

JRPP Reference No.	2010SYW027
Development Application No.	DA-1133/2010
Proposed development	Multi denominational lawn cemetery and associated works
Address	Lot 1 DP 599308 321 Greendale Road, Greendale
Applicant	Farah Georges
Land Owner	Peter Georgopoulos



(Image source: architectural drawings supplied by applicant for proposed cemetery at 321 Greendale Road, Greendale)

1. EXECUTIVE SUMMARY

Council is in receipt of a development application proposing a multi-denominational lawn cemetery and associated works at Lot 1 DP 599308, 321 Greendale Road Greendale.

The subject site is zoned RU1 – Primary Production under Liverpool Local Environmental Plan 2008. The proposed use which forms part of this application for a cemetery is currently a permissible form of development with consent.

The proposed development has a capital investment value in excess of \$10 million. As such the Sydney West Joint Regional Planning Panel (JRPP) has the function of determining the application in accordance with Section 23G of the Environmental Planning and Assessment Act 1979 (Saved Provisions).

The development application originally proposed a total of 71,000 burial plots and was previously considered by the Sydney West JRPP at its meeting of 16 July 2011. At its meeting of 16 July 2011, the Sydney West JRPP resolved to defer the determination of the application in accordance with the following:

1. *The applicant to provide additional information relating to detailed soil and groundwater analysis based on additional sampling and on proposed cut and fill levels.*
2. *Advice relating to whether traffic safety was considered in the RTA analysis and in the Independent traffic report.*
3. *The applicant the opportunity to submit an amended design, securing better integration with the undulating character of the locality by redesign of the proposed entryway and fence, retention of the dam located closest to Greendale Road in its present form and no burial plots being located between that dam and Greendale Road.*

A copy of the meeting minutes are contained within the attachment 1 (under separate cover).

1.1 Applicants actions

The applicant has amended the application in response to the Sydney West JRPP resolution. In summary the amendments have included:

- Amended plans which have removed burial plots within the front portion of the site which has seen a reduction of burial plots from 71,000 to 60,000.
- Amended plans which have reduced the site area available for burial plots to approximately 13.34 hectares.
- Amended plans which have amended the internal road layout and retention of the major dams on the site.
- Amended plans which provide section plans that illustrate only single burial plots are proposed.
- Revised specialist geotechnical, groundwater and leachate issues.

The amendments to the proposal are canvassed in more detail later in this report.

1.2 Councils actions

Further to the Sydney West JRPP meeting of 16 July 2011, the following actions have been undertaken by Council:

- A submission was made to the Department of Planning and Infrastructure on 29 June 2011 requesting that a moratorium on all current and future applications for cemeteries and/or crematoriums in the South West Growth area and Greendale Road area.
- A report regarding the cumulative impact of the operation of all currently proposed cemeteries was completed. The report focussed on the performance and condition of the local road network and the attainment of the objectives of the RU1 – Primary Production zone.
- This report was considered and adopted by Council at its meeting on 17 October 2011 to guide all current and future development applications for cemeteries. A copy of this report and Council resolution is contained within Attachment 2 (under separate cover).

- Council's Strategic Planning department prepared a report considered by Council at its meeting of 23 September 2011. Council at its meeting of 27 February 2012 resolved to prepare an amendment to Liverpool Local Environmental Plan 2008 to prohibit cemeteries in the rural zones. Cemeteries will remain a permissible land use in all of the industrial and RE1 and RE2 zoned land in Liverpool.

1.3 Exhibition of the amended proposal

Upon submission of the amended proposal and revised specialist reports, the proposal was re-exhibited from 16 November 2011 until 27 January 2012.

A total of 41 submissions were received in response to the amended proposal. This is in addition to the 216 submissions received by Council in the earlier exhibition periods for this development application.

Key issues contained within the submissions include:

- The suitability of the site.
- Impact of the development on the natural environment, specifically ground water and surface water issues.
- Loss of amenity associated with the increased traffic and vehicle movements.
- Suitability of the local road network to cater for the proposed development and other similar proposals along Greendale Road.

1.4 Key issues with amended proposal

Assessment of the amended application has been completed in accordance with Section 79C of the Environmental Planning and Assessment Act 1979 (the Act) and the following issues have emerged as a result of this assessment process:

- Access, traffic and road safety issues.
- Site design.
- Attainment of zone objectives and compatibility with sites context.
- Site area available for burial areas.
- Attainment of Water Allocation Licence.
- Perpetual care of the site.

1.5 Report recommendation

The assessment of the amended proposal has found that a number of amendments have been made to the proposal which ensures that the site in its design and layout is more sympathetic with the rural landscape qualities of the site and the locality. This has been achieved through an amended road layout which responds to the undulating nature of the site and the reduction of all burial areas within the entire front portion of the site (access

handle). The applicant has provided further details which also clarifies that the cemetery is for a lawn cemetery and the single depth burials are only to occur.

The amended application is also accompanied by revised specialist reports which demonstrate that the proposal will have minimal impacts on the natural environment and that should the development application be approved appropriate conditions could be imposed to ensure that any impacts are appropriately managed and mitigated.

However as a consequence of the amendments to the proposal to address the concerns raised in relation to visual impacts and securing a responsive site design that is appropriate for the site conditions, the proposal has reduced the area available for burials within the site.

The site area available for burials has been reduced to approximately 13.24 hectares which does not comply with Council's controls contained within Liverpool Development Control Plan 2008 (LDCP 2008). Controls within LDCP 2008 require a site area available for burials of 15 hectares.

Council in the assessment of the amended application has given significant weighting to this control within LDCP 2008. It is noted that both Council and the JRPP have previously refused other applications for cemeteries along Greendale Road for non-compliance with this control.

Given that the 15 hectare burial area requirements within LDCP 2008 were adopted following consultation with interested parties including the affected community and that this control has been consistently applied in similar applications it is considered that significant weighting be given to this control in the determination of this application.

It is further noted that Council has both resolved to proceed with an amendment to LLEP 2008 to prohibit cemeteries in the rural zones and adopted a report which supports the attainment of zone objectives in the rural zones in relation to the protection of rural lands for agricultural purposes.

The above Council resolution raises issues regarding the public interest that have been given consideration of the amended proposal. Council's strategic planning direction of to prohibit cemeteries in rural zones should be given weight in the determination of this application pursuant to public interest considerations prescribed by Section 79C of the Act.

Given the above, it is recommended that the development application proposing a multid denominational cemetery at Lot 1 DP 599308, 321 Greendale Road Greendale be refused.

2. SITE AND SURROUNDS

The subject site is identified as Lot 1 in DP 599308, 321 Greendale Road Greendale. The subject site is a battle axe shaped lot with a total site area of 40.04 hectares. The site has a frontage of approximately 104.56m to Greendale Road which opens out to a width of approximately 450m.

The site is undulating and contains a number of large dams. The site is considered to have rural landscape qualities and is currently used for grazing purposes.

The site is surrounded by rural zoned land for primary production purposes. The subject site and its immediate locality is not located within the Sydney West Growth Centres. Two existing poultry farms adjoin the site to the north east and south east.

The subject site is illustrated in Figure 1 below.



Figure 1: Aerial photograph of the subject site

3. STATUS OF OTHER CEMETERY APPLICATIONS

Council resolved to refuse DA957/2010 for a cemetery at 31 Greendale Road, Bringelly. The applicant has lodged a Class 1 application in the Land and Environment Court appealing against the refusal of the development application.

The Sydney West JRPP resolved to refuse DA394/2011 for a cemetery at 41 Greendale Road, Bringelly. The applicant has lodged a Class 1 application in the Land and Environment Court appealing against the refusal of the development application.

Council at its meeting of 28 May 2012 resolved to defend the refusal of both development applications. At the time of writing this report, no hearing date has been scheduled.

The location of both 31 and 41 Greendale Road, Bringelly in relation to the site the subject of this application is illustrated in Figure 2 below.



Figure 2: Location of 31 and 41 Greendale Road, Bringelly

4. DETAILS OF AMENDED PROPOSAL

The works proposed as part of the amended application are set out as follows:

- Retention of the existing dwellings buildings on site for use as an administration office, chapel, multi-functional condolences room, caretakers sheds and machinery storage;
- Carry out site preparation works, including the removal of identified trees shown on the landscape plan;
- Construction of an internal road network, provision of 370 kerb side car parking spaces and other types of infrastructure to service the demands of the cemetery;
- The area of internal roads has been reduced from 50,290m² to 25,500m²;
- Filling in of 1 dam and 2 ponds, retention of 5 dams including two (2) main dams;
- Provision of associated landscaping, including the creation of 20m wide perimeter buffer zones;
- Provision of fauna friendly boundary fencing;
- Retention of a critically endangered cluster of Forest Red Gum – Grey Box Woodland in the south-western corner of the site;
- The 60,000 plots are set out in groups and will be allocated to different denominations as the site is developed;
- Speed humps are provided throughout the internal road network to calm traffic movements;
- Solar energy devices provided to generate low level internal road way lighting of an evening;
- Capture and reuse of large amounts of overland stormwater;
- Allowance of overland stormwater water to flow through to neighbouring dam;
- The front fence will be retained to address the rural character of the area and act as a way-finding feature for cemetery visitors.

4.1 Stages of the development

The development proposes to be constructed in two stages. Stage 1 comprises site establishment works, roads, kerb and guttering, boundary and general landscaping, side and rear fencing, solar panels, road bollard lighting, storm water infrastructure, sewage treatment works, electrical and telecommunication works, irrigation, filling, reshaping and restructuring dams.

Stage 2 provides for the administration office, chapel and multi functional condolences room with sail covered outdoor gathering area, caretaker's office and machinery storage, outdoor gazebos and amenities.

4.2 Components of the development

The existing dwelling house and outbuildings that are to be converted are located on a rise in the property approximately 720 metres from the front property boundary

The estimate of 60,000 burial lots is approximate which the applicant has identified that it may be subject to variation as detailed design, operational demands and site constraints which may result in ongoing adjustment to plots yield.

The amended site plan illustrates that the first 500 metres of the site to the first dam will not to be used for burials in response to reducing any visual impacts on the locality and the wider locality. The amended site plan illustrates that the rest of the site will be dedicated to lawn burials. No above ground burials in crypts or memorial walls for ashes are proposed. This arrangement and style of cemetery has been chosen to minimise the visual impact of the development on the view from Greendale Road and from neighbouring properties and thus maintain the appearance of a rural landscape. A copy of the site plan is illustrated in Figure 3 below.

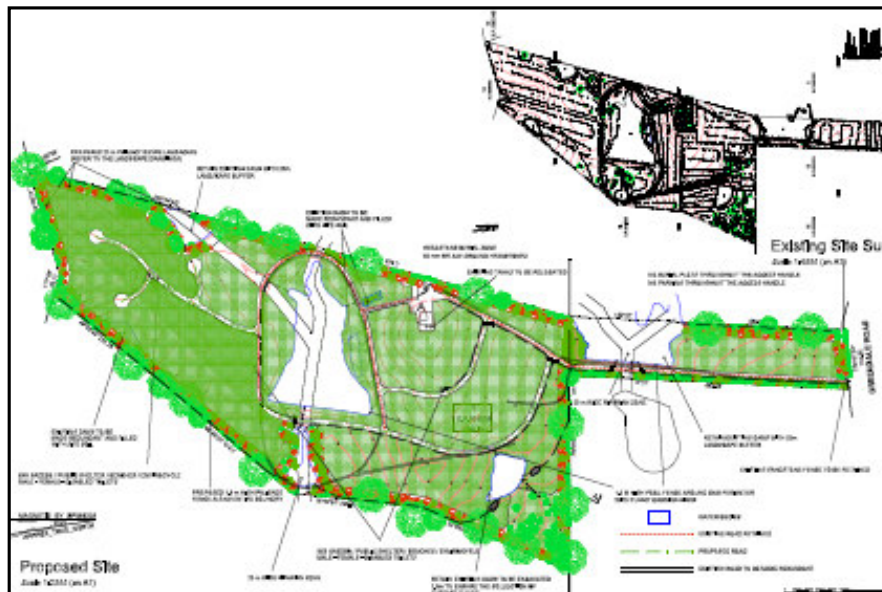


Figure 3: Site Plan for DA-1133/2010

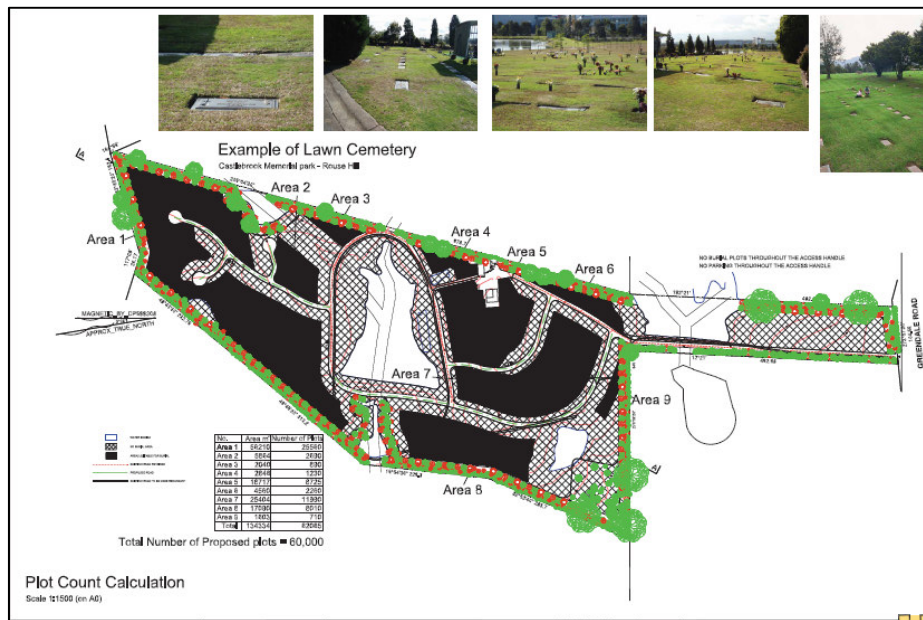


Figure 4: Burial Plot calculation

The development has been amended to be for single depth burial only. Headstones are to comprise of nameplates on a concrete base set 50mm below natural ground level.

