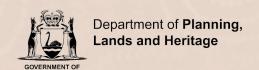
Ngunulum Layout Plan 1







NGUNULUM LAYOUT PLAN 1

Ngunulum Layout Plan No. 1 (LP1) was prepared by the former Department of Planning during 2009-2010 in partnership with Ngunulum Aboriginal Corporation (MAC), MG Corp and OES. The layout plan was prepared with a number of other Layout Plans prepared at that time in response to the outcomes of the Ord Final Agreement and the desires of the MG Dawang Land Trust and MG Corp. MG Corp (representing the traditional owners) and the Ngunulum Community endorsed the Ngunulum LP1.

Layout Plan 1 (LP1) was endorsed by the Shire of Wyndham-East Kimberley, on 21 June 2011 and the Western Australian Planning Commission (WAPC) endorsed the LP on 29 September 2011.

The WAPC endorsed one amendment in October 2012 to incorporate administrative changes to the map-set, no changes were made to the background report. The endorsed amendment is listed in part 6 of this report.

In January 2020 the background report was updated as a part of Amendment 2. The Amendment 2 background report update sought to keep all relevant information, while removing and replacing out-of-date references and data. All temporal references in the background report refer to the original date of preparation, unless otherwise specified.

As part of the machinery of government (MOG) process, a new department incorporating the portfolios of Planning, Lands, Heritage and Aboriginal lands and heritage was established on 1st of July 2017 with a new department title, Department of Planning, Lands and Heritage. Since the majority of this report was finalised before this occurrence, the Department of Planning, Lands and Heritage will be referred to throughout the document. Other government departments mentioned throughout this document will be referred to by their department name prior to the 1st of July 2017.

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Community Contact Details

Representative Organisation : Ngunulum Aboriginal Corporation

MG Corp

Related Organisations : MG Dawang Land Trust Pty Ltd

Ord Enhancement Scheme

Acronyms

Acronyms						
AHA	:	Aboriginal Heritage Act (WA) 1972				
ATSIC	:	Aboriginal and Torres Strait Islander Commission				
CR	:	Crown Reserve				
DoC	:	Department of Communities (Housing)				
DIA	:	Department of Indigenous Affairs				
DPLH	:	Department of Planning, Lands and Heritage				
EHNS	:	Environmental Health Needs Survey				
ILUA	:	Indigenous Land Use Agreement (under the Native Title Act 1993)				
KRSP	:	Kimberley Regional Service Providers				
KWAC		Kununurra Waringarri Aboriginal Corporation				
LP	:	Layout Plan				
MG Corp	Corp : Yawoorong Miriuwung Gajerrong Yirrgeb Noong Dawang Aboriginal Corporation					
NAC	:	Ngunulum Aboriginal Corporation				
NNTT	:	National Native Title Tribunal				
NTA	NTA : Native Title Act (Commonwealth) 1993					
NTRB	:	Native Title Representative Body				
OES	:	Ord Enhancement Scheme				
OFA	:	Ord Final Agreement (ILUA)				
ORIA	:	Ord Irrigation Area				
PBC	:	Prescribed Body Corporate (under the NTA, representing native title holders)				
RAESP	:	Remote Area Essential Services Program				
SWEK	:	Shire of Wyndam East Kimberley				
UCL	:	Unallocated Crown Land				
WAPC	:	Western Australia Planning Commission				

Layout Plans & the Development Process

Layout Plans provide a structure for future development. LP preparation includes with consultation with a range of relevant government authorities and agencies, but it is not development approval.

It is the responsibility of the developer to ensure that all relevant consents, approvals, licences and clearances are in place prior to commencing physical works on site.

Organisations responsible for such matters may include the landowner, local government, incorporated community council, native title representative body, native title prescribed body corporate, Aboriginal Cultural Materials Committee, Environmental Protection Authority, state and federal government departments, and other relevant regulatory authorities.

EXECUTIVE SUMMARY

Ngunulum LP No. 1 was prepared by the former Department of Planning during 2009-2010 in partnership with NAC, MG Corp and OES.

The tables below summarises the main issues concerning the planning, development and provision of services within Ngunulum, covered in more detail in the body of this report.

Table 1 - Population

Design Population	:	100	
Existing population	:	35	
Existing Service Capacity	:	25	
Aspirational Population	:	100	

Table 2 - Existing Infrastructure and Service Capacity

Infrastructure/service Indicator	Community Characteristics
Drinking water	Water obtained from bore. No data available on quality or quantity.
Native title	The community falls within a determined native title claim (MG #1 - WAD6001/95) and a registered ILUA is in place.
Secure land holding(s)	Settlement and all infrastructure held in secure title.
Flood / storm surge	Settlement and infrastructure not subject to flooding.
Emergency assistance	Emergency services at Kununurra, approximately 30 minutes away by road.
Education	Education facilities at Kununurra, approximately 30 minutes away by road.
Health	Health facilities at Kununurra, approximately 30 minutes away by road.
Governance	Ngunulum Aboriginal Corporation. No designated office at community.
Employment and enterprise opportunities	Employment opportunities at Kununurra townsite approximately 30 min drive.
Transport	Road access from Victoria Highway.
Food	Retail outlets at Kununurra, approximately 30 minutes away by road.
Electricity	Diesel generator run by community.

LP No.1 plans for future expansion of the community and formalises existing infrastructure and land-uses and provides a future SL-lot layout and road design.

DEVELOPMENT PRIORITIES

The following initiatives, were developed by the community in 2010 and considered to be needed to implement LP No.1:

Within the next year:

- 1. Prepare an essential services strategy.
- 2. Construct concrete bunding around power generator shed to mitigate against contamination of drinking water source.

