

AMATA

COMMUNITY STRUCTURE PLAN No.1 APY Lands, S.A.



AMATA COMMUNITY STRUCTURE PLAN NO. 1

FEBRUARY 2008

Prepared for: **Amata Community**

Prepared By: **Taylor Burrell Barnett Town Planning and Design**
187 Roberts Road
SUBIACO WA 6008
Phone: 9382 2911 Fax: 9382 4586
admin@tbbplanning.com.au

In association with: **Arup**

DOCUMENT HISTORY AND STATUS

Printed	7/02/2008 2:31:00 PM
Last Saved	17/12/2007 12:49:00 PM
Job No.	05/19
Author	Roger Stein
Document Version	Rev 13

Revision	Date Issued	Reviewed by	Approved by	Date Approved
Rev 0	20.10.05	Roger Stein	Roger Stein	20.10.05
Rev 1	08.11.05	Roger Stein	Roger Stein	08.11.05
Rev 2	08.12.05	Roger Stein	Roger Stein	08.12.05
Rev 3	09.03.06	Roger Stein	Roger Stein	09.03.06
Rev 4	28.04.06	Roger Stein	Roger Stein	28.04.06
Rev 5	19.05.06	Roger Stein	Roger Stein	19.05.06
Rev 6	02.06.06	Roger Stein	Roger Stein	02.06.06
Rev 7	19.09.06	Roger Stein	Roger Stein	19.09.06
Rev 8	20.10.06	Roger Stein	Roger Stein	20.10.06
Rev 9	11.12.06	Roger Stein	Roger Stein	11.12.06
Rev 10	08.01.07	Roger Stein	Roger Stein	08.01.07
Rev 11	02.03.07	Terry Quinn (Planning SA)	Roger Stein	21.03.07
Rev 12	12.09.07	Meg Bartholomew	Roger Stein	12.09.07
Rev 13	07.02.08	Terry Quinn (Planning SA)	Roger Stein	07.02.08

REPORT LIMITATIONS

This Community Structure Plan has been developed in consultation with the Community and Land Holding Authority as a planning guide for future development within the community. It is proposed to be updated on a five-yearly basis.

This Plan does not commit the State Government to the funding of infrastructure proposed. The funding of proposals will be subject to budgets and infrastructure planning processes.

TABLE OF CONTENTS

STRUCTURE PLAN REPORT	1
1.0 INTRODUCTION	1
1.1 Content and Purpose of Structure Plan	1
1.2 The Amata Community	1
2.0 METHODOLOGY	3
2.1 Background	3
2.2 Tasks	3
2.2.1 Stage 1: Preliminary Investigation	4
2.2.2 Stage 2: Structure Plan - Formulation	4
2.2.3 Stage 3: Draft Structure Plan - Review and Revision	4
2.2.4 Stage 4: Structure Plan and Report - Finalization	4
3.0 REGIONAL AND LOCAL CONTEXT	5
3.1 Land Tenure	5
3.2 Anangu Pitjantjatjara Yankunytjatjara Executive Board	5
3.3 AP Services	5
3.4 Community Management	6
4.0 HUMAN AND ECONOMIC ENVIRONMENT	7
4.1 Community Demographics	7
4.1.1 Population	7
4.1.2 Household Status	7
4.2 Historical context	8
4.3 Economic Context	8
4.3.1 Local Economy	8
4.3.2 District Community Facilities	8
4.3.3 Land Use	8
4.4 Transport Network	9
4.5 Climate	9
5.0 EXISTING DEVELOPMENT	10
5.1 Housing	10
5.2 School	10
5.3 Store	11
5.4 Health Facilities	11
5.5 Office	11
5.6 Open Space & Recreation	11
5.7 Visitor Accommodation	11
5.8 Cultural Purpose Sites	11
6.0 EXISTING INFRASTRUCTURE	12
6.1 Water Supply and Reticulation	12
6.2 Effluent Collection and Disposal	12
6.3 Electrical Generation & Distribution	13
6.4 Road Network	14
6.4.1 External	14
6.4.2 Internal	14
6.5 Aerodrome	14
6.6 Drainage	15
6.7 Telecommunications	15
7.0 OPPORTUNITIES AND CONSTRAINTS	16
7.1 Areas of Cultural Significance	16
7.2 Landform	16

