



2015

COUNCIL BUSINESS PAPERS

Ordinary Meeting 17 JUNE 2015

ATTACHMENT 6.2.2

- ▶ 1. Planning Proposal – 'Burrundulla', Lots 3 & 4 DP1069441 Spring Flat Road Mudgee
- 2. Revised Planning Proposal 'Burrundulla', Spring Flat Road Mudgee
- 3. Response to recommendations submitted by applicant

Planning Proposal – ‘Burrundulla’, Lots 3 & 4 DP1069441 Spring Flat Road, Mudgee

REPORT BY THE TOWN PLANNER TO 17 JUNE 2015 COUNCIL MEETING

Planning Proposal Spring Flat Road

GOV400043, LAN900043, LAN900044

RECOMMENDATION

That:

1. **the report by the Town Planner on the Planning Proposal – ‘Burrundulla’, Lots 3 & 4 DP1069441 Spring Flat Road, Mudgee be received;**
2. **Council support in principle the intent of the Planning Proposal for 2ha rural residential lots on the subject land with an additional requirement that the documentation be amended:**
 - i) **such that the land that is rezoned is limited to an area sufficient to accommodate 25 lots at the southern portion of the site; and**
 - ii) **to rezone a 20m wide corridor along Sydney Road to RE1 Public Recreation and vegetated to act as a visual buffer.**
3. **Prior to public exhibition of the Planning Proposal, a hydrological assessment be conducted to investigate the potential impacts of on-site effluent disposal on groundwater which feeds into the Mudgee town water supply and to demonstrate the most appropriate method of servicing;**
4. **The Planning Proposals be forwarded to the Department of Planning and Environment Gateway for determination.**

Executive summary

Council has received three Planning Proposals for 2ha rural residential development. Two of these proposals are from Minespex seeking an amendment to Local Environmental Plan 2012 to facilitate the development of land known as ‘Menah’ into 2 ha and 12 ha lots and also at Broadhead Road for 2 ha rural residential lots. These two proposals are being considered under a separate report.

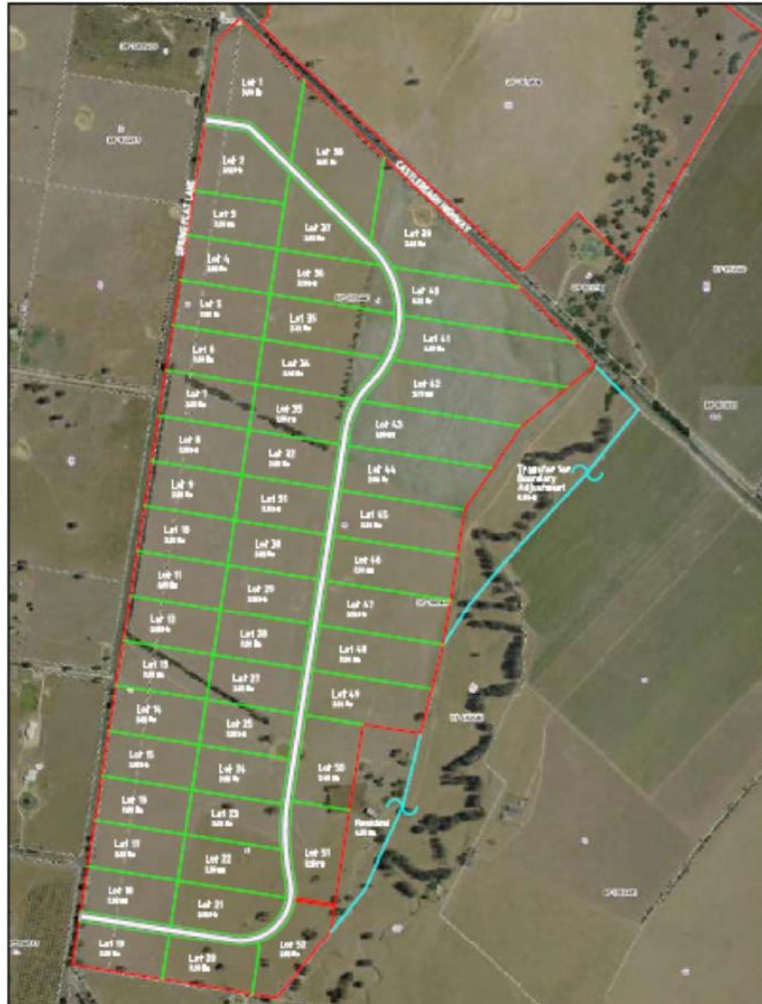
A third proposal for the same form of development has been received from Barnson on behalf of Burrundulla Pty Limited and is the subject of this report. If necessary for efficiency of administration the proposals will be combined for the purposes of the Gateway Determination. The Planning Proposal is seeking an amendment to Mid-Western Regional Local Environmental Plan 2012 to rezone the land from RU4 Primary Production Small Lots to R5 Large Lot Residential with a minimum lot size of 2ha. Council deferred consideration of the proposal at its meeting on 4 December 2013 until the completion of the Urban Release Strategy, which was endorsed in August 2014.

In terms of the release of land, this report concludes that, consistent with the proposals submitted from Minespex for the same form of development, where there are opportunities available at alternative locations, rezoning should not be limited to a single site. However, the area of land within each of these sites that is actually rezoned (as opposed to that included in the Town Structure Plan) should be limited to an area equivalent to a yield of 25 lots as the first stage of the release.

Detailed report

The site is located on the southern side of Sydney Road and the eastern side of Spring Flat Road, being Lot 3 and 4 DP 1069441 known as 'Burrundulla' and consisting of 139ha. The proposal would rezone the land from RU4 Primary Production Small Lots to R5 Large Lot Residential with a minimum lot size of 2ha. An indicative lot layout indicates a lot yield of 52 lots. The following figure, extracted from the Planning Proposal document shows the preliminary concept plan for the site.

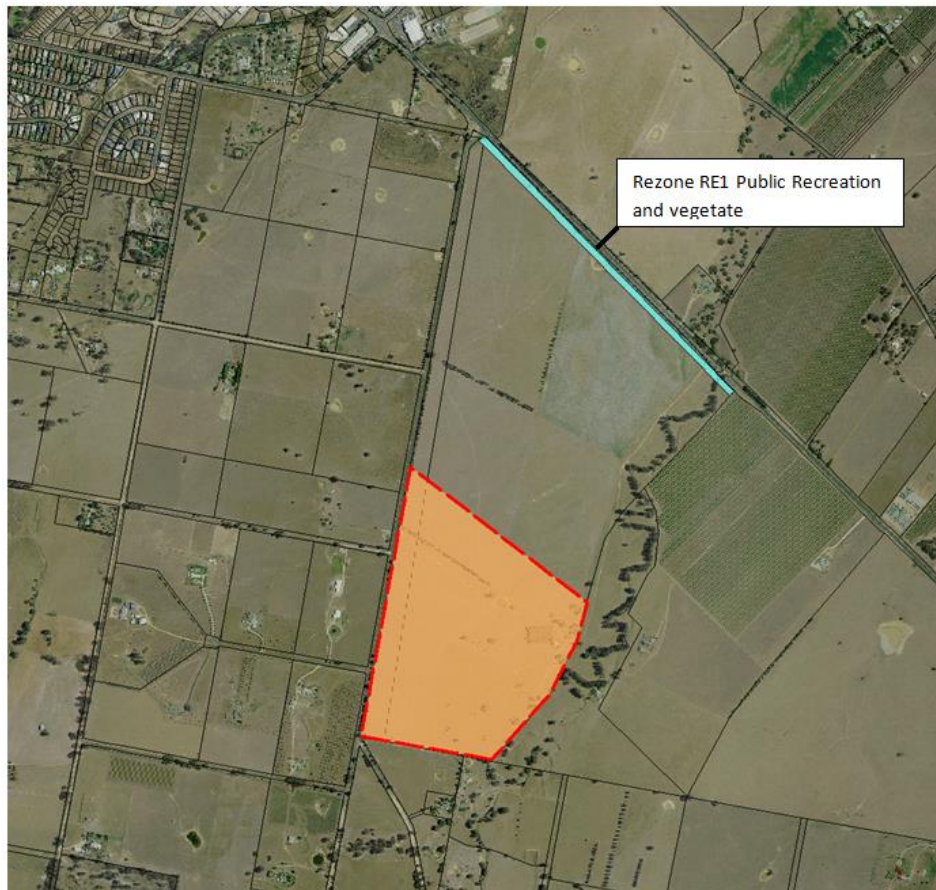
Figure 1 – Preliminary concept plan for 52 Lots



As per the assessment on supply and demand undertaken as part of the 'Menah' and Broadhead Road report, despite the URS the supply of land for 2ha lots is zero. Infrastructure demands and delivery of lots to the market have a different cost structure than general residential development which will always be fully serviced. Council need to balance the provision of supply with the need to avoid flooding the market. Based on the URS the requirement for this form of development is 7 lots per year. Allowing for five years supply, plus a sensitivity buffer of 5 years this would be 70 lots. Further, if Council takes the approach to the location of this form of development in terms of providing market choice in a manner consistent with other forms of residential land, these 70 lots could justifiably be distributed amongst the sites identified in the three proposals rather than singling one site out. Purely based on the criteria, the Broadhead Road site is the most suitable (refer to the 'Menah'/Broadhead Road Report), however, it only yields 21 lots. This leaves a 49 lot shortfall which could be distributed, at this stage between the "Menah" site and the subject site on Spring Flat Road. Therefore, it would be desirable that, should Council support the 2ha rural residential form of development at these locations it is, at this stage, limited to 25 lots at each site.

In light of this, it is recommended that the Planning Proposal be amended to rezone only the southern portion of the site R5 Large Lot Residential with a minimum lot size of 2ha to accommodate the 25 lots. The southern portion of the site is considered most suitable for rural residential development as it is setback approximately 1 kilometre from Sydney Road and is enclosed by a mature vegetation screen, providing an ample visual buffer to protect the main entrance corridor to the Mudgee town centre. An indicative location is identified in Figure 2 below.

Figure 2- Indicative area to accommodate 25 lots



Council has concerns regarding the visual impact of potential rural residential lots on the northern portion of the site with frontage to Sydney Road. As such, this report also recommends that the planning proposal be amended to rezone a 20 metre wide corridor along Sydney Road to RE1 Public Recreation and vegetated to act as a visual buffer. This requirement will ensure that a mature vegetation screen is already established along Sydney Road if further release of land for this form of development is required in the future. The recommendation is consistent with the Comprehensive Land Use Strategy and Mudgee Town Structure Plan which identifies a buffer along this section of Sydney Road to “*protect main entrance corridors to the town, provide setback criteria and restrict access to the highway*”.

Photo 1- View from Sydney Road at north-west corner looking south, noting tree corridor in the distance.



Photo 2- View from Spring Flat Road at south-west corner looking north, noting visual buffer to Sydney Road.



Site Suitability Criteria

The planning proposal has been assessed against the criteria that were identified in the report for ‘Menah’ and Broadhead Road to determine site suitability.

Criteria	Complies	Comment
will not undermine future residential land opportunities	Yes	Is outside both the north and south future urban investigation areas
can be managed to avoid land use conflict	Yes	May need additional safeguards

Criteria	Complies	Comment
is unconstrained by flooding	Yes	The site is not flood prone land and is above the 1:100 year flood level and probable maximum flood event.
can be connected to the existing road network by sealed road access	Yes	The site has sealed road access with frontage to Sydney Road and Spring Flat Road. Access via Spring Flat Road may be achieved to avoid direct entry/egress from Sydney Road which is a classified State Main Road.
is not visually intrusive and does not impact on visual amenity or sensitive corridors	No	The proposal in its current form does not address the potential visual impact of urban subdivision of future lots with frontage to Sydney Road. However, as outlined above, Council's recommendation for 2 hectare lots only on the southern portion of the site mitigates potential impacts.
will not adversely impact on the groundwater system	No	Is within the high groundwater vulnerability area. Proposal is not supported by a hydrological study. Site is up stream of the Mudgee town groundwater supply. (See comments below).
can be justified in terms of supply and demand	Possible – need to consider the context of URS	Supply and demand will continue to be difficult to measure until such time as this form of development reaches the market and Council has the sales data.
can be managed to reduce bushfire hazard	Yes	Outside the bushfire hazard area.
Land is not constrained by identified biodiversity sensitivity	Yes	Part of the site is identified as high biodiversity sensitivity along the watercourse which has been avoided in the layout.
avoid agricultural land capability assessment class I-II agricultural land	Yes	The site is identified in as class III in the eSPADE Google Maps-based information system administered by the Office of Environment and Heritage.

Based on the criteria, sensitive groundwater, visual amenity and demand/supply remain the only inconsistencies. At this stage the proposal does not include the connection of the lots to reticulated water or sewer. The proposal fails to adequately address the potential impacts of on-site effluent disposal on groundwater which feeds into Mudgee town water supply.

This report recommends that a hydrological study be conducted prior to public exhibition of the planning proposal to determine if on-site sewerage disposal is appropriate on the subject land.

Council support in principle the intent of the Planning Proposal for 2 ha lots indicating potential for further release of land on the northern portion of the site for this form of development in the future. As such, conducting the hydrological assessment prior to public exhibition would be worthwhile to ensure that rural residential development on the site will not adversely impact on the sensitive groundwater system. If the hydrological modelling indicates that on-site disposal is not acceptable due to risks to the town water supply source, the site can connect to the town sewerage scheme via the Industrial Sewerage Station on Burrundulla Road.

In regards to visual amenity, as outlined above, Council's recommendation to amend the planning proposal to rezone only the southern portion of the site for 2ha rural residential lots and to include a 20 metre wide corridor along Sydney Road to RE1 Public Recreation to be vegetated as a visual buffer will alleviate potential impacts in the short and long term.

In terms of supply and demand, as discussed above, despite the URS the supply of land for 2ha lots is zero. Based on the earlier assumptions in terms of land supply, the 'Burrundulla' site should be limited to 25 lots.

Financial and Operational Plan implications

Not applicable.

Community Plan implications

The recommendation is consistent with the Community Plan. The strategic planning function sits under the theme Looking After Our Community in the Community Plan in relation to the delivery of housing through effective land use planning.

HEATH DENNERLEY
TOWN PLANNER



CATHERINE VAN LAEREN
DIRECTOR, DEVELOPMENT

2 June 2015

Attachments: 1. Planning Proposal (included at the end of the business paper)

APPROVED FOR SUBMISSION:



BRAD CAM
GENERAL MANAGER



Planning Proposal

**Lots 3 & 4 DP1069441, south Mudgee
(land bound by Spring Flat Road and Sydney Road)**

Burrundulla Pty Limited

structural engineering
project management
residential design
civil engineering
registered surveyors
commercial design
geotechnical engineering
town planning
graphic representations
environmental drilling
construction management
mechanical engineering
industrial design
environmental consulting
nata accredited
testing laboratory
electrical engineering
interior design

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Dubbo . Mudgee . Bathurst . Parkes



Mar-15

(Our Reference: 19429 - rezoning - P01f)

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EXECUTIVE SUMMARY

This submission is made by Barnson Pty Ltd to Mid-Western Regional Council on behalf of the Burrundulla Pty Limited, seeking support in principle for the rezoning of rural land under the Mid-Western Regional Local Environmental Plan 2012. The proposal seeks Council's support to rezone the site from the RU4 - Primary Production Small Lots zone to R5 - Large Lot Residential zone. The proposal also seeks an amendment to the minimum lot size applying to the land to permit large lot residential lots with a minimum area of 2ha.

The subject land is located in the south Mudgee area and consists of two (2) lots with a total area of 139ha, being Lots 3 & 4 DP1069441 located on the southern side of Sydney Road. The subject land extends to the north and south of Sydney Road / Castlereagh Highway and has frontage to Spring Flat Road along its western boundary.

The submission follows a review of Council's Mudgee and Gulgong Urban Release Strategy (URS) 2014 which includes the proposal, recommending a minimum lot size of 2ha per lot, with Council supporting it for release from 2015+ as resolved at its meeting of 5 November 2014. The land was initially considered for rezoning in 2013 following a review of the Mid-Western Regional Comprehensive Land Use Strategy (2009) which identified Spring Flat Road as a 'hard edge' for urban growth in the south side of the town "*because it provides a clear edge between urban and rural uses*".

The Strategy identifies land north of Spring Flat Road as an opportunity for large lot residential subdivision to 4,000m². The subject land, which adjoins this edge defined by Spring Flat Road is considered a suitable extension of future large lot residential subdivision as submitted in this proposal.

Based on a preliminary assessment, the subject is predominantly cleared and limited in productivity to low intensity grazing such that its highest and best use is not being economically achieved. The subject land has sealed road frontage to Spring Flat Road and is recognised for its suitability for large lot rural residential subdivision with a minimum lot size of 2ha as an extension to the southern boundary for the area identified as potential large lot residential along Spring Flat Road.

The submission consists of two copies of this report, including:

- Planning Report prepared by Barnson Pty Ltd;
- Maps and Plans by Mid-Western Regional Council and Barnson;
- Aboriginal Archaeology Assessment by Mudgee Local Aboriginal Lands Council
- Preliminary Site Investigation prepared by Barnson

1.0 OVERVIEW OF SITE CHARACTERISTICS

1.1 Site Location

The subject land extends south of Sydney Road / Castlereagh Highway and has frontage to Spring Flat Road along its western boundary. Refer to **Figure 1** - location plan.



Figure 1 - aerial view location plan of site, located on the south-eastern edge of Mudgee

1.2 Property Description & Zonings

The subject land consists of two (2) lots legally described as:

- Lot 3 DP1069441 located on the southern side of Sydney Road and eastern side of Spring Flat Road;
- Lot 4 DP1069441 located on the southern side of Sydney Road.

The subject land is currently zoned RU4 - Primary Production Small Lots pursuant to the Mid-Western Regional Local Environmental Plan 2012 (the LEP). Refer to LEP map, in **Appendix A**.

The proposed rezoning is to R5 - Large Lot Residential, with a minimum lot size of 2ha pursuant to the LEP. Refer to proposed plan of subdivision at **Appendix B**. Land ownership is described in **Table 1**.

Table 1: Property description, lot size and preferred zoning

Lot	DP	Lot Size	Existing zoning	Suitable Zoning
3	1069441	15ha	RU4 - Primary Production Small Lot	R5 - Large Lot Residential
4	1069441	124ha	RU4 - Primary Production Small Lot	R5 - Large Lot Residential
Total Area		139ha		

1.3 Landform and Topography

Soils of the site are included in the group 'Craigmore', these soils generally occur within and around Mudgee, and on the eastern and western side of the Cudgegong River. Soil types within the group include: Non-calcic Brown Soils and Red Earths on very old Quaternary alluvium. Yellow Podzolic-Solodic Soils intergrades on lower areas and some leached loams on lower terraces adjacent to major streams (Lawrie, B.W. and Murphy, J.W. (1998), Soil Landscapes of the Dubbo 1:250 000 Sheet, Department of Land and Water Conservation of NSW, Sydney).

In broad geological terms, the area lies upon Quaternary rocks described as '*alluvial silt, clay, sand with variable humic content, sporadic peddle to cobble sized unconsolidated conglomeratic lenses*'. Underlying this series of rocks is the Narrabeen and Sydney Basin Groups of rocks of Triassic and Permian ages (NSW Mineral Resources, 1:100 000 Geological Map, 2000).

A description on salinity is not available.

The subject land generally has a mild fall to the northeast with surface runoff draining into minor streams that traverse the site into Oakey Creek, which meanders adjacent to the eastern boundary of Lot 4, flowing in a northerly direction into the Cudgegong River. Some surface runoff is captured by two 'off line' dams which located towards the middle of the site. The near level form of the land ensures that future development will require minimal earthworks thereby preserving the natural drainage regime across the site.

1.4 Land-uses

The subject land is cleared, with Lot 4 featuring two farm sheds towards its eastern boundary. The land is currently used as low intensity grazing land featuring cattle and sheep. Advice from the owners on past land uses is that the land has a long history of livestock grazing, with no portion of the land ever established for intensive agriculture purposes. Refer to **Photos 1 - 3**.

The known history of the site is also documented in the Preliminary Site Investigation report prepared under separate cover by Barnson. This report finds that the proposed area of rezoning (which excludes the shearing shed and surrounds at the south-eastern corner) is considered suitable for the proposal.



Photo 1: View from south-eastern corner of Lot 4 looking north west from Sydney Road.
Scar Tree can be seen left of centre surrounded by a herd of cattle



Photo 2: View from Spring Flat Road at south-western corner of Lot 3
looking north east, noting farm sheds to right side of picture



Photo 3: View from Spring Flat Road at south-western corner of Lot 3 looking north , noting western boundary fence and tree corridor along western boundary

1.5 Surrounding Development

The surrounding development is summarised as follows:

- To the north on the opposite side of Sydney Road is pastoral grazing land which extends east to Burrundulla Road and north to the Water Treatment Plant and Pumping Station;
- To the south-east is farmland used for livestock grazing and viticulture;
- To the south is a number of small rural lots used for livestock grazing and housing;
- To the west on the opposite side of Spring Flat Road is a number of small rural lots used for livestock grazing and an olive grove.

Refer to Aerial Map in **Appendix A**.

Noting the mix of land uses in the surrounds and its fragmented state, the proposed rezoning of the land to R5 - Large Lot Residential, with a minimum lot size of 2ha is considered to provide a compatible density and land use that is unlikely to result in any significant conflicts with adjoining land uses, nor adversely impact on sustainable agricultural practices in the locality.

1.6 Flora and Fauna

The subject land is predominantly cleared having a long established use as low intensity grazing land. Corridors / stands of established eucalypt trees are noted across the subject land, with a corridor along the western boundary of Lot 3 fronting Spring Flat Road, a corridor forming the riparian zone along Oakey Creek, corridors along either side of Sydney Road and stands towards the south-western corner of Lot 4. Vegetation apart from these is limited to grasses.

No fauna was observed onsite, however it is acknowledged that the site may be inhabited on occasion by roaming kangaroos and certain avian species. Based upon this it is unlikely that any flora shall be disturbed as part of any future development relating to the possible rezoning of the site, and no core habitat for local fauna will be threatened.

1.7 Heritage

There are no heritage items listed for the subject site in the New South Wales Heritage Register (NSW Heritage Council, 2010) or the Mid-Western Local Environmental Plan 2012.

The National Parks and Wildlife Act 1974 provides for the protection of Aboriginal relics/sites across New South Wales regardless of significance, land tenure and whether or not they are recorded in the NPWS Sites Register. It is an offence to knowingly damage, deface, cause or permit the destruction of an Aboriginal relic or place without the prior written consent of the director general of NPWS.

An Archaeology Assessment including detailed site investigation has been carried out by the Mudgee Local Aboriginal Lands Council and is attached at **Appendix C**. The investigation located a Scar Tree towards the south eastern corner of the site with the assessment recommending retention of this tree. As a result the proposed boundary for rezoning as shown on the Concept Plan has been positioned to locate the Scar Tree on land to be transferred through boundary adjustment to the southern neighbouring rural lot, which is also owned by the applicant. The use of this neighbouring land remains for agricultural purposes.

Apart from the findings of the Archaeology Assessment, no Aboriginal heritage items or sites have been recorded at or near the subject site in the New South Wales Heritage Register (NSW Heritage Council, 2010). Refer to **Appendix C** for searches conducted utilising the Aboriginal Heritage Information Management System (AHIMS).

1.8 Flooding

Oakey Creek and its tributaries traverse through Lot 4, flowing north towards the Cudgegong River, however it is not considered a significant watercourse. A check of Council's Flood Map in the Mudgee Local Creeks Flood Study 2008 confirms that the site is not flood prone land, noting it is above the 1:100 year ARI flood level and Probable Maximum Flood Event as shown on the Map. The land however is identified as groundwater vulnerable on Council's "Groundwater Vulnerability Map", therefore effluent disposal requires consideration (refer to **Section 2.3** and **Section 3.2** for further comment).

1.9 Noise

Noise measurements of background levels have not been undertaken onsite. The main contributor to noise in the vicinity is considered to be created by traffic movement along Sydney Road and use of farming machinery on neighbouring farmland.

From inspection, noise levels generated by traffic along Sydney Road and from operation of farming machinery in the surrounds are relatively low such that low density residential development may be carried out on the land subject to adequate setback / separation.

1.10 Services

Water & sewer - The proposed rezoning to low density residential with a minimum lot size of 2ha is premised upon incorporating on-site rainwater harvesting and on-site effluent disposal. As such Council applies a minimum lot size of 2ha for large lot residential land in the Bombira area on the north side of Mudgee where connection to water and sewer mains is not proposed. Accordingly, connection to the water and sewer mains is considered unnecessary.

Should connection to town water and sewer be deemed necessary, this would need to be the subject of further assessment and discussion with Council as the local water authority. Refer to **Sections 2.3 and 4.2** for further comment on effluent disposal and water supply.

Stormwater - Noting on-site rainwater harvesting is proposed for water supply to future housing development, best practice stormwater management features may be incorporated such as nutrient reduction measures, on site detention and filtration for use as potable water and landscape irrigation.

Power / communications - Both electricity and telecommunications services are available to the subject land.

1.11 Access

The subject land has sealed road access with frontage to Sydney Road and Spring Flat Road. Access via Spring Flat Road as a collector road may be achieved and is preferable so as to avoid direct entry / egress from Sydney Road which is a classified State Main Road.

As part of any future development of the site, a new road will form part of the land subdivision which will require provision of an intersections with Spring Flat Road as indicated in the Concept Plan attached at **Appendix B**. Additional detail can be provided as required by Council.

1.12 Bushfire

A review of Mid-Western Regional Council's Bushfire Prone Land Map (as provided by NSW Rural Fire Service) confirms that both portions of the subject site are substantially clear from the boundaries of bushfire prone land. Refer to Map in **Appendix B**.

Notwithstanding, with a predominant vegetation classification of **Grasslands** some level of bushfire risk is acknowledged. Future development of the land as large lot residential would result in a transformation of the site to **Managed land** thereby reducing the risk of grassfires.

2.0 PROPOSED DEVELOPMENT

2.1 General

This proposal seeks the Mid-Western Regional Council's support to rezoning of the subject land from the RU4 - Primary Production Small Lot zone to the R5 - Large Lot Residential zone, with a minimum lot size of 2ha pursuant to the Mid-Western Regional Local Environmental Plan 2012.

The intention of rezoning the land in this manner is to permit the future subdivision of the land and its development for rural residential purposes consistent with the objectives of the R5 - Large Lot Residential zone.

Significantly, the land (Lots 3 & 4 DP 1069441) adjoins an area on the western side of Spring Flat Road that is zoned part RU4 - Primary Production Small Lots and part R5 - Large Lot Residential, which is identified as a 'hard edge' for urban growth in the Mid-Western Regional Comprehensive Land Use Strategy (2009). This is "*because it provides a clear edge between urban and rural uses*".

The Strategy identifies land north (or west) of Spring Flat Road as an opportunity for large lot residential subdivision to 4,000m² which is understood to be achievable subject to provision of reticulated water and sewer as per the minimum lot size provisions applying to the Bombira rural - residential locality on the north side of Mudgee (reference LEP Cl.4.1(3)(a)). It is noted that in Bombira, a minimum lot size of 2ha otherwise applies where on-site effluent disposal and water supply is otherwise proposed, which is consistent with the principles of this Planning Proposal.

2.2 Lot Yield

The subject land comprises of two lots having a total area of approximately 139 hectares. Under the current RU4 - Primary Production Small Lots zone, the minimum lot size is 20ha whereby a compliant subdivision would permit a maximum of 6 lots, subject to demonstrating that the land is both suitable and viable for intensive agriculture. As indicated in the Land Capability Map contained in Council's Strategy, the land is a combination of Class 1, 2 and 3 suitable to crop planting (but not suited to continuous cultivation) and livestock grazing, however if subdivided into 6 x 20ha+ lots in separate ownership, such activities would not likely be viable given insufficient area.

The land is cleared and vacant with sealed main road frontage and is therefore well placed to support subdivision and future rural residential development which is consistent with the principle of adopting a 'hard edge' to residential development extending into the south of Mudgee, as recognised in Council's Comprehensive Land Use Strategy.

The proposed minimum lot size of 2ha per lot is consistent with the recommendations of the Mudgee and Gulgong Urban Release Strategy. Accordingly the minimum lot size to accompany this proposal is 2ha. Based on this minimum lot size, the potential lot yield is indicated in **Table 2**, as follows.

Table 2: potential lot yield

Lot	DP	Owner	Lot Size	Existing RU4 zone
3 & 4	1069441	Burrundulla P/L	139ha	6 lots @ 20ha+/lot
				Proposed R5 zone
Consolidated lot		Burrundulla P/L	139ha	
- 10% roads developed		Council	- 14ha*	
- Oakey Ck offset areas**		Burrundulla P/L	- 8.1ha*	
- farmland & buildings		Burrundulla P/L (Lot 34)	- 4ha	
NET AREA		Individual owners	112.9ha	56 lots @ 2ha/lot
Proposed lot yield			112.9ha	52 lots @ 2ha+/lot

* approximate measurement ** for potential transfer

With a 10% of site area allowance for roads to service a large lot residential subdivision of the land, plus a 7.6ha buffer along Oakey Creek for potential future transfer to the southern neighbouring land (by way of boundary adjustment), the total developable area is approximately 112.9ha with a maximum potential lot yield calculated to be 56 lots.

In order to provide for a range of lot sizes as proposed from a minimum of 2ha, limit future housing with frontage to Sydney Road and Oakey Creek, and preserve the existing tree corridors, the maximum potential yield of 56 lots is not sought. Rather, a slightly reduced yield of 52 lots is proposed in the Concept Plan and may be subject to revision following rezoning of the land and further consultation with Council. Refer to attached Concept Plan of subdivision for 52 lots at **Appendix B**. Plans for a Stage 1 subdivision of 19 lots along Burrundulla Road are also provided. The subdivision yield is to be finalised following rezoning whereupon a detailed plan of proposed subdivision and services shall be prepared.

2.3 Water supply and effluent disposal

Council's Urban Release Strategy 2014 recommends that Council undertake further analysis into costs of providing reticulated water and sewer to service future subdivision of the subject site, following its rezoning. As part of initial consultation with Council, it was identified that Council's current planning controls require reticulated water and sewer for subdivision of land in the R2 – Low Density Residential zone with a corresponding minimum lot size of 4,000m² (or 2,000m² for some R2 zoned areas). In comparison the proposal seeks a minimum lot size of 2ha, providing a maximum yield of 1/5th that could be achieved with a lot minimum lot size of 4,000m².

Noting that 4,000m² per lot is considered towards the upper limit in lot size of cost feasible urban subdivision with reticulated water and sewer, as reflected in Mid-Western LEP 2012, it is submitted that requiring reticulated water and sewer with a minimum lot size of 2ha is uneconomic and does not achieve a reasonable return on the cost of installing these services.

Accordingly, Council's consideration is sought for on-site effluent disposal and water supply through rainwater collection, with details of these as follows:

2.3.1 Sewerage Disposal

It is proposed that on-site effluent disposal systems be installed at each new lot. The final design of the systems shall conform with AS1547:2010, On-site domestic wastewater management. As per table K1 of AS1547:2010, for sites that maybe groundwater vulnerable, a secondary (aerated) treatment system is recommended.

For a secondary (aerated) treatment system, all household wastewater flows to the septic tank where settlement and primary breakdown of material takes place. It then flows into a second tank where the treatment system is installed and by aeration, converts it into biologically clean clear odour-free water. The water is then lightly disinfected before it is automatically irrigated onto the garden and/or lawn through a sprinkler system, or it can be disposed of below ground if required. Recent bore data on an adjacent property has indicated the groundwater is at a depth of around 7m, with the soils above consisting mainly of silty/sandy clays. The permeability rate of these types of soils is typically around 1×10^{-6} cm/s. Therefore, based on a 7m depth of soil with a permeability rate of 1×10^{-6} cm/s, secondary treated effluent would take approximately 22years to reach the groundwater table. Therefore, given the secondary (aerated) treatment systems produces a biologically clean clear odour-free water that would reach the groundwater table in around 22 years, the risk of groundwater contamination is negligible.

Noting the requirements of Clause 6.4 of Mid-Western LEP 2012, a future DA for subdivision of the site may include a hydrogeological study to further consider potential groundwater impacts caused by on-site effluent disposal associated with large lot residential development as envisaged in this proposal. If the hydrological study determines that such development would likely impact on groundwater water quality and cause its contamination, the proponent would enter into negotiations to connect Mudgee's reticulated sewer network.

2.3.2 Water supply

It is proposed that a dwelling on each lot be serviced with a rainwater tank, with rainwater collected being sufficient to service general residential needs. Based on data from the Bureau of Meteorology, Mudgee has a recorded average of 674.3mm/year of rainfall for the years 1870 – 2014. Assuming a rainfall catchment area (roof area) of 300m², being for a medium-large sized dwelling plus garage and shed, the annual rainfall collected is calculated at 202kL/year.

To assess water consumption, this is modelled with the Hunter Water usage calculator on a 4 person household, providing a calculation of 174kL/year. Therefore, based on average annual supply and consumption of rainwater, a surplus of supply is achieved. Given the yearly variation in rainfall it is recommended that water tanks be specified for future dwellings with a capacity of at least 200kL, being approximately 1 year rainfall collected.

If the hydrological study for the sewer determines that impacts to groundwater are likely to cause future contamination issues, the proponent would enter into negotiations to connect Mudgee's reticulated water network.

3.0 SITE OPPORTUNITIES – SUBSTANTIAL PUBLIC BENEFIT

3.1 Existing constraints and opportunities to development

The land subject to the proposed rezoning is zoned RU4 - Primary Production Small Lots under the provisions of the Mid-Western Regional Local Environmental Plan 2012, with a minimum lot size of 20ha. This minimum lot size carries over from the previous Interim LEP 2008 whereby the land was zoned Intensive Agriculture with a minimum lot size of 20ha.

Whilst most agriculture zoned land surrounding Mudgee has been retained from the previous Interim LEP in terms of zoning and minimum lot size, over the past 5 years Mudgee has experienced significant growth in housing with limited supply of large lot residential / rural-residential land to accommodate future demands for this.

The current zoning as RU4 - Primary Production Small Lots effectively limits the use of the land to its current use as grazing land. The current zone and corresponding minimum lot size of 20ha which advocates intensive agriculture enterprise is not considered the highest and best use of the subject site. This is due to declining financial returns on intensive agriculture enterprises and the high costs of licensed commercial water supply for such enterprises, noting the land has never been used for intensive agriculture enterprises. Further, the classification of the land which is advised as Classes 1, 2 and 3 is suitable to crop planting (but not suited to continuous cultivation) and livestock grazing, however if subdivided into 6 x 20ha+ lots in separate ownership, such activities would not likely be viable given insufficient area.

The resultant current use as low intensity grazing land is lower in cost than intensive agriculture enterprises, however also lower in potential return and is therefore not considered the highest and best use of the land given the strong demand for housing in Mudgee.

It is also noted that as housing development extends south from the existing urban edge towards Spring Flat Road (as advocated by Council's Strategy), this will increase likely land use conflict with existing agricultural enterprises. Land on the western side of Spring Flat Road which is zoned RU4 - Primary Production Small Lots (and further south R5 - Large Lot Residential) is constrained from agricultural enterprise due to its heavily fragmented nature with lots in separate ownership and ranging generally in size from 6ha - 12ha (ie. large lot rural residential) with their use mostly limited to low intensity grazing. Consequently the subject site with sealed road frontage to Spring Flat Road is recognised for its suitability for large lot rural residential subdivision, as an extension to and as the southern boundary for the area identified as potential large lot residential along the western side of Spring Flat Road.

As low density housing on lots of 2ha or more, this subdivision density would suitably act to provide a buffer between agricultural enterprises on land to the south and housing to the west.

3.2 Consideration of proposed zoning

3.2.1 Objectives of R5 Large Lot Residential zone

The proposed rezoning of the land to R5 - Large Lot Residential permits a wide range of rural, residential and non-residential related development as indicated in the 'Permitted with consent' land use table for the zone:

Aquaculture; Bed and breakfast accommodation; Cellar door premises; Dual occupancies; Dwelling houses; Garden centres; Home industries; Intensive plant agriculture; Landscaping material supplies; Markets; Neighbourhood shops; Plant nurseries; Roadside stalls; Secondary dwellings; Serviced apartments; Waste or resource transfer stations; Water recycling facilities; (plus any used not specified as prohibited)

Consideration of the rezoning proposal against the zone objectives is provided as follows:

Objectives of zone

- *To provide residential housing in a rural setting while preserving, and minimising impacts on, environmentally sensitive locations and scenic quality.*

Comment - The proposal provides an indicative supply of 52 rural-residential lots ranging from 2ha minimum within an existing rural area near the southern urban edge of Mudgee. By virtue of the relatively large lot areas proposed, the scenic quality of the existing rural landscape may be preserved including retention of its established tree corridors along Spring Flat Rd and Oakey Creek where transfer of this land with a boundary adjustment is proposed.

Being mostly cleared land, few trees will require removal and future landscaping associated with rural-residential housing should serve to enhance scenic value. Lots containing existing stands of established trees will not require these to be cleared given the ample area available to locate and build a dwelling with all weather access. The relatively flat nature of the land and its central position within the valley floor of Mudgee also ensures that distant views of the hills to the east and west and their scenic quality will not be affected.

- *To ensure that large residential lots do not hinder the proper and orderly development of urban areas in the future.*

Comment - Council's Strategy identifies land west of Spring Flat Road as an opportunity for large lot residential subdivision to 4,000m², forming a 'hard edge' to the town.

The proposed rezoning of the land to R5 - Large Lot Residential would not affect this outcome as advocated by the Strategy, whilst with a 2ha minimum lot size it would suitably create a low density residential buffer area or soft 'transition zone' between such development on the western side of Spring Flat Road and existing agricultural enterprises to the south of the site. The key merit of this is that its future development as a soft transition zone with 2ha lots envisages a more visually sensitive outcome than a 'hard edge' with smaller 4,000m² lots as advocated by the Strategy west of Spring Flat Road.

- *To ensure that development in the area does not unreasonably increase the demand for public services or public facilities.*

The site has sealed road access from Spring Flat Road and sealed road frontage to Sydney Road. Given this existing road network, traffic generation resulting from the future development of 52 rural-residential lots is not considered excessive in terms of the traffic capacities and existing traffic generation on these roads.

The proposed minimum lot size of 2ha is premised upon a future low density rural residential subdivision not requiring connection to water and sewer mains services, notwithstanding the subdivision may be designed to enable provision of such services as they extend from south Mudgee in the future in accordance with Council's Strategy.

In terms of demands on community services, rates and developer contributions collected from future subdivision would assist towards funding such services. The future initial development of 52 rural-residential homes does not represent a significant increase to Mudgee's housing stocks such that community services could reasonably accommodate such growth.

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

Comment - Land use in the surrounds is predominantly characterised by low intensity livestock grazing, with some intensive agriculture including viticulture and olive groves. It is noted that the subject site has a long standing history in its use as low intensity grazing land.

Given the predominance of low intensity grazing on the site and surrounds, and Council's Strategy advocating low density residential development to the west of Spring Flat Road, the proposed 2ha minimum lot size would suitably create a low density residential transition zone between such development on the north side of Spring Flat Road and existing agricultural enterprises to the south.

By providing such a transition zone, or 'soft edge' (rather than a 'hard edge' as advocated by the Strategy), land use conflict between agricultural activities to the south and higher density residential development to the west (as per the Strategy) may be minimised. As such the proposed rezoning would not conflict with future development or use of the surrounds, subject to sufficient setbacks being provided which may be determined at the Development Application stage for subdivision, whilst also providing a low density residential buffer to existing agricultural enterprises to the south.

3.2.2 Other LEP provisions for consideration

Clause 6.4 - Groundwater vulnerability

Cl.6.4 requires Council's consideration in the determination of a Development Application (DA) for development on land that is groundwater vulnerable. Whilst the Planning Proposal does not seek development consent for the accompanying concept subdivision plan, it is acknowledged that a future DA for subdivision would require consideration of this matter.

Subject to support of the Planning Proposal and subsequent rezoning of the land, a detailed Groundwater Assessment may be submitted accompanying a DA for subdivision subject to the requirements of Cl.6.4(3) of the LEP. As stated in **Section 2.3.1**, if the hydrological study determines that such development would likely impact on groundwater water quality and cause its contamination, the proponent would enter into negotiations to connect Mudgee's reticulated sewer network.

3.3 Land use conflict

As discussed in **Sections 3.1 and 3.2** above, the proposed 2ha minimum lot size is intended at providing a transition zone between future low density residential development to the north, and existing agricultural activities to the south. Noting that Council's LEP and Strategy adopt low density residential development to the north and south of the existing Mudgee township as a transition to rural surrounds (including Bombira where a minimum of 2ha applies), the proposal would maintain this principle.

With the subdivision plan being a concept plan only and not the subject of a Development Application, the plan may be revised as necessary subject to Council's and the Minister's endorsement of the Planning Proposal.

To address industrial operational noise caused by farming machinery, a future plan of subdivision could include measures such as:

- a rear setback control requiring a minimum prescribed setback (to be determined) from each boundary;
- nominated building envelopes for future housing on each lot.

Compared with the recent industrial and residential subdivision along Depot Road and Lions Drive in south Mudgee the proposal is less sensitive to noise impacts by virtue of the proposed low density of housing lots, such that land use conflict in this regard may be satisfactorily managed.

With regard to existing agriculture to the south, the proposed low density residential zoning with lots of 2ha or more would suitably act to provide a buffer between agricultural enterprises on land to the south. As such, this approach is adopted by Council's LEP whereby low density residential development to the north and south of the existing Mudgee township provide a suitable transition to rural surrounds.

To address potential impacts from existing agriculture of crop spraying, a future plan of subdivision could include a rear setback control and / or nominated building envelopes similar to those suggested above. Noting the Planning Proposal does not seek formal approval of the proposed subdivision plan, the plan may be revised at Development Application stage subject to the proposed rezoning of the land being endorsed by Council and the Minister.

3.4 Summary of opportunities and constraints

The main planning opportunities relating to the proposed rezoning of the subject land, include the following:

Location - The site is located on the southern edge of Mudgee with neighbouring land to the west of Spring Flat Road identified in Council's Strategy for large lot residential subdivision to 4,000m². Due to the fragmented form and multiple ownership of this neighbouring land, its future rezoning and development may be delayed thereby increasing demand for other rural land available and suitable for large lot residential development. The location of the site in this regard close to the urban edge of Mudgee makes it suitable for large lot residential development, providing a transition to larger lot farm land to the south.

Environment - The site is predominantly cleared in its current state as grazing land, with no likely presence of any threatened or endangered flora and fauna.

Land use compatibility with surrounds - The surrounding lands comprise a mix of land uses including grazing lands, large lot residential subdivision, and a cellar door / café. Based upon this mix of land uses, the proposed rezoning of the land to large lot residential and its future rural-residential use is considered compatible with the surrounding land uses.

Potential land supply - An indicative supply of 52 rural-residential lots as shown in the Concept Plan will provide a positive contribution to Mudgee's future supply of rural-residential land.

Access - The subject land has sealed road access from Spring Flat Road. The proposed Concept Plan provides for access to be achieved from within the site for most lots, and ensures that no individual driveways to Sydney Road / Castlereagh Highway are required.

Services - The proposal requests on-site effluent disposal and on-site water supply, which is assessed as achievable based on the minimum lot size of 2ha. Stormwater shall be collected on site for domestic consumption and irrigation purposes. Both electricity and telecommunications services are also available to the subject land.

Land use suitability - The subject site is located on the southern edge of Mudgee and benefits from sealed main road access via Spring Flat Road, with close proximity to the Castlereagh Highway / Sydney Road, whilst being physically removed from sensitive conservation lands to the east and west.

No physical constraints are identified that would hinder the future subdivision and development of the land for rural - residential purposes, noting:

- a) The subject land provides an opportunity to be designed in such a manner as to ensure visual and acoustic privacy, both from within the development and its surrounds;

- b) Based on the Preliminary Site Investigation, the subject land proposed for rezoning has no known contamination issues, noting that the shearing shed and its surrounds have been excluded from the proposed rezoning area. The proposed rezoning area has not been occupied by any activity with the potential to cause any significant soil contamination;
- c) There are no obvious signs of salinity over the subject land;
- d) The subject land does not appear to be flood prone land;
- e) The site is located outside the boundaries of Bushfire Prone Lands to the west;
- f) The site does not contain any known items of heritage significance, nor is it located close to any known items of heritage;
- g) The tree corridor associated with the riparian zone for Oakey Creek may be retained in one lot with the future option of transferring this land to the southern neighbouring land by way of a boundary adjustment.
- h) The subject land is not identified as prime agricultural land that would be viable for subdivision into 20ha lots (as permitted under the current RU4 zoning) that would support sustainable agricultural enterprise given their combined classification as Classes 1, 2 and 3 land and limited area;
- i) It is also unlikely that additional land can be acquired to make the subject land worthwhile for sustainable agricultural use;
- j) The proposed rezoning of the land to R5 - Large Lot Residential with a minimum lot size of 2ha is considered a higher and more appropriate use of the subject land, in that it provides an opportunity for a development capable of providing a positive physical, social and economic contribution to the Mudgee, noting its limited existing rural-residential land supply.

4.0 STRATEGIC CONTEXT

4.1 Contribution to Land Supply

Due to its location and few constraints the subject land can be readily incorporated into Council's plans for future large lot residential development in Mudgee.

From review of residential development in Mudgee it is apparent the town has experienced significant residential growth over the past 5 - 10 years including the development of large lot rural residential land in Bombira on the north side of Mudgee, with few vacant lots. The result is that there appears to be scope for supporting further large lot rural - residential development consistent with the principles of Council's Land Use Strategy. The Strategy identifies a take up rate of 6 - 8 rural residential lots/year, whereby the Concept Plan for 52 lots would provide between 7 - 9 years of land supply.

4.2 Key Council Strategies

The rationale for supporting the rezoning can be found in Council's key planning strategies and instruments. The following is a brief summary of local government planning strategies and instruments which are relevant to future planning of the site:

4.2.1 Mudgee and Gulgong Urban Release Strategy 2014

The site is identified for future rezoning and release as part of Council's Urban Release Strategy 2014 (URS). The URS identifies the site within Urban Release Area No.22, with a recommended minimum lot size of 2ha and recommended release from 2020+.

Following Council's endorsement of the draft URS for public exhibition at its Meeting of 20 August 2014, two submissions were made regarding the proposal by Raine & Horne and the proponent. Both submissions sought rezoning of the land in accordance with the Planning Proposal, within revised timing for its release from 2015+ which Council endorsed in its review of submissions at its Meeting of 5 November 2014, hence the timing of this submission.

4.2.2 Mid-Western Regional Comprehensive Land Use Strategy

The Mid-Western Regional Comprehensive Land Use Strategy ("the Strategy") dated October 2009 provides *"a basis for identifying options...to meet long term urban and rural growth needs... and provide direction for targeted growth in specific areas."*

The Strategy prepared by Parsons Brinkerhoff consultants was adopted in 2009. In relation to the South Mudgee area, the Strategy specifically recognises Spring Flat Road as the boundary for future low density residential development to the south of Mudgee, with a minimum of 4,000m²/lot, subject to connection to reticulated water and sewer. The proposed rezoning represents a minor variation to the Strategy in that the proposal seeks only to shift the boundary of future residential from land west of Spring Flat Road to land with frontage to Spring Flat Road, whilst proposing on-site effluent disposal and water supply as detailed in **Section 2.3** of this report. On this basis it is considered generally consistent with the principles of the Strategy as applied to South Mudgee / Spring Flat Road area.

4.2.3 Mid-Western Regional Local Environmental Plan 2012

The general objectives of the plan support the rezoning of the land to R5 - Large Lot Residential for rural-residential type development, as the land is appropriately located having regard to environmental constraints, accessibility and existing land-use patterns. The general objectives also support the rezoning of the site for large lot rural residential as it achieves orderly and efficient development of the site. Consideration of the zone objectives as provided in **Section 4.2** of this report indicate that future subdivision and rural - residential development of the land may be carried out in an orderly manner without adversely impacting on the surrounds.

4.3 Section 117 Directions

Pursuant to Section 117(2) of the *Environmental Planning and Assessment Act, 1979*, any relevant planning direction issued by the Minister must be followed by Council upon determining to prepare a new Local Environmental Plan (LEP) or an amendment to its LEP as initiated by a Planning Proposal.

The directions that are relevant to the proposal are identified as follows:

- Direction 1.2 - Rural Zones
- Direction 1.5 - Rural Lands

4.3.1 Direction 1.2 - Rural Zones

Consideration is given to this direction whereby the proposal seeks rezoning of rural land to permit large lot residential subdivision. As stated, the objective of this direction is *to protect the agricultural production value of rural land*.

In circumstances where a Planning Proposal is not consistent with this Direction and not identified for potential rezoning under the Council's Strategy, a study in support of the proposal is required *which gives justification to the objectives of this direction*.

As discussed in this report, the subject land is not identified as prime agricultural land that would be viable for subdivision into 20ha lots (as permitted under the current RU4 zoning) that would support sustainable agricultural enterprise given their combined classification as Classes 1, 2 and 3 land, and limited area. The land in its current state has a relatively low level of agricultural production noting its use for low intensity grazing.

Given the land's relatively low productivity and that 20ha lot subdivision as permitted under its zoning would likely reduce such productivity, it is submitted that the current zoning reflects a relatively low productive value of the land. Based on this its rezoning to R5 - Large lot residential would not result in a significant loss of productive agricultural land in the region.

4.3.2 Direction 1.5 - Rural Lands

Consideration is given to this direction which applies where *a planning proposal affects land within an existing rural zone*, and where the proposal *changes the existing minimum lot size on land within a rural zone*.

The direction requires the proposal to be consistent with the rural planning and subdivision principles listed in *State Environmental Planning Policy (Rural Lands) 2008*. Notwithstanding, a planning proposal may be inconsistent with the Direction (and the SEPP) if the proposal is justified by a strategy that identifies the land for future rezoning (that the proposal is consistent with), and the strategy has been endorsed by the Department of Planning.

In the circumstances of this Planning Proposal for rezoning the site to R5 - Large lot residential, the site is identified for such rezoning and development under the Mid-Western Urban Release Strategy 2014, as discussed in **Section 4.2.1**. Accordingly this report requests Council's consideration of the proposal as consistent with its Strategy.

5.0 CONCLUSION

Rezoning of the land is generally consistent with the objectives set out in Council's planning instruments, and planning strategies including the Mid-Western Regional Comprehensive Land Use Strategy, the Mudgee and Gulgong Urban Release Strategy 2014, and the Mid-Western Regional Local Environmental Plan 2012. Rezoning of the land to R5 - Large Lot Residential under the LEP would facilitate a future large lot rural - residential subdivision in close proximity to existing services and facilities.

The site presents few physical constraints to development. It would result in:

- Development that is suitable in the locality;
- Development that would be compatible with adjoining and adjacent land uses, including potential large lot residential development on the western side of Spring Flat Road;
- Development that shall support demand for low density rural residential housing that provide for rural lifestyle;
- Development to ensure appropriate and sufficient supply of rural-residential land in and around Mudgee.

Council is encouraged to support this Planning Proposal and take all necessary steps to amend the Mid-Western Regional Local Environmental Plan 2012 to rezone the subject land to R5 - Large Lot Residential with a minimum lot size of 2ha, thereby enabling rural-residential subdivision and development of the subject land.

We would be happy to meet with Council representatives to discuss this matter further and should Council require any further information please contact the undersigned at our Mudgee office.

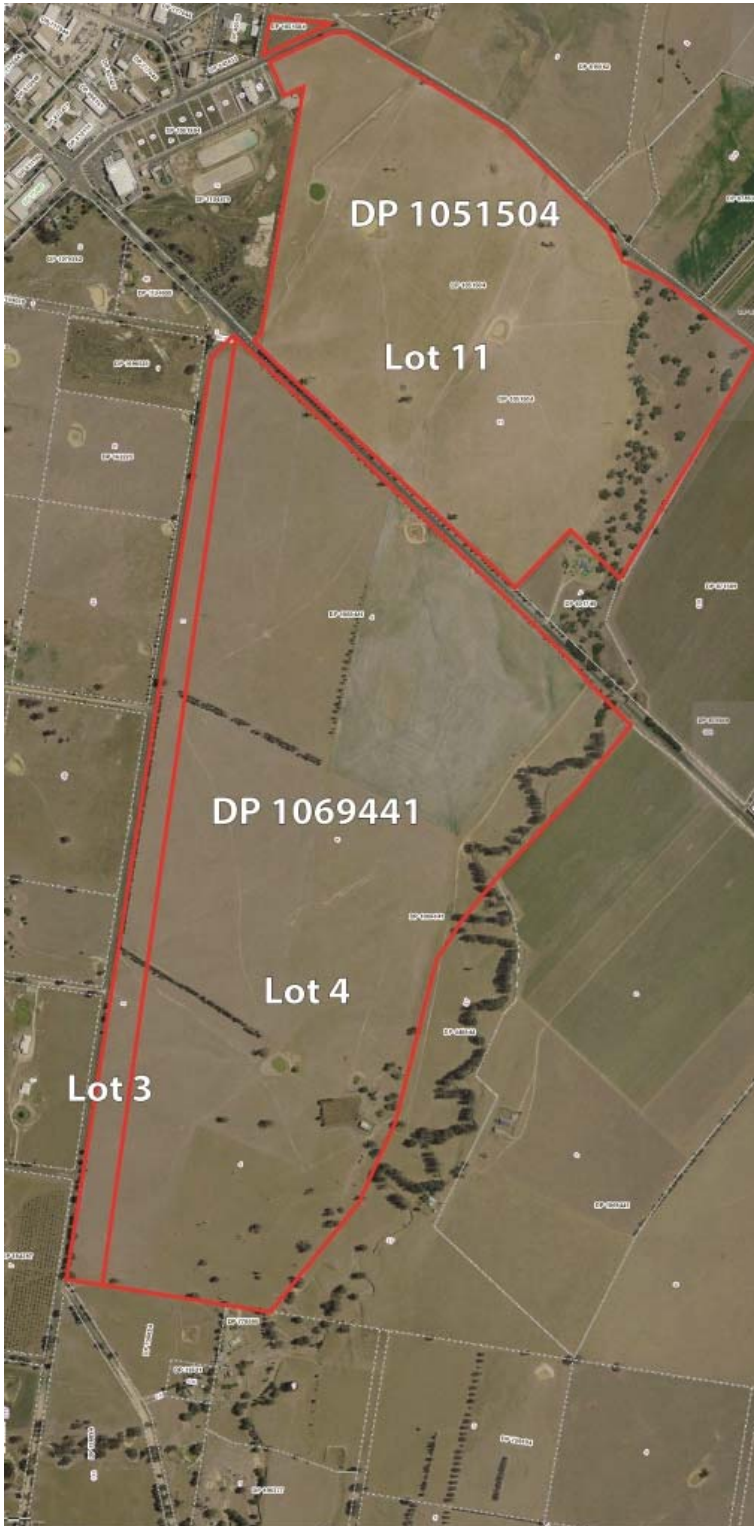
Yours faithfully

BARNSON PTY LTD

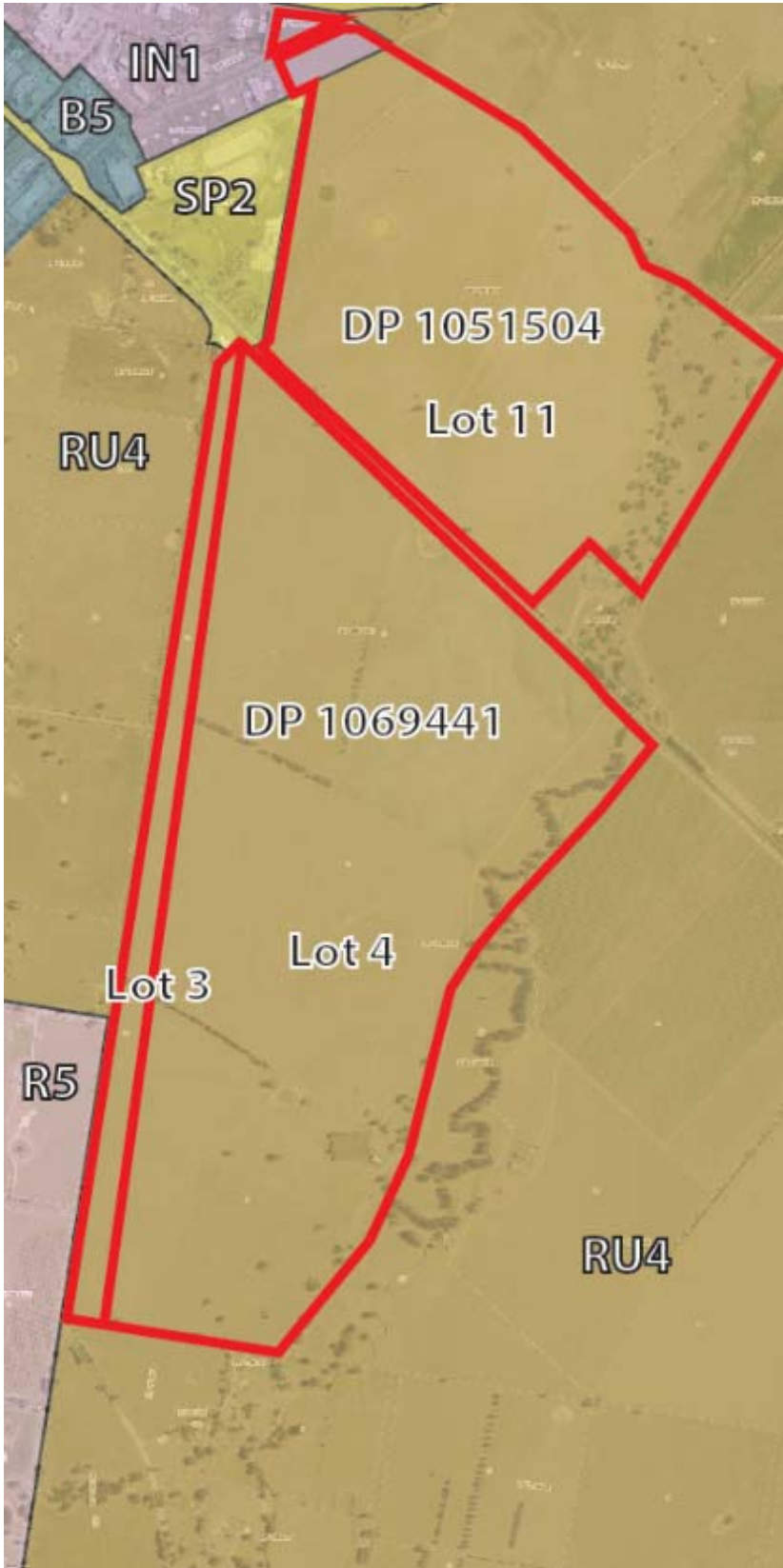
Ben Rourke - BTP, MEnvLaw

SENIOR TOWN PLANNER

Appendix A



Aerial Map - subject land and surrounds.
Lot 11 forms part of "Burrundulla" holding but is excluded for the purposes of this Planning Proposal



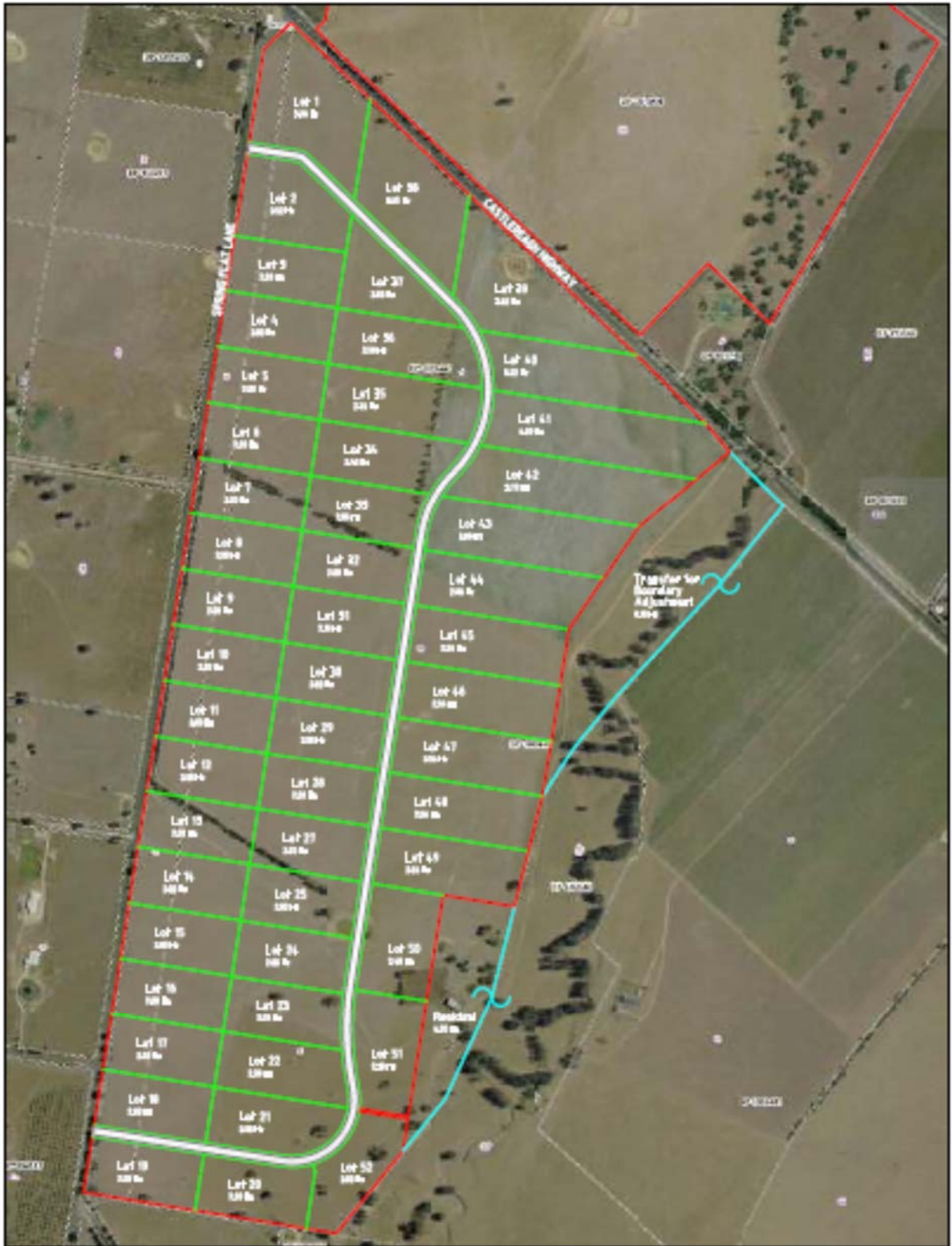
Zoning Map - Indicating existing zoning of subject site and surrounds as RU4 - Primary Production Small Lots, minimum lot size - 20ha, pursuant to Mid-Western Regional LEP 2012.

Lot 11 forms part of "Burrundulla" holding but is excluded for the purposes of this Planning Proposal

The site being Lots 3 & 4 are proposed for rezoning to R5 - Large Lot Residential with a minimum lot size of 2ha.



Appendix B - Concept Plan of subdivision



Concept Plan for 52 lots



Proposed Concept Plan of land subdivision – Stage 1 (19 lots)

Appendix C

Archaeological Assessment and AHIMS search results



Office of
Environment
& Heritage

AHIMS Web Services (AWS) Search Result

Your Ref Number :
Client Service ID : 97855

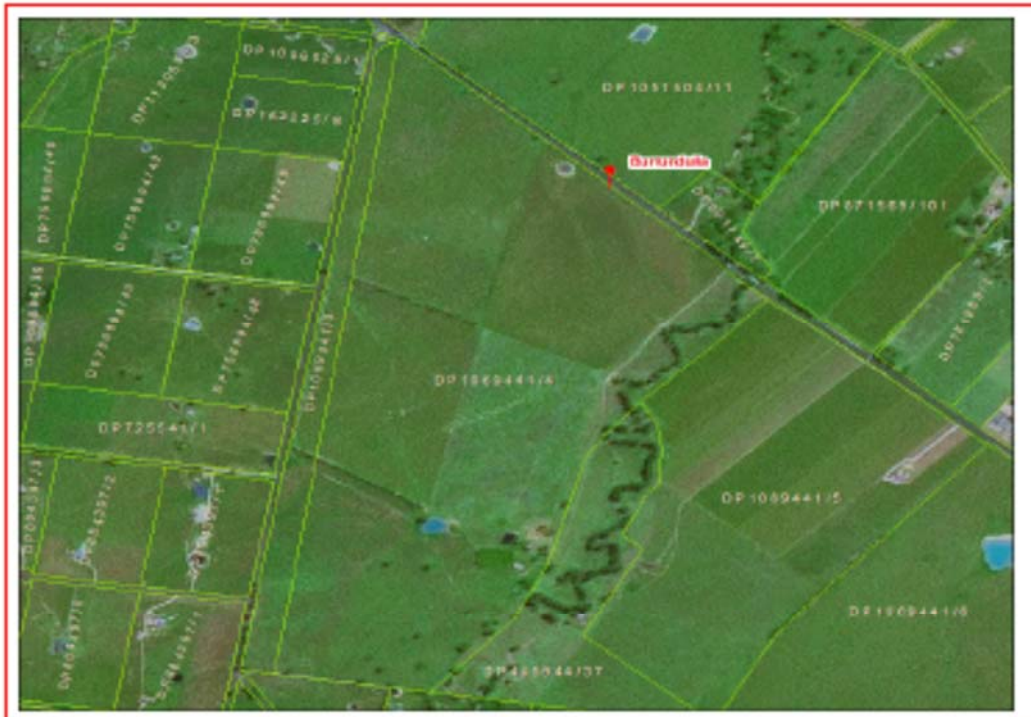
Cheryl Brown
PO Box 1967
Hurstville New South Wales 2220
Attention: Cheryl Brown
Email: cheryl.brown@environment.nsw.gov.au

Date: 15 April 2013

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 4, DP:DP1069441 with a Buffer of 50 meters, conducted by Cheryl Brown on 15 April 2013.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

Cheryl Brown
PO Box 1967
Hurstville New South Wales 2220
Attention: Cheryl Brown
Email: cheryl.brown@environment.nsw.gov.au

Date: 15 April 2013

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 3, DP:DP1069441 with a Buffer of 50 meters, conducted by Cheryl Brown on 15 April 2013.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

PLANNING PROPOSAL – BURRUNDULLA – SPRING FLAT ROAD, MUDGEE

Response to recommendations

1. Limit area to accommodate 25 lots at southern portion of site

- 1.1 Council's Urban Release Strategy 2014 (URS) as adopted identifies the Burrundulla / Spring Flat locality with a capacity of 98 x 2ha lots post 2015, with 49 lots within 1st 5 years.
- 1.2 The URS identifies the two other Planning Proposals "Broadhead" and "Menah" sites for residential subdivision post 2020 and 2035 respectively.

2. Rezone 20m wide buffer along Sydney Road to RE1 Public Recreation and vegetated as a visual buffer

- 2.1 Financial implications of Council acquiring this buffer land and maintaining this land in perpetuity are not considered.
- 2.2 Suitability of the proposed buffer as public recreation land has not been considered.
- 2.3 Effect of existing screening along Sydney Road has not been considered (see photo).
- 2.4 The Comprehensive Land Use Strategy identifies a 50m wide vegetated buffer for 'gateway planning' along the Castlereagh Highway.
- 2.5 The URS recommends the whole of the site be rezoned to R5 Large Lot Residential with a minimum lot size of 2ha/lot, and does not identify 'visual impact' as a constraint.
- 2.6 As part of a future DA for subdivision, Council may impose requirements for additional landscaping and minimum setbacks from the Highway to further address any concerns of visual impact (ie view of 5 houses, separated at least 150m apart, with landscaping).
- 2.7 A 100m setback is considered more appropriate, consistent with the range of setbacks of existing dwellings and buildings along Sydney Road south of Spring Flat Rd.
- 2.8 As a comparison, existing development and recent subdivision along Ulan Road has a 30m wide landscape buffer which is considered to provide ample screening



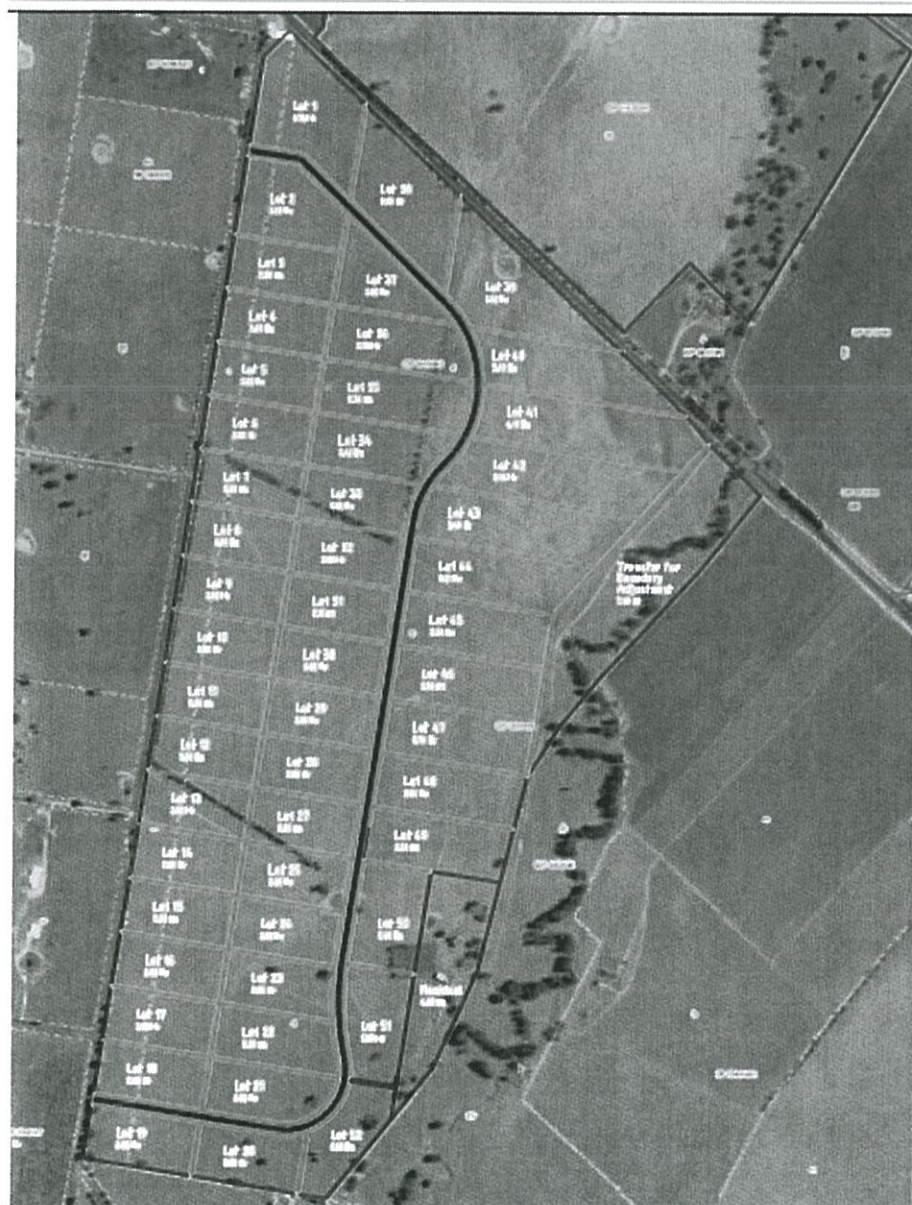
View looking north along Sydney Road (100km/h zone), site to left of view. Additional trees and landscaping within setback would screen future housing and benefit their privacy

3. Prior to public exhibition of the Planning Proposal, a hydro-geological assessment is to be conducted to investigate potential groundwater impacts of on-site effluent disposal on groundwater

3.1 Details of on-site effluent disposal capacity advised by Barnson’s engineers as part of the Planning Proposal have not been considered in this report.

3.2 A Hydro-geological assessment is required by Council as part of a future DA - pursuant to *Mid-Western Regional LEP 2012, Clause 6.4 – Groundwater vulnerability* requires that Council must consider potential impacts on groundwater and measures to minimise such impacts (whether on-site disposal or reticulated sewer connection).

3.3 The indicative area for 25 lots as recommended is approximately 1.3km south of Sydney Road. Extending Council’s reticulated sewer this distance, if required by Council would jeopardise the feasibility of the proposal given its reduction to 25 lots. No consideration is made of this cost issue in the report.



Burrundulla Concept Plan – 50 x 2ha lots. Note concept limits development to 5 lots fronting 1.2km boundary to Sydney Road and allows 100m setback



2015

COUNCIL BUSINESS PAPERS

Ordinary Meeting

17 JUNE 2015

ATTACHMENT **6.2.3**

- ▶ Planning Proposal Broadhead Road MLS:
 1. Planning Proposal document
 2. Gateway determination

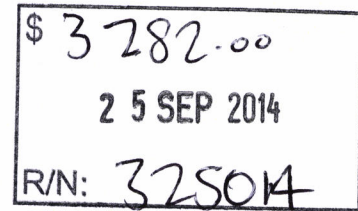


MINESPEX
 Head Office: Unit 2 & 3, 73 Market St, Mudgee
 Postal Address: PO Box 604, Mudgee NSW 2850

Tel.: +61 2 6372 9512
 admin@minespex.com.au

25 September 2014
 Our Ref: A02 Broadhead Road

The General Manager
 Mid-Western Regional Council
 86 Market Street
 MUDGEES NSW 2850



Dear Sir

PLANNING PROPOSAL - CHANGE TO MIN LOT SIZE TO ALLOW SUBDIVISION CONCEPT IN EXISTING R2 LOW DENSITY RESIDENTIAL LAND, LOT 9 DP1150667, BROADHEAD ROAD, MUDGEES NSW 2850 FOR MR PETER CONSADINE

Please accept this proposal on behalf of the owner of Broadview Estate, 238 Broadhead Road, Spring Flat, Mr Peter Consadine. The current provisions of the MWR LEP 2012 permit serviced subdivision to a min of 4000m² at the site. The land subject of the proposal should be considered for lots of min 2000m² to allow flexibility in the lot layout and infrastructure design. The reduction in the minimum lot size will provide the developer flexibility in achieving an appropriate subdivision design considerate to the constraints of the land. With the assessed characteristics of the land and constraints being considered, namely the power lines, watercourse, road realignment to avoid native vegetation and topographic suitability, the land will be able to yield a similar number of lots without a rezoning. The concept plan provided includes a variety of lot sizes ranging from 7294m² to 2010m², achieving a yield of 24 residential lots. A marginal increase in yield therefore can be expected, whereby which based on area and utilising a 4000m² min. yields approx. 21 lots.

The proponent, through Minespex, appreciates being kept informed of the progress of the proposal. Should you require further information in relation to this matter, please do not hesitate to contact myself on 0457 711 169 or Mr Bob Crooks of Jabek Pty Ltd on 0427 721 818.

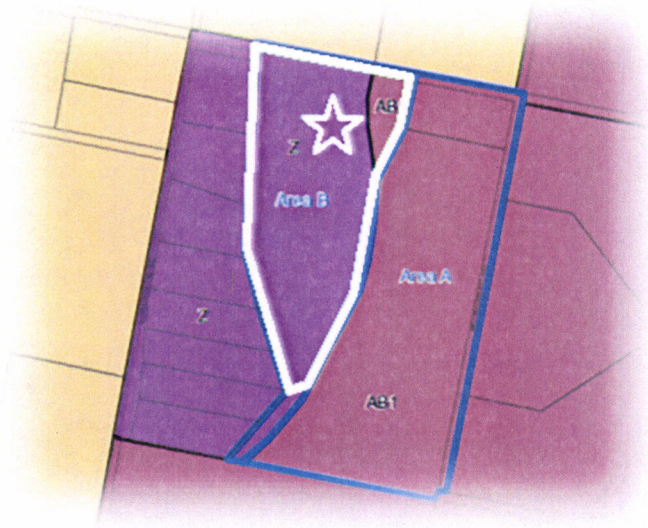
Yours faithfully

EMMA YULE
ENVIRONMENTAL TOWN PLANNER
 MINESPEX PTY LTD



Attachments:

1 – Planning Proposal - Change to min lot size to allow subdivision concept in existing R2 Low Density Residential Land, Lot 9 DP1150667, Broadhead Road, Mudgee NSW 2850 for Mr Peter Consadine (Project Ref. – JAB025/A02)



Planning Proposal Change to min lot size to allow subdivision concept in existing R2 Low Density Residential Land

Lot 9 DP1150667

Broadhead Road, Mudgee NSW 2850

for

Mr Peter Consadine

Project Ref. – JAB025/A02

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February 2014



Consultation and operational support to the mining industry

PO BOX 604, MUDGEE NSW 2850

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ISSUE AND AMENDMENT CONTROL HISTORY

ISSUE	REVISION	DATE	DESCRIPTION	AUTHOR	QA/QC
1	0	FEB 13	DRAFT FOR CLIENT	EY	RJC, PC
2	1	FEB 14	FINAL	EY	GM

OVERVIEW OF PROPOSAL

Minespex was commissioned by Jabek Pty Ltd on behalf of Mr Peter Consadine to prepare a Planning Proposal under Section 55 of the *Environmental Planning and Assessment Act 1979* for existing R2 Low Density Residential zoned land to align the minimum lot size with adjoining land to facilitate a large lot residential subdivision, with lot sizes varying from 2000m².

This report describes the proposed development concept, objectives and outcomes of the LEP amendment, explanation of provisions and justification for the planning proposal.

The proposed Mid-Western Regional Local Environmental Plan 2012 amendment is intended to facilitate the development of residential land, addressing sustainability and economic development outcomes for land that has synergy with development approved residential subdivisions. The planning proposal intends to:

- Enable a range of lot sizes to be created:
 - supporting fulfilment of lot yield predictions for the land;
 - providing flexibility in the future subdivision design options;
 - considerate to physical constraints associated with the land; and
 - co-ordinate a supply of land that is readily developed.
- Amend the corresponding lot size map for the part of Lot 9 DP115066, to align the minimum lot size for the area labelled 'Area B' (i.e. 4000m² with reticulated services) with the adjoining 'Area A' (i.e. 2000m²) both within the existing R2 Low Density Residential zone.
- Facilitate the development of the locality with consideration of constraints in accord with the concept plan provided; incorporating the subject land with the development of adjoining DA 0367/2013, to create a development that best utilises infrastructure extended to services the development, with consideration to the unique aspects of the landscape in the locality.

With regard the concept plan submitted, the expected maximum number of lots at the current minimum lot size is 21 lots (based on 4000m² min) compared to the attached plan which results in 24 lots of various sizes ranging from 7294m² to 2010m² (Proposed 2000m² min). The proposal is not by any means seeking to result in a doubling or significant additional lots but to provide flexibility in subdivision design to address site constraints. The larger lots are located on the higher ground with the smaller lots on the more level sites available on the eastern side of the proposed new road.

The consideration of options to maximise the return for infrastructure expenditure is appropriate. The planning proposal has included the concept plan to highlight the feasibility of future residential development and integration with existing road layouts, drainage, services and existing development and sensitive riparian environments.

The planning proposal can be supported by MWRC with consideration of the issues addressed in this report.

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ABBREVIATIONS

AHIMS	Aboriginal Heritage Information Management System
CLUS	Mid-Western Regional Comprehensive Land Use Strategy
DP	Deposited Plan
DP&I	Department of Planning and Infrastructure
EDS	Economic Development Strategy
EP&A Act	Environmental Planning and Assessment Act 1979
LGA	Local Government Area
MWRLEP	Mid-Western Regional Local Environmental Plan 2012
RFS	Rural Fire Service
PBP	Planning For Bushfire Protection 2006
SEPP	State Environmental Planning Policy

Purpose and Objectives of this Planning Report

This planning proposal describes the intended effect and justification for a proposed amendment to *Mid-Western Regional Local Environmental Plan 2012* (MWRLEP) for a site specific amendment to the Lot Size Map. The amendment is proposed to amend the lot size within the existing R2 Low Density Zone to allow lots to 2000m².

This planning proposal has been prepared in accordance with Section 55 of the (NSW) *Environmental Planning and Assessment Act 1979* (EP&A Act) and the following Department of Planning (DoP) guidelines:

- *A guide to preparing planning proposals* (July 2009)
- *A guide to preparing local environmental plans* (October 2012).

PART 1 - OBJECTIVES AND INTENDED OUTCOMES OF THE PROPOSAL

STATEMENT OF INTENDED OUTCOMES

The planning proposal refers to existing R2 Low Density Residential zoned land south of Mudgee, and seeks to amend the minimum lot size from 4000m² to 2000m² to align with the min lot size for adjoining R2 zoned land. This aims to facilitate development of future 'low density residential' lots in accordance with the development concept.

The subject land forms a parcel, referred to as part of "Fairview", 238 Broadhead Road that forms part of residue Lot 69 in DA0367/2013. This recently approved subdivision creates lots of min 2000m². It is intended through this proposal to provide an opportunity to best utilise the associated infrastructure (reticulated power, water and sewerage) and be able to create lots appropriate to the landscape ranging from 2010m² to 7294m² and transition to the adjoining 2ha lots to the north.

The concept provides a marginal increase in lot yield compared to the 4000m² minimum; though the concept design primarily includes a mix of larger and smaller lots to account for topography, physical restriction due to obstacles such as easements and drainage, and a new road without creating a situation where an underdeveloped site is created when the infrastructure is available to support the development. The concept, addresses development limitations such as natural drainage features, transmission line, and items of heritage significance with a mix of lot sizes able to best utilise the developable area and infrastructure to be extended to the locality.

PART 2 - EXPLANATION OF PROVISIONS

It is intended that the objectives and intended outcomes described in Part 1 will be achieved by the following:

1. No amendment to the Mid-Western Regional LEP 2012 Land Zoning Map – Sheet LZN_006E shown at **Figure 2**.
2. Amendment to the Mid-Western Regional LEP 2012 Lot Size Map – Sheet LSZ 006E where this map depicts the subject land, it is proposed to change the reference to Area A, as shown in **Figure 3**.

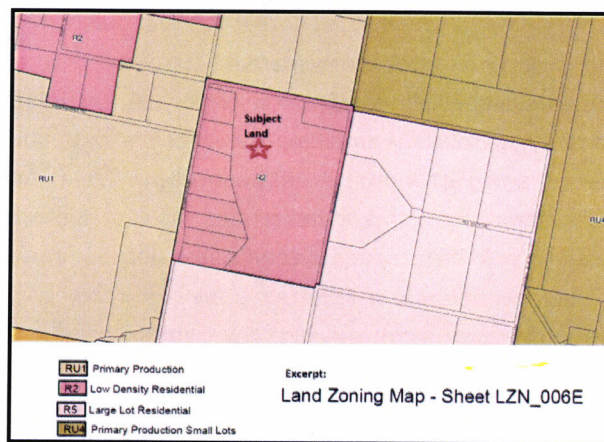


Figure 2: Excerpt from Land Zoning Map depicting the site location

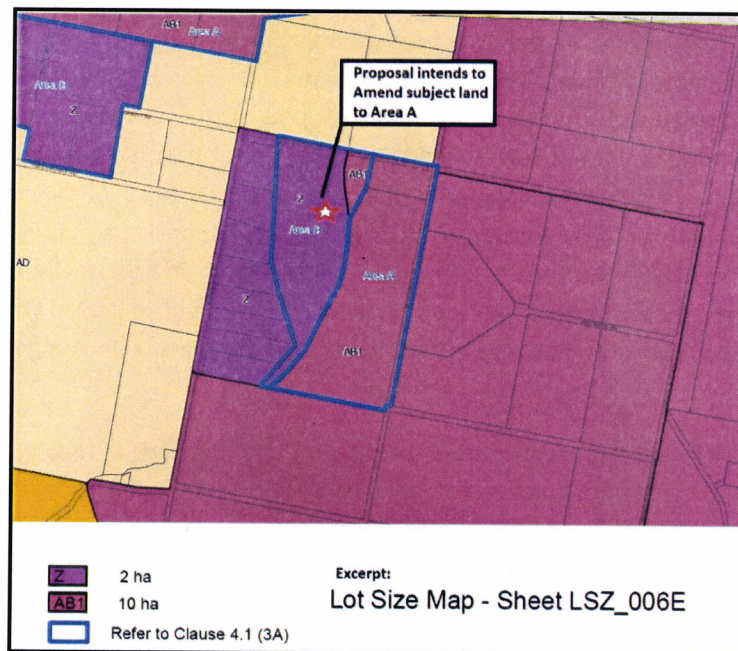


Figure 3: Proposed Amendment to Lot Size Map

PART 3 - JUSTIFICATION

This section sets out the reasoning for the proposed change to the MWRLEP 2012, taking into consideration the intended outcomes and objectives outlined. The following questions are based on requirements contained in DoP's *A guide to preparing planning proposals* (July 2009) and address the need for the planning proposal, relationship to strategic planning framework, environmental, social and economic impacts and its effect on State and Commonwealth interests.

Alternatives have been considered to achieve the future development of the R2 Low Density Residential land. It is assumed that the parcel was included in the LEP with a 4000m² minimum to provide a transition area from the elevated 2ha lots to the undulating land off Broadhead Road, with a 2000m² minimum.

However, the capacity of the land to serve as a transitional area is hindered due to the size of the land and the topography. With the developed elevated building sites (i.e. the developed 2ha lots) being able to overlook the subject land and view the smaller lots east of the watercourse and further with the development offering at most a two lot width will not in effect provide a noticeable physical transition and is not justification for persisting with a in larger min. lot size. Similarly, the slope of the land does not preclude smaller lots; with the steeper unserviceable slopes in the location already being included in the developed 2ha lots. The mix of lots sizes achieved in the concept, with larger lots primarily located on the northern side of the proposed new road, will reduce the number of neighbours for the 2ha lots and continue to provide a transitional facet.

Due to the exclusion of land for offsetting of Vegetated Riparian Corridor (for DA0367/2013), drainage and detention basin requirements and consideration of the transmission line affecting the land, the actual lot yield is only marginally increased from the 4000m² minimum. However a suitable planning outcome is achieved whereby the design is considerate to constraints but also utilises the land efficiently achieving economic goals with all lots provided adequate area for building envelopes free of constraint. The reduction in the minimum lot size will provide the developer flexibility in achieving an appropriate subdivision design for the land. The concept plan includes a variety of lot sizes ranging from 7294m² to 2010m², achieving a yield of 24 residential lots. Compared to the potential yield; (based on available area with the current 4000m² minimum), i.e. a max. yield of 21 residential lots is estimated. This minor variance supports the assertion that the main aim of the planning proposal is to ensure that economic development of the land can be achieved with the lot yields reflecting the site features, rather than a reduction of lot size to achieve a doubling of density in the location.

Though the lot yield increase is marginal, justification for the potential increase in this location has been considered with regard to alternative available land. The developers are aware of the availability of additional land supply under the Mid-Western Regional Comprehensive Land Use Strategy (CLUS). However many of these areas are not able to be readily developed and achieve reported projected lot yields. Where Council has invested in significant infrastructure improvements and issued consents, it is prudent to ensure the best use of such expenditure, and avoid instances of under-utilisation of land resources. This planning proposal seeks to make provision for the best use of the land and infrastructure through alignment with the development standards of the subdivision of the related land (DA0367/2013). If approved, the development will proceed as a stage of the

greater development of the land generally, and is a genuine development proposal (rather than an attempt to increase land value or other long term venture). The proposal is for current R2 Low Density zoned land, and no increase in zoned land is proposed.

The concept presented has approached the site's physical constraints and has been responsive to achieving a 'community' framework with a focus on utilising the services and road access extended to the site as part of DA0367/2013 and creating a development with similar development standards. Amending the minimum lot size to create consistency with the adjoining land east of the riparian corridor will provide the subject site with a marginally increased lot yield, while compensating for existing physical constraints. The concept design demonstrates the variation of lot size required to create a suitable outcome for the constrained site providing suitable building sites. This will allow the future development to best utilise services which are to be provided to the site, including reticulated water sewer and access to the sealed road network.

SECTION A - NEED FOR THE PLANNING PROPOSAL

Q.1. Is the planning proposal the result of any strategic study or report?

No. Prior to the CLUS, the land was identified by Council and rezoned in the previous Interim LEP (2008) corresponding to the current R2 Low Density Residential zoning within current Mid-Western Regional LEP 2012. The Mudgee Town Structure Plan identifies the zoning of the land for large lot residential lots. The Planning Proposal has stemmed from these strategically identified opportunities and further directed due to adjoining development approval (DA0367/2013) for residential subdivision for lots of min 2000m². The proposal to reduce the minimum lots size is the result of development constraints assessment and preliminary subdivision concept development.

The land is identified in the Mid-Western Regional Comprehensive Land Use Strategy for residential development, as well as being aligned with Mid-Western Region Community Plan towards 2030 and Mid-Western Regional Council's Economic Strategy as discussed below.

Mid-Western Regional Draft Comprehensive Land Use Strategy (CLUS)

The Mid-Western Regional Council has prepared the CLUS, which provides direction for growth for the next 15-20 years. The Strategy has informed the comprehensive MWRLEP and provides a context for future land use and is supported by the Mudgee Town Structure Plan. The following description from the CLUS refers to the subject land (Sect 3.1.3 pg 31):

"Future large lot residential land supply

...It is likely that there will be a range of densities achieved on land identified for this type of development depending on the availability of services and infrastructure, and other environmental constraints. Ideally, development of this land should be delayed until such time as reticulated sewerage and water and tar sealed road access is available.

Detailed site investigations would be required to ensure the design of any future large lot urban fringe subdivision and subsequent development appropriately responded to individual site constraints (such as natural or cultural values), road access and on-site water supply and effluent disposal.

.....

The existing large lot residential land to the south is constrained by high voltage power lines, access and the lack of sewerage infrastructure, which has limited development in this area to date and may continue to do so."

Since the CLUS (2010), the land has been approved for development (DA0367/2013) with sealing of the road access and reticulated services to be extended to the location. The development of this land should not be delayed further with the provision of servicing as indicated.

POLICY CONTEXT

The subject area in the CLUS is considered as a whole i.e. not Area A or Area B as referenced in the LEP. It is assumed that these areas are topographically based on slope and serviceability. The framework as established within the CLUS, is the basis on which the opportunities for this planning proposal have been explored and policy basis. The CLUS identifies opportunities for expansion of the Mudgee Township, supported by the Structure plan. The subject land was included in the preceding Interim LEP 2008 and similarly noted in the CLUS and has been consistently zoned for low density residential development in the current LEP.

Opportunities for residential development in line with adopted Policy to support future growth are discussed. Population growth in the LGA has triggered the need to identify how to facilitate the supply of residential land into the future as estimated land supplies are adjusted and the Mudgee Town Structure Plan is updated. The subject proposal does not require change to the Mudgee Town Structure Plan and is not seeking to provide an increased land supply. This proposal aims to describe how the land recognised as available and included in projected land supply estimates may be developed with appropriate design and constraints assessment.

The subject site has been the focus of development constraints assessment namely as part of the planning proposal and as part of the work undertaken as part of the DA processes for approved subdivisions for adjoining land. Identified constraints with reference to the subdivision concept supporting the planning proposal are discussed:

- **High Voltage Power Line (Transgrid)**

Constraint is due to existing power easement and high voltage transmission line affecting the subject land.

Flexibility in minimum lot size will ensure new boundaries avoid transmission structures. Transgrid Easement Guidelines for Third Party Development have been taken into consideration and the guidelines will be followed to ensure that high voltage transmission line is avoided. The location of proposed boundaries in relation to the existing transmission line structures has been considered with appropriate clearances achieved.

- Riparian Corridor

Constraint is due to the land being affected by three mapped watercourses.

One of the first order watercourses is not defined on the ground and is insignificant in terms of riparian habitat. The integrity of other first order watercourse (located within proposed Lot 14 in the concept plan) has been sought to be retained through the creation of a 20m wide easement and collection into the road drainage system and conveyed by pipe to the main drainage reserve. Flexibility in lot size will enable larger lots sizes to coexist with smaller lots without loss of total lot yield, as land is excluded to protect riparian environments.

The main 4th order watercourse located at the site has been the subject of environmental investigation as part of the DA0367/2013. Controlled activity approval is to be sought for works associated with the approved development. With reference to the NOW Guidelines for riparian corridors on waterfront land (NOW, 2012) the width of the Vegetated Riparian Zone (VRZ) achieved in the concept and approved development is compared to the guidelines. The averaging rule has been applied to the development, with offsets applied to the VRZ primarily on the western side of the watercourse for non-riparian use encroachments to the outer 50% of the VRZ on the eastern side of the watercourse. That is a wider VRZ is achieved for the watercourse on the bank subject to the Planning Proposal. Similarly compensation/offsetting can be applied to the off line detention basin for the area of the proposal. This reduces the available area for development on the western side of the watercourse.

- Cultural Heritage

Constraint is further due to ensuring the ongoing protection of four (4) known sites of Aboriginal Heritage having been identified in previous survey of the whole of the land owned by Mr Peter Consadine.

The constraint is acknowledged with 'Restriction as to User' provisions proposed to ensure that the identified sites are protected and avoided by new subdivision boundaries.