Within the next 5 years:

- 1. Prepare Drinking Water Source Assessment and Protection Plan.
- 2. Seal and formalise internal road network.
- 3. Improve wastewater disposal.
- 4. Upgrade power supply by connecting to town grid or relocating and replacing diesel generator.
- 5. Clear, fill, drain and service SL-lots 5 and 6.
- 6. Construct housing on SL-lots 5 and 6, as required.
- 7. Construct basketball court on SL-lot 13.
- 8. Investigate potential for commercial / caravan park enterprise, including connections to essential services, commercial licence and vehicle crossovers.

Within the next 10 years:

- 1. Clear, fill, drain and service northern future residential area (subject to power upgrade).
- Construct housing as required in northern future residential area (subject to power upgrade).

Implementing the LP

The implementation of this LP will rely on the energy and endeavour of the community members. The future growth of Ngunulum will require community members to find solutions for the provision of services and infrastructure (such as housing and sealed roads). This reinforces the objectives of Ngunulum Aboriginal Corporation to help bring about the self support of its members by the development of economic projects and industries, and to encourage members to manage their affairs on their own land.

1 REGIONAL CONTEXT

1.1 Location & Setting



Ngunulum, also known as Cockatoo Springs, is located in the Shire of Wyndham-East Kimberley, on the Victoria Highway near the Northern Territory border. The settlement is within the Ord River catchment, approximately 35 kilometres from Kununurra.

The Ord River, known locally as *Gunanurang*, is one of Western Australia's major river systems. It has an estimated catchment of 50,000km2 and flows from near Halls Creek in the south to the Cambridge Gulf in the north. This catchment is generally characterised by fertile soils and rich riparian systems.

The geography of the Ord River has significantly changed since the damming of the Ord in the 1970s. The Dam splits the river into the upper and lower Ord River systems. Whereas the river used to flow only seasonally, the dam has created a year-round flow of water suitable for irrigation purposes.

Figure 1 - Location of Ngunulum proximate to Kununurra

The settlement and Ord catchment lie in the wet-dry tropics, which is characterised by an extended dry season with most rainfall occurring during December-March. Rainfall is highly variable (Lund 2009).

1.2 Regional Culture & Demography

The broader Ord River catchment area from the Bow River junction in the south to the Cambridge Gulf in the north is the country that now comprises the Miriuwung Gajerrong native title determination areas and is the traditional country of Miriuwung, Gajerrong, Doolboong, Wardenybeng and Gija peoples (FCAFC 283 [2003] & FCA 1848 [2006]).

This catchment area consists of discrete land-holding units known locally as *Dawang*. Members of a Dawang (ie traditional owners), known as *Dawawang*, are the key decision-makers about their country under customary law. In the present-day situation some decisions about country are shared and jointly managed with agencies such as the former Department of Environment and Conversation, and former Department of Water (Hill et al 2009; DoW 2009).

Traditional rights and interests in country stem from the *Ngarangani*, the creative Dreaming period, when mythical ancestors travelled the country, made the river systems and landscape and its features. During their travels they provided the framework about how the social and physical world should be (Barber & Rumley 2003).

Successive determinations of native title in 2003 and again in 2006 demonstrate the continuing strength of cultural connections to country among traditional owners in the Ord valley and catchment despite impositions associated with European settlement, pastoralism, and the extensive irrigation scheme.

Aboriginal residents comprise about half the total population of the Ord Irrigation Area (ORIA). Aboriginal population growth is largely due to natural increase rather than in-migration. This means that, on a regional level, the Aboriginal population is younger, more permanent, stable, and fairly evenly comprised of males and females. The non-Indigenous population on the other hand is more influenced by in-migration and seasonal employment and disproportionately comprised of working-aged males (KLC 2003; Taylor 2003).

Whereas the non-Indigenous population is concentrated in the Kununurra townsite, the Aboriginal population is more dispersed, with many living in smaller settlements such as Ngunulum.

1.3 Regional History & Economy

As a population, local Aboriginal peoples have been integral to the historical development of the Ord Valley and East Kimberley. Firstly as integral labour to the pastoral economy, and later by providing a permanent and stable population for the provision of a government service economy. The inundation and irrigation of traditional country for the integration of the region into a market economy was at a direct but largely unrecognised cost to Miriuwung and Gajerrong peoples (see Skyring 2004; Redmond & Skyring 2009).

Station life

The initial occupation along the Ord River by pastoral interests from the 1880s was characterised by violence (Redmond & Skyring 2009). Aboriginal people at that time however were the only large and permanent population in the Kimberley, so by the 1920s were used as labour on stations such as Argyle Downs, Texas Downs, Lissadell and Ivanhoe. State legislation such as the *Native Administration Act 1936* (WA) bonded Aboriginal labour to pastoral leaseholders. The pastoral economy in the East Kimberley was predominantly made-up of an Aboriginal workforce until the 1970s. While this enabled many people to remain on traditional country, the workforce was paid in rations until equal wages legislation was introduced in the 1960s. This had the effect of marginalising Aboriginal people, over successive generations, from the regional economy even though their labour was integral to it (Skyring 2004; Jebb 2002).

By the mid 1950s serious consideration was being given by Federal and State governments to the development of the Ord River for irrigation purposes. The introduction of Commonwealth legislation in 1958 and 1968 saw the Federal government provide significant funding for the river's development. Construction of the Diversion Dam (ie Lake Kununurra) began in 1961 and was completed in 1963. By 1971 much of Argyle station, and other pastoral leases, had been flooded for the creation of the Ord Dam ('Lake Argyle'). Local Aboriginal people were not consulted in the planning and development of the Dam and broader irrigation area but were the population most affected by the river's development and the ensuing change to the natural environment and associated residential dislocation (Skyring 2004; see also Barber & Rumley 2003).

Town life

Kununurra townsite was established in 1960 on an excision of Ivanhoe Station on the Ord River, initially as a Water Authority centre for the irrigation project. It was gazetted as a town in 1961 and has since become the region's main administrative centre.