7.3	Localised Flooding	16
7.4	Water Bores	16
7.5	Sewerage Ponds	17
7.6	Waste Management	17
7.7	Cattle Yards	17
8.0	LAND USE RISK ASSESSMENT/RESPONSE	18
8.1	Flood	18
8.2	Isolation	18
8.3	Access	18
8.4	Potential Hazards	19
	STRUCTURE PLAN	21
1.0	STRATEGIC DIRECTION	21
1.1	Community Aspirations or Vision	21
1.2	Strategic Direction	22
2.0	FUTURE DEVELOPMENT	23
2.1	Options Considered	23
2.2	The Structure Plan	23
2.3	Land Use Sites	23
2.4	Buffers	23
2.5	Street Network	24
2.6	Housing Areas	24
2.7	Community Purpose Sites	24
2.8	Parks and Recreation	25
2.9	Visitor camping	25
2.10	Commercial	25
2.11	Light Industry	25
2.12	Development Issues	26
2.13	Service Upgrades	26
	2.13.1 Water	26
	2.13.2 Effluent Disposal	27
	2.13.3 Electricity	27
2.14	Development Priorities	27
3.0	POLICY AND ADMINISTRATIVE CONTEXT	28
3.1	Strategic and Statutory Planning Context	28
3.2	Land Not Within a Council Area (Far North) Development Plan	28
	3.2.1 Form of Development	28
	3.2.2 Waste Disposal (Landfill)	29
	3.2.3 Conservation	29
	3.2.4 Telecommunications Facilities	29
	3.2.5 Renewable Energy	29
3.3	Anangu Pitjantjatjara Water Management Plan, May 2002	30
3.4	Natural Resource Management Plan	30
4.0	AMATA COMMUNITY STRUCTURE PLAN - PLANNING OBJECTIVES	31
4.1	Form of Development	31
4.2	Integrated Risk Management	31
4.3	Housing Areas	31
4.4	Community Activity Areas	31
4.5	Commercial Activity Areas	31
4.6	Utilities/industry	32
4.7	Parks/Recreation/Rural	32
4.8	Storm Water Management	32

5.0	AMATA COMMUNITY STRUCTURE PLAN - DEVELOPMENT GUIDELINES	33
5.1	Integrated Risk Management	33
5.2	House sites	33
5.3	Siting of Buildings on House Sites	33
5.4	Stormwater Management	33
5.5	Landscaping	34
5.6	Fences	34
6.0	IMPLEMENTATION AND REVIEW OF THE COMMUNITY STRUCTURE PLAN	35
6.1	Application Requirements for Development	35
6.2	Changes to the Structure Plan	35
	ENDORSEMENT	37
	BIBLIOGRAPHY	38

APPENDICES

APPENDIX 1 Consultation Process

STRUCTURE PLAN REPORT

1.0 INTRODUCTION

1.1 Content and Purpose of Structure Plan

The Amata Community Structure Plan (Structure Plan) provides a framework within which development can proceed in an orderly and planned manner and essential services are protected over the next 5 to 10 years.

The Structure Plan consists of the following:

- A plan depicting the physical layout of the community;
- Strategic direction, planning objectives and development guidelines
- An explanation of the Structure Plan
- A report on the preparation of the plan including a brief overview of the local and regional context.