As illustrated in the site plan a 20 metre wide landscaped buffer is to be provided around the perimeter of the whole site. The site contains a number of dams that will be removed, with the two larger dams being retained and remodeled into landscape features.

The development has been amended to retain the existing front fence which consists of an ornamental masonry entrance gateway with rural fencing adjoining. Palisade fencing 1.8m high will be provided to the remainder of the site.

On-site office hours will be 8.30am to 5.00pm Monday to Friday.

Details accompanying the development outline that the site is capable of accommodating approximately 370 car parking spaces on the assumption of parallel spaces along one side of the internal roads. An formal car parking area providing spaces for 10 car are provided in the vicinity of the administration building. The site plan illustrates that there is sufficient area in the vicinity of the administration building for additional car parking.

5. PLANNING ASSESSMENT

The amended application has been assessed against the relevant provisions as prescribed by Section 79C of the Act and based on this assessment the following issues have identified and considered.

5.1 Commonwealth Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act)

The Commonwealth EPBC Act establishes a requirement of Commonwealth environmental assessment and approval for:

- *Actions that are likely to have a significant impact on matters of national environmental significance.*
- *Actions that are likely to have a significant impact on the environment on Commonwealth land.*
- *Actions taken on Commonwealth land that are likely to have a significant impact on the environment anywhere.*
- *Actions by the Commonwealth that are likely to have a significant impact on the environment anywhere.*

If it is determined that a development is a 'controlled action', the application must be considered and approval granted pursuant to the EPBC Act 1999 prior to any consent being issued.

While the proposal does include the removal of native vegetation from the site, the applicant's flora and fauna consultant Aquila Ecological Surveys has carried out an assessment on the proposed development's impacts on flora and fauna. A seven part test was also carried out which indicated that the proposal will not have any impact upon the status of any threatened species and consequently a Species Impact Assessment is not required under the Threatened Species Conservation Act 1995.

Having regards to the abovementioned actions criteria, none of these form part of the application before Council and as such the provisions of the EPBC Act 1999 are not triggered as the proposed development is not deemed a 'controlled action'.

5.2 State Environmental Planning Policy No. 44 – Koala Habitat Protection

The subject site has an area greater than 1 hectare and accordingly the proposal is subject to consideration under the provisions of SEPP 44. No evidence of Koalas was identified on site by the applicant's Flora & Fauna Consultant and neither were any preferred Koala feed trees identified on the subject land. The subject land contains neither potential nor core Koala Habitat and no impacts to the species are anticipated.

5.3 State Environmental Planning Policy No. 55 – Remediation of Land

Clause 7 of the State Environmental Planning Policy No. 55 - Remediation of Land requires Council to consider whether land is contaminated prior to granting consent to the carrying out of any development on that land. Should the land be contaminated, Council must be satisfied that the land is suitable in a contaminated state for the proposed use. If the land requires remediation to be undertaken to make the land suitable for the proposed use, Council must be satisfied that the land will be remediated before the land is used for that purpose.

A detailed Preliminary Environmental Site Assessment Report prepared by Aargus Australia finds that the subject site has low potential for contamination and is therefore not likely to pose a significant risk of harm to human health or the environment. The assessment has determined that the site can be considered suitable for the proposed use as a cemetery in the context of this planning instrument.

Should the development application be approved appropriate conditions could be imposed to ensure that the recommendations contained within the Preliminary Environmental Site Assessment Report are adhered to.

5.4 State Environmental Planning Policy (Infrastructure) 2007

The proposed development is subject to Clause 104 of the subject SEPP given that the development proposes the generation of potentially 200 or more motor vehicles. It is noted that the original application was referred to the Roads and Maritime Services (RMS) where conditions of consent was provided.

Given that the proposal has been amended to provide for a reduction in car parking on the site and revised internal roads the amended application was again referred to the RMS for consideration in accordance with the provisions of the Infrastructure SEPP

5.4.1 Comments from RMS

Most recent comments provided by the RMS has drew attention to the Greendale Road accident history contained within the Appendix B of the Traffic and Parking Assessment report accompanying the development application. Details within this report identifies that there were a total of 23 crashes along Greendale Road between 2005 to 2009 of which 20 persons were injured. The report is silent on the extent of the injuries or whether there were any fatalities during this period. It is noted that the RMS did also not comment on whether any of 23 recorded accidents were fatalities.

The applicants traffic consultant submits that the accident history suggests that the accidents occurring on Greendale Road are typical for a two lane road in a rural setting and that there are no unusual circumstances that would preclude the establishment of the proposed cemetery.

In response to the accident history along Greendale Road the RMS identified that any further increase in traffic on Greendale Road has the potential to increase the number of accidents along Greendale Road. On this basis, the RMS recommended that an “existing roads – single route road safety audit” be undertaken by an accredited road safety auditor to identify any potential road safety hazards that may emanate as a consequence of the cemetery applications and also the planned growth along portions of Greendale Road.

Given this most recent advice provided by the RMS, Council is not satisfied that the issue of road safety has been resolved. While it is noted that in the same documentation the RMS did provide recommended conditions of consent should the application be approved, it is considered that the precautionary approach in relation to road safety be adopted in the determination of this application.

It is noted that advice provided by NSW Police has identified that given the likely increase in traffic movements along Greendale Road and the current state and condition of the road has a potential to be a “motor vehicle accident hot spot”.

Given the length of time the development application has been before Council for consideration and the length of time that would take such an audit to be completed, the applicant at this stage was not requested to undertake such an audit. As such concerns raised in relation to road traffic safety remain unresolved.

It is not considered that such an audit is appropriate to be incorporated into conditions of consent including any deferred commencement conditions, given that the implications or results of such an audit remain unknown. The results of such an audit may require substantial work to Greendale Road in order to facilitate the development and to ensure that the development and its operation do not impact on road traffic safety along Greendale Road.

5.4.2 Cumulative traffic impacts

It is noted that Council previously engaged an Independent Traffic Consultant to undertake a cumulative traffic assessment of the proposed cemetery the subject of this application and other applications along Greendale Road.

In determining the cumulative impacts on the functioning and capacity of Greendale Road, the Consultant concluded that the cumulative traffic impacts of the cemetery application at 31 Greendale Road (currently subject to proceedings in the Land and Environment Court) and the approved crematoria at 992 Greendale Road can be accommodated within the road network.

5.4.3 Level of service

In a report to Council on 17 October 2011, the performance of the local network in consideration of all of the current cemetery applications was considered. The report noted the following in relation to potential traffic impacts along Greendale Road:

- *Greendale Road performs a sub0arterial function, but also services as a local road to many residents. The road is adequate to serve this function and is currently performing at a Level of Service "A" due to the low traffic volumes.*
- *Traffic volumes will grow overtime and with that level of service and performance will decrease. It is anticipated that by 2040 the Level of Service will be "C".*
- *Should the additional traffic generated by the developments at 31, 41, 321 and 992 Greendale be taken into account the Level of Service remains at "C".*
- *This drop in service does not mean that the additional traffic volume along Greendale Road will not be noticeable; it means however that the road performance does not drop considerably as a result of these application and performance remains acceptable. It is considered however, that traffic volumes will impact on the amenity of the locality.*

A copy of this report is contained within Attachment 2 (under separate cover)

5.4.2 Summary

It is noted that the functioning and capacity of Greendale Road is unlikely to result in such as loss of service that would warrant the development application be refused on this basis. This conclusion has been drawn in consideration of the independent cumulative impact study and the report to Council on 17 October 2011. However, it is acknowledged that there is likely to be some potential for amenity impacts given the increase in traffic movements along Greendale Road.

However, the issue regarding road safety along Greendale Road remains unresolved despite the additional information provided by the applicant. Most recent comments provided by the RMS have requested that the a road safety audit be undertaken for the entire length of Greendale Road. It is Council's view that conditioning such as audit, given that it relates to road safety, is inappropriate. It is also considered that completion of such an audit would not be appropriate to be incorporated into a deferred commencement approval given that the implications and outcomes of such an audit remains unknown.

It is noted that the application has been under consideration for a significant length of time and that the request for a road safety audit for Greendale Road in relation to this development application has only been forthcoming in the most recent correspondence provided by the RMS. Nevertheless, Council road safety along Greendale Road remains unresolved and the development application should not be approved on this basis.

5.5 Sydney Regional Environmental Plan No. 20 – Hawkesbury Nepean Catchment

The main aim of this plan as prescribed by Clause 3 is to protect the environment of the Hawkesbury-Nepean River system by ensuring that the impacts of future land uses are considered in a regional context.

Clause 6 of the subject plan prescribes specific policy statements and strategies for protecting the environment of the Hawkesbury-Nepean River system. Specific policy statements and strategies have been identified for agriculture on rural lands, water quality and flora and fauna as well as cultural heritage.

The relevant planning policies and strategies in respect to the subject planning instrument are considered to be:

5.5.1 Loss of agricultural land

Strategies within the planning instrument concerns giving priority to agricultural production in rural zones and protecting the agricultural potential of rural land. It should be noted that the zoning of the land (RU1) permits agricultural uses with development consent and that a number of non-agricultural uses are also permitted in the zone including crematoriums, cemeteries, health care consulting rooms and community facilities.

It is considered that it is not the intention of the strategy to retain every lot in the RU1 zone for only agricultural uses nor does the strategy prescribe that agriculture is the only suitable land use for RU1. However, it is acknowledged that there is growing pressure on the remaining rural land within the Sydney Basin in relation to its agricultural production.

The subject site and the wider Greendale locality is not located within the Sydney South West Growth Centres and it is acknowledged that that rural land located outside the South West Growth Centres within the Liverpool local government area is limited.

Consideration of the potential agricultural uses that could occur on the site is taken to likely include intensive agriculture or grazing including the keeping of a few head of cattle or horses.

This is further reinforced within the agricultural land classification mapping that identifies that the agricultural land classification of the site is Class 3. The Agricultural Land Classification

guidelines identifies that Class 3 land is better suited for grazing land or well suited to pasture improvement with the overall production level being less moderate. The same guidelines identifies that Class 1 being the most valuable for agricultural purposes.

While the site is of sufficient area that would usually enable a viable agricultural farming business its limited agricultural capacity results in a considerable lower land value in terms of its agricultural productivity.

In consideration of the above, it is considered that the potential loss of the subject site as agricultural land in the Liverpool local government area and the wider context of the Hawkesbury-Nepean Catchment is not a reason to refuse the subject development application.

5.5.2 Impact on the use of agricultural land

It is noted that the locality contains a number of poultry and intensive dairy operations. There are also two existing poultry farms located to the north-west and south-west of the subject site.

The development application was referred to the Department of Trade and Investment (incorporating the former Department of Primary Industries). Comments received from the Department identify that the specialist reports accompanying the development application predominantly deal with potential environmental impacts of the cemetery with little detail or assessment regarding the potential for land use conflicts and impacts on current agricultural uses within the locality.

There are a number of potential issues that may impact on the use of current agricultural land. Given the adjoining poultry farms to the north west and south west of the site these issues are likely to be odour and noise.

While it is accepted that there is potential for odour to occur during the clean out of poultry sheds this occurs on a less frequent basis and is unlikely to cause significant loss of amenity to the users and operators of a cemetery given that visitors to the cemetery occur on a less frequent basis.

Noise is also identified as a potential cause of land use conflict, however it is unlikely that noise generated by the cemetery will impact on the operation of the poultry farms. It is also considered unlikely that noise from the operation of the poultry farm would impact on the operation of a cemetery.

In general issues of potential impacts of the adjoining poultry farms on the proposed cemetery is unlikely to be so offensive or disturbing to generate a complaint or that would stop the current use of agricultural land in the locality. In addition, should a complaint be made it is required to be substantiated by an assessment against established guidelines.