- Road Access and Services

Constraint to increased residential density was previously stated in the CLUS due to unsealed roads that need upgrade. Further the reticulation of services was not readily extended to the site to facilitate development.

Roads and servicing no longer delays the development of the land. Sealed road access will be provided as roads are upgraded for approved subdivision and for this proposal. Access to the lots is provided from Robertson Street on the west with a new road to be constructed within and without the existing road reserve. It is intended to link this road through to the approved subdivision to the east (Road No 5 in DA 0367/2013). The development of land associated with DA0367/2013 will facilitate the additional development. Similarly, providing a surrounding constructed road network for the area bounded by Robertson Street to the east, Broadhead Road to the west and Bruce Road to the north, and Road No 5 (DA0367/2013) to the south will facilitate additional residential development in accord with the CLUS.

Water and sewerage facilities are currently being extended to service the subdivision to the east (DA0367/2013) and can be readily extended to service the proposed site. Power and telecommunication services already exist having been developed with adjoining 2ha development to

the west (accounting for such development to the east). Hence these services can be economically extended to service the proposed development.

The proposal is consistent with the Mudgee Town Structure Plan within the CLUS and was zoned prior for low density residential purposes in the Interim LEP (2008). Though this planning proposal seeks to amend the minimum lot size in the LEP, it is aligned with the Policy context:

- *The land has been identified in the LEP and CLUS as available supply for large lot residential development.*
- *The Proposal is consistent with the surrounding land values identified in the Structure Plan. The subject site includes further land owned by the proponent, approved for development to lots of 2000m². In addition, the site adjoins land identified in the CLUS for future large lot residential land use (north of Spring Flat Road between Bruce Road and Hill Sixty Drive).*
- *The Planning Proposal promotes development addressing the constraints identified in the CLUS affecting timing of the development; such as transmission lines, access, servicing, and natural environments.*
- *Provides good utilisation of infrastructure, servicing and access upgrade approved as part of DA0367/2013.*
- *Provides an opportunity for implementation of best practice urban and landscape design principles through the concept plan, integrating with existing development.*

Mid-Western Regional Council

Figure 3-1. Mudgee town structure plan

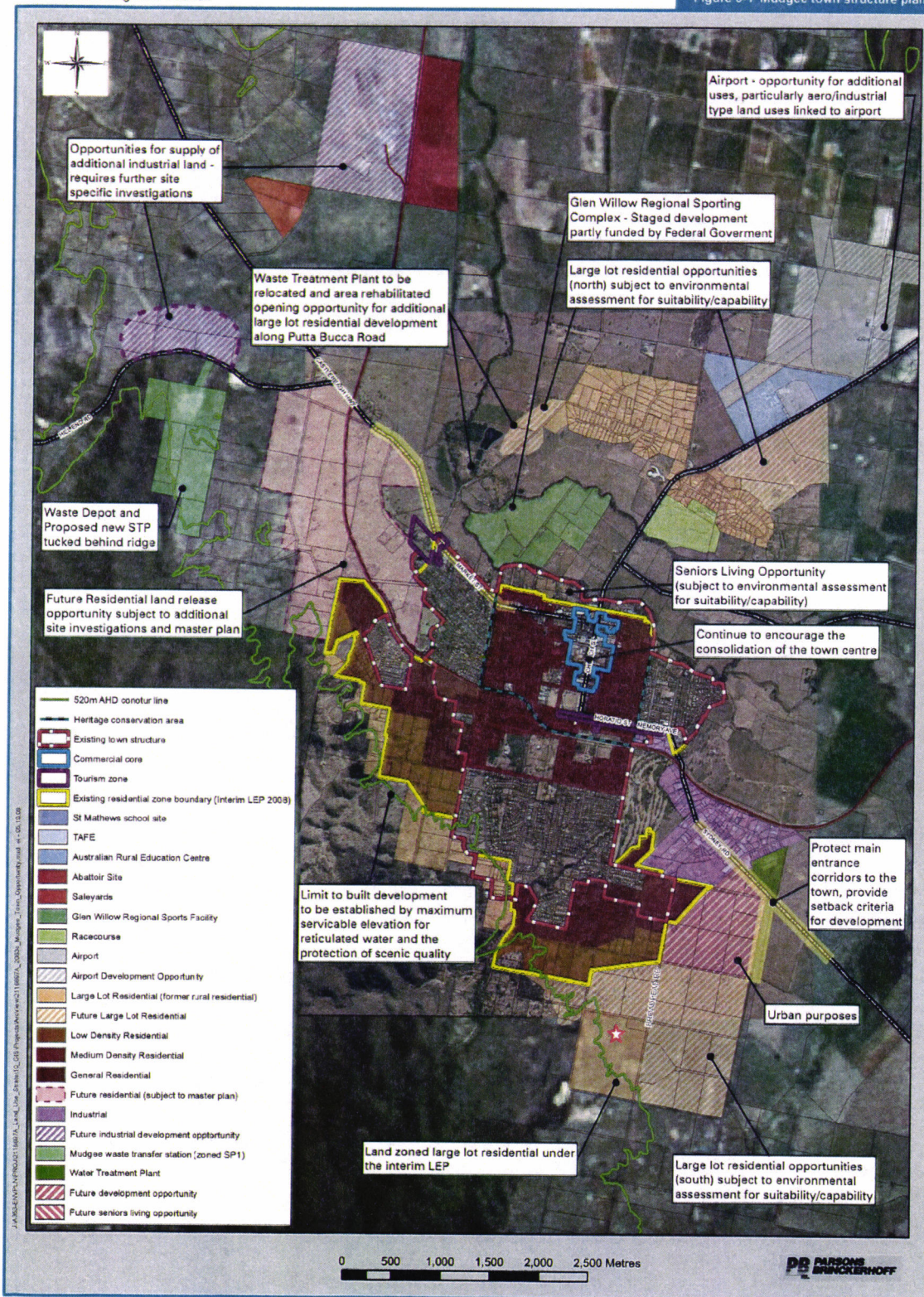


Figure 4: Mudgee Town Structure Plan

Mid-Western Region Towards 2030 Community Plan

Goals of the Community Plan and how the Planning Proposal achieves these, is discussed in the table below correlating to strategies identified in the Plan.

Goal	Strategy From Community Plan	Planning Proposal/Response
Theme 1: Looking after our Community		
2 Vibrant towns and villages	Make available diverse, sustainable, adaptable and affordable housing options through effective land use planning.	<i>Effective land use planning includes making the most of available infrastructure. The utilisation of land that has available access & adjoins similar development is effective and efficient planning. The planning proposal will provide a variety of low density lots South of Mudgee, which provides a delivery of larger prestige lots and smaller lots promoting a diversity of housing types in the location. Land release would be staged based on demand.</i>
4 Meet the diverse needs of the community and create a sense of belonging	Provide equitable access to a range of places and spaces for all in the community.	<i>The concept plan has included the provision of open space and landscaped areas, to ensure all lots are located within 400m of a local park, playground or passive open space.</i>
Theme 2: Protecting our Natural Environment		
1 Protect and enhance our natural environment	Minimise the impact of mining and other development on the environment both natural and built.	<i>Environmental mitigation measures were included in the concept plan. Surface water management has been considered as well as impact on biodiversity and riparian environments, with measures to minimise impact inherent in the concept design.</i>
Theme 3: Building a Strong Local Economy		
2 An Attractive Business and Economic Environment	Develop tools that simplify development processes and encourage high quality commercial and residential development.	<i>MWRC is to maintain and review the CLUS and LEP to encourage growth under the Plan. The Planning Proposal is in line with actions to increase the availability of residential supply and tools developed by Council.</i>
Theme 4: Connecting our Region		
1 High quality road network that is safe and	Develop and enhance walking and cycling networks across the Region.	<i>The concept plan includes opportunities for pathways and cycleway to extend into adjoining</i>

efficient.

undeveloped lands and well as connecting to existing cycle/walking paths.

Mid-Western Regional Economic Development Strategy (EDS)

Mid-Western Regional Council has prepared an Economic Development Strategy (EDS) outlining a future economic direction for the Region in the next 10 years, to June 2020. The EDS provides a broad framework for the various lead agencies and stakeholders involved in economic development to identify their roles and engage in economic development initiatives for the Region.

In line with the Strategy, provision of adequate infrastructure will support economic activity. Availability of residential land has not been identified as a key principle that will influence economic development in the region for the future. However maintaining adequate residential land supply will support Council in efforts to deliver projects that maximise local opportunities and economic benefits in line with the Economic Development Strategy.

State and Regional Policies

There is no specific State or Regional Environmental Plan that addresses the Mid-Western Regional LGA.

Q.2. Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

The planning proposal is considered the best means of achieving the intended outcomes as:

- The existing min. lot size of adjoining land of the same zoning is extended without confusion;
- The objectives of the R2 Low Density Residential zone and clause 4.1 are upheld;
- The concept plan provides opportunity for integration and transition to existing developed areas. The plan:
 - Integrates well with neighbouring properties to the developed land in Robertson Street.
 - Further, density of residential development is afforded with opportunity for appropriate transitioning to neighbouring land through application of mixed lot sizes.
- The R2 Low Density zone objectives will not be compromised by allowing the planning proposal to reduce the minimum prescribed lot size. Similarly, the current application of the zone to comparable development types in Mudgee supports the application of the smaller lot size in this instance, without hindering the intended outcomes.

Q.3. Is there a net community benefit?

The proposed low density residential development is considered likely to achieve a net community benefit, as determined by the application of the Net Community Benefit Test adapted from the *Draft Centres Policy: Planning for retail and commercial development* (April 2009), which provides a series

of questions to determine the nature of a Planning Proposal, as detailed in **Table 1** below. A net community benefit arises where the sum of all the benefits of rezoning outweigh the sum of all costs.

The assessment evaluates the external costs and benefits of the proposal (i.e. the externalities). The assessment generally assumes that any private costs will be cancelled out by any private benefits. Net Community Benefit Test is not a quantitative test, but useful tool to inform debate and help decision making on planning proposals.

The merits of the rezoning proposal have been considered against the base case, being 'no change' to zoning/retaining the status quo.

Table 1: Net Community Benefit Test

Question	Application to Planning Proposal
<i>Will the LEP be compatible with agreed State and regional strategic direction for development in the area (e.g. land release, strategic corridors, development within 800 metres of a transit node)?</i>	The NSW Government is currently preparing a draft strategic regional land use plan for the Western region. There is no applicable State or Regional strategic directions for development. However, the development is supportive of development identified in the LEP and <i>Mid-Western Regional Comprehensive Land Use Strategy (CLUS)</i> .
<i>Is the LEP located in a global/regional city, strategic centre or corridor nominated within the Metropolitan Strategy or other regional/sub-regional strategy?</i>	No.
<i>Is the LEP likely to create a precedent or create or change the expectations of the landowner or other landholders?</i>	No. The planning proposal is unique in the location, with the land being zoned for the purpose and will be able to be economically serviced. The proposal will not set a precedent that is inconsistent with current strategic documents, but provides flexibility in achieving the projected lot yields.
<i>Have the cumulative effects of other spot rezoning proposals in the locality been considered? What was the outcome of these considerations?</i>	The MWRLEP commenced on 10 August 2012. There have been no previous spot rezoning proposals in the locality under the LEP to date.
<i>Will the LEP facilitate a permanent employment generating activity or result in a loss of employment lands?</i>	The MWRLEP amendment will not facilitate a permanent employment generating activity or result in a loss of employment lands.
<i>Will the LEP impact upon the supply of residential land and therefore housing supply and affordability?</i>	Yes. The use of the site to provide a range of residential densities in the location will make a more effective use of this land, utilising existing residential zoned land to greater potential. The proposal uses land where infrastructure and services are available. A need for less new infrastructure will have a flow on effect of reduced land supply costs.

Question	Application to Planning Proposal
	<p>The planning proposal seeks to provide for residential uses which retain the unique quality lifestyle concept established in the locality, supporting diverse housing types with larger 2ha lots adjoining in elevated sites. The flexibility in lot size seeks to improve design options considering limitations without reducing overall lot yields.</p>
<p><i>Is the existing public infrastructure (roads, rail, utilities) capable of servicing the proposed site? Is there good pedestrian and cycling access? Is public transport currently available or is there infrastructure capacity to support future public transport?</i></p>	<p>The site is to be well serviced by road and other essential services. Access is provided to an upgraded existing road network. The site will also be serviced by a network of new proposed roads.</p> <p>The existing pedestrian and cycle network is linked to the site in a combination of shared road areas and separate paths (along the riparian corridor). The access point is linked to the open space areas in the concept plan where the cycle path/walkway is extended and linked to existing approved pathways.</p> <p>Servicing will be brought in vicinity of the site of the proposal with the development of neighbouring land associated with DA0367/2013.</p> <p>Public transport is not currently available to the land. The site has capacity for designated bus service stops to be provided in the concept layout.</p>
<p><i>Will the proposal result in changes to the car distances travelled by customers, employees and suppliers? If so, what are the likely impacts in terms of greenhouse gas emissions, operating costs and road safety?</i></p>	<p>Yes. The provision of additional local parks and passive open space areas within the development site will improve connectivity to such areas. Further provision of walkways/cycle paths improves connectivity. This will reduce car dependency; provide direct walking and cycle access, encouraging an active and healthy community.</p>
<p><i>Are there significant Government investments in infrastructure or services in the area whose patronage will be affected by the proposal? If so, what is the expected impact?</i></p>	<p>No.</p>
<p><i>Will the proposal impact on land that the Government has identified a need to protect (e.g. land with high biodiversity values) or have other environmental impacts? Is the land constrained by environmental factors such as flooding?</i></p>	<p>The site is not within an identified Flood Planning Area or high biodiversity significance under MWRLEP.</p> <p>The designated vegetated riparian zone (VRZ) to be enhanced by the developer will improve the current riparian corridor and protect the watercourse from development impacts.</p>

Question	Application to Planning Proposal
<i>Will the LEP be compatible/complementary with surrounding land uses? What is the impact on amenity in the location and wider community?</i>	The proposed residential use is not inconsistent with current adjoining zoning or the surrounding land use. The proposed use will not adversely impact on amenity of the existing residential land use, as the concept plan has addressed the integration with existing development and adjoining residential and rural areas.
<i>Will the public domain improve?</i>	N/A It is anticipated that Council's planning instruments will ensure that adequate setbacks for future housing development is provided along the boundaries of the site to ensure safety and amenity is not compromised from the public domain.
<i>Will the proposal increase choice and competition by increasing the number of retail and commercial premises operating in the area?</i>	N/A
<i>If a stand-alone proposal and not a centre, does the proposal have the potential to develop into a centre in the future?</i>	N/A The MWRLEP amendment would not have the potential to develop into a centre.
<i>What are the public interest reasons for preparing the draft plan? What are the implications of not proceeding at that time?</i>	The MWRLEP amendment is intended to facilitate the development of residential land that is currently zoned in the LEP. This proposal supports development potential, improves road access and path linkages, refines riparian zone buffering and overall making the best use of available land. The lot size amendment at this stage provides surety for the developer and community that the development option can proceed in accordance with project lot yields, making best use of infrastructure improvements. Should the planning proposal not proceed, future residential development is likely to be uneconomical due to the constraints and reduced lot yield. The proposal takes up opportunity to provide greater available residential lots to the Mudgee district in the medium to longer timeframes, utilising land that would be readily serviced and zoned for the purpose.

SECTION B - RELATIONSHIP TO THE STRATEGIC PLANNING FRAMEWORK

Q.4. Is the planning proposal consistent with the applicable regional or sub-regional strategy?

There are no regional strategies in place relevant to the planning proposal.

Q.5. Is the proposal consistent with Council's Community Strategic Plan or other local strategic plan?

Yes. Also refer to PART 1 and Q.1.

The current relevant local strategic plan is the Comprehensive Land Use Strategy (CLUS) which provides a context for future land use and informed the preparation of the Mid-Western Regional Local Environmental Plan (MWRLEP) (gazetted on 10 August 2012). The subject land was identified prior to this strategic work and identified by Council and was zoned for residential use in the Mid-Western Region Interim LEP 2008, i.e. prior to the MWRLEP.

The existing supply of residential zoned land was not increased with the gazettal of the Mid-Western LEP 2012, as this was based on the CLUS. The subject land has been included in the projected lot yields in the CLUS for the location. As such the proposal is consistent with Council's strategic plan and is consistent with the objectives of the current zoning.

State Environmental Planning Policies

Q.6. *Is the planning proposal consistent with applicable state environmental planning policies?*

Yes. The Planning Proposal is considered to be consistent with applicable State Environmental Planning Policies as discussed below. Analyses of applicable SEPPs are provided in the table below.

SEPP	Applicable/Consistency
1 – Development Standards	Not relevant to planning proposal.
4 – Development without consent	Not relevant to planning proposal.
6 – Number of Storeys	Not relevant to planning proposal.
14 – Coastal Wetlands	Not relevant to planning proposal.
15 – Rural Land sharing Communities	Not relevant to planning proposal.
19 – Bushland in Urban Areas	Not relevant to planning proposal.
21 – Caravan Parks	Not relevant to planning proposal.
22 – Shops and Commercial Premises	Not relevant to planning proposal.
26 – Littoral Rainforests	Not relevant to planning proposal.
29 – Western Sydney Recreation Area	Not relevant to planning proposal.
30 – Intensive Agriculture	Not relevant to planning proposal.
32 – Urban Consolidation (Redevelopment of Urban Land)	Not relevant to planning proposal.
33 – Hazardous and Offensive Development	Not relevant to planning proposal.
36 – Manufactured Home Estates	Not relevant to planning proposal.
39 – Spit Island Bird Habitat	Not relevant to planning proposal.
44 – Koala Habitat Protection	Not relevant to planning proposal.
47 – Moore Park Showground	Not relevant to planning proposal.
50 – Canal Estate Development	Not relevant to planning proposal.
52 – Farm Dams and other works in Land and Water Management Plan Areas	Not relevant to planning proposal.
55 – Remediation of Land	Relevant. <i>See comments below.</i>
59 – Central Western Sydney Economic and Employment Area	Not relevant to planning proposal.
60 – Exempt and Complying Development	Not relevant to planning proposal.
62 – Sustainable Aquaculture	Not relevant to planning proposal.
64 – Advertising and Signage	Not relevant to planning proposal.
65 – Design Quality of Residential Flat Development	Not relevant to planning proposal. Residential flat buildings are prohibited in the zone.
70 – Affordable Housing	Not relevant to planning proposal.
71 – Coastal Protection	Not relevant to planning proposal.
BASIX 2004	Future development for housing will be required to address the provisions of BASIX.
Exempt and Complying Development Codes 2008	Not relevant to planning proposal.
Housing for Seniors or People with a Disability 2009	Future development will be able to deliver accessible housing.
Infrastructure 2007	Not relevant to planning proposal. <i>See comments below.</i>
Kosciusko National Park – Alpine Resorts 2007	Not relevant to planning proposal.
Major Development 2005	Not relevant to planning proposal.
Sydney Region Growth Centres 2006	Not relevant to planning proposal.
Mining and Petroleum Production and Extractive Industries 2007	Not relevant to planning proposal.
Temporary Structures 2007	Not relevant to planning proposal.
Rural Lands 2008	The proposal aims to reduce impacts and

SEPP	Applicable/Consistency
	does not fragment rural land.
State & Regional Development 2011	Not relevant to planning proposal.
Western Sydney Employment Area 2009	Not relevant to planning proposal.
Western Sydney Parklands 2009	Not relevant to planning proposal.
Affordable Rental Housing 2009	Through the provision of a variety of lot sizes, the future housing will potentially cater to a range of income levels. An objective of the planning proposal is to preventing housing affordability issues from escalating as identified in the Local Services Assessment.

State Environmental Planning Policy No. 55 – Remediation of Land

State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55) applies to the whole of the State of NSW and is required to be considered in a proposal under Clause 6 of SEPP 55. However given the current use of the site the potential for contaminants should be considered at the development stage. Based on known use and land ownership it is unlikely that contamination will prevent future development of the land for residential purposes. However, any soil contamination would require remediation before the land can be used for residential development. Should remediation be required, it is anticipated that this can occur at future development application stage. The Planning Proposal is not inconsistent with SEPP 55.

State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) potentially applies to the site. The site does not contain flood liable land. Hence Clause 15 of the ISEPP referring to development with impacts on flood liable land is not relevant.

With reference to clause 104 Traffic Generating Development, it is unlikely that the future development would trigger the need for referral to the Road and Maritime Services (RMS) and further consideration under this clause.

Q.7. Is the proposal consistent with applicable Ministerial directions (s.117 directions)?

Section 117 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) enables the Minister for Planning and Infrastructure to issue directions regarding the content of LEPs to the extent that the content must achieve or give effect to particular principles, aims, objectives or policies set out in those directions. An overview of applicable directions and compliance is included in **Table 2**.

Table 2: Section 117 Ministerial directions

Section 117 Ministerial directions		Compliance of Planning Proposal
1.1	Business and Industrial Zones	N/A
1.2	Rural Zones	N/A.
1.3	Mining, Petroleum Production and Extractive Industries	N/A
1.4	Oyster Aquaculture	N/A
1.5	Rural Lands	N/A
2.1	Environment Protection Zones	<p>The development has been identified as nearing sensitive biodiversity pursuant to map BIO_006 of the MWRLEP. The small amount of identified Sensitive Biodiversity will be generally contained within the associated drainage corridor where it is considered that there is the lowest possible impact.</p> <p>Furthermore the site has been indicated to contain sensitive ground water supply demonstrated by map GRV_006 of the MWRLEP. This has been negated by the LEP which does not permit the development without connection to reticulated services. This will eliminate any negative impacts on ground water dependent ecological communities. Natural drainage lines have also be considered and utilised to provide drainage, ensuring minimal impact to any sensitive features.</p>
2.2	Coastal Protection	N/A
2.3	Heritage Conservation	<p>No items of European heritage have been identified in the subject site. The site contains Aboriginal objects that are protected under the National Parks and Wildlife Act 1974. A Site survey has been carried out to ensure there is no disturbance of objects by the future subdivision. The planning proposal has adopted measures that facilitate the conservation of environmental heritage. The concept plan has been adapted and includes measures to avoid impact to any sites from future subdivision works.</p>
2.4	Recreation Vehicle Areas	N/A
3.1	Residential Zones	<p>This direction applies to the subject land as a change to the lot size map is proposed. The planning proposal will make best use of the available infrastructure which is to be supplied to the locality (particularly roads, sewer and water). The residential zoning supports development of good design which is capable of sustaining the smaller lots subject to connection to the relevant utilities.</p> <p>The LEP does not permit subdivision below 2ha until such time as the provision of a reticulated water and sewerage has been made to a development site. The planning proposal will make more efficient use of infrastructure and services which are to be</p>

Section 117 Ministerial directions		Compliance of Planning Proposal
		provided to the locality.
3.2	Caravan Parks and Manufactured Home Estates	N/A
3.3	Home Occupations	The planning proposal is consistent with this Direction, and the capacity for dwellings to accommodate small businesses will not be hindered.
3.4	Integrating Land Use and Transport	The planning proposal and concept plan aids reduction of the dependence of cars, and travel demand through adequate provision of road linkages, adequate room for pathways and new open space areas. The proposal has considered the approved infrastructure, residential development patterns, and local transport issues when developing the concept plan for future subdivision. The planning proposal will build upon the existing level of access and public transport met by the adjacent residential area approved by residential subdivision DA0367/2013.
3.5	Development Near Licensed Aerodromes	N/A
3.6	Shooting Ranges	N/A
4.1	Acid Sulfate Soils	N/A
4.2	Mine Subsidence and Unstable Land	N/A
4.3	Flood Prone Land	N/A
4.4	Planning for Bushfire Protection	Mid-Western Regional LGA has a bushfire prone land map prepared under s146 of the <i>Environmental Planning and Assessment Act 1979</i> . The land captured by this planning proposal is outside of the mapped bushfire prone land. The planning proposal does not hinder adjoining lands from complying with the provisions of Planning for Bushfire Protection 2006. The subject land will be serviced with town water and have future hydrants installed as part of the concept subdivision.
5.1	Implementation of Regional Strategies	N/A
5.2	Sydney Drinking Water Catchment	N/A
5.3	Farmland of State and Regional Significance on the NSW Far North Coast	N/A
5.4	Commercial and Retail Development along the Pacific Highway, North Coast	N/A
5.8	Second Sydney Airport: Badgerys Creek	N/A
6.1	Approval and Referral Requirements	This direction is to ensure that LEP provisions encourage the efficient and appropriate assessment of development. The planning proposal does not include LEP provisions requiring concurrence, consultation or referral.
6.2	Reserving Land for Public Purposes	N/A
6.3	Site Specific Provisions	N/A
7.1	Implementation of the Metropolitan Plan for Sydney 2036	N/A

The Planning Proposal is considered to be consistent with the applicable Ministerial directions as identified above.

SECTION C - ENVIRONMENTAL, SOCIAL AND ECONOMIC IMPACT

Q.8. Is there any likelihood that Critical Habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

The Planning Proposal involves cleared pasture. The watercourses in this location have also been historically cleared of significant vegetation. The subject land adjoins mapped sites of High Biodiversity Sensitivity under the Mid-Western Regional LEP 2012 as depicted below (refer to **Figure 5**). The areas are associated with riparian corridors which have been avoided in the development concept resulting in minimal impact from development.

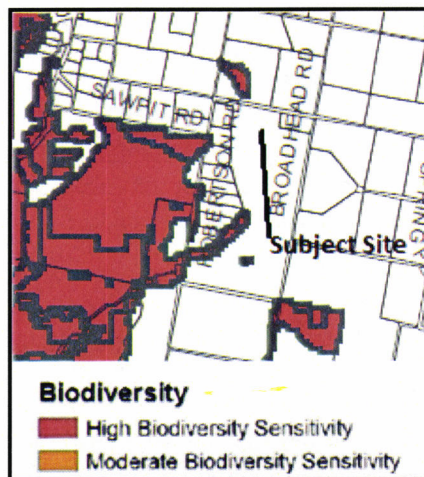


Figure 5: Biodiversity Sensitive Mapping (excerpt MWRLEP 2012 Sensitivity Biodiversity Sheet BIO_006)

Q.9. Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

The constraints assessment and concept plan development carried out as part of the planning proposal preparation process has identified key environmental issues and development constraints. Environmental issues are able to be addressed in greater depth as part of a Development Application process.

With reference to *A Guide to Preparing Planning Proposals*, technical studies to address an identified issue should be undertaken following the initial Gateway determination. Such studies together with community and public authority consultation can explore the mitigation of any potential impacts.

Constraints Assessment Summary

Where a constraint has been identified, they are able to be addressed in the concept design and further assessment at the development stage.

Topography and Soils

The site is located in a foot slope, terrace landscape and can generally be described as sloping gently to the east. The shape of the land, soils and topography presents no particular hindrance for subdivision, with relatively regular shapes to be developed.

The MWRELP has provisions to preserve the visual setting of the Mudgee Township, particularly through Clause 6.10 Visually sensitive land near Mudgee. The land subject of the planning proposal is located along the edge of the Visually Sensitive Land identified under the MWRLEP, and characterised by the 520 AHD contour. Future residential subdivision will not significantly compromise the visual setting forming the backdrop of Mudgee. It is considered that the proposed reduced minimum lot size will form an appropriate transition into higher density lots without compromising the character of the locality. A 2000m² minimum lot size, support by variety in lot sizes and layout that reduces the number of lots adjoining the established 2ha lots, being considered to provide suitable physical space, to result in a sympathetic outcome to the Visually Sensitive land identified within the planning proposal.

The area can be described as alluvial plains and terraces of the Cudgegong River and its tributaries. The lower terraces consist of various alluvial deposits of loams and sands. The landscape is considered in accordance with Murphy and Lawrie as Non Calcic brown soils and Yellow Podzolic Soils, with both Craigmore (cm) and Mullamuddy (mm) landscapes being identified within the subject site (refer to **Figure 6** below). Soil qualities and limitations indicate that both landscapes are generally suitable for residential development, care should be taken to minimise runoff and erosion during development and housing development should consider the possibility of moderate shrink and swell potential with the ability to affect foundations.

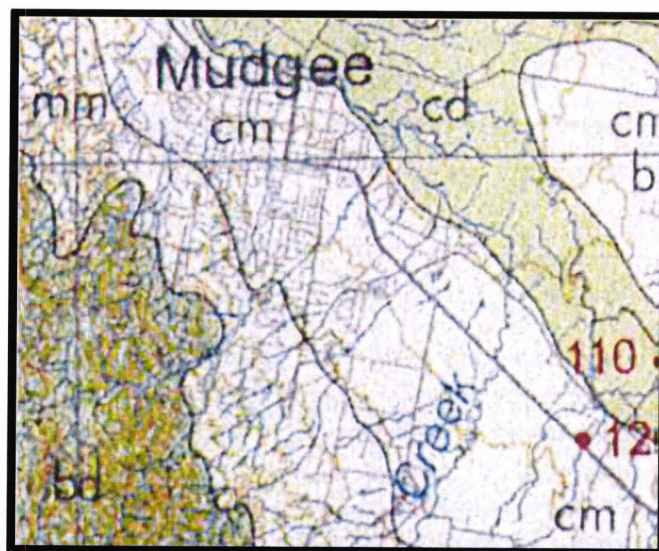


Figure 6 Soil landscape (Murphy & Lawrie 1998, subject site locality excerpt)

Groundwater Vulnerability

Clause 6.4 Groundwater vulnerability of MWRLEP applies to future development of the subject land as the site falls within land identified as “Groundwater vulnerable” on the Groundwater Vulnerability Map. The majority of Mudgee urban area falls within the mapped area as depicted in the excerpt from the map in **Figure 7** below.

MWRC must consider this clause before determining a development application, and consider relevant issues such as: the likelihood of impacting on groundwater dependent ecological communities and the likelihood of groundwater contamination from the development (including from any on-site storage or disposal of solid or liquid waste and chemicals). This requirement is for the development stage and does not hinder further consideration of the planning proposal. Furthermore it is noted that connection to both reticulated water and sewer is required, before any such physical development could occur, which negates major contributing factors for possible groundwater contamination.

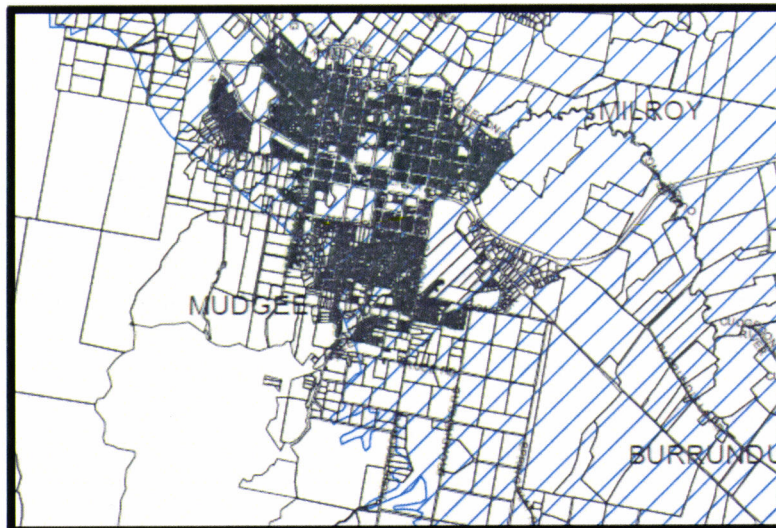


Figure 7: Groundwater Vulnerability (excerpt MWRLEP 2012 Groundwater Vulnerability Map GRV_006)

Salinity

As indicated by Murphy and Lawrie (1998) isolated low levels of salinity occur along some drainage lines and depressions in the Craigmere (cm) soil landscape group. This may place focus on land to the east of the subject land. Sites can become saline if salts in subsurface layers of the soil are mobilised and brought to the surface through rising groundwater or development of a perched water table due to an impediment to water drainage. Site specific drainage measures would need to be addressed in relation to any future subdivision proposals with current concept planning retaining natural drainage lines for development drainage.

The Mullamuddy (mm) landscape is demonstrated to have no apparent soil salinity problems in its current state. The landscape has the potential to development soil salinity issues in the medium to

long term. This should be considered during the development stage and salinity prevention methods should be implemented to negate any possible future issues.

Connection of the site to reticulated sewerage will ensure that ground water levels are not affected by onsite disposal of waste water. Site specific soil samples have not been collected for this planning proposal. The soil landscape features do not indicate a high risk for salinity to occur. Salt tolerant species, stressed vegetation and areas of scalding were not observed during the site inspection by Minespex in 2013. Future subdivision developments are able to consider the potential for salinity and supplementary reports can be prepared at that stage.

It is considered appropriate that the provisions of 'Building in Saline Environments' as outlined in the *MWRC Development Control Plan (2013)* be adopted for future development application proposals, without need for additional site specific measures.

Flora and Fauna

With the grazing of the site occurring since before the 1950's, the disturbed nature of the land, and historical clearing plus pasture improvements, the habitat value of the land has diminished. Within the subject land, existing vegetation consists generally of cleared grazing land. The planning proposal encompasses drainage corridors which do not contain any significant riparian vegetation. Future enhancement of the corridor would occur in the event of development of the land.

The subject property is not known to contain any threatened species, endangered ecological communities or critical habitat. It is considered that the site is suitable for the planning proposal with minimal site disturbance required to any vegetation located within the locality.

A number of noxious weeds are known to occur within the Mid-Western Regional LGA. No noxious weeds are currently identified as occurring within the subject site. While this may be the case, it is proposed that prior to any future development the land be inspected for weeds and any appropriate treatment provided to ensure that weeds are not spread and are adequately controlled. Overall, flora and fauna issues do not raise any issue for change to the minimum lot size as proposed.

Road Network

The road network will be upgraded as a result of residential development occurring in the locality and does not constrain the development of the site. As indicated, sealed road access will be provided as roads are upgraded for neighbouring approved subdivision and for this proposal. Access to the lots is provided from Robertson Street on the west with a new road to be constructed.

Essential Services

Power and telecommunication services are all available to the subject site and can be readily extended to service all lots proposed within the concept plan. Both reticulated water and sewerage service are required and will be extended to the site prior to the commencement of any future development. The planning proposal identifies an area currently zoned for residential development, which could greater utilise infrastructure to be provided and mitigate future impacts on the sites

servicing capabilities. This will enable the planning of infrastructure such as sewer, water and road in the most efficient manner. Services are able to be designed to accommodate the long term development requirements obtaining the most value out of local infrastructure projects.

Drainage and Flooding

The site is located outside of the associated Flood Planning Area identified under MWRLEP Flood planning map CL1_006, as such flooding impacts are not considered any further within this planning proposal.

The site is affected by mapped riparian environments. Topography directs overland flow to the east, which drains to the third order drainage corridor directly adjoining the planning proposal, ultimately leading to the Cudgegong River. The planning proposal contains minor drainage lines which have been adequately addressed within the concept to protect the riparian environment. The planning proposal has considered guidelines set out the NSW Department of Primary Industries; *Guidelines for riparian corridors on waterfront land*, within the concept plan, adjusting the concept design where necessary.

Details of the proposed stormwater drainage management as related to the subdivision concept plan are provided.

Undeveloped Catchment

The site slopes from the West to the East at approximately 5% and is mostly cleared grazing land with little tree cover. Upstream of the site there are three defined natural drainage gullies that drain through the site and flatten out into wide, shallow overland flow paths. One of these natural drainage gullies is marked as a stream on the 1:25000 topographic map of Mudgee.

The upstream catchment draining to this particular stream, shown on Lot 14 on Jabek plan BK005 PP as "Riparian Corridor", extends approximately 800m beyond the site with a total catchment area of 8.57Ha. A diversion bank has been constructed across the natural gully to divert stormwater and store it in a temporary holding pond.

As the riparian corridor has functioned as a drainage channel previously, it is proposed to remove the diversion bank from the path of the channel and allow the water to flow in its original direction until it intersects the new road to be constructed in the subdivision. At this point the stormwater would be conveyed under the new road and through a drainage easement in lot 19 by pipe, where it would then be discharged into the drainage reserve. Preliminary modelling on the undeveloped catchment indicates that there will be 1.2m³/s flowing through the riparian corridor and discharging into the drainage reserve. The outlet of the piped drainage will be stabilised with rock lining to ensure erosion of the channel bed does not occur.

Developed Catchment

The development covers an area of approximately 9.8Ha. The post-developed catchment will drain to the new road system where the minor system (5yr ARI) flows will be piped to a detention basin and water sensitive urban design treatment area for removal of rubbish, sediment and nutrients before being discharged into the existing drainage reserve. Overland flow paths will be provided to

ensure the 100yr ARI event will drain to the detention basin. The post-developed flow from the site will be modelled to ensure that it does not exceed pre-developed flow rates after leaving the detention basin.

Future Controlled Activity Approval

The development will require a controlled activity approval for the work to be completed in the riparian corridor and also the discharge of stormwater from the piped network into the existing drainage easement. The application for a controlled activity approval will be completed when the construction plans are being prepared for the development after development application consent has been issued.

The stream running through the site as marked on the 1:25000 topographic map of Mudgee (running through the area shown on Jabek plan BK005-PP as the riparian corridor) will be slightly shortened, as the water will be intercepted by the new road and diverted to the new water sensitive urban design treatment and detention storage area.

The proposed detention storage and water sensitive urban design treatment area will be located within the existing drainage reserve. The area of land used by the basin and treatment will be offset by an equally sized separate parcel of land within the development to be added to the existing drainage reserve.

Heritage

No European heritage items are listed within or in vicinity of the subject land as listed under the MWRLEP.

Aboriginal heritage survey has occurred over the subject land in the past (not as part of this Planning Proposal). The locations of known sites have been accounted for in the concept plan and all effort is to be made to avoid impact.

Q.10. How has the planning proposal adequately addressed any social and economic effects?

Potential impacts of the planning proposal and subsequent development of the site such as the demand for infrastructure and utility services and demand for community facilities and social services has been considered. The land is currently zoned for residential development and local services have been planned based on the development of this land. The change in minimum lot size to allow lots to 2000m² does not significantly alter the total projected lot yield or demand on public services. The proposal aims to create a development that best utilises infrastructure extended to service the development considerate to the environment.

It is concluded that the site can be adequately serviced within the existing infrastructure framework without placing undue demand on services in Mudgee (see Q11 below). Development under the vision and concept plan will improve the access to passive recreation areas for existing and future south Mudgee residents.

SECTION D - STATE AND COMMONWEALTH INTERESTS

Q.11. Is there adequate public infrastructure for the planning proposal?

The proposal will not increase the demand on public infrastructure as the land includes already zoned land and does not significantly increase the potential lot yield from the land with consideration of topography and physical constraints. Known local infrastructure concerns are not significantly affected as discussed below.

The Local Services Assessment prepared by Mandis Roberts referred to public infrastructure issues in addition to the land and housing shortage. Key findings of the report indicate that preschools and early childhood centres have capacity constraints. Capacity constraints are likely to be reached in the near future. However, NSW Health reports that the existing system is considered adequate to cope with growth.

Transport pressure on roads is also acknowledged, with those roads servicing the mining sector highlighted. The creation of new unnamed roads and upgrade of existing Robertson and Broadhead Roads will be required prior to the commencement of any future works. The concept design contains a single entrance point onto the unformed road linking Robertson and Broadhead Roads to the North of the subject site. This will minimise possible safety concerns as the road will also service the approved development DA0367/2013 to the east of the planning proposal. Airport and rail infrastructure is adequate.

The site will be serviced by town water and sewer which is required to be extended to the site prior to any future development. Servicing will be supplied to a standard which will be capable of adequately servicing all proposed lots of the attached concept plan. Sufficient electricity and telecommunication connection are available for the development to economically connect.

The Planning Proposal includes available area for recreational (playground) sites within the subdivision with pathway linkages along the proposed road network. This will assist in improving the accessibility of passive recreational areas within vicinity of the planning proposal and other nearby developed residential sites.

Demand on public infrastructure will require consultation with appropriate public authorities; however the proposed infrastructure is considered sufficient to provide for the future residential development and therefore is considered acceptable for the Planning Proposal.

Q.12. What are the views of State and Commonwealth Public Authorities consulted in accordance with the gateway determination, and have they resulted in any variations to the Planning proposal?

A summary of the views of State and Commonwealth Public Authorities will be provided following gateway determination.

PART 4 - DETAILS OF THE COMMUNITY CONSULTATION THAT IS TO BE UNDERTAKEN ON THE PLANNING PROPOSAL

Community consultation for the Planning Proposal would be undertaken in accordance with the consultation requirements set out in *A guide to preparing local environmental plans* (DoP 2012).

The consultation requirements for this Planning Proposal are expected to be confirmed by the Department of Planning and Infrastructure DP&I at the gateway determination.

CONCLUSION

This Planning Proposal relates to an amendment to *Mid-Western Regional Local Environmental Plan 2012* for part of land at Lot 9 DP1150667, Broadhead Road, Mudgee. The aim of this report has been to describe the proposed amendment to the prescribed minimum lot size for the subject site. The level of servicing is to align with the standard with the previously approved subdivision DA0367/2013, directly east of the site along Broadhead Road, Mudgee. This aims to facilitate development of future low density residential lots under the direction the future development concept plan.

The vision is to achieve a subdivision design with a variety of lot sizes, to be developed in line with the planning framework and further development investigations. The amended lot size to create 2000m² lots west of the riparian corridor provides capacity to adapt to site characteristics and align with the approved developments. Further, this proposal to provide an opportunity to best utilise the associated infrastructure (reticulated power, water and sewerage) and be able to create lots appropriate to the landscape ranging from 2010m² to 7294m² and transition to the adjoining 2ha lots to the north.

The planning proposal seeks to deliver the best community and design outcomes, achieving the objectives of the LEP to ensure the successful future development of the 'South Mudgee' site as well as the wider Mudgee community. The consideration of options to maximise the return for infrastructure expenditure is appropriate. The planning proposal has included the concept plan to highlight the feasibility of future residential development and integration with existing road layouts, drainage, services and existing development and sensitive riparian environments. The need for mitigation of some environmental aspects has been identified. With continued planning for subdivision development in the location these potential impacts will be able to be addressed so as to not reduce the quality of amenity for residents, or impact on the environment.

References

Department of Planning (DoP) (July 2009) *A guide to preparing planning proposals.*

Department of Planning (DoP) (July 2009) *A guide to preparing local environmental plans.*

Department of Planning (DoP) (July 2008) *Development Near Rail Corridors and Busy Roads Interim Guideline.*

Department of Planning (DoP) (April 2009) *Draft Centres Policy Planning for Retail and Commercial Development.*

Environmental and Earth Sciences (2004) *Statement of Environmental Effects (including Salinity Investigation) Lot 7 DP842243 and Lot 7 and Lot 8 DP1096571*, (unpublished report for DA0187/2005).

Mandis Roberts (August 2012) *Mid-Western Regional Council – Local Services Assessment.*

Mid-Western Regional Council (2010) *Mid-Western Region Economic Development Strategy A 10 Year Plan.*

Mid-Western Region Community Plan – Towards 2030.

Murphy B.W. and Lawrie J.W. (1998) *Soil Landscapes of Dubbo 1:250000 Sheet*, published by Department of Land and Water Conservation.

NSW Rural Fire Service (December 2006) *Planning for Bushfire Protection.*

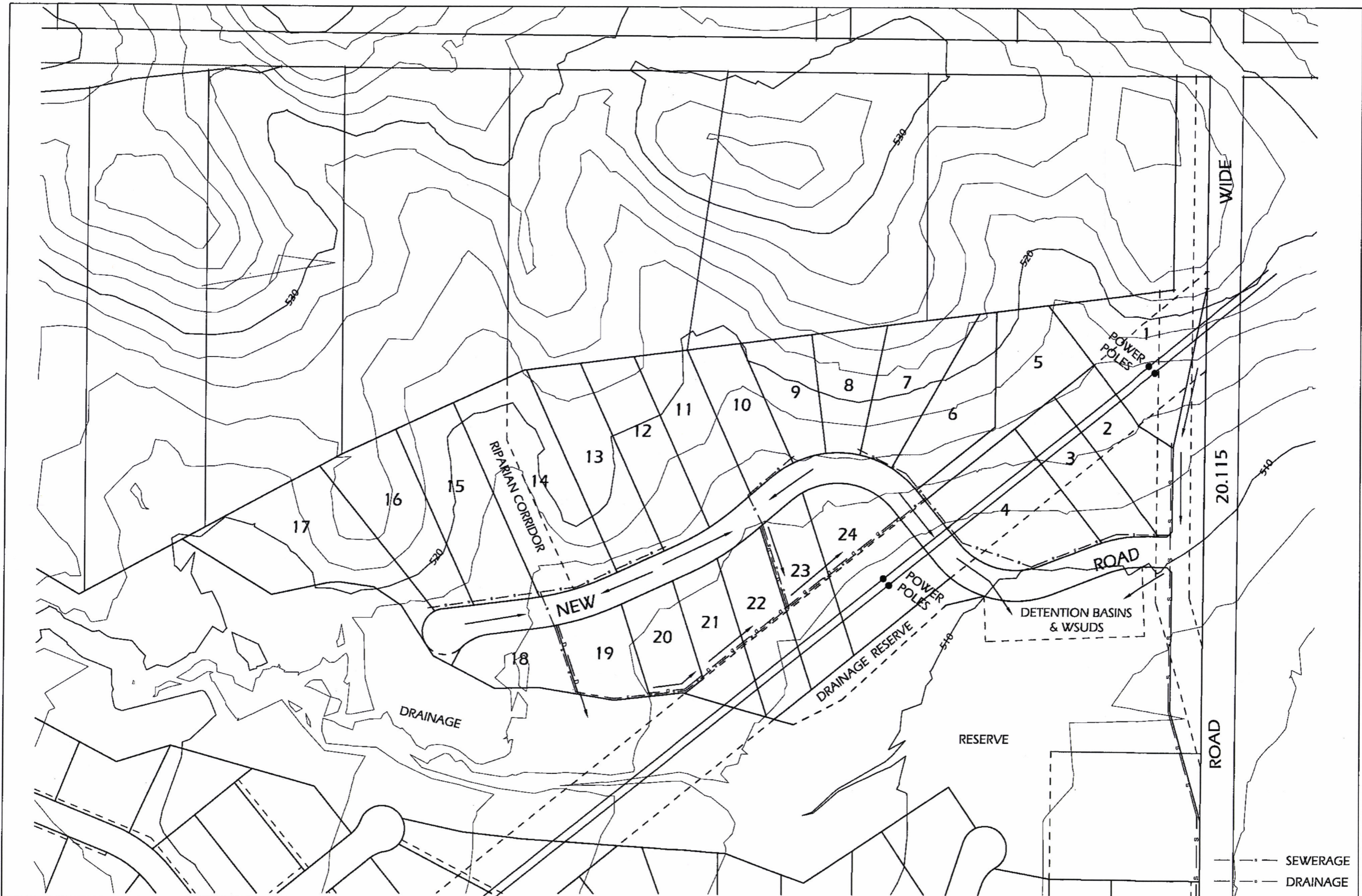
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APPENDIX A – CONCEPT PLANS

Plans Prepared by Jabek Pty Ltd -

- Concept and Lot Layout
- Service Plan
- Stormwater Drainage Plan

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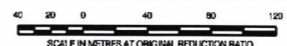
Planning Proposal for the development of Lot 69 in DA 0367/2013 being Part Lot 9 DP1150667 "Fairview" 238 Broadhead Road, Spring Flat

PREPARED BY
Jabek Pty Limited
 Land Development Consultants
 ABN: 52 155702886
 107-125 Bellevue Road
 MUDGEE NSW 2850
 Phone: 0427 721818



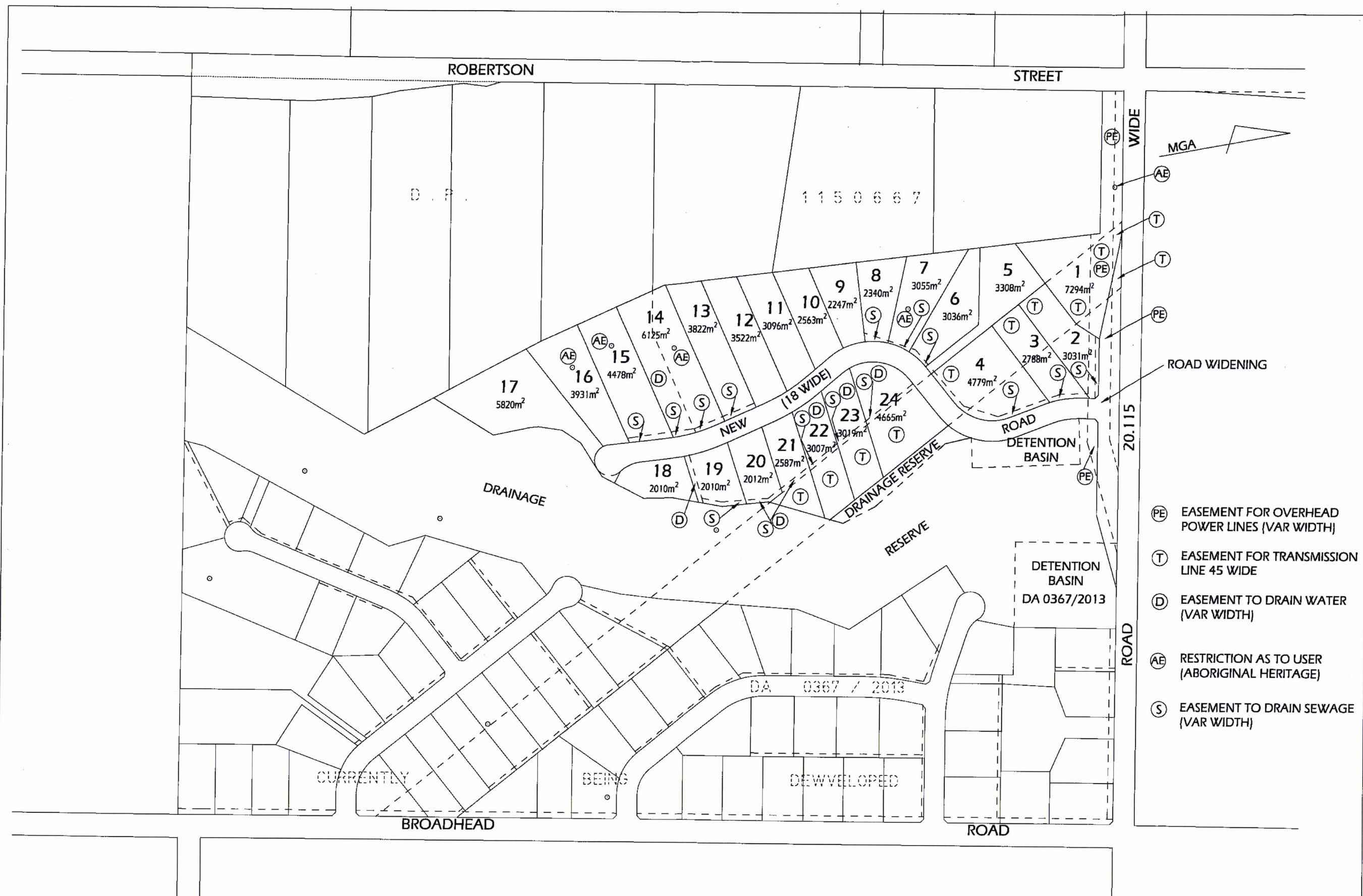
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 Mr. P. Consadine

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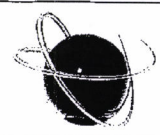
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No.	DATE	REVISION DETAILS
A	28/1/2014	Planning Principal

Planning Proposal for the development of Lot 69 in DA 0367/2013 being Part Lot 9 DP1150667 'Fairview' 238 Broadhead Road, Spring Flat

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 Land Development Consultants
 ABN: 52155702686
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 MUDGEE NSW 2850
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CLIENT:
Mr. P. Consadine

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CONCEPT & LOT LAYOUT

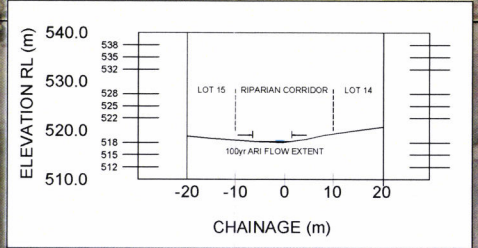
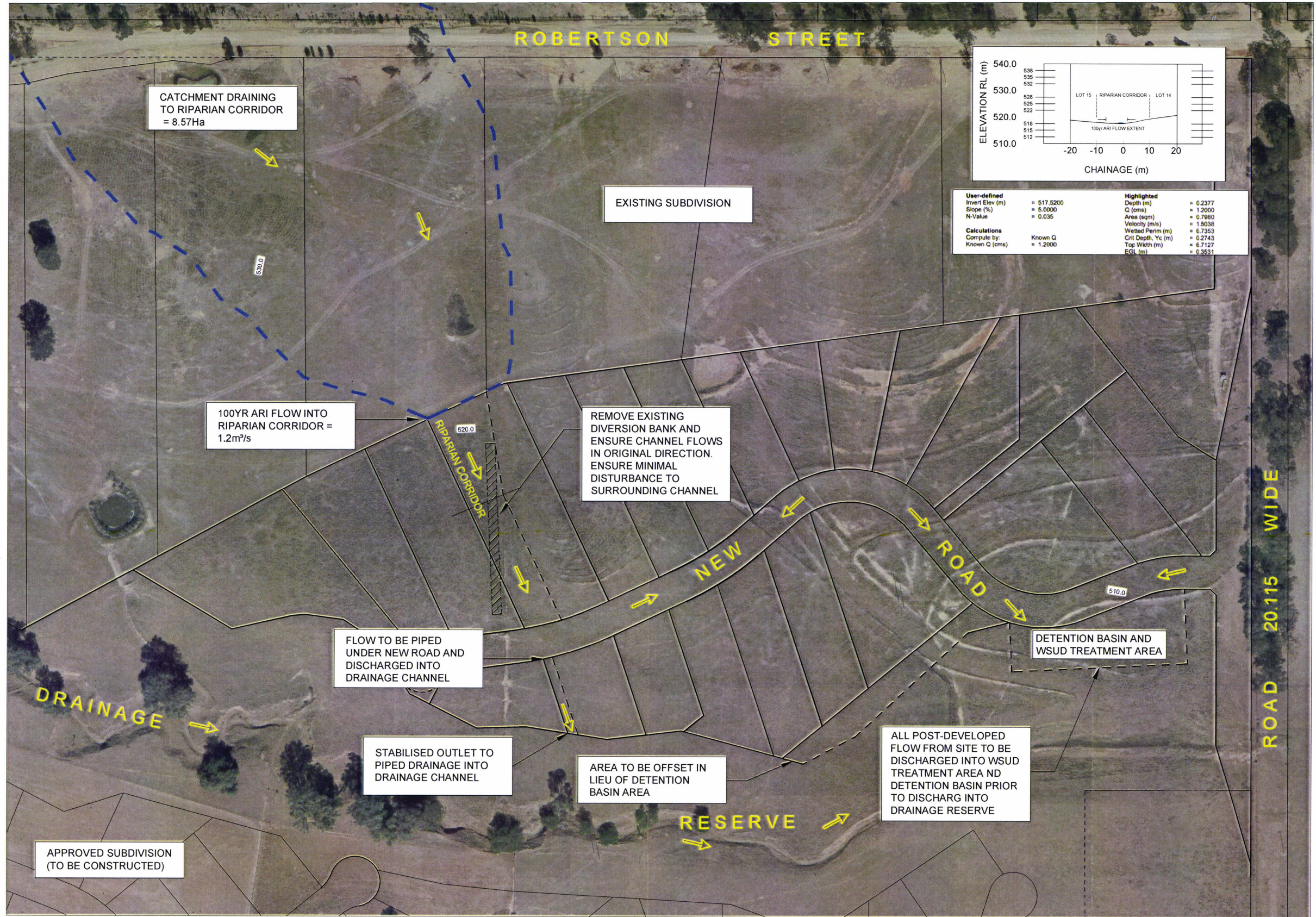
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PROJECT No:
 BK005

SHEET 2 OF 2 SHEETS

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N-Value	= 0.035	Area (sqm)	= 0.7980
		Velocity (m/s)	= 1.5038
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Known Q (cms)	= 1.2000	Top Width (m)	= 6.7127
		EGL (m)	= 0.3531

No.	DATE	REVISION DETAILS
A	30.01.14	ISSUE FOR PLANNING PROPOSAL

PREPARED BY	Jabek Pty Limited Land Development Consultants ABN: 52155702686 107-125 Bellevue Road MUDGEE NSW 2850 Phone: 0427 721818
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CLIENT: MR. P. CONSADINE

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TITLE: STORMWATER DRAINAGE PLAN PLANNING PROPOSAL	REVISION: A
DWG No: BK005 PP.dwg	JOB No: BK005
SHEET 1 OF 1 SHEETS	

15/01813

Mr Brad Cam
General Manager
Mid-Western Regional Council
PO Box 156
Mudgee NSW 2850

Attention: Elizabeth Densley, Manager Strategic Planning

Dear Mr Cam

Planning Proposal (PP_2015_MIDWR_002_00) to amend Mid-Western Regional LEP 2012 – Lot 9 DP 1150667 Broadhead Road, Mudgee

I am writing in response to your Council's letter dated 15 January 2015 requesting a Gateway determination under section 56(1) of the Environmental Planning and Assessment Act 1979 (EP&A Act) with respect to the planning proposal to amend the Mid-Western Regional LEP 2012 to reduce the minimum lot size on land at Lot 9 DP 1150667, Broadhead Road, Mudgee.

As a delegate of the Minister for Planning, I have determined the planning proposal should proceed subject to the conditions in the attached Gateway determination **(Attachment 1)**.

The Minister delegated his plan making powers to Councils in October 2012. It is noted that Council has accepted this delegation. I have considered the nature of Council's planning proposal and have decided to issue an authorisation for Council to exercise delegation to make this plan **(Attachment 2)**.

The amending Local Environmental Plan (LEP) is to be finalised within 9 months of the week following the date of the Gateway determination. Council should aim to commence the exhibition of the planning proposal as soon as possible. Council's request to draft and finalise the LEP should be made directly to Parliamentary Counsel's Office (parliamentary.counsel@pco.nsw.gov.au) 10 weeks prior to the projected publication date.

A copy of the request should be forwarded to the Department of Planning and Environment (westernregion@planning.nsw.gov.au) for administrative purposes.

The amended LEP maps and GIS data is to be uploaded to the Departments FTP site at ftp://lepup:lep_upload@203.3.194.247/ and the map information emailed to: pocgis@planning.nsw.gov.au and a copy to westernregion@planning.nsw.gov.au

The State Government is committed to reducing the time taken to complete LEPs by tailoring the steps in the process to the complexity of the proposal, and by providing clear and publicly available justification for each plan at an early stage. In order to meet these commitments, the Minister may take action under section 54(2)(d) of the EP&A Act if the time frames outlined in this determination are not met.

In accordance with "A guide for the preparation of local environmental plans", Attachment 5 – Delegated plan making reporting template (**Attachment 3**) is enclosed for Council's information. Table 2 of the attachment is to be completed and forward to westernregion@planning.nsw.gov.au when requesting the planning proposal to be notified.

Should you have any queries in regard to this matter, I have arranged for Jessica Holland, Planning Officer to assist you. Ms Holland can be contacted on (02) 6841 2180.

Yours sincerely,

 10-2-2015

Ashley Albury
General Manager, Western Region

Enclosures: Attachment 1 – Gateway Determination
Attachment 2 – Written Authorisation to Exercise Delegation
Attachment 3 – Delegate Plan Making Reporting Template



Gateway Determination

Planning Proposal (Department Ref: PP_2015_MIDWR_002_00): to amend the Mid-Western Regional LEP 2012 – amend minimum lot size on land at Lot 9 DP 1150667 Broadhead Road, Mudgee.

I, the General Manager, Western Region at the Department of Planning and Environment as delegate of the Minister for Planning, have determined under section 56(2) of the EP&A Act that an amendment to the Mid-Western Regional Local Environmental Plan 2012 (LEP) to amend to the minimum lot size on land at Lot 9 DP 1150667 Broadhead Road, Mudgee should proceed subject to the following conditions:

1. Community consultation is required under sections 56(2)(c) and 57 of the Environmental Planning and Assessment Act 1979 (EP&A Act) as follows:
 - (a) the planning proposal must be made publicly available for a minimum of **14 days**; and
 - (b) the relevant planning authority must comply with the notice requirements for public exhibition of planning proposals and the specifications for material that must be made publicly available along with planning proposals as identified in section 5.5.2 of *A Guide to Preparing LEPs (Department of Planning & Infrastructure 2013)*.
2. No consultation is required with public authorities under section 56(2)(d) of the EP&A Act.
3. A public hearing is not required to be held into the matter by any person or body under section 56(2)(e) of the EP&A Act. This does not discharge Council from any obligation it may otherwise have to conduct a public hearing (for example, in response to a submission or if reclassifying land).
4. Prior to submission of the planning proposal under section 59 of the EP&A Act a Lot Size Map that applies to the subject land is to be prepared and be compliant with the Department's "Standard technical requirements for LEP Maps".
5. The timeframe for completing the LEP is to be **9 months** from the week following the date of the Gateway determination.

Dated 10th day of February

2015.


Ashley Albury
General Manager, Western Region
Planning Services

Delegate of the Minister for Planning



WRITTEN AUTHORISATION TO EXERCISE DELEGATION

Mid-Western Regional Council is authorised to exercise the functions of the Minister for Planning under section 59 of the *Environmental Planning and Assessment Act 1979* that are delegated to it by instrument of delegation dated 14 October 2012, in relation to the following planning proposal:

Number	Name
PP_2015_MIDWR_002_00	Amend the minimum lot size on land at Lot 9 DP 1150667 Broadhead Road, Mudgee.

In exercising the Minister's functions under section 59, the Council must comply with the Department's "*A guide to preparing local environmental plans*" and "*A guide to preparing planning proposals*".

Dated *10 February* 2015

A handwritten signature in black ink, appearing to read "A. W. Albury".

Ashley Albury
General Manager, Western Region
Planning Services
Department of Planning and Environment

Delegate of the Minister of Planning

Attachment 5 – Delegated plan making reporting template

Reporting template for delegated LEP amendments

Notes:

- Planning proposal number will be provided by the department following receipt of the planning proposal
- The department will fill in the details of Tables 1 and 3
- RPA is to fill in details for Table 2
- If the planning proposal is exhibited more than once, the RPA should add additional rows to **Table 2** to include this information
- The RPA must notify the relevant contact officer in the regional office in writing of the dates as they occur to ensure the department's publicly accessible LEP Tracking System is kept up to date
- A copy of this completed report must be provided to the department with the RPA's request to have the LEP notified

Table 1 – To be completed by the department

Stage	Date/Details
Planning Proposal Number	PP_2015_MIDWR_002_00
Date Sent to Department under s56	15/01/2015
Date considered at LEP Review Panel	Considered by Ministers Delegate
Gateway determination date	10/02/2015

Table 2 – To be completed by the RPA

Stage	Date/Details	Notified Reg Off
Dates draft LEP exhibited		
Date of public hearing (if held)		
Date sent to PCO seeking Opinion		
Date Opinion received		
Date Council Resolved to Adopt LEP		
Date LEP made by GM (or other) under delegation		
Date sent to DP&I requesting notification		

Table 3 – To be completed by the department

Stage	Date/Details
Notification Date and details	

Additional relevant information:



2015

COUNCIL BUSINESS PAPERS

Ordinary Meeting

17 JUNE 2015

ATTACHMENT **6.28**

► Draft Building Asset Management Plan



*Looking After
our Community*

ASSET MANAGEMENT PLAN

BUILDINGS

11 MAY 2015

MID-WESTERN REGIONAL COUNCIL
FINANCE DEPARTMENT

■ ■ ■ ■ ■ TOWARDS 2030



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Version 1	Tim O'Reilly	Catherine Van Laeren	

THIS DOCUMENT HAS BEEN PREPARED BY TIM O'REILLY, MANAGER HEALTH & BUILDING FOR MID-WESTERN REGIONAL COUNCIL.

ANY QUESTIONS IN RELATION TO THE CONTENT OF THIS DOCUMENT SHOULD BE DIRECTED TO:

TIM O'REILLY, MANAGER HEALTH & BUILDING OR (02) 6378 2850

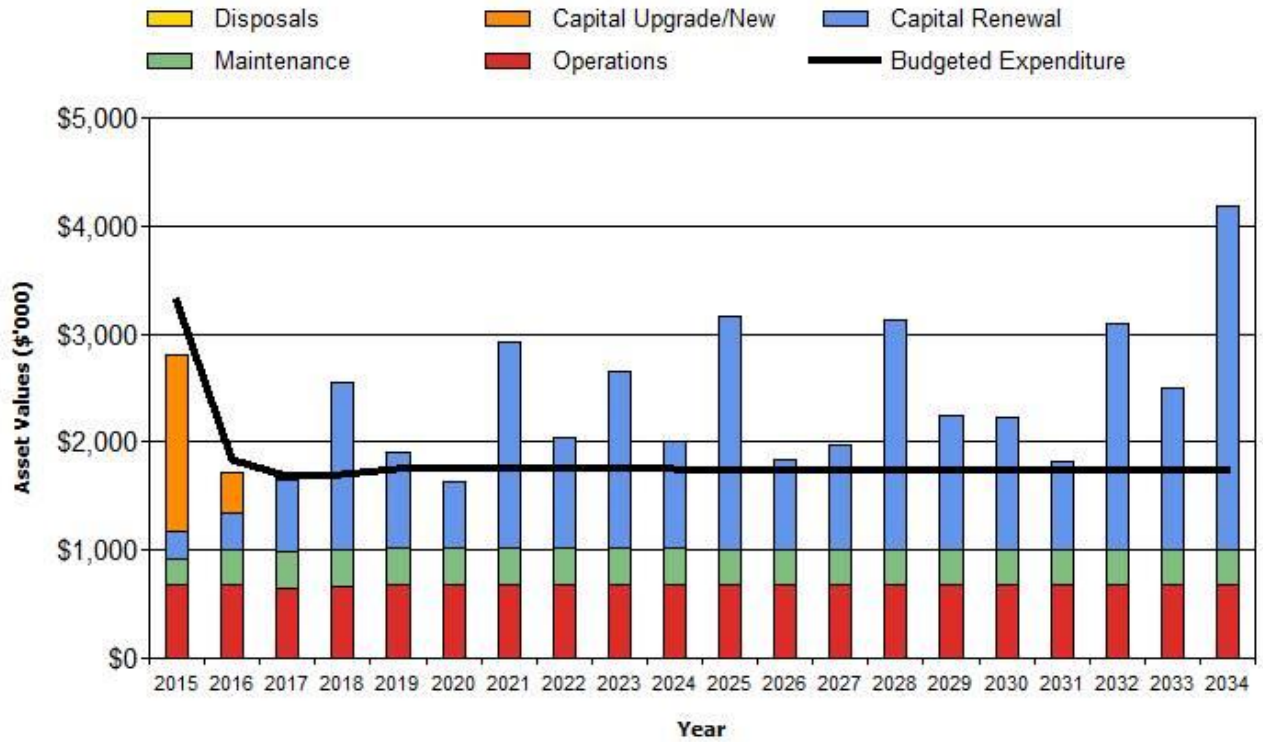
DATE OF PUBLICATION: 11 MAY 2015

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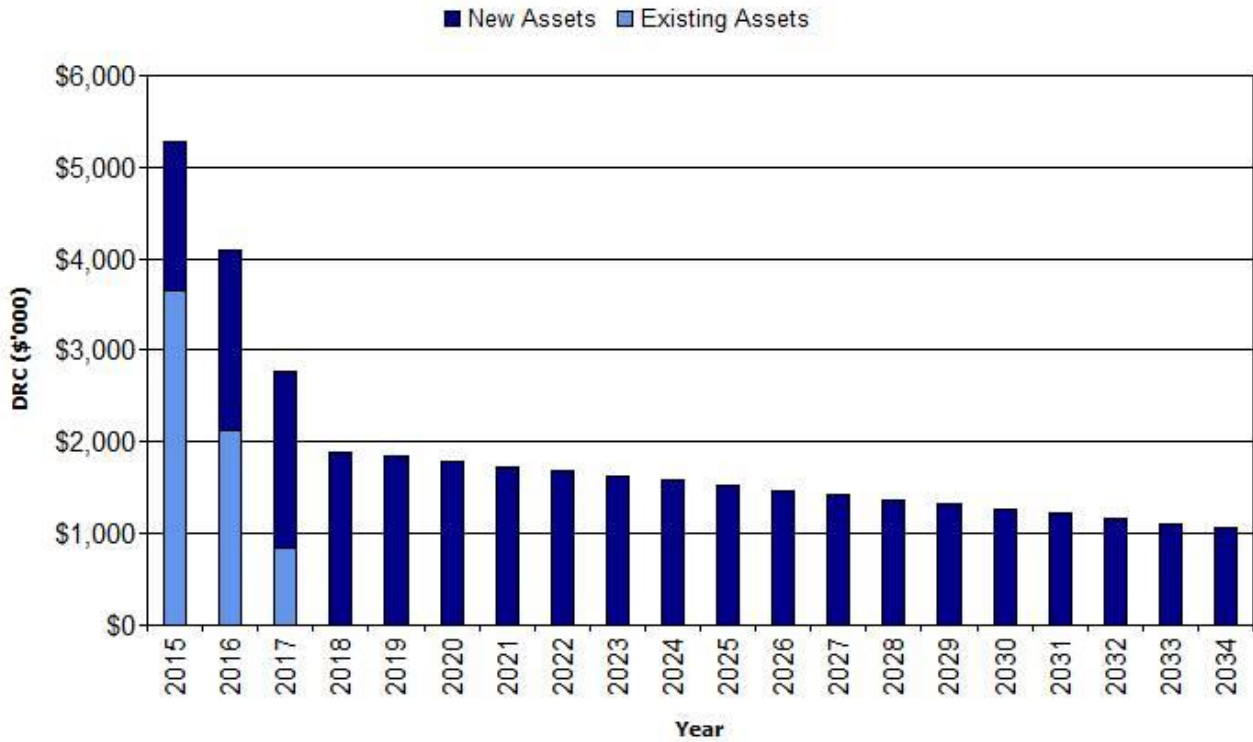
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NAMS.PLUS3 Asset Management Form 2C Upgrade/New Plan

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**Mid-Western RC
Buildings_S1_V1**

Projected Capital Upgrade/New Plan 2015

Year	Item No.	Capital Upgrade and New Projects	Estimate (\$000)	Running total (\$000)
2015	1	Preschool	\$1,000	\$1,000
2015	2	Gulgong Admin Building	\$90	\$1,090
2015	3	Gulgong Memorial Hall	\$65	\$1,155
2015	4	Airport Terminal Extension	\$80	\$1,235
2015	5	Cudgegong Water Amenities	\$157	\$1,392
2015	6	Rylstone Showground Upgrade	\$233	\$1,625
2015	7			
2015	8			
2015	9			
2015	10			
2015	Total Projected Capital Upgrade/New Plan		\$1,625	

Buildings_S1_V1

Projected Capital Upgrade/New Plan 2016

2016	1	Airport Terminal Extension	\$220	\$220
2016	2	Mudgee Depot Capital Works	\$20	\$240
2016	3	Cudgegong Water Amenities	\$140	\$380
2016	4			
2016	5			
2016	6			
2016	7			
2016	8			
2016	9			
2016	10			
2016	Total Projected Capital Upgrade/New Plan		\$380	

.....80

**Mid-Western RC
Buildings_S1_V1**

Projected Capital Upgrade/New Plan 2017

Year	Item No.	Capital Upgrade and New Projects	Estimate (\$000)	Running total (\$000)
2017	1	Billy Dunn Oval Upgrades	\$27	\$27
2017	2			
2017	3			
2017	4			
2017	5			
2017	6			
2017	7			
2017	8			
2017	9			
2017	10			
2017	Total Projected Capital Upgrade/New Plan		\$27	

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1. Executive Summary

1.1 Context

Mid-Western Regional Council covers an area of over 9,000km² and includes the historic towns of Gulgong, Kandos, Mudgee and Rylstone along with many rural villages. The region is predominately agricultural, also including extensive viticulture, large mines, increasing tourism and retail.

Due to mining development in the area the population is expected to increase, creating additional demand for services and infrastructure.

The building network is vital to deliver Council operations and provide services in a regional community. Due to the influence of tourism there is also an expectation that the buildings will be maintained to a high standard, particularly in relation to aesthetics. The major issue faced is a lack of funding available to maintain and renew a large network of buildings at a high standard.

The Building Service

The building network comprises of 230 buildings. The major function of these buildings is:

- Corporate Support/Administration
- Public Libraries
- Public Halls
- Sport and Recreation Amenities
- Saleyards Complex

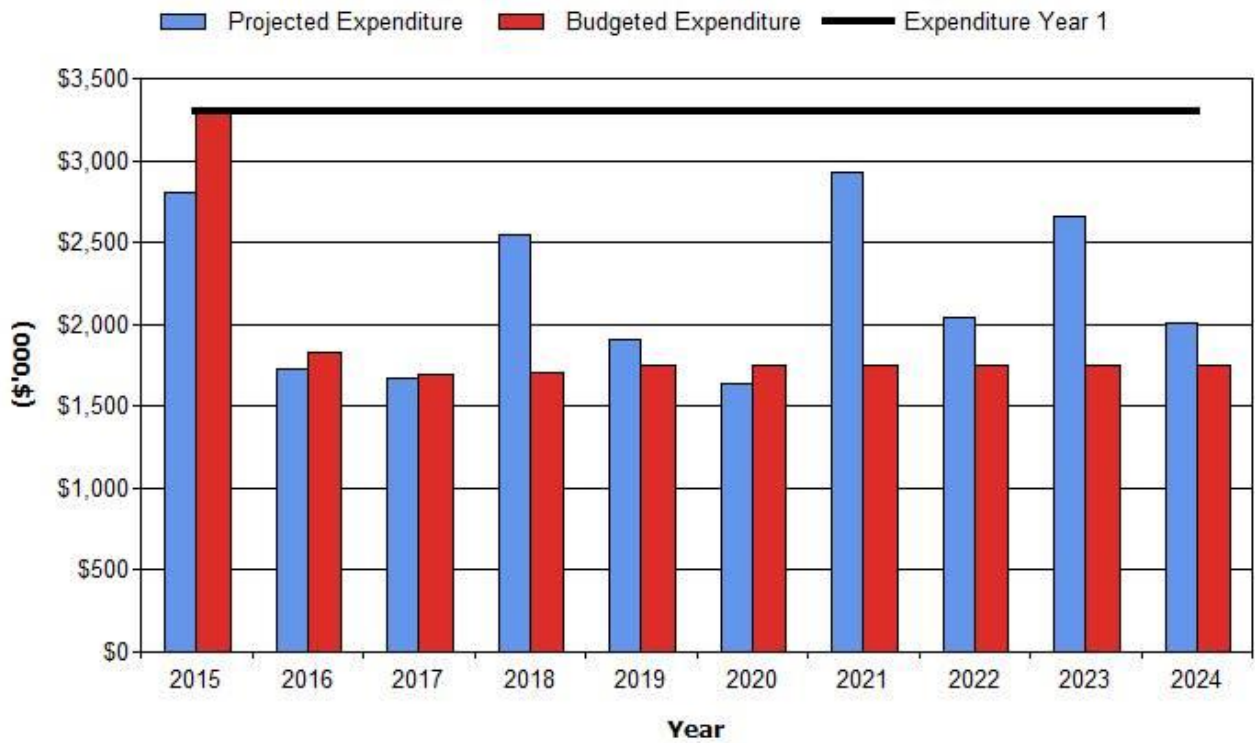
These infrastructure assets have a replacement value of \$82,689,769.75

1.2 What does it cost?

The projected outlays necessary to provide the services covered by this Asset Management Plan (AM Plan) includes operations, maintenance, renewal and upgrade of existing assets over the 10 year planning period is \$21,924,000 or \$2,192,000 on average per year.

Estimated available funding for this period is \$19,019,000 or \$1,902,000 on average per year which is \$1,902,000 of the cost to provide the service. This is a funding shortfall of \$291,000 on average per year. Projected expenditure required to provide services in the AM Plan compared with planned expenditure currently included in the Long Term Financial Plan are shown in the graph below.

Mid-Western RC - Projected and Budgeted Expenditure for (Strategy)



2. What we will do

We plan to provide building services for the following:

- Operation, maintenance, renewal and upgrade of buildings to meet service levels set by Council in annual budgets.
- Construction of a \$1,000,000 preschool facility (predominantly grant funded).

2.1 What we cannot do

We do **not** have enough funding to provide all services at the desired service levels or provide new services. Works and services that cannot be provided under present funding levels are:

- We cannot meet the renewal program for existing buildings
- We cannot meet optimum maintenance response times

2.2 Managing the risks

There are risks associated with providing the service and not being able to complete all identified activities and projects. We have identified major risks as:

- Increasing reactive maintenance costs
- Unidentified hazards that could cause injury
- Potential disruption to services due to safety issues, damage or reliability
- Decline in aesthetic appeal

We will endeavour to manage these risks within available funding by:

- Establishing a 10 year project priority list by developing a project ranking criteria for renewal and new expenditure
- Developing a condition inspection program
- Continuing inspection program

2.3 Confidence Levels

This AM Plan is based on medium level of confidence information.

2.4 The Next Steps

The actions resulting from this asset management plan are:

- Separation of operations and maintenance expenditure in the general ledger

- Separation of planned and reactive maintenance expenditure in the general ledger
- Customer requests to split into the type of request relating to service levels i.e. quality, function, capacity
- Implementation of a condition inspection program
- Utilisation of Work Orders System to schedule maintenance and record reactive maintenance
- Create defect repairs list
- Create 10 year renewal program
- Start a risk management team to review the risk management plan and ensure risks are placed on corporate risk register and raised with the Executive
- Investigate underutilised buildings and assess planned renewal activities including the potential for disposal

Questions you may have

WHAT IS THIS PLAN ABOUT?

This asset management plan covers the infrastructure assets that serve the Mid-Western Regional Council community's building needs. These assets include administration, libraries, public halls, recreation and amenities throughout the community area that enable people to work, study, receive health care, socialise, participate in sport and economic development.

WHAT IS AN ASSET MANAGEMENT PLAN?

Asset management planning is a comprehensive process to ensure delivery of services from infrastructure is provided in a financially sustainable manner.

An asset management plan details information about infrastructure assets including actions required to provide an agreed level of service in the most cost effective manner. The plan defines the services to be provided, how the services are provided and what funds are required to provide the services.

WHY IS THERE A FUNDING SHORTFALL?

Council building portfolio has evolved over an extensive period of time with assets being acquired via various sources including acquisitions through amalgamations, donations and grant funding. The slow accumulation of buildings has not facilitated the consideration of ongoing cost of management and maintenance.

Many of these assets are approaching the later years of their life and require replacement, services from the assets are decreasing and maintenance costs are increasing.

Our present funding levels are insufficient to continue to provide existing services at current levels in the medium term.

WHAT OPTIONS DO WE HAVE?

Resolving the funding shortfall involves several steps:

1. Improving asset knowledge so that data accurately records the asset inventory, how assets are performing and when assets are not able to provide the required service levels,
2. Improving our efficiency in operating, maintaining, renewing and replacing existing assets to optimise life cycle costs,
3. Identifying and managing risks associated with providing services from infrastructure,
4. Making trade-offs between service levels and costs to ensure that the community receives the best return from infrastructure,
5. Identifying assets surplus to needs for disposal to make saving in future operations and maintenance costs,
6. Consulting with the community to ensure that building services and costs meet community needs and are affordable,
7. Developing partnership with other bodies, where available to provide services,
8. Seeking additional funding from governments and other bodies to better reflect a 'whole of government' funding approach to infrastructure services.

WHAT HAPPENS IF WE DON'T MANAGE THE SHORTFALL?

It is likely that we will have to reduce service levels in some areas, unless new sources of revenue are found for buildings, the service level reduction may include

- Accepting declining service levels and plan for the additional risk associated
- Reducing the number of buildings Council provides to reduce costs
- Redirect capital upgrade funds to address existing buildings renewal

WHAT CAN WE DO?

We can develop options, costs and priorities for future building services. We can also consult with the community to plan future services to match the community service needs with ability to pay for services and maximise community benefits against costs.

WHAT CAN YOU DO?

We will be pleased to consider your thoughts on the issues raised in this asset management plan. We also welcome any suggestions on how we may change or reduce its buildings mix of services to ensure that the appropriate level of service can be provided to the community within available funding.

3. Introduction

3.1 Background

This asset management plan is to demonstrate responsive management of assets (and services provided from assets), compliance with regulatory requirements, and to communicate funding needed to provide the required levels of service over a 20 year planning period.

The asset management plan follows the format for AM Plans recommended in Section 4.2.6 of the International Infrastructure Management Manual¹.

The asset management plan is to be read with the organisation's Asset Management Policy, Asset Management Strategy and the following associated planning documents:

- Mid-Western Regional Council Community Plan
- Mid-Western Regional Council Delivery Program

This infrastructure assets covered by this asset management plan are shown in Table 2.1. These assets are used to provide many varied functions such as:

- Administration Offices
- Council Operations
- Public use to deliver services
- Available for public hire
- Commercial and residential rental

TABLE 2.1: ASSETS COVERED BY THIS PLAN

Asset category	Replacement Value
COUNCIL CORPORATE OFFICES	\$10,314,877.06
COUNCIL WORKS DEPOT	\$14,513,400.00
PUBLIC HALLS	\$14,513,400.00
AGED UNITS AND HEALTH	\$10,110,592.52
KANDOS MUSEUM	\$1,298,000.00
LIBRARIES	\$5,265,725.22
CHILDCARE FACILITIES	\$1,750,571.90
AMENITIES	\$23,850,934.13
BUSHFIRE SHEDS	\$3,723,333.87
TOTAL	\$82,689,769.75

¹ IPWEA, 2011, Sec 4.2.6, *Example of an Asset Management Plan Structure*, pp 4|24 – 27.

Key stakeholders in the preparation and implementation of this asset management plan are: Shown in Table 2.1.1.

TABLE 2.1.1: KEY STAKEHOLDERS IN THE AM PLAN

Key Stakeholder	Role in Asset Management Plan
Councillors	Represent needs of community/shareholders, Allocate resources to meet the organisation’s objectives in providing services while managing risks, Ensure organisation is financial sustainable.
General Manager/Directors	Overall responsibility for developing asset management plans and ensure resources are applied in accordance with the plan
Health & Building Manager	Implementing plans and procedures in accordance with the plan
Community, general public	Provide feedback on levels of service

3.2 Goals and Objectives of Asset Management

Mid-Western Regional Council exists to provide services to its community. Some of these services are provided by infrastructure assets. We have acquired infrastructure assets by ‘purchase’, by contract, construction by our staff and by donation of assets constructed by developers and others to meet increased levels of service.

Our goal in managing infrastructure assets is to meet the defined level of service (as amended from time to time) in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Providing a defined level of service and monitoring performance,
- Managing the impact of growth through demand management and infrastructure investment,
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service,
- Identifying, assessing and appropriately controlling risks, and
- Having a long-term financial plan which identifies required, affordable expenditure and how it will be financed.²

3.3 Plan Framework

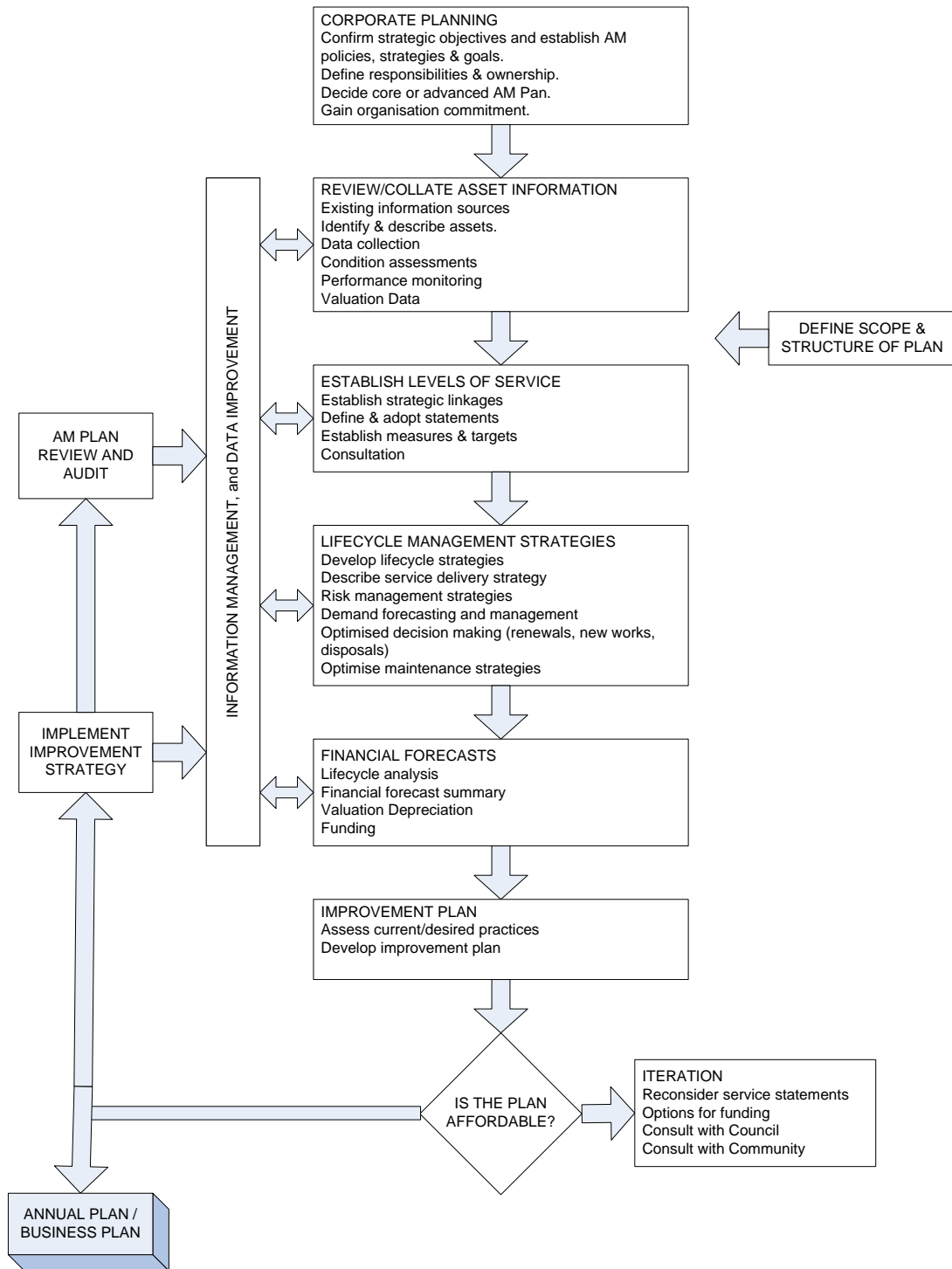
Key elements of the plan are

² Based on IPWEA, 2011, IIMM, Sec 1.2 p 1|7.

- Levels of service – specifies the services and levels of service to be provided by the organisation,
- Future demand – how this will impact on future service delivery and how this is to be met,
- Life cycle management – how Council will manage its existing and future assets to provide defined levels of service,
- Financial summary – what funds are required to provide the defined services,
- Asset management practices,
- Monitoring – how the plan will be monitored to ensure it is meeting organisation's objectives,
- Asset management improvement plan.

A road map for preparing an asset management plan is shown below.

ROAD MAP FOR PREPARING AN ASSET MANAGEMENT PLAN



Source: IPWEA, 2006, IIMM, FIG 1.5.1, p 1.11.

3.4 Core and Advanced Asset Management

This asset management plan is prepared as a 'core' asset management plan over a 20 year planning period in accordance with the International Infrastructure Management Manual³. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

Future revisions of this asset management plan will move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels in a financially sustainable manner.

3.5 Community Consultation

This 'core' asset management plan is prepared to facilitate community consultation initially through feedback on public display of draft asset management plans prior to adoption by the Council/Board. Future revisions of the asset management plan will incorporate community consultation on service levels and costs of providing the service. This will assist the Council/Board and the community in matching the level of service needed by the community, service risks and consequences with the community's ability and willingness to pay for the service.

³ IPWEA, 2011, IIMM.

4. Levels of Service

4.1 Customer Research and Expectations

The organisation has not carried out any research on customer expectations. This will be investigated for future updates of the asset management plan.

4.2 Strategic and Corporate Goals

This asset management plan is prepared under the direction of the organisation’s vision, mission, goals and objectives.

Our vision is:

“A prosperous and progressive community that we are proud to call home”

Relevant organisational goals and objectives and how these are addressed in this asset management plan are:

TABLE 3.2: ORGANISATIONAL GOALS AND HOW THESE ARE ADDRESSED IN THIS PLAN

Goal	Objective	How Goal and Objectives are addressed in AM Plan
“A safe and healthy community”	“Maintain the provision of high quality, accessible community services that meet the needs of our community”	Providing a large range of buildings to meet various needs
“Effective and efficient delivery of infrastructure”	“Provide infrastructure and services to cater for the current and future needs of our community”	Asset maintenance and renewal program of existing buildings
“Vibrant towns and villages”	Manage growth driven by the increase in mining operations in the region”	New pre-school building \$1,000,000 (2015)
“Meet the diverse needs of the community and create a sense of belonging”	“Provide equitable access to a range of places and spaces for all in the community” “Support arts and cultural development across the region”	Renewal plans include increased access at facilities

Mid-Western Regional Council will exercise its duty of care to ensure public safety is accordance with the infrastructure risk management plan prepared in conjunction with this AM Plan. Management of infrastructure risks is covered in Section 5.2.

4.3 Legislative Requirements

Mid-Western Regional Council has to meet many legislative requirements including Australian and State legislation and State regulations. These include:

TABLE 3.3: LEGISLATIVE REQUIREMENTS

Legislation	Requirement
Local Government Act	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
DLG Integrated Planning NSW	Sets standards for asset management plan and requires the plan to integrate with community plans and resourcing strategies
Environmental Planning and Assessment Act 1979	Sets out responsibilities of a building owner
National Construction Code	Performance standards for buildings
Work Health and Safety Act 2011	Aims to provide a safe working environment for all workers and other persons
Australian Accounting Standards	Financial reporting requirements

The organisation will exercise its duty of care to ensure public safety in accordance with the infrastructure risk management plan linked to this AM Plan. Management of risks is discussed in Section 5.2.

4.4 Community Levels of Service

Service levels are defined service levels in two terms, customer levels of service and technical levels of service.

Community Levels of Service measure how the community receives the service and whether Mid-Western Regional Council is providing community value.

Community levels of service measures used in the asset management plan are:

Quality	How good is the service?
Function	Does it meet users' needs?
Capacity/Utilisation	Is the service over or under used?

Mid-Western Regional Council's current and expected community service levels are detailed in Tables 3.4 and 3.5. Table 3.4 shows the agreed expected community levels of

service based on resource levels in the current long-term financial plan and community engagement.

TABLE 3.4: COMMUNITY LEVEL OF SERVICE

Service Attribute	Service Objective	Performance Measure Process	Current Performance	Expected position in 10 years based on current LTFP
COMMUNITY OUTCOMES				
A community that feels they have equitable access to quality facilities that meet their needs				
COMMUNITY LEVELS OF SERVICE				
Quality	Facilities are clean, safe and presented appropriately according to hierarchy	Customer service requests relating to service quality such as; aesthetics, safety, pets and responsiveness to issues	23 / month average	Service requests are increasing
Function	Facilities are available, reliable and accessible	Customer service requests relating to availability, access and defects	Not available	Service requests are increasing
Capacity/ Utilisation	Provided efficiently while meeting users' needs	Requests relating to congestion or underuse	Not available	Service requests are increasing

4.5 Technical Levels of Service

Technical Levels of Service - Supporting the community service levels are operational or technical measures of performance. These technical measures relate to the allocation of resources to service activities that the organisation undertakes to best achieve the desired community outcomes and demonstrate effective organisational performance.

Technical service measures are linked to annual budgets covering:

- Operations – the regular activities to provide services such as opening hours, cleaning, security, inspections, etc.
- Maintenance – the activities necessary to retain an asset as near as practicable to an appropriate service condition (e.g. general repairs, painting, etc),
- Renewal – the activities that return the service capability of an asset up to that which it had originally (e.g. building component replacement),

- Upgrade – the activities to provide a higher level of service (e.g. increased fire safety measures increased accessibility) or a new service that did not exist previously (e.g. a new library).

Service and asset managers plan, implement and control technical service levels to influence the customer service levels.⁴

Table 3.5 shows the technical level of service expected to be provided under this AM Plan. The agreed sustainable position in the table documents the position agreed by the Council/Board following community consultation and trade-off of service levels performance, costs and risk within resources available in the long-term financial plan.