The purpose of the Structure Plan is therefore to:

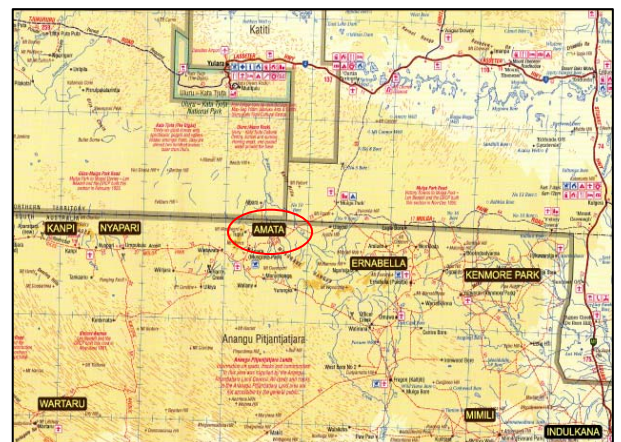
- Establish an outline vision for the community and a guide to future growth and development of the community;
- Provide a community focus for, and involvement in, the development process;
- Facilitate proper and orderly planning of the community to establish development requirements based on need within social, physical, environmental and economic opportunities and constraints;
- Provide a mechanism for a coordinated approach to the provision of services and infrastructure and enable access to existing services and infrastructure information; and
- Promote development that maximises health, safety and welfare outcomes for the community.

The Structure Plan provides the community with a plan that forms the basis for co-ordination of future development. The Plan can be used to assess future development proposals by government agencies, builders, funding agencies and the community.

1.2 The Amata Community

Amata is located approximately 115 km due south of Uluru (Ayers Rock) in South Australia. The Community occupies part of the Anangu Pitjantjatjara Yankunytjatjara (APY) Lands in the north west of South Australia.

Amata Community is located at the western end of the Musgrave Ranges about 14 km south of the Northern Territory border. It lies approximately 380 km south west of Alice Springs.



Location Plan [Source: HEMA Map]

The community has worked together to bring success in many ways. The Council members work together to bring unity and fairness for everyone through regular meetings. The community also serves the needs of Anangu within Amata as well as the surrounding homelands and travellers.



Amata Church



Amata Welcome Sign

2.0 METHODOLOGY

2.1 Background

Community Structure Plans were prepared for nine of the major communities within the Anangu Pitjantjatjara Yankunytjatjara Lands (APY Lands) in response to the need to establish a clear framework within which to accommodate development. Building works have, in the past, been initiated in some communities by State and Federal Government agencies without reference to clearly defined plans for the physical growth of the communities.

For the Anangu to be able to take responsibility for guiding the development of their communities and to protect places of cultural significance they need to have structure plans in place which are an expression of how they wish to see the physical development of their communities occurring.

Most of the funding for community facilities comes from a variety of sources outside the APY Lands. In the absence of adopted structure plans, some new facilities have been put in place without adequate input from community members and in locations which could be adversely affected by environmental conditions.

It is recognised that due to the remoteness and limited commercial opportunities within the APY Lands that outside funding to sustain the communities will be required for the foreseeable future. In addition, it is anticipated that local communities will continue to have only limited influence on the timing, scale, scope and funding of the infrastructure and development works being undertaken.

Furthermore, the high cost of providing and maintaining infrastructure in communities located great distances away from major urban centres, necessitates that existing infrastructure and facilities are well utilised.

As such, while it was essential to obtain input from the community members on the content of the structure plans, it was also important to seek out and include input from those agencies and authorities with responsibility for the current and future provision of services and infrastructure.

The plans give cause for questions to be asked about the sustainability of the communities, in particular with regard to underground water resources. At the present time there are concerns regarding the sustainability of water supplies in some communities, however there is no definitive data which can be drawn on to answer such questions. Funding is required for investigations to be undertaken across the APY Lands for how to not only provide for future increases in population but also to accommodate current population levels over time.

The structure plans have been prepared during a time of re-evaluation of past policies towards remote Indigenous communities and uncertainty in regards to future funding. The structure plans however provide a robust framework to accommodate physical changes reasonably expected to occur and allow for flexibility when future development pressures arise within the five to ten year life of the plans.

2.2 Tasks

The methodology followed for the preparation of the Community Structure Plans is summarised below:

- Investigation and research.
- Plan formulation and refinement through testing and review.
- Development of a preferred plan.