It is also noted that there are current obligations on the neighbouring poultry farms to operate in a manner that reduces their impacts. Under the requirements of the Protection of the Environment Operations Act the occupier of any premises must not cause air pollution including noise, dust and odour.

In consideration of the above the potential for a complaint and land use conflict is unlikely to restrict or prevent the current use of agricultural land in the locality and specifically the two adjoining poultry farms.

5.6 Local Environmental Plan 2008

5.6.1 Permissibility

The subject land is zoned 'RU1 Primary Production zone' under Liverpool Local Environmental Plan 2008 (LLEP 2008). An extract of the zoning map from LLEP 2008 is provided below.

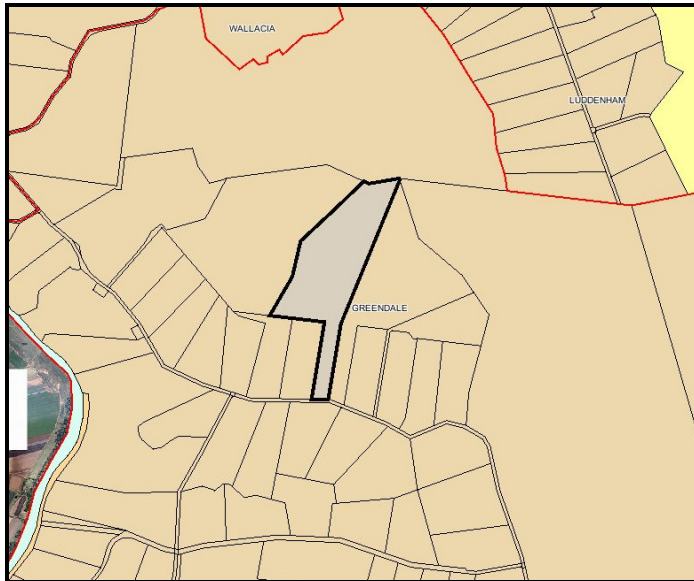


Figure 5: Extract from LLEP 2008 zoning map

The proposed use is defined as a 'cemetery' under Liverpool Local Environmental Plan 2008 and is permissible in the zone with consent.

Cemetery means a building or place for the interment of deceased persons or their ashes.

It is considered that the development satisfies the above definition and it therefore constitutes a permissible land use. It is also considered that the associated chapel is ancillary and incidental to the dominant cemetery use. Should the development application be approved a condition of consent could be imposed ensuring that the chapel is approved ancillary to the use of the site as a cemetery only.

5.6.2 Zone objectives

Zone objectives

The objectives of the RU1 – Primary Production zone are as follows:

- a) *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*

- b) *To encourage diversity in primary industry enterprises and systems appropriate for the area.*
- c) *To minimise the fragmentation and alienation of resource lands.*
- d) *To minimise conflict between land uses within this zone and land uses within adjoining zones.*
- e) *To ensure that development does not unreasonably increase the demand for public services or public facilities.*
- f) *To ensure that development does not hinder the development or operation of an airport on Commonwealth land in Badger's Creek.*
- g) *To preserve bushland, wildlife corridors and natural habitat.*

In respect of an assessment against the zone objectives reference is made to a recently adopted Council report (17 October 2011) in which Council considered the cumulative impact of the operation of all currently proposed cemeteries and/or crematoriums on: *The attainment of the objectives of the RU1 Primary Production zone.* Relevant to this assessment Council has resolved (in part) to:

“Adopt a precautionary approach to protect and retain agricultural land for future agricultural uses/rural uses particularly where individual properties are of sufficient size to facilitate viable agricultural developments”

The following comments have regard to both the individual and cumulative impacts in relation to how the development satisfies with the objectives of the RU1 – Primary Production zone. The assessment concludes that the proposal is inconsistent with the objectives (d) in some part and (e).

a) *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base*

Objective (a) seeks to promote the use of rural land for sustainable primary industry production and protect against fragmentation. It is noted that the zoning of the land currently permits agricultural uses and primary industry with development consent and that a number of non-agricultural uses are also permitted in the zone including crematorium, cemeteries, health care consulting rooms and community facilities.

It is considered that it is not the intention of this objective to retain every lot in the RU1 zone for only agricultural or primary production uses, however those non-agricultural uses must complement the rural focus of the area.

It is noted that Council recently adopted a report to give prioritisation to agriculture in rural zones. In consideration of this Council resolution in the application of the zone objectives, consideration has been given to the agricultural land classification of the subject site. As canvassed earlier in the report the subject land has an agricultural land classification of 3, with class 1 being the most valuable in terms of agricultural production.

Based on the above, while the development does result in loss of the subject from agricultural production, the site has limited capacity in regards to its agricultural production.

b) *To encourage diversity in primary industry enterprises and systems appropriate for the area.*

This objective has a similar intent to (a) in that it seeks to promote the use of rural land for sustainable primary industry production.

c) *To minimise the fragmentation and alienation of resource lands.*

It is acknowledged that the operation and use of the subject site is for the long term. Given the operation and life of the development, it is unlikely that the subject site will be redeveloped in the future and used for primary production and agricultural uses given the environmental constraints of the site. In this regard, the proposal would alienate the subject land from being used for primary production. However the site has limited suitability for agricultural pursuits and it is not considered that the development would result in alienation of any land within the wider community for primary production.

d) *To minimise conflict between land uses within this zone and land uses within adjoining zones.*

This objective seeks to permit development which is compatible with the amenity of the area, thus minimising the potential for land use conflict. In this regard the amenity is assessed in terms of bulk, scale, design height, siting and landscaping of cemeteries/crematorium and how they are consistent with the rural character of the locality.

Scale, bulk, design, height, siting and landscaping

It is acknowledged that the site and locality is of rural character with limited urban forms of development. The rural character of the locality is influenced by the adjoining poultry farms and large land holdings where there is little built form and has an undeveloped rural nature.

In considering the amendments to the proposal, it is considered that there is unlikely to be any disparity between the proposed development and the rural character of the locality when viewed from Greendale Road.

It is noted that the existing buildings on site are being used and new structures are of a minor nature, no significant impact is being created. The nature of the proposed burial plots, that is, lawn burials, also means that the development will have minimal visual impact. A 20m wide landscape strip utilising native species is proposed around the perimeter of the site.

It is considered that the concept landscape design is appropriate for the site and the locality. Should the development be approved, appropriate conditions could be imposed in regards to landscaping selection and implementation to ensure the zone objectives are achieved.

Operation

The issue regarding land use conflict between the proposed development and existing poultry and agricultural developments in the locality have been canvassed in detail earlier in this report.

It is acknowledged that the land consists of agricultural land - class 3 which is suitable for cropping rotation with pasture. Most recent advice provided from the Department of Trade and Investment identifies that the applicant has provided little detail in relation to the potential for land use conflicts between existing agricultural operations and the proposed

development. For example how would odour and traffic associated with the existing poultry farms cause issues for people attending the lawn cemetery.

While Council concurs with the advice provided by the Department of Trade and Investment in that this detail has not been forthcoming from the applicant, the potential for a complaint is not considered to be a reason to refuse the development application. Particularly where it has not been substantiated that impacts of odour and noise from a poultry farm operation would result in unacceptable impacts, particularly if there is a reasonable amount of consideration and co operation between the adjoining poultry farms and the cemetery.

It is considered that the operation of the development is not likely to result in any land use conflict that would warrant the refusal of the development application.

Traffic generation and car parking

Based on adequate available capacity within the road system it is not considered that the development is inconsistent with the zone objectives in relation to traffic generation.

Concern is raised in regards to the safety issues along Greendale Road, particularly the most recent advice provided by the RMS which has previously been canvassed within the report.

Odour, Air, Noise, and light nuisance

The proposed development is unlikely to generate any odour nuisance or air pollution.

Noise

The Acoustic Report submitted with the application identifies the following potential noise sources:

Construction Phase

There will be some noise generation associated with the construction of the facility, generally involving earth works, construction of roadways, buildings, dam and drainage works etc. Some minor excavation will be carried out for footing and slab construction. Generally works will initially involve excavator, graders and the like with the normal equipments and power tools used for building construction and paving works will be required to finish roadways and car parks.

Construction noise is not considered to be a significant issue in terms of potential noise impact upon noise sensitive receivers provided works are carried out within the recommended hours and could be incorporated into conditions of consent should the development application be approved.

Operational Phase

Sources of potential noise generation during the operational phase of the project would include:

- Mechanical plant and equipment associated with air-conditioning, water pumps, fans, emergency generators.
- Noise breakout from the Chapels.

- Noise generated during particular cultural funeral rites.
- Road traffic.

Given that the area is rural and the criteria for noise intrusion will form the basis for assessment of environmental noise emissions from the development, long-term ambient noise monitoring was not considered necessary. The typical daytime background noise level in a rural area of this type is generally 35 dBA. Acoustical measurements conducted during the period of the day when ambient levels are usually at their lowest, ie the late morning / early afternoon, confirmed the background LA90 noise level to be 35 dBA. Night-time noise levels would fall below 30 dBA and therefore 30 dBA is adopted as the night-time background LA90 noise level for assessment purposes. The background noise levels during the evening period (between 6.00 pm and 10.00 pm) are likely to be between 30 dBA and 35 dBA, depending upon local conditions such as wind and insect activity. To ensure a conservative approach, 30 dBA has been adopted as the evening background noise level.

The site is located within the central region of the Sydney Training Area and light aircraft operating out of Bankstown and Camden Airports are a predominant feature of the acoustical environment.

Other sources of ambient noise included occasional traffic on Greendale Road, vehicles operating on surrounding properties, birds, dogs, cattle and foliage rustling.

Mechanical Plant and Equipment

The noise emission of any mechanical plant and equipment associated with the facility should be controlled so that the operation of such plant does not adversely impact upon potentially sensitive residential properties. At this stage of the project the location and selection of mechanical plant has not been made.

The plant typically installed to mechanically ventilate the Chapel, administrative offices and the like generally comprises split air-conditioning systems. These units are typically designed for low noise emissions. Larger spaces may be serviced by packaged units. Pumps associated with the dams would also be of the smaller, low noise variety. The noise emissions of such plant can generally be controlled by engineering means such as judicious location, enclosure, barriers etc. The distances separating the Chapel, workshop and dam pumps from surrounding receivers are more than adequate to ensure that the mechanical noise emissions can be successfully controlled.

Breakout Noise from Chapels - Outdoor Funeral Rites and Ceremonies

The level of noise generated as a result of particular religious or cultural practices is of a highly variable nature. In general, it appears common practice for mourners to maintain a controlled demeanour out of respect for the deceased. Typically, Christian, Jewish and Muslim burials are not accompanied by excessive noise generation at the graveside, with the main service being conducted within, or in the case of some Muslim services in the vicinity, of the Chapel. Buddhist ceremonies may be accompanied by music and chanting. It is not possible to accurately predict the levels such events may generate and there are no appropriate criteria against which to assess such emissions. Such funerals are unlikely to occur on a regular basis and given the distance between the majority of burial plots and the

surrounding residential receivers and the daytime operational hours, it is also unlikely that these occasions would create a noise nuisance.

Traffic On-site

Car movements along the access road have the potential to impact acoustically upon nearby noise sensitive receivers. Calculations based on measured noise data of similar vehicular activity result in noise emissions associated with single car movements remaining within the daytime operational noise criterion of 40 dBA at the boundary of the site.

Realistically, the number of vehicle movements and the speed at which cars will travel (ie a posted maximum of 10 km/h) is likely to further ensure compliance.

Road Traffic

The traffic generated during the morning and afternoon peak periods due to staff arrivals and departures was estimated to be in the order of 20 vehicle movements (ie 20 in the morning and 20 in the evening). The calculated existing LAeq(1hour) road traffic noise level at a residential receiver located a distance of 25 m from the road is 43 dBA during the morning peak traffic period between 8.00 am and 9.00 am and 46 dBA during the afternoon peak traffic period between 5.00 pm and 6.00 pm.

These levels increase to 46 dBA and 48 dBA during the morning and afternoon periods, respectively, with the additional traffic movements generated by staff arrivals and departures. These predicted levels are well within the recommended criterion for daytime road traffic noise at residential receivers. The increase in the existing morning traffic noise level exceeds the recommended 2 dBA limit. This is unavoidable in situations where the existing traffic volumes are very low and is not considered to constitute an adverse noise impact upon residents living on Greendale Road.

The traffic assessment does not address vehicular traffic generated during funeral processions to the site. The numbers of vehicles would vary considerably from funeral to funeral and as such is difficult to quantify. Funeral processions will, at times, inevitably lead to a considerable increase in the levels of existing traffic travelling along Greendale Road. Subsequently, there will be a corresponding increase in the existing levels of traffic noise during the short duration the funeral processions pass residential receivers. The noise levels generated will vary according to the number of vehicles involved. However, given the times at which this traffic generation will occur, it is unlikely to adversely impact upon the acoustical amenity of the surrounding residential community

Operational Noise Sources

Compliance with project specific INP noise goals can be achieved at the nearest potentially sensitive residential receiver locations under typical (and worst case) operational scenario conditions.