⁴ IPWEA, 2011, IIMM, p 2.22

TABLE 3.5: TECHNICAL LEVELS OF SERVICE

Service Attribute	Service Objective	Activity Measure Process	Current Performance *	Desired for Optimum Lifecycle Cost **	Agreed Sustainable Position ***
TECHNICAL LEVELS OF SERVICE					
OPERATIONS	FACILITIES MEET QUALITY AND LEGISLATIVE STANDARDS	CLEANING FREQUENCY	CLASS A – DAILY CLASS B – DAILY OTHER – WEEKLY	CLASS A – DAILY CLASS B – TWICE WEEKLY OTHER – WEEKLY	CLASS A – DAILY CLASS B – TWICE WEEKLY OTHER – WEEKLY
		SAFETY INSPECTION FREQUENCY	FIRE SERVICES – ANNUAL (WITH EXCEPTION OF PORTABLE FIRE EXTINGUISHERS, OCCUR EVERY 6 MONTHS LIFTS – EVERY MONTH PEST – EVERY 3 MONTHS	FIRE SERVICES – 6 MONTHLY LIFTS - 6 MONTHLY PEST – 6 MONTHLY	FIRE SERVICES – ANNUALLY WITH THE EXCEPTION OF PORTABLE FIRE EXTINGUISHERS, OCCUR EVERY 6 MONTHS LIFTS – 6 MONTHLY PEST – ANNUALLY
		BUDGET	SECURITY \$ 67,000 CLEANING \$277,000 ELECTRICITY \$200,500 OTHER \$109,000 <hr/> TOTAL \$653,500	SECURITY \$ 67,000 CLEANING \$240,000 ELECTRICITY \$200,500 OTHER \$109,000 <hr/> TOTAL \$616,500	SECURITY \$ 67,000 CLEANING \$240,000 ELECTRICITY \$200,500 OTHER \$109,000 <hr/> TOTAL \$616,500
MAINTENANCE	FACILITIES MEET QUALITY STANDARDS	PLANNED MAINTENANCE COMPLETED TO SCHEDULE	MAJORITY UNPLANNED/REACTIVE MAINTENANCE	MAJORITY PLANNED MAINTENANCE	MAJORITY PLANNED MAINTENANCE
		RESPONSE TO WORKS REQUESTS WITHIN TIME FRAME	UNKNOWN	CLASS A – 90% WITHIN 1 DAY ALL SAFETY ISSUES – WITHIN 1 DAY OTHER – WITHIN 3 DAYS	CLASS A – 90% WITHIN 3 DAYS ALL SAFETY ISSUES – WITHIN 1 DAY OTHER – WITHIN 5 DAYS
		BUDGET	\$300,000	\$500,000	\$400,000
RENEWAL	FACILITIES MEET USERS’ NEEDS	CONDITION OF BUILDINGS	15% OF BUILDINGS POOR/VERY POOR CONDITION	<5% OF BUILDINGS POOR/VERY POOR CONDITION	10% OF BUILDINGS POOR/VERY POOR CONDITION Reduction in number of buildings
		PLANNED RENEWAL COMPLETED TO SCHEDULE	60% COMPLETED	100% COMPLETED TO SCHEDULE	85% COMPLETED TO SCHEDULE

		BUDGET	\$630,000	\$1,000,000	\$750,000
UPGRADE/NEW	FACILITIES MEET COMMUNITY DEMAND	DELIVERY OF PROJECTS WITHIN BUDGET THAT MEET DEMANDS	NEW BUILDINGS PROPOSED INCLUDE PRE-SCHOOL	EXTENSION TO MUDGEE ADMINISTRATION AND COUNCIL CHAMBERS	NEW BUILDINGS PROPOSED INCLUDE PRE-SCHOOL
		BUDGET	\$1,000,000 (2015)	\$1,000,000 (2015) \$4,000,000 (2016) \$500,000 MUDGEE ADMIN BUILDING UPGRADES	\$1,000,000 (2015)

NOTE: * CURRENT ACTIVITIES AND COSTS (CURRENTLY FUNDED).

** DESIRED ACTIVITIES AND COSTS TO SUSTAIN CURRENT SERVICE LEVELS AND ACHIEVE MINIMUM LIFE CYCLE COSTS (NOT CURRENTLY FUNDED).

*** ACTIVITIES AND COSTS COMMUNICATED AND AGREED WITH THE COMMUNITY AS BEING SUSTAINABLE (FUNDED POSITION FOLLOWING TRADE-OFFS, MANAGING RISKS AND DELIVERING AGREED SERVICE LEVELS).

5. Future Demand

5.1 Demand Drivers

Drivers affecting demand include population change, changes in demographics, seasonal factors, vehicle ownership rates, consumer preferences and expectations, technological changes, economic factors, agricultural practices, environmental awareness, etc.

5.2 Demand Forecast

For the purposes of the Asset Management Plans Council has adopted the *New South Wales State and Local Government Area Population, Household and Dwelling Projections 2014* published by the Department of Planning and Environment. These figures take into account findings from the 2011 Census of Population and Housing, final rebased and recast Estimated Resident Populations (ERPs) published by the Australian Bureau of Statistics for the period 1991-2011, and the latest data and expertise on fertility, mortality and migration. The projections are based on a range of assumptions and trends and will be influenced by local circumstances, in particular in the case of Mid-Western the impact of changes in the mining industry and workforce migration associated with that. Therefore, the actual trends may fluctuate over time and adjustments will need to be made. Population numbers are rounded to the nearest 50 and they should not be taken to be accurate to that level of detail.

The majority of growth within the region in the past ten years has occurred in Mudgee with a 1.1% average annual population growth rate between 1991 and 2011 compared with 0.8% Gulgong and 0.5% for the balance of the LGA. Department of Planning and Environment projections provide the baseline data. The implied rates of growth are below that which was actually experienced between 2006 and 2011 driven by the mining activity.

Council adopted the Mudgee and Gulgong Urban Release Strategy in 2014 (URS) which distils the data further and incorporates sensitivity analysis around anticipated mining activity which is beyond the scope of the DP&E but provides additional assumptions for population growth in Mudgee and Gulgong. The URS shows an additional 1,300 people in Mudgee and 140 in Gulgong over and above the DP&E estimates which will have implications for the level of service in Mudgee in particular.

The following tables are extracted from the *New South Wales State and Local Government Area Population, Household and Dwelling Projections 2014* published by the Department of Planning and Environment for the Mid-Western Regional LGA.

MID-WESTERN REGIONAL LGA POPULATION PROJECTIONS

Totals	2011	2016	2021	2026	2031
TOTAL POPULATION	23,000	23,650	24,250	24,700	25,050
TOTAL HOUSEHOLDS	9,450	9,900	10,300	10,550	10,800
AVERAGE HOUSEHOLD SIZE	2.40	2.34	2.31	2.28	2.26
IMPLIED DWELLINGS	11,450	12,050	12,500	12,850	13,150

Changes in the population include the changing demographic and the sharp trend towards an older population and a reasonably stable trend in the 0-14 age cohorts. The community will need to continue to support children and youth services at similar levels of provision and at the same time look at accommodating the consistent and not insignificant growth in the older population with over 400 people over the age of 85 in the next 15 years.

The present position and projections for demand drivers that may impact future service delivery and utilisation of assets were identified and are documented in Table 4.3.

5.3 Demand Impact on Assets

The impact of demand drivers that may affect future service delivery and utilisation of assets are shown in Table 4.3.

TABLE 4.3: DEMAND DRIVERS, PROJECTIONS AND IMPACT ON SERVICES

Demand drivers	Present position	Projection	Impact on services
Population Growth	23,000 (2011)	25 050 (2031)	Increasing demand for community buildings
Changing demographic	Presenting Occurring	Aging population	Greater demand for accessibility and services for older cohort.
Changing Community Expectation	Presenting occurring	Greater demand for youth services	Increase expectation for the provision of youth specific facilities.
Legislation	Legislation regarding building constantly under review	Greater compliance requirements in relation to management of asbestos.	Increased cost for upgrades and alterations.

5.4 Demand Management Plan

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management practices include non-asset solutions, insuring against risks and managing failures.

Non-asset solutions focus on providing the required service without the need for the organisation to own the assets and management actions including reducing demand for the service, reducing the level of service (allowing some assets to deteriorate beyond current service levels) or educating customers to accept appropriate asset failures⁵. Examples of non-asset solutions include providing services from existing infrastructure such as aquatic centres and libraries that may be in another community area or public toilets provided in commercial premises.

Opportunities identified to date for demand management are shown in Table 4.4. Further opportunities will be developed in future revisions of this asset management plan.

TABLE 4.4: DEMAND MANAGEMENT PLAN SUMMARY

Demand Driver	Impact on Services	Demand Management Plan
Preventative action vs reactive action	Strategic review of service delivery, rationalisation or expansion of services	Initiate proactive inspection and maintenance schedule

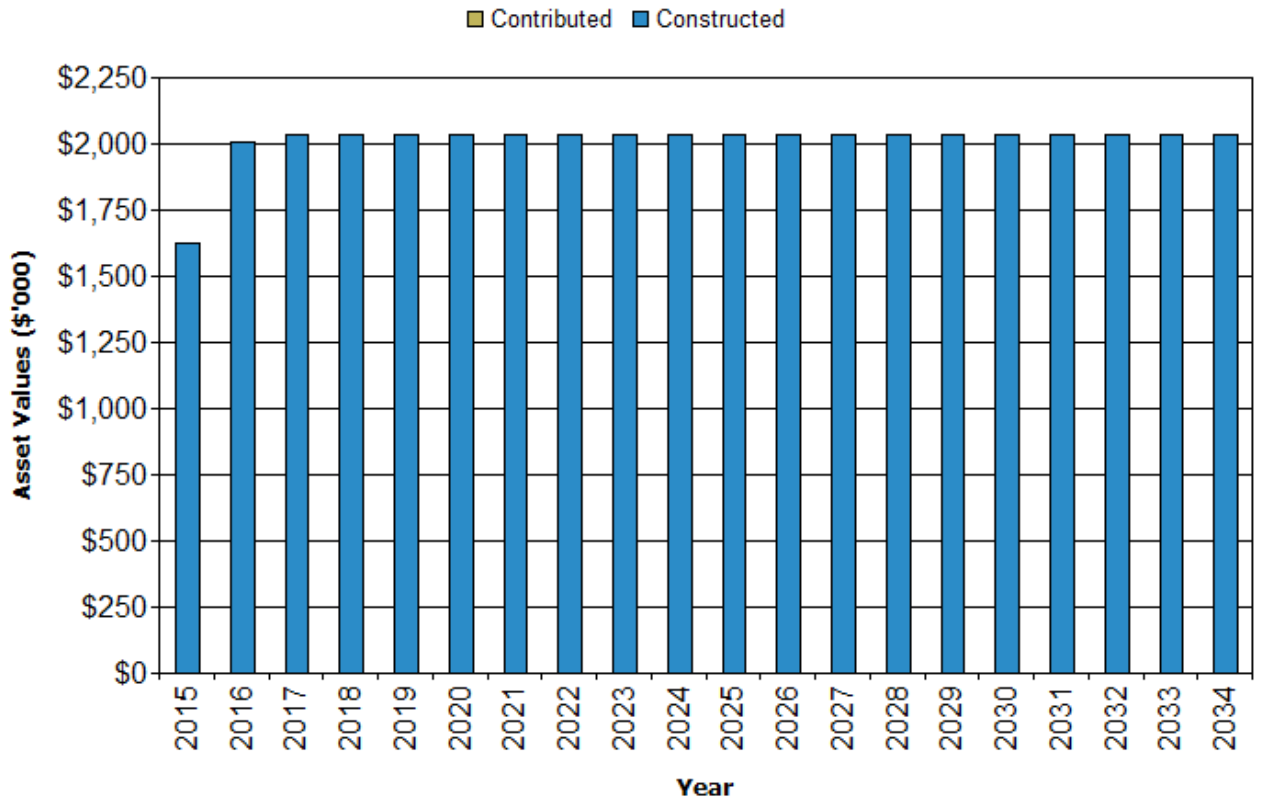
5.5 Asset Programs to meet Demand

The new assets required to meet growth will be acquired free of cost from land developments and constructed/acquired by Mid-Western Regional Council. New assets constructed/acquired by the organisation are discussed in Section 5.5. The cumulative value of new contributed and constructed asset values are summarised in Figure 1.

FIGURE 1: UPGRADE AND NEW ASSETS TO MEET DEMAND

⁵ IPWEA, 2011, IIMM, Table 3.4.1, p 3|58.

Mid-Western RC - STRATEGY - Upgrade & New Assets to meet Demand



Acquiring these new assets will commit Mid-Western Regional Council to fund ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance and renewal costs in Section 5.

6. Lifecycle Management Plan

The lifecycle management plan details how Mid-Western Regional Council plans to manage and operate the assets at the agreed levels of service (defined in Section 3) while optimising life cycle costs.

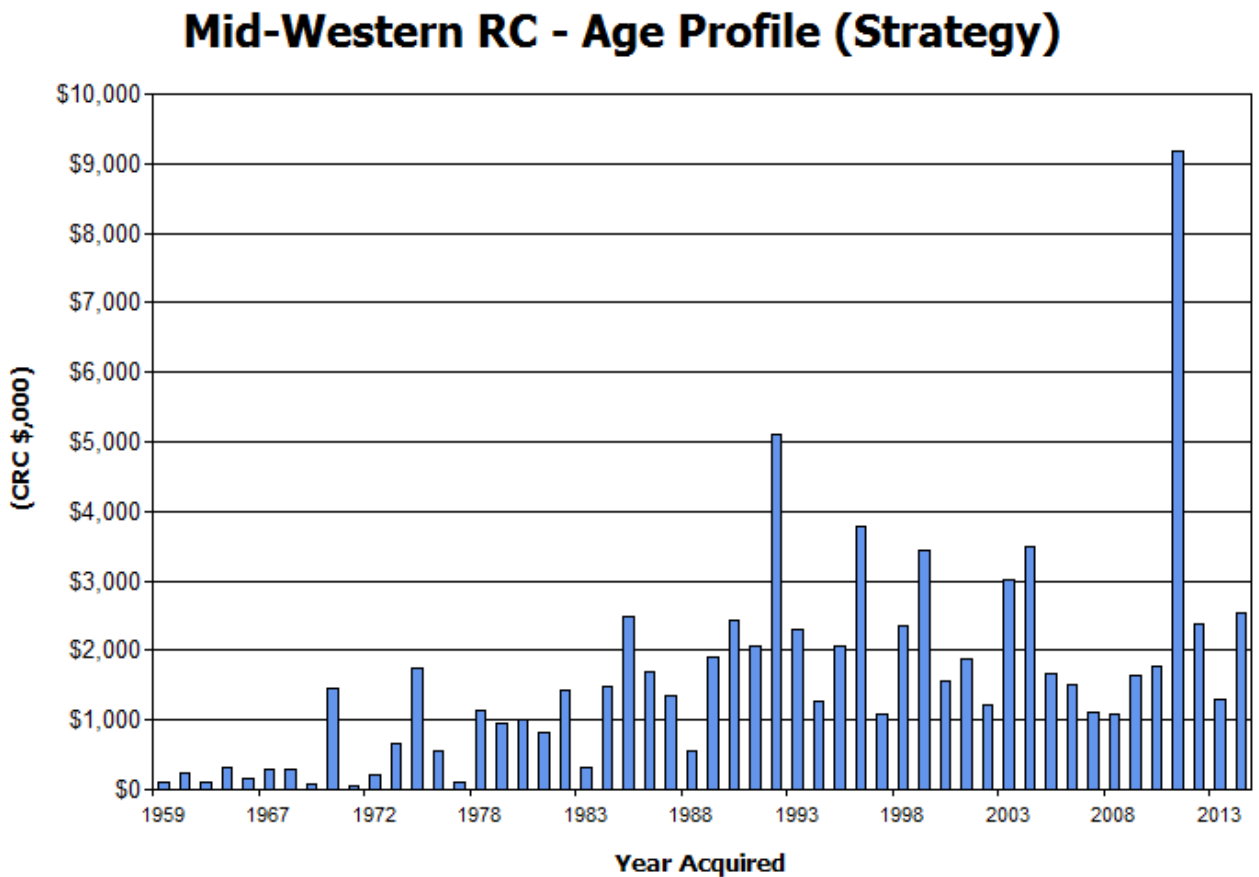
6.1 Background Data

6.1.1 Physical parameters

The assets covered by this asset management plan are shown in Table 2.1.

The age profile of the assets include in this AM Plan is shown in Figure 2.

FIGURE 2: ASSET AGE PROFILE



6.1.2 Asset capacity and performance

Mid-Western Regional Council's services are generally provided to meet design standards where these are available.

Locations where deficiencies in service performance are known are detailed in Table 5.1.2.

TABLE 5.1.2: KNOWN SERVICE PERFORMANCE DEFICIENCIES

Location	Service Deficiency
Stables Building Mudgee	Unable to meet the quality standard required to cater for art exhibitions
Grandstand, Mudgee Showground	Very poor condition

The above service deficiencies were identified from community feedback and valuer condition ratings.

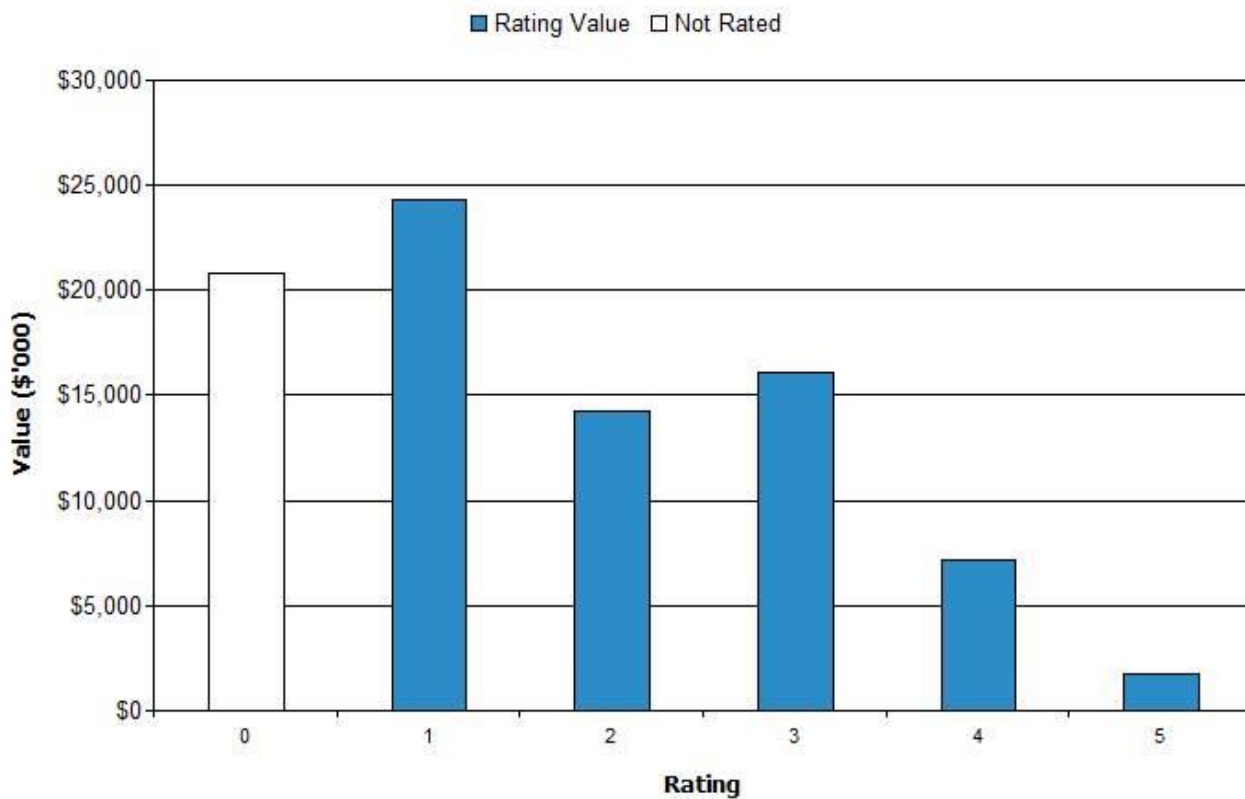
6.1.3 Asset condition

Condition was assessed at 30 June 2013 by an external valuer. A monitoring program is necessary to keep this information current.

The condition profile of our assets is shown in Figure 3.

FIG 3: ASSET CONDITION PROFILE

Mid-Western RC - Condition Profile (Buildings_S1_V1)



Condition is measured using a 1 – 5 grading system⁶ as detailed in Table 5.1.3.

TABLE 5.1.3: SIMPLE CONDITION GRADING MODEL

Condition Grading	Description of Condition
1	Very Good: only planned maintenance required
2	Good: minor maintenance required plus planned maintenance
3	Fair: significant maintenance required
4	Poor: significant renewal/rehabilitation required
5	Very Poor: physically unsound and/or beyond rehabilitation

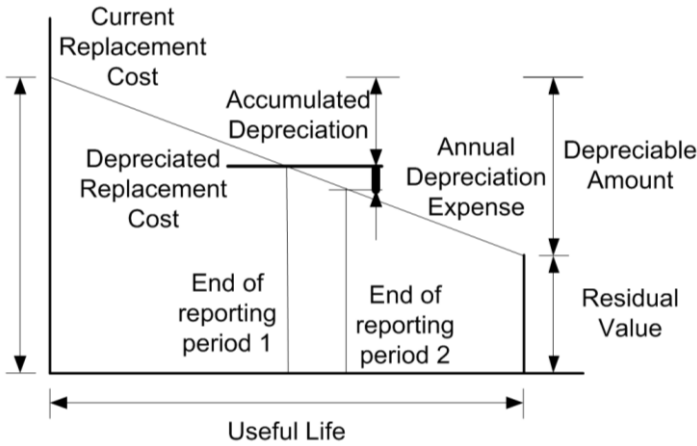
6.1.4 Asset valuations

The value of assets recorded in the asset register as at 30 June 2014 covered by this asset management plan is shown below. Assets were last revalued at 30 June 2013. Assets are valued at fair value; where a market exists at Market Value, if no observable market exists at Replacement Cost.

Current Replacement Cost	\$82,690,000
Depreciable Amount	\$78,458,000

⁶ IPWEA, 2011, IIMM, Sec 2.5.4, p 2 | 79.

Depreciated Replacement Cost ⁷	\$4,902,000
Annual Depreciation Expense	\$1,995,000



Useful lives were reviewed and determined in 2013 by AssetVal.

Key assumptions made in preparing the valuations were:

- Published project cost data was applied
- Condition assessment determines level of depreciation
- Major building components have different useful lives

Major changes from previous valuations are due to a reduction in the recognition of a residual value.

Various ratios of asset consumption and expenditure have been prepared to help guide and gauge asset management performance and trends over time.

Rate of Annual Asset Consumption
2.5%

(Depreciation/Depreciable Amount)

Rate of Annual Asset Renewal
1%

(Capital renewal exp/Depreciable amount)

In 2015 the organisation plans to renew assets at 37.6% of the rate they are being consumed and will be increasing its asset stock by 1% in the year.

⁷ Also reported as Written Down Current Replacement Cost (WDCRC).

6.2 Infrastructure Risk Management Plan

An assessment of risks⁸ associated with service delivery from infrastructure assets has identified critical risks that will result in loss or reduction in service from infrastructure assets or a ‘financial shock’ to the organisation. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as ‘Very High’ - requiring immediate corrective action and ‘High’ – requiring prioritised corrective action identified in the Infrastructure Risk Management Plan, together with the estimated residual risk after the selected treatment plan is operational are summarised in Table 5.2. These risks are reported to management and Council.

TABLE 5.2: CRITICAL RISKS AND TREATMENT PLANS

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk *	Treatment Costs
Mudgee Administration Building, Operations Building	Loss of access due to structural damage from fire, flood, storm	High	Inspections program and treatment Adequate insurance	Med	\$30,000
Entire building network	Condition deterioration due to inadequate renewal	High	Develop condition inspection program Develop and implement 10 year renewal plan	Low	\$40,000 (not costing any additional renewal funds)
Entire building network	Malfunctioning fire services	High	More regular inspection program	Med	\$10,000
Entire building network	Increase build cost due to asbestos	High	Complete asbestos risk register	Low	\$25,000

Note * the residual risk is the risk remaining after the selected risk treatment plan is operational.

6.3 Routine Operations and Maintenance Plan

Operations include regular activities to provide services such as public health, safety and amenity, e.g. cleaning, security, general maintenance and repairs.

Routine maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again.

6.3.1 Operations and Maintenance Plan

Operations activities affect service levels including quality and function through street sweeping and grass mowing frequency, intensity and spacing of street lights and cleaning frequency and opening hours of building and other facilities.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating, e.g. general repairs but excluding rehabilitation or renewal. Maintenance may be classified into reactive, planned and specific maintenance work activities.

Reactive maintenance is unplanned repair work carried out in response to service requests and management/supervisory directions.

Planned maintenance is repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

Specific maintenance is replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, replacing air conditioning units, etc. This work falls below the capital/maintenance threshold but may require a specific budget allocation.

Actual past maintenance expenditure is shown in Table 5.3.1.

(MAYBE NEIL CAN PROVIDE INFO FOR TABLE BELOW)?

TABLE 5.3.1: MAINTENANCE EXPENDITURE TRENDS

Year	Maintenance Expenditure	
	PLANNED AND SPECIFIC	UNPLANNED
"[Enter previous year]"	\$	\$
"[Enter previous year]"	\$	\$
"[Enter year prior to year 1]"	\$	\$

Planned maintenance work is currently "[Enter planned & specific mtce exp as % of total]" of total maintenance expenditure.

Maintenance expenditure levels are considered to be adequate to meet projected service levels, which may be less than or equal to current service levels. Where maintenance expenditure levels are such that will result in a lesser level of service, the service consequences and service risks have been identified and service consequences highlighted in this AM Plan and service risks considered in the Infrastructure Risk Management Plan.

Assessment and prioritisation of reactive maintenance is undertaken by Council staff using experience and judgement.

6.3.2 Operations and Maintenance Strategies

The organisation will operate and maintain assets to provide the defined level of service to approved budgets in the most cost-efficient manner. The operation and maintenance activities include:

- Scheduling operations activities to deliver the defined level of service in the most efficient manner,
- Undertaking maintenance activities through a planned maintenance system to reduce maintenance costs and improve maintenance outcomes. Undertake cost-benefit analysis to determine the most cost-effective split between planned and unplanned maintenance activities (50 – 70% planned desirable as measured by cost),
- Maintain a current infrastructure risk register for assets and present service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council,
- Review current and required skills base and implement workforce training and development to meet required operations and maintenance needs,
- Review asset utilisation to identify underutilised assets and appropriate remedies, and over utilised assets and customer demand management options,
- Maintain a current hierarchy of critical assets and required operations and maintenance activities,
- Develop and regularly review appropriate emergency response capability,
- Review management of operations and maintenance activities to ensure Council is obtaining best value for resources used.

ASSET HIERARCHY

An asset hierarchy provides a framework for structuring data in an information system to assist in collection of data, reporting information and making decisions. The hierarchy includes the asset class and component used for asset planning and financial reporting and service level hierarchy used for service planning and delivery.

The organisation’s service hierarchy is shown is Table 5.3.2.

TABLE 5.3.2: ASSET SERVICE HIERARCHY

Service Hierarchy	Service Level Objective
Class A	High standard
Class B	Good standard
Class C	Fit for operation purpose

CRITICAL ASSETS

Critical assets are those assets which have a high consequence of failure but not necessarily a high likelihood of failure. By identifying critical assets and critical failure modes, organisations can target and refine investigative activities, maintenance plans and capital expenditure plans at the appropriate time.

Operations and maintenances activities may be targeted to mitigate critical assets failure and maintain service levels. These activities may include increased inspection frequency, higher maintenance intervention levels, etc. Critical assets failure modes and required operations and maintenance activities are detailed in Table 5.3.2.1.

TABLE 5.3.2.1: CRITICAL ASSETS AND SERVICE LEVEL OBJECTIVES

Critical Assets	Critical Failure Mode	Operations & Maintenance Activities
Mudgee Administration Building/Council Chamber, Mudgee Depot Buildings, Glen Willow Grandstand, Mudgee Library/Town Hall	Inaccessible	Cleaning and inspection of safety matters like fire services, lifts, pest control, gutters and drainage
Mortimer Street Complex	Inaccessible or untenanted	Inspections and addressing issues raised by tenants promptly to keep them satisfied

STANDARDS AND SPECIFICATIONS

Maintenance work is carried out in accordance with the following Standards and Specifications.

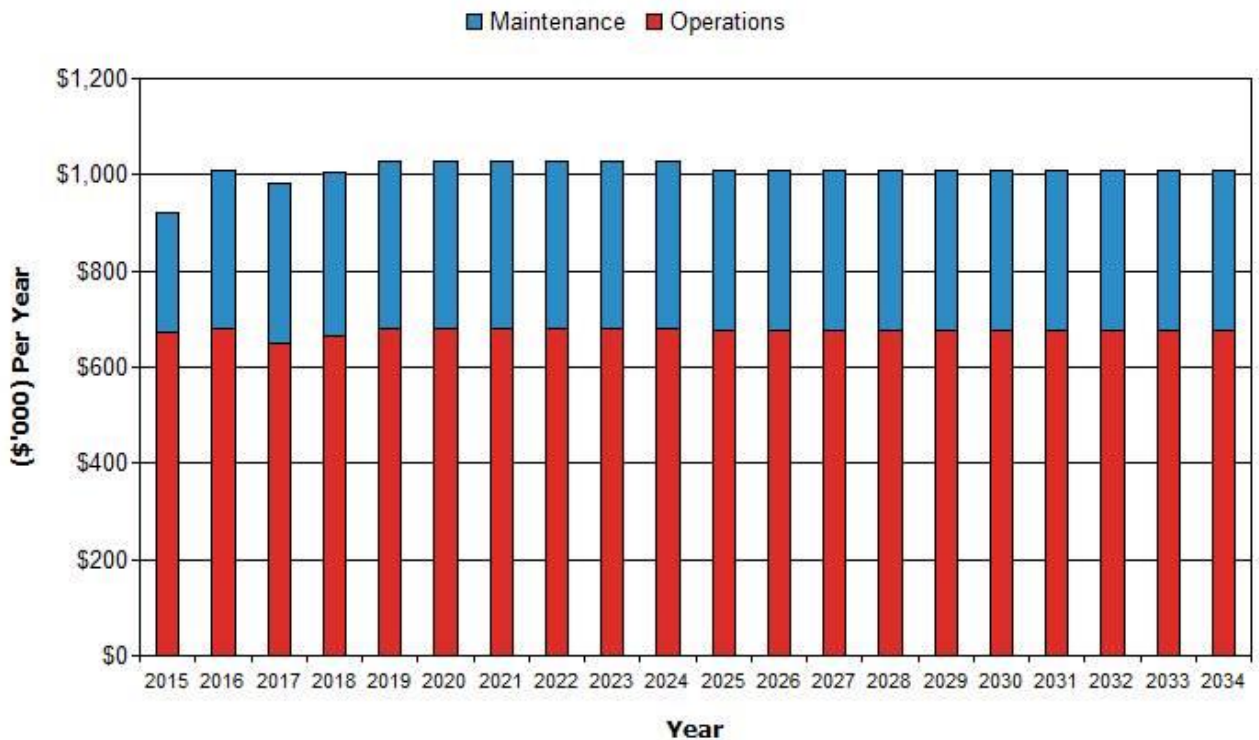
- National Construction Code Series
- Work carried out by licensed trades people

6.3.3 Summary of future operations and maintenance expenditures

Future operations and maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Figure 4. Note that all costs are shown in current 2015 dollar values (i.e. real values).

FIGURE 4: PROJECTED OPERATIONS AND MAINTENANCE EXPENDITURE

Mid-Western RC - Projected Operations & Maintenance Expenditure (Strategy)



Deferred maintenance, i.e. works that are identified for maintenance and unable to be funded are to be included in the risk assessment and analysis in the infrastructure risk management plan.

Maintenance is funded from the operating budget where available. This is further discussed in Section 6.2.

6.4 Renewal/Replacement Plan

Renewal and replacement expenditure is major work which does not increase the asset’s design capacity but restores, rehabilitates, replaces or renews an existing asset to its original or lesser required service potential. Work over and above restoring an asset to original service potential is upgrade/expansion or new works expenditure.

6.4.1 Renewal plan

Assets requiring renewal/replacement are identified from one of three methods provided in the ‘Expenditure Template’.

- Method 1 uses Asset Register data to project the renewal costs using acquisition year and useful life to determine the renewal year, or
- Method 2 uses capital renewal expenditure projections from external condition modelling systems (such as Pavement Management Systems), or

- Method 3 uses a combination of average *network renewals* plus *defect repairs* in the *Renewal Plan* and *Defect Repair Plan* worksheets on the 'Expenditure template'.

Method 1 was used for this asset management plan.

The useful lives of assets used to develop projected asset renewal expenditures are shown in Table 5.4.1. Asset useful lives were last reviewed on 30 June 2013.⁹

TABLE 5.4.1: USEFUL LIVES OF ASSETS

Asset (Sub)Category	Useful life
BUILDING ENVELOPE	15 – 100
FIRE SERVICES	15 – 40
FLOOR	15 – 100
FLOOR COVERINGS	15 – 75
INTERNAL FIT OUT	15 – 30
MECHANICAL SERVICES	15 – 40
ROOF	15 – 60
TRANSPORT SERVICES	25 – 30

6.4.2 Renewal and Replacement Strategies

Mid-Western Regional Council will plan capital renewal and replacement projects to meet level of service objectives and minimise infrastructure service risks by:

- Planning and scheduling renewal projects to deliver the defined level of service in the most efficient manner,
- Undertaking project scoping for all capital renewal and replacement projects to identify:
 - the service delivery 'deficiency', present risk and optimum time for renewal/replacement,
 - the project objectives to rectify the deficiency,
 - the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
 - and evaluate the options against evaluation criteria adopted by the organisation, and
 - select the best option to be included in capital renewal programs,
- Using 'low cost' renewal methods (cost of renewal is less than replacement) wherever possible,
- Maintain a current infrastructure risk register for assets and service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council/Board,

- Review current and required skills base and implement workforce training and development to meet required construction and renewal needs,
- Maintain a current hierarchy of critical assets and capital renewal treatments and timings required,
- Review management of capital renewal and replacement activities to ensure Council is obtaining best value for resources used.

RENEWAL RANKING CRITERIA

Asset renewal and replacement is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (e.g. replacing a roof that has outlived its useful life), or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. upgrading fire safety features to ensure occupant safety).¹⁰

It is possible to get some indication of capital renewal and replacement priorities by identifying assets or asset groups that:

- Have a high consequence of failure,
- Have a high utilisation and subsequent impact on users would be greatest,
- The total value represents the greatest net value to Mid-Western Regional Council,
- Have the highest average age relative to their expected lives,
- Are identified in the AM Plan as key cost factors,
- Have high operational or maintenance costs, and
- Where replacement with modern equivalent assets would yield material savings.¹¹

Mid-Western Regional Council carries out a merit assessment prior to each financial year to determine ranking criteria.

RENEWAL AND REPLACEMENT STANDARDS

Renewal work is carried out in accordance with the following Standards and Specifications.

- The National Construction Code Series
- Work carried out by licenced trades people

¹⁰ IPWEA, 2011, IIMM, Sec 3.4.4, p 3|60.

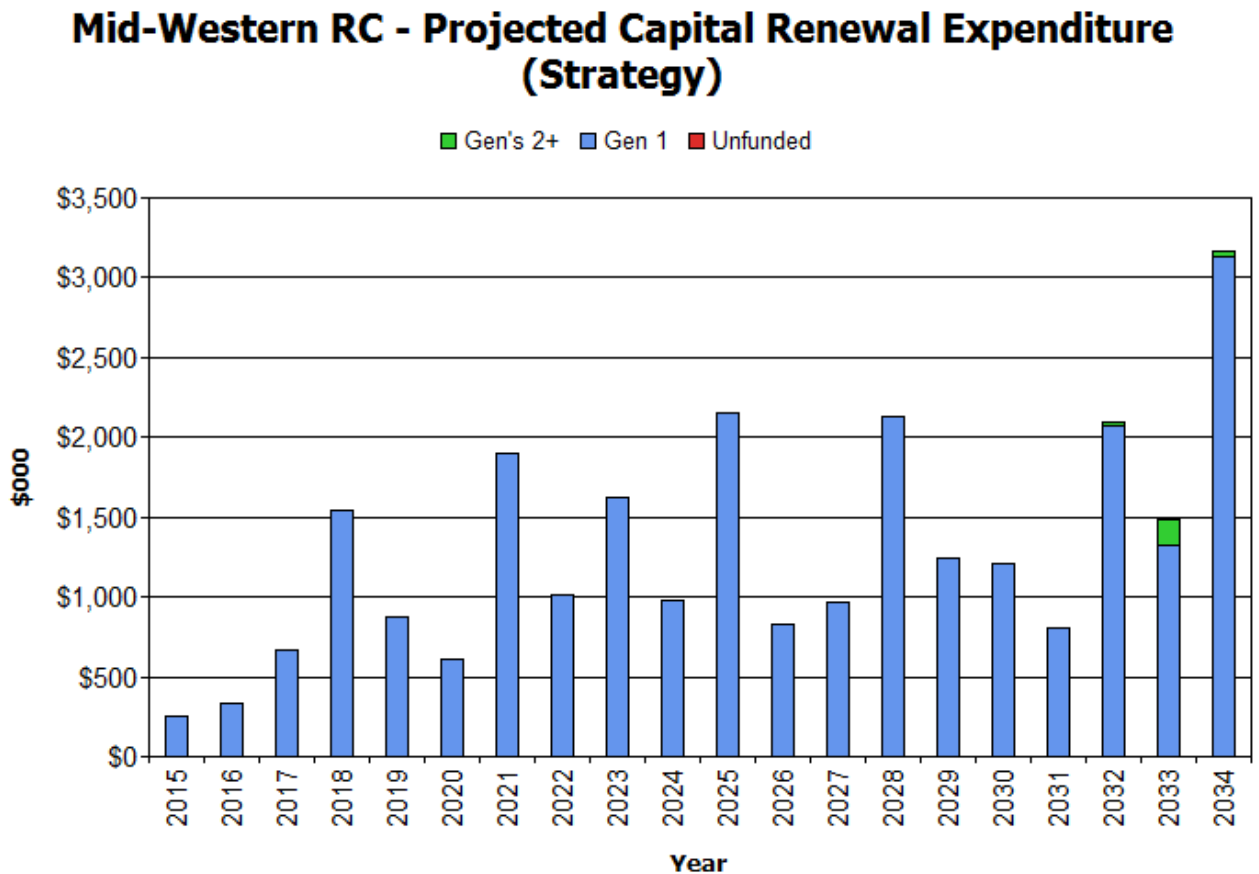
¹¹ Based on IPWEA, 2011, IIMM, Sec 3.4.5, p 3|66.

6.4.3 Summary of future renewal and replacement expenditure

Projected future renewal and replacement expenditures are forecast to increase over time as the asset stock increases from growth. The expenditure is summarised in Fig 5. Note that all amounts are shown in real values.

The projected capital renewal and replacement program is shown in Appendix B.

FIG 5: PROJECTED CAPITAL RENEWAL AND REPLACEMENT EXPENDITURE



Deferred renewal and replacement, i.e. those assets identified for renewal and/or replacement and not scheduled in capital works programs are to be included in the risk analysis process in the risk management plan.

Renewals and replacement expenditure in Mid-Western Regional Council’s capital works program will be accommodated in the long term financial plan. This is further discussed in Section 6.2.

6.5 Creation/Acquisition/Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the organisation from land development. These assets from growth are considered in Section 4.4.

6.5.1 Selection criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as councillor/management or community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes.

6.5.2 Capital Investment Strategies

Mid-Western Regional Council will plan capital upgrade and new projects to meet level of service objectives by:

- Planning and scheduling capital upgrade and new projects to deliver the defined level of service in the most efficient manner,
- Undertake project scoping for all capital upgrade/new projects to identify:
 - the service delivery 'deficiency', present risk and required timeline for delivery of the upgrade/new asset,
 - the project objectives to rectify the deficiency including value management for major projects,
 - the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
 - management of risks associated with alternative options,
 - and evaluate the options against evaluation criteria adopted by Council, and
 - select the best option to be included in capital upgrade/new programs,
- Review current and required skills base and implement training and development to meet required construction and project management needs,
- Review management of capital project management activities to ensure Council is obtaining best value for resources used.

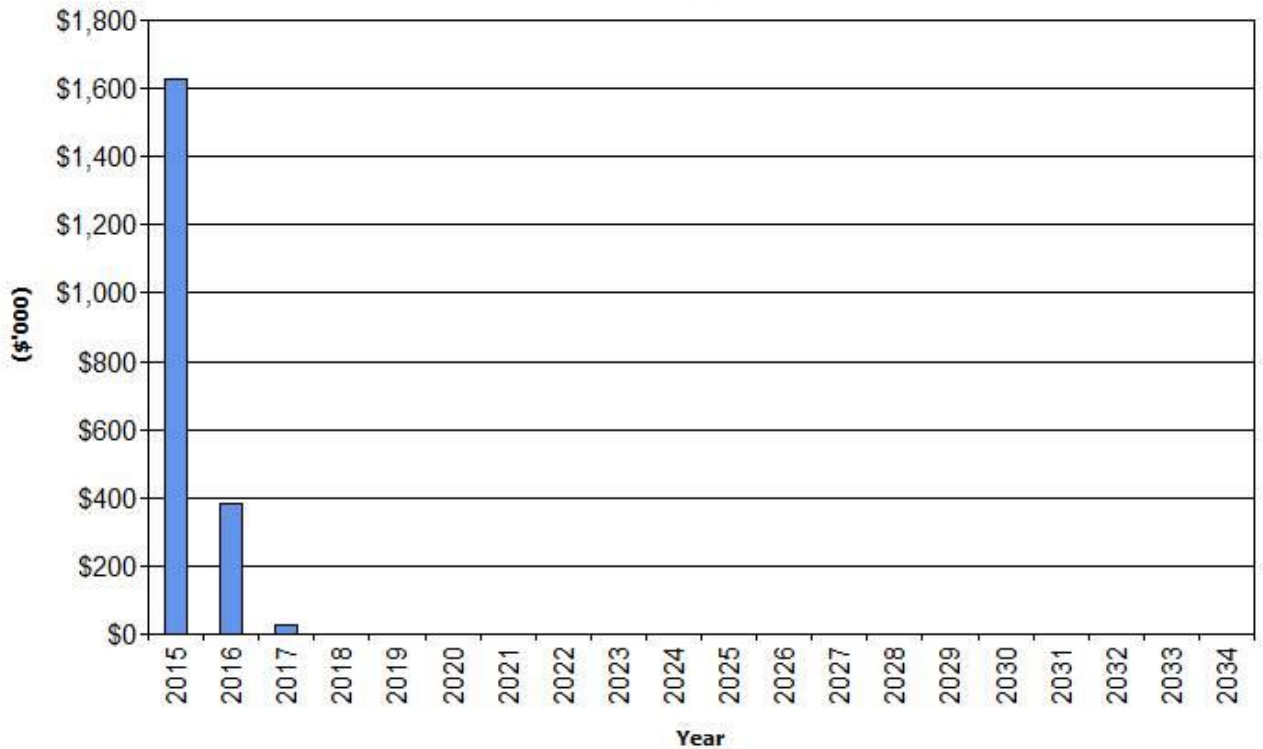
Standards and specifications for new assets and for upgrade/expansion of existing assets are the same as those for renewal shown in Section 5.4.2.

6.5.3 Summary of future upgrade/new assets expenditure

Projected upgrade/new asset expenditures are summarised in Fig 6. The projected upgrade/new capital works program is shown in Appendix C. All amounts are shown in real values.

FIG 6: PROJECTED CAPITAL UPGRADE/NEW ASSET EXPENDITURE

Mid-Western RC - Projected Capital Upgrade/New Expenditure (Strategy)



Expenditure on new assets and services in the organisation’s capital works program will be accommodated in the long term financial plan. This is further discussed in Section 6.2.

6.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are shown in Table 5.6, together with estimated annual savings from not having to fund operations and maintenance of the assets. These assets will be further reinvestigated to determine the required levels of service and see what options are available for alternate service delivery, if any. Any revenue gained from asset disposals is accommodated in Council’s long term financial plan.

Where cash flow projections from asset disposals are not available, these will be developed in future revisions of this asset management plan.

TABLE 5.6: ASSETS IDENTIFIED FOR DISPOSAL

Asset	Reason for Disposal	Timing	Disposal Expenditure	Operations & Maintenance Annual Savings
Old Rylstone Showground Toilets	Unused – has been replaced	2015	\$5,000	Nil – unmaintained
Jack Tindell Park Toilets	Unused – has been replaced	2015	\$5,000	Nil - unmaintained

6.7 Service Consequences and Risks

The organisation has prioritised decisions made in adopting this AM Plan to obtain the optimum benefits from its available resources. Decisions were made based on the development of 3 scenarios of AM Plans.

Scenario 1 - What we would like to do based on asset register data

Scenario 2 – What we should do with existing budgets and identifying level of service and risk consequences (i.e. what are the operations and maintenance and capital projects we are unable to do, what is the service and risk consequences associated with this position). This may require several versions of the AM Plan.

Scenario 3 – What we can do and be financially sustainable with AM Plans matching long-term financial plans.

The development of scenario 1 and scenario 2 AM Plans provides the tools for discussion with the Council and community on trade-offs between what we would like to do (scenario 1) and what we should be doing with existing budgets (scenario 2) by balancing changes in services and service levels with affordability and acceptance of the service and risk consequences of the trade-off position (scenario 3).

6.7.1 What we cannot do

There are some operations and maintenance activities and capital projects that are unable to be undertaken within the next 10 years. These include:

- Maintain all building to the same standard regardless of usage levels
- Construct new buildings without including an appropriate operational budget
- Retain and maintain buildings surplus to requirements

6.7.2 Service consequences

Operations and maintenance activities and capital projects that cannot be undertaken will maintain or create service consequences for users. These include:

- Slower response times to work requests
- Poorer building condition for users
- Accessibility issues
- Potential reduction in opening hours
- Reduction in the range of services provided

6.7.3 Risk consequences

The operations and maintenance activities and capital projects that cannot be undertaken may maintain or create risk consequences for Mid-Western Regional Council. These include:

- Closure of building due to safety issues or damage
- Increasing reactive maintenance costs
- Unidentified hazards that could cause injury

These risks have been included with the Infrastructure Risk Management Plan summarised in Section 5.2 and risk management plans actions and expenditures included within projected expenditures.

7. Financial Summary

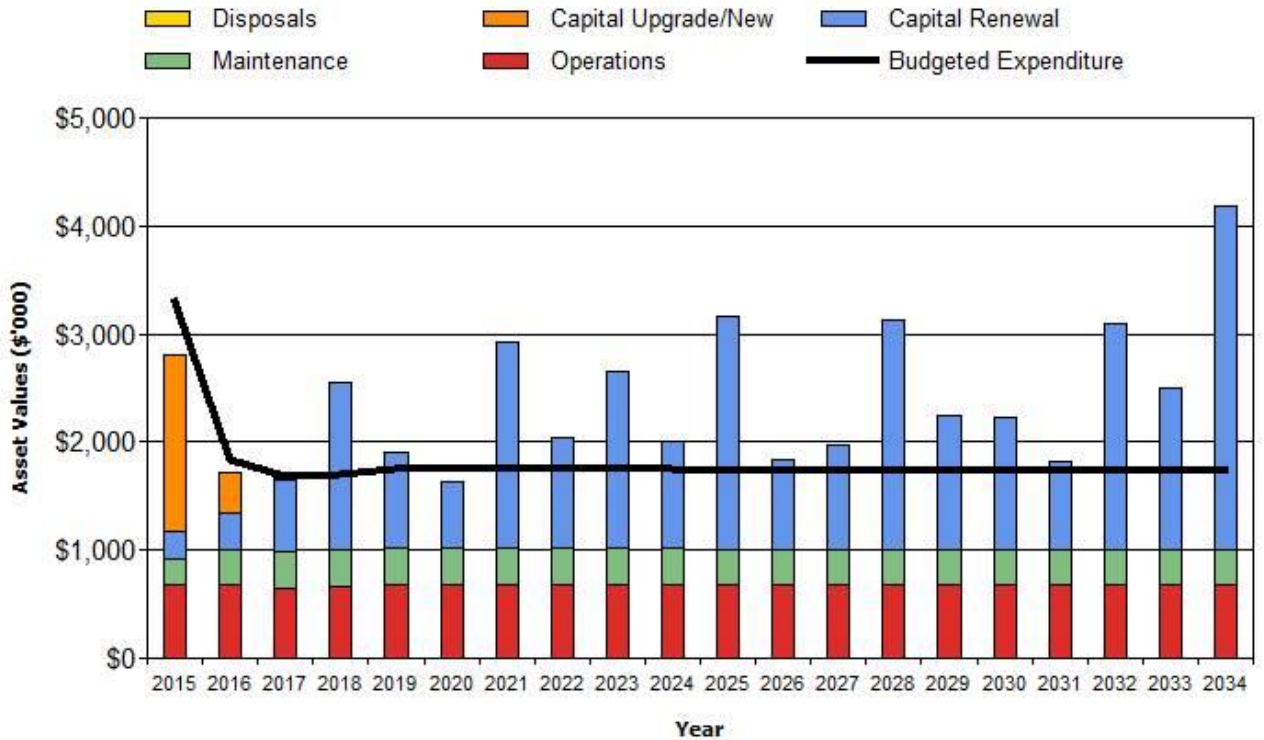
This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service and current and projected future asset performance.

7.1 Financial Statements and Projections

The financial projections are shown in Fig 7 for projected operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets). Note that all costs are shown in real values.

FIG 7: PROJECTED OPERATING AND CAPITAL EXPENDITURE

Mid-Western RC - Projected Operating and Capital Expenditure ()



8. Sustainability of service delivery

There are four key indicators for service delivery sustainability that have been considered in the analysis of the services provided by this asset category, these being the asset renewal funding ratio, long term life cycle costs/expenditures and medium term projected/budgeted expenditures over 5 and 10 years of the planning period.

ASSET RENEWAL FUNDING RATIO

Asset Renewal Funding Ratio¹² 75%

The Asset Renewal Funding Ratio is the most important indicator and reveals that over the next 10 years, Council is forecasting that it will have 75% of the funds required for the optimal renewal and replacement of its assets.

LONG TERM - LIFE CYCLE COST

Life cycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the asset life cycle. Life cycle costs include

¹² AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16

operations and maintenance expenditure and asset consumption (depreciation expense). The life cycle cost for the services covered in this asset management plan is \$3,003,000 per year (average operations and maintenance expenditure plus depreciation expense projected over 10 years).

Life cycle costs can be compared to life cycle expenditure to give an initial indicator of affordability of projected service levels when considered with age profiles. Life cycle expenditure includes operations, maintenance and capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure over the 10 year planning period is \$1,699,000 per year (average operations and maintenance plus capital renewal budgeted expenditure in LTFP over 10 years).

A shortfall between life cycle cost and life cycle expenditure is the life cycle gap. The life cycle gap for services covered by this asset management plan is \$1,304,000 per year (-ve = gap, +ve = surplus).

Life cycle expenditure is 57% of life cycle costs.

The life cycle costs and life cycle expenditure comparison highlights any difference between present outlays and the average cost of providing the service over the long term. If the life cycle expenditure is less than that life cycle cost, it is most likely that outlays will need to be increased or cuts in services made in the future.

Knowing the extent and timing of any required increase in outlays and the service consequences if funding is not available will assist organisations in providing services to their communities in a financially sustainable manner. This is the purpose of the asset management plans and long term financial plan.

MEDIUM TERM – 10 YEAR FINANCIAL PLANNING PERIOD

This asset management plan identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed level of service to the community over a 10 year period. This provides input into 10 year financial and funding plans aimed at providing the required services in a sustainable manner.

These projected expenditures may be compared to budgeted expenditures in the 10 year period to identify any funding shortfall. In a core asset management plan, a gap is generally due to increasing asset renewals for ageing assets.

The projected operations, maintenance and capital renewal expenditure required over the 10 year planning period is \$1,989,000 on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is \$1,699,000 on average per year giving a 10 year funding shortfall of \$291,000 per year. This indicates that Council expects to have 85% of the projected expenditures needed to provide the services documented in the asset management plan.

MEDIUM TERM – 5 YEAR FINANCIAL PLANNING PERIOD

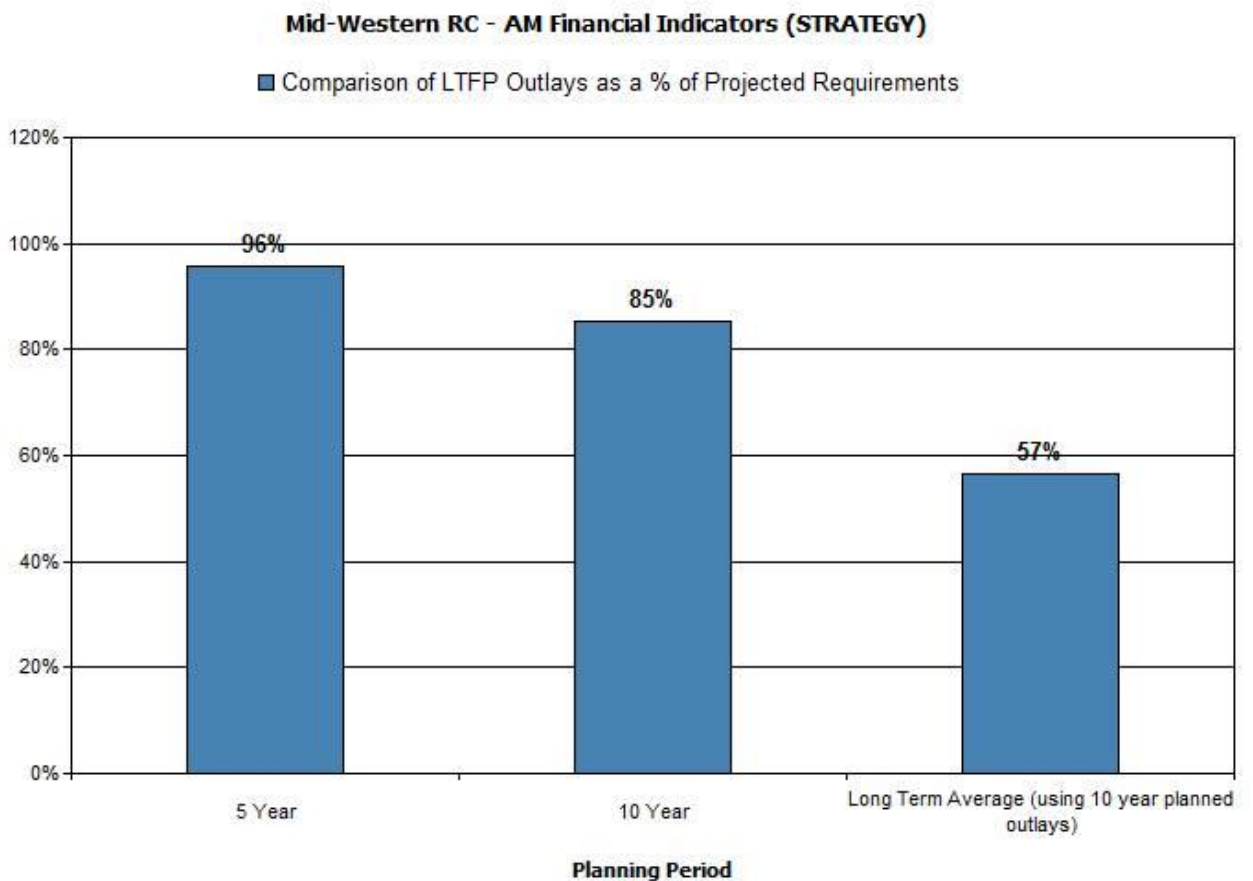
The projected operations, maintenance and capital renewal expenditure required over the first 5 years of the planning period is \$1,723,000 on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is \$1,648,000 on average per year giving a 5 year funding shortfall of \$75,000. This indicates that Council expects to have 96% of projected expenditures required to provide the services shown in this asset management plan.

ASSET MANAGEMENT FINANCIAL INDICATORS

Figure 7A shows the asset management financial indicators over the 10 year planning period and for the long term life cycle.

FIGURE 7A: ASSET MANAGEMENT FINANCIAL INDICATORS



Providing services from infrastructure in a sustainable manner requires the matching and managing of service levels, risks, projected expenditures and financing to achieve a financial indicator of approximately 1.0 for the first years of the asset management plan and ideally over the 10 year life of the Long Term Financial Plan.

Figure 8 shows the projected asset renewal and replacement expenditure over the 20 years of the AM Plan. The projected asset renewal and replacement expenditure is compared to renewal and replacement expenditure in the capital works program, which is accommodated in the long term financial plan

FIGURE 8: PROJECTED AND LTFP BUDGETED RENEWAL EXPENDITURE

Mid-Western RC - Projected & LTFP Budgeted Renewal Expenditure (Strategy)

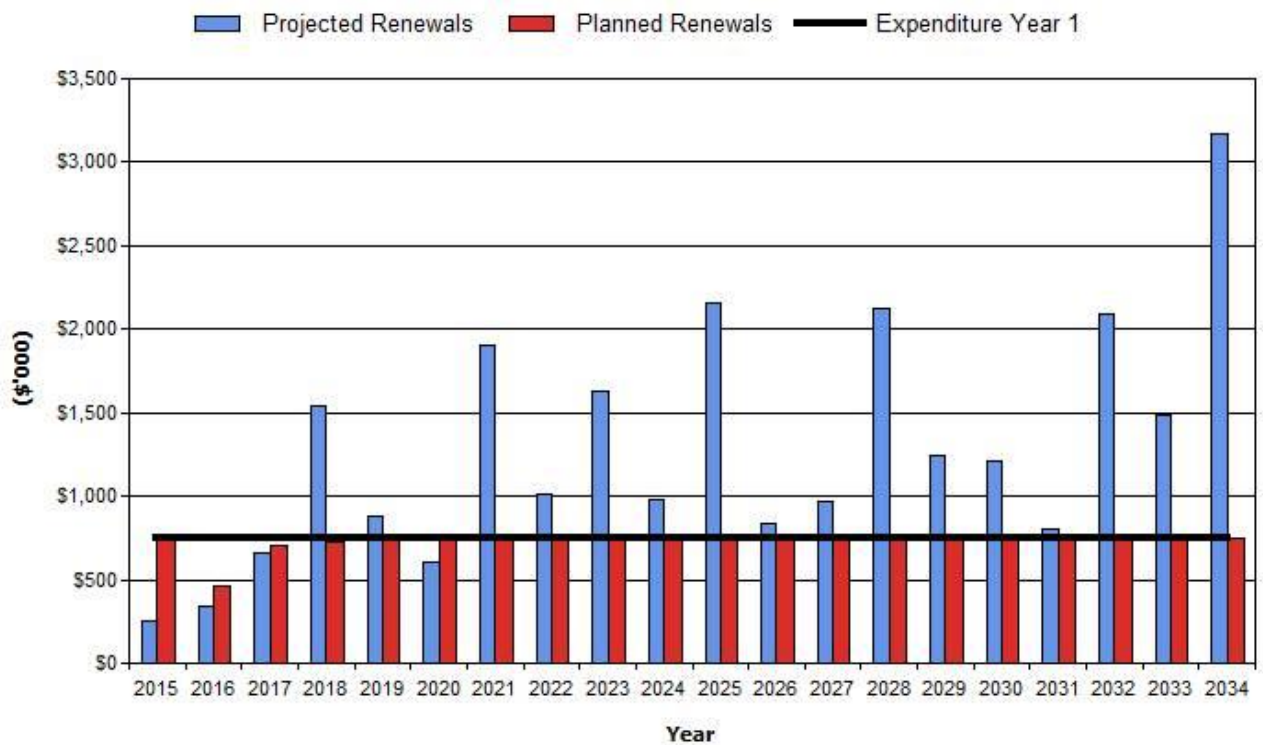


Table 6.1.1 shows the shortfall between projected renewal and replacement expenditures and expenditure accommodated in long term financial plan. Budget expenditures accommodated in the long term financial plan or extrapolated from current budgets are shown in Appendix D.

TABLE 6.1.1: PROJECTED AND LTFP BUDGETED RENEWALS AND FINANCING SHORTFALL

Year	Projected Renewals (\$'000)	LTFP Renewal Budget (\$'000)	Renewal Financing Shortfall (\$'000) (-ve Gap, +ve Surplus)	Cumulative Shortfall (\$'000) (-ve Gap, +ve Surplus)
2015	\$254	\$751	\$497	\$497
2016	\$338	\$461	\$123	\$620
2017	\$665	\$707	\$42	\$663
2018	\$1,540	\$729	-\$811	-\$148
2019	\$879	\$746	-\$133	-\$281
2020	\$611	\$746	\$136	-\$146
2021	\$1,905	\$746	-\$1,159	-\$1,305
2022	\$1,017	\$746	-\$271	-\$1,576
2023	\$1,629	\$746	-\$883	-\$2,459
2024	\$979	\$746	-\$233	-\$2,692
2025	\$2,154	\$746	-\$1,408	-\$4,100
2026	\$831	\$746	-\$85	-\$4,185
2027	\$965	\$746	-\$219	-\$4,404
2028	\$2,126	\$746	-\$1,380	-\$5,784
2029	\$1,240	\$746	-\$494	-\$6,278
2030	\$1,212	\$746	-\$466	-\$6,744
2031	\$802	\$746	-\$56	-\$6,800
2032	\$2,092	\$746	-\$1,346	-\$8,146

Year	Projected Renewals (\$000)	LTFP Renewal Budget (\$000)	Renewal Financing Shortfall (\$000) (-ve Gap, +ve Surplus)	Cumulative Shortfall (\$000) (-ve Gap, +ve Surplus)
2033	\$1,485	\$746	\$-739	\$-8,884
2034	\$3,170	\$746	\$-2,424	\$-11,309

Note: A negative shortfall indicates a financing gap, a positive shortfall indicates a surplus for that year.

Providing services in a sustainable manner will require matching of projected asset renewal and replacement expenditure to meet agreed service levels with **the corresponding** capital works program accommodated in the long term financial plan.

A gap between **projected asset renewal/replacement expenditure and amounts accommodated in the LTFP** indicates that **further work is required on reviewing service levels in the AM Plan (including possibly revising the LTFP)** before finalising the asset management plan to manage required service levels and funding **to eliminate any funding gap**.

We will manage the ‘gap’ by developing this asset management plan to provide guidance on future service levels and resources required to provide these services, and review future services, service levels and costs with the community.

7.1.1 Projected expenditures for long term financial plan

Table 6.1.2 shows the projected expenditures for the 10 year long term financial plan.

Expenditure projections are in 2015 real values.

TABLE 6.1.2: PROJECTED EXPENDITURES FOR LONG TERM FINANCIAL PLAN (\$000)

Year	Operations (\$000)	Maintenance (\$000)	Projected Capital Renewal (\$000)	Capital Upgrade/ New (\$000)	Disposals (\$000)
2015	\$674	\$247	\$254	\$1,625	\$0
2016	\$681	\$326	\$338	\$380	\$0
2017	\$650	\$331	\$665	\$27	\$0
2018	\$665	\$338	\$1,540	\$0	\$0
2019	\$681	\$346	\$879	\$0	\$0
2020	\$681	\$346	\$611	\$0	\$0
2021	\$681	\$346	\$1,905	\$0	\$0
2022	\$681	\$346	\$1,017	\$0	\$0
2023	\$681	\$346	\$1,629	\$0	\$0
2024	\$681	\$346	\$979	\$0	\$0
2025	\$678	\$333	\$2,154	\$0	\$0
2026	\$678	\$333	\$831	\$0	\$0
2027	\$678	\$333	\$965	\$0	\$0
2028	\$678	\$333	\$2,126	\$0	\$0
2029	\$678	\$333	\$1,240	\$0	\$0
2030	\$678	\$333	\$1,212	\$0	\$0
2031	\$678	\$333	\$802	\$0	\$0
2032	\$678	\$333	\$2,092	\$0	\$0
2033	\$678	\$333	\$1,485	\$0	\$0

Year	Operations (\$000)	Maintenance (\$000)	Projected Capital Renewal (\$000)	Capital Upgrade/New (\$000)	Disposals (\$000)
2034	\$678	\$333	\$3,170	\$0	\$0

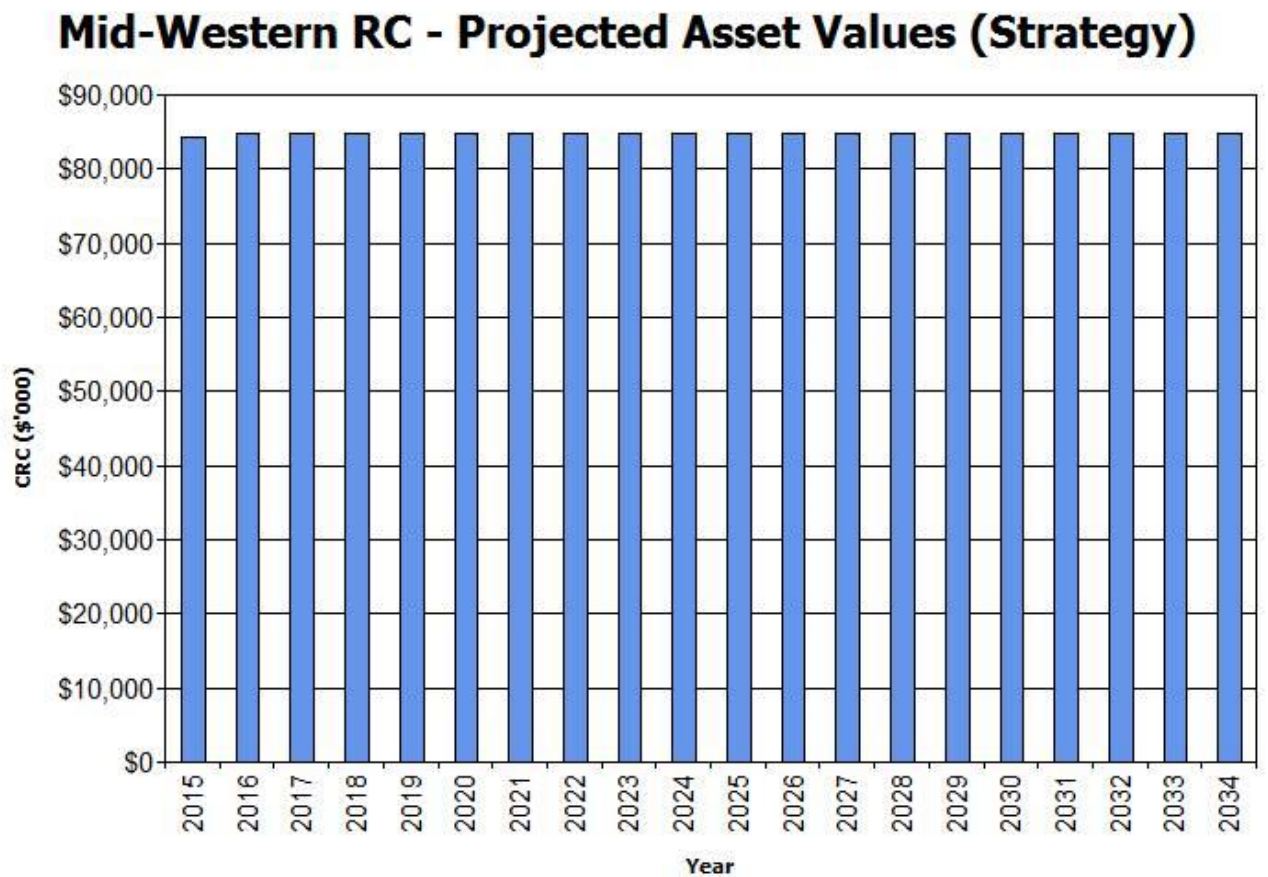
7.2 Funding Strategy

After reviewing service levels, as appropriate to ensure ongoing financial sustainability projected expenditures identified in Section 6.1.2 will be accommodated in the Council’s 10 year long term financial plan.

7.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council. Figure 9 shows the projected replacement cost asset values over the planning period in real values.

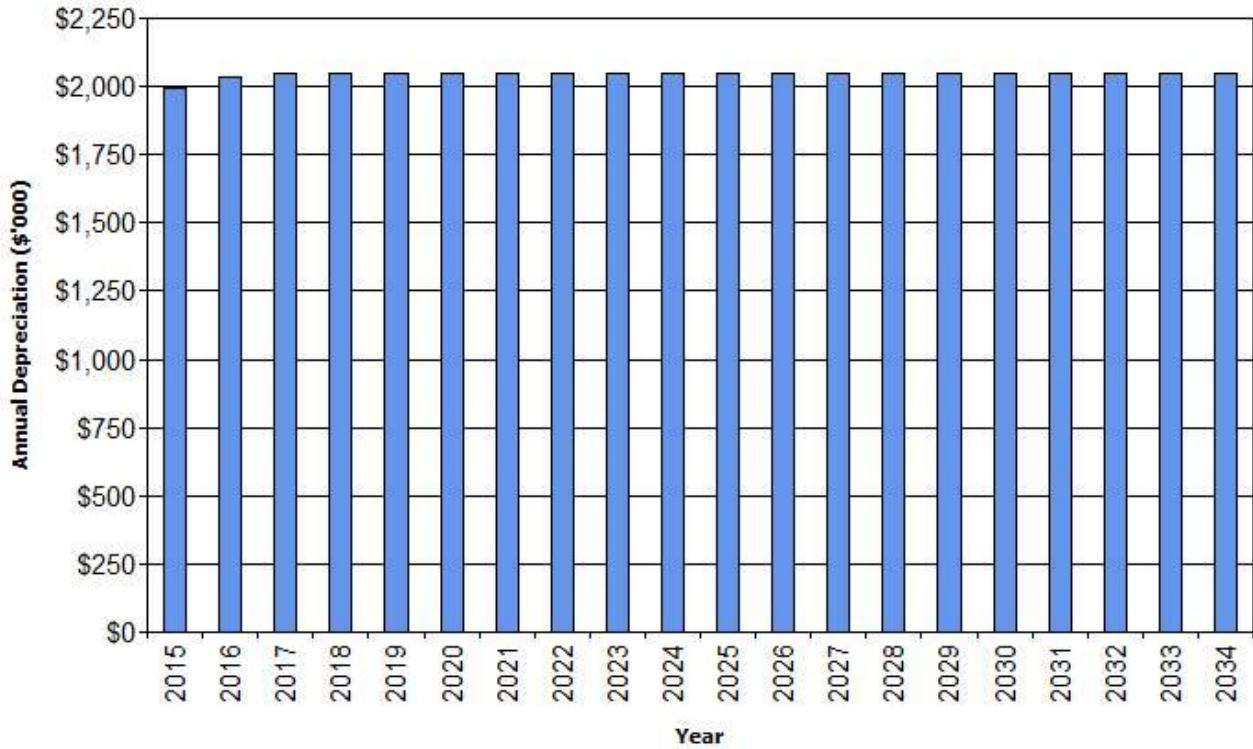
FIGURE 9: PROJECTED ASSET VALUES



Depreciation expense values are forecast in line with asset values as shown in Figure 10.

FIGURE 10: PROJECTED DEPRECIATION EXPENSE

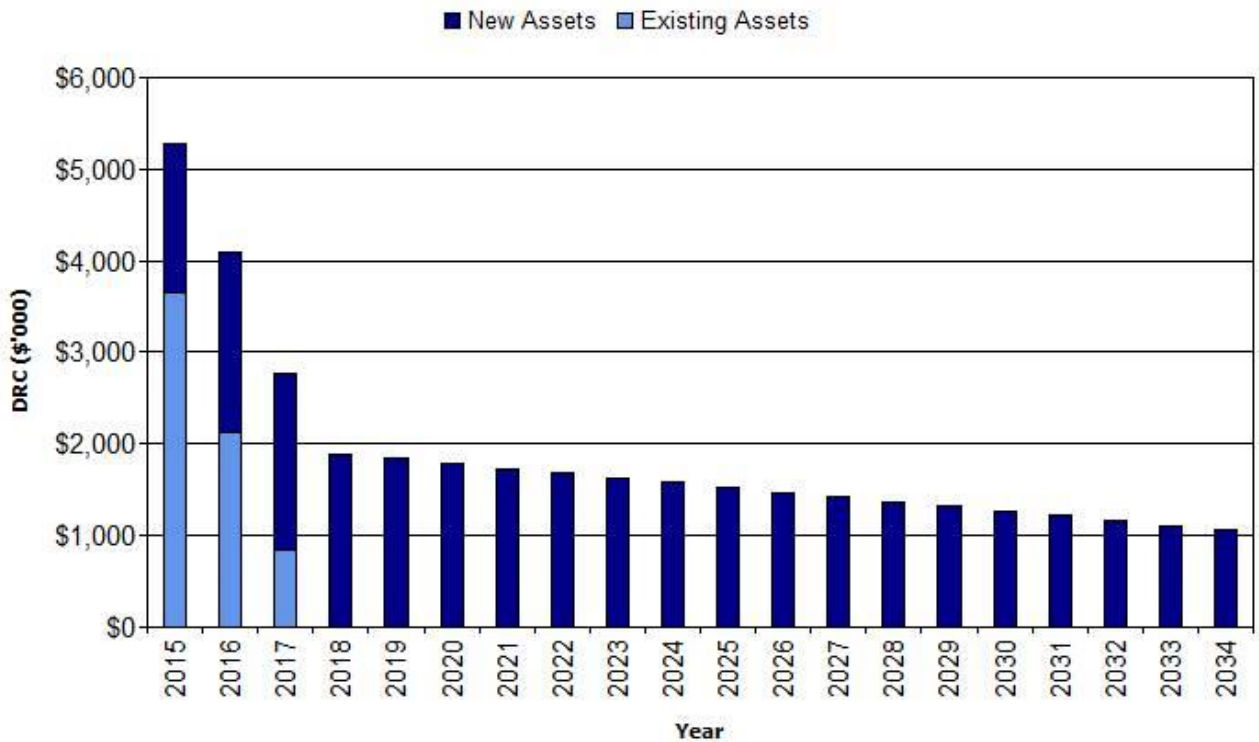
Mid-Western RC - Projected Depreciation Expense (Strategy)



The depreciated replacement cost will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the assets' depreciated replacement cost is shown in Figure 11. The depreciated replacement cost of contributed and new assets is shown in the darker colour and in the lighter colour for existing assets.

FIGURE 11: PROJECTED DEPRECIATED REPLACEMENT COST

Mid-Western RC - Projected Depreciated Replacement Cost (Strategy)



9. Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan and risks that these may change are shown in Table 6.4.

TABLE 6.4: KEY ASSUMPTIONS MADE IN AM PLAN AND RISKS OF CHANGE

Key Assumptions	Risks of Change to Assumptions
Capital renewal is based on estimated remaining useful life, influenced by the condition rating.	An average change of 1 point would change fair value by 15%
Customer service levels are based on historical work requests and ad hoc feedback without planned consultation	It is unlikely that we have overstated the service level requirement, therefore the risk is that costs requirements may be greater

7.4 Forecast Reliability and Confidence

The expenditure and valuations projections in this AM Plan are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale¹³ in accordance with Table 6.5.

TABLE 6.5: DATA CONFIDENCE GRADING SYSTEM

Confidence Grade	Description
A Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate \pm 2%
B Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate \pm 10%
C Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated \pm 25%
D Very Uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy \pm 40%
E Unknown	None or very little data held.

The estimated confidence level for and reliability of data used in this AM Plan is shown in Table 6.5.1.

TABLE 6.5.1: DATA CONFIDENCE ASSESSMENT FOR DATA USED IN AM PLAN

Data	Confidence Assessment	Comment
Demand drivers	C	Population and demographic projections are reliable however other drivers are uncertain
Growth projections		
Operations expenditures	A	Based on actual historical data
Maintenance expenditures	C	Based on actual historical data however additional maintenance required is projected unsupported
Projected Renewal exps.	B	Assessed for fair value
- Asset values		
- Asset residual values	B	Assessed for fair value
- Asset useful lives	C	It should be noted that capital renewals are based on the estimated remaining useful life. The inherent risk with estimates and future planning is the chance for variations to arise from year to year and hence we could not have the confidence to budget exactly based each year. However using averages and looking at the overall trend we can have

¹³ IPWEA, 2011, IIMM, Table 2.4.6, p 2|59.

		confidence that Council has not set aside sufficient funding for buildings in the long term.
- Condition modelling	B	Assessed for fair value
- Network renewals	C	Individual building assessment to be undertaken
- Defect repairs	E	Individual building assessment to be undertaken
Upgrade/New expenditures	B	Based on actual planned new expenditure
Disposal expenditures	C	

Over all data sources the data confidence is assessed as medium confidence level for data used in the preparation of this AM Plan.

8. Plan Improvement and Monitoring

8.1 Status of Asset Management Practices

8.1.1 Accounting and financial systems

Mid-Western Regional Council use Technology One for financials and asset management. Council buildings were revalued as at 30 June 2013 in accordance with the Fair Value accounting standards and DLG requirement and were compiled into a single asset register.

ACCOUNTABILITIES FOR FINANCIAL SYSTEMS

Finance Department

ACCOUNTING STANDARDS AND REGULATIONS

Australian Accounting Standards

Office of Local Government NSW Accounting Code

CAPITAL/MAINTENANCE THRESHOLD

Construction/Extension 100%

Renewal >\$5,000

REQUIRED CHANGES TO ACCOUNTING FINANCIAL SYSTEMS ARISING FROM THIS AM PLAN

Amendment of the chart of accounts to separation of operations and maintenance expenditure. Ideally this would also extend to separating planned and reactive maintenance.

8.1.2 Asset management system

Technology One

ASSET REGISTERS

Property Asset Register

LINKAGE FROM ASSET MANAGEMENT TO FINANCIAL SYSTEM

Depreciation and asset capitalisation are linked to finance system

Operations and maintenance expenditure are not linked to assets

ACCOUNTABILITIES FOR ASSET MANAGEMENT SYSTEM AND DATA MAINTENANCE

Operations and Finance departments

REQUIRED CHANGES TO ASSET MANAGEMENT SYSTEM ARISING FROM THIS AM PLAN

Restructure of hierarchy and asset attributes

Utilisation of work orders to scheduling maintenance and record reactive maintenance

Improving asset data

8.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 7.2.

TABLE 7.2: IMPROVEMENT PLAN

Task No	Task	Responsibility	Resources Required	Timeline
1	SEPARATION OF OPERATIONS AND MAINTENANCE EXPENDITURE IN GENERAL LEDGER	FINANCE	STAFF TIME	JULY 2015
2	SEPARATION OF PLANED AND REACTIVE MAINTENANCE EXPENDITURE IN THE GENERAL LEDGER	FINANCE, HEALTH & BUILDING	STAFF TIME	JULY 2015
3	CUSTOMER REQUESTS TO SPLIT INTO THE TYPE OF REQUEST RELATING TO SERVICE LEVELS I.E. QUALITY, FUNCTION, CAPACITY	CUSTOMER SERVICE, HEALTH & BUILDING	STAFF TIME	AUGUST 2015
4	CONDITION INSPECTION PROGRAM	HEALTH & BUILDING	STAFF TIME	JULY 2015
6	UTILISATION OF WORK ORDERS SYSTEM TO SCHEDULE MAINTENANCE AND RECORD REACTIVE MAINTENANCE	HEALTH & BUILDING, FINANCE	STAFF TIME, CONSULTANT \$5,000	DECEMBER 2014
7	CREATE DEFECT REPAIRS LIST	HEALTH & BUILDING	STAFF TIME OR CONTRACTOR	JULY 2016
8	CREATE 10 YEAR RENEWAL PROGRAM	HEALTH & BUILDING, EXECUTIVE	STAFF TIME	DECEMBER 2016
9	START A RISK MANAGEMENT TEAM TO REVIEW THE RISK MANAGEMENT PLAN AND ENSURE RISKS ARE PLACED ON CORPORATE RISK REGISTER AND RAISED WITH EXECUTIVE	MANAGEMENT	STAFF TIME	DECEMBER 2014
10	INVESTIGATE UNDERUTILISED BUILDINGS AND ASSESS PLANNED RENEWAL ACTIVITIES.	HEALTH & BUILDING, MANAGEMENT	STAFF TIME	DECEMBER 2016

8.3 Monitoring and Review Procedures

This asset management plan will be reviewed during annual budget planning processes and amended to recognise any material changes in service levels and/or resources available to provide those services as a result of budget decisions.

The AM Plan will be updated annually to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade/new and asset disposal expenditures and projected expenditure values incorporated into the organisation's long term financial plan.

The AM Plan has a life of 4 years (Council election cycle) and is due for complete revision and updating within one year of each Council election.

8.4 Performance Measures

The effectiveness of the asset management plan can be measured in the following ways:

- The degree to which the required projected expenditures identified in this asset management plan are incorporated into Council's long term financial plan,
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan,
- The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the Council's Strategic Plan and associated plans,
- **The Asset Renewal Funding Ratio achieving the target of 1.0.**

9. References

IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM

IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/namsplus.

IPWEA, 2009, 'Australian Infrastructure Financial Management Guidelines', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/AIFMG.