2.2.1 Stage 1: Preliminary Investigation

- Project Inception meeting with Planning SA and other stakeholders
- Obtain relevant documents, demographic details, community contact details
- Obtain base mapping, aerial photographs and format base plans
- Site visit and undertake site inspection
- Community consultation
- Mapping of physical constraints, opportunities, infrastructure, housing, community facilities
- Documented meeting/s, interviews

2.2.2 Stage 2: Structure Plan - Formulation

- Prepare draft Structure Plan
- Site visit
- Meeting with Community to present draft Structure Plan and receive comments.
- Copies of draft Structure Plan left to be distributed to school, art centre, placed on community notice boards
- Meeting with client
- Client and other stakeholders review structure plan, provide comment

2.2.3 Stage 3: Draft Structure Plan - Review and Revision

- Comments received, modifications made to the Draft Structure Plan
- Draft Report prepared
- Site visit
- Meeting with Community to present revised draft Structure Plan and Report, receive comments
- Copies of revised Plan and draft Report left to be distributed, placed on Community notice boards
- Meeting with client, provide copy of revised Structure Plan, draft Report for comments.

2.2.4 Stage 4: Structure Plan and Report - Finalization

- Comments received from stakeholders, modifications made to final Structure Plan, Report
- Prepare final Structure Plan and Report
- Site visit to address APY Executive meeting
- Copies of Structure Plan and Report issued.

3.0 REGIONAL AND LOCAL CONTEXT

3.1 Land Tenure

Amata is part of the Anangu Pitjantjatjara Yankunytjatjara Lands (APY Lands) which are incorporated by the Pitjantjatjara Yankunytjatjara Land Rights Act in which the SA Parliament gave Aboriginal people title to the APY Lands in 1981.

3.2 Anangu Pitjantjatjara Yankunytjatjara Executive Board

The Pitjantjatjara Yankunytjatjara Land Rights Act, 1981, provided for the vesting of title of the Anangu Pitjantjatjara Yankunytjatjara Lands to the people known as Anangu Pitjantjatjara Yankunytjatjara. The Executive Board of Anangu Pitjantjatjara Yankunytjatjara was constituted under this Act. The administrative centre of the APY Lands is Umuwa, 30 km from Pukatja.

The APY Executive Board oversees the activities of the various constituent groups serving the needs of the people on the APY Lands. It also helps shape policies regarding economic and social development. The Executive Board comprises elected members from across the APY Lands and they choose their own Chairperson.

Under the Act the functions of the Anangu Pitjantjatjara Yankunytjatjara are:

- to ascertain the wishes and opinions of traditional owners in relation to the management, use and control of the APY Lands and to seek, where practicable, to give effect to those wishes and opinions;
- to protect the interests of traditional owners in relation to the management, use and control of the APY Lands;
- to negotiate with persons desiring to use, occupy or gain access to any part of the APY Lands; and
- to administer land vested in Pitjantjatjara Yankunytjatjara.

3.3 AP Services

Anangu Pitjantjatjara Yankunytjatjara Services (Aboriginal Corporation) is located at Umuwa, and has an administration office, works depot and mechanical repair garage. Umuwa is located approximately central to the seven communities on the APY Lands.

AP Services has evolved as the service providing arm of Anangu Pitjantjatjara Yankunytjatjara (APY). This involves project management and coordinating maintenance programs that support APY's responsibility as the land owner/land title holding body, particularly Anangu environmental health and safety. AP Services works very closely with Nganampa Health's UPK section.

AP Services ongoing responsibilities include: road works (including grading and realignment), housing repairs and maintenance, development and construction projects, construction inspection, waste management, homelands essential services, bore maintenance and alternative energy programs and other works related programs as they evolve.

Other projects completed since 1994 are 'one off' projects, such as:

- Pipalyatjara Dust Control
- Relocation and Lighting of the Amata Aerodrome
- Septic Tank Survey

- Removal of Asbestos Waste
- Construction of 12 Waste Management Landfills
- Construction of housing
- Nyapari and Pukatja Dust Control
- Town Plan Finalisation

3.4 Community Management

Amata is controlled by a Governing Council and supported by administration staff. Several people are employed in funded positions.