Road Traffic Noise

Road traffic noise generated due to staff arrivals and departures will generally comply with the Environmental Criteria for Road Traffic Noise (ECRTN) guidelines during the daytime

period. Road traffic noise generated as a result of funeral processions will vary significantly depending upon the numbers of vehicles involved.

The overall increase in level will inevitably exceed the recommended 2 dB limit due to the low existing traffic volumes along Greendale Road. However given that funeral processions will typically occur between 9.30 am and 3.30 pm, it is unlikely that road traffic noise could reasonably be considered to adversely affect the acoustical amenity of the surrounding residential community.

In conclusion, the proposed development will generally comply with all relevant assessment criteria in regard to noise emissions and as such is unlikely to adversely affect the acoustic amenity of surrounding residential receivers. Appropriate operational conditions could be imposed should the development application be approved in relation to noise management and mitigation.

e) To ensure that development does not unreasonably increase the demand for public services or public facilities.

Services and facilities are taken to include physical infrastructure such as roads, drainage and sewerage and waste.

Road infrastructure

The Traffic and Parking Assessment Report accompanying the Development Application and Council's Traffic Engineer and Consultant concluded that traffic generated by the proposed development can be accommodated within the existing road capacity. However, it is noted that the most recent advice provided by the RMS requested that a Road Safety Audit be undertaken.

The results and implications of the Road Safety Audit are unknown and has potential to unreasonably increase demand on Council's road infrastructure. In this regard, it is considered based on the information available that the development is inconsistent with this zone objective and is a reason for the refusal of the development application.

Drainage

The Development Application is accompanied by a storm water drainage concept plan which has been assessed by the Office of Water which has issued General Terms of Approval which have been imposed in the draft determination notice. The site will not adversely impact upon Greendale Road drainage.

Waste Water Treatment

Sewage for the development is to be managed through the installation of an on-site waste water system which is to treat effluent to the required NSW Health standards.

The initial geotechnical assessment of the site indicates no impediments to such a system being installed on site.

Council's Environmental Health Officers have assessed the waste water disposal details and advised that they are satisfactory. Should this Development Application be approved, both a Section 68 approval to install and operate is required for the on-site sewerage management

system in accordance with the Local Government Act. A detailed Waste Water Report will be required. Appropriate conditions can be imposed should the development application be approved.

(c) *To ensure that development does not hinder the development or operation of an airport on Commonwealth land in Badgery's Creek.*

The proposed Badgery's Creek airport site is located approximately 1.7 kilometres to the north east of the subject site and the site is affected by the identified 20-25, 25-30 and 30-35 ANEF Australian Noise Exposure Forecasts.

Cemeteries are not subject to any special restrictions under clauses 7.18 of the LEP. This indicates that they are not noise sensitive uses. The height of the proposed structures will have no impact on future flight movements and the development does not require any intrusive lighting. Thus the development will not hinder the development or operation of the airport if it is built.

(d) *To preserve bushland, wildlife corridors and natural habitat.*

Objective (g) seeks to preserve bushland, wildlife corridors and natural habitat on the land. A small part of the site is identified as being environmentally significant land pursuant to Clause 7.6 of Liverpool Local Environmental Plan 2008. As such the Development Application is supported by a Flora and Fauna Survey including a Seven Part Test. The environmentally significant land is being not developed.

It is considered that the Flora and Fauna report accompanying the Development Application adequately demonstrate that the development will not adversely impact on flora and fauna species subject to recommendations including the preparation of a Vegetation Management Plan. A Vegetation Management Plan could be conditioned should the development application be approved.

The matter of Flora and Fauna impacts is addressed in more detail later in this report.

5.6.3 Other provisions

Clause 5.11-Bushfire Hazard

Clause 5.11 of LLEP 2008 is applicable to the development given that a small portion of the site is *'bushfire prone land'* and is also mapped as containing a 100m deep buffer to bushfire prone land. The proposal does not constitute a *'special fire protection purpose'* and a Bushfire Safety Authority from the Rural Fire Service is not required for the proposal. The Bushfire Assessment Report submitted with the application makes a number of recommendations regarding bush fire protection. These measures can be made conditions of consent should the development application be approved.

Clause 7.6-Environmentally Sensitive Land

Clause 7.6 Environmentally significant land requires the consent authority to consider the significance of vegetation, the sensitivity of the land and the impact of development on the environment.

The site contains environmentally sensitive land along the boundary the site. The site contains the *TSC* Act listed critically endangered ecological community, Cumberland Plain Woodland and the endangered ecological community, Shale/Sandstone Transition Forest, which would be affected by the proposed development.

In consideration of all of the above, it is considered that the proposed development will not adversely impact on flora and fauna species. Council's Natural Resource Officer has advised that the Flora and Fauna Report findings and recommendations are acceptable and requested that a Vegetation Management Plan is prepared and accordingly a consent condition could be imposed requiring submission of a Vegetation Management Plan should the development application be approved.

Based on the above, it is not considered that the development is inconsistent with Clause 7.6 of LLEP 2008.

Clause 7.8-Flood Planning

An approximately 700sqm corner of the site is affected by the Probable Maximum Flood (PMF). This portion of the site contains remnant vegetation and is not proposed for development.

Council's Flood Engineers consider that the various works to the two larger dams, Northern and Southern dam, with storage capacities of 23,699m³ and 32,162m³ respectively should be considered by the NSW Dam Safety Committee, however the two dams are not currently prescribed dams under the jurisdiction of the Dam Safety Committee.

The dams must be gazetted as prescribed dams to come under the jurisdiction of the Dam Safety Committee. Should the development application be approved a It is condition of consent should be imposed requiring any such approval.

Clause 7.18-Development in areas subject to potential aircraft noise

The land is subject to potential airport noise and falls within the three ANEF contour bands 20-25, 25-30 and 30-35. Cemeteries are not subject to any special restrictions under clauses 7.18 of the LEP. This indicates that they are not noise sensitive uses. The height of the proposed structures will have no impact on future flight movements and the development does not require any intrusive lighting. Thus the development will not hinder the development or operation of the airport if it is built.

5.7 Liverpool Development Control Plan 2008

Liverpool Development Control Plan 2008 Parts 1.1 and 5 apply to the development. Part 1.1 prescribes the general controls for all development (other than dwelling houses). Part 5 prescribes standards and criteria that are to be adhered to for development in rural and E3 zones. Part 5 also incorporates special provisions for cemeteries and crematoriums. The main relevant controls are summarised in the following table:

Standard	Requirement	Proposed	Complies
Part 1.1 – General Controls for all Development			
Clause 3 Landscaping and Incorporation of Existing Trees	Landscape planting shall be principally comprised of native species. Provide an integrated streetscape appearance with an appropriate mix of canopy trees, shrubs and groundcover in appropriate locations having regard to visibility for the safe ingress and egress of pedestrians and vehicles.	A concept landscape plan has been submitted with the Development Application. The plan provides for a dense 20m wide perimeter landscaping of native species.	Yes
Clause 4 Bushland and Fauna Habitat Preservation	Applies generally to specific zones	<p>The Development Application is supported by a Flora and Fauna Survey and Seven-Part Test.</p> <p>Council's Natural Resource Officer reviewed all specialist reports accompanying the Development Application and found that the flora and fauna field survey methods were appropriate.</p> <p>A Vegetation Management Plan can be conditioned should the development application be approved.</p>	Yes

Clause 5 Bush Fire Risk	Applies generally to bushfire prone land and land that requires bushfire hazard reduction	<p>A small portion of the site is 'bushfire prone land' and the proposed use is identified as being a 'special fire protection purpose'.</p> <p>Accordingly the Development Application is identified as being 'Integrated Development' and was referred to the NSW RFS for GTAs. The NSW RFS has issued a Bushfire Safety Authority for the proposal. This could form part of the conditions of consent should the development application be approved.</p>	Yes
Clause 6 Water Cycle Management	Storm water Drainage Concept Plan required to be submitted	<p>A concept storm water plan has been submitted which provides details that are acceptable to Council's engineers subject to the imposition of conditions.</p> <p>The Office of Water has issued GTAs on the basis that a water licence is achieved. Further commentary on this component has provided later in the report.</p>	Yes
Clause 7 Development near Creeks and Rivers	Applies to land that may impact upon a watercourse or the removal of riparian vegetation	The Office of Water has issued GTAs on the basis that a water licence is achieved. Further commentary on this component has provided later in the report	Yes
Clause 8 Erosion and Sediment Control	Soil and Water Management Plan or Erosion and Sediment Control Plan are required to be submitted	A soil and water management plan has been submitted with the Development Application and is deemed satisfactory by Council's Development Engineer.	Yes

Clause 9 Flooding Risk	Applies to flood prone land	Councils Flooding Section has no objection to the proposal subject to conditions which could be imposed should the development application be approved.	Yes
Clause 10 Contaminated Land Risk	Applies to potential or actual contaminated land or has past or current specific land uses	A preliminary stage 1 contamination report has been submitted which advises that the site of the development footprint is satisfactory and represents a low risk to human health as a consequence of contamination. The proposal is satisfactory with SEPP 55 considerations.	Yes
Clause 11 Salinity Risk	Salinity Management Plan required for high risk activities in salinity affected areas.	<p>The site is located in a moderate salinity risk location. In order to ensure that there are no adverse salinity impacts a salinity management report was submitted with the application.</p> <p>Combined with the implementation of the management measures, soil salinity and other soil related issues on the site can be readily managed. These could be incorporated into conditions of consent should the development application be approved.</p>	Yes
Clause 12 Acid Sulphate Soils	Applies to land with potential acid sulphate soils.	The site is not mapped as containing acid sulphate soils.	Yes
Clause 13 Weeds	Weed management strategy required to be submitted if site contains native weeds.	Weed management will be addressed as part of the required VMP which could form part of the conditions of consent should the development be approved.	Yes

Clause 14 Demolition of Existing Developments	Demolition to comply with AS2601-1991.	No major demolition works required. Standard conditions could be imposed should the development application be approved.	Yes
Clause 15 On-site Sewage Disposal	Applies to land with no access to reticulated sewer system	<p>The proposed development does require on-site sewerage disposal. A detailed waste water treatment report has been submitted and Council's Environment Health Section has advised that the site can accommodate on-site effluent disposal in accordance with Council requirements and subject to provision of a Section 68 Application.</p> <p>The requirement for a Section 68 application could form part of conditions of consent should the development application be approved.</p>	Yes
Clause 16 and 17 Heritage	Applies to heritage items of land in the vicinity of a heritage site, conservation area or archaeological site.	The site is not listed as containing a local heritage item.	Yes

PART 5-DEVELOPMENT IN RURAL AND E3 ZONES			
Clause 1 Site Planning			
Location of buildings	<p>Buildings shall not be located on ridges or in places where they are too visible from the street.</p> <p>When siting buildings and seeking to maximise views, the visual impact of the building on the landscape is to be minimised.</p> <p>Site planning should be sensitive to site attributes, such as streetscape character, natural landform, existing vegetation, views and land capability. The site layout should enhance the streetscape through the use of landscaping and built form.</p>	<p>The existing buildings that are being utilised are located on a ridge but are 720 metres distant from the main viewing locations on Greendale Road. No change in visual impact is occurring. The new amenities and gazebos are minor structures with little visual impact.</p> <p>The development employs a 20 metre landscape screen around the whole site.</p> <p>The front portion of the cemetery is lawn cemetery and will have a similar appearance to a rural grazing property to minimise the visual impact upon the rural landscape.</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p>

<p>Clause 4 Building Design, Style and Streetscape</p> <p>Height in Rural Areas, Building Materials, Colour</p>	<p>All non residential uses to have a general maximum height of 8.5m Materials, styles and colours to be sympathetic to the rural environment</p>	<p>As existing buildings on site are being used and new structure are of a minor nature no significant impact is being created.</p>	<p>Yes</p>
<p>Clause 5 Landscaping and Fencing</p> <p>Tree Planting</p>	<p>Existing trees and native vegetation are to be retained, protected and incorporated into the development proposal. This is particularly important for vegetation which forms part a ridgeline tree canopy and in foreshore areas (with the exception of weed species).</p> <p>Trees are to be used to provide shade to buildings, outdoor recreation areas and car parking. Unless required for screening or noise attenuation purposes, solid wall or fences, which do not allow 'through vision' along allotment boundaries will not be allowed.</p> <p>All other perimeter screen planting is to be native species. Hard surfaces should be limited to access, car parking and private open space areas</p> <p>The trees shall provide a canopy for the streetscape and rural landscape. Shrubs may be used and preferably in mulched garden beds.</p> <p>The trees shall provide a canopy for the streetscape and soften the appearance of the rural environment, without unduly concealing approved on site signage.</p>	<p>Some existing trees and native vegetation is to be retained and incorporated into perimeter landscaping.</p> <p>Landscaping to be provided. The existing front fence which is partly of solid masonry construction is being maintained and is typical for a cemetery. It is also not inconsistent with fences of some of the larger and grander rural residences.</p> <p>Perimeter landscaping to be provided utilising native species. The development does necessitate extensive hardstand area to facilitate car parking & internal private roads.</p> <p>Dense landscaping is proposed along the site frontage to minimise impact on the rural landscape of Greendale Road</p> <p>Landscaping to be provided in accordance with concept Landscape Plan which could be incorporated into conditions of consent.</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
<p>JRPP Sydney</p>	<p>West Region – Panel Meeting on 1 June 2012 – Item 1 – 2010SYW027</p>		<p>28</p>

Clause 6 Car Parking and Access Access Design and location of car parking and loading			
	Location of driveways should consider natural features, topography & vegetation	The amended driveway system reflects the natural rural landscape design for the cemetery	Yes
	Development on sites located on classified roads may require deceleration lanes	<p>The site does not have frontage to a classified road. The proposal incorporates an upgraded intersection as detailed previously in the report.</p> <p>There is no specific car parking rate for cemeteries. The application provides a total of 370 on-site car parking spaces along the sides of the proposed internal private roads. This is typical of many cemeteries to provide relatively informal parking fairly evenly throughout the cemetery in reasonable proximity to all grave sites.</p>	Yes
	Loading bays or parking for trucks, should be located in an area that is not visible from the street.	The service and maintenance area is setback approximately 720metres from the frontage.	Yes

Council resolved on 8 December 2010 to adopt amendments to Liverpool Development Control Plan 2008 to address inconsistencies and anomalies that primarily relate to rural land uses. The previous DCP 2008 Part 5 was silent on a number of land uses such as cemeteries and the amendments to the DCP introduces controls for cemeteries, crematoriums and funeral chapels.