IPWEA, 2011, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM

Mid-Western Regional Council Community Plan

Mid-Western Regional Council Operational Plan

10. Appendices

Appendix A Maintenance Response Levels of Service

Appendix B Projected 10 year Capital Renewal and Replacement Works Program

Appendix C Projected 10 year Capital Upgrade/New Works Program

Appendix D LTFP Budgeted Expenditures Accommodated in AM Plan

Appendix E Abbreviations

Appendix F Glossary

Appendix A Maintenance Response Levels of Service

PLANNED MAINTENANCE AND INSPECTIONS

ACTIVITY	TYPE	FREQUENCY	COMMENTS
AIR CONDITIONING	INSPECTION	MONTHLY	AUSTRALIAN STANDARDS APPLY
ALARMS	INSPECTION	YEARLY	AUSTRALIAN STANDARDS APPLY
AMENITIES CLEANING	CLEANING	DAILY-WEEKLY	DEPENDANT ON USAGE
BACK-FLOW PREVENTION DEVICES	INSPECTION	YEARLY	AUSTRALIAN STANDARDS APPLY
CARPET CLEANING	CLEANING	DAILY-WEEKLY	DEPENDENT ON USAGE
CHILDCARE CENTRES	INSPECTION	YEARLY	DOCS STANDARDS APPLY
ELECTRICAL COMPLIANCE	INSPECTION	YEARLY	SWITCHBOARD INSPECTIONS
ELECTRICAL TAGGING OF APPLIANCES	INSPECTION	VARIOUS	DEPENDS UPON THE TYPE OF EQUIPMENT
EXIT LIGHTING	INSPECTION	6 MONTHLY	AUSTRALIAN STANDARDS APPLY
FALL RESTRAINT SYSTEM	INSPECTION	YEARLY	AUSTRALIAN STANDARDS APPLY
FIRE EMERGENCY SYSTEMS	INSPECTION	MONTHLY - 6 MONTHLY	AUSTRALIAN STANDARDS APPLY
FLAME-RETARDANT SYSTEMS	INSPECTION	2 YEARLY	AUSTRALIAN STANDARDS APPLY
FLOOR COVERINGS	REPLACE/REPAIR	AS REQUIRED	
GARDEN MAINTENANCE	GENERAL MAINTENANCE	WEEKLY-QUARTERLY	DEPENDENT ON THE SEASON
GENERAL PROPERTY INSPECTION	INSPECTION	MONTHLY	
GREASE TRAPS	INSPECTION	MONTHLY-6 MONTHLY	
HARNESS SYSTEM	INSPECTION	YEARLY	AUSTRALIAN STANDARDS APPLY
KITCHEN CLEANING	CLEANING	DAILY	
LIFTS	INSPECTION	MONTHLY	AUSTRALIAN STANDARDS APPLY
PAINTING	GENERAL MAINTENANCE	TO BE DETERMINED	
PEST CONTROL	INSPECTION	MONTHLY - 6 MONTHLY	DEPENDENT ON LOCATION AND USAGE
POOL MAINTENANCE (CHLORINE, FILTRATION, ETCETERA)	GENERAL MAINTENANCE	HOURLY	DEPT. OF HEALTH REQUIREMENTS RE WATER QUALITY
ROOF AND GUTTER CLEANING	CLEANING	QUARTERLY	MORE REGULARLY FOR BUILDINGS NEAR TREES
THERMOSTATIC MIXING	INSPECTION	YEARLY	AUSTRALIAN STANDARDS APPLY
WINDOW CLEANING	CLEANING	TO BE DETERMINED	

REACTIVE MAINTENANCE RESPONSE TIMES

TASK	INTERVENTION LEVEL	MAKE SAFE TIME	REPAIR TIME (FROM NOTIFICATION)
AIR CONDITIONING REPLACE/REPAIR	INSPECTION/REPORT	WITHIN 2 HOURS	WITHIN 7 DAYS
BREAK-IN RESPONSE	INSPECTION/REPORT	WITHIN 2 HOURS	WITHIN 7 DAYS
CARPENTRY AND JOINERY	INSPECTION/REPORT	WITHIN 2 DAYS	WITHIN 2 WEEKS
CLEAR PLUMBING BLOCKAGES	INSPECTION/REPORT	WITHIN 24 HOURS	WITHIN 7 DAYS

TASK	INTERVENTION LEVEL	MAKE SAFE TIME	REPAIR TIME (FROM NOTIFICATION)
CONCRETING REPLACE/REPAIR	INSPECTION/REPORT	WITHIN 2 DAYS	WITHIN 2 WEEKS
DOOR LOCKS AND ALARM SYSTEMS	INSPECTION/REPORT	WITHIN 24 HOURS	WITHIN 7 DAYS
UPGRADE ELECTRICAL SYSTEM	INSPECTION/REPORT	WITHIN 7 DAYS	WITHIN 12 MONTHS
ELECTRICAL REPAIRS (MAJOR)	INSPECTION/REPORT	WITHIN 2 HOURS	WITHIN 5 DAYS
ELECTRICAL REPAIRS (MINOR)	INSPECTION/REPORT	WITHIN 2 DAYS	WITHIN 2 WEEKS
FIRE SERVICES REPAIR/REPLACE	INSPECTION/REPORT	WITHIN 24 HOURS	WITHIN 5 DAYS
FLOOR COVERINGS REPLACE/REPAIR	INSPECTION/REPORT	WITHIN 2 DAYS	WITHIN 2 WEEKS
GLAZING	INSPECTION/REPORT	WITHIN 24 HOURS	WITHIN 5 DAYS
GRAFFITI REMOVAL (OFFENSIVE)	INSPECTION/REPORT	NA	WITHIN 24 HOURS
GRAFFITI REMOVAL (NON-OFFENSIVE)	INSPECTION/REPORT	NA	WITHIN 2 WEEKS
HOT WATER SYSTEMS REPLACE/REPAIR	INSPECTION/REPORT	WITHIN 2 WEEKS	WITHIN 2 WEEKS
LIGHT BULB CHANGE (EA)	INSPECTION/REPORT	WITHIN 7 DAYS	WITHIN 30 DAYS
LIGHTS GENERAL MAINTENANCE (WCC)	INSPECTION/REPORT	WITHIN 5 DAYS	WITHIN 5 DAYS
LIGHTS GENERAL MAINTENANCE (EA)	INSPECTION/REPORT	WITHIN 7 DAYS	WITHIN 30 DAYS
LIGHTS GENERAL MAINTENANCE (WCC)	INSPECTION/REPORT	WITHIN 2 DAYS	WITHIN 2 DAYS
PAINTING	INSPECTION/REPORT	WITHIN 7 DAYS	WITHIN 12 MONTHS
PEST CONTROL	INSPECTION/REPORT	2 DAYS INSPECTION AND 7 DAYS TREATMENT	WITHIN 14 DAYS
PLUMBING FITTINGS REPLACE/REPAIR	INSPECTION/REPORT	WITHIN 7 DAYS	WITHIN 12 MONTHS

Appendix B Projected 10 year Capital Renewal and Replacement Works Program

Asset ID	Sub Category	Asset Name	From	To	Rem Life	Planned Renewal	Renewal Cost	Useful Life
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			(Years)	Year	(\$000)	(Years)
BL00054	BUSHFIRE SHED NO.1 ULAN ROAD COOKS GAP		7	2022	\$93,000	30
BL00074	BUSHFIRE SHED WINDEYER ROAD PYRAMUL		7	2022	\$57,000	30
Subtotal					\$150,000	
BL00092	CORRUGATED METAL SHED EAST STAR PROPERTY SPRING CREEK RD		0	2015	\$22,000	30
Subtotal					\$22,000	
BL00102	CYSS SHED RED HILL COMPLEX COOYAL ST		2	2017	\$25,000	15
Subtotal					\$25,000	
BL00106	DOG POUND PUTTA BUCCA ROAD		3	2018	\$84,000	30
Subtotal					\$84,000	
BL00107	DOG POUND/PENS ILFORD ROAD KANDOS		8	2023	\$20,000	50
BL00117	FORMER TOILET BLOCK MARKET ST ROBERTSON PARK		8	2023	\$22,000	30
Subtotal					\$42,000	
BL00120	GARAGES BEHIND OLD POLICE STATION 82 MARKET ST		3	2018	\$20,000	30
Subtotal					\$20,000	
BL00121	GATEHOUSE SHOWGROUND NICHOLSON ST		4	2019	\$42,000	40
Subtotal					\$42,000	
BL00123	GOLF AMENITIES (LADIES)		7	2022	\$32,000	60
Subtotal					\$32,000	
BL00142	KIOSK & STORAGE SHED BILLY DUNN PARK NANDOURA ST		0	2015	\$77,000	30
Subtotal					\$77,000	
BL00154	MAIN DEPOT TOILETS PIPER STREET		5	2020	\$46,000	50
Subtotal					\$46,000	
BL00163	METAL DECK SHED EAST STAR PROPERTY SPRING CREEK RD		3	2018	\$51,000	50
BL00174	OLD DEPOT SHED WHITE ST		3	2018	\$73,000	50
Subtotal					\$124,000	
BL00175	OLD OPEN FRONT SHED EAST STAR PROPERTY SPRING CREEK RD		0	2015	\$61,000	50
Subtotal					\$61,000	
BL00225	SHED TWO BIRRIWA RESERVE CASTLEREAGH HWY BIRRIWA		3	2018	\$37,000	30

				Subtotal	\$37,000	
BL00232	SHOWGROUND BBQ SHELTER CUDGEGONG STREET	4	2019	\$41,000	15	
				Subtotal	\$41,000	
BL00235	SHOWGROUND KOSHEMAKIN PAVILION CUDGEGONG STREET	6	2021	\$75,000	40	
				Subtotal	\$75,000	
BL00238	SHOWGROUND SHELTER CUDGEGONG STREET	4	2019	\$83,000	30	
BL00239	SHOWGROUND STORE SHED CUDGEGONG STREET	4	2019	\$61,000	60	
				Subtotal	\$144,000	
BL00246	STORE SHED GALVANISED IRON SHOWGROUND CUDGEGONG ST	2	2017	\$23,000	40	
				Subtotal	\$23,000	
BL00248	STORE SHED SANITARY DEPOT DOGTRAP HILL KANDOS	7	2022	\$64,000	30	
				Subtotal	\$64,000	
BL00250	STORE SHED SEWERAGE TREATMENT WORKS ILFORD RD KANDOS	4	2019	\$19,000	30	
				Subtotal	\$19,000	
BL00251	STORE NANDOURA ST	9	2024	\$63,000	50	
				Subtotal	\$63,000	
BL00261	TENNIS CLUBHOUSE TURILL	0	2015	\$10,000	30	
				Subtotal	\$10,000	
BL00318	STABLES INCLUDING DAY YARDS NICHOLSON ST	3	2018	\$93,000	50	
				Subtotal	\$93,000	
BL00342	INTERNAL FITOUT AT DEPARTMENTS WORKS SHED	9	2024	\$58,000	20	
				Subtotal	\$58,000	
BL00417	INTERNAL FITOUT AT AGED CARE UNIT NOS 1-3, 102 LOUEE STREET, RYLSTONE	8	2023	\$15,000	25	
				Subtotal	\$15,000	
BL00419	FLOOR COVERINGS AT AGED CARE UNIT NOS 1-3, 102 LOUEE STREET, RYLSTONE	6	2021	\$8,700	25	
				Subtotal	\$8,700	
BL00421	INTERNAL FITOUT AT AGED CARE UNIT NOS 1&2, 75 MUDGEE STREET, RYLSTONE	4	2019	\$11,000	25	
BL00424	FLOOR COVERINGS AT AGED CARE UNIT NOS 1&2, 75 MUDGEE STREET, RYLSTONE	4	2019	\$6,000	25	
				Subtotal	\$17,000	

BL00435	FLOOR COVERINGS AT AGED UNIT NOS 1-4, COOYAL ST, GULGONG	2	2017	\$12,000	25
				Subtotal	\$12,000
BL00461	INTERNAL FITOUT AT AMENITIES BLOCK, APEX PARK, CORNER WHITE & BAYLEY STS, GULGONG	5	2020	\$20,000	25
BL00470	FLOOR COVERINGS AT AMENITIES BLOCK, MARKET ST, ROBERTSON PARK, MUDGEE	5	2020	\$12,000	25
				Subtotal	\$32,000
BL00475	BUILDING ENVELOPE AT AMENITIES BLOCK, SHOWGROUND, NICHOLSON ST, MUDGEE (O)	9	2024	\$100,100	60
				Subtotal	\$100,100
BL00497	ROOF AT AMENITIES NO.2, CARAVAN PARK, SHORT ST, MUDGEE	7	2022	\$20,000	50
				Subtotal	\$20,000
BL00502	FLOOR COVERINGS AT AMENITIES, CARWELL STREET, CARAVAN PARK, RYLSTONE	6	2021	\$8,200	25
BL00527	INTERNAL FITOUT AT AMENITIES/STORE, CARWELL STREET, CARAVAN PARK, RYLSTONE	6	2021	\$24,000	25
BL00528	FLOOR COVERINGS AT AMENITIES/STORE, CARWELL STREET, CARAVAN PARK, RYLSTONE	6	2021	\$6,700	25
				Subtotal	\$38,900
BL00533	ROOF AT ANIMAL NURSERY, SHOWGROUND, NICHOLSON ST, MUDGEE	9	2024	\$12,000	40
				Subtotal	\$12,000
BL00569	BUSHFIRE SHED DOUBLE DOORS HILL END ROAD GRATTAI	4	2019	\$50,000	30
				Subtotal	\$50,000
BL00591	ROOF AT BUSHFIRE SHED NO.2, MAYS PLACE, CASSILIS ROAD, COOKS GAP	7	2022	\$11,000	40
				Subtotal	\$11,000
BL00665	INTERNAL FITOUT AT CHILD CARE CENTRE, SHORT ST, MUDGEE	9	2024	\$54,000	20
BL00667	FLOOR COVERINGS AT CHILD CARE CENTRE, SHORT ST, MUDGEE	9	2024	\$17,000	20
				Subtotal	\$71,000
BL00683	FLOOR COVERINGS AT COMMUNITY HALL & LIBRARY, ANGUS AVENUE, KANDOS	8	2023	\$96,000	25
				Subtotal	\$96,000
BL00689	FLOOR COVERINGS AT COMMUNITY SUPPORT CENTRE, 88 MARKET ST, MUDGEE	7	2022	\$23,000	25

BL00691	INTERNAL FITOUT AT COMMUNITY SUPPORT CENTRE, 88 MARKET ST, MUDGEE	7	2022	\$48,000	25
				Subtotal	\$71,000
BL00692	MECHANICAL SERVICES AT COMMUNITY SUPPORT CENTRE, 88 MARKET ST, MUDGEE	8	2023	\$91,000	30
BL00694	ROOF AT COMMUNITY SUPPORT CENTRE, 88 MARKET ST, MUDGEE	8	2023	\$60,000	50
BL00695	FIRE SERVICES AT COMMUNITY SUPPORT CENTRE, 88 MARKET ST, MUDGEE	8	2023	\$9,300	30
				Subtotal	\$160,300
BL00707	INTERNAL FITOUT AT COTTAGE, AERODROME, GEORGE CAMPBELL DR, MUDGEE	4	2019	\$8,900	20
				Subtotal	\$8,900
BL00721	INTERNAL FITOUT AT CUDGEGONG WATER PARK - AMENITIES, CUDGEGONG ROAD, CUDGEGONG	8	2023	\$31,000	25
BL00725	FLOOR COVERINGS AT CUDGEGONG WATER PARK - AMENITIES, CUDGEGONG ROAD, CUDGEGONG	8	2023	\$8,400	25
				Subtotal	\$39,400
BL00731	INTERNAL FITOUT AT CUDGEGONG WATER PARK - PORTABLE AMEN, CUDGEGONG ROAD, CUDGEGONG	3	2018	\$21,000	15
BL00732	ROOF AT CUDGEGONG WATER PARK - PORTABLE AMEN, CUDGEGONG ROAD, CUDGEGONG	3	2018	\$19,000	15
BL00733	FLOOR AT CUDGEGONG WATER PARK - PORTABLE AMEN, CUDGEGONG ROAD, CUDGEGONG	3	2018	\$8,500	15
BL00734	FLOOR COVERINGS AT CUDGEGONG WATER PARK - PORTABLE AMEN, CUDGEGONG ROAD, CUDGEGONG	3	2018	\$7,400	15
BL00735	BUILDING ENVELOPE AT CUDGEGONG WATER PARK - PORTABLE AMEN, CUDGEGONG ROAD, CUDGEGONG	3	2018	\$68,800	15
				Subtotal	\$124,700
BL00759	INTERNAL FITOUT AT DINING BLOCK, RED HILL COMPLEX, COOYAL ST, GULGONG	9	2024	\$14,000	20
				Subtotal	\$14,000
BL00831	FLOOR AT GRANDSTAND, SHOWGROUND, NICHOLSON ST, MUDGEE	7	2022	\$32,000	30
				Subtotal	\$32,000
BL00832	BUILDING ENVELOPE AT GRANDSTAND, SHOWGROUND, NICHOLSON ST, MUDGEE	6	2021	\$493,300	30
				Subtotal	\$493,300
BL00844	BUILDING ENVELOPE AT GUIDE HALL, LOUEE STREET, RYLSTONE	8	2023	\$82,900	50

				Subtotal	\$82,900	
BL00845	FLOOR COVERINGS AT GUIDE HALL, LOUEE STREET, RYLSTONE	6	2021	\$25,000		20
				Subtotal	\$25,000	
BL00846	BUILDING ENVELOPE AT HALL SUPPER ROOM, WELLINGTON ROAD, GOOLMA	8	2023	\$65,700		50
				Subtotal	\$65,700	
BL00847	ROOF AT HALL SUPPER ROOM, WELLINGTON ROAD, GOOLMA	6	2021	\$32,000		40
				Subtotal	\$32,000	
BL00848	FLOOR COVERINGS AT HALL SUPPER ROOM, WELLINGTON ROAD, GOOLMA	2	2017	\$20,000		20
				Subtotal	\$20,000	
BL00852	FLOOR COVERINGS AT HALL, WELLINGTON ROAD, GOOLMA	8	2023	\$28,000		20
				Subtotal	\$28,000	
BL00857	INTERNAL FITOUT AT HOUSE, EAST STAR PROPERTY, SPRING CREEK RD, GULGONG	0	2015	\$5,600		20
				Subtotal	\$5,600	
BL00858	BUILDING ENVELOPE AT HOUSE, EAST STAR PROPERTY, SPRING CREEK RD, GULGONG	2	2017	\$90,500		50
				Subtotal	\$90,500	
BL00860	ROOF AT HOUSE, EAST STAR PROPERTY, SPRING CREEK RD, GULGONG	1	2016	\$37,000		40
				Subtotal	\$37,000	
BL00861	FLOOR AT HOUSE, EAST STAR PROPERTY, SPRING CREEK RD, GULGONG	2	2017	\$24,000		50
				Subtotal	\$24,000	
BL00863	FLOOR COVERINGS AT IT OFFICE, 84 MARKET, MUDGEE	4	2019	\$20,000		25
BL00864	FIRE SERVICES AT IT OFFICE, 84 MARKET, MUDGEE	4	2019	\$7,900		30
				Subtotal	\$27,900	
BL00865	MECHANICAL SERVICES AT IT OFFICE, 84 MARKET, MUDGEE	7	2022	\$77,000		30
				Subtotal	\$77,000	
BL00866	INTERNAL FITOUT AT IT OFFICE, 84 MARKET, MUDGEE	4	2019	\$41,000		25
				Subtotal	\$41,000	
BL00870	INTERNAL FITOUT AT INDUSTRIAL MUSEUM, BUCHANAN STREET, KANDOS	8	2023	\$130,000		25

				Subtotal	\$130,000	
BL00872	FLOOR COVERINGS AT INDUSTRIAL MUSEUM, BUCHANAN STREET, KANDOS	4	2019	\$43,000	25	
				Subtotal	\$43,000	
BL00878	INTERNAL FITOUT AT KIOSK /SHELTER, ILFORD ROAD, KANDOS	5	2020	\$63,000	25	
BL00879	FLOOR COVERINGS AT KIOSK /SHELTER, ILFORD ROAD, KANDOS	5	2020	\$17,000	25	
				Subtotal	\$80,000	
BL00917	FLOOR COVERINGS AT MAIN DEPOT - STORE AND SIGN SHED, PIPER STREET, RYLSTONE	7	2022	\$24,000	20	
BL00919	INTERNAL FITOUT AT MAIN DEPOT - STORE AND SIGN SHED, PIPER STREET, RYLSTONE	7	2022	\$110,000	20	
				Subtotal	\$134,000	
BL00949	INTERNAL FITOUT AT MEMORIAL HALL , HERBERT ST, GULGONG	6	2021	\$550,995	25	
BL00951	FLOOR COVERINGS AT MEMORIAL HALL , HERBERT ST, GULGONG	6	2021	\$130,000	25	
				Subtotal	\$680,995	
BL00974	INTERNAL FITOUT AT NEW AMENITIES/KIOSK, BILLY DUNN PARK, NANDOURA ST, GULGONG	8	2023	\$25,000	25	
				Subtotal	\$25,000	
BL00975	FLOOR COVERINGS AT NEW AMENITIES/KIOSK, BILLY DUNN PARK, NANDOURA ST, GULGONG	9	2024	\$8,600	25	
				Subtotal	\$8,600	
BL00978	INTERNAL FITOUT AT NEW DEPOT SHED, SALEYARDS LN, GULGONG	6	2021	\$77,000	25	
BL00981	FLOOR COVERINGS AT NEW DEPOT SHED, SALEYARDS LN, GULGONG	6	2021	\$21,000	25	
				Subtotal	\$98,000	
BL01006	FLOOR COVERINGS AT OLD POLICE STATION, 82 MARKET ST, MUDGEE	8	2023	\$35,000	25	
BL01007	INTERNAL FITOUT AT OLD POLICE STATION, 82 MARKET ST, MUDGEE	8	2023	\$73,000	25	
				Subtotal	\$108,000	
BL01050	FLOOR COVERINGS AT PRE SCHOOL KINDERGARTEN, CORNER FLEMING & MCDONALD STREET, KANDOS	9	2024	\$6,300	20	
BL01052	INTERNAL FITOUT AT PRE SCHOOL KINDERGARTEN, CORNER FLEMING & MCDONALD STREET, KANDOS	9	2024	\$20,000	20	
				Subtotal	\$26,300	
BL01066	FLOOR COVERINGS AT PUBLIC TOILETS, ANGUS AVENUE, KANDOS	8	2023	\$5,400	25	

		Subtotal		\$5,400	
BL01088	FIRE SERVICES AT RECYCLING SHED , MUDGEE TIP, HARGRAVES ROAD, MUDGEE	9	2024	\$5,000	25
BL01094	ROOF AT RED HILL COMPLEX, RED HILL COMPLEX, COOYAL ST, GULGONG	9	2024	\$30,000	40
BL01106	INTERNAL FITOUT AT RESIDENCE & KIOSK, CARAVAN PARK, SHORT ST, MUDGEE	9	2024	\$11,000	25
BL01111	ROOF AT RINGSIDE/PONY CLUB SHED, SHOWGROUND, NICHOLSON ST, MUDGEE	9	2024	\$48,000	40
		Subtotal		\$94,000	
BL01173	MECHANICAL SERVICES AT SHOWGROUND - OFFICE BUILDING, CUDGEGONG STREET, RYLSTONE	4	2019	\$24,000	25
BL01175	INTERNAL FITOUT AT SHOWGROUND - OFFICE BUILDING, CUDGEGONG STREET, RYLSTONE	4	2019	\$70,000	20
		Subtotal		\$94,000	
BL01176	ROOF AT SHOWGROUND - OFFICE BUILDING, CUDGEGONG STREET, RYLSTONE	8	2023	\$54,000	40
		Subtotal		\$54,000	
BL01177	FLOOR COVERINGS AT SHOWGROUND - OFFICE BUILDING, CUDGEGONG STREET, RYLSTONE	4	2019	\$26,000	20
		Subtotal		\$26,000	
BL01190	SHOWGROUND TOILETS FEMALE CUDGEGONG ST	7	2022	\$32,000	60
		Subtotal		\$32,000	
BL01233	FLOOR COVERINGS AT SWITCH ROOM & AMENITIES , PUTTA BUCCA RD, MUDGEE	3	2018	\$6,500	20
BL01236	INTERNAL FITOUT AT SWITCH ROOM & AMENITIES , PUTTA BUCCA RD, MUDGEE	3	2018	\$17,000	20
		Subtotal		\$23,500	
BL01253	FLOOR COVERINGS AT TENNIS CLUBHOUSE, TALLAWANG ROAD, GULGONG	9	2024	\$7,400	20
		Subtotal		\$7,400	
BL01260	INTERNAL FITOUT AT TENNIS CLUBHOUSE, VICTORIA PARK, DENISON ST, MUDGEE	6	2021	\$25,000	20
		Subtotal		\$25,000	
BL01261	FLOOR COVERINGS AT TENNIS CLUBHOUSE, VICTORIA PARK, DENISON ST, MUDGEE	9	2024	\$45,000	20
		Subtotal		\$45,000	
BL01263	FLOOR COVERINGS AT TENNIS CLUBHOUSE, WELLINGTON ROAD,	5	2020	\$16,000	20

GOOLMA

				Subtotal	\$16,000	
BL01266	INTERNAL FITOUT AT TENNIS CLUBHOUSE, WELLINGTON ROAD, GOOLMA	4	2019	\$9,300	20	
				Subtotal	\$9,300	
BL01298	ROOF AT TOILET BLOCK, SHOWGROUND, NICHOLSON ST, MUDGEE	7	2022	\$32,000	50	
BL01299	BUILDING ENVELOPE AT TOILET BLOCK, SHOWGROUND, NICHOLSON ST, MUDGEE	7	2022	\$114,700	60	
				Subtotal	\$146,700	
BL01315	ROOF AT TOOLS & EQUIPMENT STORAGE SHED, DEPOT ROAD, MUDGEE	8	2023	\$46,000	50	
				Subtotal	\$46,000	
BL01316	FIRE SERVICES AT TOOLS & EQUIPMENT STORAGE SHED, DEPOT ROAD, MUDGEE	3	2018	\$7,100	30	
				Subtotal	\$7,100	
BL01318	MECHANICAL SERVICES AT TOURIST CENTRE, 84 MARKET, MUDGEE	7	2022	\$44,000	30	
BL01321	FLOOR COVERINGS AT TOURIST CENTRE, 84 MARKET, MUDGEE	7	2022	\$11,000	25	
				Subtotal	\$55,000	
BL01361	FIRE SERVICES AT WORKSHOP & STORAGE, DEPOT ROAD, MUDGEE	6	2021	\$12,000	25	
				Subtotal	\$12,000	
BL01374	SHOWGROUND CHOOK CATERING SHED (J)	4	2019	\$55,000	60	
				Subtotal	\$55,000	
BL01375	SHOWGROUND ANIMAL STALLS (T)	3	2018	\$94,000	30	
				Subtotal	\$94,000	
BL01378	BUILDING ENVELOPE TURILL COMMUNITY HALL, MUDGEE ROAD, TURILL	5	2020	\$121,300	50	
				Subtotal	\$121,300	
BL01379	ROOF TURILL COMMUNITY HALL, MUDGEE ROAD, TURILL	3	2018	\$60,000	40	
				Subtotal	\$60,000	
BL01380	FLOOR TURILL COMMUNITY HALL, MUDGEE ROAD, TURILL	6	2021	\$42,000	50	
				Subtotal	\$42,000	
BL01381	FLOOR COVERINGS TURILL COMMUNITY HALL, MUDGEE ROAD, TURILL	1	2016	\$37,000	20	
BL01382	INTERNAL FITOUT TURILL COMMUNITY HALL, MUDGEE ROAD, TURILL	1	2016	\$21,000	20	

BL01383	MECHANICAL SERVICES TURILL COMMUNITY HALL, MUDGE ROAD, TURILL	1	2016	\$12,000	25
				Subtotal	\$70,000
BL01384	BUILDING ENVELOPE EURUNDEREE SCHOOLHOUSE, 9 STRIKES LANE, EURUNDEREE	3	2018	\$72,200	50
				Subtotal	\$72,200
BL01385	ROOF EURUNDEREE SCHOOLHOUSE, 9 STRIKES LAN, EURUNDEREE	1	2016	\$12,000	40
				Subtotal	\$12,000
BL01386	FLOOR EURUNDEREE SCHOOLHOUSE, 9 STRIKES LAN, EURUNDEREE	3	2018	\$5,400	50
				Subtotal	\$5,400
BL01387	FLOOR COVERINGS EURUNDEREE SCHOOLHOUSE, 9 STRIKES LAN, EURUNDEREE	0	2015	\$5,500	20
				Subtotal	\$5,500
BL01388	INTERNAL FITOUT EURUNDEREE SCHOOLHOUSE, 9 STRIKES LAN, EURUNDEREE	1	2016	\$15,000	20
				Subtotal	\$15,000
BL01389	MECHANICAL SERVICES EURUNDEREE SCHOOLHOUSE, 9 STRIKES LAN, EURUNDEREE	0	2015	\$5,300	25
				Subtotal	\$5,300
BL01391	ROOF HARGRAVES COURTHOUSE, 3427 HILL END ROAD, HARGRAVES	4	2019	\$68,000	50
				Subtotal	\$68,000
BL01393	FLOOR COVERINGS HARGRAVES COURTHOUSE, 3427 HILL END ROAD, HARGRAVES	2	2017	\$6,700	25
BL01394	INTERNAL FITOUT HARGRAVES COURTHOUSE, 3427 HILL END ROAD, HARGRAVES	2	2017	\$10,000	25
				Subtotal	\$16,700
BL01398	FLOOR COVERINGS MEN'S SHED, RAILWAY STATION, DAVIES RD, KANDOS	5	2020	\$30,000	20
BL01399	INTERNAL FITOUT MEN'S SHED, RAILWAY STATION, DAVIES RD, KANDOS	5	2020	\$17,000	20
				Subtotal	\$47,000
BL01400	MECHANICAL SERVICES MEN'S SHED, RAILWAY STATION, DAVIES RD, KANDOS	6	2021	\$9,500	25
				Subtotal	\$9,500
BL01403	FLOOR SES BUILDING (CONCRETE SLAB), DEPOT RD	8	2023	\$11,000	50

				Subtotal	\$11,000	
BL01404	FLOOR COVERINGS SES BUILDING (CONCRETE SLAB), DEPOT RD	1	2016	\$11,000	20	
BL01405	INTERNAL FITOUT SES BUILDING (CONCRETE SLAB), DEPOT RD	1	2016	\$30,000	20	
				Subtotal	\$41,000	
BL01406	MECHANICAL SERVICES SES BUILDING (CONCRETE SLAB), DEPOT RD	3	2018	\$11,000	25	
				Subtotal	\$11,000	
BL01415	FLOOR COVERINGS TENNIS CLUBHOUSE, 5 CARWELL STREET, RYLSTONE	9	2024	\$11,000	20	
BL01416	INTERNAL FITOUT TENNIS CLUBHOUSE, 5 CARWELL STREET, RYLSTONE	9	2024	\$31,000	20	
BL01430	FLOOR COVERINGS GULGONG ADMINISTRATION CENTRE, HERBERT ST, GULGONG	9	2024	\$36,000	25	
BL01431	INTERNAL FITOUT GULGONG ADMINISTRATION CENTRE, HERBERT ST, GULGONG	9	2024	\$120,000	25	
				Subtotal	\$198,000	
BL01452	MECHANICAL SERVICES AT AMENITIES & CANTEEN, WEST END SPORTING COMPLEX, DENISON ST, MUDGEE	8	2023	\$78,000	30	
				Subtotal	\$78,000	
BL01454	FIRE SERVICES AT AMENITIES BLOCK, ANZAC PARK, HERBERT ST, GULGONG	0	2015	\$6,900	30	
				Subtotal	\$6,900	
BL01455	FLOOR COVERINGS AT AMENITIES BLOCK, APEX PARK, CORNER WHITE & BAYLEY STS, GULGONG	5	2020	\$6,800	25	
				Subtotal	\$6,800	
BL01456	MECHANICAL SERVICES AT AMENITIES BLOCK, APEX PARK, CORNER WHITE & BAYLEY STS, GULGONG	8	2023	\$29,000	30	
				Subtotal	\$29,000	
BL01458	INTERNAL FITOUT AT AMENITIES BLOCK, MARKET ST, ROBERTSON PARK, MUDGEE	6	2021	\$33,000	25	
				Subtotal	\$33,000	
BL01460	FLOOR COVERINGS AT AMENITIES BLOCK, SHOWGROUND, NICHOLSON ST, MUDGEE (O)	3	2018	\$11,000	25	
				Subtotal	\$11,000	
BL01461	INTERNAL FITOUT AT AMENITIES BLOCK, SHOWGROUND, NICHOLSON ST, MUDGEE (O)	6	2021	\$36,129	25	
				Subtotal	\$36,129	

BL01462	MECHANICAL SERVICES AT AMENITIES BLOCK, SHOWGROUND, NICHOLSON ST, MUDGEE (O)	2	2017	\$46,000	30
				Subtotal	\$46,000
BL01463	FLOOR COVERINGS AT AMENITIES BLOCK, VICTORIA PARK, GREVILLIA ROAD, GULGONG	6	2021	\$13,000	25
BL01464	INTERNAL FITOUT AT AMENITIES BLOCK, VICTORIA PARK, GREVILLIA ROAD, GULGONG	6	2021	\$37,000	25
				Subtotal	\$50,000
BL01465	MECHANICAL SERVICES AT AMENITIES BLOCK, VICTORIA PARK, GREVILLIA ROAD, GULGONG	8	2023	\$56,000	30
BL01466	FIRE SERVICES AT AMENITIES BLOCK, VICTORIA PARK, GREVILLIA ROAD, GULGONG	8	2023	\$5,000	30
				Subtotal	\$61,000
BL01473	FLOOR COVERINGS AT AMENITIES NO.2, CARAVAN PARK, SHORT ST, MUDGEE	3	2018	\$15,000	25
BL01474	INTERNAL FITOUT AT AMENITIES NO.2, CARAVAN PARK, SHORT ST, MUDGEE	3	2018	\$53,000	25
BL01475	MECHANICAL SERVICES AT AMENITIES NO.2, CARAVAN PARK, SHORT ST, MUDGEE	3	2018	\$52,000	30
				Subtotal	\$120,000
BL01476	MECHANICAL SERVICES AT AMENITIES, CARWELL STREET, CARAVAN PARK, RYLSTONE	8	2023	\$29,000	30
BL01480	MECHANICAL SERVICES AT AMENITIES/STORE, CARWELL STREET, CARAVAN PARK, RYLSTONE	8	2023	\$24,000	30
				Subtotal	\$53,000
BL01481	INTERNAL FITOUT AT ANIMAL NURSERY, SHOWGROUND, NICHOLSON ST, MUDGEE	9	2024	\$12,000	50
				Subtotal	\$12,000
BL01482	INTERNAL FITOUT AT BUSH FIRE SHED, SPRING STREET, ULAN	7	2022	\$11,000	20
				Subtotal	\$11,000
BL01487	INTERNAL FITOUT AT BUSHFIRE SHED NO.1, COOYAL PARK, COOYAL STATION, COOYAL	5	2020	\$12,000	20
				Subtotal	\$12,000
BL01488	INTERNAL FITOUT AT BUSHFIRE SHED NO.2, YORK HUON, BOTOBOLAR STATION, COOYAL	7	2022	\$21,000	20
				Subtotal	\$21,000
BL01489	INTERNAL FITOUT AT BUSHFIRE SHED NO.2, MAYS PLACE, CASSILIS ROAD, COOKS GAP	3	2018	\$11,000	20

				Subtotal	\$11,000	
BL01493	FLOOR COVERINGS AT BUSHFIRE SHED, HORSE FLAT LN, MULLAMUDDY	9	2024	\$6,200		20
				Subtotal	\$6,200	
BL01497	FLOOR COVERINGS AT WOOL SHED, SHOWGROUND, NICHOLSON ST, MUDGEE	3	2018	\$5,800		20
				Subtotal	\$5,800	
BL01498	INTERNAL FITOUT AT WOOL SHED, SHOWGROUND, NICHOLSON ST, MUDGEE	4	2019	\$16,000		20
BL01499	FLOOR COVERINGS AT CHANGE ROOMS/TOILETS/COMMENTARY BOX, JUBILEE OVAL, DENISON ST, MUDGEE	4	2019	\$24,000		25
				Subtotal	\$40,000	
BL01500	INTERNAL FITOUT AT CHANGE ROOMS/TOILETS/COMMENTARY BOX, JUBILEE OVAL, DENISON ST, MUDGEE	3	2018	\$88,000		25
				Subtotal	\$88,000	
BL01501	MECHANICAL SERVICES AT CHANGE ROOMS/TOILETS/COMMENTARY BOX, JUBILEE OVAL, DENISON ST, MUDGEE	5	2020	\$87,000		30
				Subtotal	\$87,000	
BL01509	MECHANICAL SERVICES AT CUDGEGONG WATER PARK - AMENITIES, CUDGEGONG ROAD, CUDGEGONG	9	2024	\$30,000		30
				Subtotal	\$30,000	
BL01510	MECHANICAL SERVICES AT CUDGEGONG WATER PARK - PORTABLE AMEN, CUDGEGONG ROAD, CUDGEGONG	3	2018	\$32,000		15
				Subtotal	\$32,000	
BL01511	FLOOR COVERINGS AT DEPARTMENTS WORKS SHED, DEPOT ROAD, MUDGEE	8	2023	\$22,000		20
				Subtotal	\$22,000	
BL01517	FLOOR COVERINGS AT GRANDSTAND & AMENITIES, VICTORIA PARK, GREVILLIA ROAD, GULGONG	9	2024	\$13,000		20
				Subtotal	\$13,000	
BL01518	INTERNAL FITOUT AT GRANDSTAND & AMENITIES, VICTORIA PARK, GREVILLIA ROAD, GULGONG	7	2022	\$37,000		20
				Subtotal	\$37,000	
BL01519	MECHANICAL SERVICES AT GRANDSTAND & AMENITIES, VICTORIA PARK, GREVILLIA ROAD, GULGONG	5	2020	\$13,000		25
				Subtotal	\$13,000	
BL01520	FLOOR COVERINGS AT GRANDSTAND,	7	2022	\$21,000		30

SHOWGROUND, NICHOLSON ST, MUDGEE

				Subtotal	\$21,000	
BL01521	INTERNAL FITOUT AT GRANDSTAND, SHOWGROUND, NICHOLSON ST, MUDGEE	4	2019	\$56,000	30	
				Subtotal	\$56,000	
BL01522	FIRE SERVICES AT GRANDSTAND, SHOWGROUND, NICHOLSON ST, MUDGEE	0	2015	\$6,500	30	
				Subtotal	\$6,500	
BL01526	FLOOR COVERINGS AT GRANDSTANDS, BILLY DUNN PARK, NANDOURA ST, GULGONG	9	2024	\$29,000	25	
BL01527	INTERNAL FITOUT AT GRANDSTANDS, BILLY DUNN PARK, NANDOURA ST, GULGONG	9	2024	\$110,000	25	
				Subtotal	\$139,000	
BL01529	INTERNAL FITOUT AT GUIDE HALL, LOUEE STREET, RYLSTONE	7	2022	\$14,000	20	
				Subtotal	\$14,000	
BL01530	MECHANICAL SERVICES AT GUIDE HALL, LOUEE STREET, RYLSTONE	6	2021	\$7,900	25	
				Subtotal	\$7,900	
BL01531	INTERNAL FITOUT AT HALL SUPPER ROOM, WELLINGTON ROAD, GOOLMA	2	2017	\$11,000	20	
				Subtotal	\$11,000	
BL01532	MECHANICAL SERVICES AT HALL SUPPER ROOM, WELLINGTON ROAD, GOOLMA	3	2018	\$6,300	25	
				Subtotal	\$6,300	
BL01533	INTERNAL FITOUT AT HALL, WELLINGTON ROAD, GOOLMA	8	2023	\$16,000	20	
				Subtotal	\$16,000	
BL01534	MECHANICAL SERVICES AT HALL, WELLINGTON ROAD, GOOLMA	9	2024	\$8,700	25	
				Subtotal	\$8,700	
BL01537	MECHANICAL SERVICES AT INDUSTRIAL MUSEUM, BUCHANAN STREET, KANDOS	8	2023	\$280,000	30	
				Subtotal	\$280,000	
BL01539	TRANSPORT SERVICES AT INDUSTRIAL MUSEUM, BUCHANAN STREET, KANDOS	0	2015	\$16,000	30	
				Subtotal	\$16,000	
BL01540	MECHANICAL SERVICES AT KIOSK /SHELTER, ILFORD ROAD, KANDOS	5	2020	\$62,000	30	
				Subtotal	\$62,000	

BL01543	FLOOR COVERINGS AT MAIN DEPOT - WORKSHOP COMPLEX, PIPER STREET, RYLSTONE	7	2022	\$9,700	20
				Subtotal	\$9,700
BL01544	INTERNAL FITOUT AT MAIN DEPOT - WORKSHOP COMPLEX, PIPER STREET, RYLSTONE	6	2021	\$26,000	20
				Subtotal	\$26,000
BL01546	FLOOR COVERINGS AT KITCHEN & HALL, SHOWGROUND, NICHOLSON ST, MUDGEE	7	2022	\$8,000	30
				Subtotal	\$8,000
BL01547	INTERNAL FITOUT AT KITCHEN & HALL, SHOWGROUND, NICHOLSON ST, MUDGEE	4	2019	\$22,000	30
				Subtotal	\$22,000
BL01550	MECHANICAL SERVICES AT MEMORIAL HALL, LOUEE STREET, RYLSTONE	8	2023	\$44,000	25
				Subtotal	\$44,000
BL01551	FIRE SERVICES AT MEMORIAL HALL, LOUEE STREET, RYLSTONE	9	2024	\$5,000	25
				Subtotal	\$5,000
BL01553	MECHANICAL SERVICES AT NEW DEPOT SHED, SALEYARDS LN, GULGONG	6	2021	\$75,000	30
				Subtotal	\$75,000
BL01560	MECHANICAL SERVICES AT PRE SCHOOL KINDERGARTEN, CORNER FLEMING & MCDONALD STREET, KANDOS	8	2023	\$5,000	25
BL01562	MECHANICAL SERVICES AT PUBLIC TOILETS, ANGUS AVENUE, KANDOS	8	2023	\$23,000	30
				Subtotal	\$28,000
BL01563	FLOOR COVERINGS AT RECYCLING SHED , MUDGEE TIP, HARGRAVES ROAD, MUDGEE	9	2024	\$16,000	20
				Subtotal	\$16,000
BL01564	INTERNAL FITOUT AT RECYCLING SHED , MUDGEE TIP, HARGRAVES ROAD, MUDGEE	8	2023	\$43,000	20
				Subtotal	\$43,000
BL01565	MECHANICAL SERVICES AT RECYCLING SHED , MUDGEE TIP, HARGRAVES ROAD, MUDGEE	9	2024	\$5,000	25
				Subtotal	\$5,000
BL01567	MECHANICAL SERVICES AT RED HILL COMPLEX, RED HILL COMPLEX, COOYAL ST, GULGONG	8	2023	\$5,900	25
				Subtotal	\$5,900

BL01568	FLOOR COVERINGS AT RED HILL SCOUT HALL, SCULLY ST, GULGONG	6	2021	\$30,000	20
				Subtotal	\$30,000
BL01569	INTERNAL FITOUT AT RED HILL SCOUT HALL, SCULLY ST, GULGONG	2	2017	\$82,000	20
				Subtotal	\$82,000
BL01570	MECHANICAL SERVICES AT RED HILL SCOUT HALL, SCULLY ST, GULGONG	8	2023	\$28,000	25
				Subtotal	\$28,000
BL01571	FLOOR COVERINGS AT RINGSIDE/PONY CLUB SHED, SHOWGROUND, NICHOLSON ST, MUDGEE	6	2021	\$30,000	20
BL01572	INTERNAL FITOUT AT RINGSIDE/PONY CLUB SHED, SHOWGROUND, NICHOLSON ST, MUDGEE	6	2021	\$17,000	20
				Subtotal	\$47,000
BL01573	MECHANICAL SERVICES AT RINGSIDE/PONY CLUB SHED, SHOWGROUND, NICHOLSON ST, MUDGEE	5	2020	\$9,400	25
				Subtotal	\$9,400
BL01577	MECHANICAL SERVICES AT SWITCH ROOM & AMENITIES , PUTTA BUCCA RD, MUDGEE	9	2024	\$6,100	25
				Subtotal	\$6,100
BL01578	INTERNAL FITOUT AT TENNIS CLUBHOUSE, TALLAWANG ROAD, GULGONG	8	2023	\$20,000	20
BL01579	MECHANICAL SERVICES AT TENNIS CLUBHOUSE, TALLAWANG ROAD, GULGONG	8	2023	\$7,100	25
				Subtotal	\$27,100
BL01580	MECHANICAL SERVICES AT TENNIS CLUBHOUSE, VICTORIA PARK, DENISON ST, MUDGEE	9	2024	\$14,000	25
				Subtotal	\$14,000
BL01581	MECHANICAL SERVICES AT TENNIS CLUBHOUSE, WELLINGTON ROAD, GOOLMA	8	2023	\$5,200	25
				Subtotal	\$5,200
BL01582	FLOOR COVERINGS AT TOILET BLOCK, SHOWGROUND, NICHOLSON ST, MUDGEE	3	2018	\$12,000	25
BL01583	INTERNAL FITOUT AT TOILET BLOCK, SHOWGROUND, NICHOLSON ST, MUDGEE	3	2018	\$35,000	25
				Subtotal	\$47,000
BL01584	MECHANICAL SERVICES AT TOILET BLOCK, SHOWGROUND, NICHOLSON ST, MUDGEE	2	2017	\$52,000	30
				Subtotal	\$52,000

BL01585	FLOOR COVERINGS AT TOOL SHED STORE & AMENITIES, CAHILL PARK, LEWIS ST, MUDGEE	4	2019	\$16,000	25
BL01586	INTERNAL FITOUT AT TOOL SHED STORE & AMENITIES, CAHILL PARK, LEWIS ST, MUDGEE	4	2019	\$59,000	25
				Subtotal	\$75,000
BL01587	MECHANICAL SERVICES AT TOOL SHED STORE & AMENITIES, CAHILL PARK, LEWIS ST, MUDGEE	5	2020	\$58,000	30
				Subtotal	\$58,000
BL01588	FLOOR COVERINGS AT TOOLS & EQUIPMENT STORAGE SHED, DEPOT ROAD, MUDGEE	1	2016	\$18,000	25
BL01589	INTERNAL FITOUT AT TOOLS & EQUIPMENT STORAGE SHED, DEPOT ROAD, MUDGEE	1	2016	\$37,000	25
				Subtotal	\$55,000
BL01590	MECHANICAL SERVICES AT TOOLS & EQUIPMENT STORAGE SHED, DEPOT ROAD, MUDGEE	2	2017	\$69,000	30
				Subtotal	\$69,000
BL01592	INTERNAL FITOUT AT WOODWORKERS PAVILION, SHOWGROUND, NICHOLSON ST, MUDGEE	5	2020	\$10,000	20
				Subtotal	\$10,000
BL01593	FLOOR COVERINGS AT WORKSHOP & STORAGE, DEPOT ROAD, MUDGEE	3	2018	\$79,000	20
BL01594	INTERNAL FITOUT AT WORKSHOP & STORAGE, DEPOT ROAD, MUDGEE	3	2018	\$350,000	20
				Subtotal	\$429,000
BL01595	MECHANICAL SERVICES AT WORKSHOP & STORAGE, DEPOT ROAD, MUDGEE	6	2021	\$44,000	25
				Subtotal	\$44,000
BL01617	BUILDING ENVELOPE CRUDINE COMMUNITY HALL, 1600 CRUDINE ROAD, CRUDINE	2	2017	\$131,400	50
				Subtotal	\$131,400
BL01618	ROOF CRUDINE COMMUNITY HALL, 1600 CRUDINE ROAD, CRUDINE	1	2016	\$62,000	40
				Subtotal	\$62,000
BL01619	FLOOR CRUDINE COMMUNITY HALL, 1600 CRUDINE ROAD, CRUDINE	2	2017	\$44,000	50
				Subtotal	\$44,000
BL01620	FLOOR COVERINGS CRUDINE COMMUNITY HALL, 1600 CRUDINE ROAD, CRUDINE	0	2015	\$38,000	20

				Subtotal	\$38,000	
BL01621	INTERNAL FITOUT CRUDINE COMMUNITY HALL, 1600 CRUDINE ROAD, CRUDINE	1	2016	\$22,000	20	
BL01622	MECHANICAL SERVICES CRUDINE COMMUNITY HALL, 1600 CRUDINE ROAD, CRUDINE	1	2016	\$12,000	25	
				Subtotal	\$34,000	
BL01635	MOWER SHED WELLINGTON RD GOOLMA	3	2018	\$7,600	30	
				Subtotal	\$7,600	
BL01640	HALL STORAGE SHED ULAN RD TURILL	1	2016	\$12,000	30	
				Subtotal	\$12,000	
BL01643	GOLF AMENITIES (MEN'S) COX STREET	7	2022	\$32,000	60	
				Subtotal	\$32,000	
BL01644	RFS TRANSPORTABLE OFFICE CORICUDGY RD OLINDA	5	2020	\$10,000	15	
				Subtotal	\$10,000	
BL01654	POOL TIMBER STORE SHED KANDOS	3	2018	\$20,000	30	
				Subtotal	\$20,000	
BL01658	STORAGE SHED WELLINGTON ROAD GOOLMA	6	2021	\$16,000	30	
				Subtotal	\$16,000	
BL01660	POOL PUMP SHED LAWSON PARK POOL	9	2024	\$13,000	30	
				Subtotal	\$13,000	
BL01670	SHOWGROUND TOILETS MALE CUDGEGONG ST	7	2022	\$32,000	60	
				Subtotal	\$32,000	
BL01679	ROOF CLUBHOUSE GULGONG POOL	9	2024	\$14,000	40	
				Subtotal	\$14,000	
BL01681	FLOOR COVERINGS CLUBHOUSE GULGONG POOL	7	2022	\$6,400	20	
				Subtotal	\$6,400	
BL01682	INTERNAL FITOUT CLUBHOUSE GULGONG POOL	2	2017	\$18,000	20	
				Subtotal	\$18,000	
BL01683	MECHANICAL SERVICES CLUBHOUSE GULGONG POOL	3	2018	\$6,100	25	
				Subtotal	\$6,100	
				Program Total	\$9,816,224	

Appendix C Projected Upgrade/Exp/New 10 year Capital Works Program

NAMS.PLUS3 Asset Management Form 2C Upgrade/New Plan

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Mid-Western RC Buildings_S1_V1

Projected Capital Upgrade/New Plan 2015

Year	Item No.	Capital Upgrade and New Projects	Estimate (\$000)	Running total (\$000)
2015	1	Preschool	\$1,000	\$1,000
2015	2	Gulgong Admin Building	\$90	\$1,090
2015	3	Gulgong Memorial Hall	\$65	\$1,155
2015	4	Airport Terminal Extension	\$80	\$1,235
2015	5	Cudgegong Water Amenities	\$157	\$1,392
2015	6	Rylstone Showground Upgrade	\$233	\$1,625
2015	7			
2015	8			
2015	9			
2015	10			
2015	Total Projected Capital Upgrade/New Plan		\$1,625	

Buildings_S1_V1

Projected Capital Upgrade/New Plan 2016

2016	1	Airport Terminal Extension	\$220	\$220
2016	2	Mudgee Depot Capital Works	\$20	\$240
2016	3	Cudgegong Water Amenities	\$140	\$380
2016	4			
2016	5			
2016	6			
2016	7			
2016	8			
2016	9			
2016	10			
2016	Total Projected Capital Upgrade/New Plan		\$380	

Mid-Western RC Buildings_S1_V1

Projected Capital Upgrade/New Plan 2017

Year	Item No.	Capital Upgrade and New Projects	Estimate (\$000)	Running total (\$000)
2017	1	Billy Dunn Oval Upgrades	\$27	\$27
2017	2			
2017	3			
2017	4			
2017	5			
2017	6			
2017	7			
2017	8			
2017	9			
2017	10			
2017	Total Projected Capital Upgrade/New Plan		\$27	

Appendix D Budgeted Expenditures Accommodated in LTFP

NAMS.PLUS3 Asset Management Mid-Western RC

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Buildings_S1_V1 Asset Management Plan

First year of expenditure projections **2015** (financial yr ending)

Buildings

Asset values at start of planning period

Current replacement cost	\$82,690 (000)
Depreciable amount	\$78,458 (000)
Depreciated replacement cost	\$4,902 (000)
Annual depreciation expense	\$1,995 (000)

Calc CRC from Asset Register
\$82,690 (000)
This is a check for you.

Operations and Maintenance Costs for New Assets

Additional operations costs	0.80%
Additional maintenance	0.39%
Additional depreciation	2.54%
Planned renewal budget (information only)	

You may use these values calculated from your data or overwrite the links.

Planned Expenditures from LTFP

20 Year Expenditure Projections Note: Enter all values in current **2015** values

Financial year ending	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000

Expenditure Outlays included in Long Term Financial Plan (in current \$ values)

Operations

Operations budget	\$674	\$668	\$634	\$649	\$665	\$665	\$665	\$665	\$665	\$665
Management budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AM systems budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Total operations	\$674	\$668	\$634	\$649	\$665	\$665	\$665	\$665	\$665	\$665
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Maintenance

Reactive maintenance budget	\$247	\$320	\$323	\$330	\$338	\$338	\$338	\$338	\$338	\$338
Planned maintenance budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specific maintenance items budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Total maintenance	\$247	\$320	\$323	\$330	\$338	\$338	\$338	\$338	\$338	\$338
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Capital

Planned renewal budget	\$751	\$461	\$707	\$729	\$746	\$746	\$746	\$746	\$746	\$746
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Planned upgrade/new budget	\$1,625	\$380	\$27	\$0	\$0	\$0	\$0	\$0	\$0	\$0
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Non-growth contributed asset value	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
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Asset Disposals

Est Cost to dispose of assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
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Carrying value (DRC) of disposed assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
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Additional Expenditure Outlays Requirements (e.g from Infrastructure Risk Management Plan)

Additional Expenditure Outlays required and not included above	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Operations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Capital Renewal to be incorporated into Forms 2 & 2.1 (where Method 1 is used) OR Form 2B Defect Repairs (where Method 2 or 3 is used)

Capital Upgrade	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
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User Comments #2										
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Forecasts for Capital Renewal using Methods 2 & 3 (Form 2A & 2B) & Capital Upgrade (Form 2C)

Forecast Capital Renewal from Forms 2A & 2B	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Forecast Capital Upgrade from Form 2C	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$1,625	\$380	\$27	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Appendix E Abbreviations

Abbrev	Description
AAAC	Average annual asset consumption
AM	Asset management
AM Plan	Asset management plan
ARI	Average recurrence interval
ASC	Annual service cost
BOD	Biochemical (biological) oxygen demand
CRC	Current replacement cost
CWMS	Community wastewater management systems
DA	Depreciable amount
DRC	Depreciated replacement cost
EF	Earthworks/formation
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
LTFP	Long term financial plan
MMS	Maintenance management system
PCI	Pavement condition index
RV	Residual value
SoA	State of the Assets
SS	Suspended solids
vph	Vehicles per hour
WDCRC	Written down current replacement cost

Appendix F Glossary

ANNUAL SERVICE COST (ASC)

1. Reporting actual cost

The annual (accrual) cost of providing a service including operations, maintenance, depreciation, finance/opportunity and disposal costs less revenue.

2. For investment analysis and budgeting

An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operations, maintenance, depreciation, finance/ opportunity and disposal costs, less revenue.

ASSET

A resource controlled by an entity as a result of past events and from which future economic benefits are expected to flow to the entity. Infrastructure assets are a sub-class of property, plant and equipment which are non-current assets with a life greater than 12 months and enable services to be provided.

ASSET CATEGORY

Sub-group of assets within a class hierarchy for financial reporting and management purposes.

ASSET CLASS

A group of assets having a similar nature or function in the operations of an entity, and which, for purposes of disclosure, is shown as a single item without supplementary disclosure.

ASSET CONDITION ASSESSMENT

The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

ASSET HIERARCHY

A framework for segmenting an asset base into appropriate classifications. The asset hierarchy can be based on asset function or asset type or a combination of the two.

ASSET MANAGEMENT (AM)

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

ASSET RENEWAL FUNDING RATIO

The ratio of the net present value of asset renewal funding accommodated over a 10 year period in a long term financial plan relative to the net present value of projected capital renewal expenditures identified in an asset management plan for the same period [AIFMG Financial Sustainability Indicator No 8].

AVERAGE ANNUAL ASSET CONSUMPTION (AAAC)*

The amount of an organisation's asset base consumed during a reporting period (generally a year). This may be calculated by dividing the depreciable amount by the useful life (or total future economic benefits/service potential) and totalled for each and every asset OR by dividing the carrying amount (depreciated replacement cost) by the remaining useful life (or remaining future economic benefits/service potential) and totalled for each and every asset in an asset category or class.

BORROWINGS

A borrowing or loan is a contractual obligation of the borrowing entity to deliver cash or another financial asset to the lending entity over a specified period of time or at a specified point in time, to cover both the initial capital provided and the cost of the interest incurred for providing this capital. A borrowing or loan provides the means for the borrowing entity to finance outlays (typically physical assets) when it has insufficient funds of its own to do so, and for the lending entity to make a financial return, normally in the form of interest revenue, on the funding provided.

CAPITAL EXPENDITURE

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

CAPITAL EXPENDITURE - EXPANSION

Expenditure that extends the capacity of an existing asset to provide benefits, at the same standard as is currently enjoyed by existing beneficiaries, to a new group of users. It is discretionary expenditure, which increases future operations and maintenance costs, because it increases the organisation's asset base, but may be associated with additional revenue from the new user group, e.g. extending a drainage or road network, the provision of an oval or park in a new suburb for new residents.

CAPITAL EXPENDITURE - NEW

Expenditure which creates a new asset providing a new service/output that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operations and maintenance expenditure.

CAPITAL EXPENDITURE - RENEWAL

Expenditure on an existing asset or on replacing an existing asset, which returns the service capability of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it generally has no impact on revenue, but may reduce future operations and maintenance expenditure if completed at the optimum time, e.g. resurfacing or resheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval.

CAPITAL EXPENDITURE - UPGRADE

Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operations and maintenance expenditure in the future because of the increase in the organisation's asset base, e.g. widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility.

CAPITAL FUNDING

Funding to pay for capital expenditure.

CAPITAL GRANTS

Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

CAPITAL INVESTMENT EXPENDITURE

See capital expenditure definition

CAPITALISATION THRESHOLD

The value of expenditure on non-current assets above which the expenditure is recognised as capital expenditure and below which the expenditure is charged as an expense in the year of acquisition.

CARRYING AMOUNT

The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.

CLASS OF ASSETS

See asset class definition

COMPONENT

Specific parts of an asset having independent physical or functional identity and having specific attributes such as different life expectancy, maintenance regimes, risk or criticality.

CORE ASSET MANAGEMENT

Asset management which relies primarily on the use of an asset register, maintenance management systems, job resource management, inventory control, condition assessment, simple risk assessment and defined levels of service, in order to establish alternative treatment options and long-term cash flow predictions. Priorities are usually established on the basis of financial return gained by carrying out the work (rather than detailed risk analysis and optimised decision-making).

COST OF AN ASSET

The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, including any costs necessary to place the asset into service. This includes one-off design and project management costs.

CRITICAL ASSETS

Assets for which the financial, business or service level consequences of failure are sufficiently severe to justify proactive inspection and rehabilitation. Critical assets have a lower threshold for action than noncritical assets.

CURRENT REPLACEMENT COST (CRC)

The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

DEFERRED MAINTENANCE

The shortfall in rehabilitation work undertaken relative to that required to maintain the service potential of an asset.

DEPRECIABLE AMOUNT

The cost of an asset, or other amount substituted for its cost, less its residual value.

DEPRECIATED REPLACEMENT COST (DRC)

The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset.

DEPRECIATION / AMORTISATION

The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

ECONOMIC LIFE

See useful life definition.

EXPENDITURE

The spending of money on goods and services. Expenditure includes recurrent and capital outlays.

EXPENSES

Decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or increases in liabilities that result in decreases in equity, other than those relating to distributions to equity participants.

FAIR VALUE

The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties, in an arm's length transaction.

FINANCING GAP

A financing gap exists whenever an entity has insufficient capacity to finance asset renewal and other expenditure necessary to be able to appropriately maintain the range and level of services its existing asset stock was originally designed and intended to deliver. The service capability of the existing asset stock should be determined assuming no additional operating revenue, productivity improvements, or net financial liabilities above levels currently planned or projected. A current financing gap means service levels have already or are currently falling. A projected financing gap if not addressed will result in a future diminution of existing service levels.

HERITAGE ASSET

An asset with historic, artistic, scientific, technological, geographical or environmental qualities that is held and maintained principally for its contribution to knowledge and culture and this purpose is central to the objectives of the entity holding it.

IMPAIRMENT LOSS

The amount by which the carrying amount of an asset exceeds its recoverable amount.

INFRASTRUCTURE ASSETS

Physical assets that contribute to meeting the needs of organisations or the need for access to major economic and social facilities and services, e.g. roads, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no separate market value.

INVESTMENT PROPERTY

Property held to earn rentals or for capital appreciation or both, rather than for:

- use in the production or supply of goods or services or for administrative purposes; or
- Sale in the ordinary course of business.

KEY PERFORMANCE INDICATOR

A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target. Performance indicators commonly relate to statutory limits, safety, responsiveness, cost, comfort, asset performance, reliability, efficiency, environmental protection and customer satisfaction.

LEVEL OF SERVICE

The defined service quality for a particular service/activity against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental impact, acceptability and cost.

LIFE CYCLE COST *

1. **Total LCC** The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.
2. **Average LCC** The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises average operations, maintenance expenditure plus asset consumption expense, represented by depreciation expense projected over 10 years. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

LIFE CYCLE EXPENDITURE

The Life Cycle Expenditure (LCE) is the average operations, maintenance and capital renewal expenditure accommodated in the long term financial plan over 10 years. Life Cycle Expenditure may be compared to average Life Cycle Cost to give an initial indicator of affordability of projected service levels when considered with asset age profiles.

LOANS / BORROWINGS

See borrowings.

MAINTENANCE

All actions necessary for retaining an asset as near as practicable to an appropriate service condition, including regular ongoing day-to-day work necessary to keep assets operating, e.g. road patching but excluding rehabilitation or renewal. It is operating expenditure required to ensure that the asset reaches its expected useful life.

- **Planned maintenance**
Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.
- **Reactive maintenance**
Unplanned repair work that is carried out in response to service requests and management/ supervisory directions.
- **Specific maintenance**
Maintenance work to repair components or replace sub-components that needs to be identified as a specific maintenance item in the maintenance budget.
- **Unplanned maintenance**
Corrective work required in the short-term to restore an asset to working condition so it can continue to deliver the required service or to maintain its level of security and integrity.

MAINTENANCE EXPENDITURE *

Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the

required level of service. It is expenditure, which was anticipated in determining the asset's useful life.

MATERIALITY

The notion of materiality guides the margin of error acceptable, the degree of precision required and the extent of the disclosure required when preparing general purpose financial reports. Information is material if its omission, misstatement or non-disclosure has the potential, individually or collectively, to influence the economic decisions of users taken on the basis of the financial report or affect the discharge of accountability by the management or governing body of the entity.

MODERN EQUIVALENT ASSET

Assets that replicate what is in existence with the most cost-effective asset performing the same level of service. It is the most cost efficient, currently available asset which will provide the same stream of services as the existing asset is capable of producing. It allows for technology changes and, improvements and efficiencies in production and installation techniques

NET PRESENT VALUE (NPV)

The value to the organisation of the cash flows associated with an asset, liability, activity or event calculated using a discount rate to reflect the time value of money. It is the net amount of discounted total cash inflows after deducting the value of the discounted total cash outflows arising from e.g. the continued use and subsequent disposal of the asset after deducting the value of the discounted total cash outflows.

NON-REVENUE GENERATING INVESTMENTS

Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to the Council, e.g. parks and playgrounds, footpaths, roads and bridges, libraries, etc.

OPERATIONS

Regular activities to provide services such as public health, safety and amenity, e.g. street sweeping, grass mowing and street lighting.

OPERATING EXPENDITURE

Recurrent expenditure, which is continuously required to provide a service. In common use the term typically includes, e.g. power, fuel, staff, plant equipment, on-costs and overheads but excludes maintenance and depreciation. Maintenance and depreciation is on the other hand included in operating expenses.

OPERATING EXPENSE

The gross outflow of economic benefits, being cash and non-cash items, during the period arising in the course of ordinary activities of an entity when those outflows result in decreases in equity, other than decreases relating to distributions to equity participants.

OPERATING EXPENSES

Recurrent expenses continuously required to provide a service, including power, fuel, staff, plant equipment, maintenance, depreciation, on-costs and overheads.

OPERATIONS, MAINTENANCE AND RENEWAL FINANCING RATIO

Ratio of estimated budget to projected expenditure for operations, maintenance and renewal of assets over a defined time (e.g. 5, 10 and 15 years).

OPERATIONS, MAINTENANCE AND RENEWAL GAP

Difference between budgeted expenditures in a long term financial plan (or estimated future budgets in absence of a long term financial plan) and projected expenditures for operations, maintenance and renewal of assets to achieve/maintain specified service levels, totalled over a defined time (e.g. 5, 10 and 15 years).

PAVEMENT MANAGEMENT SYSTEM (PMS)

A systematic process for measuring and predicting the condition of road pavements and wearing surfaces over time and recommending corrective actions.

PMS SCORE

A measure of condition of a road segment determined from a Pavement Management System.

RATE OF ANNUAL ASSET CONSUMPTION *

The ratio of annual asset consumption relative to the depreciable amount of the assets. It measures the amount of the consumable parts of assets that are consumed in a period (depreciation) expressed as a percentage of the depreciable amount.

RATE OF ANNUAL ASSET RENEWAL *

The ratio of asset renewal and replacement expenditure relative to depreciable amount for a period. It measures whether assets are being replaced at the rate they are wearing out with capital renewal expenditure expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

RATE OF ANNUAL ASSET UPGRADE/NEW *

A measure of the rate at which assets are being upgraded and expanded per annum with capital upgrade/new expenditure expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

RECOVERABLE AMOUNT

The higher of an asset's fair value, less costs to sell and its value in use.

RECURRENT EXPENDITURE

Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operations and maintenance expenditure.

RECURRENT FUNDING

Funding to pay for recurrent expenditure.

REHABILITATION

See capital renewal expenditure definition above.

REMAINING USEFUL LIFE

The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining useful life is useful life.

RENEWAL

See capital renewal expenditure definition above.

RESIDUAL VALUE

The estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

REVENUE GENERATING INVESTMENTS

Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, e.g. public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

RISK MANAGEMENT

The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.

SECTION OR SEGMENT

A self-contained part or piece of an infrastructure asset.

SERVICE POTENTIAL

The total future service capacity of an asset. It is normally determined by reference to the operating capacity and economic life of an asset. A measure of service potential is used in the not-for-profit sector/public sector to value assets, particularly those not producing a cash flow.

SERVICE POTENTIAL REMAINING

A measure of the future economic benefits remaining in assets. It may be expressed in dollar values (Fair Value) or as a percentage of total anticipated future economic benefits. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (Depreciated Replacement Cost/Depreciable Amount).

SPECIFIC MAINTENANCE

Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, replacement of air conditioning equipment, etc. This work generally falls below the capital/ maintenance threshold and needs to be identified in a specific maintenance budget allocation.

STRATEGIC LONGER-TERM PLAN

A plan covering the term of office of councillors (4 years minimum) reflecting the needs of the community for the foreseeable future. It brings together the detailed requirements in the Council's longer-term plans such as the asset management plan and the long-term financial plan. The plan is prepared in consultation with the community and details where the Council is at that point in

time, where it wants to go, how it is going to get there, mechanisms for monitoring the achievement of the outcomes and how the plan will be resourced.

SUB-COMPONENT

Smaller individual parts that make up a component part.

USEFUL LIFE

Either:

- the period over which an asset is expected to be available for use by an entity, or
- The number of production or similar units expected to be obtained from the asset by the entity.

It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the Council.

VALUE IN USE

The present value of future cash flows expected to be derived from an asset or cash generating unit. It is deemed to be depreciated replacement cost (DRC) for those assets whose future economic benefits are not primarily dependent on the asset's ability to generate net cash inflows, where the entity would, if deprived of the asset, replace its remaining future economic benefits.

Source: IPWEA, 2009, Glossary

Additional and modified glossary items shown *



2015

COUNCIL BUSINESS PAPERS

Ordinary Meeting

17 JUNE 2015

ATTACHMENT **6.2.10**

► Integrated Mining Policy:

1. Copy of the Mine Application Guideline
2. Copy of the Standard Secretary's Environmental Assessment Requirements



MINE APPLICATION GUIDELINE

Specific development application requirements for State Significant mining and extractive industry developments under the *Environmental Planning and Assessment Act 1979*

DRAFT MAY 2015



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PRELIMINARY

Purpose

This guideline has been prepared to assist proponents of mining and extractive industry ('mining') projects in the preparation of development applications under the State significant development provisions of the *Environmental Planning and Assessment Act 1979* (the Act).

This guideline relates to the contents of a Preliminary Environmental Assessment (PEA) and Environmental Impact Statement (EIS). In particular, it is intended to ensure applicants clearly describe:

1. what the consent authority is being asked to approve (project description);
2. the strategic context for the development;
3. what choices and trade-offs have been made (and why) in the process of designing a mining development (project rationale);
4. environmental, social and economic impacts (as a separate component to the project description); and
5. what consultation will be or has been undertaken in preparing the development application.

Background

The majority of large mining developments in New South Wales (NSW) are assessed and determined under the State Significant Development (SSD) provisions (Division 4.1 of Part 4) of the Act. Smaller quarries and non-coal mines require development consent under Part 4 of the Act.

Section 78A of the Act requires an EIS to be submitted in support of development applications for mining projects. The proponent is required to apply for the Secretary's Environmental Assessment Requirements (SEARs) prior to preparing an EIS. In practice, the request for SEARs is accompanied by a PEA, which informs the development of the SEARs.

The information supplied in the PEA is further developed and expanded on in the EIS, consistent with requirements set out in the SEARs.

This guideline includes the requirements of the NSW Government for mining applications. Some mining projects may also require a site verification certificate¹ or gateway certificate² under the *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* (Mining SEPP). The gateway assessment is undertaken by an independent expert panel – the Mining and Petroleum Gateway Panel – that assesses the proposal against specific criteria set out in the Mining SEPP.

The mine planning process

Consistent with the principles of ecologically sustainable development, proper consideration must be given to potential environmental, social and economic impacts during the mine planning process. This requires applicants to ensure that the development of a preferred mine design addresses:

- the full lifecycle of the mine from construction and operation to

¹ The requirements for site verification certificates are set out at majorprojects.planning.nsw.gov.au/application/SVC.

² The requirements for the Gateway Process are set out in the [Guideline for Gateway Applicants](#).



- rehabilitation and lease relinquishment;
- potential environmental and community impacts; and
- consideration of project options and alternatives to avoid or minimise negative impacts.

An effective mine planning process should:

- reduce the potential for environmental and community impacts which exceed relevant approval criteria;
- reduce levels of public concern;
- avoid potential delays in the approval process; and
- optimise the sustainability of post-closure land use outcomes.

Applicants should adopt an iterative approach to developing the preferred mine design, with regular reviews based on:

- results of ongoing exploration and technical feasibility studies;
- consideration of effective resource recovery;
- evaluation of the project viability and the economic benefits of developing the resource;
- results of baseline environmental studies (e.g. identification of significant flora/fauna species or areas of particular cultural significance);
- outcomes of environmental assessment studies (e.g. site water balance or noise/air quality modelling);
- consideration of a range of climatic scenarios;
- consideration of cumulative impacts with other nearby projects and proposals;

- whether environmental, social and economic impacts can be avoided, minimised or adequately mitigated; and
- ongoing consultation with key stakeholders, including regulators and the community.

Avoidance, minimisation and mitigation measures should be the primary strategies for managing the potential adverse impacts of a development. Early adoption of these strategies can reduce additional cost and delays during the assessment and determination process.

The applicant should consider the capacity for mining to coexist with surrounding existing and proposed land uses. Factors to consider include:

- the characteristics of the surrounding environment and community and their sensitivity to impacts (including competing land uses);
- the characteristics of the potential impacts, including their predictability;
- potential future mine expansions; and
- proposed impact minimisation and mitigation strategies and their effectiveness and reliability.

Appropriate separation distances provide confidence that existing land uses can be maintained. Early consideration may need to be given to acquiring sufficient land to provide adequate separation from nearby sensitive land uses to minimise impacts and ensure long-term compliance with air quality, noise or water quantity and quality requirements.

Careful consideration should be given to both the location of the primary development and the suitability of



sites selected for ancillary activities and infrastructure, including processing plants, pipelines and transportation corridors.

Applicants should give consideration to:

- locating linear ancillary infrastructure within existing disturbance corridors;
- using topographical features to reduce potential amenity impacts (for example noise impacts); and
- sharing infrastructure with nearby operations where appropriate commercial agreements can be reached.

The project needs to be outlined in its entirety so that the interactions between various components of a mine plan and the reasoning behind design decisions are clearly articulated in the development application. This will ensure that decision makers understand what choices or trade-offs have been made and why.

SPECIFIC REQUIREMENTS FOR SSD MINING DEVELOPMENTS

The development application process for State significant mining requires the submission of two key documents. These are the:

- Preliminary Environmental Assessment (PEA); and
- Environmental Impact Statement (EIS).

Preliminary Environmental Assessment

A PEA is required to inform the Government's development of project-specific Secretary's Environmental Assessment

Requirements (SEARs) for a development application.

A PEA is to be presented in summary and predominantly qualitative form, avoiding lengthy and overly technical discussion. A PEA is not intended to involve a detailed analysis of a proposal. For this reason, the format and layout should be relatively simple. Reference can be made to preliminary assessments and other studies by inclusion of summary result tables etc. rather than incorporating this information in its entirety.

A PEA will be made available to all stakeholders, including the community, and is intended to enable stakeholders to gain a clear understanding of what is proposed.

The length and format of a PEA will depend on the proposal, but as a guide, a PEA for a complex proposal can be effectively presented in a document of 50 pages, including an executive summary.

Environmental Impact Statement

In contrast to a PEA, an EIS is required to inform the consent authority's decision as to whether a project should be approved (through the grant of a development consent, environment protection licence and mining lease).

A robust EIS will quantify both the existing environment and potential environmental impacts to a high degree of certainty.

There is no restriction on the length of an EIS.

The mining-specific requirements for a PEA and an EIS are set out under the following headings.



1 PROJECT SUMMARY

The purpose of this section is to assist applicants in providing a concise summary of the key aspects of the proposed development.

Mining-specific PEA requirements

The PEA should include a table which summarises the key attributes of the project (similar to the example provided at Table 1). The content and level of detail provided in this table should be consistent with the level of project certainty at the time of submission of the PEA.

Mining-specific EIS requirements

The EIS should include a project summary table similar to the example provided at Table 1, but completed to a level of specificity and detail appropriate to the nature and extent of the proposed development.

2 PROJECT DESCRIPTION

2.1 Development description

The purpose of this section is to assist applicants in clearly and accurately defining what is being proposed as part of the development application.

Mining-specific PEA requirements

The PEA should provide a clear and concise summary of the proposed mine design and project as a whole. It should describe the types of activities that will be undertaken during each stage of the development and include:

- the objectives of the development; and
- an outline of the nature, scale and extent of the development.

Mining-specific EIS requirements

The EIS should include a complete description of the development, to a level of specificity and detail appropriate to the nature and extent of the proposed development. For example, this would include detailed information in relation to the elements identified for PEA as well as details such as:

- The nature and extent of the development, including:
 - *mine location and extent;*
 - *mine design and layout;*
 - *mining method;*
 - *infrastructure and mining plant;*
 - *processing/beneficiation activities;*
 - *product transport; and*
 - *the intended post-mining land use.*
- The intended scale of the development, including:
 - *expected life of the project;*
 - *production rates;*
 - *capital expenditure;*
 - *employment (approximate number of FTE);*
 - *export revenue; and*
 - *projected royalties.*
- Workforce:
 - *number of workers;*
 - *workforce source (local/non-local);*
 - *accommodation requirements and availability;*
 - *number of shifts;*
 - *shift change times; and*
 - *workforce transport requirements (FIFO/traffic implications).*
- Waste streams:
 - *type (waste rock, tailings, tyres etc);*
 - *production rate;*



- *fate;*
- *breakdown products; and*
- *any specific management requirements.*

The EIS should also include a tabulated summary of the environmental assessment requirements, and references to where these have been addressed in the EIS.

2.2 Ancillary developments

The purpose of this section is to assist the applicant in identifying any related developments that are NOT being proposed as part of the subject development application but are necessary to support that development.

Mining-specific PEA requirements

The PEA should outline:

- any ancillary developments (e.g. processing, transport, pipelines etc.); and
- what approval pathway will be sought for those ancillary developments.

The level of detail in this section should be appropriate to the level of project certainty at the time of submission of the PEA.

Mining-specific EIS requirements

The EIS should include a complete description of any ancillary developments and their approval requirements to a level of specificity and detail appropriate to the nature and extent of the proposed development.

2.3 Development schedule

The purpose of this section is to assist applicants in ensuring that the timing of key aspects of the proposed development are clearly

and accurately defined as part of the development application.

Mining-specific PEA requirements

The PEA should outline a conceptual schedule for the proposed development.

The level of detail in this section should be appropriate to the level of project certainty at the time of submission of the PEA.

Mining-specific EIS requirements

The EIS should include a complete description of, and schedule for, each key phase of the development, including:

- construction;
- operation;
- rehabilitation; and
- closure

2.4 Management commitments

The purpose of this section is to assist applicants in ensuring that any management commitments to avoid, minimise or mitigate potential impacts are clearly and accurately defined as part of the development application.

Mining-specific PEA requirements

The PEA should outline proposed conceptual mitigation strategies for managing the potential adverse impacts of the development.

The level of detail in this section should be appropriate to the level of project certainty at the time of submission of the PEA.

Mining-specific EIS requirements

The EIS should set out in detail any commitments to avoid, minimise or mitigate potential impacts of the project. These commitments will be



considered by the consent authority to form part of the project.

The information in this section should be a complete description to a level of specificity and detail appropriate to the nature and extent of the proposed development.

2.5 Mapping requirements

The purpose of this section is to assist applicants in ensuring that the physical layout of the proposed development over time is clearly and accurately defined as part of the development application.

Note that GIS mapping requirements had not been finalised as at the date this guideline was drafted and may be specified separately.

3 STRATEGIC CONTEXT

3.1 Target resource

The purpose of this section is to assist applicants in ensuring that the resource targeted by the proposed development is clearly and accurately defined as part of the development application.

Mining-specific PEA requirements

The PEA should provide summary information on the characteristics of the resource. It should also demonstrate effective and efficient recovery of the resource within land use constraints. This information may include:

- the specifics of any title held over the area under the *Mining Act 1992*;
- exploration methods, geological characteristics, constraints on resource recovery, recoverable resource;
- whether or not the development is likely to have a significant impact

on current or future extraction or recovery of minerals, petroleum or extractive materials, including indication of resource sterilised or not included in order to minimise impacts to sensitive areas;

- the relationship of the resource to any existing mine; and
- whether other industries or projects may be dependent on the development of the resource.

The level of detail in this section should be appropriate to the level of project certainty at the time of submission of the PEA.

Mining-specific EIS requirements

The EIS should include the information required for a PEA above, but to a degree of specificity and detail appropriate to the nature and extent of the proposed development.

3.2 Regional context

The purpose of this section is to assist applicants in ensuring that local and regional sensitivities / constraints on the proposed development are clearly and accurately described as part of the development application.

Mining-specific PEA requirements

The PEA should outline the location of the proposed development in relation to relevant local and regional features using maps and design plans where relevant (see also Section 2.5). This section should also identify relevant:

- land use constraints;
- biophysical, hydrological, environmental and heritage constraints; and
- economic considerations.



Mining-specific EIS requirements

The EIS should include the information required for a PEA above, but to a level of specificity and detail appropriate to the nature and extent of the proposed development. This will include:

- land use constraints:
 - *identification of the existing land use;*
 - *proximity to existing urban areas and settlements and future growth areas;*
 - *competing rural land uses/proximity to sensitive land uses;*
 - *potential competing future or emerging industries;*
 - *proximity to competing resources;*
 - *drinking water storage areas or town water supplies;*
 - *water supply constraints including access to water/competing water users; and*
 - *practical constraints on mining operations such as disposal of incidental water;*
- biophysical, environmental and heritage constraints:
 - *protected areas and areas of high environmental value;*
 - *water sources for catchments, rivers and aquifers;*
 - *matters of national environmental significance identified at regional scale; and*
 - *other biophysical or heritage features of significance mapped or known areas at regional or subregional scale;*
- economic considerations:
 - *availability and proximity to existing mining-related or dependent infrastructure and utilities;*
 - *proximity to competing resources;*
 - *proximity to markets; and*

- *proximity to downstream processing or other related / dependent industries.*

3.3 Permissibility and strategic planning

The purpose of this section is to assist applicants in ensuring that the permissibility of the proposed development is clearly and accurately defined as part of the development application.

Mining-specific PEA requirements

The PEA should outline relevant State and Commonwealth legislation for the development. In particular, the PEA must consider whether the proposal is:

- *permissible under Part 2 of the Mining SEPP; and*
- *State significant development under the State Environmental Planning Policy (State and Regional Development) 2011.*

The PEA must also consider the matters set out under Parts 1, 3 and 4AA of the Mining SEPP and the potential for significant impacts on water resources that may require assessment by the Independent Expert Scientific Committee under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

The level of detail in this section should be appropriate to the level of project certainty at the time of submission of the PEA.

Mining-specific EIS requirements

The EIS should include the information required for a PEA above, but to a degree of specificity and detail appropriate to the nature and extent of the proposed development.



4 PROJECT RATIONALE

The purpose of this section is to assist applicants in ensuring that the reasoning behind the preferred form of the proposed development is clearly and accurately explained as part of the development application.

The intention is that the application brings together the various interconnected components of the proposal and articulates the rationale for the project as a whole so that stakeholders understand what tradeoffs have been made and why.

Mining-specific PEA requirements

The PEA should include an outline of the rationale behind key mine design decisions, for example:

- mining method; and
- setbacks from sensitive receivers.

Mining-specific EIS requirements

The EIS should address the following to a level of specificity and detail appropriate to the nature and extent of the proposed development:

- how has the nature of the resource and geology influenced the extraction method and mine design?
- what other constraints to mining the resource are there and how have they influenced the mine design?
- why the proposed extraction method was selected (e.g. truck and shovel, dragline etc.)?
- how have the costs and benefits of alternative mine extents and mining methods been considered and balanced against resource recovery, project viability and

other economic, environmental and social factors?

- What consequences does the preferred extraction method have for the mine layout, operation and impacts. For example:
 - *pit size and orientation;*
 - *longwall width;*
 - *waste rock volume and dump layout;*
 - *blasting;*
 - *fleet selection and noise/dust;*
 - *access requirements (area required to be exposed for operational reasons);*
 - *the final landform (e.g. final voids); and*
 - *rehabilitation scheduling.*
- mining plant:
 - *why was the proposed mining plant selected?*
 - *is it best in class with respect to water use, noise, dust and exhaust emissions? If not, why not? What effect does this have on setbacks etc?*
- rehabilitation:
 - *what alternative concepts for the post-mining landform design and rehabilitation were considered?*
 - *how were the costs and benefits of these alternatives evaluated and what were the outcomes of this?*
 - *why was the preferred approach chosen?*
- impact avoidance, minimisation and mitigation strategies:
 - *how were impacts avoided?*
 - *what strategies were considered?*
 - *how were the costs and benefits of these alternatives evaluated and what were the outcomes of this?*
- change drivers:

- *is the development likely to include multiple phases, which may require further approval?*
- *identify any drivers which are reasonably likely to result in changes to the mine design or mining operations during the life of the project (e.g. market conditions leading to lower than forecast production rates).*
- *identify how the mine design or mining operations may be influenced by these drivers (e.g. changes to mine sequencing or rehabilitation timing).*
- *describe the sensitivity of the mine design and operations to these drivers.*

5 ENVIRONMENTAL IMPACT ASSESSMENT

The purpose of this section is to assist applicants in ensuring that the potential environmental impacts of the proposed development are clearly and accurately identified and assessed as part of the application.

Mining-specific PEA requirements

The PEA should:

- outline key environmental issues and land use constraints; and
- outline the possible significance and acceptability of potential impacts and whether the project is likely to be viable within these constraints.

The level of detail in this section should be appropriate to the level of project certainty at the time of submission of the PEA.

Mining-specific EIS requirements

In addition to any specific environmental impact assessment requirements set out in Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* and

elsewhere, the EIS should include the information required for a PEA above, but to a degree of specificity and detail appropriate to the nature and extent of the proposed development.

6 CONSULTATION

The purpose of this section is to assist applicants in ensuring that the level and extent of consultation about the proposed development is clearly and accurately defined as part of the development application.

The applicant is expected to conduct an appropriate level of consultation with potentially impacted stakeholders. This may include, but is not limited to:

- affected landholders and businesses;
- local council(s);
- local communities;
- relevant regulators; and
- other relevant agencies.

Mining-specific PEA requirements

The PEA should include:

- an outline of the consultation strategy for the project; and
- a statement of key strategic issues raised or likely to be raised by stakeholders and any proposed responses.

The level of detail in this section should be appropriate to the level of project certainty at the time of submission of the PEA.

Mining-specific EIS requirements

The EIS should include the information required for a PEA above, but to a degree of specificity and detail appropriate to the nature and extent of the proposed development.



Table 1 – Project summary for use at PEA and EIS stages

Project Component	Summary of the Project (example)
Mining Method	Open cut mining in three pit areas covering approx. 1,000 hectares.
Resource	Mining of A1, B1 and B2 Seams to a depth of 200 m.
Disturbance Area	Disturbance of approximately 1,200 hectares with no more than 600 hectares disturbed or unvegetated at any time.
Annual Production	Run-of-mine coal production up to 5 million tonnes per annum.
Mine Life	Approximately 21 years of mining.
Total Resource Recovered	Up to 95 million tonnes of run-of-mine (ROM) coal.
Beneficiation	Processing at a CHPP of up to 5 million tonnes p.a. of ROM coal.
Management of Mining Waste	Emplacement of waste rock in in-pit and out-of-pit waste rock emplacements up to a height of approximately 150 m AHD.
General Infrastructure	Access roads, electricity supply and distribution, rail loop, CHPP, train loading infrastructure, ROM coal stockpiles, coal handling equipment, diesel storage, administration, workshop, stores and ablution buildings, heavy vehicle servicing, parking and washdown facilities.
Product Transport	Transport of product coal by train with an average of 3 trains per day and a maximum of five trains per day during peak periods.
Water Supply and Balance	<p><i>[This section should outline:</i></p> <ul style="list-style-type: none"> <i>• consideration of relevant policies and guidelines</i> <i>• sources and security of water supply and contingency options</i> <i>• all defined water sources under relevant water sharing plans</i> <i>• water use requirements on site (including a detailed water balance)</i> <i>• any off-site water transfers and discharges]</i>
Water Management	<p><i>[This section should outline how water will be managed, including, but not limited to:</i></p> <ul style="list-style-type: none"> <i>• clean water (e.g. stormwater runoff from undisturbed surrounding land)</i> <i>• contaminated runoff (e.g. from waste rock emplacements)</i> <i>• pit water (e.g. groundwater seepage)</i> <i>• wastewater products (e.g. from processing materials)</i> <i>• reuse (e.g. irrigation, dust control)</i> <i>• potential discharges (including location(s)) and practical options to avoid discharge.]</i>
Operational Workforce	Approximately 250 people (including contractor personnel).
Hours of Operation	Open cut mining, coal processing and rail load-out 24 hours per day, seven days per week.
Key Environmental Impacts and Mitigation Measures	<p><i>[Highlight the major potential impacts and measures proposed to address those impacts, including:</i></p> <ul style="list-style-type: none"> <i>• air impacts</i> <i>• noise impacts</i> <i>• waste production and management]</i>
Capital investment Value	\$500 million



Standard Secretary's Environmental Assessment Requirements (SEARs)

FOR STATE SIGNIFICANT MINING DEVELOPMENTS

MAY 2015



INTRODUCTION

State significant development is regulated under the *Environmental Planning and Assessment Act 1979*, which requires a proponent to apply to the Department of Planning and Environment for development consent, supported by an Environmental Impact Statement. That Environmental Impact Statement must take into account the requirements of the *Environmental Planning and Assessment Regulation 2000* and any additional Environmental Assessment Requirements issued by the Secretary.

This document identifies the standard Secretary's Environmental Assessment Requirements (SEARs) for State significant mining applications. The SEARs cover those requirements that would be reasonably expected to apply to the majority of new mining applications in NSW. However, the Secretary may decide to issue Environmental Assessment Requirements for a specific project that deviates from the SEARs (this may include adding additional requirements or removing irrelevant requirements). This allows the Secretary to ensure an Environmental Impact Statement is appropriately targeted to enable Government assessment of the identified project, accounting for any special or region-specific environmental risks.

The SEARs incorporate and consolidate the assessment requirements of the:

- Department of Planning and Environment for development consent applications;
- Environment Protection Authority for Environment Protection Licence applications; and
- Division of Resources and Energy for Mining Lease applications.

By providing regulators with this information early in the assessment process, it enables the assessment of State Significant mining proposals to be integrated across regulatory agencies. This will lead to more efficient assessment processes and reduce duplication and uncertainty in regulatory responsibilities and activities.

Definitions

For the purposes of this Guideline:

<i>Approval (instrument)</i>	relates to a relevant regulatory approval instrument, for example: a Development Consent (DC), Environment Protection Licence (EPL), or Mining Lease (ML)
<i>AIS</i>	means an Agricultural Impact Statement, prepared in accordance with the Strategic Regional Land Use Policy Guideline for Agricultural Impact Statements (DPE 2012)
<i>BSAL</i>	means Biophysical Strategic Agricultural Land
<i>DPE</i>	means the Department of Planning and Environment
<i>DPI</i>	means the Department of Primary Industries
<i>DRE</i>	means the Division of Resources & Energy
<i>EIS</i>	Environmental Impact Statement
<i>EPA</i>	means the Environment Protection Authority
<i>Mining operation</i>	means a development which is the subject of an authorisation under the <i>Mining Act 1992</i> and a consent or approval under the <i>Environmental Planning and Assessment Act 1979</i>
<i>OEH</i>	means the Office of Environment and Heritage
<i>Proponent</i>	the person, company or other group applying for an approval
<i>Regulatory agencies</i>	means DPE, EPA or DRE, or their successor agencies



SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

The information outlined in the box below will be included in Environmental Assessment Requirements to ensure a clear link between the requirements and a specific project proposal.

Secretary's Environmental Assessment Requirements Section 78A(8A) of the <i>Environmental Planning and Assessment Act 1979</i> State Significant Development (Mining)	
Application Number	SSD [####]
Proposal	The [Proposal name], which includes: <ul style="list-style-type: none"> [description]
Location	[Location description, approximate only]
Applicant	[Applicant name]
Date of Issue	[day] [month] [year]
Further consultation after 2 years	If you do not lodge a DA and an EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Secretary in relation to the requirements for lodgement.

GENERAL REQUIREMENTS

The EIS for the development must:

- Address the environmental, social and economic issues that the consent authority should consider when assessing the application;
- Be informed by stakeholder consultation, including with relevant local, State and Commonwealth Government authorities, infrastructure and service providers, community groups and affected landowners, as well as the local community;
- Contain the information required by Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*;
- Consider and respond to the NSW Mining & Petroleum Gateway Panel's Conditional Certificate (as applicable)¹;

¹ Where Gateway consideration is not applicable, the applicant should prepare an Agricultural Impact Statement (see Land and Soil section).



- Assess the likely impacts of the development on the environment, focusing on the specific issues identified below, including:
 - a description of the existing environment likely to be affected by the development, using sufficient baseline data; and
 - an assessment of the likely impacts of all stages of the development, including any cumulative impacts, taking into consideration any relevant laws, environmental planning instruments (including Part 3 of the *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*), guidelines, policies, plans and industry codes of practice.
- Describe the measures that would be implemented to mitigate and/or offset the likely impacts of the development, and an assessment of:
 - whether those measures are consistent with industry best practice, and represent the full range of reasonable and feasible mitigation measures that could be implemented;
 - the likely effectiveness of those measures, including performance criteria where relevant;
 - whether contingency plans are necessary to manage any residual risks; and
 - a description of the measures that would be implemented to monitor and report on the environmental performance of the development if it is approved.

PROJECT SUMMARY

The EIS must include a project summary consistent with the relevant requirements of the Mine Application Guideline.

PROJECT DESCRIPTION

The EIS must include, consistent with the relevant requirements of the Mine Application Guideline, a full description of:

- the development;
- all activities that may be undertaken as part of the proposal;
- any ancillary developments (that is, any related developments that are NOT being proposed as part of the subject development application but are necessary to support that development); and
- the timing of each key phase of the development.

Management commitments

The EIS must include a full description of any management commitments consistent with the relevant requirements of the Mine Application Guideline, including:

- A consolidated summary of all the proposed environmental management and monitoring measures, identifying all relevant commitments in the EIS;



- A detailed assessment of any noise, air quality, water quality or waste monitoring required during the construction phase and on-going operation of the facility to prevent or minimise any adverse environmental impacts from the development;
- Appropriate data requirements are to be identified as part of the EIS, to form the basis for baseline and ongoing monitoring of environmental parameters;
- A demonstration that the proposed methods for baseline and subsequent monitoring are scientifically robust and statistically sound; and
- Details of monitoring programs, compliance assurance programs and reporting requirements and arrangements that demonstrate the effectiveness of proposed management measures in meeting specified environmental requirements. In addition to outlining proposed programs, clearly identify what is to be monitored and audited and why. This must include identification of monitoring locations, parameters to be monitored, sample analysis methods, the level of reporting proposed. Include information on frequency and type of audits proposed to assure compliance with applicable requirements.

Mapping requirements

The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the *Environmental Planning and Assessment Regulation 2000*.

These documents should be included as part of the EIS and should be provided in an electronic format that enables integration with mapping and other technical software.

STRATEGIC CONTEXT

Target resource

The EIS must fully describe the resource targeted by the development, including:

- a resource/reserve statement that has been prepared in accordance with the most recent Joint Ore Reserve Committee Code (JORC Code), including resource and reserve estimates for each coal seam/ore body proposed to be mined. The statement must include the coal quality parameters/ore grades for each seam/ore body, product specifications and yields²;
- Details of run-of-mine ore, low grade ore-mineralised waste and waste rock tonnage planned to be extracted for each year of the life of the project;
- An estimate of the saleable product planned to be produced for each year of the life of the project; and

² The proponent needs to demonstrate that sufficient resources exist at an Indicated level of confidence (or higher) in order to cover the majority of the initial life of mine production schedule. Any contribution from Inferred resource(s) to the schedule needs to be justified.



- Identification of those market segment(s) product tonnes would be sold into (e.g. export/domestic thermal/metallurgical coal, export/domestic mineral product, Sydney construction materials, local/NSW or interstate etc.)³.

Regional context

The EIS must describe any local and regional sensitivities and constraints on the proposed development, consistent with the relevant requirements of the Mine Application Guideline. The EIS should consider the Government's *Voluntary Land Acquisition and Mitigation Policy* when considering local and regional impacts of proposed mining activity.

Permissibility and strategic planning

The EIS must address the relevant requirements set out in the Mine Application Guideline.

Other approval requirements

The EIS must identify any approvals that must be obtained before the development can commence, including:

- Identification of existing mineral titles, mineral title applications and the final proposed mining lease area(s) for the project site and areas surrounding the proposed project area;
- If the proposal includes Crown Land, demonstrate compliance with the Commonwealth *Native Title Act 1993* and the right to negotiate process for those Crown Lands; and
- Water access licences.

REHABILITATION

The EIS must include a detailed description of progressive rehabilitation timeframes and commitments for each domain, having regard to the following:

Post-mining land use

- Identification and assessment of post-mining land use options;
- Identification and justification of the preferred post-mining land use outcome(s), including a discussion of how the final land use(s) are aligned with relevant local and regional strategic land use objectives; and
- Identification of how the rehabilitation of the project will relate to the rehabilitation strategies of neighbouring mines within the region, with a particular emphasis on the coordination of rehabilitation activities along common boundary areas.

³ It is understood that an estimate of product tonnes split into a particular market segment is difficult to estimate at a particular point in time and is dependent on market conditions as the life of the mine progresses, however the applicant should provide a best estimate of their market mix at the initial stages of the project.



Rehabilitation objectives and domains

- Inclusion of a set of project rehabilitation objectives and completion criteria that clearly define the outcomes required to achieve the post-mining land use for each domain. Completion criteria should be specific, measurable, achievable, realistic and time-bound. If necessary, objective criteria may be presented as ranges.

Rehabilitation Methodology

- Details regarding the rehabilitation methods for disturbed areas and expected time frames for each stage of the rehabilitation process; and
- Mine layout and scheduling, including maximising opportunities for progressive final rehabilitation. The final rehabilitation schedule should be mapped against key production milestones (i.e. ROM tonnes) of the mine layout sequence before being translated to indicative timeframes throughout the mine life. The mine plan should maximise opportunities for progressive rehabilitation.

Conceptual Final Landform Design

- Inclusion of a drawing at an appropriate scale identifying key attributes of the final landform, including final landform contours and the location of the proposed final land use(s).

Monitoring and Research

- Outlining the monitoring programs that will be implemented to assess how rehabilitation is trending towards the nominated land use objectives and completion criteria;
- Details of the process for triggering intervention and adaptive management measures to address potential adverse results as well as continuously improve rehabilitation practices; and
- Outlining any proposed rehabilitation research programs and trials, including their objectives. This should include details of how the outcomes of research are considered as part of the ongoing review and improvement of rehabilitation practices.

Post-closure maintenance

- Description of how post-rehabilitation areas will be actively managed and maintained in accordance with the intended land use(s) in order to demonstrate progress towards meeting the closure objectives and completion criteria in a timely manner.

Barriers or limitations to effective rehabilitation

- Identification and description of those aspects of the site or operations that may present barriers or limitations to effective rehabilitation, including:
 - evaluation of current rehabilitation techniques and performance against existing rehabilitation objectives and completion criteria;
 - an assessment and life of mine management strategy of the potential for geochemical constraints to rehabilitation (e.g. acid rock drainage, spontaneous combustion etc.), particularly associated with the management of overburden/interburden and reject material;



- the processes that will be implemented throughout the mine life to identify and appropriately manage geochemical risks that may affect the ability to achieve sustainable rehabilitation outcomes;
 - a life of mine tailings management strategy, which details measures to be implemented to avoid the exposure of tailings material that may cause environmental risk, as well as promote geotechnical stability of the rehabilitated landform; and
 - existing and surrounding landforms (showing contours and slopes) and how similar characteristics can be incorporated into the post-mining final landform design. This should include an evaluation of how key geomorphological characteristics evident in stable landforms within the natural landscape can be adapted to the materials and other constraints associated with the site.
- Where a void is proposed to remain as part of the final landform:
 - a constraints and opportunities analysis of final void options, including backfilling, to justify that the proposed design is the most feasible and environmentally sustainable option to minimise the sterilisation of land post-mining;
 - a preliminary geotechnical assessment to identify the likely long term stability risks associated with the proposed remaining high wall(s) and low wall(s) along with associated measures that will be required to minimise potential risks to public safety; and
 - outcomes of the surface and groundwater assessments in relation to the likely final water level in the void. This should include an assessment of the potential for fill and spill along with measures required be implemented to minimise associated impacts to the environment and downstream water users;
 - Consideration of the controls likely to be required to either prevent or mitigate against these risks as part of the closure plan for the site;
 - Where an ecological land use is proposed, demonstrate how the revegetation strategy (e.g. seed mix, habitat features, corridor width etc.) has been developed in consideration of the target vegetation community(s);
 - Where the intended land use is agriculture, demonstrate that the landscape, vegetation and soil will be returned to a condition capable of supporting this; and
 - Consider any relevant government policies⁴.

PROJECT RATIONALE

The EIS must address the relevant requirements set out in the Mine Application Guideline.

⁴ The following government policies should be considered when addressing rehabilitation issues:

- Mine Rehabilitation – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)
- Mine Closure and Completion – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)
- Strategic Framework for Mine Closure (ANZMEC-MCA)



ENVIRONMENTAL IMPACT ASSESSMENT

Land and soils

The EIS must:

- Characterise soils across the disturbance footprint, including a soil assessment undertaken in accordance with the NSW Government's BSAL verification protocol (or its latest version);
- Evaluate the current land and soil capability class and associated condition;
- Include an AIS;
- Assess the likely impact of the development on landforms (topography), including:
 - the potential subsidence impacts on cliffs, rock formations and steep slopes (if any); and
 - the feasibility and sustainability of any new landforms;
- Assess the compatibility of the development with other land uses in the vicinity of the development in accordance with the requirements of clause 12 of the *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*;
- Describe the mitigation and management options that will be used to prevent, control, abate or minimise identified soil and land resource impacts associated with the project. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented;
- Describe the outcomes from consultation with relevant stakeholders, including key agencies (such as DPI and OEH), landholders and agricultural businesses in the locality; and
- Consider any relevant government policies⁵.

Water

The EIS must:

- Base the assessment of adequate baseline data to account for typical temporal and spatial variations;
- Describe relevant groundwater and surface water resources, with details of seasonal and historic annual variations in rainfall and evaporation;

⁵ The following government policies should also be considered when addressing land issues:

- Interim Protocol for Site Verification & Mapping of Biophysical Strategic Land (OEH);
- Landslide risk management guidelines presented in Australian Geomechanics Society (2007);
- Managing urban stormwater: soils and construction, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; B Waste landfills; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC 2008).;
- Site Investigations for Urban Salinity (DLWC, 2002);
- Soil and Landscape Issues in Environmental Impact Assessment (NOW); and
- State Environmental Planning Policy No. 55 – Remediation of Land.



- Identify relevant Water Quality Objectives for surface and groundwater, including indicators and associated trigger values or criteria, in accordance with National Water Quality Management Strategy Guidelines for fresh and marine water quality, drinking water, groundwater protection and water quality monitoring and reporting;
- Identify and describe the application of any relevant Water Sharing Plan, or other management plan, to the proposal;
- Assess the impacts of the development on:
 - the quantity and quality of the region’s ground and surface water resources, connectivity between water sources, water-dependent assets, water-related infrastructure, connectivity with sea water and other water users;
 - sediment laden water from disturbed areas;
 - saline/contaminated water from underground workings;
 - beneficial use of aquifers and groundwater dependent ecosystems;
 - existing flow regime; and
 - ecosystem quality, quantity and function.
- Describe the proposed management and use of water by the development, including:
 - a detailed and consolidated site water balance;
 - control of clean water, including details of any clear water diversion structures;
 - management of stormwater and excess water;
 - details of water storage facilities, volume estimates and fit-for-purpose water reuse potential;
 - procedures for responding to incidents, including identification of trigger values; and
 - identification of discharge points, anticipated frequency, volume and characterisation of water discharged (including pollutants).
- Demonstrate that all practical options to avoid discharge have been implemented and outline any measures taken to reduce the pollutant load, where a discharge is necessary. Where a discharge is proposed, analyse expected discharges in terms of:
 - the impact on the receiving environment, including consideration of all pollutants that pose a risk of non-trivial harm;
 - Water Quality Objectives, including Total Suspended Solids, demonstrating that ambient targets can be met;
 - any relevant Catchment Action Plan or Coastal Zone Management Plan;
 - salt balance, to be compliant with the requirements of any relevant Salinity Trading Scheme or the objective of "no new salt" being introduced into surface water systems;

- if discharge includes a mixing zone, demonstrate National Water Quality Management Strategy criteria can be achieved at edge of mixing zone or that impacts are reversible; and
- volume and timing, especially in relation to periods of low flow in receiving watercourses.
- Demonstrate how the proposal will:
 - protect Water Quality Objectives in receiving waters, where they are being achieved; and
 - contribute towards achievement of the Water Quality Objectives, where they are not being achieved.
- Model long term impacts of any final landform on the surface and groundwater regime, including impacts due to contaminant throughflow, spillage and transport through the final landform, and an assessment of pit lake quality and model contaminant enrichment/accumulation and salt stratification within any proposed final void lakes; and
- Consider any relevant government policies⁶.