Amata is part of the corporate CDEP with members participating in alternative employment projects. In 2001 84.3% of the Indigenous workforce was employed as part of the CDEP.

The Amata Governing Council representing the Amata community manages the community. It employs staff through the CDEP for basic maintenance work around the community.

4.0 HUMAN AND ECONOMIC ENVIRONMENT

This part of the report provides background information on Amata Community. It includes details about its population, economic activities, the transport network and climate. A very brief summary of the history of the community is included. This part of the report is drawn from various other reports and sources.

The main APY communities are Pukatja (Ernabella) with a 2001 Census population of 446, Amata with 270, Kaltjiti (Fregon) with 300, Iwantja (Indulkana) with 280, Mimili with 250 and Pipalyatjara with 114. The remaining estimated 700 to 800 people are located in several smaller communities and approximately 50 occupied homelands.

The APY Lands are located in South Australia's most northern region. They are bordered by Western Australia to the west, Northern Territory border to the north and encompass the Great Victorian Desert to the northeast. They cover an area of 105,000 km², which is approximately 10% of the state's total area.

4.1 Community Demographics

The 2001 demographic profile for Amata provides some context for the community. The following characteristics are noted:

4.1.1 *Population*

Amata community had a population of approximately 273 people in 2001. Of those people, 243 (89%) were Indigenous persons. Non-Indigenous people represented 11% of the population. During the dry season this number may be less however is likely to be significantly more in the wet season. The core population fluctuates with many residents being transient.

The median age of people in Amata is 27, with the median age for Indigenous people is 25.

The gender ratio is expressed as the number of males per 100 females. The gender ratio for Amata is 82.5. The gender ratio for Indigenous people of Amata is 80.

This suggests a young population, with more females than males.

4.1.2 *Household Status*

Occupied private dwellings are used as the basis for analysis and a family is defined as two or more persons, one of whom is at least 15 years of age who are related by blood, marriage (registered or de facto) adoption, step or fostering and are usually resident in the same house.

In Amata 91.3% of households were family households. The most common type of family is a couple family (with children) (47.1%), followed by one parent family (29.4%).

The mean household size in Amata is 5.5 persons, while the mean Indigenous household is 6.8 persons.

This household size is consistent with current assessment of household size when the number of community houses is counted at 37 and accepting a 2001 Indigenous population of 243. This indicates an average household size of 6.5 persons per house.

Sometimes residents may be waiting for accommodation; others might be visiting from affiliated homelands or communities, others might be travelling on lore or other culturally related activities. There may be occasional influxes of visitors during law business and sporting events such as football carnivals. The population can increase significantly to 1,000-1,200 during such events. Similarly, when lore business and sporting events occur elsewhere in the APY Lands, attended by Amata people, the population is temporarily reduced.

4.2 Historical context

Amata was established as a cattle outstation in the 1960's to take the pressure off the increasing growth of Pukatja (Ernabella). Amata is located in the far north west of South Australia near the base of the Musgrave Ranges. The community is made up of approximately 300 Anangu Maru (Aboriginal people) who speak Pitjantjatjara as their first language and English as the second or third language.

4.3 Economic Context

4.3.1 Local Economy

Amata operates a small economy comprising the local store, maintenance workshop, some arts and crafts, occasional tourist accommodation and cattle grazing. The grazing activity involves 3,000 head of cattle and another 900 on agistment. None of the community members works with cattle.

The local economy of the area is linked to the future mining operations, pastoral industry, developing tourism ventures based on significant visitor numbers to Uluru and Kata Tjuta and mining ventures.

4.3.2 District Community Facilities

Alice Springs in the Northern Territory is the nearest major town and supports a population of approximately 25,000 plus many more visitors during peak tourist periods. The town comprises approximately 10,000 residences, and a wide range of education, health, administrative commercial and sporting facilities.