Despite the subject application being submitted prior to the amendments of the DCP, the amendments do have statutory weight and can be considered pursuant to section 79C of the Environmental Planning and Assessment Act. Compliance with the amended controls is contained within the table below:

Standard	Requirement	Proposed	Complies
Part 5 – Cemeteries, Crematoriums and Funeral Chapels			
Site suitability	Cemeteries and crematoria must be located on a site with a minimum of 15ha.	The site has an area of 40.04 hectares. Approximately 13.34 hectares of the site will be available for burial purposes	No.
	Cemeteries and crematoria and funeral chapels shall not be located in a road which has a seal width of less the 6m.	The section of Greendale Road fronting the site has a seal width in excess of 6 metres. Sections of the greater length (approx 15km) of Greendale Rd may be marginally below the 6.0m	No
	Burial plots are not suitable within areas where the water table is within 3metres of the surface.	Minimum depth of 6.3m recorded in proposed burial areas.	Yes
	Burial plots must not be located on flood prone land.	The minor area of flood affected land is not being developed with burial plots.	Yes
Setbacks	Buildings and burial plots should be setback 20m from a public street and 15m from any side or rear boundary.	No development is proposed within the first 500 metres to Greendale Road. All burials are setback a minimum of 20m from a side or rear boundary. The caretaker office is a minimum of 1.5m from a side boundary however this is considered acceptable as it is reusing an existing building and is not proximate to any sensitive adjoining uses on the adjoining property.	Partial compliance
Landscaping and fencing	A berm is to be provided around the property and must be 1m high and 3m wide.	No berm is provided however dense landscaping (20m wide) is provided to the perimeter of the site and will achieve screening of the development.	No bit considered acceptable.

	A landscape buffer zone of at least 10m must be provided to the rear and side boundaries of the site.	A 20metre landscaped buffer is proposed around the whole site.	Yes
Car parking and access	Cemeteries and crematoria and funeral chapels are to be located on a road with sufficient capacity to accommodate a turning or slip lane to enter the site. A traffic study is to be included with the DA.	RMS requirement for a Type CHR right-turn storage bay of minimum length 20 metres and a BAL left-turn treatment. Traffic Study submitted.	Yes Yes
Operation	A plan of management is to be submitted with the DA	This has not been submitted.	No

5.7.1 Non-compliances

As demonstrated by the compliance table above, the development does not fully satisfy all of the provisions prescribed by LDCP 2008 as identified in the above compliance table. The areas of non-compliance which are detailed individually below.

Cemeteries and crematoria must 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.

This inclusion of a minimum burial area requirement is to ensure financial and operational sustainability of future cemetery operations and to limit the proliferation of cemeteries and crematoriums on rural land. The imposition of a 15hectare minimum land holding demonstrates a clear intention by Council to control the location of cemeteries on smaller rural land holdings.

It is noted that the subject site has an area of 40.04 hectares and the proposed has been amended to reducing the extent of burial plots to maintain the rural appearance of the site.

It is noted that the landscape and burial perimeter setbacks of 20m have been adopted as opposed to the minimum 10m and 15m respectively required by the DCP. In addition the large existing dams are being kept and the front access handle is not being utilised as part of the amended proposal.

While this identifies that the site has potential to accommodate additional burial areas should these landscaped areas be reduced, it would be to the detriment of the rural landscape character of the site. The applicant has not been able to demonstrate in the amended proposal how this control can be complied with while still ensuring that the rural character of the site is maintained.

In considering the variation to the DCP consideration has been given to the Planning Principle regarding the weight to be given to a Development Control Plan is considered applicable, as outlined in Stockland Development Pty Ltd v Manly Council [2004] NSWLEC 472 revised - 01/10/2004. The Land and Environment Court has previously held that a DCP or Council Policy that has been consistently applied by a council will be given significantly greater weight than one which has only been selectively applied.

In the application of the above planning principle, the following matters have been taken into consideration:

the extent, if any, of research and public consultation undertaken when creating the policy

Comment:

The minimum site area, provision was adopted following public exhibition and review. It is considered that the exhibition of this clause reflects intent to control the placement of cemeteries and ensure that this land use is sustainable through the application of a minimum site area.

the time during which the policy has been in force and the extent of any review of its effectiveness

Comment:

The policy has only been in place since December 2010, and consequently, insufficient time has elapsed for a review. Given the contemporaneous nature of this control is considered inappropriate, in the absence of any substantive information to the contrary, to consider amending it at this time.

the extent to which the policy has been departed from in prior decisions

Comment:

The control has not been varied to date. It has been considered in the assessment of three applications (Nos.992 Greendale Road, No. 41 Greendale Road and No.31 Greendale Road). It is noted the development applications at 31 and 41 Greendale Road were refused for the non compliance with the controls.

the compatibility of the policy with the objectives and provisions of relevant environmental planning instruments and development control plans;

Comment:

The control is considered to be compatible with the objectives of LLEP 2008 and is specifically referenced in LDGP 2008.

the compatibility of the policy with other policies adopted by a council or by any other relevant government agency

Comment:

There is no adopted compatible site area control in respect of Cemeteries in NSW either at a Local or State Government level.

whether the policy contains any significant flaws when assessed against conventional planning outcomes accepted as appropriate for the site or area affected by it

Comment:

This control has been recently adopted following public exhibition and is considered to be one which reflects the policy intent of Council and its residents. The establishment of a minimum site area as a planning control is quite common and encourages the amalgamation or identification of development sites of an area that is considered sufficient enough to provide for sustainable development. It also prevents the establishment of numerous smaller cemetery developments, which would lead to fragmentation of rural land. The control is considered to reinforce the principle of orderly development.

In consideration of all of the above, it is noted that reduced burial plot area available is as a consequence of ensuring that the development is responsive to the rural landscape qualities of the site and the locality. The applicant has submitted revised plans which illustrate that despite the overall area of the site, only approximately 13 hectares of the site is available for burial areas.

Given that Council has consistently applied this control in the assessment of the other similar development applications, the application in its current form can not be supported on this basis. It is considered that the applicant has failed to demonstrate how the zone objectives can be secured in relation to rural character while ensuring compliance with DCP controls. On this basis, it is considered that the variation to the 15 hectare burial area requirements should not be supported and that this control should be given significant weight in the determination of the subject application.

Cemeteries and crematoria and funeral chapels shall not be located in a road which has a seal width of less than 6m.

Council's records indicate that the road carriageway for the full frontage of the site has a seal of 6m. However, it is noted that Greendale Road for its entire length does not provide for a seal width of 6m.

Further to this, Council is in receipt of advice from the RMS which outlines that a Road Safety Audit for its entire length should be undertaken. This raises concerns which have been unable to be resolved in relation to road traffic safety which can be attributed to Greendale Road having a carriageway seal of less than 6m in portions.

Given that the issue of road safety has not been resolved in the amendments and additional information provided by the applicant and the RMS most recent advice, this non compliance can not be dismissed.

A Plan of Management must be submitted with a Development Application and must include details of the operation of the use

A Plan of Management does not accompany the development application as amended. A development application of this scale should be accompanied by a Plan of Management.

5.8 Other considerations

The following documents are considered relevant in the deliberation of the development application.

5.8.1 The Public Health Act 1991 and Public Health (Disposal of Bodies) Regulation 2002

Whilst compliance with the provisions of the above legislation is required it is not a matter enforced by Council. The Public Health Act 1991 and Public Health (Disposal of Bodies) Regulation 2002 regulates the handling of bodies both by funeral industry professionals and by members of the public. Both the Act and Regulations predominantly provides standards and procedures for the handling and preparation of dead bodies to minimise any risk to public health such as procedures for handling bodies, waste disposal and maintenance of registers. However, both the Act and Regulations are largely silent on any specific requirements for cemeteries and graves.

Most relevant to the subject development application is Clause 22(2) of the Regulations which prescribes:

A person must not bury a body in or on any land if to do so would make likely the contamination of a drinking water supply or a domestic water supply.

Comment:

The development application was referred to NSW Health (Public Health Unit) for comment. No comments were received from the Public Health Unit. Within 1.5 kilometres of the site 43 bores that draw water have been identified. Although detailed information is not available for these bores, it is assumed that they are for stock and domestic use. Whilst it is unlikely that people would be using this water for drinking purposes, the water still may be used for domestic purposes and this will trigger consideration of Clause 22(2).

In this regard, buffer distances and geological properties of the site are crucial in preventing contamination of soils and groundwater as a result of decomposing bodies in cemeteries. It is noted that the unsaturated soil layer in cemeteries is the most important line of defence against the transport of degradation products into aquifers as the soil acts as both a filter and absorbent.

The soil conditions on the site and the proposed vertical separation of graves to the water table and the proposed horizontal distances to water bodies and water courses will ensure containment of any leachate to the site. In consideration of all of the above, it is considered that the development application satisfies Clause 22(2) of the Public Health (Disposal of Bodies) Regulation 2002 in that the proposal is unlikely to result in the contamination of a drinking water supply or a domestic water. This could be further reinforced through conditions of consent should the development application be approved.

5.8.2 World Health Organisation (WHO) – Research Paper on “The Impact of Cemeteries on the Environment and Public Health” 1998

The World Health Organisation (WHO) has published a research paper on “The impact of cemeteries on the environment and public health”. The paper undertook a review of the current state of knowledge regarding the presence or absence of soil and groundwater contamination from cemeteries. The paper identifies key geological and hydro geological properties on sites suitable for development as a cemetery as well as recommending draft requirements which could be used to site and design a future well managed cemetery.

Geological properties of cemeteries

Comment:

Geological properties are identified as crucial in preventing contamination of soils and groundwater as a result of decomposing bodies in cemeteries. It is further noted that the unsaturated soil layer in cemeteries is the most important line of defence against the transport of degradation products into aquifers as the soil acts as both a filter and absorbent.

In consideration of the above, the paper suggests that in selecting a suitable site for a cemetery, the site should have a soil that have strong absorbance characteristics to remove degradation products from seepage water and so to minimise the impact of cemeteries on local ground water.

The geotechnical assessment accompanying the development application details the geotechnical parameters of the site. The site generally has clay soils. The small particle size of clay soil has advantages as the particles provide multiple surfaces where nutrients can “stick” as well as providing a capacity to hold water.

The clay soils at the site are also likely to have high susceptibility to shrinkage and well movement resulting in soil moisture content. While this does not present a constraint to the site in relation to the prevention of contamination, it will have implications on the types of foundations for any proposed structures. In this regard, recommendations are contained within the geotechnical assessment in relation to footings and foundations which could be included within conditions of consent.

It is therefore considered that the geological properties of the subject site are not a constraint to the development given that the properties of clay soil off a much reduced opportunity for off-site contaminant migration.

Hydro geological properties of cemeteries

Comment:

The idea of providing cemeteries with buffer zones is consistent with well established planning practices for landfill sites and hazardous industries where the opportunity for offsite migration of pollutants and contaminants is higher.

The WHO research paper finds that the hydro geological properties of a cemetery should allow for a minimum 1 metre separation between burial bases and groundwater levels to

minimise seepage and allow for a sufficient soil buffer to allow for a natural breakdown and absorption of seepage and contaminants released from deceased bodies.

Recommendations within the WHO paper

The WHO paper concludes that the pollution potential for cemeteries is present but in a well managed cemetery with suitable soil conditions and drainage arrangements the risk is properly slight. On this basis, the paper provided a number of recommendations that could be used in determining the suitability of the site and the design of a proposed cemetery.