⁶ The following government policies should be considered when addressing water issues (see also next page):

- NSW Aquifer Interference Policy 2012 (NOW)
- NSW State Groundwater Policy Framework Document (NOW)
- NSW State Groundwater Quality Protection Policy (NOW)
- National Environment Protection Measure Guideline on the Investigation Levels for Soil and Groundwater (EPHC, 1999)
- Australian Groundwater Modelling Guidelines 2012 (Commonwealth)
- National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
- NSW Floodplain Development Manual 2005
- Floodplain Risk Management Guideline (OEH)
- Guidelines for the Assessment & Management of Groundwater Contamination (EPA)
- Groundwater Sampling and Analysis: Field Guide (Geosciences Australia, 2009)
- Surface Water
- Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation (EPA)
- NSW State Rivers and Estuary Policy (NOW)
- NSW Government Water Quality and River Flow Objectives (EPA)
- Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC 2006)
- National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)
- National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)
- National Water Quality Management Strategy: Guidelines for Sewerage Systems – Effluent Management (ARMCANZ/ANZECC)
- National Water Quality Management Strategy: Guidelines for Sewerage Systems – Use of Reclaimed Water (ARMCANZ/ANZECC)
- Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (EPA)
- Managing Urban Stormwater: Soils & Construction (Landcom) and associated Volume 2E: Mines and Quarries (DECC)
- Bunding and Spill Management (OEH - environment.nsw.gov.au/water/bundingspill.htm)
- Environmental Guidelines: Use of Effluent by Irrigation (EPA)
- A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH)
- Risk Assessment Guidelines for Groundwater Dependent Ecosystems (NOW, 2012)



Flooding

The EIS must:

- Assess the likely upstream and downstream flood impacts of the development;
- Map features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:
 - flood prone land;
 - flood planning area, the area below the flood planning level; and
 - hydraulic categorisation (floodways and flood storage areas).
- Describe flooding assessment and modelling used to determine the design flood levels for events, including a minimum of the 1 in 10 year, 1 in 100 year flood levels and the probable maximum flood, or an equivalent extreme event. The modelling must consider:
 - impacts of the proposal on existing flood behaviour for a full range of flood events, including up to the probable maximum flood;
 - impacts of the proposal on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazards and hydraulic categories; and
 - impacts of the flood assessment on the proposed water management structures, such as sediment basins and stormwater runoff quality management systems.

Biodiversity

The EIS must:

- Assess biodiversity values and the likely biodiversity impacts of the development in accordance with:
 - the Framework for Biodiversity Assessment, unless otherwise agreed by OEH, by a person accredited in accordance with s142B(1)(c) of the *Threatened Species Conservation Act 1995*, except where a strategic regional assessment is already in place; and
 - a comprehensive biodiversity offset strategy, in accordance with the NSW Biodiversity Offsets Policy for Major Projects.
- Consider potential impacts on aquatic biodiversity and assess any impacts in accordance with the Fisheries NSW policy and guidelines for fish habitat conservation and management (Update 2013).
- Consider any relevant government policies⁷.

• NSW Guidelines for Controlled Activities on Waterfront Land (NOW)
• Information Guidelines for Independent Expert Scientific Committee advice on coal seam gas and large coal mining development proposals (if IESC assessment requirement is necessary)

⁷ The following government policies should be considered when addressing biodiversity issues:

• BioBanking Assessment Methodology (OEH)



Heritage

The EIS must assess the likely Aboriginal and historic heritage (cultural and archaeological) impacts of the development:

- Identify and describe the Aboriginal and historic heritage values that exist across the whole area that will be affected by the proposal. This may require surface survey and test excavation;
- Where Aboriginal cultural heritage values are identified, consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (OEH). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented;
- Demonstrate measures taken to avoid, minimise and mitigate any impacts on Aboriginal and historic heritage values;
- Identify any conservation outcomes; and
- Consider any relevant government policies⁸.

Blasting

The EIS should consider blasting impacts in the context of air quality, and noise and vibration issues, as outlined in the relevant sections below.

Air quality

The EIS must include a detailed Air Quality Impact Assessment prepared according to the requirements and guidelines contained in the 'Approved Methods for the Modelling and Assessment of Air Pollutants in NSW'. The Air Quality Impact Assessment must:

- Demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations Act 1997* and the *Protection of the Environment Operations (Clean Air) Regulation 2010*;
- Assess the risk associated with potential discharges of fugitive and point source emissions for all stages of the proposal. Assessment of risk relates to environmental harm, human health, and amenity;

-
- Environmental Offsets Policy (Commonwealth DoE)
 - NSW State Groundwater Dependent Ecosystem Policy (NOW)
 - Risk Assessment Guidelines for Groundwater Dependent Ecosystems (NOW)
 - Upper Hunter Strategic Assessment – Interim Policy (DP&E)
 - State Environmental Planning Policy No. 44 – Koala Habitat Protection

⁸ The following government policies should be considered when addressing heritage issues:

- The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
- Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH)
- Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (OEH)
- Code of Practice for Archaeological Investigations of Objects in NSW (OEH)
- Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (OEH)
- NSW Heritage Manual (DUAP)
- Statements of Heritage Impact 2002 (Heritage Office and DUAP).



- Justify the level of assessment undertaken on the basis of risk factors, including but not limited to:
 - proposal location;
 - characteristics of the receiving environment; and
 - type and quantity of pollutants emitted.
- Describe the receiving environment in detail. The proposal must be contextualised within the receiving environment (local, regional and inter-regional as appropriate). The description must include but need not be limited to:
 - meteorology and climate;
 - topography;
 - surrounding land-use;
 - receptors; and
 - ambient air quality.
- Include a detailed description of the proposal. All processes that could result in air emissions must be identified and described. Sufficient detail to accurately communicate the characteristics and quantity of all relevant emissions must be provided;
- Identify the location and extent of all relevant fixed and mobile sources of emissions to the air from the development, including rehabilitation and exposed areas. The location of all relevant emission sources should be clearly marked on a plan for key years of the mine development;
- Include consideration and justification of reasonable 'worst case' emission scenarios. Consideration should be given to factors including, but not limited to:
 - emission quantity;
 - emission source locations;
 - level of production;
 - type and quantity of material(s) handled; and
 - cumulative influences from other existing, approved and proposed mines and from other industry.
- The EIS must identify all relevant pollutants of concern and estimate emissions by quantity, particle size, source(s), and discharge point(s). Include all mechanically generated, combustion, and transport related emissions;
- For all sources of fugitive TSP, PM₁₀ and PM_{2.5} for key years throughout the life of the proposal, the impact assessment must include:
 - list of emission factors;
 - description and justification of all relevant parameters used in the emission estimation equations, including site specific measurements, proponent recommended values or published literature;
 - detailed emission estimates plus descriptive summary;



- methodology used to produce time varying emissions from annual emissions;
- list of control factors and their justification, including methods used to achieve best management practice that are directly linked to control factors (e.g. speed limits on vehicles, watering rates, use of chemical suppressants etc.); and
- base case inventory with no control and a final inventory with all relevant proposed emission controls.
- Detail emission control techniques/practices that will be employed by the proposal. All relevant emission controls must be benchmarked against best practice process design and emission control. Nominated controls must be explicitly linked to calculated emission reductions adopted in the air quality impact assessment emissions inventory, with all assumptions documented and justified. Reference should be made to procedures outlined in Coal Mine Particulate Matter Control Best Practice - Site-specific determination guideline (OEH November 2011)
www.environment.nsw.gov.au/resources/air/20110813coalmineparticulate.pdf;
- Account for cumulative impacts associated with existing emission sources as well as any currently approved or proposed developments linked to the receiving environment;
- Include air dispersion modelling where there is a risk of adverse air quality impacts, or where there is sufficient uncertainty to warrant a rigorous numerical impact assessment. Air dispersion modelling must be conducted in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC 2005)
www.environment.nsw.gov.au/resources/air/ammodelling05361.pdf;
- This assessment should include the following pollutants, as a minimum:
 - dust deposition;
 - total suspended particles;
 - PM₁₀ particulate matter;
 - PM_{2.5} particulate matter; and
 - Nitrogen dioxide (NO₂).
- Results of dispersion modelling should be presented, at a minimum, as follows:
 - isopleth plots showing the geographic extent of maximum pollutant concentrations (incremental and cumulative);
 - tables presenting the maximum predicted pollutant concentrations (increment and cumulative) and the frequency of any predicted exceedances at each surrounding privately-owned properties, mine-owned properties and other sensitive receptors (as applicable); and
 - time series and frequency distribution plots of pollutant concentrations at each private receptor location at which an exceedance is predicted to occur.

Where no exceedances are predicted, the analysis must be performed for the most impacted off site sensitive receptor.



- Provide a detailed discussion of all relevant proposed emission control measures in the form of a project Air Quality Management Plan. The plan must include details of a proactive and reactive management system. The information provided must include measurable and auditable measures:
 - link proposed emission controls to the site specific best practice determination assessment;
 - timeframes for implementation of all identified emission controls;
 - key performance indicators for emission controls;
 - monitoring methods (location, frequency, duration);
 - response mechanisms;
 - responsibilities for demonstrating and reporting achievement of KPIs;
 - record keeping and complaints response register; and
 - compliance reporting.
- Consider any relevant government policies⁹.

Noise and vibration

The EIS must:

- Assess the likely operational noise impacts of the development (including construction noise) under the NSW Industrial Noise Policy, including the 'Application Notes – Industrial Noise Policy' as published from time to time on EPA's website (www.epa.nsw.gov.au), as amended and/or superseded by current NSW Government policies or guidelines specific to industrial noise impact assessment'. If a claim is made for specific construction noise criteria for certain activities, then this claim must be justified and accompanied by an assessment of the likely construction noise impacts of these activities under the Interim Construction Noise Guideline;
- Assess the likely public road noise impacts of the development under the NSW Road Noise Policy (i.e. traffic generating development impacts); and
- Assess the likely rail noise impacts of the development for both public (NSW Rail Network) and private (non-network) rail lines under the Rail Infrastructure Noise Guideline;
- Assess vibration impacts associated with the proposed development (including construction and operation but excluding those associated with blasting activities) should be assessed using the Assessing Vibration: a technical guideline (DEC, 2006); and

⁹ The following government policies should be considered when addressing air quality issues:

- Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA)
- Coal Mine Particulate Matter Control Best Practice – Site Specific Determination Guideline (EPA)
- Generic Guidance and Optimum Model Settings for the CALPUFF Modelling System for Inclusion in the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)
- National Greenhouse Accounts Factors (Commonwealth)
- Assessment and Management of odour from stationary sources in NSW



- Assess likely operational overpressure and groundborne vibration impacts from blasting activities applying the Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZECC, 1990).

Waste

The EIS must:

- Identify all wastes to be generated by all aspects of the project and identify procedures for the handling and management of all wastes produced. The handling of rejects, tailings, overburden material and tyres are important aspects for consideration;
- Identify, characterise and classify all waste (including liquid waste) that will be generated onsite through excavation, demolition or construction activities, including proposed quantities of the waste¹⁰;
- Include a detailed plan for the classification of waste material generated onsite (including liquid waste), including the sampling locations and sampling regime that will be employed to classify the waste in accordance with the EPA's Waste Classification Guidelines, particularly with regards to the identification of contamination hotspots;
- Demonstrate how waste will be managed in accordance with the waste hierarchy, established under the *Waste Avoidance and Resource Recovery Act 2001*, which aims to ensure that resource management options are considered against the following priorities:
 - Avoidance including action to reduce the amount of waste generated by households, industry and all levels of government;
 - Resource recovery including reuse, recycling, reprocessing and energy recovery, consistent with the most efficient use of the recovered resources; and
 - Disposal including management of all disposal options in the most environmentally responsible manner.
- Identify, characterise and classify all waste (including liquid waste) that is proposed to be removed to an offsite location for either recycling, reprocessing or disposal. Each waste stream should be quantified and an appropriate management option identified for each stream;
- Identify, characterise and classify all waste (including liquid waste) that is proposed to be disposed of onsite. The disposal location and type of waste for each stream should be described, including information on the waste disposal infrastructure proposed to be constructed to contain that waste (i.e. monocell construction and specifications, tyre disposal pits, etc.). The disposal method should include an assessment of the risks to the surrounding environment (groundwater, air, surface water, etc.) or a justification that there is no risk;
- Provide details of how waste will be handled and managed during transport to a lawful facility. If the waste possesses hazardous characteristics, the Proponent

¹⁰ All waste must be classified in accordance with the EPA's Waste Classification Guidelines.



must provide details of how the waste will be treated or immobilised to render it suitable for transport and disposal;

- Where appropriate given the nature of the proposal, provide details of how stockpiles of waste will be located and managed onsite to minimise pollution, including:
 - labelling of stockpiles for identification, ensuring that all waste is clearly identified and stockpiled separately from other types of material (especially the separation of any contaminated and non-contaminated waste).
 - proposed height limits for all waste to reduce the potential for dust and odour.
 - procedures for minimising the movement of waste around the site and double handling; and
 - measures to be implemented to minimise erosion, leachate and sediment mobilisation.
- Provide details of how any leachate will be:
 - kept separate from stormwater runoff;
 - treated (if applicable); and
 - any proposed transport and disposal of leachate off-site.
- Waste rock emplacement areas with particular attention to:
 - quantity of waste rock likely to be generated;
 - geochemical assessment of the waste rock;
 - proposed strategies for the handling, reuse/recycling and disposal of waste rock, considering the outcomes of the geochemical assessment; and
 - designation of transport routes for the transport of waste rock.
- Identify the management and disposal methods for coal washery rejects (including tailings generated at the mine site), including:
 - quantity of coal washery rejects to be generated;
 - proposed strategies for the handling, storage, reuse/recycling and disposal of coal washery rejects; and
 - details of actions to prevent potential impacts to groundwater, surface water or any other environmental aspect which may occur as a result of the management technique utilised.

Chemicals, hazardous substances and dangerous goods

The EIS must:

- Detail the types and quantity of all chemical and hazardous substances and/or dangerous goods, including but not necessarily limited to: hydrocarbons (oils and fuels), hazardous or dangerous materials (e.g. explosives etc.) to be used or stored onsite; and
- Details of procedures for the handling, storage, transport and disposal of all chemical substances, hazardous or dangerous goods used, stored, processed



or requiring offsite disposal, in addition to the requirements for liquid and non-liquid wastes.

Feral animals and weeds

The EIS must include an overview of the methods, and control programs and targets that will be used to control feral animals and weeds.

Economic appraisal

The EIS must include:

- A detailed calculation of the capital investment value (as defined in clause 3 of the *Environmental Planning and Assessment Regulation 2000*) of the development, including a description of all the assumptions and components from which that calculation is derived.
- A comprehensive economic appraisal, consistent with the NSW Government's *Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals*, which:
 - includes a quantitative analysis and assessment, where feasible and reasonable, of all issues considered in the EIS;
 - qualitatively describes impacts that cannot be quantified; and
 - is incorporated into the conclusions of the EIS as appropriate.

The EIS must also consider any other relevant government policies, including any guidance on the valuation of benefits and costs.

Subsidence [Underground mines only]

The EIS must include an assessment of possible subsidence effects and consequential environmental, social and economic impacts on the natural and built environment. To justify the proposed underground mining projects, the EIS must demonstrate the feasibility of:

- the proposed mining operation (e.g. mining methods, layout and sequences); and
- the proposed strategies to manage subsidence risks to surface or sub-surface features that are considered to have significant economic, social, cultural or environmental value.

Justification must be supported by the information provided by the proponent, including, but not limited to:

- description of the proposed mining operation (e.g. mining methods, layout and sequences);
- identification and general characteristics of surface and subsurface features that may be affected by subsidence caused by the proposed mining;
- general and relevant site conditions including depths of cover, geological, hydrogeological, hydrological, geotechnical, topographic and climatic conditions, as well as any conditions that may cause elevated or abnormal subsidence;



- identification and general characteristics of any previously excavated or abandoned workings that may interact with the proposed or existing mine workings;
- results of preliminary prediction of the nature, magnitude, distribution, timing and duration of subsidence;
- results of a risk assessment in relation to subsidence of surface or sub-surface features that are considered to have significant economic, social, cultural or environmental value, taking into consideration the points above; and
- results of feasibility studies in relation to the proposed mining operation and proposed strategies to manage subsidence risks to surface or sub-surface features that are considered to have significant economic, social, cultural or environmental value.

In relation to the natural environment, the EIS must:

- describe the natural features (both surface and sub-surface) that could be affected by subsidence;
- describe the natural features likely to be affected by the development, using at least two years baseline data to describe background natural variation;
- describe the suite of threatened species, population and ecological communities likely to use these natural features as habitat;
- evaluate the importance of these features to the habitat and life cycle of the threatened entities identified;
- accurately predict likely subsidence effects, including a sensitivity analysis of these predictions.
- assess the potential direct and indirect geological, hydrological and ecological impacts of the predicted subsidence in the short, medium and long term
- outline a detailed monitoring program that enables measurement of the actual geological, hydrological and ecological performance of the development in the short, medium and long term, if it is approved; and
- outline measures proposed to avoid, minimise, manage and offset the direct and indirect impacts, including an evaluation of the effectiveness and reliability of the proposed measures.

Should offsets be required, the proponent should develop a Biodiversity Offsets Strategy in accordance with the draft '*Policy framework for biodiversity offsets for upland swamps and associated threatened species impacted by longwall mining*'.

Transport

The EIS must:

- Detail the options or arrangements for securing access to the NSW rail network, including the potential to share infrastructure with other mines in the region;



- Assess the likely impacts of the development on the capacity, condition, safety and efficiency of the local and State network, with regard for local council requirements; and
- Assess road impacts, including the capacity, condition, safety and efficiency of the local and State road network, with regard to council's requirements; and
- Consider any relevant government policies¹¹.

Visual

The EIS must include an assessment of the likely visual impacts of the development on private landowners in the vicinity of the development and key vantage points in the public domain, paying particular attention to the creation of any new landforms (bunds, etc.), and minimising the lighting impacts of the development.

Public Safety

The EIS must include an assessment of the likely risks of the development to public safety, paying particular attention to potential subsidence risks, bushfire risks, flood risks, and the handling and use of any dangerous goods¹².

Social

The EIS must:

- assess the social impacts of the proposal, having regard to the local and regional impacts of the development; and
- set out proposed measures and strategies to avoid, manage, or mitigate the project's social impacts¹³.

CONSULTATION

The EIS must describe the consultation that was carried out, identify the issues raised during this consultation, and explain how these issues have been addressed.

¹¹ The following government policies should be considered when addressing transport issues:

- Guide to Traffic Generating Development (RTA)
- Road Design Guide (RMS)
- relevant Austroads Standards

¹² The following government policies should be considered when addressing transport issues:

- State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
- Hazardous and Offensive Development Application Guidelines – Applying SEPP 33
- Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis

¹³ The NSW Government is currently considering guidance options, addressing the social impacts of mining developments. This section of the SEARs will be updated once that work is complete.



2015

COUNCIL BUSINESS PAPERS

Ordinary Meeting 17 JUNE 2015

ATTACHMENT **6.2.13**

► Capital Program Update

*Good
Government*

MONTHLY BUDGET REVIEW

ATTACHMENT 1 – CAPITAL
PROGRAM UPDATE

OPERATIONAL PLAN/ DELIVERY
PROGRAM – 2014/15

APRIL

MID-WESTERN REGIONAL COUNCIL

CORPORATE DEPARTMENT

■ ■ ■ ■ ■ TOWARDS 2030



\$'000	ORIGINAL ANNUAL BUDGET	APPROVED VARIATIONS	REVISED ANNUAL BUDGET	PROPOSED VARIATIONS	PROPOSED ANNUAL BUDGET	ACTUAL YTD	PROPOSED ANNUAL BUDGET	%	COMMENT
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Looking after our Community

RURAL FIRE SERVICE - CUDGEGONG HERITAGE BUILDING	135	(85)	50	0	50	7	13%	Land has been allocated and NSW RFS are currently designing the building. Survey work has been completed.
RURAL FIRE SERVICE - WINDEYER RFS SHED	0	20	20	0	20	18	89%	Completed
COMM. TRANSPORT- VEHICLE PURCHASE	50	0	50	0	50	47	94%	Vehicle replacement program completed for the financial year.
GPS CEMETERY SITES	24	0	24	0	24	6	26%	GPS works have been undertaken awaiting data
PUBLIC TOILETS - CAPITAL UPGRADES	10	0	10	0	10	0	0%	Budget only for reactive works as required.
PUBLIC TOILETS - PERCY NOTT PARK	110	150	260	0	260	53	21%	Exeloo prefabricated toilet ordered. Awaiting confirmation of delivery date. Likely to be August 2016
PUBLIC TOILETS - MUDGEES CEMETERY	40	0	40	0	40	1	4%	Work has commenced. Will be completed in early June 2015
PUBLIC TOILETS - LAWSON PARK TOILETS UPGRADE	6	0	6	0	6	4	73%	Completed works to repaint facilities, replace cracked tiles.
PUBLIC TOILETS - ROBERTSON PARK MUDGEES	6	0	6	0	6	5	79%	Completed works to repaint facilities, replace cracked tiles, reseal floors and construct access path
PUBLIC TOILETS - PARENTS ROOM	20	(20)	0	0	0	0	0%	Work has been deferred until a suitable site can be found.
LIBRARY BOOKS	83	(20)	63	0	63	57	92%	Continue to purchase Library books
KANDOS MUSEUM - CAPITAL	116	(41)	75	0	75	74	99%	Complete.

COMMUNITY CENTRES - PERRY ST COMPLEX CAPITAL	35	(35)	0	0	0	0	0%	Work has been deferred until a suitable site can be found.
CAPITAL UPGRADE - GULGONG MEMORIAL	65	0	65	0	65	52	80%	Work complete. Evaporative coolers installed and are now operational, complete.
CAPITAL UPGRADE - RYLSTONE HALL	25	0	25	0	25	23	94%	Works completed - Internal painting and repairs to the floor, and heating system.
CAPITAL UPGRADE - KANDOS HALL	230	(60)	170	0	170	166	98%	Work complete. Roof removal commenced 3 November and completed on 18 November 2014.
CAP UPGRD-CLANDULLA FACILITIES	5	(5)	0	0	0	0	0%	No expression of interest for use. Budget removed in March QBR.
CAPITAL UPGRADE - KANDOS PRESCHOOL	5	0	5	0	5	4	77%	Work complete
ANZAC PARK GULGONG ROTUNDA	3	0	3	0	3	3	107%	Work complete
RURAL HALLS UPGRADE	25	0	25	0	25	0	0%	Work has commenced. Upgrades being provided to Goolma Hall, Hargraves Hall and Bungaba Hall
MUDGEES POOL SAFETY ITEMS	45	(18)	27	0	27	27	100%	Turnstiles installed - works complete.
GULGONG POOL SAFETY ITEMS	25	(1)	24	0	24	24	101%	Turnstiles installed - works complete.
KANDOS POOL SAFETY ITEMS	27	18	45	0	45	45	100%	Turnstiles installed and new pool cleaner purchased - works complete.
GULGONG POOL REPAIRS	0	50	50	0	50	42	84%	No further works are required. Completed
MUDGEES SHOWGROUNDS - REDEVELOPMENT	45	26	71	0	71	20	28%	Fence has been erected and orders placed for the drainage works and heating in the main pavilion.
GLENWILLOW SPORTS GROUND UPGRADES	40	0	40	0	40	37	92%	Complete. New fence provided around No.2 field.

RYLSTONE SHOWGROUND UPGRADE	250	(17)	233	0	233	191	82%	DA approved and order placed with contractor to enclose part of the sheep pavilion to form a storage shed. Project to be completed by June 2015.
GLEN WILLOW SOCCER AMENITIES REBUILD	235	5	240	0	240	249	104%	Complete.
GULGONG SHOWGROUND UPGRADE	250	(50)	200	0	200	189	94%	Scope of works completed under budget, savings returned to reserve.
VICTORIA PARK - FENCING	70	0	70	0	70	0	0%	Works to commence in May
VICTORIA PARK - GRANDSTAND REPAIRS	10	0	10	0	10	8	82%	Completed
BILLY DUNN OVAL - UPGRADES	27	10	37	0	37	18	49%	Shed to be erected in May
VICTORIA PARK UPGRADES	500	(10)	490	0	490	148	30%	Cabling works commenced, Electrical upgrades and installation of lights to occur in May / June
PLAYGROUND UPGRADE - GULGONG TENNIS COURTS	50	0	50	0	50	48	95%	Completed
SAMMY'S FLAT CRICKET NETS	0	20	20	0	20	18	89%	Synthetic coverings to be laid in May
PASSIVE PARKS - LANDSCAPING IMPROVEMENTS	5	0	5	0	5	4	75%	Various minor landscaping works currently being undertaken.
RED HILL RESERVE - TOURISM DEVELOPMENT INVESTIGATION	0	499	499	0	499	140	28%	Tender report to May Council Meeting.
PLAYGROUND EQUIPMENT UPGRADE	6	0	6	0	6	5	81%	Two slides replaced. Remaining budget being used for reactive works later in the year.
SCULPTURES ACROSS THE REGION	30	(10)	20	0	20	15	76%	Another two sculptures installed in Lawson Park West.
AVISFORD RESERVE - CAPITAL	35	(35)	0	0	0	0	0%	Received advice from Office of Environment and Heritage, works on hold until Pea Flower flowers Sept-Dec. Grant department notified.
PLAYGROUND EQUIPMENT - VICTORIA PARK MUDGEE	0	0	0	0	0	0	0%	Completed
DEWHURST DRIVE MUDGEE PLAYGROUND UPGRADE	40	0	40	0	40	40	100%	Completed

NOYES PARK KANDOS PLAYGROUND UPGRADE	35	0	35	0	35	34	96%	Completed
LAWSON PARK - LIGHTING	50	0	50	0	50	40	80%	Completed
LAWSON PARK - RESTORATION STONE FENCE	50	(47)	3	0	3	3	91%	Survey revealed very little movement in the wall over the last five years. No restoration works are required at this stage.
NEW PARK - MELTON ROAD	250	(50)	200	0	200	6	3%	Playground equipment installation commenced, to be completed in May
VICTORIA PARK - RELOCATE PLAYGROUND	60	0	60	0	60	60	100%	Completed
PLAYGROUND SHADING PROGRAM	15	0	15	0	15	15	102%	Completed
LUE PLAYGROUND	0	39	39	0	39	38	97%	Completed
ANZAC PARK TABLES	0	6	6	0	6	5	83%	Completed
PASSIVE PARKS - LAND MATTERS	180	158	338	0	338	165	49%	1. Purchase of land for Park at 8 Doug Gudgeon Drive, complete. 2. Purchase of 74 Fairydale Lane - Contract signed, deposit paid and agreed conditions to be completed before settlement occurs. Plan of subdivision registered. Agreed condition to be completed by 8/5/2015. Estimated completion date - 2 months from completion of agreed conditions i.e. 30/6/2015.
ART GALLERY FACILITY	50	(45)	5	0	5	1	14%	Report going to Council meeting in May
STREET SCAPE CAPITAL IMPROVEMENTS	16	(8)	8	0	8	0	2%	Tree works undertaken throughout the year.
STREET CAPITAL IMPROVEMENTS - ANGUS AVE	3	0	3	0	3	3	140%	Completed
STREETSCAPE IMPROVEMENTS - BELLEVUE ESTATE	5	3	8	0	8	8	102%	Completed

STREETSCAPE - BIN REPLACEMENT PROGRAM	12	(12)	0	0	0	0	0%	Completed replacement of street bins as required. This line item also covered costs associated with the upgrading of the timber slatted bins in the Gulgong CBD as part of the recycling bin program.
STREETSCAPE - RECYCLING BIN PROGRAM	10	18	28	0	28	28	99%	Grant funded purchase and installation of street recycling bins for Kandos, Rylstone, Gulgong and Mudgee completed.
STREETSCAPE - TREE PLANTING RYLSTONE/KANDOS	8	0	8	0	8	3	44%	Completed
Total	3,425	452	3,877	0	3,877	2,195	57%	

Protecting our Natural Environment

RURAL WASTE DEPOT UPGRADES	55	(45)	10	0	10	0	0%	Various signs have been ordered for replacement at rural waste facilities. To be completed by May 2015
MUDGEES WASTE DEPOT UPGRADES	30	135	165	0	165	66	40%	Fencing works completed. Investigation for suitable clay to line new cell through GHD completed. Received advice back from EPA regarding ground water investigation and required works on 30 March 2015. These works will now be scheduled but unlikely to be completed by 30 June 2015. Entry road to be upgraded in June.
WASTE SITES REHABILITATION	100	(100)	0	0	0	0	0%	Budget only.
WTS - HOME RULE UPGRADE	0	10	10	0	10	0	0%	Replacement fencing that has been damaged or stolen. Works to be completed by

								end June 2015.
WASTE SITE REHAB - WINDEYER	0	50	50	0	50	21	41%	Remediation works and capping to Windeyer Waste Transfer Station completed. Fencing to further control tipping on site and to be completed by June 2015.
COMMUNITY RECYCLING CENTRE	0	10	10	0	10	0	0%	Grant funded project to construct a facility that houses problem waste types at the Mudgee Waste Facility. Design and approval stage of project to occur this financial year with remainder of the project to be completed by November 2015.
DRAINAGE CAPITAL IMPROVEMENTS	258	(247)	11	0	11	5	51%	Works planned are for Horatio St detention basin. Tender recommendation to June Council Meeting.
CULVERT INSTALLATIONS	54	0	54	0	54	7	13%	Culverts are installed as locations are identified.
CAUSEWAY IMPROVEMENTS	60	(60)	0	0	0	0	0%	Budget transferred to Coricudgy Road Bridge Repair.
ENV - PUTTA BUCCA WETLANDS CAPITAL	15	0	15	0	15	1	9%	Tree planting in May
WATER NEW CONNECTIONS	132	(36)	96	0	96	81	84%	Provision of connections to new development as required.
WATER AUGMENTATION - GULGONG	25	(10)	15	0	15	0	0%	Increase plant control including installation of online turbidity monitoring equipment. Quotations sought. Installation to commence mid May 2015. Scheduled completion early June 2015.
WATER AUGMENTATION - MUDGEE	5,060	(5,060)	0	0	0	2	0%	Budget has been reallocated to individual water

								augmentation projects below.
WATER AUGMENTATION - MUDGEE HEADWORKS	0	5	5	0	5	5	95%	Plant upgrades to the raw water transfer system, chemical dosing, and additional filtration to cater for growth. Plant designers reviewing current plant capacity prior to proceeding to concept development. Majority of budget transferred to 2015/2016 in the March QBR and scheduled in association with development progress.
WATER AUGMENTATION - WEST MUDGEE EXTENSION	0	15	15	0	15	0	0%	Extension of distribution infrastructure West Mudgee. Consultant is making final changes to the detailed designs and scheduled to complete end May 2015. Majority of budget transferred to 2015/16 in March QBR and tendering and construction scheduled in association with development progress.
WATER REDBANK DAM UPGRADE	0	41	41	0	41	15	36%	Final tree planting will occur in the month of June.
WATER SECURITY OF RYLSTONE SUPPLY	0	1	1	0	1	1	58%	Completed November 2014.
WATER TELEMETRY - BUDGET ONLY	20	0	20	0	20	0	2%	Implementation of remote SCADA control for on-call operations. Initial trial completed January 2015. Provision of digital RTUs for Mudgee Pump Stations. Installation to commence in May 2015.

WATER LOSS MANAGEMENT WORKS	26	4	30	0	30	15	52%	Flow meter and data logger installation at Kandos, Charbon and Clandulla reservoirs. Materials procured. Installation works to be completed May 2015.
WATER MAINS - CAPITAL BUDGET ONLY	300	(300)	0	0	0	0	0%	Budget only. Allocated as per below projects.
WATER MAINS - CHURCH ST SOUTH - MADERIA TO SPRING	0	214	214	0	214	212	99%	Water main replacement works commenced opposite Medical Centre in September 2014. Works completed for area of road restoration works in December 2014.
WATER MAINS - MEDLEY STREET	0	80	80	0	80	59	74%	Replacement of 1950's cast iron main that has failed multiple times over the last 18 months. Scope of works increased with reallocation of Mayne St water main replacement budget (\$18K). Complete May 2015.
WATER MAINS - SPRING ROAD	0	0	0	0	0	0	0%	Extension of water main along Spring Road to mitigate potential for low water pressure during peak periods in South Mudgee. Budget reallocated to Bruce Road alignment in March QBR. New alignment will mitigate low pressure during peak period for existing South Mudgee developments, as well as provide a connection point for new developments in South Mudgee.
WATER MAINS - MARKET ST (LEWIS TO LAWSON)	0	36	36	0	36	37	101%	Replacement of water mains to correspond with planned road works in March. Works completed February 2015. Remaining budget transferred

								to Bruce Road Project in March QBR.
WATER MAINS - BRUCE ROAD	0	138	138	0	138	0	0%	Budget reallocated from Spring Road to Bruce Road alignment in March QBR. New alignment will mitigate low pressure during peak period for existing South Mudgee developments, as well as provide a connection point for new developments in South Mudgee. Land matters and design currently underway. Construction expected to commence June 2015.
WATER PUMP STATION - CAPITAL BUDGET ONLY	64	(64)	0	0	0	0	0%	Budget only. Allocations as per below.
WATER PUMP STATION - CLEARWATER MUDGEE	0	40	40	0	40	0	0%	Pump No. 2 refurbishment scheduled to be completed mid May 2015.
WATER PUMP STATION - BURRUNDULLA BORE FIELD	0	20	20	0	20	0	0%	Recommission C2 bore at Burrundulla well field. Construction commenced. Scheduled to complete May 2015.
WATER RESERVOIR - FLIRTATION HILL MUDGEE	0	15	15	0	15	0	0%	Reservoir roofing to be replaced after summer period. Quotations received, contractor scheduled to commence in June 2015. Completion of project will be July 2015. Budget transferred in March QBR.
RESERVOIRS - PALERMO RD MUDGEE	0	5	5	0	5	0	0%	Roof sealing complete. Reservoir access issue will be rectified with construction of secured ladder in June 2015.

RAW WATER SYSTEMS RENEWALS	15	0	15	0	15	0	0%	Church St reservoir refurbishments due to leaks. Quotations sought to date cannot be progressed within budget. Minor leaks, vermin proofing and structural assessment will proceed within this financial year.
WATER TREATMENT WORKS - MUDGEE	0	31	31	0	31	30	96%	Filter media top-up at Mudgee WTP completed October 2014. Online turbidity monitoring installation completed April 2015.
WATER TREATMENT PLANT - GULGONG	0	3	3	0	3	3	98%	Filter media top-up at Gulgong WTP completed October 2014.
WATER TREATMENT PLANT - RENEWALS	68	(24)	45	0	45	36	81%	Rylstone WTP Flocculation tank has been patch sealed during August 2014. Clear water pump No. 1 at Mudgee WTP refurbished and reinstalled October 2014. Installation of chemical bunding at Rylstone WTP to be completed June 2015.
WATER METERS - BULK	110	0	110	0	110	28	25%	Program to replace water meters greater than 15 years old. Current annual program is behind schedule associated with increase in water billing frequency.
SEWER NEW CONNECTIONS	46	(21)	25	0	25	19	78%	Provision of new connections to new development as required.
SLUDGE DEWATERING MOBILE UNIT	374	49	422	0	422	123	29%	Contract commenced June 2014 for unit to process STP sludge. Unit received onsite April 2015. Commissioning to commence in May 2015.

SEWER AUGMENTATION - RYLSTONE & KANDOS	530	(515)	15	0	15	0	0%	Land matters. Proceeding with proposed STP site land matters from April 2015. Land matters will not be completed this financial year. Majority of budget transferred to 2015/16 in March QBR.
SEWER AUGMENTATION - MUDGEE	0	49	49	0	49	13	26%	Lab equipment and site works including provision of shed and boosted potable water supply completed December 2014. Electrical connections completed in February. Commissioning of works will be undertaken May-June 2015.
SEWER TELEMETRY	20	0	20	0	20	0	2%	Implementation of remote SCADA control for on-call operations. Initial trial completed January 2015. Provision of digital RTUs for Mudgee Pump Stations, following installation of telemetry at Louee Street pump station. Installations to commence May 2015.
SEWER TELEMETRY - RYLSTONE/KANDOS LINK	15	0	15	0	15	5	36%	Survey to establish line of sight for telemetry implementation at sewage pump stations. Survey completed January 2015. Louee Street pump station telemetry installed April 2015.
SEWER AUGMENTATION - CHARBON & CLANDULLA	0	0	0	0	0	0	0%	Budget only. It is proposed to allocate the remaining budget to the following projects upon further investigation: Lawson Park bridge rising main replacement, sewer main relining.
SEWER MAINS - CAPITAL BUDGET ONLY	361	(361)	0	0	0	0	0%	Budget only. Allocated as per

								below.
SEWER MAINS RELINING	0	423	423	0	423	318	75%	Year 2 of 3 year contract for relining works were completed in July 2014. Additional budget transferred in March QBR to increase relining works program. Relining contractor to complete additional works in June 2015.
SEWER MAINS - MUDGEES INDUSTRIAL AREA	0	1	1	0	1	0	0%	Provision of WAE drawings for Mudgees Industrial area sewerage system upgrades constructed in 2013.
SEWER MAINS - RISING MAIN CAERLEON	0	18	18	0	18	0	0%	Provision of sewer rising main for Caerleon development. Timing of works dependant on development progress. Majority of budget deferred in March QBR. Tendering and construction works will be rescheduled as development progresses.
SEWER PUMP STATION - CAPITAL BUDGET ONLY	68	(68)	0	0	0	0	0%	Diesel pump refurbishment, Hospital Pump Station Gulgong undertaken within maintenance budget. Savings transferred in March QBR due to reactive works not required.
SEWER PUMP STATION - INDUSTRIAL	0	10	10	0	10	0	0%	Construction works complete. Awaiting final WAE.
SEWER PUMP STATION - FLOW METERING	50	(50)	0	0	0	0	0%	Budget to commence infiltration flow monitoring program has been deferred in March QBR. As infiltration monitoring is weather dependant, the likely scheduling will be December 2015 - February 2016.

SEWER PUMP STATION - CAERLEON	0	20	20	0	20	8	39%	Detailed design scheduled to be completed June 2015. Timing of works in conjunction with development progress. Majority of budget deferred in March QBR. Tendering and construction work will be rescheduled as development progresses.
SEWER PUMP STATION - ACCESS AT AIRPORT	5	0	5	0	5	0	0%	Provide all weather access to Airport SPS. Fencing and access gates scheduled to be installed June 2015.
DECOMMISSION MUDGEES STP PUTTA BUCCA	150	(33)	117	0	117	2	2%	Decommissioning of the old Mudgee sewage treatment plant. Quotations sought for Remediation Plan. Initial infrastructure removal will commence in May 2015. Partial budget deferred in March QBR to allow remediation plan actions to be undertaken in 2015/16.
SEWER TREATMENT WORKS - RENEWALS	45	0	45	0	45	0	0%	Renewals as required at the four sewage treatment plants. Alternate chemical dosing trial investigated for Mudgee STP aiming to achieve further phosphorus reduction for reduced chemical cost. Trial to be undertaken commencing April 2015.
Total	8,055	(5,570)	2,486	0	2,486	1,113	45%	

Building a Strong Local Economy

CUDGEGONG WATERS AMENITIES	157	0	157	0	157	89	56%	Finishing touches underway. Building to be completed by
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								end of May
ENTRANCE SIGNAGE - RYLSTONE/KANDOS	14	0	14	0	14	8	58%	Kandos signs completed, awaiting final quotation to finish Rylstone, Charbon & Clandulla scroll signs
STREET BANNERS - GULGONG	0	9	9	0	9	0	0%	Report to Council meeting in May
SALEYARDS - CAPITAL BUDGET ONLY	10	(10)	0	0	0	0	0%	Budget only. Allocated to projects below
SALEYARDS - CATTLE CRUSH	0	11	11	0	11	11	101%	Completed
SALEYARDS - POST AND RAIL REPLACEMENT	0	10	10	0	10	5	46%	Work continues on the additional bull pens rails.
SALEYARDS - PARKING AREA ROAD WORKS	20	0	20	0	20	0	0%	Road works scheduled for May/June.
PROPERTY - KANDOS SURPLUS LAND BLOCKS	3	0	3	0	3	1	32%	45 Dunn Street - Council resolution 4/5/2015 - sell to Kids & Carers Support Group Kandos/Rylstone for nil consideration. Transfer proceeding through Council's solicitors.
PROPERTY - EX SALEYARDS STAGE I	0	75	75	0	75	54	71%	Continued investigation of legal ownership matters.
PROPERTY - MORTIMER ST PRECINCT	20	0	20	0	20	0	0%	Painting, installation of automatic doors and internal works commencing in May.
RIVERVIEW ESTATE - ROAD CLOSURE	0	0	0	0	0	1	0%	Application for closure of part Perry St - Council resolution to close and sell 3/12/2014. 2 valuations being considered. Awaiting 2nd valuation. Applicant responsible for all costs.
COMMERCIAL PROP - PRESCHOOL FACILITY	1,000	(162)	838	0	838	373	44%	Framework now complete. Building will be at lock up stage by end of May. Work on track to be completed by October 2015
Total	1,224	(66)	1,158	0	1,158	540	47%	

Connecting our Region

URBAN RESEALS - BUDGET ONLY	0	0	0	0	0	0	0%	Budget only item
URBAN RESEAL - PERRY STREET MUDGEES	90	(23)	67	0	67	67	100%	Completed
URBAN RESEAL - FLIRTATION HILL LOOKOUT GULGONG	9	(1)	8	0	8	8	100%	Completed
URBAN RESEAL - LITTLE BELMORE STREET GULGONG	15	(7)	8	0	8	8	99%	Completed
URBAN RESEAL - LOWE STREET GULGONG	6	(2)	4	0	4	4	95%	Completed
URBAN RESEAL - MAYNE STREET GULGONG	10	(5)	5	0	5	5	99%	Completed
URBAN RESEAL - BLIGH CLOSE MUDGEES	3	(1)	2	0	2	2	97%	Completed
URBAN RESEAL - BULGA STREET GULGONG	12	(3)	10	0	10	10	100%	Completed
URBAN RESEAL - COOMBER STREET RYLSTONE	8	(1)	7	0	7	7	99%	Completed
URBAN RESEAL - COOYAL STREET GULGONG	7	(3)	4	0	4	4	98%	Completed
URBAN RESEAL - DABEE STREET RYLSTONE	6	0	6	0	6	6	102%	Completed
URBAN RESEAL - GLADSTONE STREET MUDGEES	79	(25)	54	0	54	54	99%	Completed
URBAN RESEAL - JAMISON STREET KANDOS	17	(9)	9	0	9	9	100%	Completed
URBAN RESEAL - MEALEY STREET MUDGEES	14	0	14	0	14	14	96%	Completed
URBAN RESEAL - PHILIP CLOSE MUDGEES	5	(2)	3	0	3	3	99%	Completed
URBAN RESEAL - MACQUARIE DRIVE MUDGEES	11	(4)	7	0	7	7	97%	Completed
URBAN RESEAL - MULGOA WAY MUDGEES	32	(12)	20	0	20	19	99%	Completed
URBAN RESEAL - ROBERTSON STREET MUDGEES	15	(7)	7	0	7	7	100%	Completed
URBAN RESEAL - WOODSIDE CLOSE MUDGEES	21	(14)	7	0	7	7	97%	Completed
URBAN RESEAL - LISBON ROAD MUDGEES	18	(2)	16	0	16	16	100%	Completed
URBAN ROADS KERB & GUTTER CAPITAL	22	0	22	0	22	13	58%	Kerb and gutter works have been completed in Gulgong and are being planned for Baskerville Close and Robertson Street in Mudgees.

FAIRY DALE LANE UPGRADE	800	(277)	523	0	523	37	7%	The design works for Saleyards Lane have been completed and Fairydale detailed design is due in early June. Works is planned to commence on site in late May. The power poles require relocation and electrical design works and Essential Energy Approvals are being undertaken. The environmental assessments have been completed.
REHAB - HENBURY AVENUE KANDOS	75	0	75	0	75	62	83%	Practically complete, only linemarking outstanding
REHAB - CHURCH STREET MUDGEES	417	(111)	306	0	306	307	100%	Completed
REHAB - MAYNE ST ASPHALT, GULGONG	155	(155)	0	0	0	0	0%	This project has been cancelled following community consultation.
REHAB - LEWIS ST MUDGEES SEG 40	175	(32)	143	0	143	142	99%	Completed
REHAB - FARRELLY ST CLANDULLA SEG 10	20	(12)	8	0	8	8	97%	Completed
REHAB - MARKET ST MUDGEES SEG 20	140	0	140	0	140	46	33%	The road rehabilitation works have been completed and the shoulder sealing will be carried out in May. The scope of this project has been reduced following community consultation. The residents did not support the moving of the kerb and gutter to widen the nature strip. All kerb and gutter and associated drainage works were removed from the scope.
REHAB - JACQUES/DANGAR ST KANDOS	25	0	25	0	25	1	5%	To commence in May 2015
REHAB - JACQUES/RODGERS ST KANDOS	25	0	25	0	25	7	29%	To commence in May 2015

REHAB - FIRST ST MUDGEES SEG 10	40	10	50	0	50	1	1%	Works have commenced with the kerb and gutter and associated drainage works. The road will be rehabilitated to repair failures and correct the pavement shape to prevent water ponding.
REHAB - FITZGERALD ST RYLSTONE SEG 10	75	0	75	0	75	48	64%	The rehabilitation works have been completed however following works the residents have raised concerns that they have lost on road parking spaces as the table drain is now steeper than originally. Staff are investigating available options.
REHAB - MORTIMER ST MUDGEES SEG 60 70 80	100	(48)	52	0	52	51	98%	Completed
REHAB - CUDGEGONG RD EVANS CROSSING	220	110	330	0	330	53	16%	The temporary detour road is in operation and works have commenced on the culvert. Water has caused issues with the construction of the base slabs, however progress is being made with completion expected late June.
RESHEETING - URBAN ROADS	13	0	13	0	13	4	31%	Urban resheeting is planned in Rylstone over the next two months.
FAIRYDALE LANE LAND MATTERS CAPITAL	0	114	114	0	114	0	0%	Separate budget allocated to cover legal fees, site clean-up and development application fees; this will be funded from S94. Negotiations with landowner finalised. Draft MOU prepared and is currently with owner of land for comment before final MOU is drawn.

URBAN ROADS LAND MATTERS CAPITAL	26	0	26	0	26	4	14%	<p>1. Engineers Road reserve - in last stages of removing unauthorised occupier - Occupier has agreed to vacate Road Reserve. Consultation to then occur with adjoining land owners as to future of road reserve.</p> <p>2. Castlereagh Highway realignment from Putta Bucca to Hill End Road - documentation not completed from 1997 - plan has been registered. Awaiting titles to be returned from LPI and then matter is finalised - estimate matter will be complete by 31/5/2015.</p>
RURAL RESEALS - ACACIA DRIVE RYLSTONE	43	(23)	21	0	21	21	101%	Completed
RURAL RESEALS - GORRIES LANE GOOLMA	8	(1)	7	0	7	7	99%	Completed
RURAL RESEALS - BORONIA ROAD RYLSTONE	20	(9)	11	0	11	11	101%	Completed
RURAL RESEALS - DABEE ROAD RYLSTONE	2	(2)	0	0	0	0	0%	Completed
RURAL RESEALS - DABEE ROAD RYLSTONE	110	(68)	42	0	42	42	101%	Completed
RURAL RESEALS - NARRANGO ROAD RYLSTONE	130	(67)	63	0	63	64	101%	Completed
RURAL RESEALS - BURRUNDULLA ROAD MUDGEE	96	(57)	40	0	40	39	99%	Completed
RURAL RESEALS - QUEENS PINCH ROAD MUDGEE	90	(37)	53	0	53	53	100%	Completed
RURAL RESEALS - ROCKY WATERHOLE ROAD MUDGEE	89	(33)	56	0	56	55	99%	Completed
RURAL RESEALS - YARRABIN ROAD	163	(20)	144	0	144	145	101%	Completed
RURAL REHAB - LUE RD (OLIVE FARM)	0	37	37	0	37	36	100%	Completed
HEAVY PATCHING BUDGET	101	(90)	11	0	11	11	99%	Completed
BLACKSPOT YARRAWONGA RD SHOULDER WIDENING	0	108	108	0	108	96	88%	Completed
RURAL REHAB - LUE ROAD	628	12	639	0	639	640	100%	Completed
RURAL REHAB - GLEN ALICE ROAD	172	(92)	80	0	80	80	100%	Completed
FUTURE YRS REFS - BUDGET ONLY	5	0	5	0	5	0	6%	Expended as required for planned road works.

RURAL SEALED ROAD LAND MATTERS	15	0	15	0	15	1	4%	Land acquired to realign Happy Valley Road in 1997 but plan never registered - will be resolved by incorporating with Sale of Land for Unpaid Rates action - Auction date 9/5/2015.
RURAL SEALED REGIONAL ROAD RESEALS	595	(595)	0	0	0	0	0%	Budget only item
RURAL SEALED REGIONAL ROAD REPAIR PROGRAM	400	(400)	0	0	0	0	0%	The project was not successful this year. The budget has been reallocated to other Regional Road projects.
BLACKSPOT BYLONG VALLEY WAY - GROWEE GULPH	0	29	29	0	29	0	1%	The project was completed in 2013/14. The budget allocation was to cover an overspend during the project works.
BLACKSPOT COPE RD SHOULDER WIDENING	0	11	11	0	11	12	104%	Completed
BLACKSPOT COPE RD SHOULDER WIDENING	0	29	29	0	29	29	101%	Completed
REHAB COPE ROAD UPGRADE BUDGET ONLY	2,564	(2,564)	0	0	0	0	0%	Budget only item
BLACKSPOT BYLONG VALLEY WAY - STH OF KANDOS	0	263	263	0	263	263	100%	Completed
REHAB COPE ROAD UPGRADE - MILESTONE 1	0	1,509	1,509	0	1,509	1,481	98%	Completed
REHAB COPE ROAD UPGRADE - CONFORMING RESEALS	0	103	103	0	103	42	40%	Reseal works have been completed for 2014/15 FY. They will resume in accordance with the program in 2015/16.
REHAB COPE ROAD UPGRADE - MILESTONE 2	0	953	953	0	953	705	74%	To be completed mid May.
REHAB COPE ROAD UPGRADE - MILESTONE 3	0	73	73	0	73	15	20%	To commence in mid May following completion of Milestone 2.
PITTS LANE/ULAN RD SIGNAGE	0	15	15	0	15	9	58%	The signs have been delivered and will be installed in May.
ULAN WOLLAR ROAD UPGRADES	146	0	146	0	146	0	0%	Materials have been ordered for the pipe extensions.
REG RESEALS - WOLLAR ROAD	0	241	241	0	241	240	100%	Completed

REG RESEALS - BYLONG VALLEY WAY RESEAL	0	137	137	0	137	137	100%	Completed
REG RESEAL - HILL END ROAD RESEAL	0	163	163	0	163	163	100%	Completed
REG RESEAL - GOLLAN ROAD SEG 40 & 50	0	48	48	0	48	47	100%	Completed
REGIONAL ROAD HEAVY PATCHING	0	159	159	0	159	0	0%	Heavy patching will be undertaken on Hill End Road and Bylong Valley Way.
RURAL SEALED REGIONAL ROAD LAND MATTERS CAPITAL	5	0	5	0	5	2	37%	Gollan Road, Goolma matters x 2 - Road Widening at Shearmans Bridge, 1 matter has progressed to registration of plan.
SEAL EXTENSION - NULLO MOUNTAIN	120	32	152	0	152	152	100%	Completed
SEAL EXTENSION - LOCHIEL LN	4	(2)	3	0	3	2	87%	Completed
RESHEETING - BUDGET ONLY	1,200	0	1,200	0	1,200	952	79%	Resheeting is currently in progress.
MURRAGAMBA RD - REALIGNMENT	0	1,545	1,545	0	1,545	524	34%	Murragamba Road is progressing quickly with all earthworks and drainage works completed. The pavement works have commenced and will be completed by mid May. The project will be completed in early June.
UNSEALED ROADS LAND MATTERS CAPITAL	5	0	5	0	5	2	33%	Beechworth Road plan registered and titles created 30/9. Transfer of land parcel to affected property owner finalised.
RURAL UNSEALED REGIONAL ROAD RESHEETING	52	(52)	0	0	0	0	0%	Project not going ahead due to proposed major upgrade woks on Wollar Road
SEAL EXTENSION - WOLLAR ROAD	185	(185)	0	0	0	0	0%	Project not going ahead due to proposed major upgrade woks on Wollar Road
GREEN GULLY BRIDGE	0	111	111	0	111	107	96%	Completed
BUTTER FACTORY BRIDGE	0	69	69	0	69	63	92%	Completed

CORICUDGY ROAD BRIDGE - REPAIR	0	7	7	0	7	7	101%	The design works have been completed. Fabrication and installation will happen next financial year following Fisheries approvals.
STONEY CREEK BRIDGE	0	101	101	0	101	77	76%	Temporary side track works are complete. In preparation for next years bridge replacement works, requests for quotations have been sent out for a geotechnical site investigation. The works will be awarded mid May with deliverables deadlines at the end of June.
MACDONALDS CREEK BRIDGE REPLACEMENT	0	50	50	0	50	0	0%	Requests for quotations have been sent out for a geotechnical site investigation and environmental assessment. The works will be awarded mid May with deliverables deadlines at the end of June.
ULAN ROAD STRATEGY - CAPITAL BUDGET ONLY	3,297	(3,297)	0	0	0	2	0%	Budget only item
ULAN ROAD - MIDBLOCK 19.999 TO 22.215	0	548	548	0	548	503	92%	Completed
ULAN ROAD - WOLLAR RD INTERSECTION	0	1,056	1,056	0	1,056	868	82%	Practically complete, only transverse linemarking outstanding, waiting on specialist contractors.
ULAN ROAD - MT PLEASANT LN TO BUCKAROO LN	0	279	279	0	279	83	30%	Buckaroo Lane / Ulan Road intersection works have commenced in April. Currently widening works are taking place to accommodate the next turning lanes.
ULAN ROAD - SPRINGVIEW LN TO MIDBLOCK 13.478	0	157	157	0	157	136	87%	Design completed. No construction works planned for 2014/15.
ULAN ROAD - COPE RD TO UCML MINE ENTRANCE	0	18	18	0	18	14	80%	Design completed. No construction works planned

									for 2014/15.
ULAN ROAD - WATTLEGROVE LN TO MIDBLOCK 19.999	0	124	124	0	124	112	91%	Design completed. No construction works planned for 2014/15.	
ULAN ROAD - WYALDRA LN TO QUARRY ENTRANCE 27.783	0	56	56	0	56	46	83%	Design completed. No construction works planned for 2014/15.	
ULAN ROAD - WINCHESTER CRES TO MIDBLOCK 31.106	0	272	272	0	272	77	28%	Construction to commence in May 2015 following completion of the environmental assessment.	
ULAN ROAD - LAGOONS RD TO TOOLE RD	0	1,352	1,352	0	1,352	1,198	89%	Completed	
FOOTWAYS - CAPITAL BUDGET ONLY	247	(108)	139	0	139	21	15%	Footpath construction works are currently in progress on Robertson Street.	
FOOTWAYS - BUS SHELTERS	2	46	48	0	48	2	4%	The bus shelters are ordered and are currently being fabricated. There was a change in scope following consultation with the school bus operator which resulted in a slightly different shelter design. Works are to be completed by end of June.	
PEDESTRIAN - KANDOS TO CLANDULLA	100	0	100	0	100	0	0%	This project is subject to ARTC Approvals.	
PEDESTRIAN - CHARBON PEDESTRIAN BRIDGE	99	0	99	0	99	0	0%	This project is subject to ARTC Approvals.	
PEDESTRIAN - GLEN WILLOW WALKWAY	50	172	222	0	222	99	45%	Currently extending the walkway a further 500m, works expected to be completed by mid June.	
GULGONG WALKWAY	100	0	100	0	100	51	51%	The route along Medley Street has been determined. Contractors will commence works in May 2015 to complete this years project.	
PEDESTRIAN - RYLSTONE PEDESTRIAN BRIDGE	200	(50)	150	0	150	8	6%	Report to May Council meeting.	

CYCLEWAY - RYLSTONE TO KANDOS RESEAL	50	0	50	0	50	0	0%	This project is currently under review as the location of the future water main is likely to be underneath the cycleway which means that the cycleway will be damaged during installation.
CYCLEWAY - PITTS LANE	0	103	103	0	103	95	92%	Completed
PEDESTRIAN - MELTON PARK	0	35	35	0	35	0	0%	Works commenced to be completed in May
PEDESTRIAN - MAYNE & MEDLEY ST GULGONG	0	3	3	0	3	0	0%	The traffic islands are to be constructed in May.
AIRPORT EXTEND TAXIWAY	0	175	175	0	175	172	98%	Completed
AIRPORT - APPROACH LIGHTS	0	725	725	0	725	480	66%	Conduits installed, waiting for lights to arrive for installation in May/June
AIRPORT - AIRCRAFT PARKING	0	300	300	0	300	290	97%	Civil works complete and now requires line marking
AIRPORT - CARPARKING FACILITIES	0	145	145	0	145	134	92%	Civil works complete and now requires line marking
AIRPORT - TERMINAL EXTENSION	0	80	80	0	80	0	0%	Design complete and will go out to tender in May - completion date 30/09/15
AIRPORT - CAPITAL UPGRADES	2,000	(1,867)	133	0	133	84	63%	Additional works may include connecting the terminal building to the main sewer line - this will be determined after the tender process for the building
AIRPORT - REALIGN AIRPORT ENTRY	0	180	180	0	180	114	63%	Scheduled to be sealed in May
AIRPORT - BACKUP POWER	0	42	42	0	42	41	99%	Completed
STREET LIGHTS - HERBERT & MAYNE INT	20	0	20	0	20	0	0%	Preliminary design received, currently considering alternative options to ensure best outcome aesthetically for Gulgong CBD.
Total	15,820	1,531	17,350	0	17,350	11,999	69%	

Good Government

AUSTRALIA DAY BOARDS	3	0	3	0	3	2	64%	New Australia Day boards have been installed. Project completed.
MUDGEES ADMINISTRATION BUILDING UPGRADE	50	0	50	0	50	44	89%	Works now complete
GULGONG ADMIN BUILDING	90	0	90	0	90	22	24%	Work now complete
MUDGEES TOURIST OFFICE	20	0	20	0	20	13	65%	Works complete. New lighting and carpet installed.
CAPITAL UPGRADE - MWRC DEPOT	0	43	43	0	43	45	107%	Scheduled works complete.
CAPITAL UPGRADE - RYLSTONE DEPOT	5	0	5	0	5	0	9%	These works have been postponed until adequate funds become available to carry-out the works to a satisfactory level. A funding proposal has been put forth in the 15/16 financial year.
WEEDS CARPARK CAPITAL UPGRADE	20	(20)	0	0	0	0	0%	Budget reallocated to Capital Upgrade - MWRC Depot, to better manage total project works.
TELEPHONE SYSTEM - VOIP	200	(118)	82	0	82	81	99%	Preferred vendor appointed, reviewing detailed project specifications, to be rolled out Q1-Q2 15/16.
OFFSITE RECORDS STORAGE	30	(10)	20	0	20	0	0%	Working with contractor on removal of boxes to offsite storage location In May.
IT NETWORK UPGRADES	70	0	70	0	70	79	113%	Complete
IT CORPORATE SOFTWARE	15	41	56	0	56	16	28%	Implementation of Corporate Performance reporting by 30 June. Training scheduled 18/6.

IT - EMAIL ARCHIVE SOLUTION	20	0	20	0	20	16	81%	Complete
IT - WEBCASTING EQUIPMENT COUNCIL CHAMBERS	0	6	6	0	6	5	93%	Complete
ASSET MANAGEMENT SYSTEM UPGRADES	0	122	122	0	122	90	74%	Training scheduled 2-5 June, Go live 1/7. Order to be placed for additional mobility devices
PLANT PURCHASES	3,670	1,465	5,135	0	5,135	4,827	94%	One truck still to be ordered this year.
RYLSTONE DEPOT CAPITAL WORKS	0	3	3	0	3	3	101%	Works complete.
Total	4,193	1,532	5,724	0	5,724	5,244	92%	

Total Capital Works Program	32,717	(2,121)	30,596	0	30,596	21,091	69%
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2015

COUNCIL BUSINESS PAPERS

Ordinary Meeting 17 JUNE 2015

ATTACHMENT **6.2.17**

► Draft Mudgee Regional Airport Master Plan 2015

REHBEIN AIRPORT CONSULTING

DATE 31 March 2015

CONTACT BEN HARGREAVES

Draft

Mudgee Regional Airport | Master Plan 2015
For Mid-Western Regional Council

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APPENDIX A

MASTER PLAN FIGURES

Draft

Document Control Page

Revision	Date	Description	Author	Signature	Verifier	Signature	Approver	Signature
0	15/02/15	DRAFT	BJH/JSL		AC		BJH	
1	21/02/15	DRAFT	BJH		AC		BJH	
2	31/03/15	DRAFT	BJH		AC		BJH	

GLOSSARY OF TERMS & ABBREVIATIONS

ACN (Aircraft Classification Number)	A number expressing the relative effect of an aircraft on a pavement for a specified standard subgrade category.
ASV	Annual Service Volume
Aerodrome	A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.
AFRU (Aerodrome Frequency Response Unit)	The AFRU is an electronic, ground based, aviation safety enhancement device, intended for use on the CTAF or MBZ frequency at non-controlled aerodromes.
AIP ERSA	Airservices Australia Aeronautical Information Package En-Route Supplement Australia
ANEF	Australian Noise Exposure Forecast
ARC (Aerodrome Reference Code)	A code used to specify the standards for individual aerodrome facilities which are suitable for use by aeroplanes within a range of performances and sizes. The code is composed of two elements: the first is a number (from 1 to 4) related to the aeroplane reference field length and the second is a letter (from A to F) related to the aeroplane wingspan and outer main gear wheel span.
ARP	Aerodrome Reference Point
ATC	Air Traffic Control
AWIS	Automatic Weather Information Service
AWS	Automated Weather Station
BoM	Bureau of Meteorology
CAGR	Compound Annual Growth Rate
CASA (Civil Aviation Safety Authority)	The Australian federal government department responsible for setting and maintaining safety standards for civil aviation. CASA is responsible for the codification of international standards and recommended practices into Australian legislation and for the issue of licences for aviation personnel including pilots, amongst other responsibilities.
CASR (Civil Aviation Safety Regulation)	CASRs establish the regulatory framework (<i>Regulations</i>) within which all service providers must operate.
Council	Mid-Western Regional Council
CTAF	Common Traffic Advisory Frequency
FAA	Federal Aviation Administration (United States Department of Transportation)
General Aviation (GA)	The sector of the aviation industry that does not include regular public transport (RPT) airlines and military aviation.
GPS	Global Positioning System
IATA	International Air Transport Association

ICAO	International Civil Aviation Organisation
IFR/IMC (Instrument Flight Rules/ Instrument Meteorological Conditions)	Refers to rules under which flight involving navigation requiring reference to radio navigational aids or instruments is carried out. Weather conditions below a certain minima are referred to as instrument meteorological conditions (IMC). IFR flight requires pilots to be qualified in the use of instrument navigation and to use radio navigational aids provided at airports.
INM	Integrated Noise Model
IWI	Illuminated Wind Indicator
LIRL	Low Intensity Runway Lighting
LoS	Level of Service – a range of values or assessments of the ability of the terminal to meet demand
MOS	Manual of Standards
MTOW	Maximum Take-off Weight
Navaid	Commonly-used abbreviation for 'radio navigational aid'
NDB (Non Directional Beacon)	A simple and common type of radio navigational aid which allows pilots to track to or from its location.
Non-precision instrument approach	An instrument approach and landing that uses lateral guidance but does not use vertical guidance.
OLS	Obstacle Limitation Surfaces
PAL	Pilot Activated Lighting
PANS-OPS	Procedures for Air Navigation Systems – Aircraft Operations
Pavement Classification Number (PCN)	A number expressing the bearing strength of a pavement for unrestricted operations by aircraft with ACN value less than or equal to PCN.
Payload	The total weight of passengers and cargo that an aircraft can carry.
PSI	Unit of pressure or stress (pounds per square inch)
RESA (Runway End Safety Area)	Area provided at the end of a runway strip, to protect the aeroplane in the event of undershooting or overrunning the runway.
RFDS	Royal Flying Doctor Service
RNAV/GNSS Approach	Area Navigation/Global Navigation Satellite System Approach. A form of instrument approach procedure using signals from orbiting satellites to determine an aircraft's precise position at a point in time.
RPT (Regular Public Transport)	Air services operated by airlines that are scheduled to occur on a regular basis at fixed times or frequencies and on fixed routes.
RWS (Runway Strip)	A defined area including the runway and stopway, intended to reduce risk of damage to aircraft running off a runway and to protect aircraft flying over it during take-off or landing operations.

**VFR/VMC (Visual Flight Rules/
Visual Meteorological Conditions)**

Refers to rules under which flight involving navigation solely by reference to visual cues (rather than requiring reference to radio navigational aids or instruments) is carried out. VFR flight is permissible only when meteorological conditions (cloud base and visibility) are above defined limits. Such conditions are referred to as visual meteorological conditions (VMC). VFR flight does not require pilots to be qualified in the use of instrument navigation, nor does it require expensive radio navigational aids to be provided at airports.

WI

Wind Indicator

Draft

1.0 INTRODUCTION

REHBEIN Airport Consulting was commissioned by Mid-Western Regional Council (Council) to prepare this Master Plan for Mudgee Regional Airport. The Master Plan establishes a framework for the future development of the airport and addresses the existing airport activities as well as opportunities for growth in aviation and aviation-related activities.

The Master Plan sets out short, medium and long-term proposals for aeronautical and non-aeronautical development within the airport land and identifies opportunities for adjacent airport-related development consistent with the Mid-Western Local Environmental Plan (LEP) 2012.

1.1 PURPOSE

Airport master planning is undertaken to enable best-management practises and sound land-use development in addressing diverse aviation and community interests. An Airport Master Plan is the primary strategic tool available to airport owners and operators and communicates the operator's intentions with respect to development of the airport. Its purpose is to set out a long-term framework for the development of all facilities within the airport that protects future development against the effects of current decisions.

Consistent with these strategic considerations, the *Airports Act 1996* summarises the aims of an Airport Master Plan as follows:

- Establishing strategic direction for the efficient and economic development of the airport over the planning period;
- Providing for the development of additional uses of the airport site;
- Indicating to the public the intended uses of the airport site; and
- Reducing potential conflicts between uses of the airport site, and to ensure that uses of the airport site are compatible with the areas surrounding the airport.

Although the *Airport Act 1996* does not have statutory application to Mudgee Regional Airport, this does not reduce the relevance of these four key aims.

1.2 OBJECTIVES

Council has identified several further specific objectives in commissioning this Master Plan, including the desire to:

- Support the existing airport activities as well as future growth;
- Incorporation of the existing sub-division;
- Incorporation of land recently acquired by Council adjacent to the airport site; and
- Understand the possible opportunities for future aviation-related activities and facilitate their growth.

The following three primary development objectives have been identified:

- Provide a clear and coherent plan to facilitate future airport development, which meets the needs of all current and future airport users in a balanced and equitable fashion;
- Encourage the expansion of aviation facilities to enhance and improve the economic return from the existing airport asset; and
- Protect the airport and its operation from incompatible development and activities external to the airport.

1.3 METHODOLOGY

The principal steps in the preparation of this Master Plan were as follows:

- To gain an understanding of the planning context for this Master Plan the following was undertaken:
 - Stakeholder consultation was undertaken to solicit the views issues and concerns of key stakeholders (discussed further in **Section 2.5**); and
 - Existing information, including Council planning and economic development documents, was reviewed.
- A review of existing infrastructure, facilities and activities at the airport was undertaken;
- Based on consultation with the stakeholders and consideration of the local economy, economic and business development opportunities for the airport were considered and reviewed;
- Based on these identified opportunities and consideration of relevant market trends, forecasts of future aviation activity for the purpose of planning adequate infrastructure requirements were prepared;
- Aeronautical infrastructure development proposals were set including apron and taxiway development as well as supporting services. In parallel, proposals for non-aeronautical commercial development, including new hangar sites and aviation-related development precincts, and landside access were developed. This provided the overall development concept for the airport;
- An implementation plan was then developed including a staged development plan formulated to provide guidance on the implementation of the proposals as well as indicative capital cost estimates; and
- The potential wider planning impacts of various airport safeguarding requirements were then considered through the development of future Obstacle Limitation Surfaces (OLS) as well as lighting restrictions and wildlife hazards which will help define land use and specific development surrounding the airport.

1.4 MASTER PLAN STRUCTURE

This Mudgee Regional Airport Master Plan 2015 is structured as follows:

- **Section 2.0** sets out the planning context to this Master Plan;
- **Section 3.0** describes the existing situation with regards to infrastructure and activities at the airport;
- **Section 4.0** identifies the key economic and business development opportunities for the Mudgee Regional Airport which are likely to influence future activity levels and infrastructure requirements, along with associated forecasts of future aviation activity;
- **Section 5.0** describes the proposed development concept in terms of aeronautical and non-aeronautical infrastructure;
- **Section 6.0** outlines an expected implementation plan and staging along with indicative costs for short-term development;
- **Section 7.0** discusses the airport safeguarding requirements to ensure future operational capability of Mudgee Regional Airport is adequately protected; and
- Supporting Figures A through H illustrating relevant aspects of the Master Plan as referenced within the document are included at **Appendix A**.

2.0 PLANNING CONTEXT

2.1 REGIONAL CHARACTERISTICS

2.1.1 GEOGRAPHY

The Mid-Western Region local government area is located in the Central Tablelands of New South Wales approximately 260 km north east of Sydney by road (approximately 3½ hours driving time) and 212 km by air.

The Region has a total area of approximately 9,000 square kilometres. The administrative centre of the Mid-Western Region is Mudgee which is located on the Castlereagh Highway. The highway runs approximately north-south through the region and provides access to Lithgow and the Blue Mountains to the south and Gulgong, Dunedoo and Dubbo to the north and north west.

The region has a cool to warm climate with an average daily maximum temperature of 31°C in January and 14°C in July. The average daily minimum temperature varies from 16°C to 1°C respectively.

2.1.2 ECONOMY

The economy of the Mid-Western region is driven by four main sectors based around agriculture, mining, tourism and viticulture.

Tourism

Almost 500,000 people visit the area each year for the local wine, food, sporting and cultural events. Over 600 local businesses in the region are either directly or indirectly involved in the tourism industry or related to tourism¹. The Mudgee Region hosts more than 50 events annually that attract people to visit the area including the Mudgee Wine and Food Festival, the Rylstone Street Feast and the Henry Lawson Heritage Festival.

The Glen Willow Regional Sporting Complex has hosted a number of large sporting events including the Country Vs City Rugby League game and the Trans-Tasman AusTouch Football Series.

Mining

Mining is the fastest growing industry in the region and employs the largest number of people (approximately 14% in 2011). The Mudgee Region Economic and Business Profile¹ prepared by Council indicates that there are ongoing expansion plans for existing mines which will increase productivity and job opportunities in the region. In addition to this there are plans for the development of a further four mines in the wider area.

¹ Economic and Business Profile for the Mudgee Region, Mid-Western Regional Council

Agriculture

A wide range of agricultural products are produced on the Mudgee Region including crops, livestock and other livestock products such as wool. According to the Mudgee Region Economic and Business Profile document prepared by Council, approximately 38% of registered businesses in the region are part of the agricultural sector.

Viticulture

The Mudgee Region has a significant wine industry with around 2,300 hectares of vines. It has been one of the fastest growing premium wine producing regions in Australia, although in recent years grape production in the area has decreased to more sustainable levels as a result of a nationwide oversupply. There is now a focus on diversification, marketing and food and wine events such as the Pymont Uncorks Mudgee Festival to increase the profile of the region.

The wine industry also contributes to the tourism sector with over 40 cellar doors open to the public, providing visitors with an opportunity to sample the distinctive wines of the region, talk to winemakers and enjoy some complementary food.

2.1.3 POPULATION

The Mid-Western Region Local Government Area (LGA) had a population of almost 24,000 people in 2013². Between 2009 and 2013 there has been an annual average population growth rate of 1.5%.

Significant population growth is expected in the Mudgee Region as a result of the growth of the coal mining industry in the local area. It is expected that the new positions created will be filled by new residents to the area who have the relevant skills. It is anticipated that the total population of the Mudgee Region including new major projects will exceed 26,000 people by 2020³ and could be as high as 28,000.

2.2 ROLE AND HISTORY OF MUDGEE REGIONAL AIRPORT

Mudgee Regional Airport is owned and operated by Mid-Western Regional Council. The airport is located approximately 5 kilometres to the northeast of Mudgee on the north western side of Ulan Road and occupies an area of approximately 99 hectares. This includes the original airport land plus a further 4 hectares to the east of George Campbell Drive which Council has recently acquired with the intention of enabling some airport development. **Figure A** provides a location plan.

Brindabella Airlines operated Regular Passenger Transport (RPT) services between Sydney and Mudgee using a 19-seat Metroliner until the airline went into receivership in December 2013 when all operations ceased. Nonetheless, the airport is the primary aviation facility for the region, which encompasses an area in excess of 9,000 sq. km. Council remains committed to ensuring RPT

² Australian Bureau of Statistics (ABS)

³ Economic and Business Profile for the Mudgee Region, Mid-Western Regional Council

services at the airport are re-established and recently resolved to support a Sydney-Mudgee service by existing charter operator FlyPelican using 19-seat Jetstream 32 aircraft. FlyPelican is currently undergoing relevant CASA approval processes and it is anticipated that services will commence in late April 2015.

A wide range of General Aviation (GA) aircraft also operate to and from the airport including private and commercial operators as well as the Royal Flying Doctor Service (RFDS) and the Rural Fire Services (RFS).

The airport operated under the Aerodrome Local Ownership Plan in partnership with the Commonwealth Government until the 1990s, when Council assumed full responsibility for management, operation and development. In 1998, a new passenger terminal was opened and Council is currently completing a \$2m project to upgrade the car parking, terminal extension, apron expansion and an upgrade of runway lighting.

Council has recently purchased 4 hectares of land adjacent to the airport, east of George Campbell Drive (the current main airport access road) with the aim of facilitating additional aviation-related subdivision development.

2.3 MUDGEE AIRPORT MASTER PLAN 2005

A Master Plan for Mudgee Regional Airport was prepared in 2005. The Master Plan focused on the building area precinct which accommodates the passenger terminal, general aviation facilities and potential development areas. The objectives of the Master Plan were to provide a clear and coherent plan to facilitate future airport development which meets the needs of all users; encourage the expansion of aviation facilities to enhance and improve economic return from the existing airport asset; and protect the airport and its operation from incompatible development and activities external to the airport.

The Master Plan forecast passenger movement growth of 3-3.5% per annum resulting in around 30-36% increase in total passenger numbers on 2005 figures by 2014. A background growth rate of 1.5% per annum was assumed for fixed wing aircraft movements and 3% per annum for helicopter movements. An additional 7,654 of training movements were included in the forecast resulting in a total of 23,254 movements by 2014.

The general principles adopted in the Master Plan included a proposed development of an extension to the northern GA areas, forming Stage 1. Stage 2 included the proposed development at the new southern GA area following decommissioning and removal of the non-directional beacon (NDB).

2.4 PLANNING INTEGRATION

2.4.1 MID-WESTERN REGIONAL LOCAL ENVIRONMENTAL PLAN (LEP) 2012

The current statutory planning instrument which determines land use policy for the airport and surrounding area is the Mid-Western Regional Local Environmental Plan (LEP) 2012, which makes local environmental planning provision for land in the Mid-Western region. The LEP aims to:

- Promote growth and provide for a range of living opportunities throughout the region;
- Encourage proper management, development and conservation of resources within the region;
- Provide a secure future for agriculture by protecting agricultural land;
- Foster a sustainable and vibrant economy that supports and celebrates the region's rural, natural and heritage attributes;
- Protect the settings of Mudgee, Gulgong, Kandos and Rylstone;
- Match residential development opportunities with the availability of urban and community services and infrastructure; and
- Promote development that minimises the impact of salinity on infrastructure, buildings and landscape.

The LEP sets out land use zones for the region. The LEP identifies the land on which the airport is located as 'SP2 – Infrastructure' which aims to provide for infrastructure and related uses, prevent development that is not compatible with or may detract from the provision of infrastructure. The land surrounding the airport is identified as 'RU4 – Primary Production Small Lots'. An area of land identified as 'R1 – General Residential' is located to the south of the airport.

2.4.2 MID-WESTERN REGIONAL COMPREHENSIVE LAND USE STRATEGY 2010

The Mid-Western Regional Comprehensive Land Use Strategy was prepared in 2010 and provides a basis for identifying options for the region to meet long term urban and rural growth needs. The Strategy informs the Mid-Western Regional LEP. A key principle of the Strategy is to manage and protect transport infrastructure, including air, to ensure long-term sustainable economic growth across the region. This will ensure that the role of airports and air services in the growth of the region are acknowledged and protect their current and future operations from inappropriate development having regard for height limitations, noise impacts and surrounding development.

The Strategy includes Local Area Strategies for urban areas including the Mudgee Town Structure Plan. The Mudgee Town Structure Plan identifies opportunities for additional land uses directly surrounding the airport particularly for aviation-related uses directly linked to the airport. The Town Structure Plan guides rezoning of land and in order for any opportunities identified around the airport to be realised, land would need to be rezoned under the LEP2012. The plan also identified an area for the Australian Rural Education Centre (AREC) directly adjacent to the airport to the south.

2.4.3 LOT 63 PLANNING PROPOSAL (DP18063)

A planning proposal (DP18063) has been submitted to Council for the development of Lot 63 (55 George Campbell Drive) which is 16.7 hectares in size and is located directly adjacent to the airport site to the north. The site is currently zoned as 'RU4 – Primary Production Small Lots' in the LEP. The proponent wishes to develop 24 rural residential lots with associated aircraft hangars directly adjacent to the airport with the potential for direct airside access to the taxiway and runway network at the airport. Such a development could provide for residential lots with aircraft hangars suitable for individuals with their own aircraft to live in. The objective of the proposal is not to rezone the land in question but amend the applicable Lot Size map to 2 hectares to ensure this type of development is consistent with the LEP.

Council has also issued a development consent for a small strip of land (formerly a road reserve) along the northern boundary of the airport site on Lot 4 DP 561282 (owned in conjunction with Lot 63 - the site of the Planning Proposal). The consent is for the development and subdivision of 12 hangars with associated residential accommodation.

2.4.4 MID-WESTERN REGION ECONOMIC DEVELOPMENT STRATEGY – A 10 YEAR PLAN

The Mid-Western Regional Council's Economic Development Strategy has been prepared to outline the future economic direction for the region for the next 10 years. The strategy highlights Council's economic development mission which is to encourage a strong and diversified economy that delivers lifestyle benefits to the community through supporting business and investment activities that in turn generate opportunities for employment, income and sustainable economic growth. As part of the strategy, Council endeavours to support existing businesses who will be major contributors to net new job growth in the region.

The strategy highlights that a number of key drivers will influence economic development in the region including employment, education, workforce skills, business development, investment, infrastructure, tourism and marketing.

With direct relevance to this Master Plan, the Economic Development Strategy highlights the Council's desire to provide infrastructure that accommodates economic growth and meets the commercial, industrial and retail needs of the region as well as providing an attractive business environment which provides adequate local infrastructure to ensure competitiveness of the region's economic activity. To ensure this occurs, the Strategy indicates that Council will promote the development of airport infrastructure at Mudgee Airport as an opportunity for business expansion in the aviation related industry. This Master Plan will assist Council to achieve this aim.

2.5 STAKEHOLDER ENGAGEMENT

2.5.1 STAKEHOLDER MEETINGS

Stakeholder consultation was undertaken to solicit the views issues and concerns of key stakeholders and airport users including Council representatives, airport tenants and users, and

local businesses. Consultation was undertaken during a site visit to Mudgee by REHBEIN Airport Consulting personnel in June 2014 including separate meetings with Council representatives and external stakeholders. Discussion was largely focussed on the future infrastructure requirements and expansion potential of Mudgee Regional Airport. The stakeholders consulted are indicated in **Table 1**.

2.5.2 FEEDBACK SUMMARY

Feedback obtained during consultation included a range of concerns and issues and provided a valuable background to Mudgee Regional Airport's existing situation and future aspirations. The key themes relevant to this study are as follows:

- There are a number of drivers for the growth of activities at the airport including the local mining industry and hosting of cultural events;
- There are currently no RPT services from Mudgee Regional Airport since the demise of Brindabella Airlines to support the mining industry and other key industries including transporting medical specialists to the area;
- Council continues to work to identify a new RPT service operator and the Master Plan must assume that such services will re-commence in the future;
- Notwithstanding the current absence of passenger services, there is inadequate capacity in the existing passenger terminal for a 19-seat aircraft turnaround;
- Mudgee Regional Airport benefits from a very scenic location as well as being situated close to town. There are opportunities to take advantage of these strengths through greater promotion of the airport throughout the general aviation community;
- Development at the airport should be encouraged, creating a climate of aviation enthusiasm, although it is essential to maintain a high-quality environment in keeping with the surroundings;
- Council could consider reviewing its aeronautical charging structures and/or rates to encourage the desired development and aviation activity;
- There is a place for both residential and commercial development, but these should be kept separate and with strict controls on residential uses;
- Pavement strengthening for Gulfstream and other private jet aircraft is needed as there are opportunities here; and
- A number of opportunities for the expansion of aviation and aviation-related activities at the airport were identified, revolving generally around the concept of a 'best-in-State' industrial park focussed on aviation services. These opportunities are addressed in greater detail in **Section 4.0**.

Table 1: Stakeholder Consultation

Organisation	Representative Name	Position
Mid-Western Regional Council	Warwick Bennett	General Manager
	Julie Robertson	Economic Development Officer
	Sally Mullinger	Works Manager
	Andrew Drummond	Plant & Facilities – Aerodrome Manager
	Bob Husband	Aerodrome Reporting Officer
	Gary Bruce	Manager Statutory Planning
	Brad Cam	Director of Operations
	Brett Exelby	Director of Finance & Administration
Mudgee Aero Club	Rob Duffy	Secretary & Treasurer
	Peter Huish	Member
Commercial Helicopters	Kate Rogers Mark Rogers	Business Owners
Oz Choppers		
Airborne Avionics		
Mudgee Region Tourism Inc	Virginia Craney	Interim Tourism Manager
Observair	Brad Welch	Chief Pilot
Airwest Fight Training	Craig Cooke	Business Owner
Moolarben Coal	Scott Fittler	Community Relations Coordinator
Hertz	Karen Hurst	Mudgee Manager
Private individual	Dave Roberts	Hangar Owner
Private individual	Noel Dawson	Hangar Owner

2.6 REGULATORY CONTEXT

2.6.1 AVIATION SAFETY

The Civil Aviation Safety Authority (CASA) is the statutory authority that conducts the safety regulation of civil air operations in Australia including the regulation of certified and registered aerodromes. The CASA Manual of Standards Part 139 Aerodromes (CASA MOS Part 139) is made pursuant to Civil Aviation Safety Regulations (CASR) Part 139. CASR Part 139 sets out the regulatory regime for aerodromes used by aeroplanes conducting air transport operations.

CASA MOS Part 139 sets out the standards and operating procedures for certified, registered aerodromes and other aerodromes used in air transport operations. As a Certified Aerodrome under CASR Part 139, the existing facilities and any proposed future facilities included within this Master Plan for Mudgee Regional Airport must comply with the standards set out in CASA MOS Part 139.

2.6.2 AVIATION SECURITY

The Aviation Transport Security Act 2004 establishes a regulatory framework to safeguard against unlawful interference with aviation. To achieve this purpose, the Act establishes minimum security requirements for civil aviation in Australia by imposing obligations on airport operators. Existing and future facilities must comply with the Aviation Transport Security Regulations 2005 made under the Aviation Transport Security Act 2004.

Mudgee Regional Airport is a Security Controlled aerodrome and the specific requirements for aviation security applicable at Mudgee are set out in the airport's Transport Security Program.

There is currently no requirement to implement screening of passengers and checked baggage unless Regular Public Transport or open charter services are operated by aircraft with a maximum weight of more than 20,000kg.

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3.0 EXISTING SITUATION

This chapter provides a brief description of the main infrastructure components and activities at Mudgee Regional Airport. **Figure B** shows the existing airport infrastructure.

3.1 EXISTING AIRPORT INFRASTRUCTURE

3.1.1 RUNWAYS

Mudgee Airport has a two-runway system aligned in the 04/22 and 16/34 directions.

Runway 04/22

Runway 04/22 is the main runway at Mudgee Regional Airport is 30m wide and has a total sealed length of 1,739 metres.

The runway strip associated with Runway 04/22 is 90 metres wide with a graded surface and extends 60 metres beyond the runway ends. This runway strip width permits use for Code 3C instrument non-precision operations, subject to landing minima adjustments, in accordance with CASA MOS Part 139 requirements. Typical Code 3C aeroplanes operating in Australia include the Saab 340, Bombardier Q400, and Fokker 50.

The published pavement classification number (PCN) is 12/F/C/580(84PSI)/U. The runway strength is suitable to accommodate typical 30-50 seat aircraft such as the Saab 340, Dash 8-100, Dash 8-300 or Embraer EMB120.

Turning nodes are provided at each runway end. An intermediate turning node is located approximately one-third in from Runway 04 threshold.

Runway End Safety Areas (RESAs) are in accordance with previous Australian standards whereby the length of the RESA is measured from the end of the runway. The current standards require the RESA to be measured from the end of the runway strip. CASA permits existing RESAs to remain in accordance with the previous standard until the runway is lengthened, when the current standard must be complied with.

Runway 16/34

Runway 16/34 is an unlit, unsealed runway 1,075 metres long and 30 metres wide located within a 90 metre wide runway strip. The runway strip extends 60 metres beyond each runway end. The runway meets the requirements for a Code 2C non-precision instrument runway in accordance with CASA MOS Part 139 (although no instrument approaches are currently published to this runway). The runway has a grass surface and is not rated in terms of bearing strength.

3.1.2 TAXIWAYS

There are several taxiways currently at Mudgee. These are indicated on **Figure B**. The taxiway designations used are those indicated in the Aeronautical Information Package – En-route Supplement Australia (AIP-ERSA).

Taxiway A

The primary taxiway (Taxiway A) has a sealed surface and is located approximately 350 metres from the Runway 22 threshold. It provides access to Runway 04/22 from the main apron adjacent to the passenger terminal. The taxiway is 15 metres wide and equipped with edge lighting and is suitable for Code C aircraft with a wheelbase of less than 18 metres.

Taxiway B

Taxiway B provides access to hangars immediately north of the passenger terminal.

Taxiway C

This grass taxiway connects Taxiway D and the terminal apron with the Runway 34 threshold.

Taxiway D

Taxiway D is an unlit sealed taxiway of variable width up to 15 metres but normally accommodates Code A aircraft accessing the hangar area and refuelling facility to the south of the passenger terminal.

Taxiway E

Taxiway E is an unlit sealed taxiway running north from the main apron area and serves hangar development to the north of the passenger terminal. The taxiway is 15 metres wide but presently is suitable for Code B aircraft only to ensure adequate clearances to adjacent hangars. Several sealed taxiway connectors to the aprons associated with the hangar development in this area.

Council is in the process of extending Taxiway E to connect to the Runway 22 threshold.

Other

The open area between to the east of the NDB is utilised as an informal grass taxiway providing access to hangar development in the southern corner of the airport site occupied by an avionics business associated with Commercial Helicopters.

3.1.3 AIRCRAFT PARKING AREAS

Main Apron

The main apron fronting the passenger terminal is a sealed apron of approximately 1,500 square metres. A single Metroliner aircraft parking position is marked, incorporating a secondary keyhole marking for parking in the opposing direction when required to ensure aircraft facing into the wind.

Itinerant Parking Apron

A separate sealed apron area for itinerant GA aircraft is located to the southwest of the main apron and Taxiway A. Most of the depth of this apron lies within the Code C taxiway strip associated with Taxiway A, thereby limiting its operational usefulness. Council has therefore recently expanded this apron to increase the ability for aircraft to park on the sealed surface without infringing the Taxiway A strip clearance.

Southern GA Apron Areas

Sealed apron areas associated with the fuel facility and hangar development exist to the south of the passenger terminal

Light Aircraft Parking and Tie-Down Area

A marked light aircraft tie-down area is located on grassed areas of the aerodrome to the south of the main GA hangar area. The area caters for small GA aircraft less than 2,000kg and has capacity for approximately 10 aircraft.

Northern GA Area

There are a number of sealed aircraft parking areas adjacent to hangar developments to the north of the passenger terminal. Taxiway E and Taxiway B provide access to this area.

3.1.4 VISUAL AND NAVAGATIONAL AIDS

Markers and markings

Standard white gable markers define the runway strips for both runways. Runway 04/22 is provided with runway centreline, runway end, threshold, fixed distance, touchdown zone markings in accordance with CASA MOS Part 139. Taxi guideline markings are provided at taxiway entrances and turning nodes.

Wind indicators

The primary wind indicator and associated signal area is illuminated and located to the north of the main apron.

Aerodrome Lighting

Runway 04/22 is equipped with low intensity pilot activated runway edge lighting. The lights are installed at 90m spacing to the previous standard. However, Council has recently upgraded the runway lighting system to meet the current maximum spacing requirement of 60m and installed a Precision Approach Path Indicator (PAPI) light system to provide visual slope guidance for aircraft on approach.

Runway 16/34 is not equipped with lighting.

The main taxiway is equipped with blue edge lighting and the main apron is equipped with apron floodlighting suitable for small aircraft (below Code 3C).

Non-Directional Beacon

The Mudgee NDB is located on the airport to the south of the apron areas. The NDB is owned and operated by Airservices Australia. Its operation is planned to continue as the NDB is on Airservices' Backup Navaid Network (BNN).

The Mudgee Very High Frequency Omni Range (VOR) navaid is located 2 kilometres west of the airport terminal, outside of the current airport land boundary.

Automatic Weather Information Service

A Bureau of Meteorology Automatic Weather Information Service (AWIS) is provided at Mudgee Airport. The automated weather station (AWS) is located adjacent to the IWI and signal area.

3.1.5 INSTRUMENT APPROACH PROCEDURES

Approaches to the aerodrome in the instrument meteorological condition (IMC) require the use of procedures based on the NDB navigation aid or on satellite-based technology. Currently the following procedures are published for the airport:

- § NDB Runway 22 Arrival;
- § VOR-A; and
- § RNAV (GNSS) Runway 22 Arrival

Instrument approaches to Runway 04 are not possible due to the high terrain to the south of the airport. High terrain prohibits circling to the south-east of the airport, and right hand circuits are required for Runways 16 and 22.

3.1.6 FUELING FACILITIES

Mudgee Aerodrome's fuelling facility is located adjacent to the Mudgee Aero Club, to the south of the passenger terminal. The facility is operated by a contractor and has above ground AVGAS and Jet A-1 fuel storage tanks under cover. Both fuel types are available through a bowser dispensing system using keycard access and there is an airside Jet A-1 above-ground fuel hydrant point adjacent to the main apron for larger aircraft. Access for road tankers is via Gate 2 adjacent to the Mudgee Aero Club.

3.1.7 SURFACE ACCESS

Surface access to the passenger terminal and GA areas is from George Campbell Drive which is a sealed two-lane road off Ulan Road. Access to the passenger terminal, main car park and hangar development to the south is via a sealed two-way road. Access to the hangar development to the north of the passenger terminal is also via a sealed two-way road with a turning area at its northern extremity.

The main car park provides 41 parking spaces plus 1 disabled space. Within the car park a total of four spaces are reserved for the car rental companies, Thrifty and Hertz.

A car park is also located between George Campbell Drive and the northern hangar development.

3.1.8 HANGAR DEVELOPMENT

Hangar development is located north and south of the main apron and passenger terminal area which are occupied by a variety of activities including private hangars (one with residential accommodation), the Rural Fire Services (RFS), commercial aviation and aviation-related businesses and Mudgee Aero Club. All facilities are either leased from, or are sited on land leased from Council.

Northern hangar area

A number of hangar facilities have been developed to the north of the passenger terminal. These include:

- § An open-fronted hangar owned by Council and currently used primarily to store airport equipment. An area is also occupied by Airwest Flight Training;
- § Three other hangars occupied by private individuals;
- § Two larger hangars owned and occupied by an aerial firefighting contractor (R & M Aircraft); and
- § A private hangar facility with pilot accommodation owned by Observe Air.

Southern hangar area

South of the terminal, in addition to the aviation fuel storage facilities, is the Mudgee Aero Club building and three (3) hangars.

Commercial Helicopters

A private helicopter operator (Commercial Helicopters) occupies three hangars and a number of associated facilities on a freehold site located in the south east corner of the airport. These facilities are located outside the airport boundary, although airside access is provided under arrangement with Council. The same proprietors also operate another helicopter business and an avionics business (Airborne Avionics) from the same facilities. These three businesses make extensive use of the Mudgee Regional Airport facilities.

3.1.9 UTILITIES AND CIVIL INFRASTRUCTURE

Electricity

Electricity is supplied to the terminal precinct and southern hangar area via overhead supply. A pad mounted sub-station has recently been installed at the southern end of George Campbell Drive, adjacent to the Commercial Helicopters property.

Water

The passenger terminal and building area are supplied from George Campbell Drive and reticulated to the particular facilities. A header tank is located near the airport entry gate.

Sewer

A sewer system is connected to the hangar developments and has recently been connected to the town system via a gravity sewer running from the Southern Hangar Area to a pump station adjacent to southern boundary of the airport.

Sewer is not connected to the terminal building, cottage or aero club, which all operate on septic systems.