4.3.3 Land Use

The pre-dominant land uses around Amata are activities such as pastoralism, (cattle grazing) and tourism.

Amata cattle yards can hold 3,000 head of cattle and about 100-200 horses. Amata community owns all of the cattle. It is hoped that CDEP workers will become involved to help muster, brand, and look after cattle, break in horses and work on fencing. At the moment there are 10 workers. Help is required to train the CDEP workers to do this work and get the cattle yards running with vehicles to help with mustering.



Cattle Yard

None of these existing land uses are expected to have any adverse impact on the community.

4.4 Transport Network

Amata is serviced regionally by air, and a strategic freight and tourist road network via the Stuart Highway and Giles-Mulga Park Road.

4.5 Climate

Amata shares a similar climate to the Giles Weather Station having a dry climate with hot summers and mild winters. The annual average rainfall is 283 mm and while the average rainfall is higher during the warmer months of the year there is considerable variation from year to year.

January is the hottest month, with an average maximum temperature of 37.2° C.

By contrast winters are mild, with July average maximum and minimum temperatures being 19.9°C and 6.8°C respectively.

The wettest months are November to March, with February being the wettest month with an average rainfall of 48.5 mm on five days.

Source: *Australian Bureau of Meteorology*, 2006

5.0 EXISTING DEVELOPMENT

The Amata settlement pattern is quite compact and regular but also includes generous internal spaces. The road pattern is based on a modified grid, with some small cul-de-sacs connected through short cuts. The topography of the site is generally flat with the land falling from south to north and east to west, with the Musgrave Ranges providing a northern backdrop. The north-south aligned roads follow the contours of the land. The main Mulga Park Road passes along the eastern side of the community. There are few other natural constraints affecting the settlement.

5.1 Housing

Existing housing consists of approximately 37 single community houses and some other forms of shelter. An aged persons' complex has been constructed and can accommodate several people. Another 15 houses are occupied by administration, clinic, school and police staff.

The Anangu population of Amata numbers approximately 243 people resulting in a household density of 6.5 people per house. This number is quite high by conventional standards and represents 3.25 people per bedroom for a two bedroom house, or 2.2 people per bedroom for a three bedroom house.

Amata is laid out on a modified grid pattern, but with some disconnected roads that residents have linked by short cuts. For the most part, this provides good connectivity and permeability, but also promotes higher vehicle speeds in places.

House sites are mostly rectangular and have areas of approximately 900-1,000 m² with frontages of 30-35 m.



Housing



Aged Persons Housing

5.2 School

The Amata Anangu school has approximately 70 students enrolled and a total of 18 staff – 11 teaching and 7 non-teaching. The Amata school is an important focal point for residents.

The school occupies a central location within the community and there has been a recent upgrade of facilities including classrooms. The school will continue to occupy the same site.

The school has an adjoining oval, ungrassed, but with football goal posts in place. A TAFE centre is located opposite the Community Office.



Amata TAFE

5.3 Store

Amata has a well-stocked store to serve residents and visitors. It also serves fuel to motorists.

5.4 Health Facilities

Nganampa Health Council is an Aboriginal owned and controlled health organisation operating on the APY Lands. Across this area, Nganampa Health operates nine clinics, including the Amata Health Clinic, an aged care respite facility and assorted health related programs including aged care, sexual health, environmental health, health worker training, dental, women's health, male health, children's health and substance abuse prevention.

5.5 Office

The office is located next to the store and opposite the Arts Centre and TAFE. The building is relatively new, includes a reception area, offices and a meeting room. Parking is available on the street verge.

5.6 Open Space & Recreation

Amata is one of the few communities provided with extensive areas of open space within the community. Areas between the office and store have been retained with several trees. The community also has established a bush tucker garden west of the school oval. The garden has been irrigated and fenced to control access.

An oval, softball pitch and BMX track has been developed northwest of the community, south of the sewer pump station. The oval surface is grassed and there are flood lights in place. Children's play areas are mostly contained within the school grounds.