Compliance with these recommended guidelines is demonstrated in the table below:

REQUIREMENT	PROVIDED	COMPLIES
Human or animal remains must not be buried within 250m of any well, borehole or spring from which a portable water supply is drawn.	No groundwater bores are within 250m of the site. In addition, groundwater bores are at a greater depth below ground level than the relatively shallow depth of burials thus providing a greater buffer distance as well.	Yes
The place of interment should be at least 30m away from any other spring or watercourse and at least 10m away from any field drain	All burial plots provide a buffer distance in excess of 20m from the top of bank of watercourses and from existing dams and irrigation area for on-site waste water.	Yes
All burial pits on the site must maintain a minimum of 1m clearance above the highest natural water table	In burial areas the minimum depth of groundwater is 6.3 metres. Grave bottoms are not greater than approximately 1.5metres below ground level.	Yes
Burial excavations should be backfilled as soon as the remains are interred, providing a minimum of 1m soil cover at the surface.	The requirements of the NSW Health Dept will be met. These are for a minimum 900mm cover or 400mm to top of grave liner for shallow burials.	No.

As illustrated in the above table the proposal generally complies with the recommendations contained within the WHO paper in relation to site recommendations and cemetery design and layout requirements.

The groundwater assessment accompanying the development application provides details of groundwater well monitoring. The submitted reports were prepared by Aargus Australia. The applicant had these reports peer reviewed by Martens – Consulting Engineers. The sub-surface investigation undertaken to date include:

- 18 test pits excavated using a rubber tyred backhoe.
- 5 boreholes with stand pipes to depths of 5.4 - 6.3 m
- 6 groundwater piezometers to depths of 8 m>

Sub-surface conditions indicated generally topsoil of 0.2 - 0.3 m overlying residual clay soils to depths varying between 1.3 - 2.6 m, which in turn overlies low permeability weathered shale and siltstone bedrock.

The near surface residual soils encountered generally across the site comprise silty clays and clays, of medium to high plasticity, and generally of very stiff consistency. Such materials are expected to have estimated permeability values of between 1×10^{-6} cm/s to 1×10^{-7} cm/s (0.32 metres per year to 0.032 metres per year). These soils restrict surface water percolation into underlying aquifers and as such the depth to groundwater does not inter-relate to any surface waters found on site except for possibly deep water dams (i.e. the two largest dams on site).

This low permeability offers limited migration pathways for any potential contaminants to migrate off-site or percolate from surface areas into the underlying aquifer. Once in deeper geological mediums, shales are present. Shale has a lot of porosity (much more than sandstone), but extremely low permeability (like clay). Similar permeability characteristics and migration pathways are therefore likely.

Groundwater found on the site included:

- i. The presence of groundwater within the 3 of the borehole standpipes was inconclusive as there may have been surface water ingress into the standpipes.
- ii. Of the 6 installed piezometers, only 1 (GW@ / BH2) recorded groundwater which was at a depth of 6.3 m. This is located adjacent and north of the main southern dam at the site.

Site investigations indicate that shallow groundwater is not likely to occur at the site. It is expected that ground water adjacent to and down slope of the dams may be elevated for brief periods. However, these areas are located within dam / watercourse setbacks and do not contain any proposed burial plots.

Given the high clay content of residual soils and saline nature of sub-surface shale/siltstone bedrock conditions, the local groundwater regime would be considered a very slow moving low recharge system with expected poor water quality.

Groundwater of the site is not expected to have a high resource value and is therefore, together with its low recharge regime, considered a low vulnerability system.

While the consultant concludes there is unlikely to be a risk to groundwater, further monitoring should be incorporated into conditions of consent should the development application be approved. It is not considered that there are any issues in relation to groundwater that should warrant the refusal of the development application.

Non compliance with requirements of the NSW Health Department

To achieve sufficient vertical clearance in all locations across the site reliance is placed upon restricting burials to single depth burials and the use of grave liners for encapsulated burials in a number of locations on the site. This allows a shallower burial than the standard minimum depth of 900mm, thus maximising the vertical separation of graves from groundwater or bedrock. Bodies also then located at a level in the soil profile where aerobic processes are more prevalent.

In order to bury at a depth less than the 900mm specified in Clause 20 of the Public Health (Disposal of Bodies) Regulation 2002 the approval from the Director General of the Department of Health, or delegate is required. The Director General's authority under clause 20, Public Health (Disposal of Bodies) Regulation 2002 has been delegated (delegation PH306) to an Area Health Service's Public Health Unit Director and / or Medical Officer of Health.

This approval has not as yet been attained. While this raises concerns in regards to site suitability, no advice has been forthcoming from the NSW Health Department in that any objection or concern is raised in relation to varying the above requirements.

Notwithstanding, should NSW Health Department raise objections once an application is made under the Clause 20 of the Public Health (Disposal of Bodies) Regulation 2002 it is unlikely that the development could occur in its proposed form. While consideration could be given to incorporating the above requirement as part of deferred commencement condition, should the development application be approved concern is raised in that should this approval be unable to be achieved it may require changes to the development application.

6. CONSULTATION

6.1 Internal departments

Consultation was undertaken with the following internal Council departments:

DEPARTMENT	COMMENT:
Building	No objections. Conditions could be imposed to ensure all relevant matters prescribed within the BCA are adhered to.
Strategic Planning	Original concerns with the close grouping of the multi denominational buildings and possible congestion if multiple services are held simultaneously. This has been rectified by the amended plans deleting the original proposal to have multiple facilities for the various religious faiths.

	<p>Proposal may result in potential cumulative traffic implications.</p> <p>Attention is drawn to the recent Council resolution to proceed in amending LLEP 2008 to prohibit cemeteries in the rural zone.</p>
Engineering	No objection subject to conditions. These conditions could be imposed should the development application be approved.
Traffic	<p>The following comments were received from Council's Traffic Department:</p> <ul style="list-style-type: none"> • Traffic generation is unlikely to have a significant impact on level of service of the adjacent road network. • Access design must incorporate an RTA type "CHR" treatment with road widening and right-turn bay and deceleration left-turn lane. • Detailed parking design must be submitted for approval by Traffic Committee prior to Occupancy Certificate. The design must clearly indicate staff parking, visitor parking, hearse parking, service vehicle parking and bus and coach parking. The design must comply with AS2890.1-2004 and AS2890.6-2009. • Detailed road design including speed limit management and controls, signs and markings, road widths must be submitted for Traffic Committee approval prior to Occupation Certificate.
Environmental Health	Proposed onsite sewage management system is satisfactory subject to conditions could be imposed should the development application be approved.
Environment	<p>No objections subject to preparation of a Vegetation Management Plan for the 0.5 ha of Cumberland Plain Woodlands on the site and a Weed Management Plan for the whole site.</p> <p>The loss of the smaller dams and the remodelling of the two larger dams on the site may result in potential loss of fauna habitat.</p>
Access Committee	Considered by committee. No comments provided.
Aboriginal Community Development Officer	The site is not likely to have any Aboriginal significance.
Landscaping	No objection subject to standard conditions being imposed should the development application be approved.

6.2 External Departments and Agencies

The following comments were received from external departments and agencies

DEPARTMENT	COMMENT
NSW Office of Water	<p>The General Terms of Approval (GTA's) previously issued by the Office of Water are still applicable in relation to the need for applying for a controlled activity approval.</p> <p>The previous proposal had shown the dams to be modified to a storage volume to be within the Harvestable Rights of the property and therefore was not subject to water licensing requirements.</p> <p>The Office of Water has reviewed the amended proposal, which now involves the use of water from the several dams currently on the property. The Office has determined that a water use approval and a Water Access Licence (WAL) are required.</p> <p>One of the dams on the property is on a 'river' as defined in the Water Management Act 2000 and the other dam exceeds the 'Harvestable Right' for the property.</p> <p>It is noted that there has been significant changes to the proposal in relation to the use of water from the existing dams.</p> <p>For this proposal to proceed as currently presented, the applicant will be required to purchase a water allocation (WAL) from another WAL holder within the Mid Nepean River Catchment Zone as outlined in the trading rules within the Water Sharing Plan for the Greater Metropolitan Region Unregulated water sources.</p> <p>Currently the use of any water for any purpose other than stock and domestic is unlawful. As it is expected that it could be very difficult for the applicant to purchase water from another WAL holder it is recommended, particularly if the proposal is reliant on the use of surface water, that the consent authority make any consent with a deferred commencement until the applicant can demonstrate the gaining all the appropriate water licensing and water allocations to the volumes required for the success of this project.</p> <p>Should the development application be approved the Office of Water requirements would need to be included into a deferred commencement condition.</p>
NSW Health	No comments received.
Land and Property	Supports application as it will help address predicted shortages

Management Authority	<p>in cemetery capacity in Sydney.</p> <p>Recommends that any approval is linked with a transparent and robust perpetual maintenance scheme to ensure that the true development and maintenance costs associated with the cemetery are not transferred to future generations.</p>
NSW Police	<p>Lighting throughout and in particular car park areas should meet the minimum Australian Standards. Installing high quality, vandal resistant lamps are less likely to require replacement or maintenance. Lighting should be bright enough for an observer to be able to see into the back seat of parked vehicles. These lights should be on during the night and into the early hours of the morning to ensure visibility is maintained and decreases the opportunity for persons to hide in the darkness. As sites like these are often targets for malicious damage all precautions should be taken to preserve the memory of those buried.</p> <p>Signage is very important during the construction stage and whilst the site is up and running. These signs should be displayed on the exterior fence line at access points to act as a possible deterrent for would be vandals. These are examples of signs that could be utilised:</p> <p>"Trespassers will be prosecuted"</p> <p>"Have you removed your valuables?"</p> <p>"Is your car locked?"</p> <p>"Premises under 24hour surveillance"</p> <p>Speed signs to be posted within the site and an adequate number of calming devices (speed bumps) be put in to reduce the possibility of pedestrian related accidents.</p> <p>Consideration should be given to the current road and its capacity to deal with numerous commuters using the facilities during special religious / cultural ceremonies. In its current state Greendale Road is a rural single lane road with no street lighting, guttering and minimal street signage. Police believe this area may have the potential to be a motor vehicle accident hot spot. As such adequate lighting, signage and a possible widening of the roadway near the entry point to the premises to allow vehicles to over take any vehicles waiting to turn into the premises. Police believe this should be done on both sides of the roadway (east & west side)</p> <p>Reduction of landscaping in and around the main access points (Greendale Road). This may impact with motorist's field of vision</p>

	and may potentially lead to major motor vehicle accidents.
Aboriginal Land Council	No comments received.
Sydney Regional Development Advisory Committee	<p>The following comments were provided by the RMS:</p> <ul style="list-style-type: none"> • It is noted that Appendix B in the submitted Traffic and Parking Assessment Report (Ref 09193) shows that a total of 23 crashes with 20 persons injured were recorded along Greendale Road from 2005 to 2009, Any further increase of traffic on Greendale Road could potential result in an increase of crashes. As advised previously, an "Existing Roads - Single Route Road Safety Audit" on Greendale Road should be undertaken by an accredited road safety auditor to identify any potential road safety hazards that may emanate due to the planned growth along Greendale Road and the relevant countermeasures necessary to be depicted to allow the efficient and safe operation-of the roadway as per Austroads Guidelines. • The proposed access intersection design plan incorporating the provision of a type CHR right-turn storage bay of minimum 120 metres in length and a BAL left-turn treatment as proposed in the Revised Traffic and Parking Impact Assessment report should be provided to the satisfaction of Council and should comply with Austroads guidelines. • Any proposed landscaping and/or fencing must not restrict sight distance to pedestrians and cyclists travelling along the footpath of Greendale Road. • The proponent should ensure that at least 50 metres of No Stopping restrictions are placed along either side of the approach driveway to Greendale Road to ensure uninterrupted traffic flow arriving and departing from the development. • Similarly "No Stopping" restrictions should be placed along the full frontage of the development on Greendale Road following consideration of the Local Traffic Committee. • The layout of the proposed car parking areas associated with the subject development (including, driveways, grades, turn paths, sight distance requirements, aisle widths, aisle lengths, and parking bay dimensions) should be in accordance with AS 2890.1 -2004, AS 2890.2 - 2002, and AS 2890.6 - 2009. • The provision of off-street car parking shall be to the satisfaction of Council. • The internal roads are to be marked with pavement arrows to direct traffic movements in / out of the site and guide traffic circulation on the site. • A swept path analysis / plan of the longest vehicle shall be submitted to Council for review and approval, which

	<p>illustrates the longest vehicle entering and exiting the subject site, as well as manoeuvrability within the subject site, in accordance with Austroads.</p> <ul style="list-style-type: none"> • All vehicles are to enter and leave the site in a forward direction. • A Construction Traffic Management Plan detailing construction vehicle routes, number of trucks, hours of operation, access arrangements and traffic control should be submitted to Council prior to the issue of a construction certificate. • All demolition and construction vehicles are to be contained wholly within the site and vehicles must enter the site before stopping. • All work s associated with the. proposed development shall be at no cost to the RMS.
NSW Trade and Investment	<p>Agriculture</p> <p>The land consists of agricultural land class 3 suitable for cropping in rotation with pasture. The locality contains poultry and intensive dairy operations.</p> <p>The report deals mainly with the potential environmental and landscape impacts that a lawn cemetery may generate - however there is little detail or assessment regarding the potential for land use conflict risks between agricultural operations and a lawn cemetery. For example an assessment of how odour and traffic associated with agriculture particularly poultry and dairy could cause issues for people attending the lawn cemetery.</p> <p>While poultry and dairy farms are operating in the locality, attendees and permanent on-site residents will experience odour on occasions particularly at clean out (usually every 8 weeks) or with low wind conditions at night near the end of the growing cycle. From DPI's experience noise impacts during truck deliveries and at bird pick-up can also trigger complaints.</p> <p>Minerals</p> <p>The subject land is within AUTH 424 held by Director General NSW Department of Trade & Industry on behalf of the Crown, and PEL 2 held by AGL Upstream Investments Pty Ltd. The Resources & Energy Division has no concerns to raise regarding the proposal.</p>

6.3 COMMUNITY CONSULTATION

The original development application was exhibited from 5 May 2010 to 4 June 2010 in accordance with Liverpool Development Control Plan 2008. Ninety five submissions were received objecting to the proposal. One submission was received from the Free Church of Tonga raising no objections to the development.