3.2 HISTORICAL AVIATION ACTIVITY

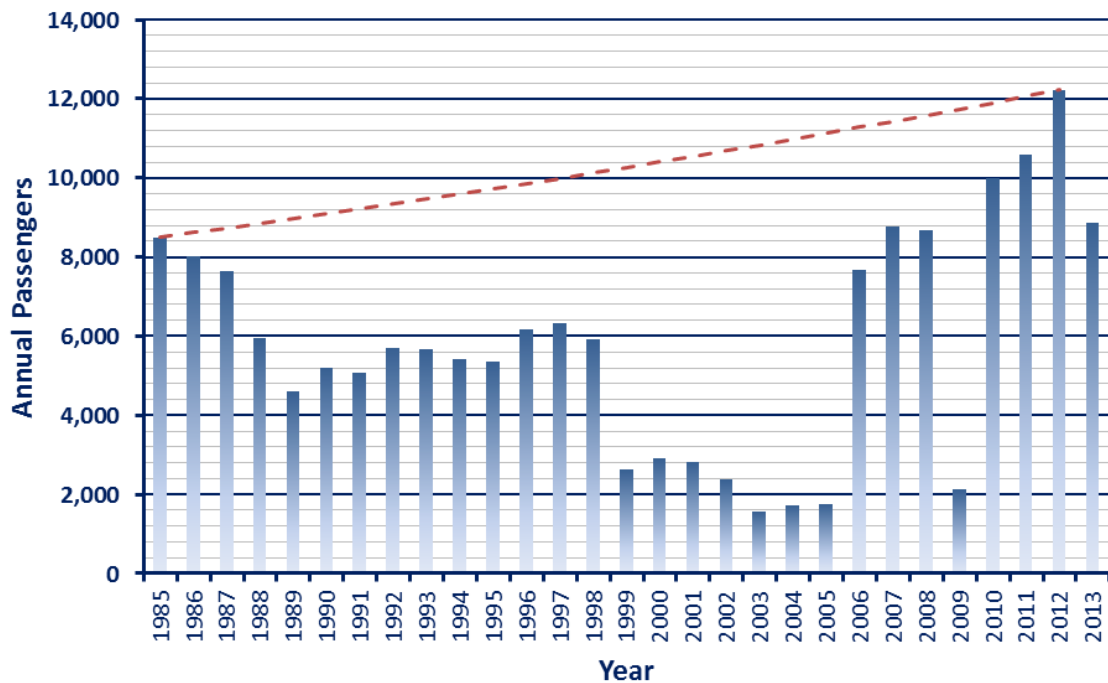
3.2.1 PASSENGER TRAFFIC

Figure 1 shows passenger numbers travelling on Regular Public Transport (RPT) services during the period 1985 to 2013. Overall passenger numbers have been extremely volatile over the period, varying from less than 2,000 to more than 12,000. It is likely that this variability is partly a result of the passenger demand being at a relatively low level where small schedule or aircraft type changes may make a big difference to the actual numbers of travelling passengers.

Overall, there was an annual average growth rate of 1.4% from 1985 to 2012, although the period 2006 to 2012 has an annual average growth rate of 6.9%. 2013 passenger numbers do not represent a full year of airline services, as a result of the grounding and subsequent liquidation of Brindabella Airlines in November and December of that year.

Although no RPT services are currently operated from the airport, Council anticipates a new service will be operating from late April 2015.

Figure 1: Historical Passenger Traffic 1985 – 2013



Source: BITRE

3.2.2 AIRCRAFT MOVEMENTS

Figure 2 displays total aircraft movements at Mudgee Regional Airport from 2009/10 to 2013/14. This shows there has been a declining trend in aircraft movements over the last five years. The annual average growth rate for this period is -6.8% for the total period, this includes 2013/14 when

RPT services ceased at the airport as a result of the liquidation of Brindabella Airlines in December 2013.

Figure 2: Historical Aircraft Movements 2009/10 to 2013/14



Source: Avdata

Figure 3 shows aircraft movements by activity for the full 12 months during 2012/13 when RPT services were still in operation. Figure 4 shows the estimated proportion of movements by type of activity in 2014 (January to June data available only), based on aircraft movement data, following the cessation of RPT services in December 2013.

Figure 3: Aircraft Movements by Activity - 2012/13

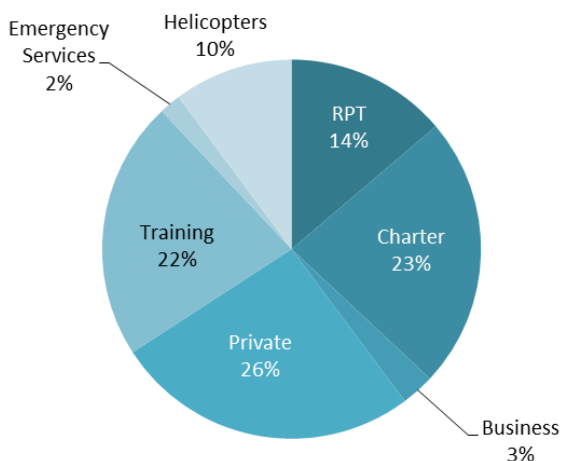
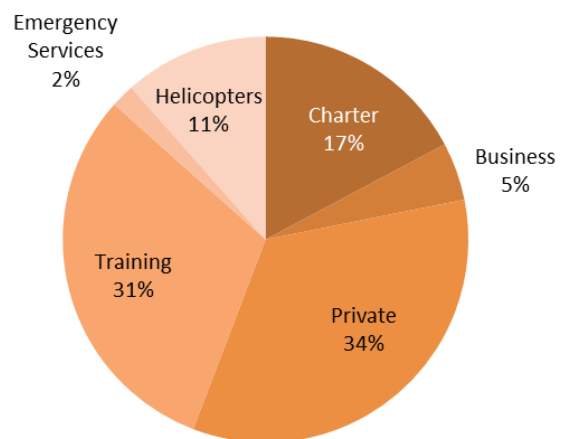


Figure 4: Aircraft Movements by Activity - January to June 2014



Private

In the first half of 2014, private operations are considered to account for approximately 34% of aircraft movements at the airport. This includes all recreational flying at the airport including all movements by aircraft based at the airport and movements by itinerant aircraft.

Training

It is estimated that training movements account for approximately 31% of all movements at the airport. This includes all based operations as well as itinerant training operations. This accounts for all training, stop and go and practice approaches recorded at the airport.

Charter

Charter operations account for approximately 17% of all movements at the airport. This includes all movements operated by aircraft that have been hired or are being used to carry passengers or goods.

Helicopter

Helicopter movements account for approximately 11% of all movements at the airport. This includes all movements by Commercial Helicopters who are based at the airport as well as all visiting helicopters.

Business

Business includes all movements that are related to business activities whether aviation-related or not. These account for approximately 5% of all movements.

Emergency

This category includes all movements undertaken by the Royal Flying Doctor Service and any other emergency service including the Police and RFS. This category accounts for approximately 2% of all movements at Mudgee Regional Airport.

RPT

Although not shown in **Figure 4**, prior to the cessation of RPT operations in December 2013, RPT movements accounted for approximately 14% of all movements at the airport. This included all operations by Brindabella Airlines, using the 19-seat Metroliner.

4.0 ECONOMIC AND BUSINESS DEVELOPMENT OPPORTUNITIES

To understand the possible opportunities for future aviation-related activities, feedback from the stakeholder consultation was combined with REHBEIN Airport Consulting's knowledge of key aviation industry trends and experience from a range of other regional airports, to understand existing and potential future economic and business opportunities for Mudgee Regional Airport.

Aviation and aviation-related opportunities were all considered with a view to facilitating the growth of the airport. The following paragraphs highlight the opportunities considered most feasible, although of course others may exist now or in the future. These opportunities are then considered in estimating potential future aviation activity at the airport as well as in the land use planning to ensure aviation-related opportunities can be accommodated.

4.1 AVIATION OPPORTUNITIES

4.1.1 PASSENGER SERVICES

Since the closure of Brindabella Airlines in December 2013, there are currently no Regular Public Transport (RPT) operators serving Mudgee Regional Airport. The provision of RPT services provides valuable air links that support the local economy, particularly the mining industry and the attraction of a new operator to the Mudgee – Sydney route is seen as a key opportunity for the airport which Council has been pursuing throughout 2014. FlyPelican is anticipated to commence services from late April/early May 2015, offering a double-daily weekday return schedule from Sydney and one Sunday afternoon return service.

Potential also exists for triangulated services with Dubbo or, more likely, destinations further west like Cobar which also do not have passenger services at present. Whether there is sufficient demand to support RPT services on 30 – 50-seat aircraft is a question which would require more detailed specialist investigation. However the relative proximity of Mudgee by road to Sydney, as well as to regional RPT services in Dubbo, might mean that alternative forms of passenger service to RPT may be required to satisfy local demand growth above that served by FlyPelican or a similar 19-seat RPT operator.

Opportunity exists for new charter operators to base themselves at Mudgee Regional Airport. Such an operator could provide services that support the local industries including the demands of the local mining activities and supplement RPT services. Demand for charter operations may also come from the local tourism industry including transporting visitors to and around the region for the local food and wine attractions as well as the various sporting and cultural events that take place throughout the year.

Commercial Helicopters is an existing charter operator at Mudgee Regional Airport and provides helicopter services including agricultural aerial spraying, mining support, fire-fighting, aerial surveys and scenic flights.

4.1.2 FLIGHT TRAINING

Flying training can be broadly separated into that which is provided to private individuals, or academy-style commercial airline pilot training centres. Whilst there are variations within this spectrum, different sectors of the flying training industry have varying requirements which can be generally classified according to these two categories.

Like many regional locations in Australia, Mudgee's location and airspace are conducive to *ab initio* pilot training.

Commercial Pilot Academy

Flight training for commercial airlines is gravitating towards an academy model, focussed around high-intensity flying operations combined with intensive study. Academies generally seek to operate in the 100-200 students per year range to maximise efficiencies in what is becoming an extremely cost-competitive market. These academies usually accommodate around 100-150 cadets on site at any time, and require an integrated campus incorporating accommodation, education, training and maintenance facilities occupying several thousand square metres. Such academies generate high-intensity flying operations with large volumes of touch-and-go circuits needing to be completed as efficiently as possible. Such academies also need easy access to international gateways for cadets, educational linkages to provide basic English skills, and airport facilities which are compatible with high-levels of training. Ideally, such airports will be dedicated to flight training or at least prioritise this activity over other aviation uses.

As such, commercial pilot training is largely confined to the major metropolitan general aviation airports, with Bankstown Airport in Sydney and Camden Airport being major providers. Whilst some regional airports within Australia are attracting large commercial flight training facilities to locate on their site, these facilities have specific requirements in terms of the area of land and facilities that they require. Mudgee's location and weather are potential attractants, a lack of ready access to controlled airspace could be seen as a disadvantage.

Despite the unprecedented expected demand for commercial pilots within the Asia-Pacific region over the next 20 years, it is unlikely that Bankstown Airport will reach capacity before about 2040. During this period it is possible that some smaller flying schools serving recreational and private pilots may be displaced and there is also uncertainty regarding the impacts the proposed Western Sydney Airport at Badgerys Creek may have on operations. However, it is considered likely that major commercial pilot training is likely to remain consolidated at Bankstown.

Private flight training

Whilst the opportunities for pilot training schools of various types to establish at Mudgee Regional Airport are not to be ignored, it is also important to be realistic and target appropriate possibilities. Rather than major airline flight training academies, it is considered more likely that the congestion and demand for intensive flying training at the metropolitan airports, will presents opportunities for regional aerodromes to serve the pilot training needs of individuals in a less congested

environment and where a more personal service can be offered. Mudgee would appear to be ideally placed for this with conducive meteorological conditions, established tourism infrastructure, convenient and economical access by road to the major population centres in greater Sydney and plenty of other attractions in the area. Potential therefore exists for Mudgee Regional Airport to attract additional private flight training for individuals at the recreational, private pilot and commercial pilot levels.

4.1.3 RECREATIONAL FLYING

Potential exists for Mudgee Regional Airport to attract additional recreational flying movements, for similar reasons to those described above. This activity may either originate from Mudgee or recreational pilots may utilise the airport as a destination. It is anticipated that the airport could attract recreational flying that cannot be accommodated in the Sydney area due to capacity issues or attract some pilots away from the busy Sydney airspace to the more relaxed airspace at Mudgee. Recreational pilots may also be attracted to Mudgee by the attractive surrounding landscape, proximity of the airport to the town and the numerous tourist attractions, particularly those related to food and wine.

4.1.4 TOURISM-RELATED AVIATION

There are a number of opportunities which can be considered together under the term 'tourism-related' aviation. These include itinerant aircraft visitation, fixed base operators, charter and pleasure flights and skydiving. These are considered to be opportunities for growth as a result of Mudgee's characteristics as a tourism destination, with the potential for relevant aviation businesses to provide services for visitors.

Itinerant Aircraft and Fixed Base Operators

Somewhat distinct from a charter operator, although potentially part of the same business operation, a fixed base operator (FBO) offer servicing for itinerant private, corporate and charter aircraft. Catering more to business aircraft operators and high-end private aviators, in combination with the associated tourism draws to generate the itinerant aircraft demand it is likely that the need for a FBO would develop over time. Given the proximity of the airport to a number of vineyards, the opportunity to jointly market day-trips and weekend visits by air to Mudgee's wineries, with luxury accommodation, private travel, personalised winery tasting tours and the ability to carry purchases home, would seem to be viable.

Charter and Pleasure Flights

There is likely to be potential for growth in this sector in combination with increased tourism visitation in general.

Skydiving

Skydiving is, anecdotally, an apparent growth sector within the leisure aviation industry. Mudgee's locational advantage suggest that it might be considered viable for a skydive operator to establish at the airport. As an initial step there are skydive companies which 'fly-in' to regional destinations in

order to serve sporadic demand. However, again it is considered to be tourism-related demand rather than local residents that would take advantage.

4.1.5 AIRCRAFT MAINTENANCE, REPAIR AND OVERHAUL

As the number of aircraft based on the airport increases, and as the amenities available to visiting pilots increase, opportunities for the expansion of existing aircraft maintenance services will increase. As this grows, the viability of subsidiary specialist services such as avionics, aircraft interiors (seats & upholstery) and aircraft painting will also grow.

Similarly to pilot training, Mudgee offers accessibility to the Sydney GA market and the associated opportunities for maintenance companies to attract business from elsewhere.

4.1.6 RESIDENTIAL AIRPARK DEVELOPMENT

The demand for hangar accommodation combined with residence is becoming increasingly popular in Australia and can, in general, be considered an important growth sector. There is already one example of this type of development at Mudgee.

A number of factors contribute to the success of an airpark development, including resident demographics, facilities and safety standards. An important element is appropriate development controls to ensure quality.

There are several successful airparks within Australia and these include the Whitsunday Aviation Village Estate (WAVE), which would be considered the prime example of a high-quality development in a tourism-oriented location. An airpark is also under development at Rylstone, near Mudgee, which is of a similar nature to WAVE. Any airpark development at Mudgee Regional Airport should therefore be considered in light of the offer available at Rylstone.

Airparks appeal to a certain demographic, which generally includes aviation enthusiasts, charter businesses and holiday-makers. Key motivations for choosing to live in an airpark include sharing a common interest with like-minded people; a ready availability of aviation infrastructure; and the high level of security and convenience provided.

According to a study of airparks in the USA, the estates generally attract people aged over 50 who are semi-retired professionals, with significant assets and moderate to high disposable income. They also have time available to fly and maintain their own aircraft. This selective demographic may also be attracted to the investment potential of airparks because there are few parks and property values within them are high, relative to similar property. No such studies are available in relation to Australian airparks, although there is no reason to suggest the findings would be different.

At a minimum, airparks must adhere to the relevant Civil Aviation Safety Authority (CASA) guidelines in relation to infrastructure, technical support and resident-use amenity. It should be noted however that none of the existing airpark developments are at airports which also serve airline operations and therefore the requirements in relation to segregation and control of airpark

users with respect to safety and security have never been fully tested in Australia. Generally, resident access to the runway, taxiway and terminal areas has to be monitored and this requires a security system that can be accessed via a key pad or swipe card together with a limited number of taxiway connections to the airfield proper.

Lot size differs and depends on the location of the airpark, but general lot size falls between 800m² and 2,500m². The price of lots also varies, depending on the location and the facilities offered on site and the surrounding areas.

For a variety of reasons, long-leasehold arrangements provide greater power to ensure users comply with safety, security and general behavioural requirements. However, to encourage the investment needed to achieve a quality development freehold tenure may be necessary.

There is limited land within the existing Mudgee Regional Airport boundary to achieve anything approaching a true airpark concept and therefore it is recommended that any response to this type of opportunity be restricted to the adjacent Airport Related Development Opportunity lands.

4.2 AVIATION-RELATED COMMERCIAL DEVELOPMENT OPPORTUNITIES

The following points describe the potential opportunities for the development of aviation-related facilities at the airport, which Council may facilitate through the provision of appropriate airside and landside subdivision infrastructure:

- The construction of a Rural Fire Service (RFS) museum at the airport is currently being considered by the RFS. This will provide an additional tourist attraction for the aviation and general community in the Mudgee area;
- Provision of aircraft maintenance and avionics at the airport through the opening of an aircraft maintenance provider;
- To encourage tourism to the area, aircraft maintenance services could be provided as a 'package' coupling it with an overnight stay in Mudgee providing the opportunity for visitors to sample the local food and wine attractions on offer;
- Private airport storage to support the potential increase in private flight training and recreational flying at the airport;
- Development of hangars which can be leased to aviation businesses, providing an income stream for Council;
- Development of hangars with residential accommodation. Similar to the hangar that already exists and offers pilot accommodation, further hangars may be developed that allow people to permanently reside at the airport with direct access to the aircraft and the runways. Alternatively, short-stay tourist accommodation could be developed.
- Development of hangars with mixed non-aviation uses such as function facilities. These could provide facilities for businesses in the area by providing meeting rooms and other function facilities as well as support such activities as airshows and fly-ins;

- The existing landing fees are currently considered a deterrant to recreational and training flights, a reduction in landing fees at Mudgee Regional Airport would support the potential growth of these activities; and
- Potential exists to promote the area and airport to the recreational flying community by hosting fly-ins that allow visitors to sample the tourist attractions in the region as well as utilising the airport facilities.

As businesses begin to locate at the airport, opportunities exist to exploit potential synergies between businesses and activities. For example, the establishment of a light aircraft maintenance business at the airport may attract other charter operators and private aviators to locate to the airport.

4.3 FUTURE AVIATION ACTIVITY FORECASTS

4.3.1 PASSENGER DEMAND

Airport infrastructure, particularly the passenger terminal and landside access facilities, need to be planned with sufficient capacity to accommodate future anticipated passenger levels. Passenger demand has therefore been considered to understand the future facilities required at the airport and to feed into the aircraft movement forecast.

Historical data presented in **Section 3.2.1** shows that passenger numbers at the airport have fluctuated considerably over the last 20 years. Based on the historical passenger data available it is estimated that there is a general baseline demand of approximately 10,000 – 12,000 passengers per annum at Mudgee.

The overall compound annual average growth rate (CAGR) for passenger numbers over the last 20 years is 1.4%. Taking into account the driving time to Sydney (and that from greater Sydney's main population centres to Mudgee) along with the competitive presence of Dubbo for regional air services, it is considered that this would represent a realistic base case for passenger growth even if local population growth exceeds expectations. As a high-growth scenario, an annual growth rate of 5% has been applied. This is consistent with the highest growth forecasts presently available for the Australian market, which is seen as maturing over the next 20 years.

The base scenario suggests annual passenger demand of between 13,000 and 16,000 passengers approximately by 2035, and the high-growth scenario results in a passenger traffic level of around 30,000 passengers by 2035.

In the absence of other significant, but currently unforeseen, external drivers in the local economy, passenger traffic in 2035 is expected to lie somewhere between the current situation (with no RPT services) and an annual throughput of 30,000 passengers.

4.3.2 FORECAST AIRCRAFT MOVEMENTS

Projections of annual aircraft movement numbers have been developed by segmenting aviation activity into its principal component sectors, each of which has differing drivers and prospects for growth at Mudgee Regional Airport. These sectors are:

- Passenger Transport;
- Charter;
- Business;
- Private;
- Training;
- Emergency Services; and
- Helicopters.

The potential for growth in aircraft movements at Mudgee is considerable, therefore a scenario-based approach has been used to forecast aircraft movements at the airport. The low-, medium- and high-growth scenarios for total aircraft movements are shown in **Figure 5**, with more than 60,000 movements in the high-growth scenario, more than 40,000 movements in the medium-growth scenario and 20,000 movements in the low-growth scenario by 2034.

The forecast aircraft movement growth in each market segment is discussed in the following paragraphs. **Figure 6** indicates how each segment is expected to contribute to the overall movement numbers in the medium-growth scenario, which is considered to represent a base case for airport facility planning purposes.

It should be emphasised that these forecasts have been developed for the purpose of ensuring that infrastructure planning makes adequate provision for the scale and nature of future airport facilities. They are not to be treated as predictions of actual growth, which will be dependent on a wide range of factors which include global, national and local economic conditions and the success of Council in promoting Mudgee Regional Airport as a place for aviation businesses to establish operations.

In particular, it should be noted that the medium- and high-growth scenarios assume that some or all, respectively, of the adjacent Airport Related Development Opportunity lands are developed by aviation businesses and contribute to the capacity requirements of the Mudgee Regional Airport movement area facilities. Whilst the movement numbers represented by the medium- and high-growth scenarios are certainly considered achievable through comparison with other successful and vibrant regional airports, they are contingent on Council realising development opportunities at and adjacent to the airport within the 20-year horizon of this Master Plan. Caution should therefore be exercised in using these forecasts for purposes beyond those for which they were developed. Even the low-growth scenario is considered unlikely to occur through latent demand alone – Council needs to work in parallel to generate the demand, through attraction of aviation and aviation-related businesses.

Figure 5: Forecast Aircraft Movements 2014 – 2034

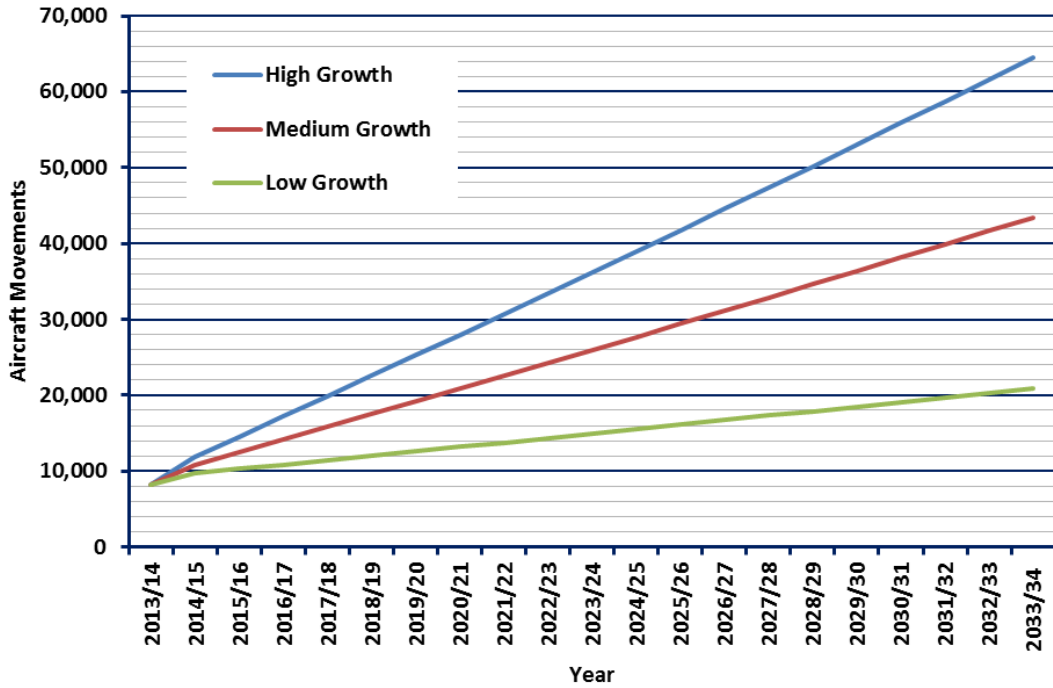
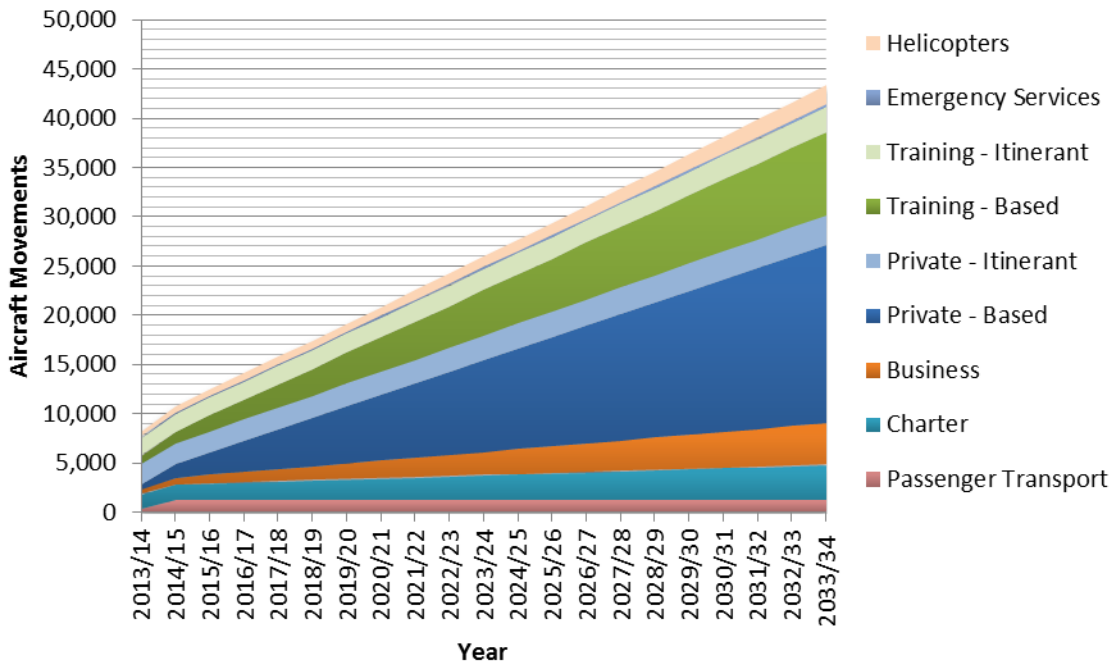


Figure 6: Forecast Aircraft Movements by Sector 2014 – 2034 (Medium-Growth)



Passenger Transport

All forecast scenarios assume that the estimated passenger demand set out in **Section 4.3.1** is met by FlyPelican or other passenger transport services, on a double-daily weekday return service (single-daily return at weekends) that may operate direct to Sydney or be part of a triangulated service with other regional airports in the vicinity. This results in approximately 1,250 movements per annum.

Charter

The forecast assumes that Mudgee Regional Airport will attract new charter operators to be based there, meeting the demands of the local economy for aircraft hire or the carriage of passengers and goods, this demand may be related to mining, tourism, agriculture or some other sector.

The high-growth scenario assumes that future development at the airport is significant and up to three charter companies may base themselves at the airport, in addition to the current levels of charter operation. This level of activity could generate around 4,500 movements per annum by 2034.

Passenger Transport

All forecast scenarios assume that the estimated passenger demand set out in **Section 4.3.1** is met by charter or other passenger transport service, on a double-daily weekday return service (single-daily return at weekends) that may operate direct to Sydney or be part of a triangulated service with other regional airports in the vicinity. This results in approximately 1,250 movements per annum.

Charter

The forecast assumes that Mudgee Regional Airport will attract new charter operators to be based there, meeting the demands of the local economy for aircraft hire or the carriage of passengers and goods, this demand may be related to mining, tourism, agriculture or some other sector.

The high-growth scenario assumes that future development at the airport is significant and up to three charter companies may base themselves at the airport, in addition to the current levels of charter operation. This level of activity could generate around 4,500 movements per annum by 2034.

The medium-growth scenario assumes that charter activity at the airport will be less significant with approximately two charter operators at the airport generating around 3,500 movements per annum by 2034.

The low-growth scenario assumes that one charter operator may be based at the airport generating around 2,500 movements per annum by 2034.

Business

As well as the ongoing use of the airport by non-aviation related businesses with their own aircraft, the forecast assumes that Mudgee Regional Airport will attract new aviation-related businesses to

locate there, meeting the demands of the local aviation community for services such as aircraft maintenance and avionics.

The high-growth scenario assumes that future development at the airport is significant with considerable growth in all segments, therefore resulting in an increased demand for aviation-related services. This could attract a number of new businesses to be based at the airport and is estimated to result in approximately 4,800 movements per annum by 2034.

The medium-growth scenario assumes that the increase in business activity at the airport is less steep and could generate around 4,000 movements per annum by 2034. The low-growth scenario assumes around 3,000 movements per annum by 2034.

Private

For forecasting purposes, private aircraft movements have been divided into two further sub-categories: Mudgee-based, and itinerant.

Mudgee-Based

Based private movements include all those generated at the airport by the existing and potential future development including activities such as private aircraft storage and residential airpark developments.

The high-growth scenario assumes that Mudgee attracts a number of private aircraft owners to base their aircraft at the airport away from the busy Sydney area. It is assumed that there is considerable development both within the airport and outside the airport boundary, including the residential Airpark for which a Development Application (DA) has already been received as well as further extensive development of a similar type. More than 29,000 based private movements would be expected to be generated by this level of development by 2034 in the high-growth scenario.

The medium-growth scenario assumes a lesser extent of development outside of the existing airport boundary. More than 18,000 based private movements are forecast by 2034 in the medium-growth scenario.

The low-growth scenario assumes that future development is retained within the existing airport boundary. More than 4,000 based private movements are forecast by 2034 in the low-growth scenario.

Itinerant

Itinerant private movements include aircraft that are visiting the airport only. Although GA movements have been decreasing at many airports, these forecasts assume that Mudgee's popularity as a destination airport, where visitors can enjoy the scenic views and its food and wine offerings, increases. The forecast therefore assumes that private itinerant visitation movements will increase by approximately 3% per annum in the high-growth scenario resulting in almost 3,800 itinerant private movements by 2034.

The medium-growth scenario assumes that growth in this area is less significant with 2% growth per annum resulting in approximately 3,100 movements by 2034.

The low-growth scenario assumes that the attraction of Mudgee is only sufficient to produce a 1% growth per annum, which is still in excess of contemporary GA growth rates at many locations, resulting in approximately 2,500 movements by 2034.

Training

Training aircraft movements have also been divided into based and itinerant movements for forecasting purposes.

Mudgee-Based

Based training includes all recreational training movements generated by recreational flight training schools at the airport itself. It is considered that Mudgee Regional Airport has the potential to attract a significant number of trainee pilots with multiple flight training providers. The high-growth scenario assumes approximately 35 students per year learn to fly at one or more flight training schools resulting in approximately 15,000 movements per annum.

The Medium-growth scenario assumes approximately 20 students per year learn to fly at one or more recreational flight training schools resulting in approximately 8,500 movements per annum. The low-growth scenario assumes approximately 10 students learn to fly at one or more recreational flight training schools resulting in approximately 4,000 movements per annum.

Itinerant

Itinerant training movements include aircraft that are visiting the airport only for training purposes. Similar to private itinerant movements, this scenario assumes that Mudgee's popularity as a destination airport, where visitors can enjoy the scenic views and relatively quiet and relaxed airspace away from Sydney, increases. The forecast therefore assumes that these movements will increase by approximately 3% per annum in the high-growth scenario. Approximately 3,100 itinerant training movements are forecast in the high-growth scenario by 2034.

The medium-growth scenario assumes that growth in this area is less significant with 2% growth per annum resulting in approximately 2,500 movements by 2034.

The low-growth scenario assumes that the attraction of Mudgee is less with 1% growth per annum resulting in approximately 2,100 movements by 2034.

Helicopters

There has been a general increase in helicopter activity in recent years throughout Australia, particularly as a result of resource activity but also more generally across the sector including emergency services. Overall helicopter registrations have increased at 6.5% per annum between

2008 and 2013 according to the Australian Helicopter Industry Association (AHIA). Given the established presence of helicopter businesses at Mudgee Regional Airport, growth prospects in this sector can be expected to be good.

The high-growth scenario therefore assumes that helicopter activity at the airport will grow at a slightly higher rate to recent helicopter registrations of 8% per year on average. This would generate almost 2,650 helicopter movements per annum.

The medium-growth scenario assumes that demand for helicopter services at Mudgee Airport continues at the rate of recent national demand and uses a growth rate of 6.5% per annum, resulting in approximately 2,000 helicopter movements per annum.

The low-growth scenario assumes a lesser growth rate of 3% per annum which would generate just over 1,000 helicopter movements per annum.

Emergency Services

Population growth in the Mudgee area is likely to be the key driver behind emergency services movements at the airport, particularly for the RFDS. Therefore, the high growth scenario growth for this segment matches the population forecast growth of 3% to 2020/21 and 1.5% from 2021/22 to 2034. This results in almost 300 movements per annum by 2034.

The medium-growth scenario assumes that population growth is less and uses a growth rate of 2% to 2020/21 and 1% on to 2034, resulting in approximately 250 movements by 2034.

The low-growth scenario assumes a flat growth rate of 1% across all years to 2034, generating approximately 230 movements by 2034.

5.0 DEVELOPMENT CONCEPT

5.1 GENERAL PRINCIPLES

This section describes the overall development concept envisaged for Mudgee Regional Airport on the basis of its ultimate utilisation of available land. The concept presents what is considered to be the optimal strategic direction for the airport by identifying and determining the spatial allocation of land in a balanced manner.

Aeronautical infrastructure development is described in **Section 5.2** and non-aeronautical development in **Section 5.3**. Although each is described separately, they are inherently linked as it is the aviation-related commercial development which will largely influence the requirements for aeronautical infrastructure.

The development concept described in this section is based on an assessment of the likely ultimate aviation needs of Mudgee Regional Airport. Further discussion on logical staging of the development, in accordance with demand, is provided in **Section 6.1**.

5.2 AERONAUTICAL INFRASTRUCTURE

The proposed aeronautical development concept, covering airfield and terminal infrastructure requirements and development staging, has been prepared on the basis of satisfying a set of critical planning parameters. **Section 5.2.1** sets out the critical planning parameters upon which the aeronautical development proposals are based. This is followed by presentation of the proposals and development concepts for the runways, taxiways, aprons and passenger terminal.

Figure C, Figure D and **Figure E** set out the concepts described in this section in more detail.

5.2.1 DESIGN AIRCRAFT CHARACTERISTICS

CASA requires that aerodrome movement area infrastructure is designed to the standards applicable to the aircraft that the facilities are intended to serve. The relevant standards are set out in the CASA Manual of Standards Part 139 (MOS Part 139) and are based on an aerodrome reference code system established by the International Civil Aviation Organisation (ICAO), of which Australia is a signatory.

Aerodrome Reference Code

The dimensions, shape and layout of basic aerodrome facilities such as runways, taxiways and aprons are essentially determined by the performance capability and size of the aircraft that are intended to use them. The planning and design of these facilities therefore begins by identifying the most demanding or critical aircraft that will use them.

In Australia, like most countries, this is achieved by using the ICAO aerodrome reference code system. The reference code has two elements, a number and a letter, which are derived by grouping aircraft with similar performance capability and key physical dimensions. Thirteen aircraft

groupings, each with a unique code number and letter combination such as 1A, 2B, 3C and 4D have been identified.

The objective is to plan individual facilities for the critical aircraft likely to use them. Different facilities at the airport, such as those intended for RPT services and those intended solely for GA aircraft, are normally planned for their specific critical aircraft. On the other hand, common use facilities such as the primary runway and taxiway system will be planned for the most demanding aircraft envisaged to use the airport.

Pavement Strength

The strength of airfield pavements is classified using the ICAO Aircraft Classification Number/Pavement Classification Number (ACN/PCN) system. The ACN is calculated by the aircraft manufacturer for each aircraft, based on the damaging effect of the aircraft on different types of pavement. The ACN is dependent on both the maximum weight of the aircraft and the number, type and configuration of the landing gear. The ACN also includes a component related to the tyre pressure of the main gear, which can often become the critical parameter in relation to pavement strength.

Principal Aircraft Parameters

Table 2 summarises the principal relevant planning parameters that relate to aeronautical facilities for each of the key aircraft types that might conceivably use Mudgee Regional Airport in the future.

Table 2: Principal Design Aircraft Key Parameters

Aircraft Type	ICAO Aerodrome Reference Code	Wingspan (m)	MTOW (kg)	Typical Passenger Capacity (Pax)
Cessna 172	1A	10.9	1,160	N/A
Cessna 404	1A	14.1	3,810	N/A
Beech Super King Air 200	1B	16.6	5,670	8-10
Cessna 208 Caravan	1B	15.9	3,310	9 – 12
Cessna 441	1B	15.1	4,468	8 – 10
DHC6 Twin Otter	1B	19.8	5,670	19
Air Tractor AT-802A	1B	18.0	7,257	N/A
Pilatus PC-12	2B	16.2	4,740	N/A
Embraer EMB-110	2B	15.3	5,670	19
Cessna Citation I / II	2B	15.8	6,030	8
Bae Jetstream 32	2B	15.9	6,250	19
Beech 1900D	2B	16.6	7,530	19
Metro III	2B	17.4	6,580	19
Bombardier CL-600	3B	18.9	19,620	19
Dassault Falcon 900	3B	19.3	20,640	19

Aircraft Type	ICAO Aerodrome Reference Code	Wingspan (m)	MTOW (kg)	Typical Passenger Capacity (Pax)
Embraer E-145	3B	20.0	24,100	50
Dash 8-100, -200	2C	27.4	15,650	36
Dash 8-300	2C	27.4	18,645	50
Metro 23	3C	17.4	7,480	19
Saab 340	3C	21.4	13,155	34
Fokker F50	3C	29.0	20,820	55
ATR 72	3C	27.0	22,000	68
Dash 8- Q400	3C	28.4	29,260	74

Master Plan Design Aircraft

At the forecast passenger traffic levels, the largest aircraft size requirement envisaged during the next 20 years is for 19-36 seat aircraft types. These are encompassed by a 3C aerodrome reference code.

From a commercial GA perspective, the vast majority of opportunities are likely to be covered by aircraft in the 2B or 3B categories. However, there are sufficient possibilities which would require Code C accessible facilities to ensure that these are provided for within certain areas of the airport. These areas include the main apron, taxiway connection to the Runway 22 threshold, and selected development sites within the South East and South West Development Zones.

5.2.2 RUNWAYS AND RUNWAY STRIPS

No upgrade or extension of the runways is proposed and the Master Plan retains, generally, the existing runway and runway strip geometry and characteristics. These characteristics are adequate for the range of aviation and aviation-related opportunities described in **Section 4.0** in accordance with current CASA requirements.

Provision is made to safeguard a future increase in runway strip width for Runway 04/22 to 150m, through the addition of 30m flyover areas on each side of the existing 90m wide graded strip.

The areas required by the new RESA standards for Runway 04/22 are also indicated, although these are not a mandatory requirement at present. It is nonetheless recommended that Council considers acquiring the small areas of land required to implement the current RESA standards in the future, whenever it may be economical to do so, in order to minimise any risk that the length of runway would need to be reduced.

5.2.3 TAXIWAYS

Provision for a suitable taxiway system has been identified based on the ultimate development of the currently available land, whilst also facilitating potential connections to adjacent land which may

be used for airport-related opportunities. The future taxiway layout is indicated on **Figure C**, with further detail on **Figure D**.

The long-term objective for taxiway development is to establish a parallel taxiway arrangement wherever sufficient land exists. By ensuring that backtracking operations on runways are minimised, capacity of the runway system will be maximised allowing the greatest number of aircraft movements to occur as efficiently as possible.

In addition to the parallel taxiways, additional taxiways and taxilanes are proposed as required to serve to hangar development.

Development of the taxiway system, including the parallel taxiway components, can occur incrementally as demand grows and operational requirements dictate. As an initial stage, taxiways can be formalised on the natural surface for use when environmental conditions permit. As demand grows, taxiway links can be progressively sealed for all-weather use and strengthened for larger aircraft.

5.2.4 PASSENGER TERMINAL

The terminal in its current form would be adequate for charter or air taxi services by aircraft with less than 9 passenger seats. Council is planning a modest extension of the terminal building, which will be completed in 2015. It is considered this would be sufficient to remove the reported congestion associated with 19-seat aircraft turnarounds.

Given the prospects for re-establishing passenger services with greater than 19-seats at Mudgee, any requirement further for extension is considered unlikely within this Master Plan horizon. Nonetheless, an ultimate requirement for larger terminal facilities should not be ruled out. The characteristics of the airport site do not readily suggest any suitable alternative location for passenger terminal facilities, and the ultimate aeronautical development concept assumes that any aircraft of sufficient size to operate future regional airline services would be accommodated in the general vicinity of the existing terminal.

An expansion reserve for the passenger terminal building has therefore been identified to ensure that alternative uses do not preclude further augmentation or redevelopment of the terminal in its current location, should this ever be required. The reserve, indicated on **Figure E**, is adequate to enable a significant upgrade of the terminal, sufficient to handle larger charter operations or regular public transport services by up to 50-seat aircraft in comfort.

5.2.5 AIRCRAFT PARKING AREAS

Provision for apron parking is made in two main areas within the ultimate concept:

- Expansion of the itinerant aircraft stand-off apron and expansion to the north of the main apron. A long-term aircraft parking concept for this area is shown in **Figure E**; and
- Development of new apron parking in the south of the airport land adjacent to Commercial Helicopters.

All the proposed apron areas are accessible by Code C aircraft, but could be used for smaller aircraft.

5.2.6 OTHER AIRFIELD FACILITIES

Fuel Facility

The fuel facility is likely to remain adequate in the short to medium-term. The Master Plan proposed realignment of Taxiway D which will provide space for aircraft to taxi up to the fuel facility without infringing the taxiway strip.

NDB

Although users indicated that there is essentially no requirement to use the NDB in the presence of the VOR and satellite-based instrument procedures, Airservices (the owner of the NDB) requires it to remain to provide en-route backup navigation capability for the wider air traffic network.

The NDB currently restricts the development hangar sites within the South West Development Zone, and so any opportunity to relocate the NDB ought to be considered.

5.3 NON-AERONAUTICAL DEVELOPMENT

Airports with available land that is not required for future aeronautical infrastructure have the potential to generate diverse revenue streams and produce economic generators. Revenue raised through the use of this land can be used to pay for major investments and expenditure growth. The airport also has a wider economic benefit to the area. The airport and the businesses located there employ local people. Furthermore, airports also invest relatively large amounts to meet new requirements, maintain their infrastructure and expand capacity. These investments often comprise both local construction and equipment.

Council would like to continue to take advantage of the available land at the airport to develop aviation-related activities and businesses whilst not infringing on the aeronautical requirements of the airport.

In responding to the objectives of the Master Plan, as described in **Section 1.2**, the main features of the non-aeronautical development concept include provision for additional aircraft hangars. The term 'hangar' is a generic description encompassing those types of facilities requiring airside access and therefore by definition includes such things as aircraft maintenance facilities, flying training schools, charter and fixed-base operations which might address the aviation-related opportunities described in **Section 4.0**

5.3.1 KEY DEVELOPMENT CONSTRAINTS

There are three key constraints to development which it has been necessary to take explicit account of in the preparation of the development non-aeronautical concept set out below. These are:

- The Mudgee NDB is on Airservices Backup Navigation Network and will therefore continue to be in service for the foreseeable future. Airport development in the vicinity of the NDB will need to be compliant with NDB siting guidelines including building height limitations, until such time as the NDB is decommissioned or it can be relocated to an alternative location. The current location of the NDB means it prevents any development within a 60m radius of the antenna⁴. This limits the extent of subdivision development that is possible within the South East Development Zone. Development outside 60m may also need to be subjected to a technical assessment by Airservices;
- The protection of obstacle limitation surfaces applicable to a Code 3 instrument non-precision approach runway with 150m wide runway strip. This effectively limits further development to the north of the terminal; and
- The limited extent of land available within the existing airport land boundary outside the runway and runway strip areas.

5.3.2 PROPOSED DEVELOPMENT AREA

To accommodate the identified opportunities set out in **Section 4.0**, development has been identified based on their specific requirements, constraints, likelihood, timing, synergies with other activities at the airport and the available land.

- Terminal precinct;
- Northern development zone;
- South East development zone; and
- South West development zone.

The principal features of each precinct are discussed below.

Terminal Precinct

This precinct incorporates existing passenger terminal building and car park, along with future expansion reserve for both.

The expansion reserve for the passenger terminal building is adequate to enable a significant upgrade of the terminal, sufficient to handle larger charter operations or regular public transport services by up to 50-seat aircraft in comfort.

The car park expansion would accommodate an additional 40-50 spaces as described in **Section 5.3.3**.

⁴ CASA MOS Part 139 v1.12 November 2014 para 11.1.13.1 stipulates that a radius of 150m from the NDB antenna should be kept clear of buildings exceeding 2.5m in any dimension. However, this requirement is generally proven to be conservative based on development at other airports. Airservices siting criteria for NDB state that development proposals between 60m and 300m radius from the centre of the NDB antenna that exceed an elevation angle of 5° from ground level at the centre of the antenna require assessment. This effectively permits buildings up to 5.25m high at a 60m radius without assessment and larger buildings subject to assessment.

Northern Development Zone

The northern development zone incorporates the existing development to the north of the terminal in the northern hangar area. Practically, further development in this zone is precluded through a lack of available land and OLS constraints.

Subject to possible development in the adjacent airport related development opportunity lands, some development or redevelopment along the current eastern boundary might be possible.

South East Development Zone

This precinct is envisaged as representing the development of a 'best in state' aviation industrial subdivision. Incorporating the three existing hangars in the Southern Hangar Area expansion is planned to the south and east, to occupy the land recently purchased by Council and ultimately becoming contiguous with the Commercial Helicopters development and the proposed RFS facility.

The key development concept features are:

- Realignment of George Campbell Drive to facilitate taxiway access to new hangar development lots, with associated new airport access on to Ulan Road;
- Ten (10) lots 40m wide by 55m deep approximately suitable for typical commercial operations utilising Code B aeroplanes;
- A further 8-10 lots of similar dimensions for future development once the NDB is decommissioned or relocated;
- Two (2) 50m wide by 80m deep lots with the option of around 8,000 sq m of adjacent licensed apron area to be used for access and parking of up to Code C aircraft; and
- A premium corner site currently identified for a non-aviation related Rural Fire Service heritage museum and administration facility.

South West Development Zone

An area suitable for further subdivision has been identified in the south western area of the current airport site. This area would require a new access road to be provided to enable development, together with engineering services for commercial operators. It is therefore envisaged that subdivision of this zone would not occur until the industrial lots in the South East Development Zone were exhausted.

However, as a location for private aircraft storage, where access could be provided by unsealed road and utilities are not essential, this zone could be developed earlier.

The key development concept features of this zone are:

- Six (6) lots approximately 40m wide by 70m deep, suitable for typical commercial operations using Code B and smaller Code C aeroplanes, with Code B/C taxiway access directly to Runway 04/22;

- Twelve (12) lots approximately 28m wide by 35m deep, suitable for typical commercial operations using Code A aeroplanes;
- Approximately 1.4 hectares available for un-subdivided construction of private hangars for light aircraft storage. Depending on the configuration of this area and the type of hangar construction, space for approximately 25-30 typical light aircraft hangars (Cessna 172) be available; and
- New access road connection to Ulan Road south of Commercial Helicopters.

5.3.3 LANDSIDE ACCESS

External Access

A new external access is proposed on Ulan Road to serve the realigned George Campbell Drive which would form the main access to the Terminal Precinct, Northern and South East development areas.

The existing George Campbell Drive intersection with Ulan Road would remain, to serve the proposed RFS site and the two aviation sites to the west.

A further access road would be required to access the South West Development Area.

Internal Access

A future one-way access loop serving the terminal and looping around the car park is proposed to facilitate any expansion of the terminal.

Road reserve widths of 20m have been allowed which would provide for two trafficable lanes, footpath areas, service corridors, limited parking, and strip landscaping. A width of 15m would strictly suffice for this, however an additional width of road reserve allows for less stringent set-back requirements to be imposed on the leasable areas, enables supplementary roadside parking if required and will assist in maintaining an open and feel to the development appropriate to the surrounding rural environment.

Car Parking

The area immediately east of the terminal and existing car park should be reserved for expansion of car parking requirements for the terminal precinct and nearby development. There is room for approximately 46 additional spaces with the option for 6-10 more along the southern edge of the terminal access road.

Within the proposed subdivision areas, it is envisaged that the general principle would be to require adequate parking to be provided as part of individual lot developments, an indicative lot layout shown has been sized accordingly. Supplementary parking areas could however be provided in convenient locations.

5.3.4 ENGINEERING SERVICES

It is assumed that there is sufficient capacity in the existing supply systems (water, electricity, sewer and telecommunication) at the airport boundary to service the new development areas. It is recommended that the Council undertake an assessment of these services to confirm the adequacy of these engineering services. The South East Development Area would take supply from junctions at appropriate locations along the realigned George Campbell Drive.

It is recommended that a conceptual master grading design be undertaken for the proposed South East Development Area to prove the land use concept and determine the indicative extent of any required earthworks and drainage systems.

5.4 OTHER LAND USE OPPORTUNITIES

Other than the proposed development areas discussed above, there are only limited opportunities within the airport boundary to identify possible higher order land use potential. There are, however, a number of areas adjacent to the airport boundary which have been identified within the LEP as potential airport related development opportunities. These areas are shown on **Figure C** and bound the eastern, northern and western perimeter of the airport.

Such areas would be suitable for a range of airport-related activities, which may or may not require access to the airfield proper. However, the Master Plan makes provision for taxiway access points to each potential area, subject to the establishment of a suitable access agreement. In particular, it is felt that given the nature of the surrounding land uses, and the lack of available space within the airport land for residential airpark style development, rural residential development with airport access would appear to be an ideal use for these lands. This would allow what is effectively a property development activity to occur on private land, by developers experienced in such matters, without undue risk to Council.

5.5 TENURE & OWNERSHIP OF AIRPORT SITES

A common difficulty at regional airports is the complaint that lease arrangements make it difficult for small aviation-related businesses to finance developments which would expand the range of aviation activities on airport land. Users often advocate the subdivision and freehold sale of airport land, with Council potentially retaining ownership of the land required for runways, taxiways, aprons and the passenger terminal area. This arrangement, however, is predicated on having confidence that there will never be a need for major redevelopment or reconfiguration of facilities within the airport site. Given the dynamic nature of the industry and ever-changing development opportunities, it is widely acknowledged that it is essential to retain as much flexibility as possible with respect to future requirements. The lease of sites within the airport boundary is generally favourable on the basis that Council maintains long-term control of the land, even if the lease periods are relatively long.

The current arrangement at Mudgee Airport where leasehold sites are offered is standard practice for airports throughout Australia, and fulfils the flexibility imperative described above. On the other hand it is acknowledged that it may prove difficult to arrange development finance for lease terms shorter than 20, or in some case 30 years.

Council should consider carefully how the available land will be made available to developers, particularly in the South East Development Zone. Although Council has the option to sell freehold some or all of the individual sites, this approach is not recommended. Several sites held on freehold purchase basis may restrict future plans for the adjacent sites and could reduce the flexibility of the surrounding land. Through projects at other regional airports, REHBEIN Airport Consulting has also witnessed regional council's difficulties in developing airports based on past decisions to sell land on a freehold basis.

It is recommended instead that Council adopt an extended lease arrangement. The standard leases offered by the Federal Airports Corporation (FAC) were for 25 years with 40 year tenure available for special developments and a number of regional airports are now considering 20 years as a minimum lease period, sometimes with extension options. Shorter lease terms may be negotiated by mutual agreement.

In the event that the ability to offer freehold land is considered absolutely essential to attract businesses or residential aviators and that the vision for development of Mudgee Regional Airport cannot be fulfilled without recourse to a freehold tenure, the adjacent Airport Related Development Opportunity lands offer the ideal mechanism for this scenario. Development could occur on land held privately, or Council could acquire the land, develop it, and then offer the freehold to aviation businesses. In both cases, the flexibility of land use within the existing airport land boundary would not be eroded.

6.0 IMPLEMENTATION PLAN

6.1 DEVELOPMENT STAGING

For the purpose of this Master Plan, developments have been divided into three stages by expected timing, as follows:

- Short-term: Expected to be required within the next five years (ie before 2020). Planning and budgeting for these developments should occur now;
- Medium-term: Expected to be required some time between 5 and 20 years (ie between 2020 and 2035). The timing of these developments is subject to a number of factors which make it difficult to predict the exact timeframe. The need and expected timing of these should be reviewed further during the next 5-yearly Master Plan review process, when it is anticipated that some of these developments will move into the 'short-term' category; and
- Long-term (or ultimate): developments which to comply with sound planning practices should nevertheless continue to be safeguarded for implementation subject to demand, or for which there are existing constraints with unknown removal timeframes.

6.1.1 SHORT-TERM DEVELOPMENT

Short-term development anticipated before 2020 is indicated on **Figure E**. The key elements are as follows.

Airside works

- Expansion of the stand-off itinerant large aircraft parking apron (Council has completed this item during the Master Plan preparation period);
- Realignment and extension of Taxiway D as a sealed Code B taxiway to provide access to the first stage of the South East Development Zone;
- Extension of Taxiway E to Runway 04/22 as a sealed Code B taxiway;
- Formalisation of an extension to Taxiway A as a sealed Code B taxiway to provide access to the businesses in the south eastern corner of the airport;
- Provision of additional grassed light aircraft tie-down parking area south of Taxiway D; and
- Subject to development in the adjacent Airport Related Development Opportunity land to the north, provision of Code A taxiway access to this land linking the Runway 22 threshold and Runway 16/34.

Landside Works

- Realignment of George Campbell Drive and diversion of associated engineering services;
- Provision of internal subdivision access road for the first stage of the South East Development Zone; and

- Provision of services reticulation for the first ten (10) lots in the South East Development Zone.

6.1.2 MEDIUM-TERM DEVELOPMENT

Medium term development comprises the remainder of the development on **Figure C**, other than that which is noted as 'Future Development'. The key components are presented here in, very approximately, the order they are anticipated to be required at the time of preparation of this Master Plan.

- Further expansion of the stand-off itinerant parking apron and redevelopment of the main apron towards Runway 04/22;
- Construction of Code C taxiway access between the Runway 22 threshold and Taxiway A;
- Extension of sealed Code B taxiway access to serve an additional three (3) lots within the South East Development Zone;
- Upgrade of Taxiway A to Code C standards to serve Commercial Helicopters and adjacent commercial lots; and
- Development of taxiway access to the South West Development Area, along with a new road access passing to the south of Commercial Helicopters.

6.1.3 ULTIMATE DEVELOPMENT

The ultimate development concept is that reflected in **Figure C**. In addition to the medium-term development envisaged prior to 2035, the Master Plan provides for the following at some stage in the future:

- Expansion of the South East Development Zone subdivision to encompass the area vacated by the existing NDB;
- Parallel taxiways to both sides of Runway 16/34;
- Provision of sealed apron parking adjacent the airport boundary to the south of the Runway 34 threshold; and
- Taxiway access connections to adjacent Airport Related Development Opportunity land areas.

6.2 INDICATIVE COSTS

Indicative costs have been developed for the key elements envisaged in the short term development have been prepared. Given there is considerable uncertainty over the need for, and required timing of, any of the other developments within the development concept, costs for medium and long-term developments are not appropriate at this stage. The indicative costs for short-term development items are summarised in **Table 3**.

Table 3: Short-term Development Indicative Costs

Item	Qty	Rate	Cost
Airfield Works			
Itinerant Apron Extension (Code C)	3,300 m ²	\$150 / m ²	complete
Taxiway D Realignment & Extension (Code B)	4,500 m ²	\$140 / m ²	\$630,000
Taxiway E Extension (Code B)	1,800 m ²	\$140 / m ²	\$260,000
Taxiway A Extension (Code B)	3,400 m ²	\$140 / m ²	\$480,000
Code A Taxiway between Rwy 22 threshold & Rwy 16/34	3,600 m ²	\$120 / m ²	\$510,000
Landside Access			
George Campbell Drive Realignment	5,300 m ²	125 / m ²	\$1,100,000
New Intersection with Ulan Road	1 item	\$500,000	\$500,000
Internal Subdivision Access Road	1,100 m ²	\$100 / m ²	\$110,000
Utilities Reticulation			
George Campbell Drive:			
Stormwater Drainage	600 L.m	\$750 / L.m	\$450,000
Diversion – Water 150 dia upvc main	600 L.m	\$200 / L.m	\$120,000
Diversion – Electrical	600 L.m	\$825 / L.m	\$500,000
Diversion – Telecommunications	600 L.m	\$330 / L.m	\$200,000
Internal Subdivision:			
Stormwater Drainage	130 L.m	\$625 / L.m	\$90,000
Sewer 150dia uPVC Gravity Main	130 L.m	\$250 / L.m	\$40,000
Water 150dia uPVC main	130 L.m	\$200 / L.m	\$30,000
Electrical	130 L.m	\$825 / L.m	\$110,000
Telecommunications	130 L.m	\$330 / L.m	\$50,000

A range of assumptions and exclusions were made in order to produce the indicative development costs, there are as follows:

- Costs are based on assumptions made in the absence of detailed feature and level survey and/or geotechnical investigation;
- Airfield development costs includes allowances for earthworks, pavement, stormwater drainage and taxiway edge lighting;
- Costs included for the development of the subdivision do not include ground improvements or servicing within lots or the construction of hangars, it is anticipated that this will be carried out by the lessee/owners. Costs for engineering services (power, water,

telecommunications, sewer and stormwater drainage) to the lot boundary, taxiway access (where relevant) and landside access to the subdivided sites have been considered only;

- Engineering services for the new subdivided sites will be connected to the existing services at the airport site;
- Upgrades to the power, water and sewer connections to the airport site have not been considered;
- GST has not been included;
- An allowance of 15% for preliminaries and 30% for design contingency has been made; and
- No allowance for construction contingency has been made.

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7.0 AIRPORT SAFEGUARDING

Adequate protection of the basic capability to undertake aircraft operations in accordance with prescribed safety standards and regulatory requirements, and in an efficient and economic manner, is imperative to the future realisation of aeronautical opportunities at Mudgee Regional Airport.

It is important to protect the airport from encroachment of incompatible surrounding land uses, to ensure continued operations whilst protecting the amenity of surrounding properties.

In order to adequately protect for the potential future aircraft operations at Mudgee Regional Airport envisaged by this Master Plan, safeguarding of a number of aspects will be required through appropriate planning and development restrictions and monitoring processes.

Council should give consideration as to how best to address and incorporate each of the issues discussed below into its planning policy.

7.1 NATIONAL AIRPORTS SAFEGUARDING FRAMEWORK

The National Airports Safeguarding Framework (NASF) is a national land use planning framework that aims to:

- Improve community amenity by minimising aircraft noise-sensitive developments near airports including through the use of additional noise metrics and improved noise-disclosure mechanisms; and
- Improve safety outcomes by ensuring aviation safety requirements are recognised in land use planning decisions through guidelines being adopted by jurisdictions on various safety-related issues.

The NASF was developed by the National Airports Safeguarding Advisory Group (NASAG), comprising of Commonwealth, State and Territory Government planning and transport officials, the Australian Government Department of Defence, the Civil Aviation Safety Authority (CASA), Airservices Australia and the Australian Local Government Association (ALGA).

The NASF was agreed to by Commonwealth, State and Territory Ministers at the Standing Council on Transport and Infrastructure meeting on 18 May 2012. The agreement represents a collective commitment from governments to ensure that an appropriate balance is maintained between the social, economic and environmental needs of the community and the effective use of airport sites. NASF applies to all airports in Australia.

The NASF currently consists of a set of seven principles and six guidelines, as follows:

- **Principle 1:** The safety, efficiency and operational integrity of airports should be protected by all governments, recognising their economic, defence and social significance
- **Principle 2:** Airports, governments and local communities should share responsibility to ensure that airport planning is integrated with local and regional planning
- **Principle 3:** Governments at all levels should align land use planning and building requirements in the vicinity of airports
- **Principle 4:** Land use planning processes should balance and protect both airport/aviation operations and community safety and amenity expectations
- **Principle 5:** Governments will protect operational airspace around airports in the interests of both aviation and community safety
- **Principle 6:** Strategic and statutory planning frameworks should address aircraft noise by applying a comprehensive suite of noise measures
- **Principle 7:** Airports should work with governments to provide comprehensive and understandable information to local communities on their operations concerning noise impacts and airspace requirements.
- **Guideline A:** *Measures for Managing Impacts of Aircraft Noise*
- **Guideline B:** *Managing the Risk of Building Generated Windshear and Turbulence at Airports*
- **Guideline C:** *Managing the Risk of Wildlife Strikes in the Vicinity of Airports*
- **Guideline D:** *Managing the Risk of Wind Turbine Farms as Physical Obstacles to Air Navigation*
- **Guideline E:** *Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports*
- **Guideline F:** *Managing the Risk of Intrusions into the Protected Airspace of Airports.*

The full NASF principles and guidelines can be found on the Department of Infrastructure and Regional Development's website at: www.infrastructure.gov.au/aviation/environmental/airport_safeguarding/nasf

These safeguarding aspects are discussed in the following sub-sections with reference to Mudgee Regional Airport.

7.2 AIRCRAFT NOISE

7.2.1 AUSTRALIAN NOISE EXPOSURE FORECAST

Restrictions on airport operations as a result of annoyance caused by exposure to aircraft noise can significantly limit the ability of an airport to facilitate aviation related business and employment. The Australian Noise Exposure Forecast (ANEF) system is one metric used for conveying the levels of aircraft noise exposure in the vicinity of airports. It is the only system which currently has statutory meaning for land use planning, through Australian Standard AS2021-2015, *Acoustics: Aircraft Noise Intrusion – Building Siting and Construction*.

The ANEF is constructed using the Integrated Noise Model (INM) to generate contours of equal noise exposure level. It is normal to show contours of 20,25,30,35 and 40 ANEF units. It is based upon the:

- Intensity, duration, content and spectrum of the sound;
- Forecast aircraft types and movements on various flight paths; and
- Average daily distribution of aircraft take-offs and landing.

In accordance with the safeguarding principles and manner of endorsement for ANEFs⁵, aircraft noise forecasts should represent the future expected state of aircraft noise exposure in the vicinity of an airport. The ANEF can be prepared for a specific forecast year, or to represent the anticipated aircraft operations associated with the ultimate development of the airport.

Council does not currently have an endorsed ANEF. Australian Noise Exposure Concepts were included in the 2005 Master Plan. However, it is recommended that these be updated to reflect this Airport Master Plan and an ANEF then be subsequently endorsed for incorporation into the LEP.

7.2.2 N-ABOVE CONTOURS

The NASF Guideline A – *Measures for Managing the Impacts of Aircraft Noise* recognises that the 20 ANEF and 25 ANEF zones within which residential developments are restricted under AS2021, do not capture all high noise affected areas around an airport. AS2021 itself recognises that the ANEF contours are not necessarily an indicator of the full spread of noise impacts, particularly for residents newly exposed to aircraft noise.

N-above contours have been developed and are now being applied by strategic planners to complement the ANEF metric and provide an additional communication and planning tool. N-above contours indicate the number of aircraft noise events equal to or greater than a specified noise level expected to occur on an average day.

Where there is no major existing or approved development, there is scope to plan ahead to take account of potential noise disturbance and in particular to minimise the zoning of noise-exposed land for residential development.

For this reason, NASF Guideline A recommends that existing and future development need to be treated differently, with rezoning of greenfield to permit noise sensitive uses only undertaken subject to the following approach:

- There should be no new designations or zoning changes that would provide for noise sensitive developments within a 20 ANEF where that land was previously rural or for non-urban purposes. Zoning for noise-sensitive development should be avoided where ultimate capacity or long range noise modelling for the airport indicates either:
 - 20 or more daily events greater than 70 dB(A);
 - 50 or more daily events of greater than 65 dB(A); or

⁵ All ANEFs are endorsed for technical accuracy by Airservices Australia, to ensure that the modelling assumptions adopted in INM appropriately reflect the parameters associated with aircraft operations, that consultation with relevant stakeholders including local and state government agencies has been undertaken, and that the forecast movements do not exceed the capacity of the future proposed airport infrastructure (ie runways).

- 100 events or more daily events of greater than 60 dB(A).

7.3 BUILDING GENERATED WINDSHEAR AND TURBULENCE

Buildings of a certain size and dimensions, when sited near to runway ends, can sometimes generate windshear and turbulence effects which can pose a safety risk to aircraft. The effect depends on a number of factors and NASF Guideline B sets out:

- empirically determined criteria for windshear and turbulence;
- generic guidance on mitigating risks from proposed buildings;
- a methodology for assessment of proposed buildings;
- options, where required, for subsequent detailed modelling of wind effects; and
- options to mitigate wind effects of existing buildings where required.

The assessment envelopes for building generated windshear and turbulence associated with NASF Guideline B cover an area 1,200m or closer perpendicular to the runway centreline and extend 900m along the extended centreline of the runway prior to the runway threshold and 500m along the runway. Within these areas, NASF recommends that any proposed buildings be evaluated to confirm there will be no unacceptable impacts on the safety of aircraft operations.

7.4 WILDLIFE HAZARDS

Birds (and other wildlife) on or around airfields should be regarded as a potential hazard to aircraft safety. The majority of aircraft collisions with birds occur near the airfield during take-off, landing and associated phases. Birds may be ingested into aircraft jet engines or otherwise cause damage that may impact on the pilot's ability to manoeuvre the aircraft.

The prevention of bird strike requires careful consideration during master planning phase to identify potential land uses that may attract birds. Master planning considerations include the land use inside the boundaries of the airport and the surrounding land uses that should be avoided to reduce the risk of bird strike. It is essential that the Council planners incorporate this into future Local Environmental Plans to minimise the wildlife threat to future aircraft operations associated with land use.

Land use and the environment surrounding aerodromes can attract birds and bats. Waterways, agriculture, landfills and even golf courses often provide attractants that contribute to transit issues where birds and bats traverse the airfield while moving between nesting areas and feeding or foraging sites. Development near airfields that provides refuge, feeding or breeding opportunities for large numbers of birds or bats contributes to an increased risk of bird strike.

Figure H identifies land uses that have the potential to increase bird and bat strike potential and provides guidance on buffer zones within which certain activities around Mudgee Regional Airport should be controlled. This guidance is based on NASF Guideline C. Within these buffers it is recommended that some activities are excluded whilst others have control measures. Appropriate

land use development restrictions within these boundaries should be implemented by Council to adequately protect the safety of future aircraft operations.

Current land uses within the buffer zones should be reviewed, including agricultural land use, to identify any existing non-compatible land uses that increase bird strike risk. Consultation with land-owners and operators of non-compatible land uses may identify suitable management practices to reduce the bird presence. Existing infrastructure associated with incompatible land uses will not require relocation but management practices may require enhancement if bird and wildlife hazards from these and similar become an issue.

While consideration of land uses within and adjoining the airport is essential for decreasing bird strike risk, operational procedures and control measures are applied to reduce the existing threat of birds. Targeted maintenance and management activities are necessary to reduce habitat or food sources that attract birds.

7.5 LIGHTING DISTRACTION AND GLARE

NASF Guideline E *Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports* and Section 9.21 of CASA MOS Part 139 provide advice with regard to the design and provision of lighting systems for use at or in the vicinity of an aerodrome, with the intention of minimising the potential hazard to aircraft operations from the lighting. Anyone proposing to install a lighting system within the vicinity of the aerodrome should be made aware of the requirements by the airport operator.

CASA has the power, through regulation 94 of the Civil Aviation Regulations 1988 (CAR 1988), to require lights which may cause confusion, distraction or glare to pilots in the air, to be extinguished or modified. Ground lights may cause confusion or distraction as a result of their colour, position, pattern or intensity of light omission above the horizontal plane. The advice provided by CASA is applicable to lighting installations within a 6 kilometre radius of the airport. The lights within this radius fall into a category most likely to be subjected to the provisions of Regulation 94 of CAR 1988. Within the 6km radius, a primary area exists which is divided into four light control zones labelled A, B, C and D. These zones reflect the degree of interference ground lights can cause as a pilot approaches to land. **Figure G** shows the primary area and zones in relation to Mudgee Regional Airport within which limits on intensity of light emissions (at 3 degrees above the horizontal plane) should be maintained. The emission intensity limits are also shown on the plan, expressed in candela (the common candle emits light at an intensity of roughly one candela) and are as follows:

- Zone A: 0 candela (cd);
- Zone B: 50 cd;
- Zone C: 150 cd; and
- Zone D: 450 cd

7.6 AIRSPACE PROTECTION

7.6.1 OBSTACLE LIMITATION SURFACES

Obstacles on or in the vicinity of an aerodrome, whether natural features or man-made structures, may prevent its optimal utilisation by aircraft through:

- Reducing the runway distances available for take-off or landing;
- Reducing the authorised take-off and landing weights for some aircraft;
- Restricting certain types of aircraft; and/or
- Limiting the range of weather conditions in which aircraft can operate.

The shape and dimensions of the OLS for an airport are determined on a case by case basis and needs to be assessed by CASA to determine its operational impact. No structure located on an airport should be allowed to exceed the vertical limits of the OLS unless required to do so to serve its operational purpose.

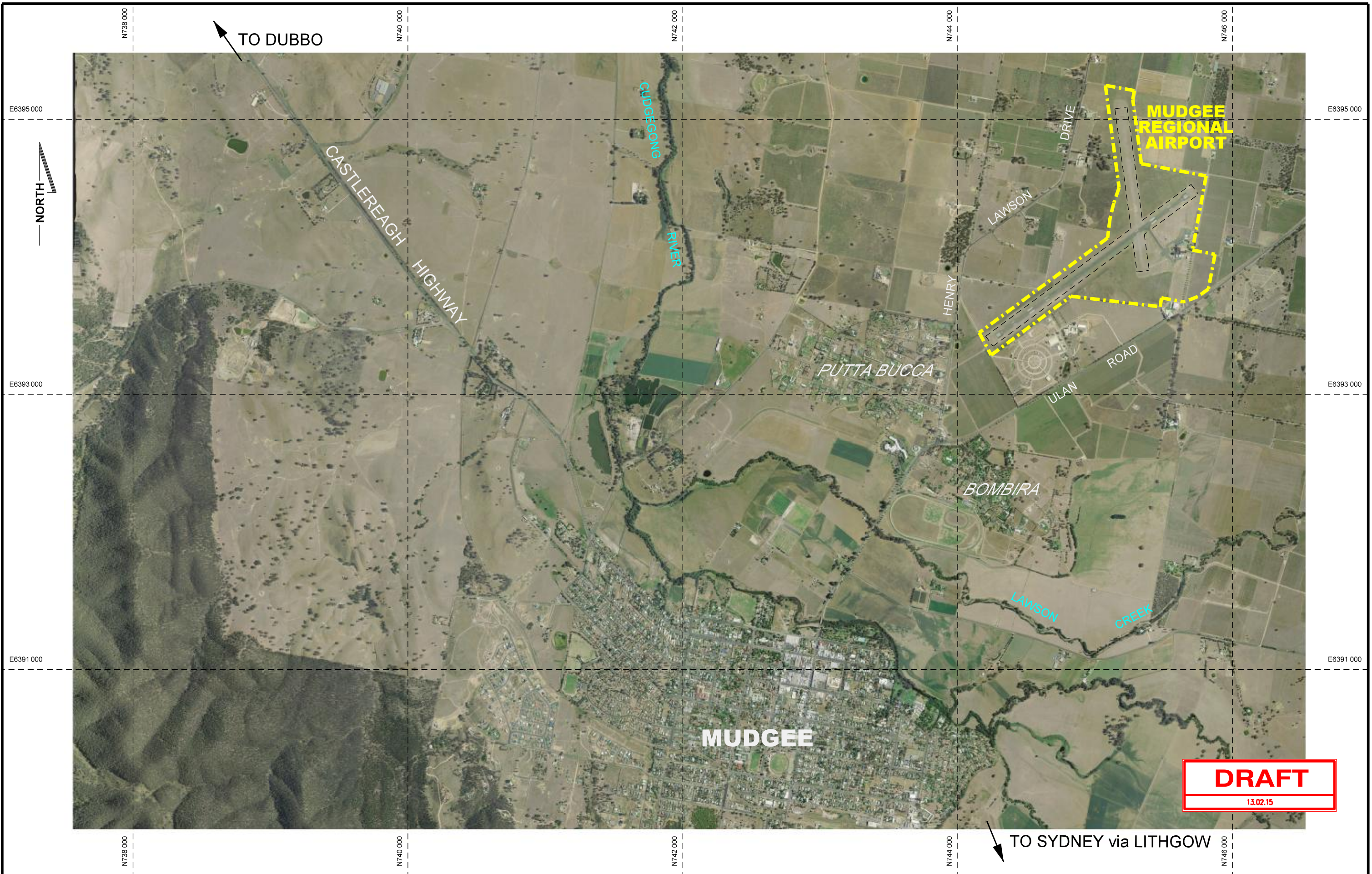
The Master Plan does not propose any changes to either of the runways, therefore this existing OLS will remain relevant and should be incorporated into the Mid-Western Regional LEP. The OLS plan can be found on **Figure F**.

7.6.2 PANS-OPS SURFACES

Council should be aware that as the airport operator, it has responsibility under the CASRs Part 139 and Part 173 to ensure the Procedures for Air Navigation Systems – Aircraft Operations (PANS-OPS) protection surfaces are monitored and maintained free from any intruding obstacles.

APPENDIX A

MASTER PLAN FIGURES



Project: **MUDGEE REGIONAL AIRPORT MASTER PLAN 2015**

Client: **MID-WESTERN REGIONAL COUNCIL**

Title: **LOCATION PLAN**

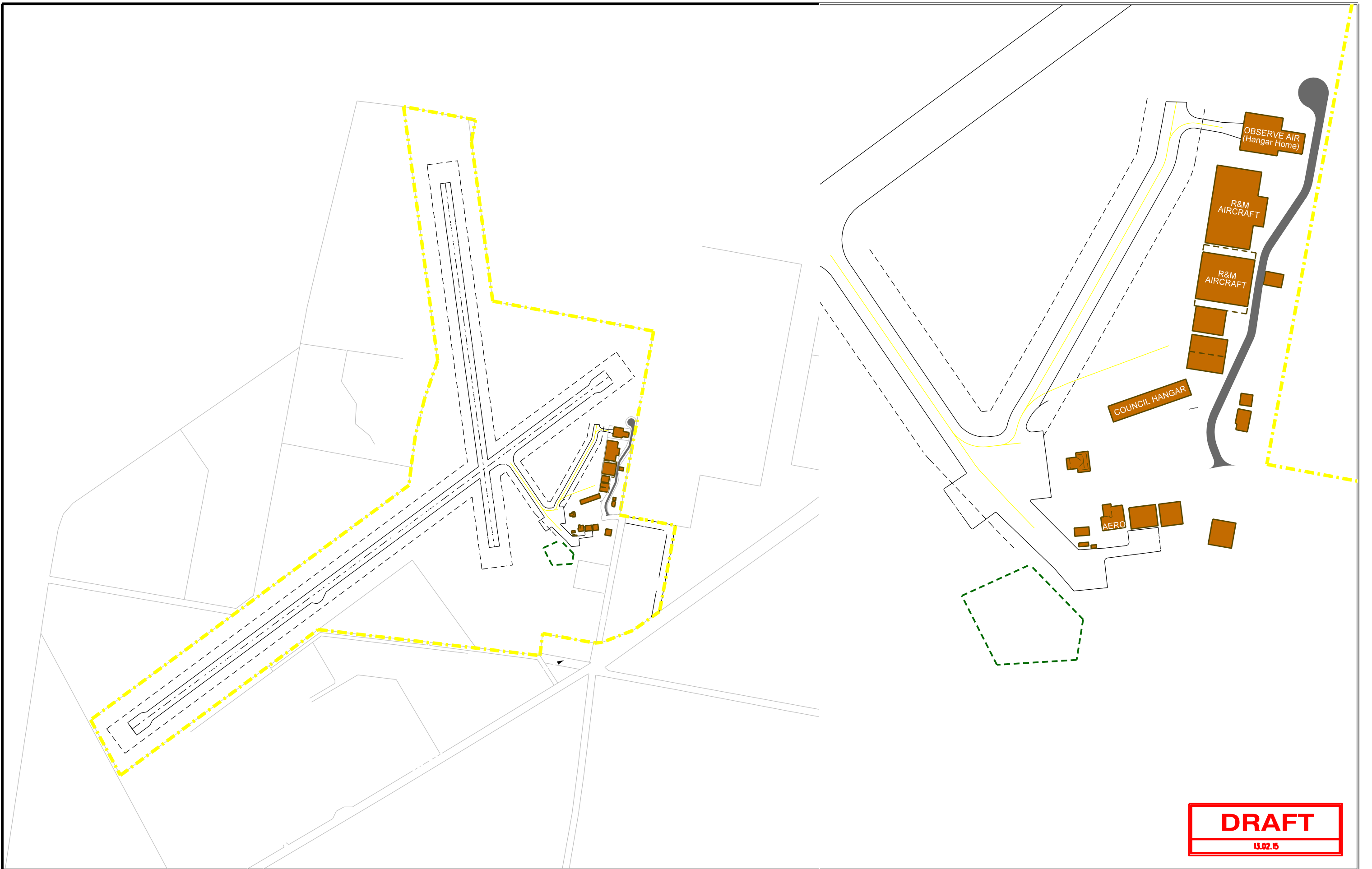
REHBEIN Airport Consulting

The Association of Consulting Engineers Australia

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A C N 126 939 768
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EMAIL mail@rar.net.au

Drawn: CMF Checked: JSL Approved: BJH

Figure No:		FIGURE A
Scale: 1:25000		
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Rev	Date	Sheet Size



DRAFT
13.02.15

Project: MUDGEE REGIONAL AIRPORT
MASTER PLAN 2015

Client: MID-WESTERN REGIONAL COUNCIL

Title: **EXISTING AIRPORT FACILITIES**

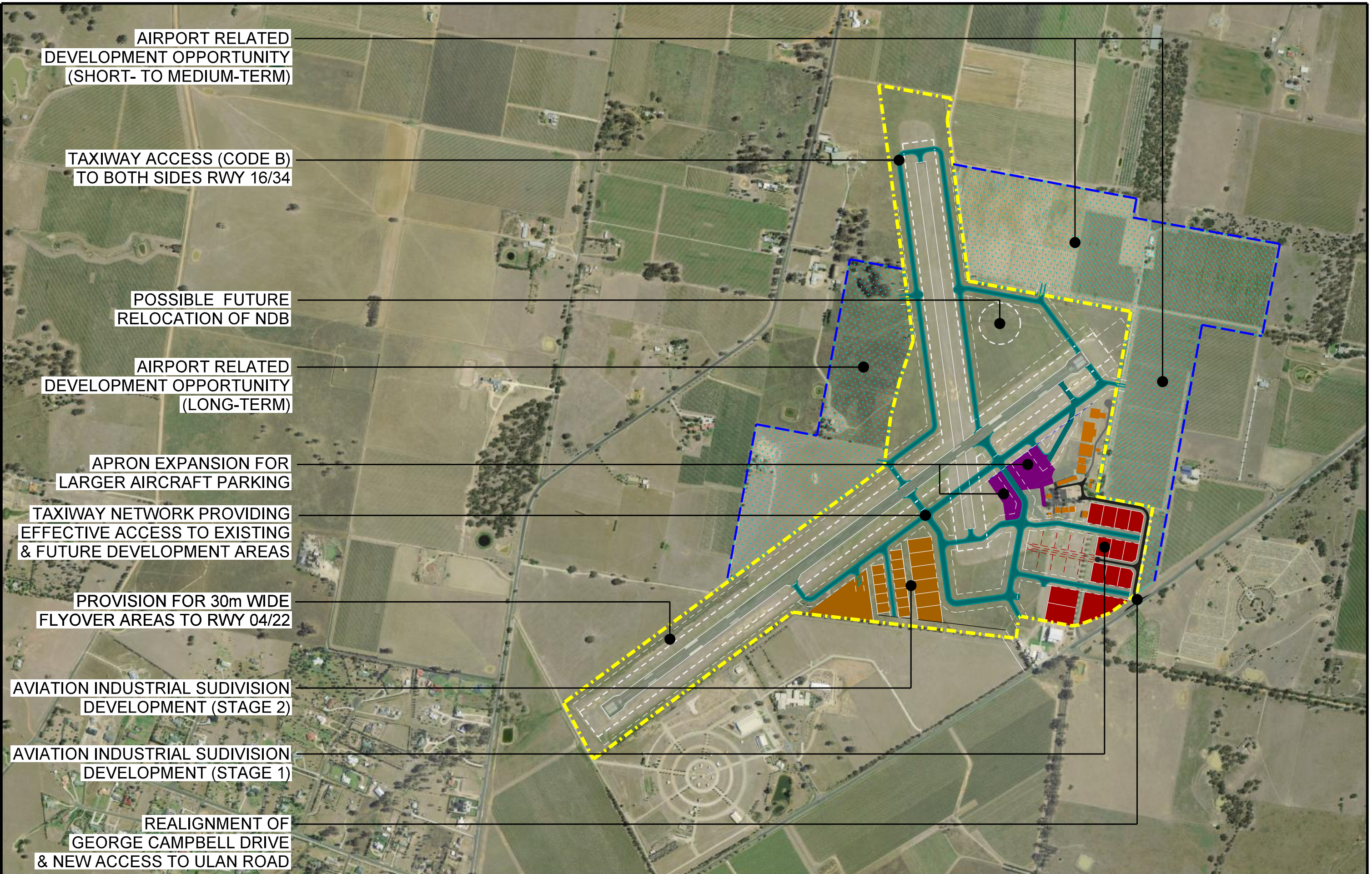
REHBEIN Airport Consulting

The Association of Consulting Engineers Australia

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Figure No:		B
FIGURE		
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Rev	Date	File Ref: B14024
		A3 Sheet Size



AIRPORT RELATED
DEVELOPMENT OPPORTUNITY
(SHORT- TO MEDIUM-TERM)

TAXIWAY ACCESS (CODE B)
TO BOTH SIDES RWY 16/34

POSSIBLE FUTURE
RELOCATION OF NDB

AIRPORT RELATED
DEVELOPMENT OPPORTUNITY
(LONG-TERM)

APRON EXPANSION FOR
LARGER AIRCRAFT PARKING

TAXIWAY NETWORK PROVIDING
EFFECTIVE ACCESS TO EXISTING
& FUTURE DEVELOPMENT AREAS

PROVISION FOR 30m WIDE
FLYOVER AREAS TO RWY 04/22

AVIATION INDUSTRIAL SUDIVISION
DEVELOPMENT (STAGE 2)

AVIATION INDUSTRIAL SUDIVISION
DEVELOPMENT (STAGE 1)

REALIGNMENT OF
GEORGE CAMPBELL DRIVE
& NEW ACCESS TO ULAN ROAD

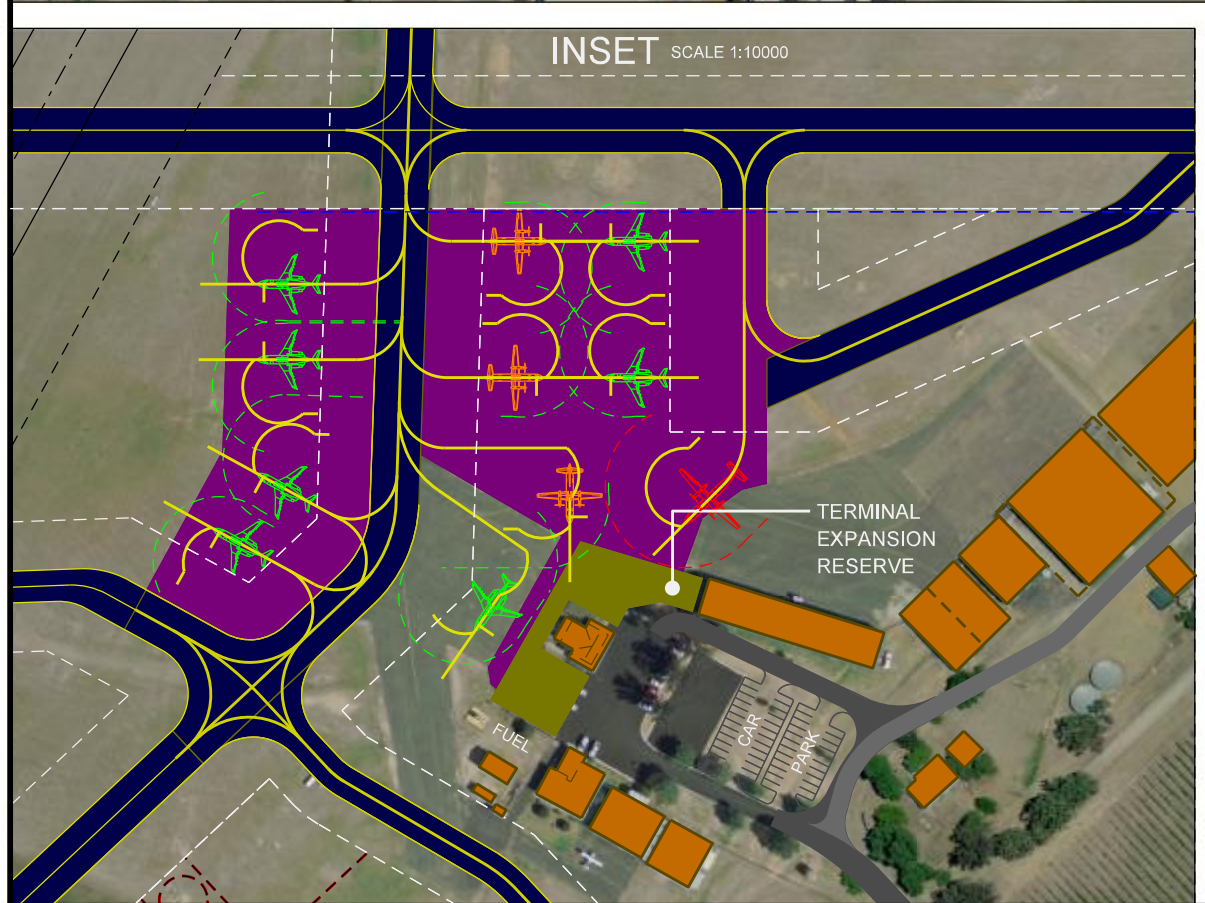
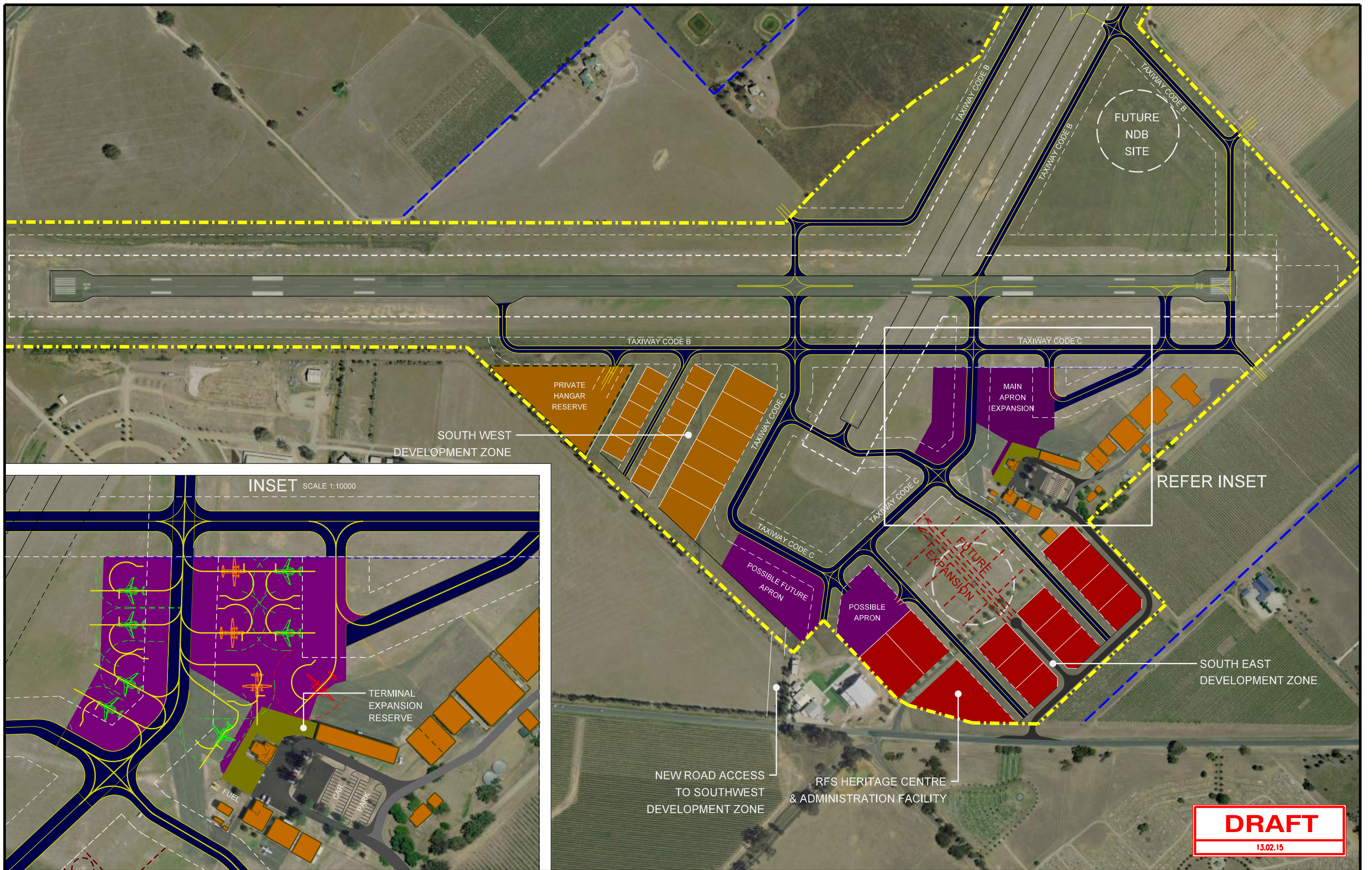
Project: MUDGEE REGIONAL AIRPORT
MASTER PLAN 2015

Client: MID-WESTERN REGIONAL COUNCIL
Title: **ULTIMATE DEVELOPMENT CONCEPT**

REHBEIN Airport Consulting
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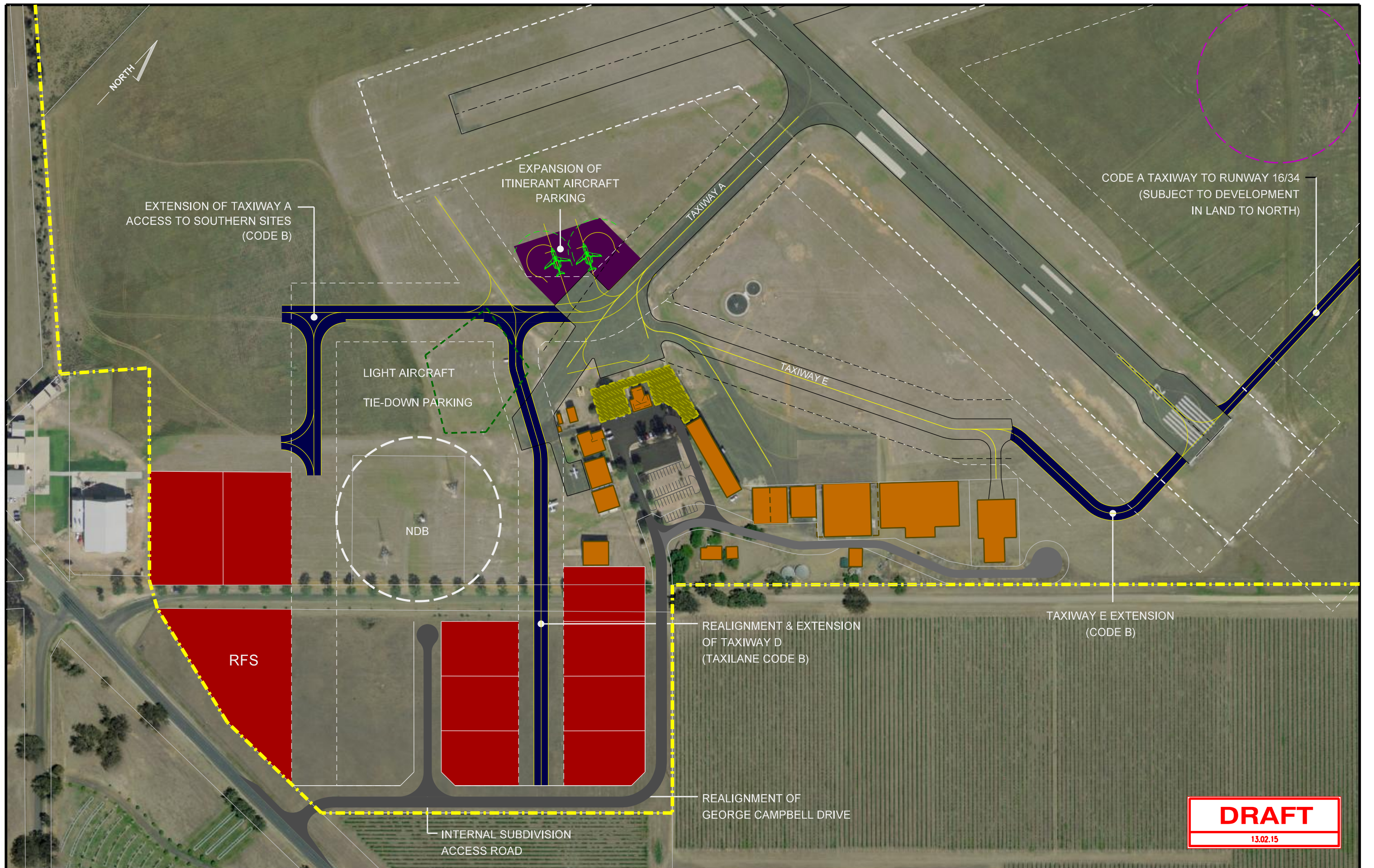
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Figure No:		FIGURE C	A3 Sheet Size
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File Ref: B14.024			