Existing basketball courts are located near the centre of the community and south of the school.



Bush Tucker Garden



Basketball Court

5.7 Visitor Accommodation

Formal designated visitor or contractor accommodation is available and managed by the Community Officer.

5.8 Cultural Purpose Sites

There are cultural purpose sites (lore areas) near the community. The lore areas north-west of the community have been noted but are not clearly defined. Anthropological Cultural Heritage Clearance of the community has been undertaken. For future development, information on sites of significance within the area can be obtained from APY.

The Art Centre is located close to other community purpose activities west of the community store.

6.0 EXISTING INFRASTRUCTURE

6.1 Water Supply and Reticulation

The base plan information provided by Sinclair Knight Merz (custodians of the ATSC data), a site visit and local advice indicates that the community has a potable water supply and reticulation system. The system comprises:

- Three groundwater extraction bores (AMB 17, 26 & 109) are located from approximately 1 km east of the community and equipped with electric submersible pumps. Usually only one or two bores are operated at a time, and deliver water to ground mounted storage tanks and an ultra violet disinfection system located to the eastern side of the community.
- Two elevated tanks, 22.5 kL each, on a 12m elevated stand on the east side of the community. Total water storage capacity is 920 kL (as at 24/05/06).

Water reticulation mains extend throughout the community from the elevated storage tanks to provide individual dwellings with a water supply.

Water consumption has been an issue at the community, with demand exceeding supply. The sustainability of the water source at Amata is uncertain. A comprehensive drilling and testing programme to determine safe extraction rates is recommended. Monitoring of the groundwater aquifer/s is required before a significant expansion in the population size of community is considered.



Water Tank



Water Bore (Solar)



Fire Hydrant

6.2 Effluent Collection and Disposal

According to the base plan information provided by SKM, a site visit and ESO advice, the community is served by a comprehensive effluent disposal system. Most of existing dwellings are connected to septic tanks that overflow into a reticulated gravity common effluent drainage system.

Community buildings and public ablution blocks are also connected to the reticulated common effluent system.

An effluent pump station is located in the community west of the community office (near the power station) and discharges effluent to the wastewater disposal area.



Stand Pipe & Sewer Pump Station

The pump station is equipped with two 4.4 kW electric submersible sewerage pumps.

Effluent is pumped via a 100 mm PVC rising main to the wastewater treatment ponds located approximately 1.2 km southwest of the community. The reticulation system and ponds were constructed in approximately 1987. The pump station and rising main were replaced and upgraded in 1997.

Two earth banked, lined effluent ponds and one large evaporation pan are used to treat and evaporate the effluent.

No detailed information was available to make a thorough assessment as to the condition or capacity of the existing infrastructure.

Based on this data the effluent treatment ponds do not appear to be utilised to their full potential and as such, would appear to have spare capacity to accept additional effluent generated from expansion of the Community.



Amata Waste Water Ponds

6.3 Electrical Generation & Distribution

According to the base plan information provided by SKM, a site visit and advice, the Community owns an electrical generation and distribution system. ETSA Utilities is the licensed distributor for the line network. The community receives essential services support grants from Department of the Premier and Cabinet Aboriginal Affairs and Reconciliation Division (DPC – AARD) to assist the day to day management of their primary infrastructure. The grant is for the purchase of diesel fuel, lubricating oil, for the specific purpose of power generation and the essential services officer's salary.



Amata Power Station

Power in Amata is currently generated by three diesel generators, located in a brick power house that was constructed in 1989. A control system provides automatic synchronization and load sharing for the generators. Caterpillar 3306 engines power all of the generators. Diesel fuel capacity is 90,000 litres stored in two 45,000 litres above ground tanks installed in 1991. A pre-cast modular bunding system is installed around the tanks. There is a current proposal to connect Amata to an electricity grid originating from Umuwa.

Currently there is a network of aerial cabling running through the Community to provide individual dwellings with power and this network can be extended to serve the proposed community expansion.