The Joint Regional Planning Panel (JRPP) in response to a preliminary briefing on the application by Council officers, requested additional information on the proposal. Due to changes made to the proposal by the applicant in response to the JRPP request, the development proposal was publicly re-exhibited from 27 October to 26 November 2010. A total of approximately 216 submissions were received in response to this exhibition of the proposal.

The matter was further considered by the JRPP at its meeting held 16 July 2011 and resolved to defer the determination of the application pending a number of matters. A revised proposal for 60,000 plots was submitted and re advertised from November 2011 until 27 January 2012.

A further 41 submissions were received thus bringing the total to approximately 257 submissions having been received in response to the three public exhibitions of the proposal. The number of submissions received is approximate as there have been a number of development proposals for cemeteries and crematoria in the Greendale/Bringelly area. Some submissions received by Council were non specific as to the actual development or developments being referred to.

An initial information session was held by Council officers on the 9 November 2010 to clarify concerns raised within the submissions during the second exhibition period. The submissions in general are detailed, well argued, passionate and strongly put forward. Reference to the complete submissions on file is recommended as any summary of such will always be considered limited.

The general themes and issues raised in the submissions are summarized below:

ISSUE 1:

The development application incorrectly states the anticipated number of burial plots as 60,000. Objectors have calculated that less than 30,000 plots will be achieved on site. This will affect the financial viability of the development.

Comment:

The burial plot diagrams originally supplied with the application are indicative and do not show dimensions for the width of the burial plots. The also show a separation distance between each plot. The objections have used scaled dimensions for width to calculate a yield. The objectors' calculations are accurate for the assumptions made.

The applicant in response to these concerns has provided a burial plot layout for the whole site. A total of 62,065 burial lots have been plotted, although permission is sought only for 60,000 plots. A denser plot layout has been provided with reduced provision of pathways and the removal of separation distance between plots.

It is to be noted that excavated graves sizes are smaller than the actual burial plot size and dependent on matters such as casket / coffin size, localized soil conditions, digging method and OHS considerations. The proposed burial plot dimensions are 2,260mm X 900mm with the headstone plaque incorporated within the plot dimensions.

Council concurs with the concerns raised within submissions in relation to the financial viability of the development as a consequence of the amendments and the reduced area available for burials which as amended does not comply with the relevant DCP provisions.

ISSUE 2:

Ground water and surface water pollution will result. This will have effects on downstream properties and farm dams.

Comment:

A number of objectors commissioned a report by Harvest Scientific Services Pty Ltd to review the original and later revised application. The review suggests that substantial portions of the subject land are potentially incompatible with the proposed land use. In particular, it is considered that:

- The topographic location of portions of the subject land may represent an unacceptable groundwater pollution and re-surfacing hazard;
- Intermittent shallow groundwater tables are likely to be found within certain portions of the subject land and that an insufficient buffer distance (vertical height) will be available to protect groundwater and thus manage this issue;
- Local surface undulations may be required to be filled to ensure that the surface landform sheds surface waters. The use of grave liners, as required by NSW Health when land is filled, may be in-compatible with religious beliefs. Furthermore, after-filling, it may be impractical to place the bodies at a depth of greater than 400mm below the natural ground surface as currently required by NSW Health (NSW Health, 2006b), as the fill depth may be prohibitively thick; and
- Appropriate buffer distances to surface water features (drainage lines, dams etc) will need to be made available to manage the risk of surface water contamination.

The Harvest Report concludes:

"In summary, if the subject land is to be utilised for the burial of human bodies then more detailed investigations will be required to delineate the portions of the subject site that are suitable for this land-use. Given the potential for the spread of disease if appropriate controls are not put in place, it is recommended that a precautionary approach be adopted to this site assessment process".

The Harvest Review postulates that portions of the site are potentially incompatible with burials because of groundwater pollution and resurfacing hazards. The original Harvest Report basically recommends that this information be obtained prior to DA approval.

The revised application and supporting studies have refined the portions of the site suitable for burials. It is noted that this revised mapping has reduced the site area available for

burials which does not comply with the DCP. The constraint map prepared by ALW Design – Civil Engineering Consultants - has identified those portions of the site that may be found to be unsuitable for burial plots or may require adaptations to be made to those portions of the site.

The Harvest submission assumes normal depth burials with a minimum 1metre clearance of soil below the grave bottom giving a minimum soil depth requirement of 2.5 metres which is only achieved in limited portions of the site. The applicant proposes that grave liners be utilised where required. The top of the grave liner must be a minimum of 400mm below finished surface level. A soil thickness of 75mm exists between the coffin/ casket lid and the grave liner. Thus the minimum soil coverage is reduced from 900mm to 475mm plus liner thickness.

A distinction must also be made between the vertical separation between grave invert level and ground water and grave invert level and bedrock. The distance to groundwater is important as it allows for possible fluctuations in water table levels and allows a distance for leachate to be ameliorated by soil before reaching the water table. This is arguably of greater importance than the additional recommendation by some authorities for 1metre of soil depth below grave bottom. It can be argued that the presence of weathered shale and siltstone below the soil profile can act as a capping stratum hindering the flow of any leachate downward. It is also possible if desired to break up and replace the weathered rock effectively creating sumps below the graves.

The studies submitted with the application indicate that based on the permeability and structure of the soil, it is expected that the movement of any leachate generated within the soil will be minimal and therefore surface breakout is unlikely. The clay soils are estimated to have permeability values of between 1×10^{-6} cm/s and 1×10^{-7} cm/s (0.32metres per year to 0.032 metres per year). These clay soils restrict surface water percolation into underlying aquifers and as such the depth to groundwater does not inter-relate to any surface waters found on site except for possibly the two largest and hence deepest dams on the property.

The low sub soil permeability offers limited migration pathways for any potential contaminants (leachate) to migrate off-site or to percolate from surface areas into the underlying aquifer. Weathered shales and shale bedrock are present at greater depths. Shale has less porosity than clays (much more than sandstone), but extremely low permeability (like clay). Similar permeability characteristics and migration pathways to the clay subsoils are therefore likely within the deeper shales. Therefore, it is likely that natural attenuation will be sufficient to treat any leachate that may be generated by burials.

The applicant's updated groundwater / geotechnical report has indicated that the clearance between single burial plots and the ground water table generally exceeds a 3metre clearance. The updated report samples more of the site and submits that the previous report contained some groundwater measurements that were affected by surface water influx thus giving false indications of a high ground water table. Original bores were initially drilled for geotechnical purposes not groundwater monitoring and were thus not initially capped and permitting surface water / rainwater infiltration.

To achieve sufficient vertical clearance in all locations reliance is placed upon restricting burials to single depth burials and the use of grave liners for encapsulated burials in a

number of locations on the site. This allows a shallower burial than the standard minimum depth of 900mm, thus maximising the vertical separation of graves from groundwater or bedrock. Bodies also then located at a level in the soil profile where aerobic processes are more generally more prevalent. It is noted for the proposal to adopt shallower burials approval is required from the NSW Health Department which has not been obtained through this development application.

Grave liners for encapsulated burials must be of an impervious material and are typically constructed of 18mm thick compressed cement sheeting although other proprietary systems are available. The design, structure and materials used for encapsulation need to avoid subsidence when the coffin deteriorates, prevent feral animals entering the grave and prevent the escape of decomposition odours.

A grave liner must be constructed whenever the depth of burial is reduced from the mandatory 900mm. The body of the deceased person must be contained in a coffin or casket. The distance from the top of the lid of the grave liner to the natural ground surface shall not be less than 400mm, and should be as deep as possible. Further burial rights are not granted in respect of shallow grave sites.

ISSUE 3:

The development is visually unappealing.

Comment:

It is considered that the amendments to the proposal ensures that the rural landscape qualities of the site and locality are maintained. It is not considered that this concern is a reason to refuse the development application.

ISSUE 4:

Non compliance with zone objectives

Comment:

The issue of zone objectives has been canvassed in detail earlier in this report. It is considered that the proposal has potential to result in some land use conflict in relation to the generation of complaints and on this basis, it is considered the proposal does not fully satisfy objective (d). However, it is considered the potential for complaints is not a reason to result in the refusal of the development application.

As identified earlier, the RMS have requested that a Road Safety Audit be undertaken for the entire length of Greendale Road. Given that this has not been undertaken and that the results of such an audit are unknown there is potential for Council's road infrastructure to be impacted upon and for this reason the proposal is inconsistent with this zone objective in relation to Council's infrastructure.

This objective not being resolved as part of the amended application is considered to be a valid reason for refusal.

ISSUE 5:

Validity of application. The application lacks enough detail to enable an informed decision to be made. Too much detail is left to the future stages of development.

Comment:

The original application identifies the site for a future crematorium but lacked details of the proposed design and its operation. This component of the application has been deleted. The application has also been amended to delete indicative multiple memorial facilities in favour of one small multi denomination facility, thus removing a further degree of uncertainty from the application.

ISSUE 6:

The development is a regional facility better suited in a location such as the Western Sydney Parklands.

Comment:

Cemeteries may be appropriate in the Western Sydney Parklands, however the application before the JRPP is not in the parklands.

ISSUE 7:

Large scale cemeteries are not rural in nature. It is an over development of the site.

Comment:

Cemeteries in rural areas have historically been of a relatively small scale and associated with church grounds or municipal undertakings on the outskirts of towns. Economies of scale have resulted in the expansion in size of many traditionally small scale rural activities such as poultry farming and greenhouse horticulture all with associated increases in visual impact. The proposed cemetery by being a lawn cemetery will have minimal visual impact and present a grassed field appearance in keeping with a rural environment.

ISSUE 8:

The development will result in the loss of agricultural land.

Comment:

Although the cemetery land use will remove a rural parcel of land from being used for agricultural purposes, the land as previously mentioned is not high quality agricultural working land or land that would commercially support the grazing of livestock. It does not fragment or alienate other rural land from amalgamating with other adjoining parcels.

ISSUE 9: Generalised abhorrence to the notion of a proximate cemetery.

Comment:

Many people find cemeteries peaceful and serene places. Equally many people find the thought of living near a cemetery challenging and confronting and associated with feelings of grief, sadness and loss.

Whilst cemeteries are essential and eventually a facility to be used by all, they are perceived to be developments that need to be spatially and temporally distant from the observer, that is, out of sight and thus not under present and constant consideration by an observer.

Both these perspectives may be equally valid. It is not the role of a planning authority to arbitrate on which is to be the correct and proper viewpoint, however an assessment of the negative viewpoint is required as it is presented as an objection to be considered. Objectively a planning authority must consider the abhorrent viewpoint as irrational in any normative sense. It is based on subjective fears and perceptions rather than any real threat or danger. Vague intimations of abhorrence and repugnancy are not sufficient to justify rejecting a development application.

This abhorrence and repugnancy results in the perception of the development as visually contaminated. No matter how attractive the development appears it will be perceived in a negative fashion.

ISSUE 10:

Ground and surface water contamination from the cemetery will make local farm produce more difficult to market

Comment:

Successful marketing of what limited produce is produced in the immediate vicinity is not expected to be a significant issue. For perspective for example, no difficulty appears to be experienced with marketing crops irrigated from and livestock watered from the Nepean River.

ISSUE 11:

Atmospheric pollution and ash fallout will result from the crematorium.

Comment:

As previously reported no crematorium is proposed as part of the amended application.

ISSUE 12:

Odours will be caused.

Comment:

No offensive off site odours will result from a properly managed cemetery.

ISSUE 13:

Neighbouring poultry farms may be subjected to odour complaints from cemetery visitors.