The period from the 1970s until the 1980s can be characterised by the increasing urbanisation of Aboriginal populations in the Ord catchment. During this period, after the introduction of equal wages legislation and the creation of the irrigation scheme, relatively large numbers of former station workers moved into centres such as Kununurra, with an associated shift away from economic engagement in the private sector to an engagement in the government sector in the form of CDEP (Taylor 2003). Nulleywah reserve, on the outskirts of the town centre, was established in the 1980s as accommodation for people who had migrated from surrounding pastoral stations.

Voting rights in local government in Western Australia were restricted until 1985 to owners and occupiers of rateable property. This had the effect of excluding most Aboriginal people in the Shire of Wyndham-East Kimberley from local representation as Aboriginal people have generally lived on non-rateable land (Rumley H. & D. 1988).

There was no formal land-use planning of the Nulleywah reserve in Kununurra until the first layout plan was prepared as late as 1997 (Connell Wagner 2002). Poor living conditions in town spurred some Miriuwung and Gajerrong family groups in the 1980s to establish camps and living areas at locations away from the town but within proximity to town services.

Community life

The Ngunulum community was established in the mid 1980s.

As is detailed below, the creation of community living areas for most Miriuwung Gajerrong settlements was formalised through the native title process under the Ord Final Agreement in 2006.

1.4 Native Title

Native title issues affecting Ngunulum

Ngunulum settlement falls within the Miriuwung Gajerrong #1 native title determination area and is principally comprised of native title holders.

The application for determination of native title by Miriuwung Gajerrong peoples comprised two claim areas, Miriuwung Gajerrong #1 (WAD6001/95) (MG #1) and Miriuwung Gajerrong #4 (WAD124/04) (MG #4). The two combined determination areas total approximately 14,000 sq km.

The native title holders referred to in this report refer to both determination areas. Separate PBCs exist for MG #1 and MG #4 determinations respectively.

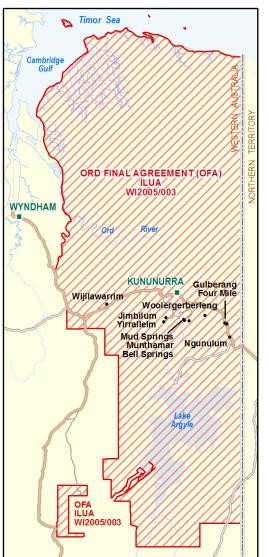
Ord Final Agreement

Ngunulum falls within the Ord Final Agreement area, which is an 'area agreement' ILUA under the NTA and resolves native title issues associated with both the MG #1 MG #4 determination areas. The ILUA, commonly referred to as the 'OFA' or 'Ord Stage 2 Agreement', was registered with the National Native Title Tribunal in August 2006.

The area subject to the OFA is shown in Figure 2.

Key features of the OFA include:

- Recognition of Miriuwung and Gajerrong peoples as the traditional owners for Kununurra and surrounding areas;
- The State's acquisition of 65,000ha of land for agricultural, residential and industrial development of Ord Stage 2;
- The creation of six new conservation parks and their joint management with DEC. The
 parks are held under freehold title by MG Corp and leased to the State;
- Clarification and agreement as to instances where native title is extinguished (including the granting of freehold titles) and where native title is not extinguished;
- The establishment of the Ord Enhancement Scheme (OES), to redress social, cultural and economic impacts that development of Ord Stage 1 has had on Miriuwung and Gajerrong peoples, including the flooding of traditional country to create Lake Argyle and associated displacement of people;
- The creation of a 50,000ha freehold title (Yardungarrl) and 19 Community Living Areas.



The production of LP No.1 in collaboration with the Ngunulum community is therefore an indirect outcome of the broader native title process and the OFA

Figure 2 - Area subject to Ord Final Agreement & location of settlements

Background to Native Title in Australia

The Native Title Act 1993 (NTA) enshrines in legislation the High Court Mabo decision, in which the common law of Australia formally recognised Indigenous rights and interests in land through the continuing observance of traditional law and custom.

Native title is defined by section 223 of the NTA as:

the communal, group or individual rights and interests of Aboriginal people or Torres Strait Islanders in relation to land or waters where:

the rights and interests are possessed under the traditional laws acknowledged, and the traditional customs observed, by the Aboriginal people or Torres Strait islanders; and b) the Aboriginal people or Torres Strait islanders, by those laws and customs, have a connection with the land and waters; and c) the rights and interests are recognised by the common law of Australia.

Native title is therefore not a form of land tenure, such as freehold or a crown lease. Rather it is the recognition of pre-existing rights and interests in country. Traditional rights and interests in country may co-exist with other non-Indigenous interests in some instances.

Under the NTA, native title holders and registered claimants are entitled to the right to negotiate regarding proposed future acts which may affect claimed or held native title. Examples of future acts which may affect native title rights and interests include mining exploration, the construction of public works (such public housing), and the granting of certain forms of land tenure (such as freehold).

Also under the NTA, agreements called ILUAs can be entered into to clarify, eg, future acts that will not extinguish native title or how traditional owners are to be compensated for the extinguishment of traditional rights and interests.

More information about native title can be obtained from the National Native Title Tribunal.

2 COMMUNITY PROFILE

2.1 Population

Estimating and predicting populations in Aboriginal communities is difficult because Aboriginal people tend to be mobile in terms of housing and living arrangements. Populations can increase and decrease quite rapidly based on family, cultural or administrative factors (eg. Taylor 2003; Morphy 2010). The community members of Ngunulum have close affiliations with other settlements in the MG Determination Area and there are regular movements of people throughout the region.

The Australian Bureau of Statistics has advised that recent census data for Wijilawarrim is unavailable as the settlement was not included as a discrete collector district in the 2001, 2006, 2011 or 2016 censuses. The only known published population estimates for Ngunulum are from the Environmental Health Needs Survey (EHNS), undertaken by the former Department of Indigenous Affairs in 1997, 2004 and 2008. These are:

Population of Ngunulum	1997 EHNS	2004 EHNS	2008 EHNS
Total persons	27	30	30

In addition to the above, a key source of population data is from the community itself. Community members advised that the usual permanent population of Ngunulum is approximately 35 people, comprised of 10 adults and 25 children.