DRAFT
13.02.15

Project: MUDGEE REGIONAL AIRPORT MASTER PLAN 2015	Client: MID-WESTERN REGIONAL COUNCIL	REHBEIN Airport Consulting <small>The Association of Consulting Engineers Australia</small>	CBD HOUSE, Level 3 120 WICKHAM STREET FORTITUDE VALLEY QLD 4006 A C N 126 939 768 TELEPHONE (07) 3250 9000 FACSIMILE (07) 3250 9001 EMAIL info@rehbein.aero	Figure No FIGURE D	Scale: 15000 A3 Sheet Size
	Title: DEVELOPMENT AREA LAYOUT			0 13 02 15 Rev Date	
Drawn: ND		Checked: BJH	Approved: BJH		



Project: **MUDGEE REGIONAL AIRPORT MASTER PLAN 2015**

Client: **MID-WESTERN REGIONAL COUNCIL**

Title: **SHORT-TERM DEVELOPMENT (2015 - 2020)**

REHBEIN Airport Consulting

The Association of Consulting Engineers Australia

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Drawn: ND Checked: BJH Approved: BJH

Figure No: **FIGURE E**

Scale: 1:2500

0 13 02 15

Rev Date

File Ref: B14024

Sheet Size: A3

RUNWAY CLASSIFICATION / CODE		
RUNWAY	APPROCH	TAKE OFF
04	CODE 3 INSTRUMENT NON-PRECISION	CODE 3
22	CODE 3 INSTRUMENT NON-PRECISION	CODE 3
16	CODE 2 NON-INSTRUMENT	CODE 2
34	CODE 2 NON-INSTRUMENT	CODE 2

NOTES: 1. ALL DIMENSIONS AND DISTANCES ARE IN METRES
 2. ELEVATIONS BASED ON AUSTRALIAN HEIGHT DATUM (AHD)
 3. HP DENOTES HORIZONTAL PLANE

APPROACH SURFACES										
RUNWAY	ELEVATION AT INNER EDGE	LENGTH OF INNER EDGE	DISTANCE FROM THRESHOLD	DIVERGENCE EACH SIDE	FIRST SECTION LENGTH	SLOPE	SECOND SECTION LENGTH	SLOPE	HORIZONTAL SECTION LENGTH	TOTAL LENGTH
04	459.0	150	60	15%	3000	3.33%	3600	2.5%	8400	15000
22	470.6	150	60	15%	3000	3.33%	3600	2.5%	8400	15000
16	470.9	80	60	10%	2500	4%				
34	465.7	80	60	10%	2500	4%				

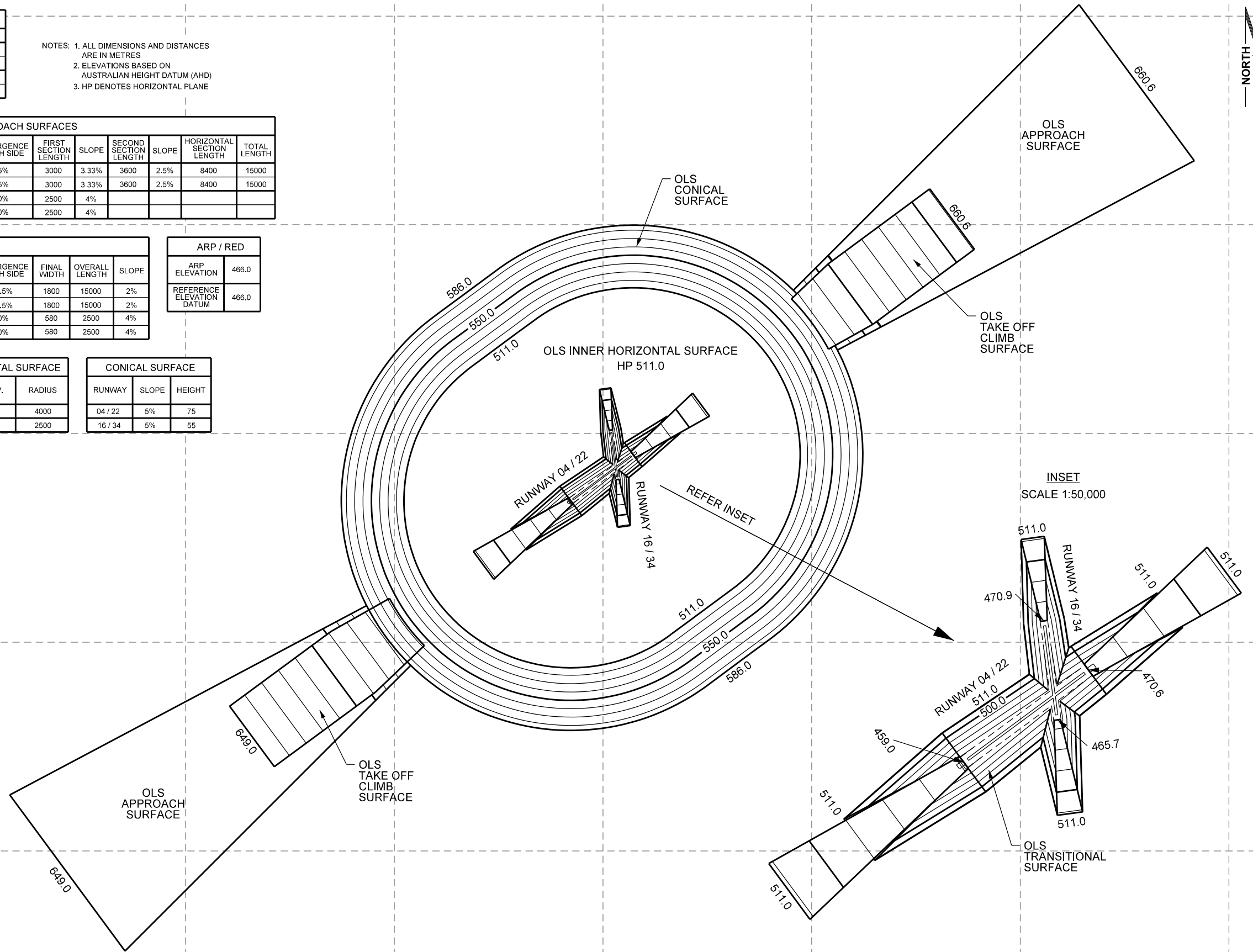
TAKE OFF SURFACES							
RUNWAY	ELEVATION AT INNER EDGE	LENGTH OF INNER EDGE	DISTANCE FROM THRESHOLD	DIVERGENCE EACH SIDE	FINAL WIDTH	OVERALL LENGTH	SLOPE
04	470.6	180	60	12.5%	1800	15000	2%
22	459.0	180	60	12.5%	1800	15000	2%
16	465.7	80	60	10%	580	2500	4%
34	470.9	80	60	10%	580	2500	4%

ARP / RED	
ARP ELEVATION	466.0
REFERENCE ELEVATION DATUM	466.0

TRANSITIONAL SURFACE	
RUNWAY	SLOPE
04 / 22	14.3%
16 / 34	20%

INNER HORIZONTAL SURFACE		
RUNWAY	ELEV.	RADIUS
04 / 22	511.0	4000
16 / 34	511.0	2500

CONICAL SURFACE		
RUNWAY	SLOPE	HEIGHT
04 / 22	5%	75
16 / 34	5%	55



DRAFT
13/02/15

Project: MUDGEE REGIONAL AIRPORT
 MASTER PLAN 2015

Client: MID-WESTERN REGIONAL COUNCIL
 Title: **OBSTACLE LIMITATION SURFACES**



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Drawn: CMF

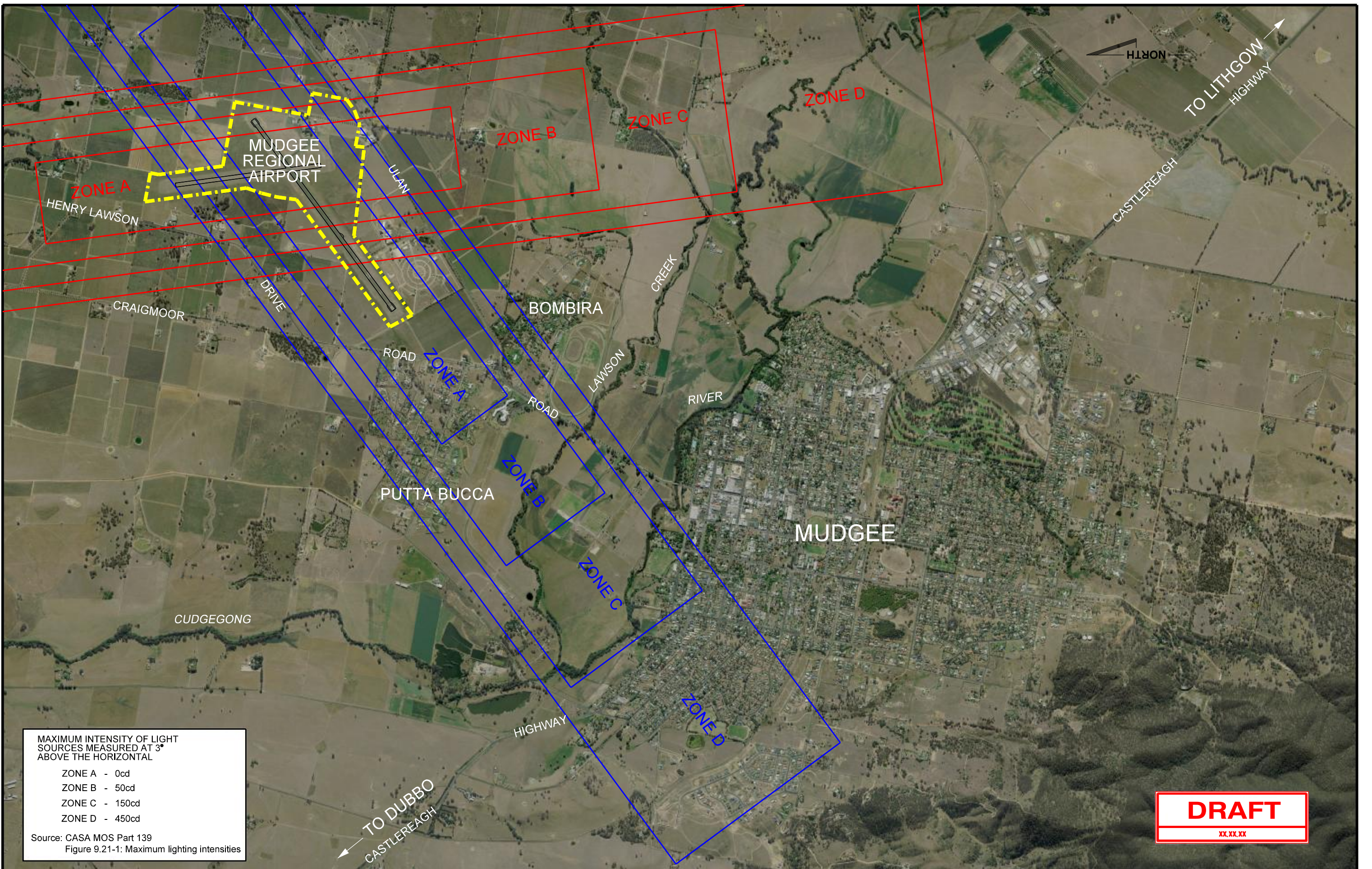
Checked: JSL

Approved: BJH

0 13 02 15
 Rev Date

Figure No
FIGURE F
 Scale: 1:100,000
 File Ref: B14024

A3
 Sheet Size



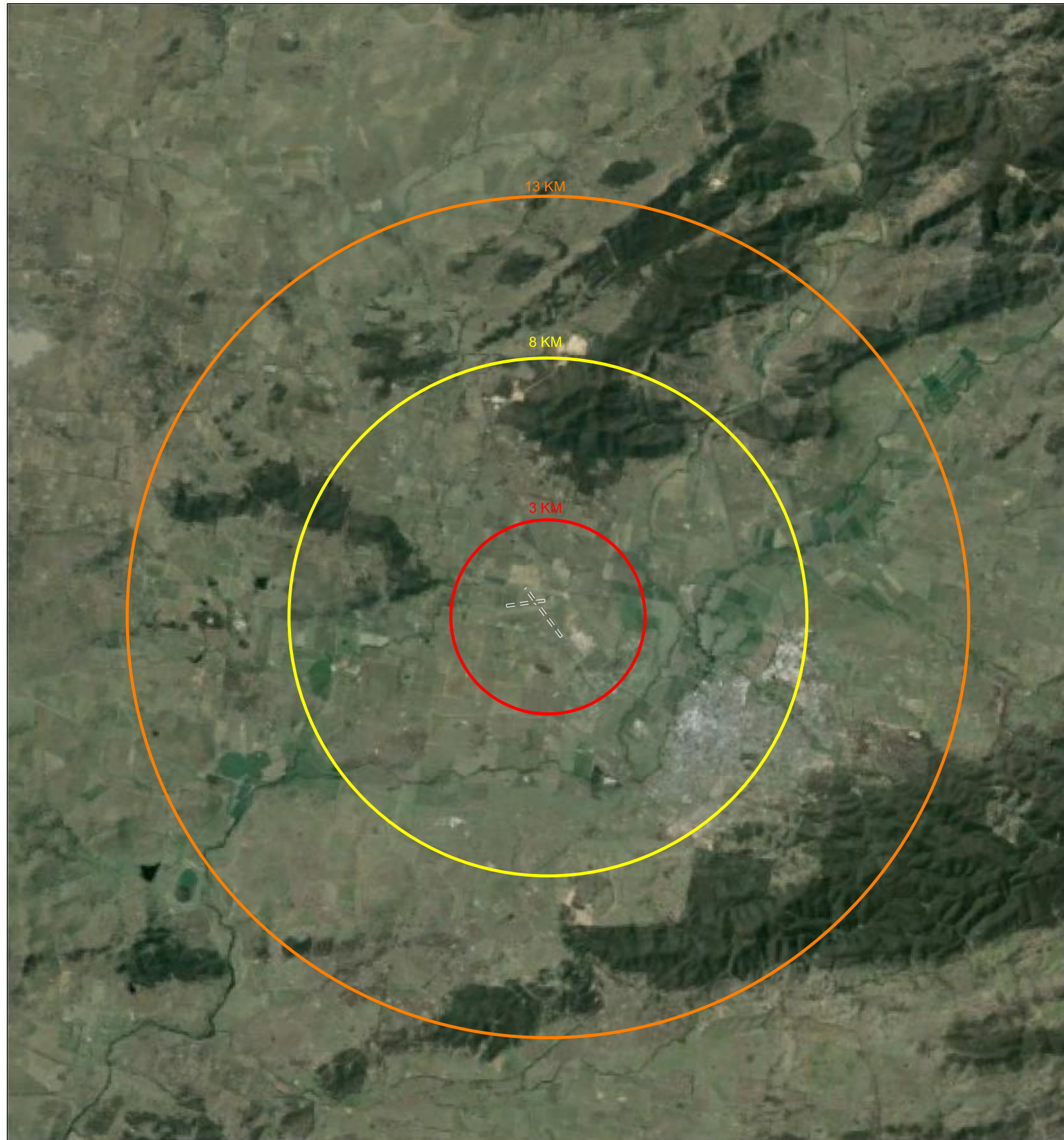
MAXIMUM INTENSITY OF LIGHT SOURCES MEASURED AT 3° ABOVE THE HORIZONTAL

- ZONE A - 0cd
- ZONE B - 50cd
- ZONE C - 150cd
- ZONE D - 450cd

Source: CASA MOS Part 139
Figure 9.21-1: Maximum lighting intensities

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XX.XX.XX

Project: MUDGEE REGIONAL AIRPORT MASTER PLAN 2015	Client: MID-WESTERN REGIONAL COUNCIL	<p style="font-size: 8px; margin-top: 5px;">The Association of Consulting Engineers Australia</p>	CBD HOUSE, Level 3 120 WICKHAM STREET FORTITUDE VALLEY QLD 4006 A C N 126 939 768 TELEPHONE 1071 3250 9000 FACSIMILE 1071 3250 9001 EMAIL info@rehbein.aero	Figure No FIGURE G	
	Title: LIGHTING RESTRICTIONS		Scale: 1:25000 File Ref B14024	A3 Sheet Size	
Drawn: CMF	Checked: JSL	Approved: BJH	Rev 0 Date 13 02 15	Rev 0 Date 13 02 15	File Ref B14024



PLANNING ASSESSMENT CRITERIA FOR BIRD AND BAT STRIKE POTENTIAL

LAND USE CATEGORY	DESCRIPTION
Group A	Putrescible waste disposal site
Group B	Sewerage treatment facilities
	Commercial fish processing
	Bird sanctuaries and fauna reserves
	Artificial water body (including water mgt structures such as detention basins or wetlands and dams or enclosed tanks)
	Aquaculture
	Turf farming
	Animal farming with potential to attract birds/bats
	Fruit farming
	Food processing plants
	Group C
Fairgrounds	
Outdoor theatres	
Drive-in Restaurants	
Sports Grounds	
NB: Group classifications have been adopted from the Queensland State Planning Policy 1/02: Development in the Vicinity of Certain Airports and Aviation Facilities	
Artificial water bodies may include:	
a) Water management structures, such as detention basins and constructed wetlands	
b) Large agricultural dams and non-enclosed tanks.	

PLANNING RECOMMENDATIONS TO LIMIT BIRD AND BAT STRIKE

LAND USE CATEGORY	RECOMMENDATION	DESIGN RESPONSE RECOMMENDATION
Group A	Should be avoided within 13 km of the runway	Recommend no development
Group B	Should be avoided within 3 km of the runway and where located between 3 km and 8 km of the runway, should include measures to discourage wildlife	Potential food/waste sources are covered/collected so that they are not accessible.
		For fruit, animal farming and turf production, wildlife deterrence measures are used (e.g. bird scarers or netting)
		Artificial water body Artificial water body design shall minimise habitat opportunities for birds (e.g. careful selection of landscaping, water body edge treatments, etc)
Group C	Where located within 15 km of the runway, should include measures to manage waste disposal	Potential food/waste sources are covered/ collected so that they are not accessible to wildlife

NB: There is no requirement to remove or change existing land uses within the above categories.

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13.02.15

Project: MUDGEER REGIONAL AIRPORT MASTER PLAN 2015

Client: MID-WESTERN REGIONAL COUNCIL

Title: WILDLIFE HAZARDS



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Figure No:
FIGURE H
Scale 1:150000
File Ref: B14024

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2015

COUNCIL BUSINESS PAPERS

Ordinary Meeting 17 JUNE 2015

ATTACHMENT **6.2.30**

► MWRC Employee Opinion Survey Overall Report, All respondents March 2015

Mid-Western Regional Council

Employee Opinion Survey

Overall report

All respondents

March 2015



Insync Surveys Pty Ltd

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Address	PO Box 446, Flinders Lane, VIC 8009, Australia
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Summary of key findings	2
Response statistics	3
Best practice scorecard	5
Overall satisfaction	6
Local Government weighted performance index	7
Local Government overall satisfaction	8
Local Government (NSW) weighted performance index	9
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Employee perceptions of importance and performance	11
Employee engagement	12
Best practice graphs	13
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The top 3 sources to get information about what is going on in the organisation	39

Introduction

Insync Surveys was engaged by Mid-Western Regional Council to conduct a survey of its employees in March 2015 and is the first survey of this type conducted by Insync Surveys.

The overall response rate for the 2015 survey was 76% (185 valid responses out of 245 invitations).

About the Employee Opinion Survey

The Employee Opinion Survey (“EOS”) addresses vital issues considered crucial in driving continuous improvement and organisational success.

The survey is designed to provide Mid-Western Regional Council with a means to identify key employee concerns that may presently exist within the organisation with the following objectives in mind:

- To measure employee attitudes across a range of key cultural and performance dimensions
- To align management and employee expectations in order to facilitate greater productivity within the workplace environment
- To allow workplace satisfaction variables to be measured (or benchmarked) over time
- To ultimately enhance workplace satisfaction through a commitment to research and reflection

Summary of key findings

Key indicators

Overall Key Indicators	Mid-Western Regional Council March 2015
Response rate	76% (185/245)
Weighted performance index	66.9%
Overall satisfaction	4.96
Performance scores above 5.00	7
Performance scores below 4.00	2
Critical gap scores (above 1.90)	3
Areas important to employees	Workplace safety, Job satisfaction, Cooperation across work areas
Key strengths	Workplace safety, Health and wellbeing, teamwork
Key improvement opportunities	Talent retention, Trust, Valuing employees
Employee engagement	62%

Response statistics

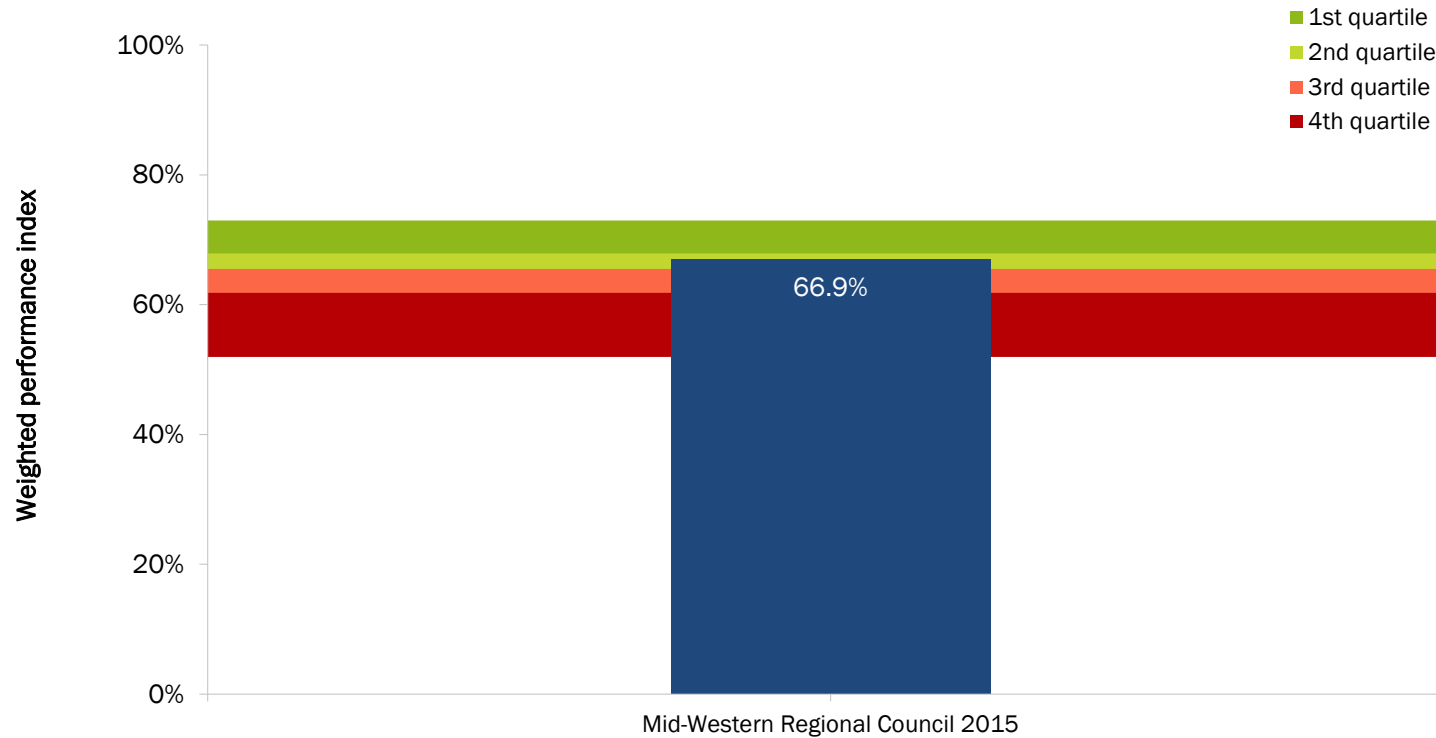
All respondents	185
Directorate	
Corporate	21
Community	35
Development	14
Operations	94
HR / Executive Support	8
<i>Unspecified</i>	13
Department	
Community Services / Family Day Care	7
Customer Service	6
Records	3
Development Engineering	1
Strategic Planning / Environment	2
GM / Executive Support	5
Airport / Salesyards / Showgrounds	3
Financial Services	6
Governance / Rangers	2
Health and Building	3
Human Resources / WHS	5
ICT Services	4
Director Community and Admin Support	1
Director Development and Admin Support	1
Director Operations and Admin Support	3
Director Corporate and Admin Support	2
Parks and Gardens	12
Procurement and Stores	4
Roads	58
Revenue and Property	5
Statutory Planning	7
Waste / Recycling / Ironed Out	10
Weeds Control	1
Workshop	8
Water and Waste Water / Electricians	20
<i>Unspecified</i>	6
Gender	
Female	65
Male	103
<i>Unspecified</i>	17
Age Group	
24 years and under	6
25-34 years old	30
35-44 years old	46
45-54 years old	58
55 years and over	37
<i>Unspecified</i>	8
Length of Service	
Less than 1 year	19
1-2 years	15
2-4 years	41
4-6 years	20
6-10 years	29
More than 10 years	58
<i>Unspecified</i>	3

Employment Status	
Full time	137
Part time	31
Casual	3
<i>Unspecified</i>	14
Intention to Stay	
Less than 1 year	11
1-2 years	21
2-4 years	9
4-6 years	20
6-10 years	29
More than 10 years	77
<i>Unspecified</i>	18
How often do you have a face-to-face conversation about your work with your immediate manager / supervisor?	
Daily	99
Once a week or fortnight	62
Once a month	11
Once a year	8
Never	2
<i>Unspecified</i>	3
Are you from a non-english speaking background?	
Yes	6
No	175
<i>Unspecified</i>	4
Do you supervise or manage staff?	
Yes	59
No	121
<i>Unspecified</i>	5

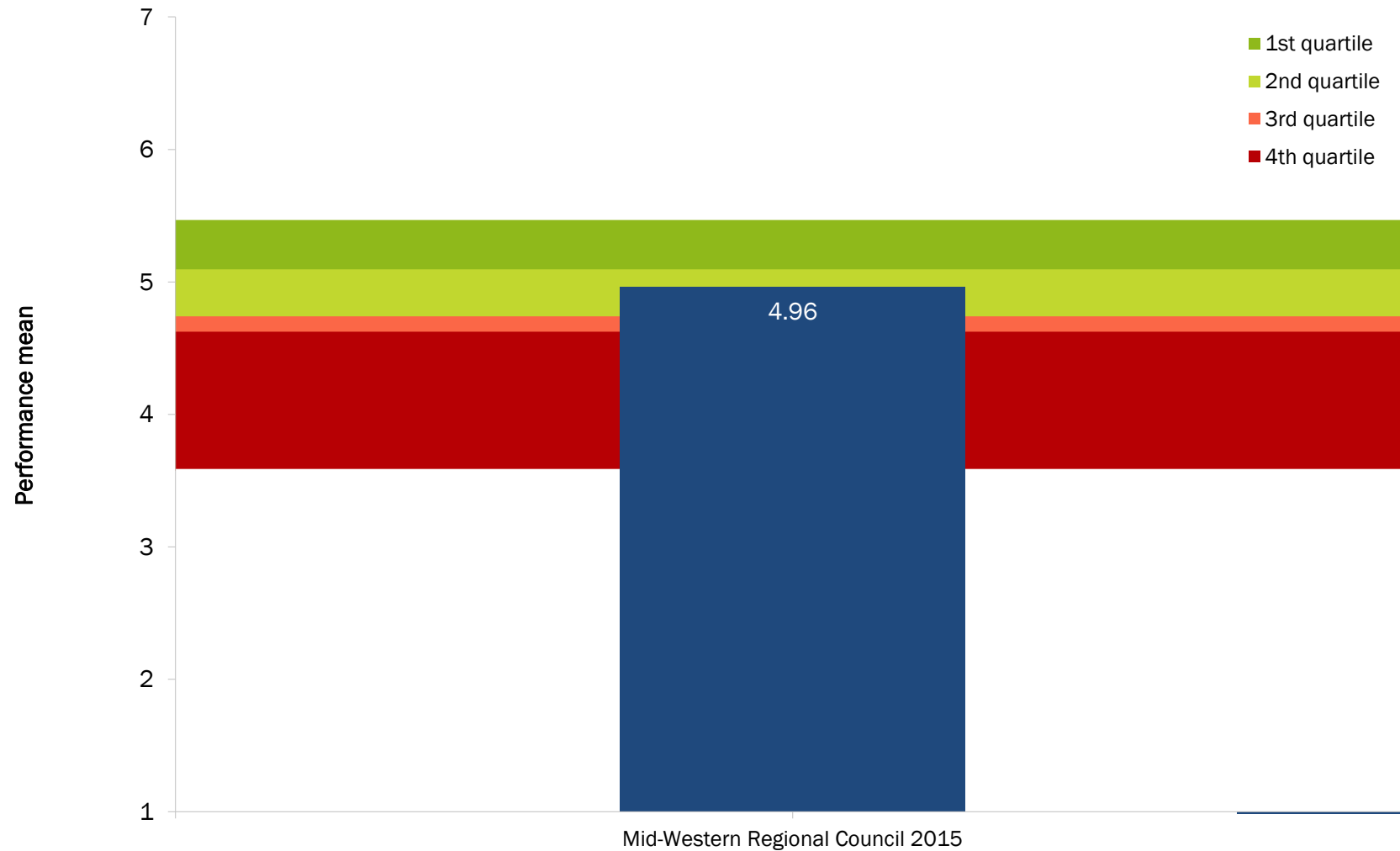
Best practice scorecard

Weighted Performance Index

	Leadership & Innovation	Strategy & Planning Processes	Data, Information & Knowledge	People	Customer & Market Focus	Processes, Products & Services	Business Results	Weighted Total
Weighting	18%	10%	10%	16%	15%	16%	15%	100%
Mid-Western Regional Council 2015	67.6%	64.5%	64.2%	65.3%	67.4%	67.2%	70.1%	66.9%
Highest performer in database	72.4%	71.0%	71.2%	73.1%	74.1%	73.7%	74.8%	73.0%
Median	66.0%	63.8%	63.5%	65.8%	64.7%	66.3%	65.8%	65.5%
Lowest performer in database	53.0%	49.6%	52.6%	51.1%	49.4%	55.0%	48.5%	51.6%

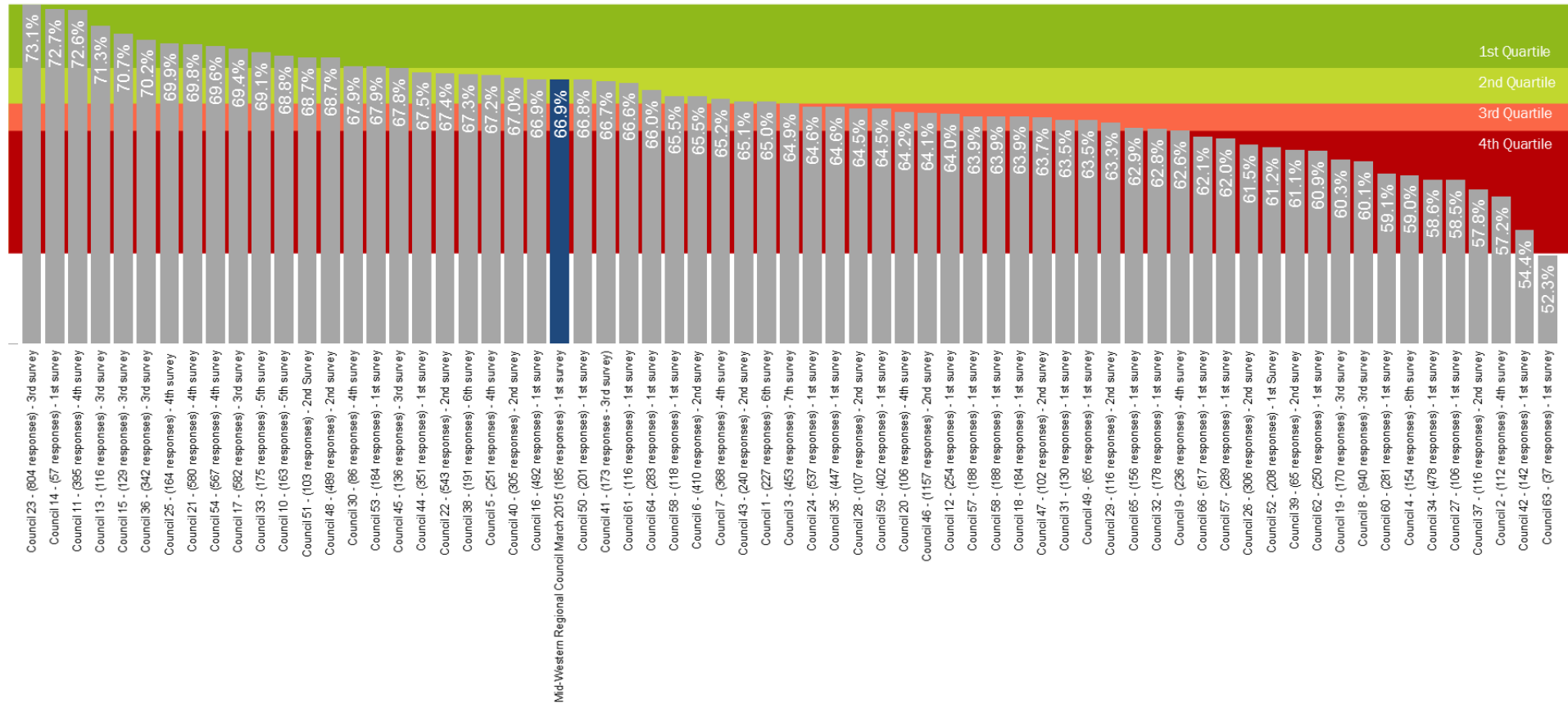


My overall satisfaction with the organisation



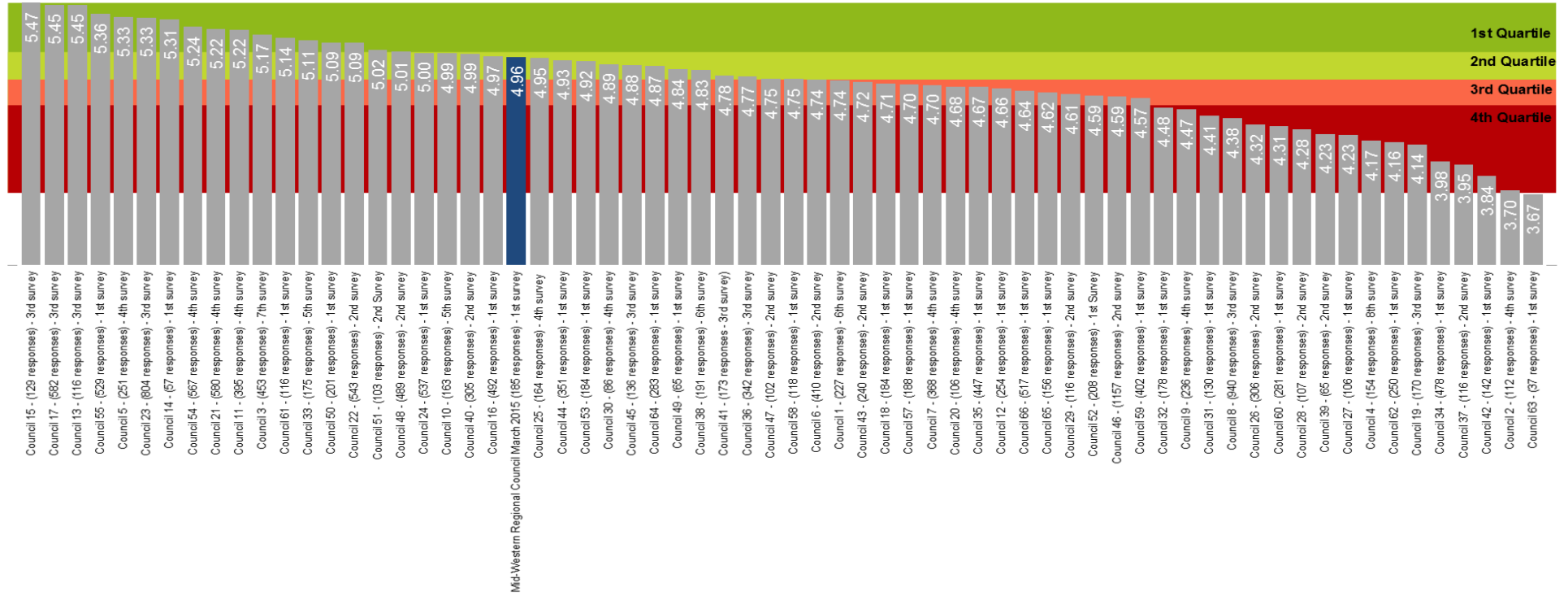
All Local Government Councils Employee Opinion Survey 2007-2015

Weighted Performance Index



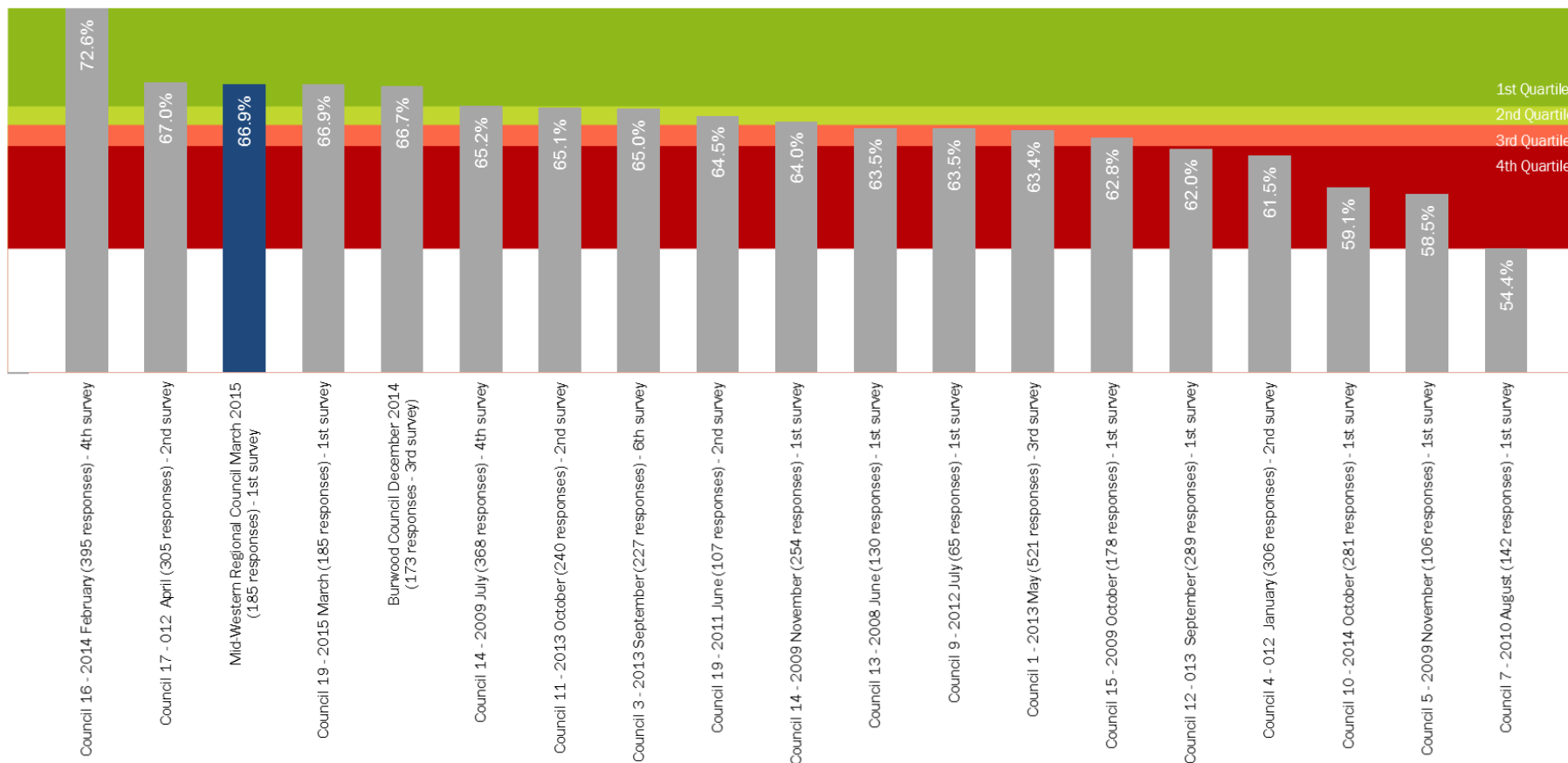
All Local Government Councils Employee Opinion Survey 2007-2015

Overall Satisfaction



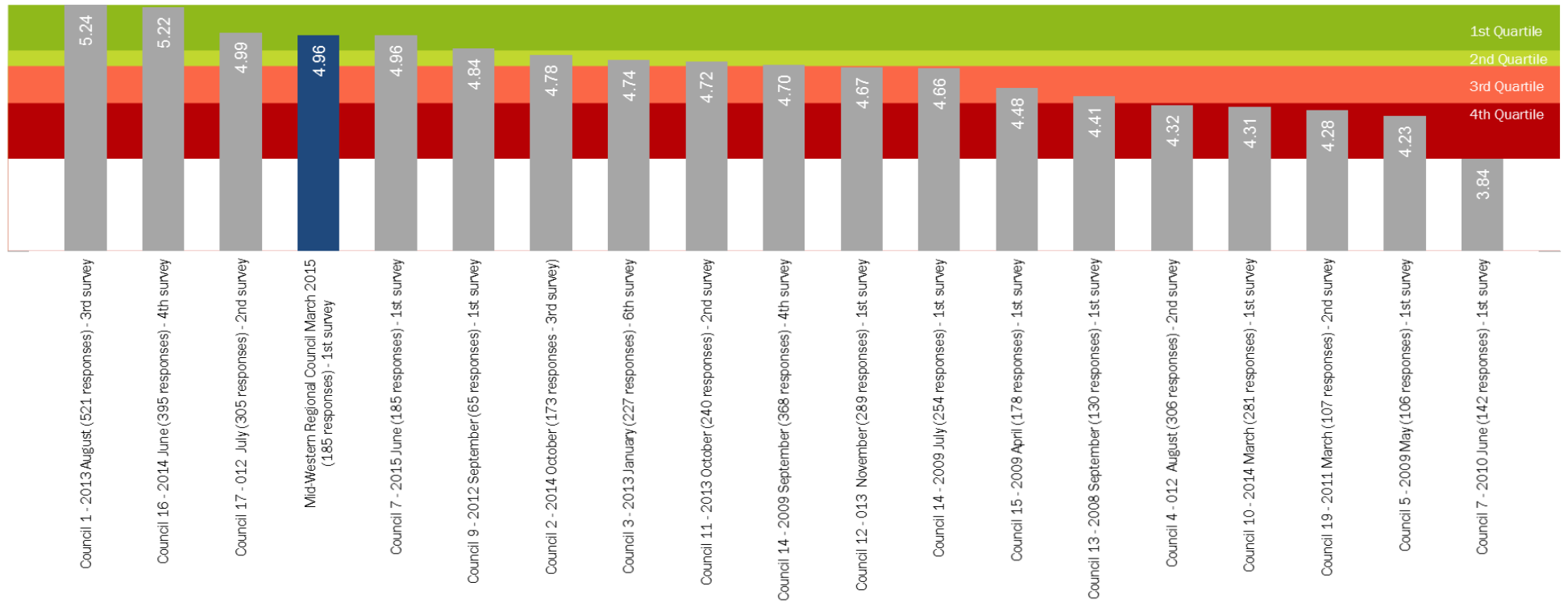
All Local Government Councils (NSW) Employee Opinion Survey 2007-2015

Weighted Performance Index



All Local Government Councils (NSW) 2007-2015

Overall Satisfaction



Employee perceptions of importance and performance

Mid-Western Regional Council

Top 5 Importance

Survey item	Mean score 2015
Providing a safe work environment	6.43
Being satisfied in my job	6.30
Cooperating across work areas	6.18
Achieving my work team's goals and objectives	6.17
Balancing work and life demands	6.16

Top 5 Performance

Survey item	Mean score 2015
Providing a safe work environment	5.40
Providing for the health and wellbeing of employees	5.14
Working as a team in my work area	5.11
Having the person to whom I report listen and respond to me	5.09
Achieving my work team's goals and objectives	5.09

Top 5 Gap

Survey item	Mean score 2015
Keeping skilled employees	1.99
Trust among people in the organisation	1.98
Valuing employees in the organisation	1.91
Cooperating across work areas	1.89
Providing incentives and rewards	1.73

Employee Engagement

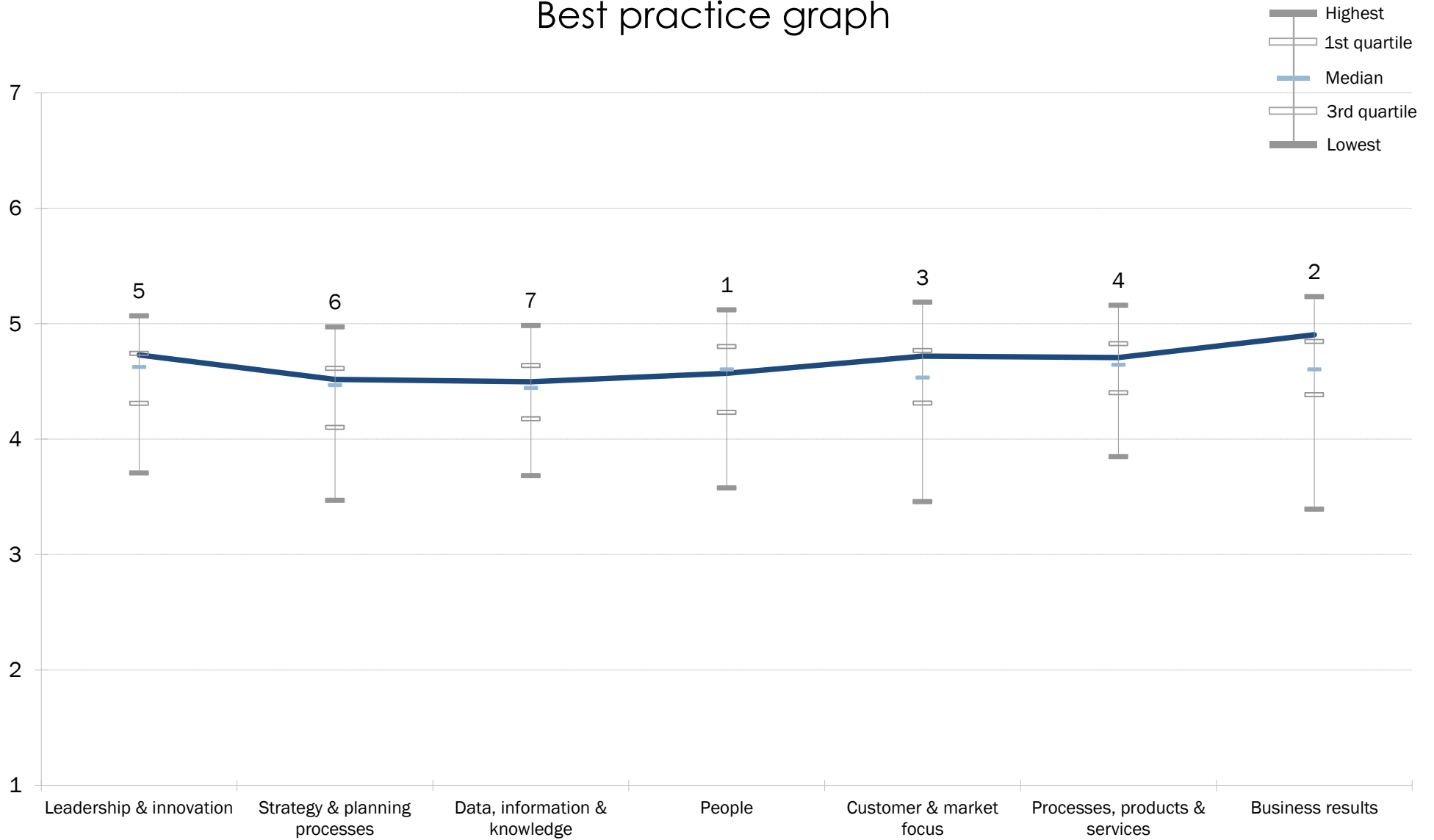
Engagement items table

Survey item	March 2015 % fav.
I am proud to be working here	70%
I would recommend our organisation as a workplace to my family and friends	61%
Overall, I am satisfied with my job	69%
I have a strong sense of belonging to our organisation	52%
I believe that my own success is important to the success of our organisation	66%
Most challenges I face at work are good learning experiences	59%
I volunteer to do extra work on special projects and initiatives	66%
I happily do extra work to help our organisation succeed	71%
I can envisage a fulfilling future for myself at our organisation	54%
I look forward to coming to work each day	54%
Engagement Index	62%

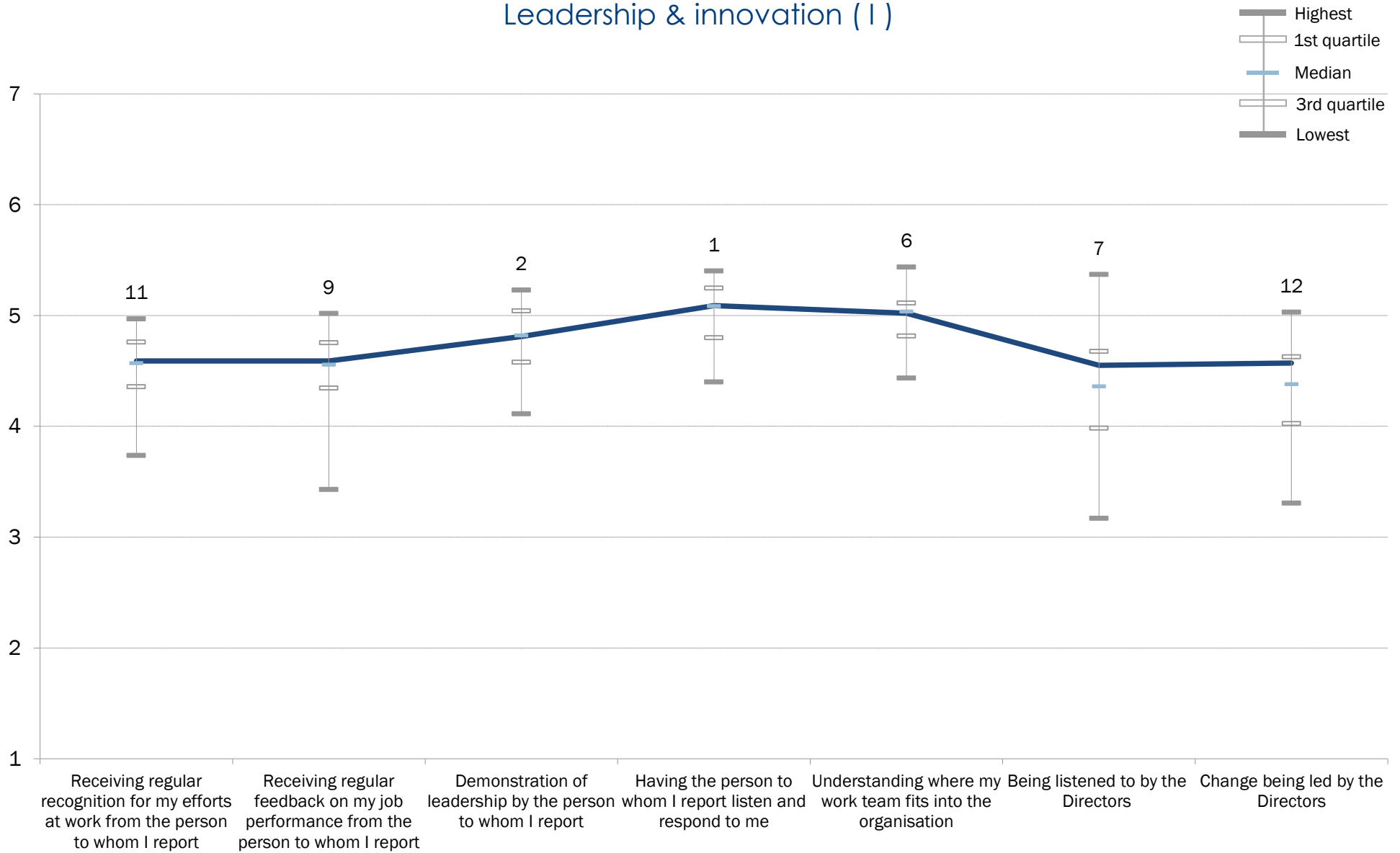
Your average raw score compared to Insync Surveys' benchmark database.

Legend: Bottom decile Bottom quartile 2nd and 3rd quartiles Top quartile Top decile

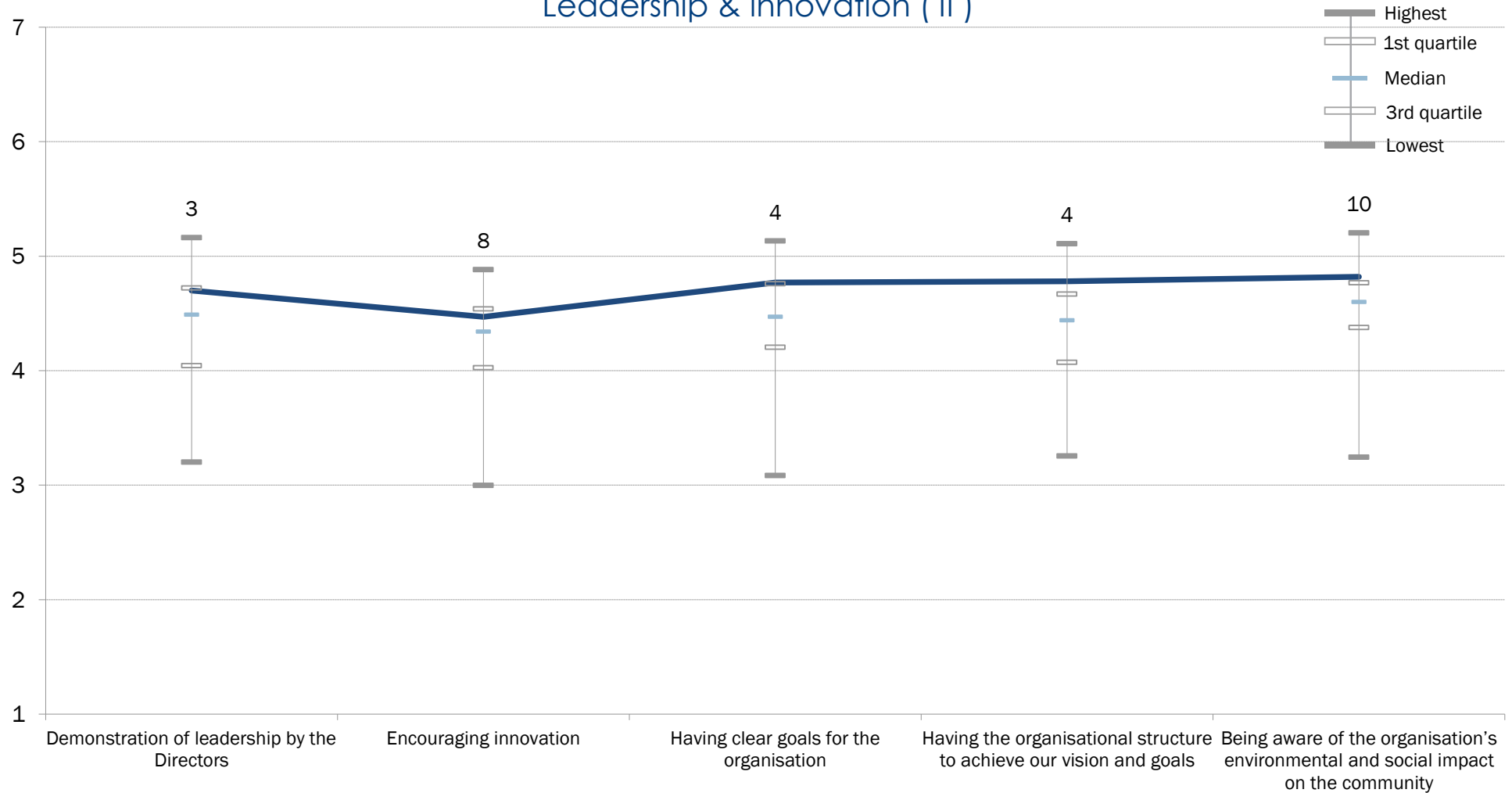
Best practice graph



Leadership & innovation (I)



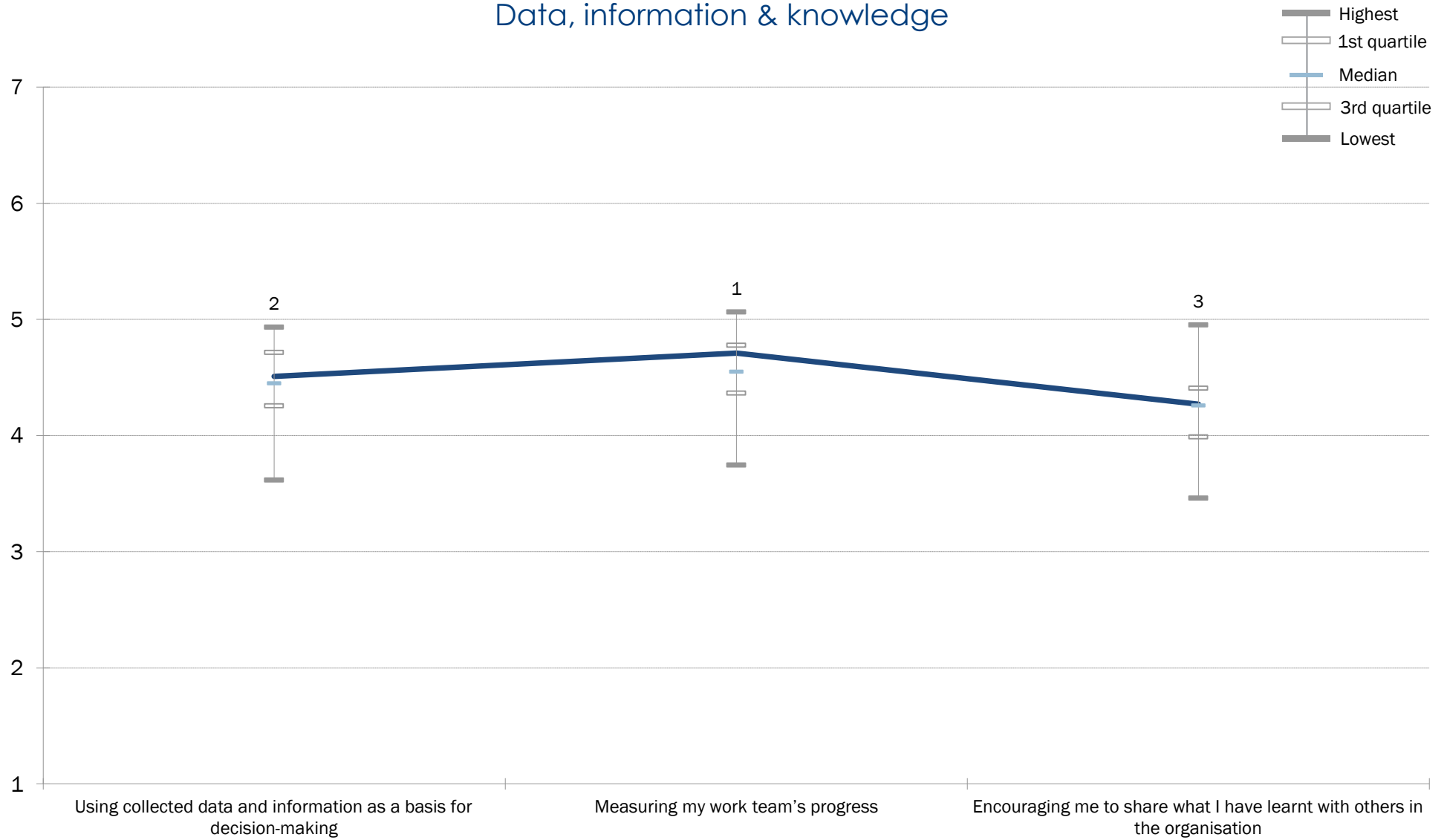
Leadership & innovation (II)



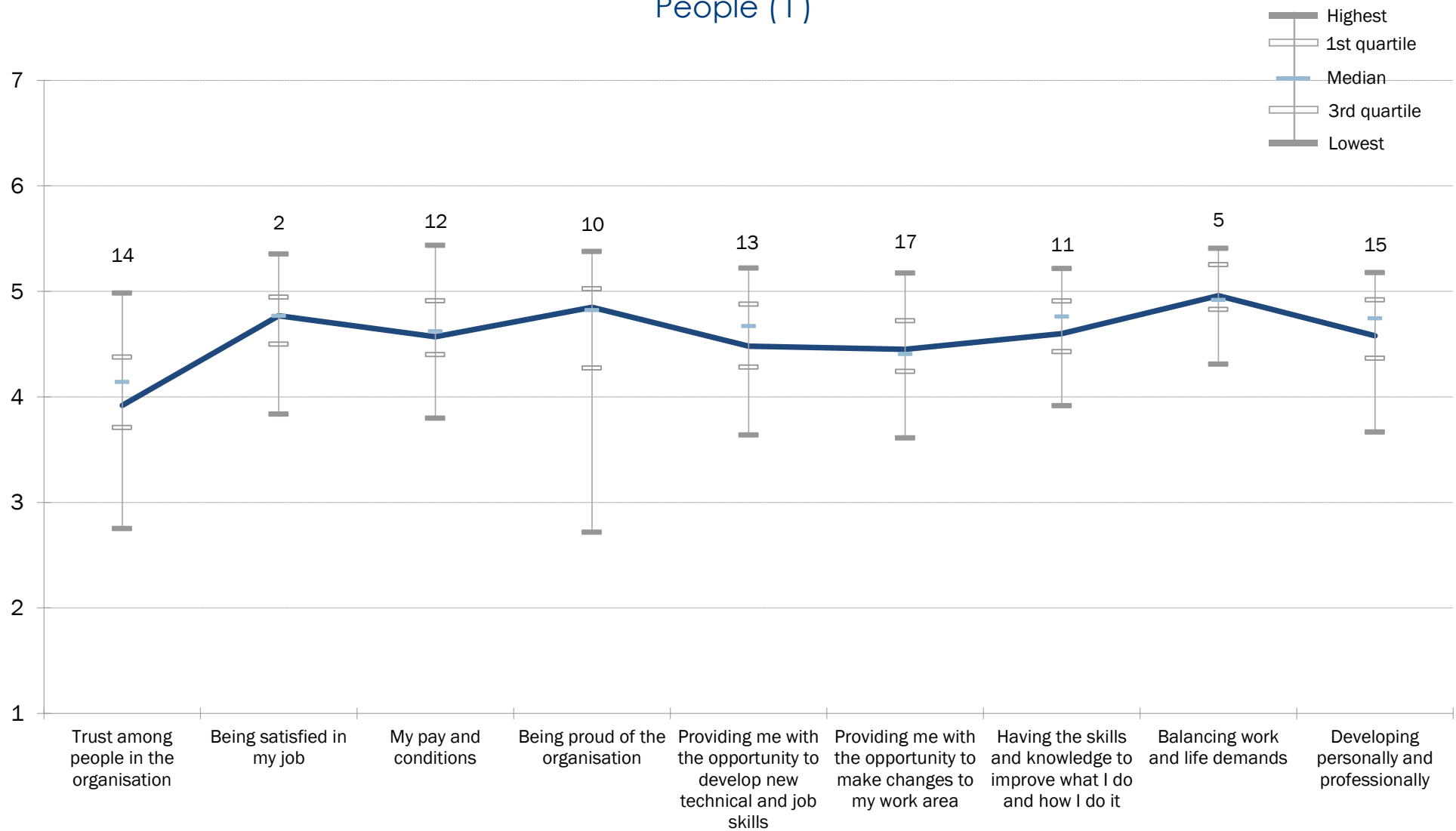
Strategy & planning processes



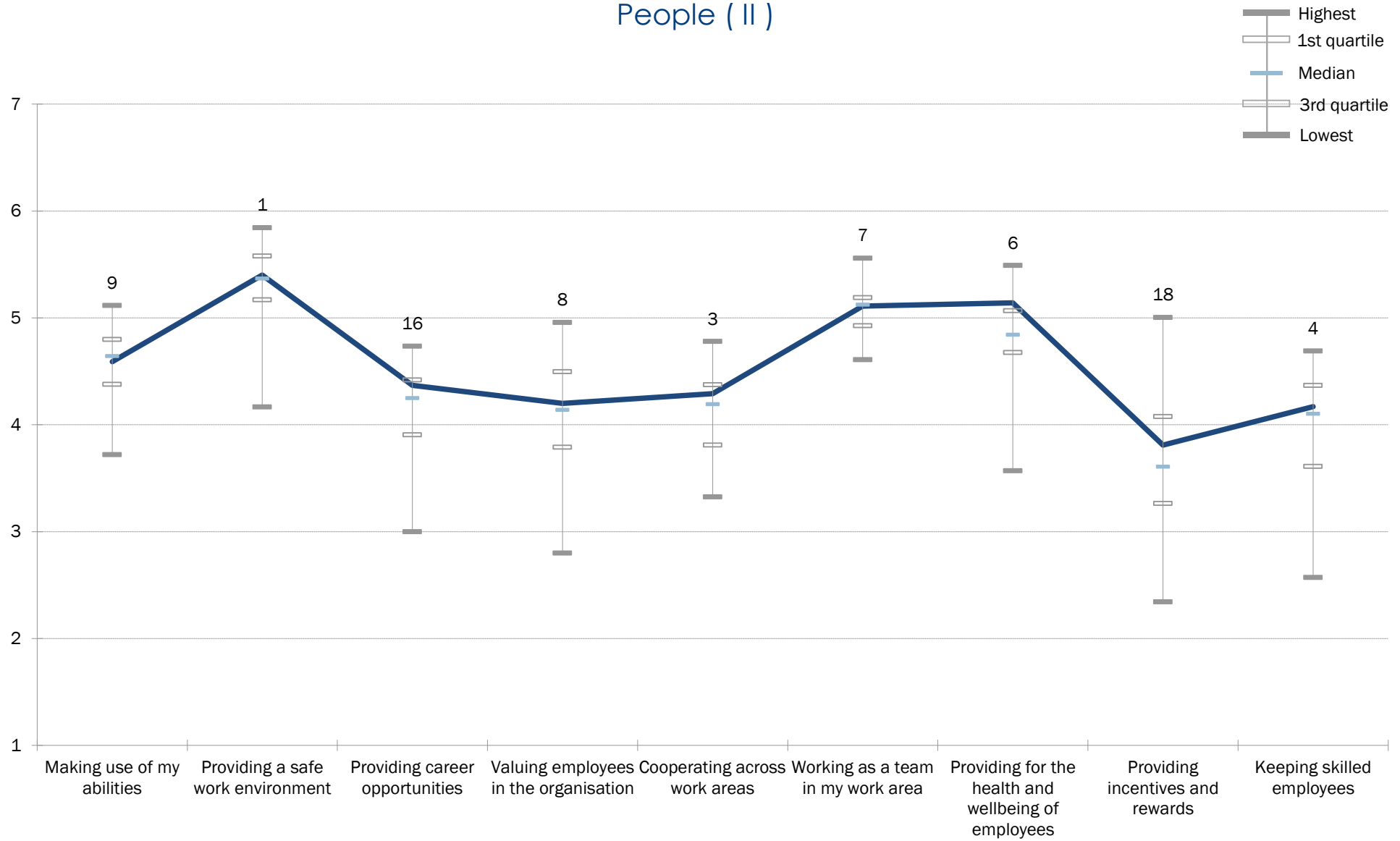
Data, information & knowledge



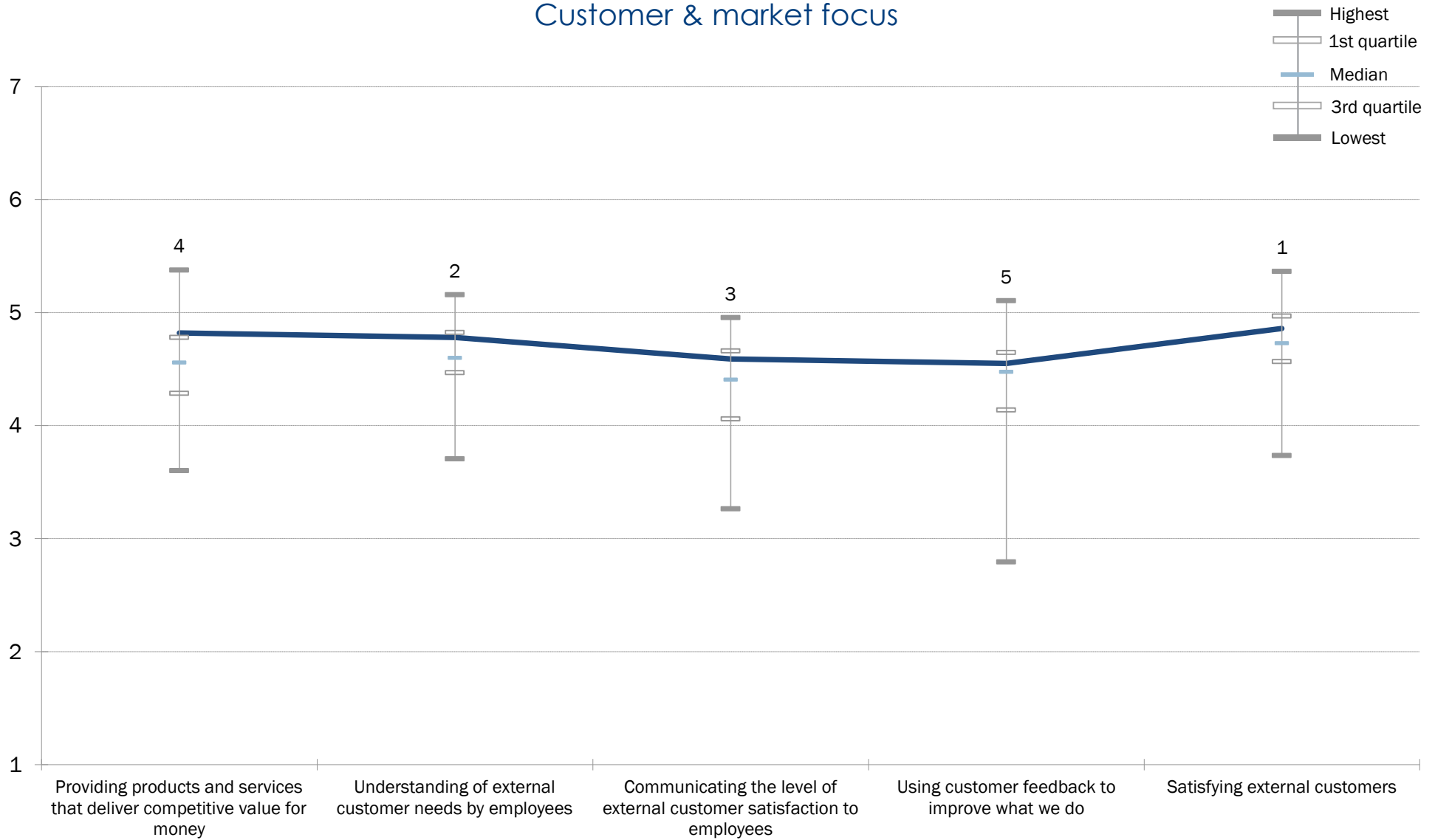
People (1)



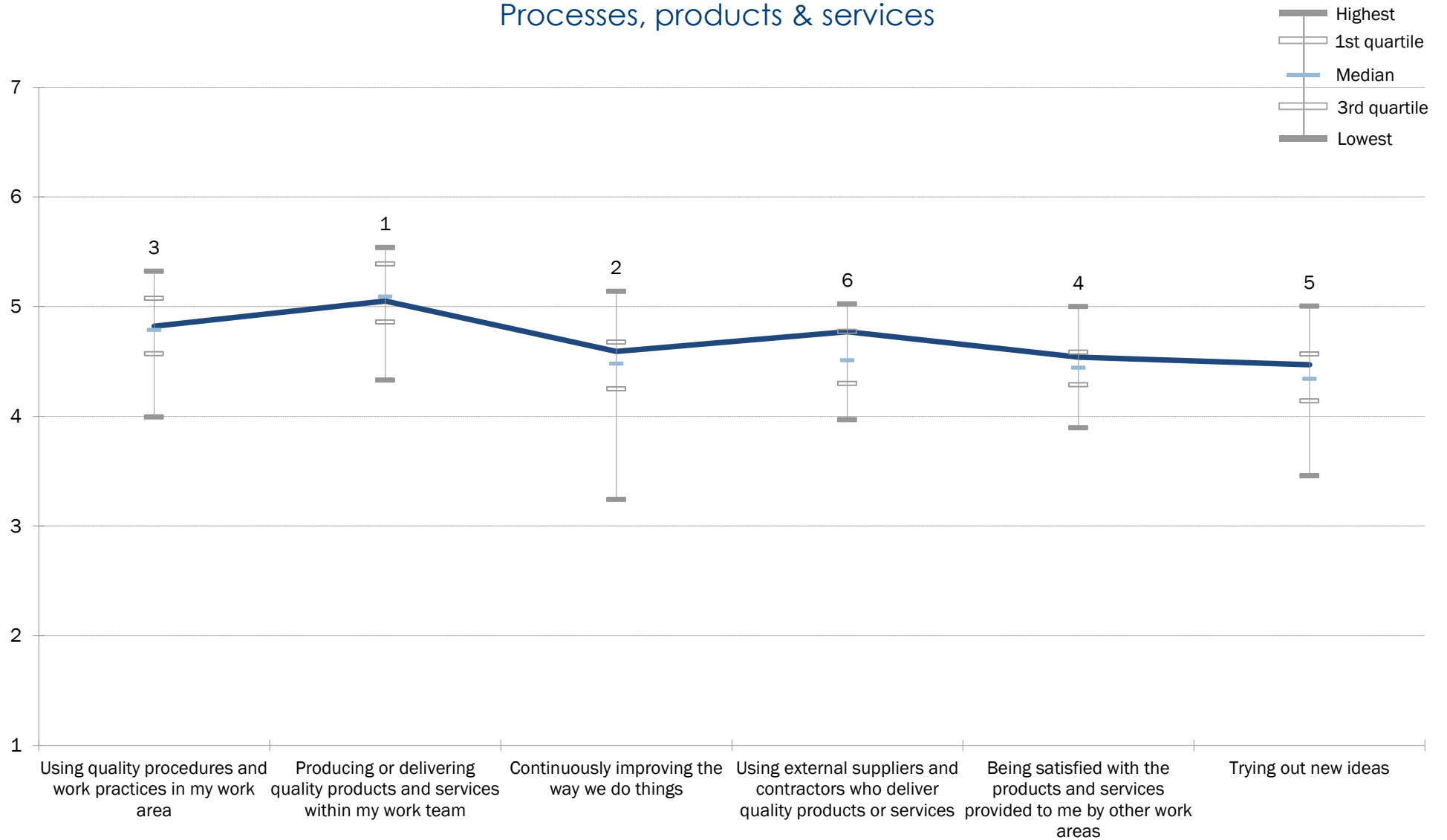
People (II)



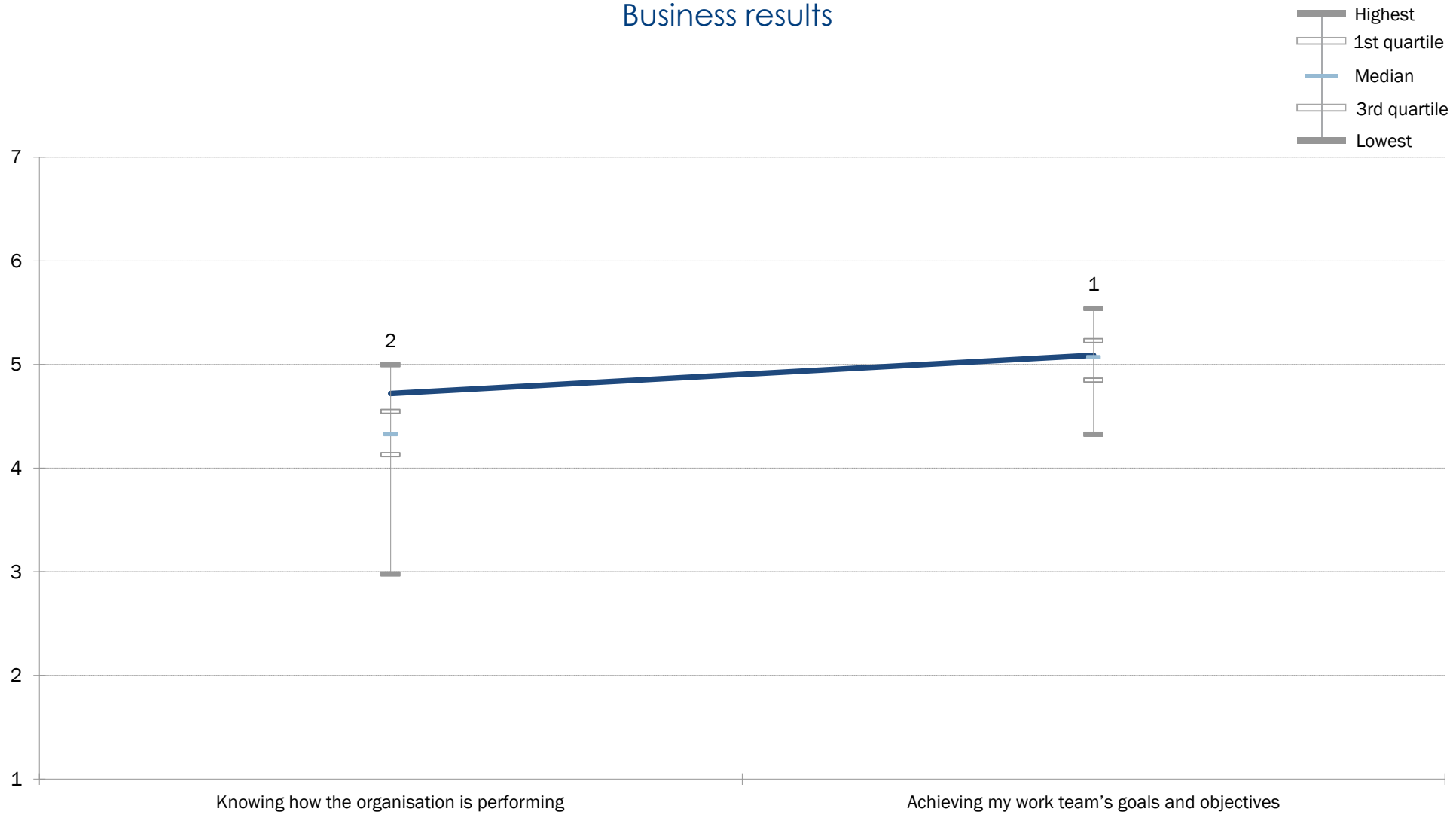
Customer & market focus



Processes, products & services



Business results



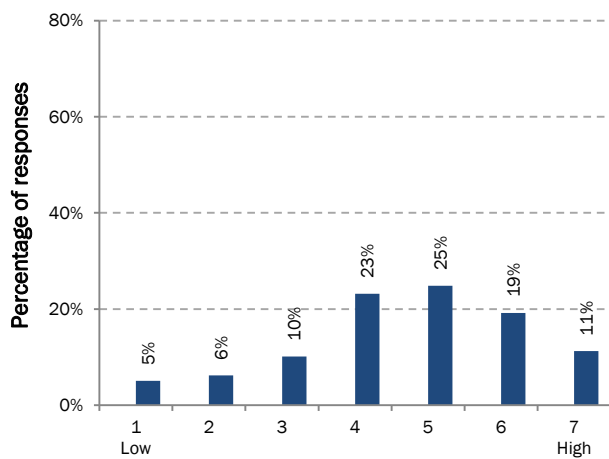
Survey responses by item - All respondents

These charts show the survey participants' responses to each survey item. The columns show the percentage of respondents that selected each option on the 7 point scale. Above each chart is the average Performance rating.

