is to be deleted from Liverpool Development Control Plan 2008.
Justification for each section is provided in red.

Part 5 Rural and Environmental Zones

Clause 9.13 "Cemeteries, Crematoria and Funeral Chapels" is to be deleted.

Justification: The deletion of this clause will be appropriate should the prohibition of cemeteries and crematoria in rural zones in the Liverpool Local Environmental Plan 2008 be successful