Based on the available data, the population of Ngunulum is estimated to be approximately 35 people.

Aspirational population

Aspirational population refers to the future population as desired by the existing community members.

Community members have advised that up to 15 new houses would be required to accommodate members of their extended family who currently live in Kununurra and elsewhere, but who would relocate to Ngunulum if sufficient housing were available. Based on a total of 20 houses and an average occupancy of 5 people per house, the aspirational population of Ngunulum is up to high as 100 people.

Existing Service Capacity

Urban growth at Ngunulum is constrained by the existing level of essential services available at the settlement. It is estimated that the existing electricity generation capacity could service up to 25 people. (see section 3)

Drinking water quantity and quality is unknown. (see section 3)

The risk of contaminating the existing drinking water source is very high, as all existing houses, a power station and an ablution block at Ngunulum are very close to the drinking water source. Additional housing will increase the risk of contamination to the settlement's drinking water supply. (see section 3)

The total existing services capacity population for Ngunulum is 25 people.

Design population

Design population refers to the number of residents that the LP plans for. The design population takes into consideration the community's aspirational population, available population growth data, and the servicing and physical constraints.

One of the objectives of the LP is to ensure that community residents are provided with an appropriate level of services and housing throughout the 15 year time frame of the LP, by coordinating infrastructure provision with population growth.

It is considered that the population of Ngunulum is likely to increase through natural growth, and migration to the settlement will remain- regardless of servicing constraints. It is therefore necessary to plan for a degree of urban growth over the 15 year timeframe of the LP. Should the level of essential services provided to residents at Ngunulum be improved (especially improved drinking water and electricity services), it may be possible for the aspirational population to be accommodated at the settlement with an appropriate level of servicing.

The design population for Ngunulum is 25 - 100 people.

2.2 Governance & Representation

Over time Miriuwung and Gajerrong peoples have developed their own sophisticated formal governance structures at various spatial scales to assist with local representation.

The various governance structures that affect the planning and development of Ngunulum are summarised below.

Incorporated Community

The community is managed through its incorporated body - Ngunulum Aboriginal Corporation (NAC). NAC was incorporated under the *Aboriginal Councils and Associations Act 1976* in 1987.

The aims of NAC are as follows:

- (a) support the social development of its members in all ways;
- (b) help to bring about the self support of its members by the development of economic projects and industries:
- (c) support education, job training, health services, work and housing for its members;
- (d) help and encourage its members to manage their affairs upon their own lands:
- (e) help and encourage its members to keep and renew their traditional culture;
- (f) help to build trust and friendship between its members and other people;
- (g) participate with other Aboriginal Associations in projects for their mutual benefit;
- (h) receive and spend grants of money from the Government of the Commonwealth or of the State or from other sources.

NAC is registered with the Office of the Registrar of Indigenous Corporations (ORIC). Documents on NAC can be obtained from www.oric.gov.au

Dawang Council

The 16 Dawang that comprise the traditional lands of Miriuwung Gajerrong peoples are represented by an over-arching Dawang Council. Membership of the Dawang Council is regulated under the incorporated rulebook of MG Corp.

MG Corp

At a broader governance level, MG Corp acts in trust on behalf of all MG native title holders to ensure compliance with its obligations under the Ord Final Agreement including those relating to community living areas.

MG Corp was incorporated under the *Corporations (Aboriginal and Torres Strait Islander) Act 2006* in 2006 and its constitution was subsequently amended in 2008.

Although membership to MG Corp is limited to native title holders, MG Corp is not a native title prescribed body corporate. However MG Corp has the authority to assist MG peoples in relation to planning, management and use of traditional lands.

MG Corp (or a subsidiary entity of MG Corp such as MG Dawang Land Pty Ltd) may hold titles to land transferred under the OFA, which is the situation with regard to land holdings at Ngunulum.

Ord Enhancement Scheme

The Ord Enhancement Scheme (OES) is an outcome of the OFA and is a partnership between MG Corp and the State Government through the Kimberley Development Commission. The purpose of the OES is to address the negative social and economic impacts that Stage 1 of the irrigation scheme has had on Miriuwung and Gajerrong peoples (see KLC 2004).

The OES Management Committee is jointly appointed by the State and MG Corp.

LP No. 1 is prepared for Ngunulum at the request of the OES and by way of a Memorandum of Understanding between the OES and Western Australian Planning Commission.

2.3 Land Tenure

Clause 42 of the *Ord Final Agreement Variation #2 2005* requires the State to transfer approximately 50,000ha of pre-identified land as freehold title to MG Corporation. This portion of land (referred to as 'Yardungarrl' in the Agreement) was transferred under the *Transfer of Land Act 1893* to MG Dawang Pty. Ltd. and registered in 2007. Ngunulum is located on a 8242ha freehold lot that comprises part of the multi-lot Yardungarrl title.

A summary of the details of this land parcel follows:

Tenure	Fee simple
Lot	Lot 995 on Deposited Plan 37024
Certificate of Title	2660/925
Registered Proprietor	MG Dawang Land Pty. Ltd.
Area	8241.88ha

All community housing and infrastructure is located on Lot 995.

2.4 Aboriginal Heritage

Notwithstanding the text box on the following page, the summary of heritage matters derives from discussion with community representatives and a desk-top survey of sites registered under the AHA 1972 using the <u>Aboriginal Heritage Inquiry System</u>.

The purpose of the following discussion is to foreshadow heritage constraints to development as they relate to the implementation of the LP. These constraints to development must be addressed prior to construction of housing and other works.

No-Go Area

The community has advised that there are cultural sites in the vicinity of the living area, including a cemetery. As such the layout plan designates the north-west of existing housing and proposed football oval as a no-go area.

Registered Sites

There is one registered site that covers the western portion of the living area and beyond. This is a mythological site and the details are closed to the general public (see appendices).