Leadership & innovation

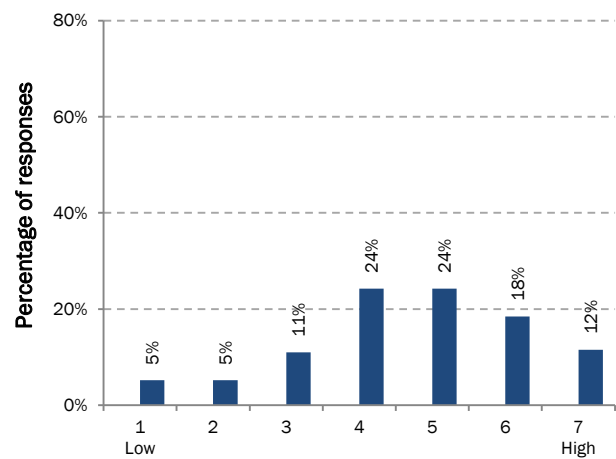
Receiving regular recognition for my efforts at work from the person to whom I report

Performance score 4.59



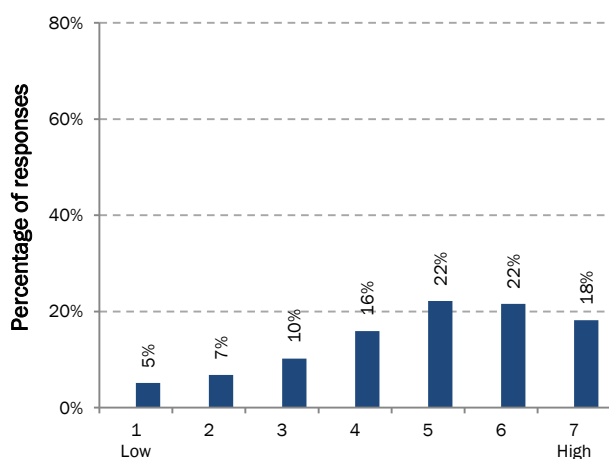
Receiving regular feedback on my job performance from the person to whom I report

Performance score 4.59



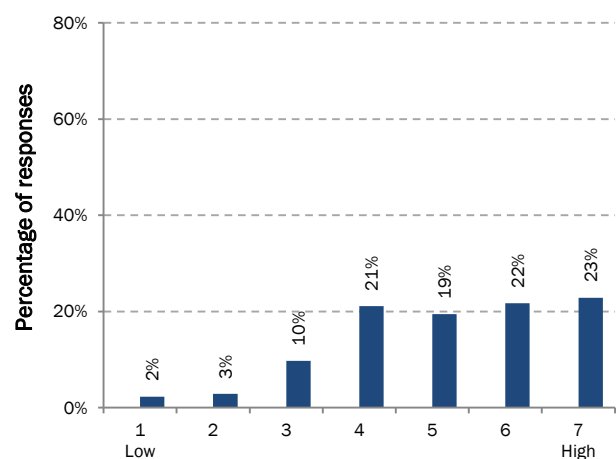
Demonstration of leadership by the person to whom I report

Performance score 4.81



Having the person to whom I report listen and respond to me

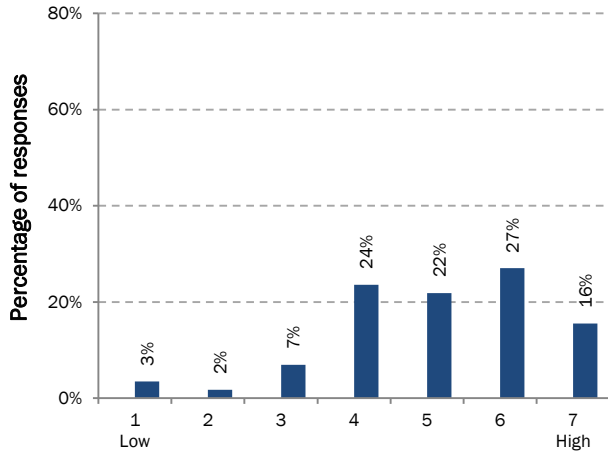
Performance score 5.09



Leadership & innovation (continued)

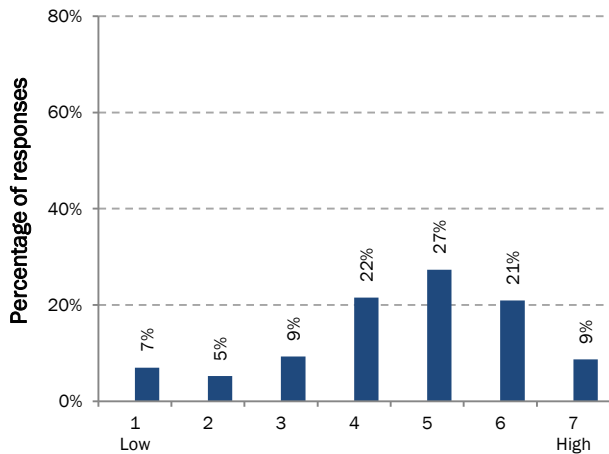
Understanding where my work team fits into the organisation

Performance score 5.02



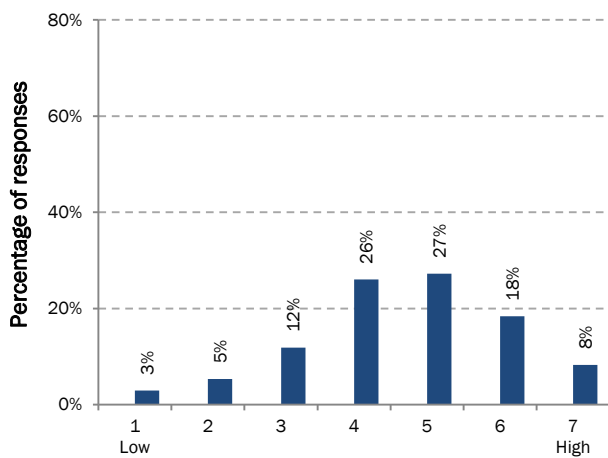
Being listened to by the Directors

Performance score 4.55



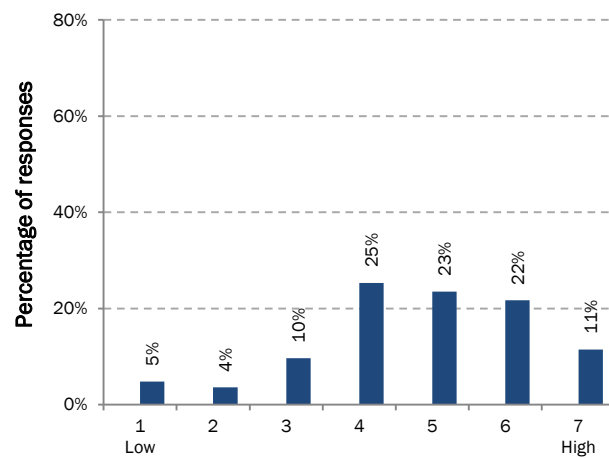
Change being led by the Directors

Performance score 4.57



Demonstration of leadership by the Directors

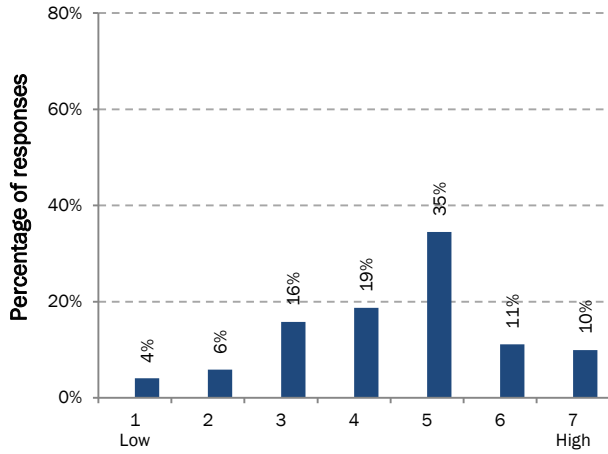
Performance score 4.70



Leadership & innovation (continued)

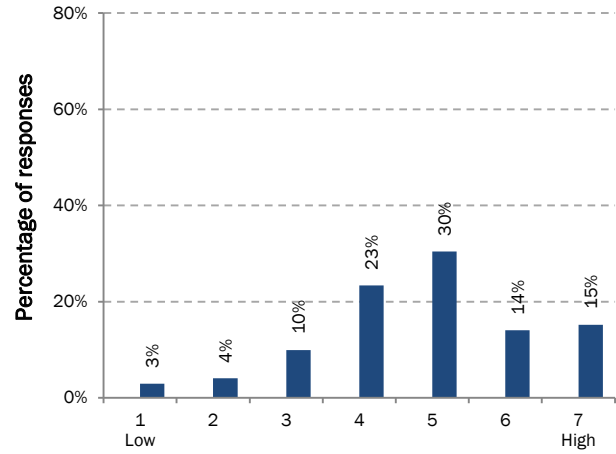
Encouraging innovation

Performance score 4.47



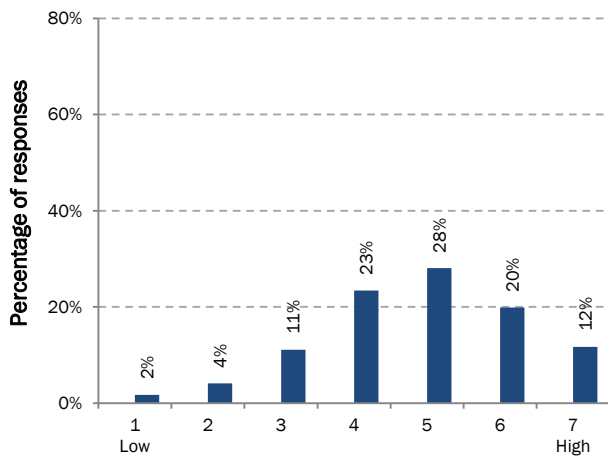
Having clear goals for the organisation

Performance score 4.77



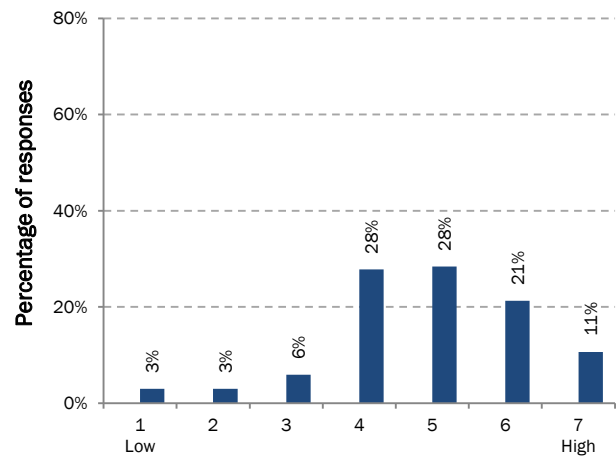
Having the organisational structure to achieve our vision and goals

Performance score 4.78



Being aware of the organisation's environmental and social impact on the community

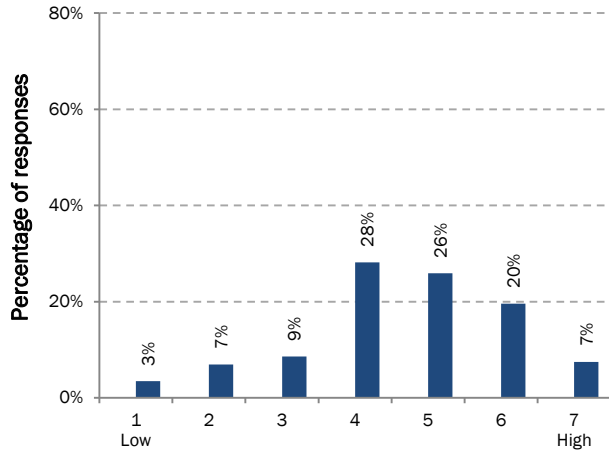
Performance score 4.82



Strategy & planning processes

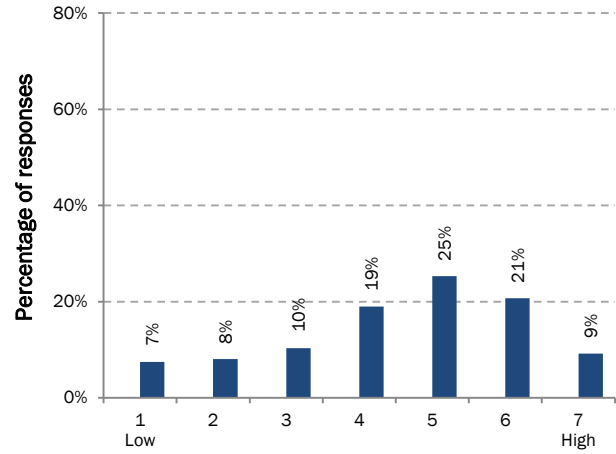
Planning in my work area being linked to the organisation's plans

Performance score 4.55



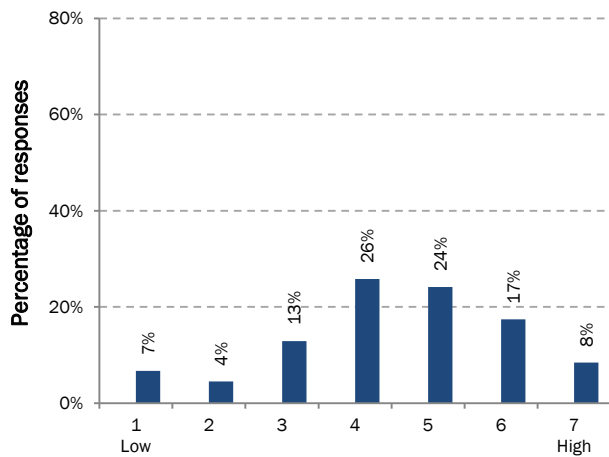
Involving me in the development of plans for my work team

Performance score 4.45



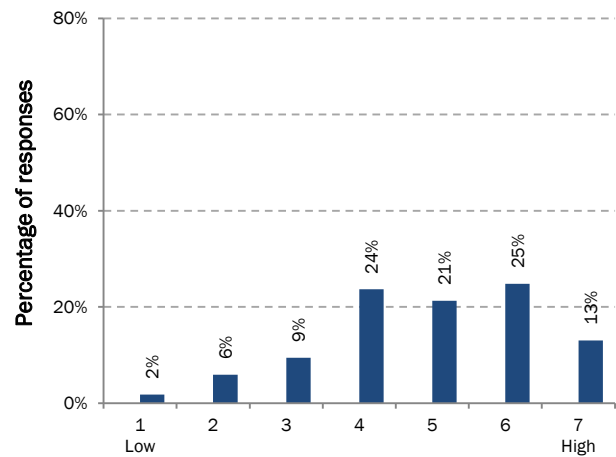
Having the resources to achieve my work team's goals

Performance score 4.42



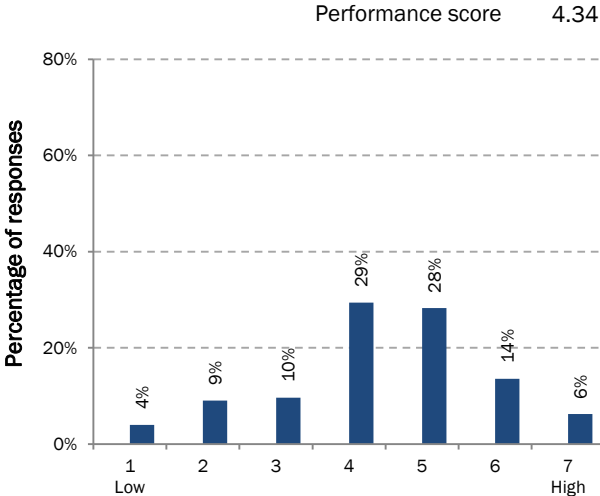
Planning for the future of the organisation

Performance score 4.83



Strategy & planning processes (continued)

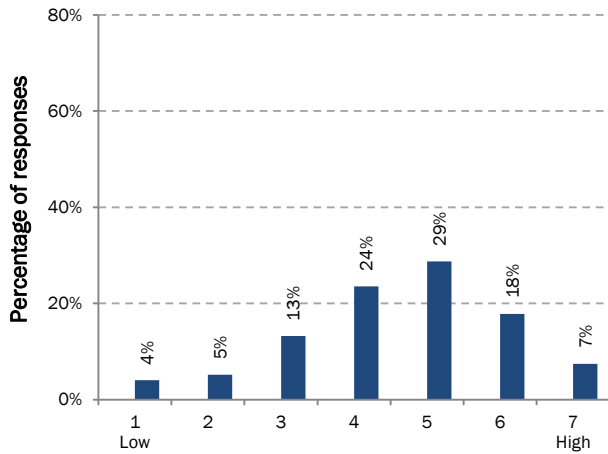
Understanding why the organisation makes changes



Data, information & knowledge

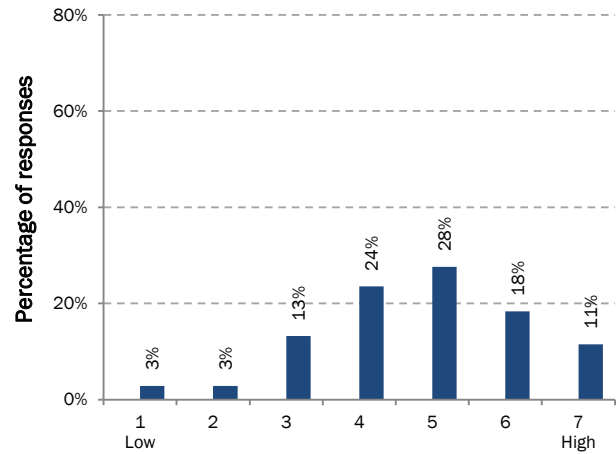
Using collected data and information as a basis for decision-making

Performance score 4.51



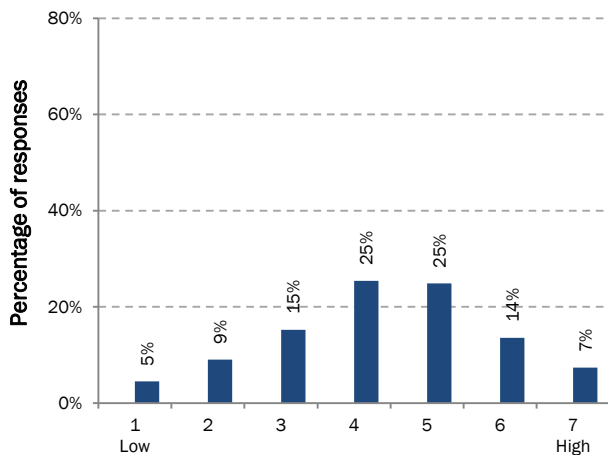
Measuring my work team's progress

Performance score 4.71



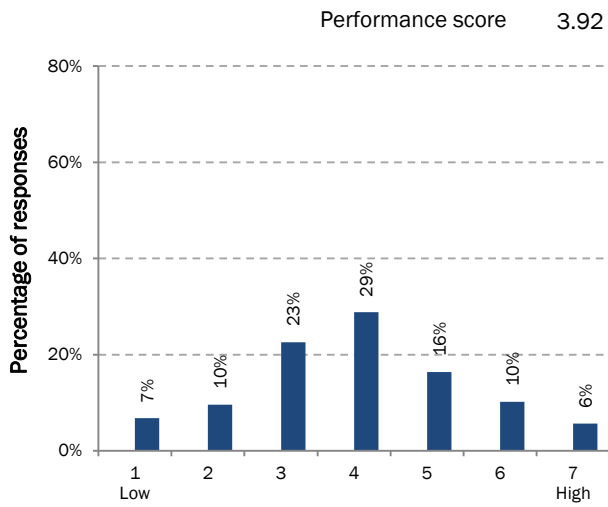
Encouraging me to share what I have learnt with others in the organisation

Performance score 4.27

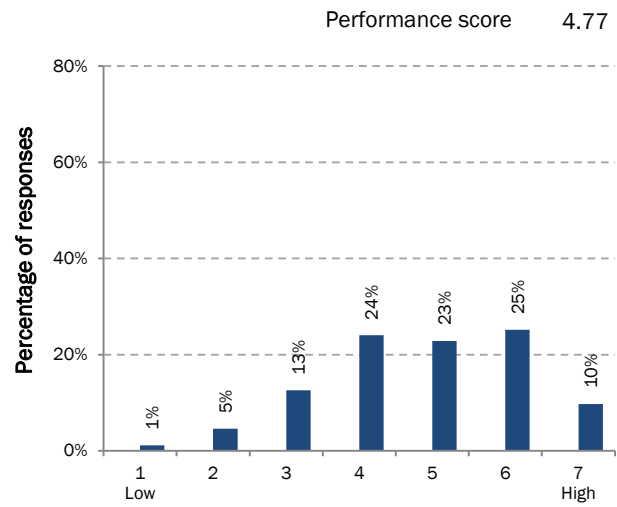


People

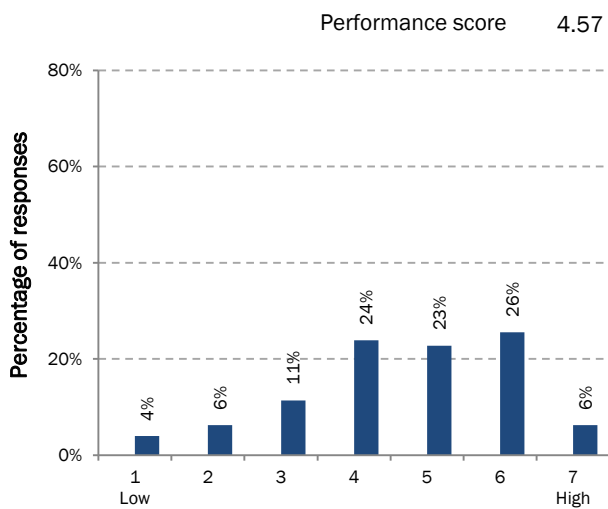
Trust among people in the organisation



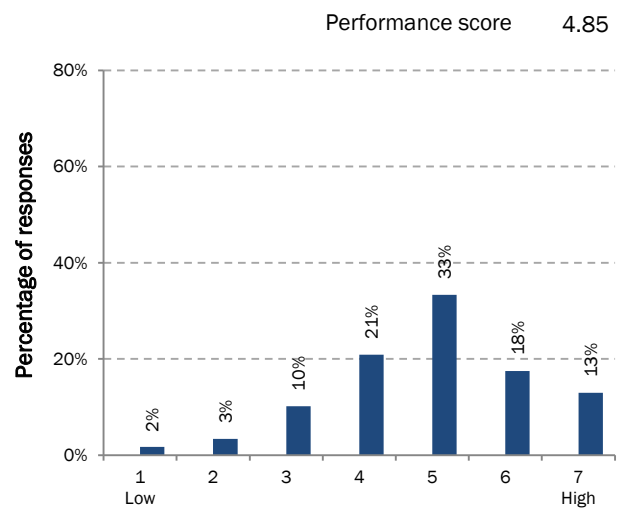
Being satisfied in my job



My pay and conditions



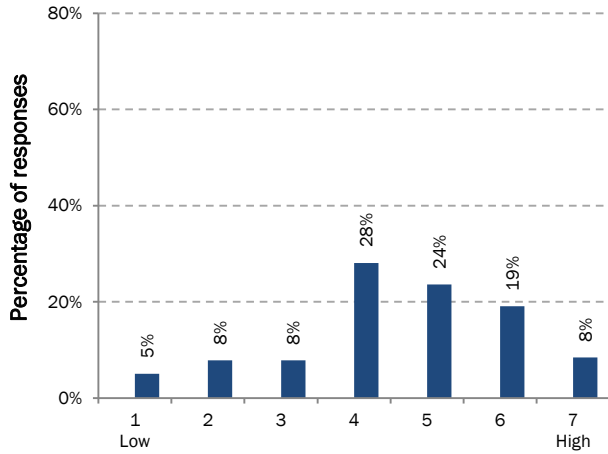
Being proud of the organisation



People (continued)

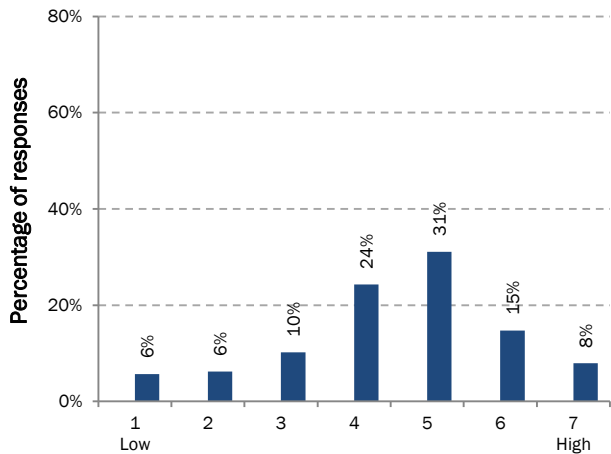
Providing me with the opportunity to develop new technical and job skills

Performance score 4.48



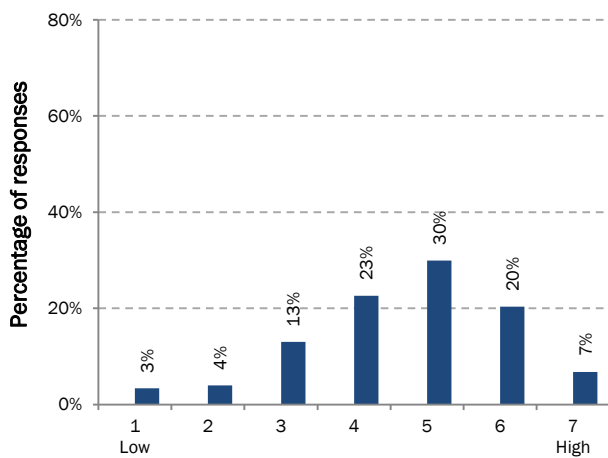
Providing me with the opportunity to make changes to my work area

Performance score 4.45



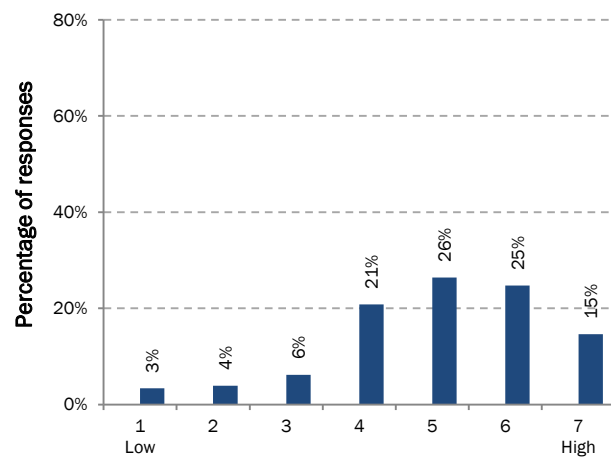
Having the skills and knowledge to improve what I do and how I do it

Performance score 4.60



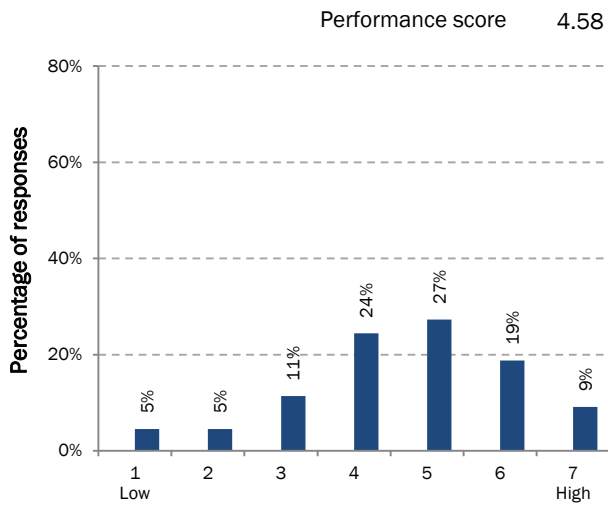
Balancing work and life demands

Performance score 4.96

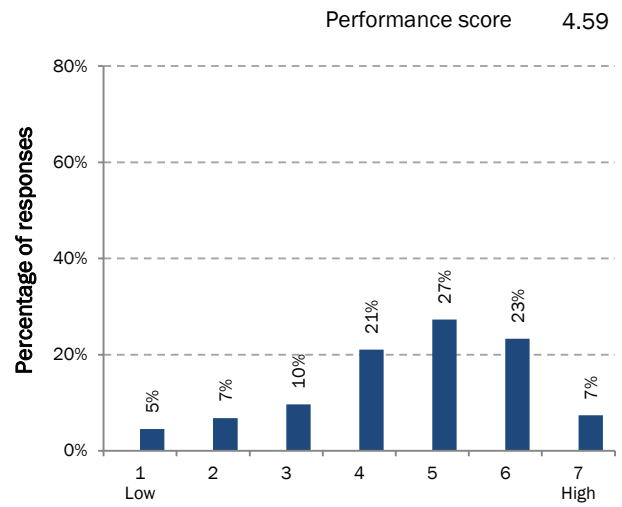


People (continued)

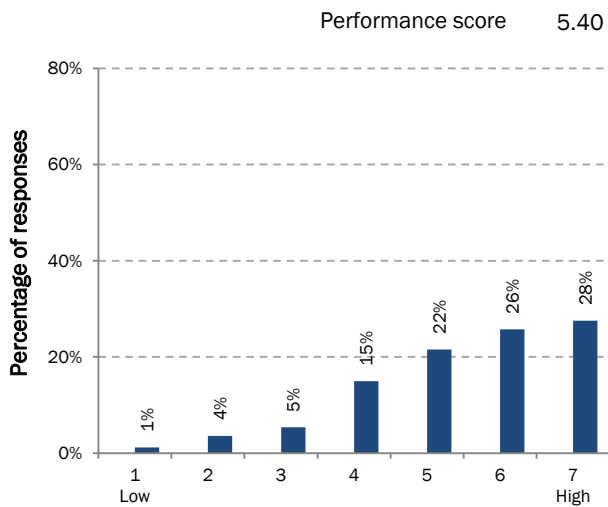
Developing personally and professionally



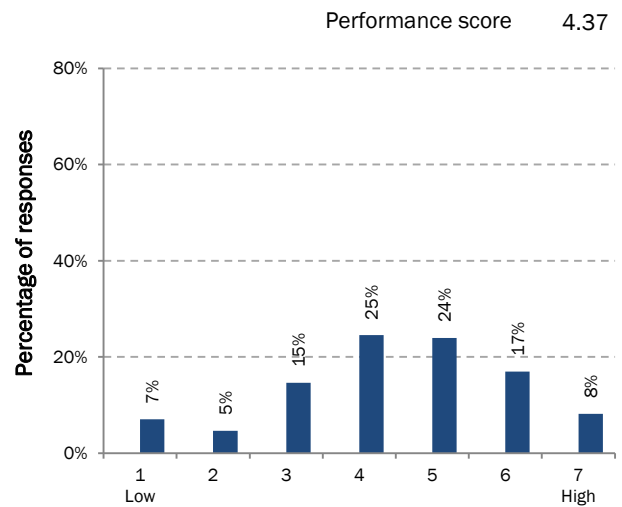
Making use of my abilities



Providing a safe work environment



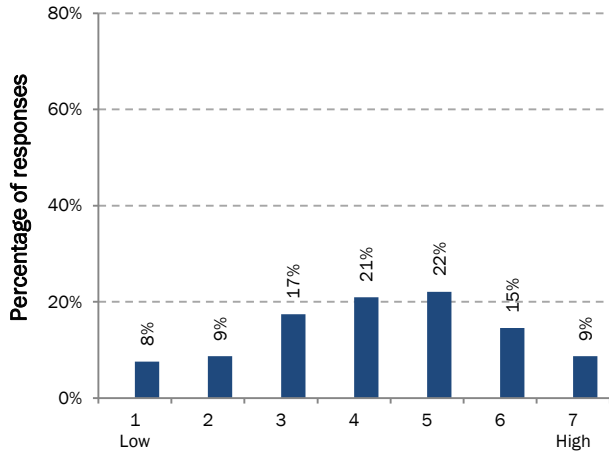
Providing career opportunities



People (continued)

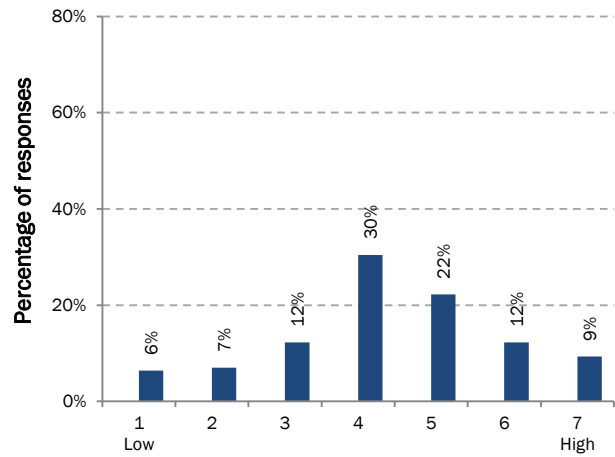
Valuing employees in the organisation

Performance score 4.20



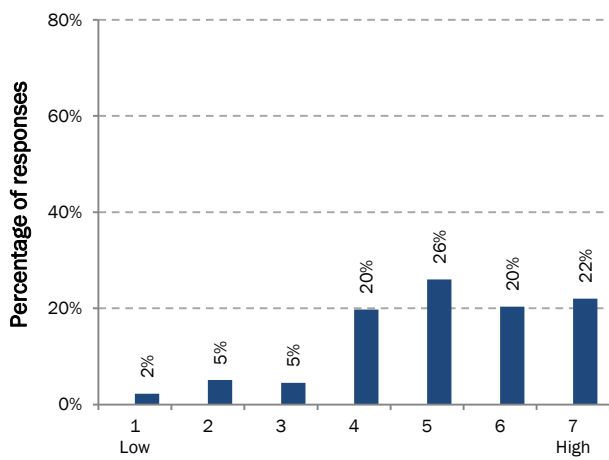
Cooperating across work areas

Performance score 4.29



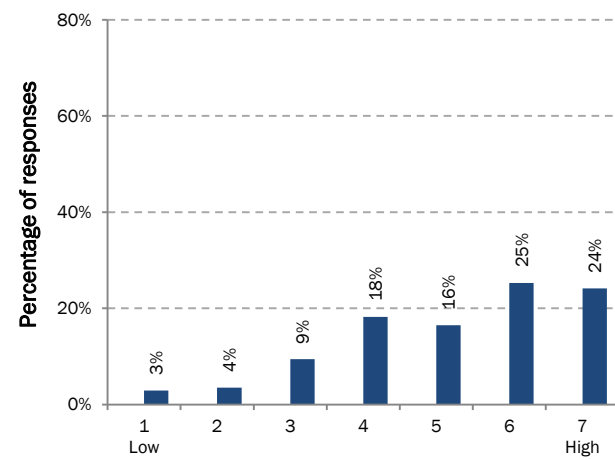
Working as a team in my work area

Performance score 5.11



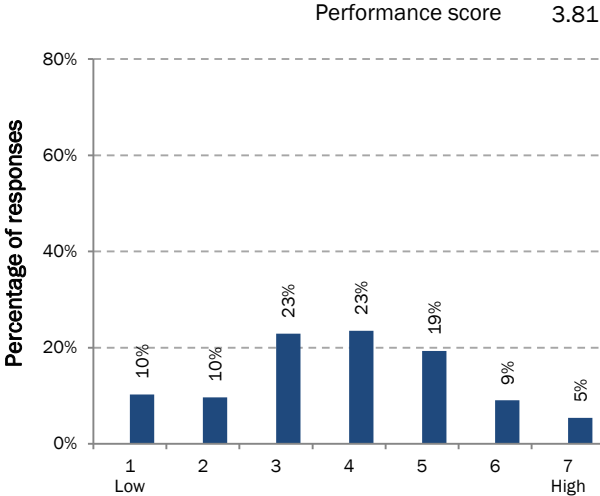
Providing for the health and wellbeing of employees

Performance score 5.14

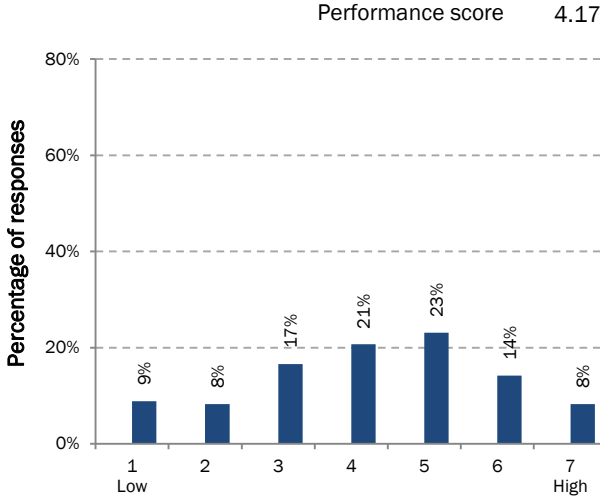


People (continued)

Providing incentives and rewards



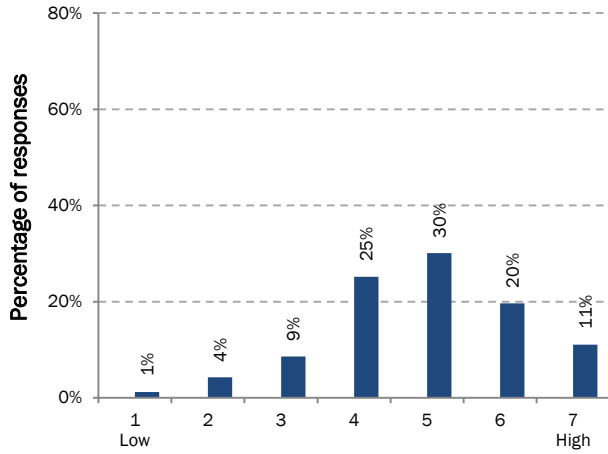
Keeping skilled employees



Customer & market focus

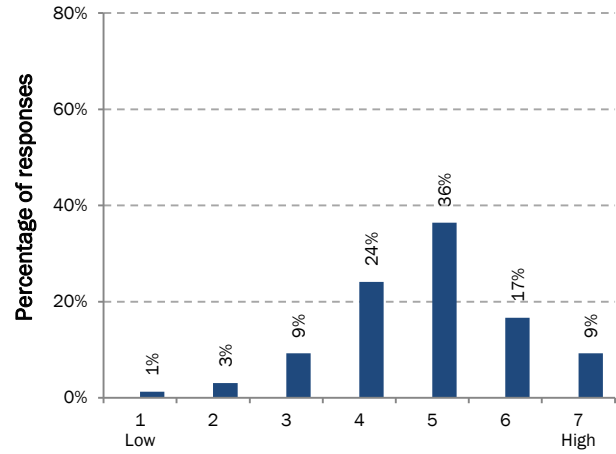
Providing products and services that deliver competitive value for money

Performance score 4.82



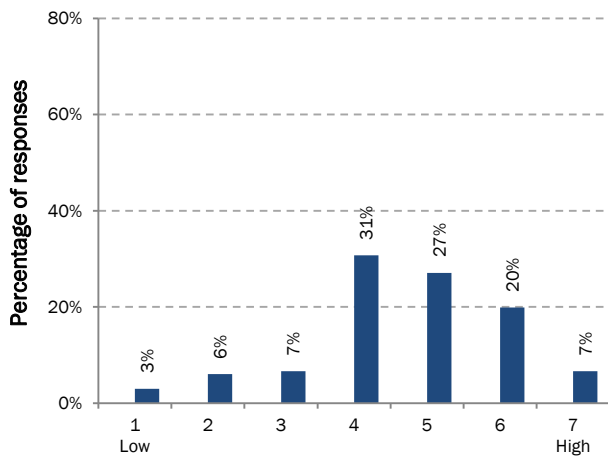
Understanding of external customer needs by employees

Performance score 4.78



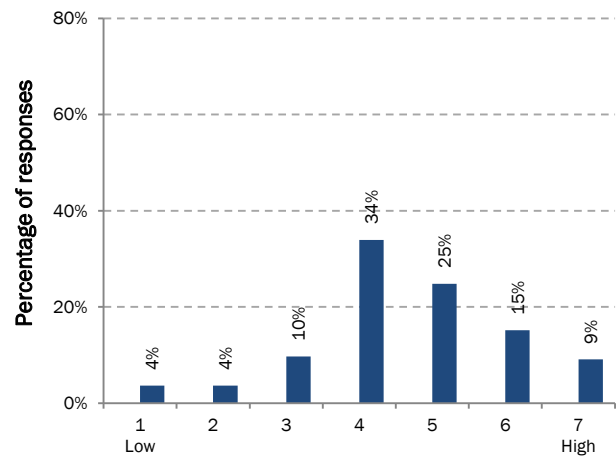
Communicating the level of external customer satisfaction to employees

Performance score 4.59



Using customer feedback to improve what we do

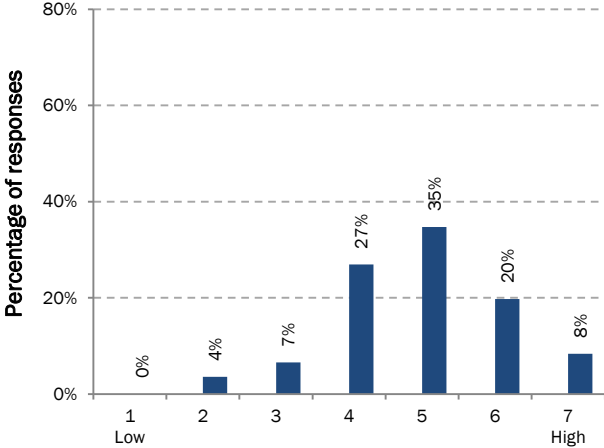
Performance score 4.55



Customer & market focus (continued)

Satisfying external customers

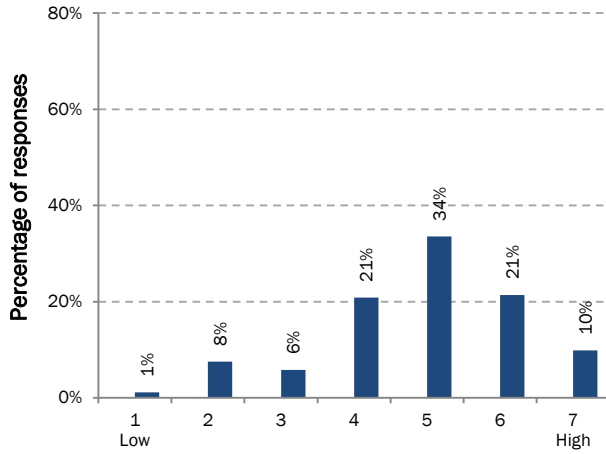
Performance score 4.86



Processes, products & services

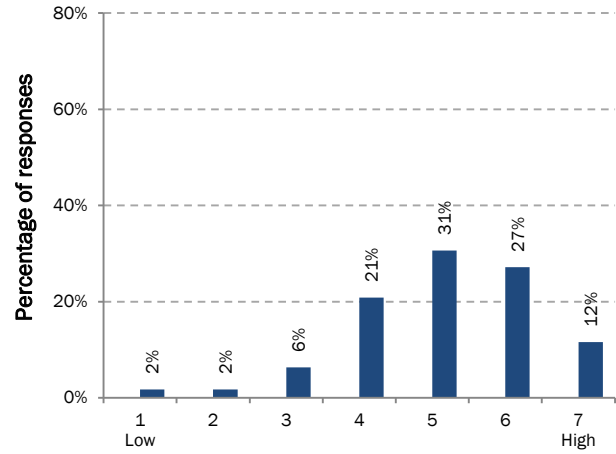
Using quality procedures and work practices in my work area

Performance score 4.82



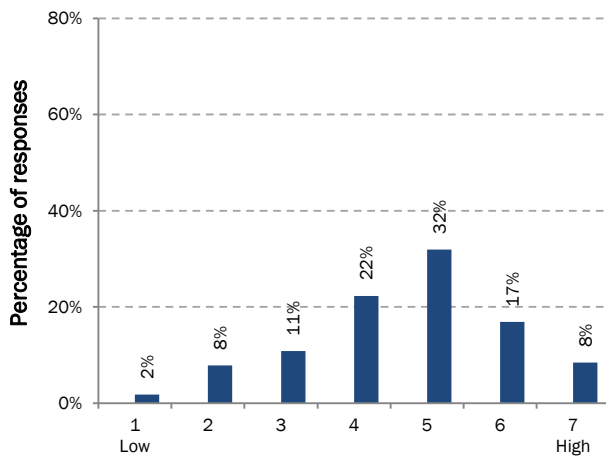
Producing or delivering quality products and services within my work team

Performance score 5.05



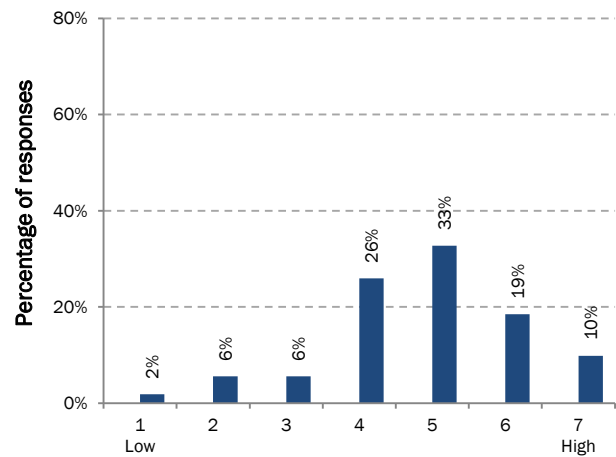
Continuously improving the way we do things

Performance score 4.59



Using external suppliers and contractors who deliver quality products or services

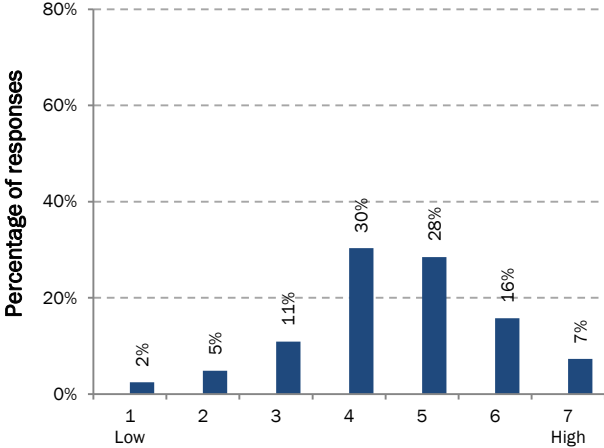
Performance score 4.77



Processes, products & services (continued)

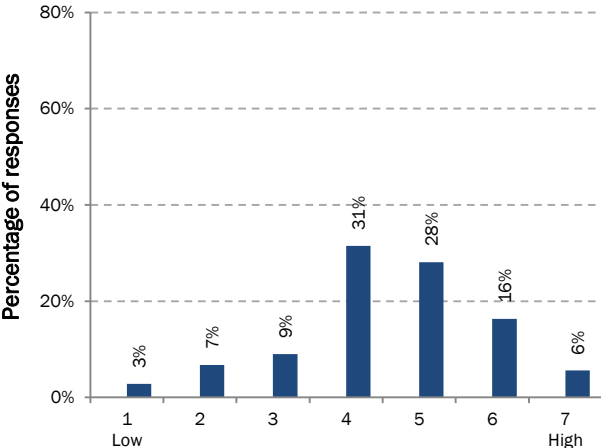
Being satisfied with the products and services provided to me by other work areas

Performance score 4.54



Trying out new ideas

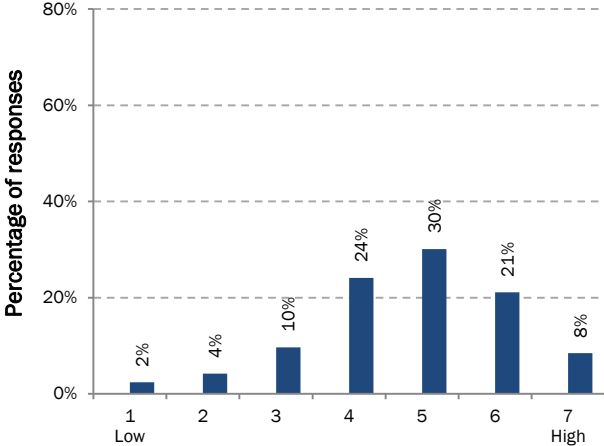
Performance score 4.47



Business results

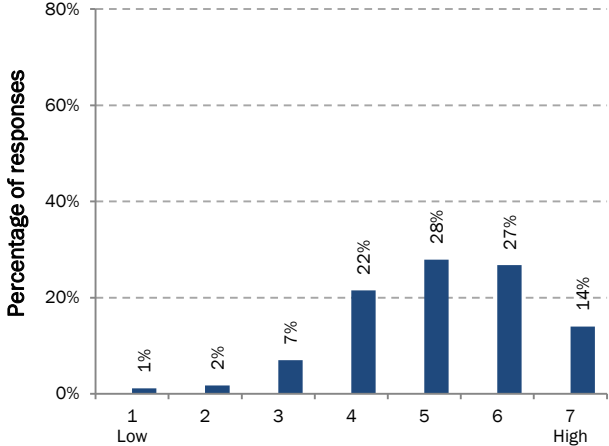
Knowing how the organisation is performing

Performance score 4.72



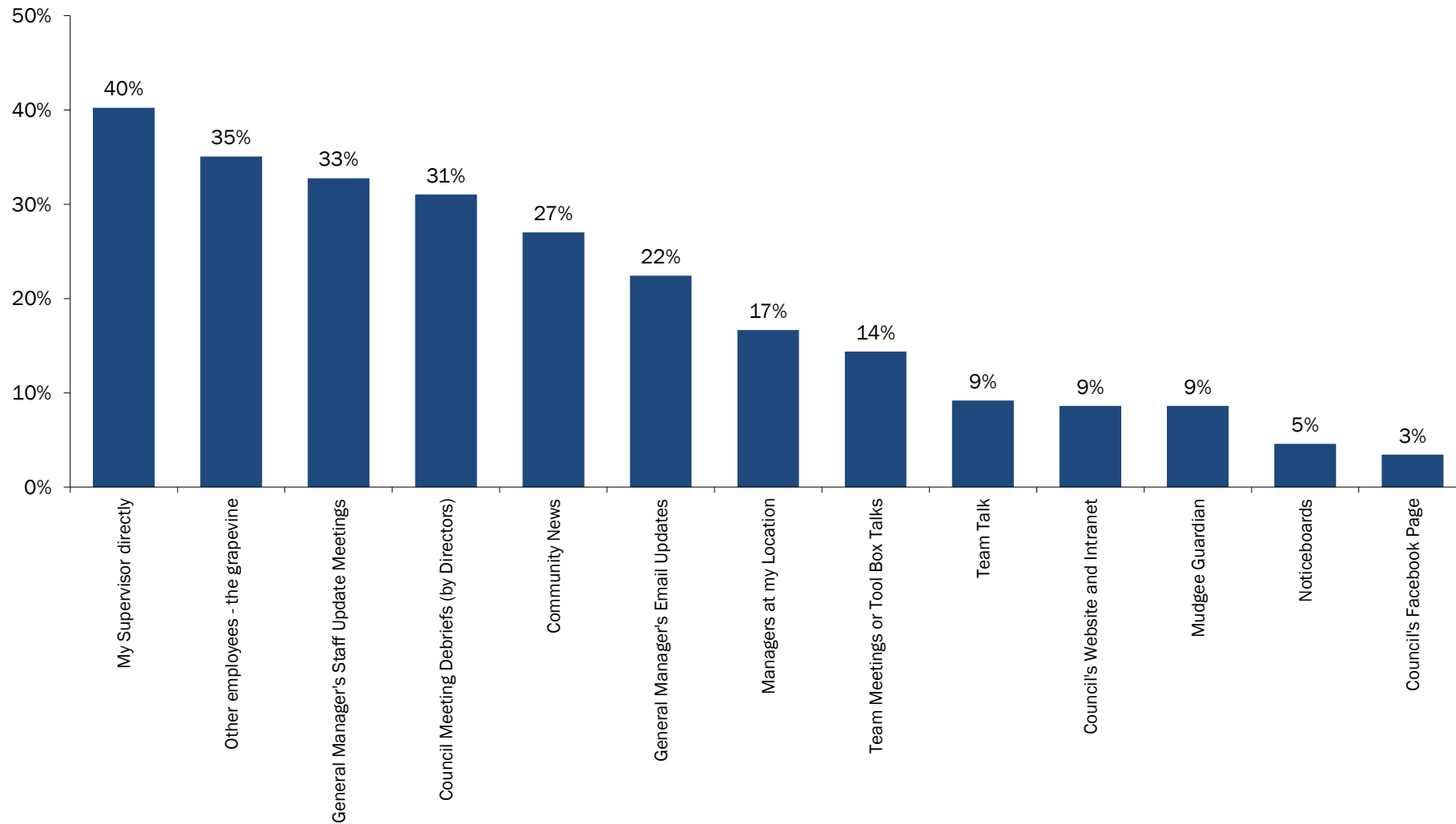
Achieving my work team's goals and objectives

Performance score 5.09



Mid-Western Regional Council, Employee Opinion Survey 2015

From which of the following sources do you get most of your information about what is going on in the organisation? (Top 3 sources only)
(multiple choice)



All respondents (174 responses)



2015

COUNCIL BUSINESS PAPERS

Ordinary Meeting 17 JUNE 2015

ATTACHMENT 6.1.1

► Attachment to Rescission Motion: Extract of Planning Report to Council meeting on 15 April 2015

1.1.1 Planning Proposal - Additional Dwellings Adams Lead Road Gulgong, Spring Flat Road and Market Street Mudgee

REPORT BY THE TOWN PLANNER TO 15 APRIL 2015 COUNCIL MEETING

Planning Proposal

GOV400043, LAN900048

RECOMMENDATION

That:

1. **the report by the Town Planner on the Planning Proposal - Additional Dwellings Adams Lead Road Gulgong, Spring Flat Road and Market Street Mudgee be received;**
2. **Council exercise the delegation in relation to the preparation of the amendment to Local Environmental Plan 2012 to amend the Mid-Western Regional LEP 2012 – Spring Flat Road, Adams Lead Road, Market Street and Split Zoning subject to the Opinion issued by Parliamentary Counsel.**

Executive summary

Following receipt of Planning Proposal documents from three individuals Council resolved (17 September 2014) to prepare an amendment to the Local Environmental Plan 2012 (LEP2012) to:

1. Amend the Lot Size Map Sheet 006 in Spring Flat Road to facilitate the subdivision of Lot 52 DP 633029 to 20ha minimum lot size;
2. Rezone land to R5 Large Lot Residential and amend the Lot Size Map to 'Z' 2 Ha on land in Adams Lead Road Lot 76 DP 755434 Gulgong
3. Insert a provision in Local Environmental Plan 2012 which allows for the subdivision of split zoned land provided the area containing a dwelling or an opportunity for a dwelling meets the minimum lot size for land within that zone.
4. Rezone to part R1 and part RE2 land in Market Street Lot 41 DP 703056 and Lot 1 DP 564729 Mudgee and insert a provision relating to the permissibility of subdivision & dwellings on certain split zoned Residential land
5. Rezone to R1 General Residential Lot 42 DP 703056, Mudgee and amend the MLS to 600m2

The Planning Proposal was exhibited in accordance with the Gateway Determination **PP_2014_MIDWR_003_00** from Friday 30th January 2015 till Friday 3rd April 2015, a total two (2) submissions were received. The exhibition period was extended following an error in the uploading of the necessary documentation to the Council's web site thus providing an additional 28 days for public submissions to be received.

During the exhibition Council received two (2) submissions, all relating to the Market Street aspect of the amendment (item 4 above). These issues are discussed in detail below. The report recommends that Council proceed with a request to Parliamentary Counsel seeking an Opinion that the amendments be made.

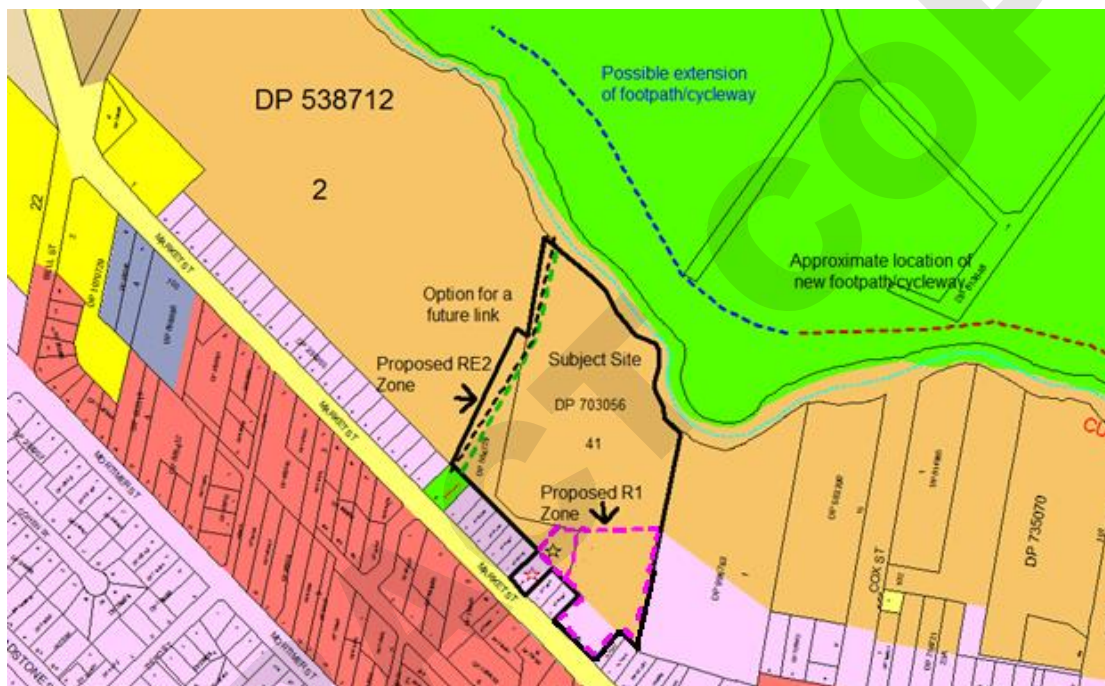
Detailed report

It is intended that the objectives and intended outcomes as described in Part 1 will be achieved through the application of the following mechanisms:

4. & 5. REZONE TO PART R1 AND PART RE2 LAND IN MARKET STREET LOT 41 DP 703056 AND LOT 1 DP 564729 AND REZONE TO R1 LOT 42 DP 703056 MUDGEE AND AMEND THE MINIMUM LOT SIZE MAP TO 600M²

The third of the proposal is the most complex. The intention is to enable a dwelling to be erected on land currently within the E3 Environmental Management zone by rezoning part of the land to R1 General Residential, rezone a strip of land to ultimately provide a link to the Cudgegong River and facilitate a subdivision and boundary adjustment.

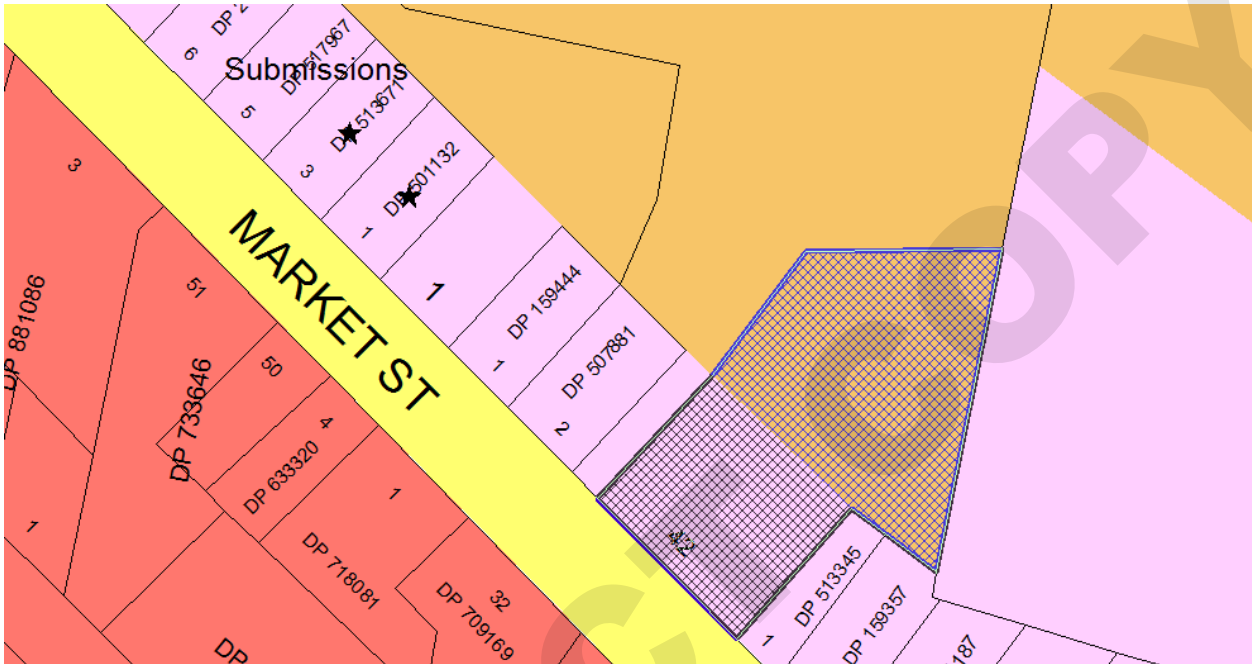
The proposal offers a Public Recreation zone, however, at this stage and until Council is in a position to acquire the land a Private Recreation zone may be more appropriate. The RE2 Zone would run along Lot 1 DP 564729 154 Market Street and the north western corner of Lot 41 DP 703056 146 Market Street and provide a link to the Cudgegong River from Interact Park in Market Street. This is shown on the map below.



The proposal to rezone part of Lot 41 DP 703056 and Lot 1 DP 564729 and all of Lot 42 DP 703056 to R1 General Residential as outlined on the maps above leads to the need for clarity in developing on split zones.

In addition to the rezoning the Lot Size Map will be amended to show 600m² for the subject re zoned land at Lot 41 DP 703056, Lot 1 DP 564729 and Lot 42 DP 703056 to align with the General Residential zoning and facilitate boundary adjustments.

It should be noted that, the initial Planning Proposal did not interfere with Lot 42 DP 703056 which is currently zoned part R1 General Residential and part E3 Environmental Management. However, as proposed this would have resulted in an isolated parcel of E3 and it was a condition of the Gateway Determination to include Lot 42 DP 703056 in its entirety as R1 with a corresponding MLS of 600m².



Lot 42 DP 703056 as hatched above – Initially not included in the Planning Proposal but required as a condition of the Gateway to be included in the R1 General Residential zone. Stars denote submissions.



Stars denote the location of objections. Hatch is Lot 42 DP 703056 being the additional lot included at the Gateway.

GATEWAY DETERMINATION

The Department of Planning & Environment (DP&E) gave permission for the Planning Proposal to proceed and be exhibited on 9 December 2014 (**Attachment 1**), subject to the following amendments:

- a) to address State Environmental Planning Policy (SEPP) 55 Remediation of Land and State Environmental Planning Policy (Rural Lands) 2007,
- b) to outline the zones which are to be affected by the minimum lot size for split zones provision,
- c) to zone land at lot 76 DP 755434 Adams Lead Road, Gulgong Zone R5 Large Lot Residential,
- d) to clearly indicate the intent to amend the minimum lot size on part Lot 41 DP 703056 and part lot 1 DP 564729 Market Street, mudgee to 600 square metres, and
- e) to zone land that forms part Lot 42 DP 703056 within Zone E3 Environmental Management, Zone R1 General Residential and amend the minimum lot size to 600 square metres.

On Monday 26 January 2015 the Planning Proposal had been amended as requested and DP&E agreed Council could publically exhibit the Planning Proposal.

PUBLIC EXHIBITION

The Planning Proposal and all accompanying attachments were placed on Public Exhibition from Friday 30th January 2015 till Friday 27th February 2015. The Public Exhibition involved a newspaper advertisement, neighbour notification letters, uploading the documents to Council's website and having a hard copy of the Planning proposal at Gulgong, Mudgee and Rylstone Council offices for the public to view.

There was an error loading an attachment to the website and as such a second exhibition period was undertaken to ensure all community members had appropriate time to respond.

The second exhibition was between Friday 6th March 2015 and Friday 3rd April 2015.

During the Exhibition Periods responses from the Rural Fire Service (RFS), Office of Environment and Heritage (OEH) and two (2) formal objections were received from the public. As discussed below.

SUBMISSIONS AND RESPONSES

Public Authority Responses –

The Rural Fire Service (RFS) responded on the 10th March 2015 stating RFS had reviewed the 'plans and documents received for the proposal and subsequently has no concerns or issues in relation to bushfire'.

The NSW Office of Environment & Heritage (OEH) responded on 27th February 2015, generally supporting the Planning Proposal. OEH noted an item of Aboriginal Heritage near the Market Street portion of the proposal and suggests further 'due diligence' will be required before any future development.

This will be addressed at the development application stage as is practice of Council.

Public Submissions – the issues raised in the two public submissions are addressed below.

Location	Issue	Staff Comment
Planning Proposal - Exhibition	The information placed on public exhibition is incomplete and inadequate. Particularly the gateway determination and attachments not being up loaded to Council's Website properly.	There was a problem with uploading the documents which went unnoticed during the first exhibition. All documents were available at Council's Mudgee, Gulgong and Rylstone offices during the first exhibition. However in response to the concerns it was decided to re-exhibit the Planning Proposal and Associated documentation between Friday 6 th March 2015 and Friday

Location	Issue	Staff Comment
	<p>The planning proposal as exhibited is not the same as that Considered by Council at its Council meeting in September 2014 and therefore Council has not endorsed the planning proposal as provided to the Department for Gateway determination.</p>	<p>3rd April 2015.</p> <p>The Planning proposal provided to the Department was the same as the Planning proposal endorsed by Council in September 2014. The changes made prior to the exhibition were made as conditions in the Gateway Determination. These changes were to;</p> <ul style="list-style-type: none"> • include Lot 42 DP 703056 in the Residential zone and impose the MLS to 600m2 for this lot; and • to use the R5 rather than the R2 zone for land in Adams Lead Rd Gulgong (no change to lot size).
<p>154 Market Street, Mudgee</p>	<p>Potential rezoning of the land from E3 – Environmental Management to R1 – General Residential will result in dwellings behind my property.</p>	<p>The option to build a second dwelling under the dual occupancy provisions already exists on the land in question, however, under the current LEP framework the dual occupancy could not be subdivided. Under the proposal, the second dwelling will be still be permissible and the land could be subdivided to create a separate tile for the dual occupancy.</p>
	<p>Negative Impact on property values</p>	<p>Property Values are not a Planning consideration under the EP&A Act 1979</p>
	<p>Loss of views</p>	<p>Council has setback and height limit controls to assist in maintaining neighbourhood amenity at the development application stage. In this case, that part of the existing lot that is proposed to be rezoned R1 is immediately behind the existing dwelling on the site and includes the area in which a dual occupancy could be located under the current LEP provisions. Any DA be it a dual occupancy under the current LEP or a second dwelling in line with the proposed amendment will require a full merit assessment.</p>
	<p>The need/viability of the proposed RE2 land and potential pathway connecting Market Street to the Cudgegong.</p>	<p>A new public walking link is considered a positive outcome as it provides important access to the Cudgegong River and allows more flexible future pathways planning.</p>
	<p>Building in Flood Prone Land</p>	<p>The proposed rezoning is on land identified as ‘no flood risk’ towards market street and low flood risk (maximum extent) towards the Cudgegong River. This is similar to</p>

Location	Issue	Staff Comment
		the remainder of properties on the northern Side of Market Street and any impacts on dwellings will be assessed at DA stage.
	Overlooking/ Loss of Privacy / Overshadowing	The main intent of the zoning change is not to allow additional uses but facilitate subdivision. Amenity concerns will be addressed if and when a DA for a dwelling is lodged in line with Council LEP and DCP controls.
	Traffic generation from new developments	There is considered to be no significant change in traffic generation. A dual Occupancy development is currently permissible and would result in additional dwellings, the rezoning is for the provision of subdivision.

The Public Submissions have been taking into consideration and are considered to be of minor consequence to the Planning proposal as addressed above.

In addition to the written submissions, a request was made by an objector to meet with staff to discuss concerns. Despite staff setting aside time to do this, the objector did not avail themselves of the opportunity.

Financial and Operational Plan implications

Not applicable.

Community Plan implications

The strategic planning function sits under the theme Looking After Our Community in the Community Plan. Should the recommendation proceed it will have implications for land use development as a result of an amendment to the LEP 2012.

**AMBROSE MARQUART
TOWN PLANNER**



**CATHERINE VAN LAEREN
DIRECTOR, DEVELOPMENT**

7 April 2015

Attachments:

1. Gateway Determination
2. Public Submission
3. Public Submission
4. RFS Response
5. OEH Response

APPROVED FOR SUBMISSION:



**BRAD CAM
GENERAL MANAGER**



Mr Brad Cam
 General Manager
 Mid-Western Regional Council
 PO Box 156
 Mudgee NSW 2850

Dear Mr Cam

Planning Proposal (PP_2014_MIDWR_003_00) to amend Mid-Western Regional LEP 2012 – Spring Flat Road, Adams Lead Road, Market Street and Split Zoning

Thank you for your letter dated 5 November 2014 requesting a Gateway Determination under Section 56(1) of the Environmental Planning and Assessment Act 1979 (EP&A Act) with respect to the Planning Proposal including various amendments to Spring Flat Road, Adams Lead Road, Market Street and Split Zoning.

As a delegate for the Minister for Planning, I have determined the planning proposal should proceed subject to the conditions in the attached Gateway Determination (**Attachment 1**).

While I support the proposed amendments, it is identified that the rezoning of land at Spring Flat Road and Adams Lead Road are inconsistent with the Mid-Western Regional Comprehensive Land Use Strategy (CLUS). It is recommended that Council consider a review of the CLUS to ensure consistency with the proposed amendments. Further, Council should ensure that planning proposals to amend provisions on rural land are consistent with the CLUS and are strategically justified.

The Minister delegated his plan making powers to Councils in October 2012. It is noted that Council has accepted this delegation. I have considered the nature of Council's Planning Proposal and have decided to issue authorisation for Council to exercise delegation and make this plan (**Attachment 2**).

The amended Local Environmental Plan (LEP) is to be finalised within 9 months of the week following the date of the Gateway Determination. Council should aim to commence the exhibition of the planning proposal as soon as possible. Council's request to draft and finalise the LEP should be made directly to Parliamentary Counsel's office (parliamentary.counsel@pco.nsw.gov.au) 6 weeks prior to the projected publication date.

A copy of the request should be forwarded to the Department of Planning and Environment (westernregion@planning.nsw.gov.au) for administrative purposes.

Department of Planning & Environment

Western Region Office 188 Macquarie Street, Dubbo NSW 2830 | PO Box 58 Dubbo NSW 2830 | T 02 6841 2180 | F 02 6884 8483 | www.planning.nsw.gov.au

The amended LEP maps and GIS data is to be uploaded to the Departments FTP site at ftp://lepup:lep_upload@203.3.194.247/ and the map information emailed to: pocgis@planning.nsw.gov.au and a copy to westernregion@planning.nsw.gov.au .

The State Government is committed to reducing the time taken to complete LEPs by tailoring the steps in the process to the complexity of the proposal, and by providing clear and publicly available justification for each plan at an early stage. In order to meet these commitments, the Minister may take action under section 54(2)(d) of the EP&A Act if the time frames outlined in the determination are not met.

In accordance with 'A guide for the preparation of local environmental plans', the Delegated Plan Making Reporting Template (**Attachment 3**) is enclosed for your reference. Table 2 of the document is to be completed and forwarded to westernregion@planning.nsw.gov.au when requesting the Planning Proposal to be notified, in accordance with section 59 of the EP&A Act.

Should you have any further enquiries, I have arranged for Jessica Holland, Planning Officer to assist you. Ms Holland may be contacted at the Departments Western Region Office on (02) 6841 2180.

Yours sincerely

 9-12-2014
Ashley Albury
General Manager, Western Region

Enclosed:

Attachment 1 – Gateway Determination
Attachment 2 – Written Authorisation to Exercise Delegation
Attachment 3 – Delegated Plan Making Reporting Template



Gateway Determination

Planning Proposal (Department Ref:PP_2014_MIDWR_003_00): to amend the Mid-Western Regional LEP 2012 – Spring Flat Road, Adams Lead Road, Market Street and Split Zoning.

I, the General Manager, Western Region at the Department of Planning and Environment as delegate of the Minister for Planning, have determined under section 56(2) of the EP&A Act that an amendment to the Mid-Western Regional Local Environmental Plan 2012 (LEP) to:

- a) amend the minimum lot size on land at Lot 52 DP 633029 Spring Flat Road, Spring Flat from 100 hectares to 20 hectares;
- b) amend the land use zone at Lot 76 DP 755434 Adams Lead Road, Gulgong from Zone RU1 Primary Production to Zone R2 Low Density Residential and amend the minimum lot size from 100 hectares to 2 hectares,
- c) amend the land use zone at part Lot 41 DP 703056 and part Lot 1 DP 564729 Market Street, Mudgee from Zone E3 Environmental Management to Zone R1 General Residential and Zone RE2 Private Recreation and amend the minimum lot size from 400 hectares to 600 square metres, and
- d) insert a provision regarding minimum lot sizes for split zoned lots to provide for subdivision of lots that are within more than one zone,

should proceed subject to the following variations and conditions:

1. Prior to undertaking public exhibition, Council is to amend the Planning Proposal:
 - a) to address State Environmental Planning Policy (SEPP) 55 Remediation of Land and State Environmental Planning Policy (Rural Lands) 2008,
 - b) to outline the zones which are to be affected by the minimum lot size for split zones provision,
 - c) to zone land at Lot 76 DP 755434 Adams Lead Road, Gulgong Zone R5 Large Lot Residential,
 - d) to clearly indicate the intent to amend the minimum lot size on part Lot 41 DP 703056 and part Lot 1 DP 564729 Market Street, Mudgee to 600 square metres, and
 - e) to zone land that forms part Lot 42 DP 703056 within Zone E3 Environmental Management, Zone R1 General Residential and amend the minimum lot size to 600 square metres.

The Planning Proposal is not to be placed on public exhibition until the Department is satisfied that the above amendments have been adequately addressed.

2. Community consultation is required under sections 56(2)(c) and 57 of the Environmental Planning and Assessment Act 1979 (EP&A Act) as follows:
 - (a) The planning proposal must be made publicly available for a minimum of 28 days; and
 - (b) The relevant planning authority must comply with the notice requirements for public exhibition of planning proposals and the specifications for material that must be made publicly available along with planning proposals as identified in section 5.5.2 of 'A Guide to Preparing LEPs' (Department of Planning and Infrastructure 2013).
3. Consultation is required with the following public authority under section 56(2)(d) of the EP&A Act and/or comply with the requirements of relevant S117 Directions:
 - Office of Environment and Heritage



Planning & Environment

- NSW Rural Fire Service

4. A public hearing is not required to be held into the matter by any person or body under section 56(2)(e) of the EP&A Act. This does not discharge Council from any obligation it may otherwise have to conduct a public hearing (for example, in response to a submission or if reclassifying land).
5. Prior to submission of the Planning Proposal under section 59 of the EP&A Act the relevant Land Zoning Maps and Lot Size Maps that apply to the subject land are to be prepared compliant with the Department's 'Standard technical requirements for LEP maps'.
6. The timeframe for completing the LEP is to be 9 months from the week following the date of the Gateway Determination.

Dated *9th* day of *December* 2014.

a.w. alb
Ashley Albury
General Manager, Western Region
Planning Services

Delegate of the Minister for Planning

EXTRACT

COPY




WRITTEN AUTHORISATION TO EXERCISE DELEGATION

Mid-Western Regional Council is authorised to exercise the functions of the Minister for Planning under section 59 of the *Environmental Planning and Assessment Act 1979* that are delegated to it by instrument of delegation dated 10 October 2012, in relation to the following planning proposal:

Number	Name
PP_2014_MIDWR_003_00	Spring Flat Road, Adams Lead Road, Market Street and Split Zoning.

In exercising the Minister's functions under section 59, Council must comply with the Department's "A guideline for the preparation of local environmental plans" and "A guide to preparing planning proposals".

Dated 9th December 2014


Ashley Albury
General Manager, Western Region
Planning Services
Department of Planning and Environment

Delegate of the Minister for Planning

Attachment 5 – Delegated plan making reporting template

Reporting template for delegated LEP amendments

Notes:

- Planning proposal number will be provided by the department following receipt of the planning proposal
- The department will fill in the details of Tables 1 and 3
- RPA is to fill in details for Table 2
- If the planning proposal is exhibited more than once, the RPA should add additional rows to **Table 2** to include this information
- The RPA must notify the relevant contact officer in the regional office in writing of the dates as they occur to ensure the department's publicly accessible LEP Tracking System is kept up to date
- A copy of this completed report must be provided to the department with the RPA's request to have the LEP notified

Table 1 – To be completed by the department

Stage	Date/Details
Planning Proposal Number	PP_2014_MIDWR_003_00
Date Sent to Department under s56	
Date considered at LEP Review Panel	Considered by the Director Generals Delegate 9 December 2014
Gateway determination date	9 December 2014

Table 2 – To be completed by the RPA

Stage	Date/Details	Notified Reg Off
Dates draft LEP exhibited		
Date of public hearing (if held)		
Date sent to PCO seeking Opinion		
Date Opinion received		
Date Council Resolved to Adopt LEP		
Date LEP made by GM (or other) under delegation		
Date sent to DP&I requesting notification		

Table 3 – To be completed by the department

Stage	Date/Details
Notification Date and details	

Additional relevant information:



Mrs Sally Wilson
156 Market Street
MUDGEE NSW 2850

26 February 2015

General Manager
Mid-Western Regional Council
PO Box 156
Mudgee NSW 2850

RE: Planning Proposal Objection to Rezone to part R1 and Part RE2 land in Market Street Lot 41 DP 703056 and Lot 1 DP 564729 and rezone to R1 Lot 42 DP 703056 Mudgee and amend MLS to 600m²

I write to object to the planning proposal to rezone land on Market Street, Mudgee to residential as published by Mid Western Regional Council on 30 January 2015.

The planning proposal is of interest to me because of the close proximity to my property at 156 Market Street, Mudgee. The rear of my property adjoins the subject of the planning proposal DP 703056 Lot 41 and 42, which is proposed to change from land currently zoned E3 Environmental Management Zone to R1 General Residential.



Figure 3 - Existing Land Zoning Map

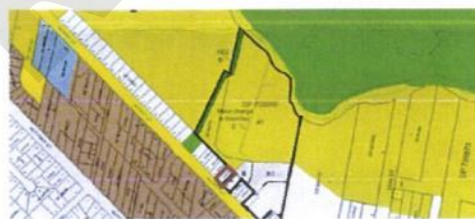


Figure 4 - propose Land Zoning Map

Figure 1: 156 Market Street in relation to the subject site (outlined in red)

The nature of the change and the proximity to my property will impact on my enjoyment of living on a block that backs onto open space which forms much of the attractiveness of living on my side of Market Street.

The major impacts of the rezoning and my specific objections are outlined below and we request that they be taken into consideration by Council in their assessment on the planning proposal:

Inadequate information placed on exhibition and procedural issues

The information placed on public exhibition is incomplete and inadequate. The information placed on exhibition fails to include: a copy of Council's resolution; a copy of the Gateway Determination which specifies the requirements associated with the Planning Proposal including any amendments and its consultation; and a copy of all the appendices referenced in the Planning Proposal.

The method of the rezoning also calls into question the nature of whether due process has been followed by Council. Further, the Planning Proposal does not clearly reveal the specific intentions for the land parcels as to the true ultimate usage as it fails to identify how the land will be subdivided and where a future potential residential dwelling may be located within each allotment created as would be the case for isolated site specific rezoning.

The planning proposal as exhibited is not the same as that considered by Council at its meeting in September 2014, therefore the Council has not endorsed the planning proposal as provided to the Department for the Gateway Determination. Inadequate information placed on exhibition.

Inadequate consultation

Part 5 "Community Consultation" describes the proposal of minor significance. I would contend that the zoning change has major significance on the individual property owners that adjoin the subject site.

My home at 156 Market Street was chosen as our family dwelling, in part, because of its outlook on idyllic open space in a country setting. A change to zoning to land at the rear of my property from E3 Environmental Management to R1 General Residential threatens the future for enjoyment of this property in the following ways:

- Overlooking into my property threatening my privacy
- New residential buildings overshadowing my property
- Obstruction of existing views to idyllic open space
- Traffic generation from new developments

Little evidence has been demonstrated in the notification letter received from council that any degree of assessment has been made by the proponent or Council to consider the impacts of the zoning change on adjoining properties. Furthermore, it appears that this rezoning is occurring in isolation rather than as a strategic change driven by economic, social or environmental principles.

The Planning Proposal document published on the Mid-Western Regional Council website does little more to demonstrate an evidence based assessment.

Flood prone land

The proposed change in zoning is to occur on a property that has been identified as flood prone land. It is Council's duty to consider the potential effects of flooding and impacts both on the subject land and surrounding development.

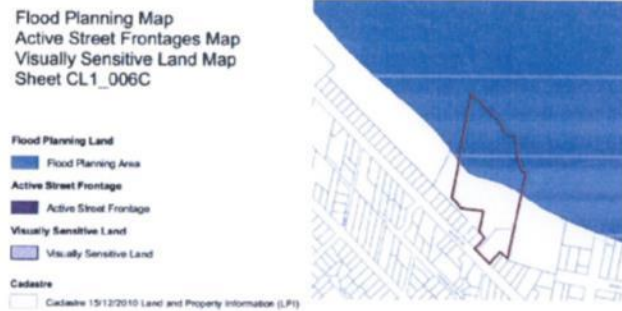


Figure 2: Flood planning map demonstrates the subject site is flood prone

Prior to notifying the public of the planning proposal, no investigation into the specific impacts of any changes to the land zoning in relation to the existing flood impacts appears to have occurred. Neither the letter received by adjoining residents, nor does the Planning Proposal document published on the Mid-Western Regional Council website contain any evidence that such any risk or hazard assessment relating to flood prone land has been completed,

The section 117 Directions issued by the Minister of Planning clearly state that a planning proposal should not rezone land within flood planning areas from Special Use, Special Purpose, Recreation, Rural or Environmental Protection Zone to Residential. The planning proposal as exhibited fails to provide any justifications associated with requesting a variation of any Section 117 Direction. Even if this was undertaken as part of Appendix 2, this information is missing from the exhibited documentation.

To date, neither Council nor the proponent have provided sufficient evidence that a rezoning would be safe and have not explored any avenues to mitigate flood risk impacts on new or existing developments on Market Street.

We are happy to discuss these issues further and welcome a Council officer site inspection to demonstrate our concerns. Please do not hesitate to contact me on 0488 910 077.

Yours Sincerely


Sally Wilson

Ambrose Marquart

From: Ambrose Marquart
Sent: Monday, 2 March 2015 11:01 AM
To: 'Alayna Gleeson'
Subject: RE: 154 Market St

Hi Mr & Mrs. Gleeson,

Thanks for your submission and interest in the planning decision affecting your local area.

The subject Planning Proposal (PP_2014_MIDWR_003_00) exhibition period has now finished. As such Council will be collating the submissions received and making a recommendation to the Department of Planning. Please remember Council did not propose the rezoning and acts in an intermediary role.

Property values are not a planning consideration under the EP&A Act 1979 and therefore cannot be considered during the assessment process, however change of land use and loss of privacy will be taken into consideration.

I am happy to book in a time to discuss the Planning Proposal with you both. Please let me know when you are available.

Thanks and Regards,

Ambrose Marquart | Town Planner - Planning and Development
PO Box 156 | Mudgee NSW 2850
P: 02 6378 2850 | F: 02 6378 2815
e: Ambrose.Marquart@midwestern.nsw.gov.au



From: Alayna Gleeson [<mailto:alayna.gleeson@hotmail.com>]
Sent: Thursday, 9 October 2014 8:37 PM
To: Des Kennedy; paul.
Subject: 154 Market St

Hi Des & Paul.

Hope all is well.

I've recently been made aware that Council has been dealing with a DA proposal for 154 Market St, Mudgee which includes rezoning parcels of land and potential subdivision.

This property adjoins our property (158 Market St) at the rear due to the unusual layout of the land at number 154.

We are extremely concerned that Council will potentially be rezoning this land from an Environment Zone to Residential and as such, dwellings may be built directly behind our property.

We are concerned that Council would be so quick to rezone a parcel of land and if this approval is given, where does it stop? The area is an Environmental Zone for a reason and this shouldn't be interrupted.

One of our biggest concerns is the potential impact on our property value if dwellings are built directly behind our property. We purchased our property three years ago knowing that the land at the rear was an Environmental Zone and there would never be the potential for our view (which is the number one selling point of our property) to be interrupted.

I also question the viability of the proposed pathway from Interact Park to the river. When Council is investing in so much infrastructure on the northern side of the river, what purpose would the proposed path on the southern side serve? It would lead to nowhere? Council should be continuing to invest in pathway LINKS for the whole community to enjoy.

I ask that Council carefully considers its approval of this application. I would also like the opportunity to discuss this matter with you further and in more detail.

I look forward to hearing from you.

Alayna & Murray Gleeson
alayna.gleeson@hotmail.com
0415 515 188

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All communications to be addressed to:

Headquarters
15 Carter Street
Lidcombe NSW 2141

Headquarters
Locked Bag 17
Granville NSW 2142

Telephone: 1300 NSW RFS
e-mail: csc@rfs.nsw.gov.au

Facsimile: 8741 5433



The General Manager
Mid-Western Regional Council
PO Box 156
MUDGEE NSW 2850

PP_2014_MIDWR_003_
Your Ref:00
Our Ref: L13/0024
DA15020595666 KV

ATTENTION: Ambrose Marquart

10 March 2015

Dear Sir/Madam

Planning Instrument for Planning Proposal - Spring Flat Road, Adams Leads Road and Market Street

I refer to your letter dated 2 February 2015 seeking advice for the above Planning Instrument in accordance with the 'Environmental Planning and Assessment Act 1979'.

The Service has reviewed the plans and documents received for the proposal and subsequently raise no concerns or issues in relation to bush fire.

For any queries regarding this correspondence please contact Kalpana Varghese on 1300 NSW RFS.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Iona Cameron', written over a large, light grey watermark that says 'EXTRACT COPY'.

Iona Cameron
A/Team Leader, Development Assessment and Planning

The RFS has made getting information easier. For general information on 'Planning for Bush Fire Protection, 2006', visit the RFS web page at www.rfs.nsw.gov.au and search under 'Planning for Bush Fire Protection, 2006'.



Your reference: PP_2014_MIDWR_003_00
Our reference: DOC15/41094
Contact: Michelle Crawford 02 6883 5339
Date: 27 February 2015

Ambrose Marquart
Town Planner
Mid-Western Regional Council
PO Box 156
Mudgee NSW 2850

Dear Ambrose

RE: Planning Proposal (PP_2014_MIDWR_003_00) – Spring Flat Road, Adams Leads Road and Market Street

Thank you for your letter (dated 2 February 2014) seeking comment from the Office of Environment and Heritage (OEH) on the above planning proposal.

Please note that as of the 29th February 2013, the Environmental Protection Authority (EPA) was re-created as an independent authority. Please consult the EPA separately.

The OEH has the following primary areas of interest relating to strategic land use planning proposals:

1. The impacts of development and settlement intensification on biodiversity and Aboriginal cultural heritage;
2. Adequate investigation of the environmental constraints of affected land;
3. Avoiding intensification of land use and settlement in environmentally sensitive areas (ESAs).
4. Ensuring that development within a floodplain is consistent with the NSW Government's Flood Prone Land Policy, the principles set out in the Floodplain Development Manual, and applicable urban and rural floodplain risk management plans.

We also understand that planning proposals must comply with current statutory matters such as the Local Planning Directions under S117 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

We generally support strategic planning proposals which:

- Avoid rural settlement intensification in areas of biodiversity value, Aboriginal cultural heritage value and other environmentally sensitive areas;

- Include objectives, such as 'no net loss of native vegetation', that will ensure the LEP supports the NSW State Natural Resource Management Targets and Catchment Management Authority Action Plans; and
- Minimise flood risk to human life, property and the local environment while maintaining floodplain connectivity for environmental benefit.

Some specific comments on the proposed rezone are included below. For all other matters please refer to Attachment A which includes our generic recommendations for local government strategic planning. Council should ensure that those matters within Attachment A which are relevant to the rezoning proposal have been appropriately addressed.

Aboriginal Cultural Heritage

OEH notes that your AHIMS search shows one recorded Aboriginal site within or near the subject site in Market Street, Mudgee. OEH also notes that due to this and the proximity to the Cudgegong River that at development stage further due diligence assessment supported by heritage site surveys will be undertaken. Further details are provided in Attachment A.

If additional information relating to the proposal indicates that areas within OEH responsibilities require further investigation, we may provide future input. Should you require further information, please contact Michelle Crawford, Conservation Planning Officer on (02) 6883 5339.

Yours sincerely,



SONYA ARDILL
Senior Team Leader Planning, North West Region
Regional Operations

Enclosure: Attachment A

ATTACHMENT A

Office of Environment and Heritage (North West Branch) general advice for local government strategic planning 2013

BIODIVERSITY VALUES

Rural settlement intensification can have significant impacts on biodiversity. Development will have short and long-term negative impacts on biodiversity. These negative impacts are caused by activities such as:

- the clearing of house and building sites
- the disturbance caused by infrastructure (such as new roads, fence lines, dams and access to utilities), and
- the construction of asset protection zones for statutory fire protection.

The cumulative effect of multiple subdivisions will magnify these substantial impacts on biodiversity. These impacts are not regulated by the *NSW Native Vegetation Act 2003* (NV Act).

There is also a need to recognise climate change as a severe and wide ranging threat to biodiversity in NSW. Rising temperatures and sea-levels, changed rainfall and fire regimes will affect biodiversity in complex and often unpredictable ways. As a result of climate change, current threats to biodiversity, including habitat loss, weeds, pest animals and drought, are expected to intensify.

In many cases, existing approaches to biodiversity conservation (protection of intact vegetation, species recovery, mitigation of current threats and revegetation and restoration activities) will form the basis of adaptation programs to address the impacts of climate change. Reducing existing threats to biodiversity, such as habitat loss, pests and weeds is the most effective option for enabling species to adapt to climate change (at least in the short term) as this will increase the capacity of species to persist in their current locations and form the base from which migration can occur.

Council has the responsibility to control the location and, to a degree, development standards of settlement and other land use intensification. Local Environmental Plans (LEPs) can be used to avoid settlement and development in Environmentally Sensitive Areas (ESAs) including areas of remnant native vegetation.

The S117 Directions (*Environmental Planning and Assessment Act 1979*) require that Councils in preparing a new LEP must include provisions that facilitate the protection and conservation of ESAs. As a minimum, these provisions must aim to maintain the existing level of protection for ESAs within the LGA, as afforded by the current LEP.

As a matter of priority the OEH recommends six actions be taken by Councils when developing new LEPs. These will address the S117 Directions, and protect biodiversity from growth, development and associated pressures and changes:

1. Implement appropriate Environmental Zonings.
2. Avoid development in remnant native vegetation.
3. Establish large minimum lot sizes.
4. Conduct comprehensive environmental studies if areas of high environmental sensitivity occur in sites where there is a strong imperative to intensify land use.
5. Include a biodiversity overlay and clauses within the LEP.
6. Define biodiversity protection and management measures in Development Control Plans.

1. Implement appropriate Environmental Zonings

The zone, E1 'National Parks and Nature Reserves', should be applied to all of the OEH estate within the LGA. We also encourage Councils to apply other environmental and water ways zones in appropriate areas.

The E1 zoning is intended to apply to all lands acquired under the *National Parks and Wildlife Act 1974* (NP&W Act), and therefore is not limited to only the 'National Park' and 'Nature Reserve' classifications.

OEH is also strongly supportive of the implementation of appropriate environmental zonings to other areas identified to have high biodiversity or Aboriginal cultural sensitivity. Private and public lands with high conservation values, including those providing linkages or corridors, can be protected in LEPs through appropriate zoning and/or via overlays with associated development controls. Councils should implement land use zonings such as E2-E4 and W1-W2 to provide as much protection as possible to biodiversity and ecological communities. Specific advice regarding the use of these zones is included in Practice Note previously forwarded to Council.

In particular, we advocate the application of the E2 zone to areas of private or Crown lands that are presently managed primarily for conservation (such as crown reserves or areas under conservation covenants).

We also recommend that Travelling Stock Reserves (TSRs) with known conservation values are included in E3 zones at a minimum, although E2 zoning would be preferred. Mapping of TSRs, including identified conservation values, is available via the Grassy Box Woodlands Conservation Management Network. This mapping can be accessed via <http://gbwcmn.net.au/node/6>.

2. Avoid development in remnant native vegetation

- Council, through the Land Use Strategy and LEP, can protect biodiversity by avoiding development such as settlement and other land use intensification, in areas of remnant native vegetation.
- Development should be directed to areas that have already been cleared, unless such areas have been identified as having environmental importance (eg targeted by a Catchment Management Authority for revegetation to improve regional connectivity).

Avoiding development in areas of native vegetation will contribute to the achievement of Catchment and State biodiversity targets.

Settlement should also be avoided in locations that are likely to be targeted for investment by the Catchment Management Authority (CMA). Landholders in such areas may receive incentive funding for protection and enhancement of native vegetation or revegetation of cleared areas.

OEH will not support strategic land use recommendations or LEP provisions that allow further settlement opportunities in these areas, particularly if Council assumes that ongoing management could be effectively controlled by complex DCP rules.

To assist, the best available mapping of remnant native vegetation has been supplied to Council as part of an interagency package of Environmentally Sensitive Area (ESA) mapping and associated Technical and Practice Notes to help Council identify areas where further settlement intensification should not be allowed. At the broad strategic level, these maps can be used to identify areas that are most likely to be free from significant land, water or biodiversity constraints, therefore more suited to development.

Excluding remnant native vegetation from development pressure on private land could be largely achieved by retaining such areas on relatively large holdings, within RU1 and RU2 zones for example. This would also allow the CMA approval processes, under the *Native Vegetation Act 2003*, to be applied.

Similarly, higher density settlement in 'fire prone' locations should be avoided in the first instance. Where residential areas abut native vegetation there is pressure for the required Asset Protection Zones and other hazard management measures to encroach on that vegetation, particularly where adequate existing cleared land has not been retained to fulfil that role.

Avoiding settlement in remnant native vegetation is also likely to avoid bushfire prone lands and protect any Aboriginal cultural heritage that may remain in such areas.

3. Establish large minimum lot size limits

Minimum lot size limits should be large in RU1 and RU2 zones as well as environmentally sensitive areas. This will reduce the pressures of development and settlement on biodiversity in rural lands.

Minimum lot size limits can be used to reduce the pressures of development and settlement on biodiversity. The LEP should define realistically large minimum lot size limits with associated dwelling provisions to control the intensity of development and settlement.

In particular, Council needs to ensure that minimum lot sizes in environmentally sensitive areas are of an appropriately large size to control the cumulative impact of any development and settlement intensification permitted in those areas by the LEP.

Council needs to adopt a risk-based approach to this matter. The selected sizes should be designed to meet expectations of rural living while minimising the adverse environmental impacts of any settlement that may occur with the sub division.

If Council is strongly of the opinion that lot sizes need to be reduced then this should not be applied uniformly across the shire with environmentally sensitive areas excluded from such revisions.

4. Conduct targeted environmental studies

Where development in areas of native vegetation or environmentally sensitive areas cannot be avoided, a targeted environmental study should be conducted. This should focus on ensuring a "maintain or improve" outcome for biodiversity.

Where Council is unable to avoid applying zonings or minimum lot sizes which permit essential development intensification in remnant native vegetation, a targeted study should be conducted to investigate the biodiversity values of the area. Any study should determine how potential impacts can be mitigated or, where this is not possible, offset through conservation management of other areas.

This study and any resulting objectives and zonings should aim to ensure a 'maintain or improve' outcome. This is a vital step in the strategic planning process and in effectively addressing the S117 Directions.

5. Include a biodiversity overlay and suitable clauses within the LEP

OEH strongly recommends the use of overlays and associated provisions with the LEP to provide additional protection for biodiversity.

It is particularly important to define assessment and development control provisions for those instances where development or settlement intensification cannot be avoided in remnant native vegetation.

LEPs should include objectives and provisions that require a 'maintain or improve' outcome for native vegetation and threatened species whenever clearing of native vegetation or environmentally sensitive areas cannot be avoided

Overlays can also be used to update any existing 'environmentally sensitive lands' provisions in current LEP and therefore meet the requirements of the S117 Directions to at least maintain existing environmental protection standards.

Importantly, the use of such overlays is consistent with the Department of Planning and Infrastructure (DoPI) Practice Note PN 09-002v (30 April 2009) on environmental zones¹ which states:

'Local environmental provisions may be applied where zone provisions need to be augmented in order to ensure that special environmental features are considered. For example, rural land that is still principally for agriculture but which contains environmentally sensitive areas may be zoned RU1 or RU2 and the environmental sensitivities managed through a local provision and associated ('overlay') map.

The benefits of this approach include:

- *The intended conservation or management outcomes for land can be clearly articulated in the LEP.*
- *Areas are clearly defined and controls streamlined.*
- *Sub-zones are not created. (These are not permitted under the standard instrument).*

Provisions for environmentally sensitive areas may include multiple natural resource or other features such as acid sulfate soils and riparian land. A local provisions clause may include objectives and, where the sensitivity is a mappable attribute, a map would accompany the provision'.

OEH advocates the inclusion of the environmentally sensitive land overlays developed by the former Departments of Water and Energy, Environment and Climate Change, and Primary Industries (Fisheries). These overlays and clauses have been prepared to provide Council with information on resource assets and environmental constraints and how these assets and constraints should be managed during the assessment of development applications. The use of the environmentally sensitive areas overlays supplied by agencies is now common-place in both exhibited and gazetted LEPs.

The use of these overlays and clauses and how these may affect land uses are outlined in the previously mentioned Practice Note and Technical Note. When implemented in this way the layers and clauses do not exclude development. Rather, they act as a flag for values that may be present at a site. Sites should be checked for these potential values prior to any development approval. If the values are present at the site, the impact should be avoided or, if this is not possible, at the very least minimised and mitigated.

6. Define biodiversity protection and management measures in Development Control Plans

Biodiversity protection and management measures should be defined in Development Control Plans (DCP) for all areas zoned for rural small holdings, residential and other development intensifications.

We view DCPs as a secondary mechanism to provide biodiversity protection and management measures. It is vital that biodiversity values are first considered strategically in zoning decisions and

development assessment provisions. We do not consider it acceptable to completely defer consideration of these matters to the DCP stage.

It is also important to consider the threats to remnant native vegetation posed by adjoining land uses.

For example, threats to biodiversity associated with nearby growth and intensification of residential land use include (but are not limited to):

- clearing,
- domestic animals,
- invasive plants,
- effluent and waste dispersion,
- changes in hydrology and hydraulics,
- increasing access due to fire trails and other tracks, and
- firewood collection.

Particular attention should be paid to relevant Key Threatening Processes identified and listed under the TSC Act². Mechanisms to abate threats to ESAs (such as implementing codes of practice, best management practice, alternative designs and operations, control technology and buffers between remnant vegetation and small holdings) should be considered.

Council should recognise that buffers may be necessary between environmentally sensitive areas and other land uses. The size of the buffer will vary depending on the nature or activity being undertaken and the level of management control required to prevent or minimise adverse impacts. Provisions should be made to rigorously assess any developments within environmentally sensitive areas and adjoining buffers to prohibit land uses and activities that threaten the ecological integrity, values and function of the area.

Some forms of development adjacent to national parks and reserves can impact on their values and should be avoided or restricted. Council should consider how these areas could be buffered from incompatible development and activities so that potential conflicts can be minimised.

The OEH Guidelines for Developments Adjoining OEH Estate³ have been designed to assist Councils when they are assessing development on lands adjoining OEH estate. However, the issues identified in these guidelines are also relevant when considering buffers for protection of environmentally sensitive areas.

ABORIGINAL CULTURAL HERITAGE

Land Use Strategies, LEPs and DCPs should aim to identify and protect culturally sensitive areas, rather than relying on site by site development assessment.

Aboriginal objects, places and areas are protected across all land tenure under the *National Parks and Wildlife Act 1974*. However, Council should not rely on the site by site development assessment process as the only mechanism for considering the impact of development and settlement intensification on Aboriginal cultural heritage.

It is clear from the S117 directions and mandatory clauses in the Standard Instrument that DoP supports a **strategic approach** to the protection of Aboriginal cultural heritage. Provisions to facilitate the strategic conservation of Aboriginal cultural and heritage within a local government area should include a landscape framework for assessing potential impacts and partnership development with local Aboriginal people.

We strongly recommend that Councils develop planning strategies that result in the **avoidance** of impacts to Aboriginal cultural heritage and minimise impacts in instances where avoidance is not possible.

Specifically, it is important to:

- Develop a framework for effective Aboriginal engagement; and
- Identify sensitive and least sensitive areas through:
 - accessing existing Aboriginal site information;
 - cross reference to landscape information;
 - assessment of areas of potential development/settlement intensification;
 - use of the Department's search tools;
 - reports from previous studies.
 - Aboriginal knowledge; and by
 - Undertaking site surveys to ground truth assumptions.

We offer the following advice to aid Council efforts in adequately addressing Aboriginal cultural heritage assessment and protection within strategic planning documents and environmental planning instruments:

1. The Aboriginal Heritage Information Management System

Councils should contact the OEH to seek access to the Aboriginal Heritage Information Management System (AHIMS) prior to the drafting of any new Land Use Strategy or LEP. AHIMS is the State register of known Aboriginal site locations. A data licence agreement between the OEH and Council can be prepared on application. Information about obtaining a data licence is available on the OEH website⁴. Alternatively, the AHIMS Registrar can be contacted by phone on (02) 9585 6513 or (02) 9585 6345 or by email at ahims@environment.nsw.gov.au.

2. Aboriginal Heritage Study

We recommend using the AHIMS data, along with any previous landscape assessments of the occurrence of Aboriginal objects and sensitive areas, to assist in developing effective strategies to assess impacts to Aboriginal sites in areas being considered for future development. The selection of landscape mapping to overlay with AHIMS site data will highlight distribution patterns between landscape features and Aboriginal sites. This information can assist in identifying potential areas of sensitivity in locations where no location information for Aboriginal sites exists.

OEH can be contacted to advise on data searches for previous cultural and heritage studies undertaken in each Council LGA, and discuss the potential for appropriate desktop tools for use in cultural heritage management.

We recommend that the strategic planning process be used to initiate the development of a strategic framework for engaging local Aboriginal community interests to ensure that active engagement with Aboriginal people evolves over time.

3. Implement a range of tools to ensure strategic management of Aboriginal cultural heritage

We strongly recommend that Councils aim to protect identified areas of Aboriginal cultural sensitivity through:

- The designation of appropriate zoning provisions and boundaries where possible,

- Inclusion on the Heritage Map of any specific important areas identified (which will enable the mandatory clauses in the Standard Instrument to be effectively applied),
- The generation of a cultural heritage constraints map which could be used in a similar way to the ESA layers provided by the natural resource management agencies,
- Appropriate provisions within DCPs to ensure adequate assessment and protection of Aboriginal cultural heritage values,
- Formation of an Aboriginal community Advisory Group to ensure on going input and dialogue on identification and management of Aboriginal cultural heritage for the LGA

4. Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales⁵

This code of practice is to assist individuals and organisations to exercise due diligence when carrying out activities that may harm Aboriginal objects and to determine whether they should apply for consent in the form of an Aboriginal Heritage Impact Permit (AHIP).

The *National Parks and Wildlife Act 1974* (NPW Act) provides that a person who exercises due diligence in determining that their actions will not harm Aboriginal objects has a defence against prosecution for the strict liability offence if they later unknowingly harm an object without an AHIP.

The NPW Act allows for a generic code of practice to explain what due diligence means. Carefully following this code of practice, which is adopted by the *National Parks and Wildlife Regulation 2009* (NPW Regulation) made under the NPW Act, would be regarded as 'due diligence'. This code of practice can be used for all activities across all environments.

This code sets out the reasonable and practicable steps which individuals and organisations need to take in order to:

- identify whether or not Aboriginal objects are, or are likely to be, present in an area
- determine whether or not their activities are likely to harm Aboriginal objects (if present)
- determine whether an AHIP application is required.

When formulating DCPs and other planning controls, Council should require proponents to undertake due diligence in accordance with the Code of Practice. Proponents should provide Council with evidence that the due diligence process has been fol

¹ http://www.planning.nsw.gov.au/planningsystem/pdf/pr09_002_envt_protection_zones.pdf

² **Key Threatening Processes:**

<http://www.environment.nsw.gov.au/threatenedspecies/KeyThreateningProcesses.htm>

³ **Guidelines for Development Adjoining DECCW Estate:**

<http://www.environment.nsw.gov.au/protectedareas/developmntadjoiningdecc.htm>

⁴ <http://www.environment.nsw.gov.au/licences/AboriginalHeritageInformationManagementSystem.htm>

⁵ **Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW**

<http://www.environment.nsw.gov.au/licences/archinvestigations.htm>