Comment:

All poultry farms must be operated and managed to minimise or eliminate offensive odours in accordance with the provisions of the Protection of the Environment Operations Act 1997. There will be no permanent residents on the site, only day time staff and individual visitors to the cemetery will typically attend infrequently and for a limited period of time. Objection to a development so as to reduce scrutiny and potential complaints whilst understandable is not considered a valid ground for objection.

ISSUE 14: Noise impacts.**Comment:**

The Acoustic Report into the development indicates that no significant noise nuisance will be created by the development apart from a minor increase in noise from vehicles traveling along Greendale Road.

ISSUE 15: Local amenity and lifestyle will be adversely affected.**Comment:**

The Liverpool experience to date with cemeteries has generally been positive. Liverpool has historically been well served with cemeteries. Firstly Pioneer Cemetery on the outskirts of the original town of Liverpool (and now edge of the CBD) followed by the Liverpool Cemetery off Memorial Avenue and the various small rural churchyard cemeteries with the largest at Church Road Denham Court.

More recently lawn cemeteries have been established at Leppington and Western Road Kemps Creek. Newer and progressively larger cemeteries have thus historically developed on the expanding outskirts of the developed areas of Liverpool and in neighbouring rural areas. This application reflects a continuation of the historical trend. The rural lifestyle of current residents of Kemps Creek and Denham Court / Leppington is not considered to have been substantially and adversely affected by the cemeteries located in those suburbs.

ISSUE 16:

Cumulative impacts (particularly traffic) with other proposed cemeteries and crematoria proposed on Greendale Road.

Comment:

This issue has been canvassed earlier in the report and it is not considered that traffic generation and functional capacity of Greendale Road is a reason for refusal of the development application.

ISSUE 17:

Traffic generation, congestion and resultant accidents particularly from funeral processions and on busy days such as mothers' day. Greendale Road is too narrow with inappropriate horizontal and vertical alignment and needs to be upgraded.

Comment:

The site has access from Greendale Road which is a collector road with a sub-arterial function. Greendale Road facilitates two way traffic with one undivided lane in each direction. The width of the existing sealed pavement carriageway is approximately 6.2m along the frontage of the subject site however as identified earlier within the report concern is raised that the entire length of Greendale Road is not of 6m (sealed).

It is also noted that the RMS have requested a Road Safety Audit. In this regard, residents concerns regarding traffic and road safety have not been resolved as part of the amended application.

It is considered that it is not appropriate for the development application to be approved on this basis and that the concerns raised in submissions are substantiated.

ISSUE 19:

No public transport to the site is available.

Comment:

No public transport is available to the site. Whilst public transport is desirable for all developments, the reality is that for most visitations to cemeteries public transport is inappropriate and not desired. Travel will generally be via funeral vehicles and personal vehicles with high occupancy rates because of pooling by relatives and friends. A typical funeral will involve participants from many locations in four quite distinct trips within a relatively short time span – home or work to place of service then to the cemetery then to a reception then back to home or place of work. Public transport is unlikely to be available for all links in the journey and is typically unsuitable for mourners requiring a degree of privacy and freedom from worrying about connections and timetables.

ISSUE 20:

There is only one road access to the cemetery.

Comment:

The site has one access road with access from two directions. Greendale Road has sufficient capacity to accommodate the expected traffic volumes.

ISSUE 21:

The site is affected by flooding.

Comment:

An approximately 700sqm corner of the site is affected by the Probable Maximum Flood (PMF). This portion of the site contains remnant vegetation and is not proposed for development. It is to be left free of burial plots.

ISSUE 22:

Past animal slaughter on the site may make it unattractive as a burial ground.

Comment:

Council has no record of the site being used as an abattoir. The current owner advises that animals have not been slaughtered on the property. In any event the matter is not relevant to the planning consideration of the proposed development.

ISSUE 23:

Proposed onsite sewage management is inadequate.

Comment:

An on-site sewage treatment system is proposed and will be subject to separate approval under Section 68 of the Local Government Act. Should the development application be approved these could be incorporated into the conditions of consent.

ISSUE 25:

Endangered ecological communities will be adversely affected.

Comment:

The subject site is identified as containing environmentally significant land pursuant to Clause 7.6 of Liverpool Local Environmental Plan 2008. As such the development application is supported by a Flora and Fauna Survey including a Seven-Part Test and a Vegetation Management Plan. The area affected is not proposed for burial plots.

It is considered that the specialist reports accompanying the development application adequately demonstrate that the development will not adversely impact on flora and fauna species. Furthermore, the proposed actions and tasks within the Vegetation Management Plan ensure that flora and fauna communities on site will be conserved and enhanced.

ISSUE 26:**Loss of property values for neighbouring properties.****Comment:**

Cemeteries are permissible within rural zones and are not inherently incompatible with rural neighbours as evidenced by the existence of lawn cemeteries in Liverpool at Leppington and Western Road Kemps Creek.

The presence of a nearby cemetery may preclude some buyers from considering a property for purchase, however, a similar argument can be mounted for nearly all rural activities ranging from odorous poultry farms, composting activities and recently fertilized market gardens to noisy trail bike riders on rural residential properties to high traffic generating quarries. A positive selling point for properties near cemeteries is that in reality they are relatively benign neighbours in terms of actual physical nuisance compared to many other rural uses

ISSUE 27:**Future maintenance and upkeep of the site has not been addressed adequately.****Comment:**

The application has submitted very general details of the financial modeling of the development however a specific operation plan which addresses perpetual care and maintenance arrangements have not been provided.

This is contrary to the requirements within LDCP 2008 Part 5.

ISSUE 28:**Warragamba Dam will be contaminated by the development.****Comment:**

Properly managed, the runoff from the cemetery will not be contaminated. Also the runoff from the site ultimately reaches the Nepean River downstream of its confluence with the Warragamba River. Should the development application be approved, a condition of consent could be imposed.

ISSUE 29:**The lack of water supply for the project as town water is unavailable and the local rainfall available for onsite collection is low and variable.****Comment:**

Town water is not available. If the proposed treated water from on-site rain water tanks proves generally inadequate in servicing the use of the main buildings then regular supplementation with purchased water from tankers will be required. Whilst this is generally an undesirable scenario for a residential development, it is not necessarily an unsuitable arrangement for a commercial development.

Treated waste water is to be utilised for toilet flushing. Hand sterilising solution is to be provided for hand washing in remote amenity buildings. The dams are to be utilised for site and landscaping watering. Water consumption can also be minimised through appropriately chosen plantings, grass cover selection and management.

The potential water demand has also reduced in the amended application with replacement of the multiple memorial service facilities with one small multi denominational chapel. A Water Allocation Licence is required to be obtained for the site in order to make use of the water from the dams as advised by the Office of Water. Should the development application be approved, this would need to be incorporated into a deferred commencement condition.

ISSUE 30:

Large and excessive quantity of fill is proposed in the development of the site.

Comment:

The current design retains the two large dams on the property essentially in their existing state and the revised road layout minimises the amount of earth works required on the site. When considered in context relative to the size of the site (40 hectares) and the scale of the development the amount of proposed earthworks is not considered excessive.

ISSUE 31:

The proposed places of worship may be used for more than funeral services and result in additional impacts on the neighbourhood.

Comment:

The amended application removes the multiple proposed separate facilities for memorial services for various religions and cultures. A single multi denominational chapel with limited capacity is proposed.

7. The likely impacts of development

7.1 Natural and Built Environment

The amendments to the application have resulted in a development which is more consistent with the existing and future rural landscape character of the locality.

7.2 Social Impacts and Economic Impacts

There are recognised arguments to support the proposal on the basis that there is an identified need for cemeteries within the Sydney Greater Metropolitan Area.

In respect of the Economic impacts there is a question regarding the viability of the proposal. The concern raised by Council is raised in relation to the reduction of the site area available for burial as a result of the amendments made to the proposal.

In this regard, concern is raised in relation to the potential sterilisation of the site given that the use of a site as a cemetery is definite. Whilst the question of economic viability is usually given little weight in planning considerations, the underlying concern is that unlike other land-uses once burials have occurred it will effectively sterilise this land parcel from alternate

uses and consequently Council needs to be satisfied that the project is financially sound. Unfortunately insufficient information has been provided in this case, particularly given the DCP non compliance.

8. Suitability of the site

The site is not considered, on balance, to be suitable for the amended development for the reasons outlined in this report, specifically:

- The proposal is contrary to the zone objectives of RU1. While the proposal is a permissible land use, it does not provide an entitlement that all cemeteries are suitable on all land within the RU1 zone. For reasons detailed in this report, the proposal is not considered to satisfy all the objectives of the RU1 zone.
- The proposed development is contrary to a number of controls contained within LDCP 2008 – Part 5 in particular the minimum land area.
- Concern remains unresolved in relation to road traffic safety.

9. The Public Interest

Having regard to recent cemetery reports it is Council's view that that adequate provision is made for the burial needs of the future and existing residents of the Liverpool local government area. Even if this position was found to be incorrect the proposal is not considered to be in the public interest for the following reasons

- The proposal is contrary to the zone objectives (d) in some part and (e) of the RU1 zone. While the proposal is a permissible land use, it does not provide an entitlement that all cemeteries are suitable on all land within the RU1 zone. For reasons detailed in this report, the proposal is not considered to satisfy the objectives of the RU1 zone.
- The proposed development is contrary to a number of controls contained within LDCP 2008 – Part 5 in particular the minimum land area.
- There is concern regarding the financial viability of the development specifically given the reduction in burial areas available on the site which is contrary to LDCP 2008.
- Concern remains unresolved in relation to traffic road safety.
- Council has recently resolved to proceed with an LLEP 2008 amendment to prohibit cemeteries within rural zones of Liverpool.
- A number of relevant issues and concerns have been raised in written submissions and consultation with the community.

10. CONCLUSION

The DA seeks consent for a cemetery with a total capacity of 60,000 internments. The applicant has provided a detailed and lengthy submission with a number of expert environmental reports that assess and review the impacts of the proposal upon the natural environment.

A primary issue relates to the non-compliance with Council's prescribed 15 hectares minimum burial area. The proposal has been amended to provide for only approximately 13 hectares of site area which would be available for burials. This is contrary to DCP controls.

Providing a large burial area requirement seeks to provide for adequate burial space to ensure sites have long term viability and provide for the capacity to cater for long term demand for burial space reducing the need to find alternate sites on an ongoing basis. It is considered that overall a reduced number of large sites located in appropriate locations may result in reduced number of neighbouring properties and associated interface issues compared to a large number of smaller sites dispersed across the rural areas. Also larger sites have an increased capacity to provide for the appropriate setbacks, circulation space, and on site facilities.

While the proposal has been amended to address visual impact issues, which are now considered to be satisfactorily resolved through the incorporation of increased setbacks and burials removed from the access handle, it has been at a consequence of the availability of the sites burial areas. Council is not satisfied is an appropriate outcome for the site and the community.

Given that the 15 hectare burial area requirements within LDCP 2008 were adopted following consultation with interested parties including the affected community and that this control has been consistently applied in similar applications it is considered that significant weighting be given to this control in the determination of this application.

It is further noted that Council has both resolved to proceed with amendments to LLEP 2008 to prohibit cemeteries in the rural zones and adopt of report which supports the attainment of zone objectives in the rural zones.

The above Council resolutions raise issues regarding the public interest that have been given consideration of the amended proposal. Council's strategic planning direction of Council to prohibit cemeteries in rural zones should be given weight in the determination of this application pursuant to public interest considerations prescribed by Section 79C of the Act.

Concern is also raised in the most recent advice provided by the RMS which has requested that a Road Safety Audit be provided to ensure road safety is adequately considered has also not been resolved.

Given the above, it is recommended that the development application proposing a multidenominational cemetery at Lot 1 DP 599308, 321 Greendale Road Greendale be refused.

RECOMMENDATION:

That the Sydney West JRPP refuse development application DA-1133/2010 as amended for a cemetery at 321 Greendale Road, Greendale for the following reasons:

1. Pursuant to the provisions of S79C(1)(a)(i) of the Environmental Planning and Assessment Act 1979, the proposed development does not satisfy objective (e) of the RU1 – Primary Production zone.
2. Pursuant to the provisions of S79C(1)(a)(iii) of the Environmental Planning and Assessment Act 1979, the proposed development does not satisfy all the requirements of Clause 9.13 – Cemeteries, Crematoriums and Funeral Chapels of Part 5 of Liverpool Development Control Plan 2008. In this regard, the application:
 - (i) Proposes a cemetery on a lot that does not have a minimum of 15 hectares of site area available for burial plots,
 - (ii) Greendale Road does not have a sealed pavement width of 6m for its entire length.
 - (iii) Does not demonstrate that the submitted Plan of Management will ensure satisfactory perpetual care of the site.
3. Pursuant to the provisions of S79C(1)(b) of the Environmental Planning and Assessment Act 1979, the proposal has not resolved all road safety issues and in this regard has potential to impact on the built environment.
4. Pursuant to the provisions of S79C(1)(e) of the Environmental Planning and Assessment Act 1979, the submissions received raise a number of valid concerns regarding the minimum site area, long term viability and road safety impacts on Greendale Road therefore the proposed development is not considered to be in the public interest.