Any future development at the community, including implementing LP No1, should therefore be undertaken in consultation with the community and MG Corp on behalf of the native title holders to ensure adequate avoidance and protection of sites.

Impact of Aboriginal Heritage on Development of Settlements

The Aboriginal Heritage Act 1972 (AHA) was introduced in Western Australia to provide automatic protection for all places and objects in the State that are important to Aboriginal people because of connections to their culture. The Department of Planning, Lands and Heritage maintains a Register of Aboriginal Sites as a record of places and objects of significance to which the AHA applies. Unregistered sites of cultural significance to Aboriginal people are also protected under the State Government's Aboriginal Heritage Act 1972, but only registered sites are recorded on the Department's database and are generally included in the Aboriginal Heritage Inquiry System.

The presence of an Aboriginal site places restrictions on what can be done to the land. Under the AHA it is an offence for anyone to excavate, damage, destroy, conceal or in any way alter an Aboriginal site without obtaining the appropriate approvals. This applies to the development of Aboriginal settlements as it does any other type of settlement. Investigation whether there is an Aboriginal heritage site on the land must be undertaken prior to development or works, and may require a heritage survey or clearance.

Contact should be made with the relevant Native Title Representative Body in the first instance.

No formal heritage assessment under the *Aboriginal Heritage Act 1972* has been undertaken as part of the preparation of this LP. The LP background report and map-set do not represent clearance under that Act in any way. It is expected that any future development of housing and other infrastructure on the community be undertaken in consultation with the community and native title holders and cleared in accordance with the provisions of the AHA.

2.5 Community Aspirations

The ideas for improvements to the facilities were noted by the Ngunulum community when the Layout Plan was developed in 2010, and these are listed below. All of these aspirations have been incorporated into the plan and the recommended program of works for the LP.

- 1. Connect community to town's power supply,
- 2. Establish a designated administration office and community store,
- 3. Establish a commercial tourism site/caravan park,
- 4. Establish a basketball court and recreation area.
- 5. Establish more houses

3 EXISTING INFRASTRUCTURE & SERVICES

3.1 Housing

At the time of consultation, there were five houses at Ngunulum. These houses were occupied, however community members stated that the housing stock was very old and major repairs were required to all dwellings. This is reflected by the EHNS from 2004, which found that 100% of dwellings at Ngunulum required repairs and maintenance.

Based on 5 habitable dwellings at the settlement and a usual permanent population of 35 people, the average number of residents per house is 7.

Essential Services

3.2 Water Supply

The former Department of Water conducted an audit of water supply infrastructure at Ngunulum in 2008. A summary of the findings follows:

Table 3 - Summary of water supply infrastructure at Ngunulum. (Department of Water 2008)

Bore	- 1 bore approximately 120m south of nearest house - Bore compound is not fenced - Solar powered - Bore infrastructure is in good condition except for minor leak from sample point tap - Vegetation around bore needs to be cleared for a fire break
Water tank	- 1 poly tank approximately 20m south of nearest house - Tank on 10m elevated stand - 7000L capacity - Water tank compound is not fenced - Water tank is in good condition
Water distribution	- Pressure pump - Condition of pipe work is ok - Water pressure is adequate, no water pressure problems
Water treatment and testing	No water treatment or disinfection Water tested by SWEK in September 2007 and May 2008 No problems with water quality
Other comments	Tank overflows resulting in pooling of water at base of tank. Float valve to be fitted to prevent this problem. Concrete bunding to be put around the generator shed to prevent contamination of water source from diesel and oil spills.

Bacterial testing of Ngunulum's water supply was undertaken by the Shire of Wyndham - East Kimberley on 28 May 2008 upon request by KWAC. A sample taken from the bore was found to have a low pH level but was otherwise free of major issues, while Thermophillic Amoebae were detected in the sample taken from the water tank (Shire of Wyndham - East Kimberley, cited in Department of Water 2008).

The Shire undertook chemical testing on 17 September 2007 following concerns of strange tasting water. No issues were detected from the sample taken from the bore, however elevated copper levels were detected in a sample taken from one of the settlement's houses. The Shire attributed this to the low pH level causing corrosion of copper fixtures and fittings in the house. (Shire of Wyndham - East Kimberley, cited in Department of Water 2008).



Figure 3 - Water storage tank

Water quality and quantity is unknown, therefore it is not possible to determine whether the existing drinking water supply is adequate or otherwise.

The bore is not suitably separated from incompatible land uses and is therefore at risk of contamination. The 'Aboriginal Settlements Guideline Layout Plan Exclusion Boundaries' policy 2012 recommends a 500m buffer for groundwater drinking water sources. The power station. dwellings and ablution block are all located within 200m of the bore at Ngunulum, and are therefore at risk of contaminating the settlement's drinking water supply. See section 4.

3.3 Electricity Supply



Figure 4 - Diesel generator shed on SL-lot 11

Ngunulum is located outside the Kununurra Electricity Licence Area, for which Horizon Power is the licensed electricity supplier. The community is responsible for provision of their own electricity, with technical assistance from KWAC.

Ngunulum obtains its power supply from a 22kw/27.5kva diesel generator located approximately 20m east of the nearest house. The generator is housed under a simple shelter (see figure 5). Distribution is via underground cable to 3 houses. (Horizon Power, 2008).

Community members advised that the generator requires 1 drum of diesel per week on average to meet the settlement's electricity needs, costing approximately \$400. It was observed during a site visit in October 2009 that a large number of empty diesel drums were being stored in the vicinity of the power station, posing an environmental health risk. These empty diesel drums had been removed by the time of a site visit in March 2010. During this site visit, community members advised that the generator had broken down. A portable generator was being used to provide power to one house.

The power generator is not suitably separated from sensitive land uses. The WAPC 'Aboriginal Settlements Guideline 3: Layout Plan Exclusion Boundaries' policy 2012 recommends that power stations be separated from sensitive land uses such as residential by at least 200m. In the case of Ngunulum, all houses are located within this buffer area, with the closest house being 20m away and the drinking water bore being approximately 120m away. This has the potential to significantly reduce residential amenity and negatively impact on public health through exposure to excessive noise levels and exhaust plumes and seepage of diesel into groundwater systems.

The existing electricity supply infrastructure appears to be sufficient for the settlement's current population. However, the capacity of the existing generator is unlikely to be sufficient for the settlement's design population, and substantial upgrades will be required in the future.

3.4 Wastewater

Three houses at Ngunulum have plumbing connections to septic tanks and dispose of wastewater via leach drains. The remaining houses are serviced by an ablution block. KWAC assists with the maintenance of sewer disposal systems.

Community members advised that the water table is high during the wet season. The groundwater system is therefore at increased risk of contamination from effluent disposal.

Municipal Services

3.5 Flooding & Drainage

There are a number of springs watercourses in and around Ngunulum which constrain urban growth. The settlement located on peninsular-shaped portion of elevated land with а large expanse of spring country to the east and watercourses to the north and west.

Community members reported no damage to housing or infrastructure caused by flooding or stormwater run-off.



Figure 5 - Settlement in proximity to Victoria Highway and drainage channels

3.6 Access & Dedicated Roads

Road access to Ngunulum is via Victoria Highway. By road, the settlement is located approximately 30km from Kununurra and 10km from the Northern Territory boundary. Victoria Highway is sealed and is predominantly a single carriageway (two lane - two way) road. The Highway provides reliable year round access to the settlement and is maintained by Main Roads Western Australia.

An unsealed, compacted gravel access road extends from the Highway to the main settlement area.

3.7 Internal Road Layout

The internal road layout of Ngunulum is comprised of the access road into the settlement from Victoria Highway and a number of informal tracks leading to dwellings and community infrastructure.

3.8 Rubbish Disposal

Ngunulum's rubbish is collected by KWAC on a fortnightly basis. Community members stated that they do not wish to have a rubbish tip at the settlement.

3.9 Community Services

Residents of Ngunulum commute to Kununurra for community services such as education and health care, as well as commercial activities such as retail and banking.

There is no designated office at the community.

4 RECOMMENDATIONS

4.1 Essential & Municipal Service Delivery

There is a lack of clarity with regard to which agency or agencies are responsible for funding and delivery of essential and municipal services to MG Corp communities.

Implementing the layout plan will be difficult until such time that specific agencies are identified for, for example, the funding of drinking water analysis and protection, sealing of roads, and reticulation of power and wastewater.

In normal circumstances municipal services in townsites (such as the maintenance of access roads and collection of rubbish) would be undertaken by local government. Larger remote Aboriginal communities with a population greater than 50 permanent residents generally fall within the Remote Area Essential Service Program (RAESP) managed by the Department of Communities (Housing). The smaller MG communities fall outside of these two categories.

It is recommended that an implementation plan be prepared by MG Corp to establish which agencies (if any) have current responsibility for the delivery of essential and municipal services.

The implementation plan should address whether agencies such as local government and/or KWAC have the potential to become essential and/or municipal essential service providers to MG communities and identify what the recurrent funding source would be.

4.2 Drinking water analysis and protection

The unknown quantity and largely unknown quality of the existing drinking water supply at Ngunulum may limit the potential growth of the settlement in the future. It is therefore recommended that appropriate analysis of the settlement's drinking water supply occurs, in order to determine compliance with the Australian Drinking Water Guidelines and whether the sustainable yield meets current and projected usage levels. This should occur prior to any significant investment at Ngunulum in the future.

An assessment of the drinking water supply could be undertaken as part of the preparation of a Drinking Water Source Protection Plan (DWSPP) for Ngunulum. DWSPPs also define areas of land within which land uses are restricted in order to protect drinking water that is harvested within that area, and are based on hydrological analysis of the particular circumstances of the water source and the settlement/s it serves.

It is acknowledged that analysis of the existing water supply or the preparation of a DWSPP is unlikely in the immediate future, given that no agency has responsibility for the provision of essential services to Ngunulum.

As a short-term measure, it is also recommended that corroded copper fixtures in house kitchens be replaced to address the issue of strange tasting water.

4.3 Electricity Supply Upgrade

The future growth of Ngunulum is largely contingent on the upgrading of the settlement's power supply. The capacity of the existing diesel generator is not sufficient for the design population and its proximity to sensitive land uses may be a public health risk.

Options for upgrading the settlement's power supply include connecting to the reticulated town grid and replacing the diesel generator with a solar system that has a diesel generator as a back-up only. Should Ngunulum be connected to the reticulated town grid, the existing diesel generator should be decommissioned and the site remediated.

Relocating the existing diesel generator is not recommended due to the following constraints: residential development to the south and proposed residential to the north, a creek line to the east, and a no-go area and graveyard to the west. Relocating the power station outside of the field of these constraints is likely to be prohibitive.

Future housing

An area for future residential growth to the north of the community has been depicted on the plan. Residential growth, and associated population increase, should only occur after the community's power supply has been upgraded. As such, individual SL-lots have not been assigned to this area.

SL-lots 5 and 6 should be developed in the short to medium term, as required.

4.4 Road layout

The road layout depicted in the LP generally reflects the simple settlement layout (SL) road system that currently exists at the settlement, with the exception that the existing loop road is proposed to be subsumed within a community use area.

All SL roads should be sealed and bituminised in the future when funds to do so become available to reduce issues of dust generation.

SL road are generally 20m in width. A simple system of table drains should be incorporated into the road verges as the road network is formalised to assist with stormwater conveyance. The road network should also be used as the alignment for essential service infrastructure such as power lines and water pipes.

4.5 Lot numbering

The LP assigns a settlement layout lot (SL-lot) to every designated land area at Ngunulum. A simple road naming system has also been employed. The purpose of this is to provide a unique identifier to each designated land area for administrative purposes and to assist with the delivery of essential/emergency services.

The SL-lot numbers have been adopted as a guide only, and do not exist in any legal sense. SL-lot numbers and road names can change subject to approval from the Ngunulum community and endorsement by the Western Australian Planning Commission.

4.6 Wastewater Disposal

Improvement to the method of wastewater disposal is required to minimise the risk of contamination to the groundwater system. The long-term solution is to provide a reticulated sewerage service, although it is acknowledged that there is a lack of funds to do so and no agency is assigned the responsibility for the construction and ongoing maintenance of such infrastructure at Ngunulum.

It is therefore recommended that improvements to the current method and/or new methods of onsite effluent disposal be investigated. Possible improvements to the current method include: the use of filters on the outlet of septic tanks to reduce the amount of solids in the outgoing effluent; an alternating system of two or more leach drains with a diverter box to change the flow of effluent (allowing the unused portion to dry out); and regular de-sludging of septic tanks as part of a systemic maintenance regime by a responsible agency. Alternatively, the site suitability of the various alternative treatment units approved by Department of Health for use in WA should be investigated.

Any effluent disposal system should comply with the specifications of the Department of Health and the Shire's Environmental Health department. It is also recommended that the settlement's drinking water supply be regularly tested in order to identify any potential contamination, especially in light of the apparently high water table at Ngunulum.

4.7 Tourism Site / Caravan Park

Future commercial development of a caravan park, as proposed on the LP context plan, should be in accordance with the <u>Caravan Park and Camping Ground Regulations 1997</u> and associated license and conditions issued by the Shire.

At a minimum, the required works are likely to entail the provision of an adequate water supply and provision of ablutions. The Shire has developed Guidelines for the assessment of such applications, which are summarised below.

Vehicles crossovers, for access from Victoria Highway, will need to be constructed by the developer to standards as specified by Main Roads WA. Main Roads WA (Kununurra office) should be consulted prior to submitting a license application to the Shire.

5 PLANNING FRAMEWORK

5.1 State Planning Policies

State Planning Policies (SPPs) are prepared and adopted by the WAPC under statutory procedures set out in section 26 of the *Planning and Development Act 2005*.

The WAPC and local governments must have 'due regard' to the provisions of State Planning Policies when preparing or amending town planning schemes and when making decisions on planning matters. The State Administrative Tribunal is also required to take SPPs into account when determining appeals.

The following SPPs were given due regard in the preparation of LP No. 1:

- SPP 3 Urban Growth and Management;
- SPP3.2 Planning for Aboriginal Communities; and
- SPP2.7 Public Drinking Water Source

5.2 Land Use Buffers for Aboriginal Communities

The exclusion boundaries shown on the map-set are in accordance with the WAPC's Aboriginal Settlements Guideline 3: Layout Plan Exclusion Boundaries.

5.3 Shire of Wyndham-East Kimberley

Local Planning Scheme No. 9

The Shire of Wyndham-East Kimberley Local Planning Scheme No. 9 (LPS 9) was gazetted on 19 February 2019.

Ngunulum is zoned settlement under LPS 9 which identifies existing and proposed Aboriginal settlements and to collaboratively plan for the orderly and proper development of those places.

Under the Scheme, preparation and endorsement of a layout plan in accordance with State Planning Policy 3.2; and ensuring that development accords with a layout plan is a requirement of the settlement zoning (see current Scheme zoning in Figure 4 on the following page).

LPS 9 states development in the Settlement Zone is to accord with an endorsed Layout Plan and provide for:

- (a) a mix of land uses typically found in Aboriginal Settlements, including light industrial, tourism, residential, commercial, community, recreation and public utility; protecting sensitive areas such as No Go areas and drinking water source protection areas from inappropriate development.
- (b) traditional law and culture.

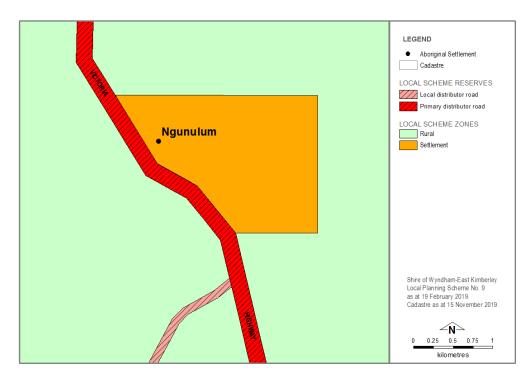


Figure 6 - Land classification under SWEK LPS 9, Ngunulum

Local Planning Strategy

The Shire of Wyndham-East Kimberley Local Planning Strategy (endorsed by the WAPC 21 August 2019) provides a vision for the growth and development of the Shire over a 10-15 year time frame. The strategy notes that Layout Plans should be prepared for all remote settlements, and should incorporate planning for infrastructure within and to these settlements and that existing Layout Plans within the Shire should be reviewed for currency.

Guidelines for Nature Based Camp Facilities

The Shire has developed Guidelines (April 2010) on how to deal with applications for camp sites, to set minimum licensing standards and ensure consistency as to how applications are dealt with.

Licenses are issued by the Shire under authority of the <u>Caravan Parks and Camping Grounds</u> <u>Regulations 1997.</u>

In assessing applications, the Shire has regard proximity to other camp sites and caravan parks, tenure, need, environment and amenity (eg water supply, ablutions). See appendices for the full Guideline.

ENDORSEMENTS 6

Ngunulum Community Layout Plan No.1

PO Box 2090 Kununurra, WA, 6743

The Ngunulum Aboriginal Corporation (representing the community) hereby adopts the Ngunulum (Cockatoo Springs) Community Layout Plan No. 1 (2010) as a guide for future development within its boundaries.

The elected council acknowledges that the layout represents community aspirations for future development, and hereby adopts the plan, report and provisions at the meeting of Council held on:

The Day of Day Market 2010

Adopted by the Ngunulum Aboriginal Corporation:

Director
[Please print and sign name]

Director

Director

Director

Director

MG Corporation Endorsement



Ngunulum Community Layout Plan No.1

PO Box 2110 Kununurra WA 6743

MG Corporation (representing the traditional owners of Miriuwung Gajerrong #1 & #4 native title determinations) hereby adopts the **Ngunulum (Cockatoo Springs) Community Layout Plan No. 1 (2010)** as a guide for future development within the native title determination area.

The Board acknowledges that the layout represents community aspirations for future development, and hereby adopts the plan, report and provisions at the meeting held on:

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Director Heren GERKARS Redna O'Malley Edna O'MALLEY	Director
Rdna O'Malley	
Edna O'MALLEY	



Ngunulum Community Layout Plan No.1

PO Box 614 Kununurra WA 6743

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Endorsed by the Shire of Wyndham-East Kimberley:

CE PREO MILLS

Shire President (Please print and sign name)

CEO

(Please print and sign name)

Council Seal





Ngunulum Community Layout Plan No.1

469 Wellington Street Perth WA 6000

CONSULTATION & REFERENCES

CONSULTATION SUMMARY

Preparation of this Layout Plan is the result of consultation with the community representatives and a range of agencies, authorities, non-government organisations during 2009-2010.

Information was obtained from the following sources.

Organisation	Date
Ngunulum site visits	Oct 2009
	Mar 2010
	July 2010
MG Corp/OES	Oct 2009
Australian Bureau of Statistics	June 2009
State Land Services, Department of Regional Development & Lands	July 2010
Department of Indigenous Affairs	June 2010
Department of Housing	July 2010
Kununurra Warringarri Aboriginal Corporation	July 2010
01: (W E ((// 1	0 10000
Shire of Wyndham-East Kimberley	Oct 2009
	Aug 2010
Londonto	Oct 2000
Landgate	Oct 2009
	July 2010
Horizon Power	July 2010
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Department of Water	June 2010
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The PACP team of former the Department of Planning would like to thank Mr Lawford Benning and Ms Anna Moulton of the Ord Enhancement Scheme for their assistance in co-ordinating and mediating site visits to communities in the Ord Valley.

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Skyring, F. 2004 'History, development and Ord 1 today', in Kimberley Land Council (KLC) 'Ord Stage 1: Fix the Past, Move to the Future. Aboriginal Social and Economic Impact Assessment of the Ord River Irrigation Project'. Unpublished report by the KLC, Broome.

Taylor, J. 2003 Aboriginal Population Profiles for Development Planning in the Northern East Kimberley. Research monograph no. 23. Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.



Amendment 1

Plan Date

: 17 November 2010

WAPC Endorsed

: 20 September 2011

Proponent

Department of Planning

Requires

WAPC only - minor amendment

Endorsement

Reason for the Amendment

The Department of Planning, on behalf of the Western Australian Planning Commission (WAPC), is the custodian for Layout Plans prepared under State Planning Policy 3.2, including the Ngunulum Layout Plan 1.

Since the publication of that Policy in August 2000 all Layout Plan map-sets have been prepared using a variety of computer-aided-design (CAD) formats. All Layout Plan mapsets have now been converted to a common user geographic information systems (GIS) format, including the Ngunulum Layout Plan 1.

This conversion process has required a comprehensive re-development of the map-set and includes a number of data and content upgrades. This may include the establishment of new Settlement Layout lots (SL-lots), the inclusion of recommended settlement zones, modification to ensure land-use areas accord with Aboriginal Settlements Guideline 1, inclusion of drinking water source protection areas, incorporation of updated cadastre, and many other general improvements.

Approved

This is a minor amendment as the myriad changes made to content and illustration are of a technical nature. As such, under provision 6.14 the endorsement of the WAPC only is required.

Western Australian Planning Commissions THE STATUTE MEETING

Date 25/10/2012

int name

Rosa Rigali

Planning Administration Team Leader Perth, Peel Planning - Department of Planning

Other Information:

This Layout Plan does not constitute development approval.

It is the responsibility of the developer to ensure that all relevant consents, approvals, licences and clearances are in place prior to commencing physical works on site. Organisations responsible for such matters may include landowner, local government, incorporated community council, native title representative body, Department of Environment & Conservation, Aboriginal Cultural Materials Committee, Environmental Protection Authority, Department of Consumer & Employment Protection and Department of Water.

Amendment No. 2

Proponent : Department of Planning, Lands and Heritage

Date : 17th January 2020

Reason for the Amendment

The enactment of the Shire of Wyndham-East Kimberley (SWEK) Local Planning Scheme 9 (LPS 9), gazetted on 19 February 2019, has resulted in the need to delete the 'Recommended Settlement Zone' and add the 'Settlement' zone to match the LPS 9.

DPLH has also undertaken an update of the Layout Plan background report to ensure that it remains up-to-date, accurate and fit-for-purpose. The update includes:

Revising the population and housing data;

Editing and reformatting the background report:

Removing out of date text and references

	Land Identification	Amendment description
1.	All	Delete the 'Recommended Settlement Zone'. Add 'Settlement' zone to match the SWEK LPS 9.
2.	All	Update the Background Report.

Endorsement:

In accordance with Planning Bulletin 108/2013 this amendment is minor in nature. As such, the endorsement of the Western Australian Planning Commission is solely required.

Determined on behalf of the Western Australian Planning Commission in accordance with the *Instrument of Delegation* – *Delegation to officers of certain powers and functions of the*

Western Australian Planning Commission.

Ashley Randell / da Descriptional Planning Policy Regional Planning

PN: 15151

Other Information:

This Layout Plan does not constitute development approval.

It is the responsibility of the developer to ensure that all relevant consents, approvals, licences and clearances are in place prior to commencing physical works on site. Organisations responsible for such matters may include landowner, local government, incorporated community council, native title representative body, Aboriginal Cultural Materials Committee, Environmental Protection Authority and Department of Water and Environmental Regulation.