Power is reticulated throughout the community by a standard ETSA Utilities overhead system with a combination of high (11 kV) and medium (415/240V) voltage power lines. Street lighting is provided by standard streetlights mounted on stobie poles.

The nearby Tupul and Katjikuta Homelands, approximately 10 km away, are supplied with power from Amata via overhead reticulation.

6.4 Road Network

The APY Road Network Study prepared by QED Pty Ltd examined the roads linking communities on the APY Lands. It primarily dealt with connecting roads and not internal road networks so is not considered relevant to the Community Structure Plans, apart from the implications for reducing isolation and ensuring accessibility during all types of weather.

The following road networks provide vehicular access to the Community.

6.4.1 External

The community can be accessed from Mulga Park Road via approximately 100 km of unsealed road, which is maintained by the AP Services. The current alignment of Mulga Park Road bypasses Amata and does not encourage use by visitors to the community.

6.4.2 Internal

The internal road network comprises of a series of bitumen sealed and kerbed roads providing access to the housing and services within the community. Most of these roads are in good condition.

A small proportion of the road network is unsealed, particularly the access to the oval, power station, aerodrome and waste management area. There are also a number of unsealed 'shortcuts' used to cross vacant land within the Community.

Access roads to and through the site provide vehicle access to all residences. There is no clearly defined pedestrian pathway system and consequently walking along the roads is common.

Car parking and roads are defined with bollards or large rocks to limit the tendency for informal tracks to develop and so make pedestrian movement safer.



East-West Street

All roads are formed and constructed to a sealed standard. Concrete spillways are formed at the junction of stormwater drains and the roads. Open spillways are being used to prevent any accidents with children being trapped and minimise the risk of blocking drains with debris.

6.5 Aerodrome

In April 2002, Airport Technical Services Pty Ltd prepared a report titled Amata Aerodrome - Strategic Aerodrome Investigation. That report contained the following information.

The aerodrome serves the Amata community and eight homelands. The aerodrome is located 9 km from the community and provides urgent medical evacuations, mail services, government and community aircraft charters. It provides essential access as roads to the area become impassable due to flooding.



Amata Air Strip

The current site features a 15 m wide sealed section contained within a 30 m wide runway. The available length of 1,371 m is considered satisfactory for current and future aircraft likely to utilize Amata, subject to resolution of the specific operating requirements for aircraft currently being reviewed. The presence of the nearby Musgrave Ranges restricts the use of aerodrome to right hand circuits, when landing from the northwest in order to avoid mountain obstructions and possible turbulence effects.

The report identified several items for consideration related to upgrading the facility, in particular increasing the sealed width from 12 m to 18 m and gravel sections.

6.6 Drainage

There is no historical recorded information held with any of the authorities, regarding the flood level of a creek line that runs north of the Community.

According to the base plan information provided by SKM and site visits, there is no piped stormwater system in place to cope with stormwater runoff from roads and houses within the Community. The implementation of sealed roads in Amata was partly designed to allow for the roads to act as stormwater drains. A series of channels that have more than likely been historical flood routes for the area criss-cross vacant land throughout the Community, and may pose a flood risk where close to existing housing. Maintaining effective drainage of stormwater must be considered when developing vacant land.

Community representatives have indicated that areas of the northern side of the community are flood prone. A line of interceptor banks has been constructed east of the community. Based on the anecdotal information provided, flooding is most likely due to a lack of adequate drainage paths and a detailed drainage study would be necessary to address this problem.

6.7 Telecommunications

The community is reticulated with Telstra infrastructure and it is understood from community representatives that there are private phone services currently in use in addition to the two public phones and the office phones.

7.0 OPPORTUNITIES AND CONSTRAINTS

The constraints on future physical growth of Amata are detailed below,

7.1 Areas of Cultural Significance

The structure plan shows an approximate boundary line to the west of Amata that identifies a limit to all forms of development for reasons of cultural significance to the Anangu.

This 'no go' area is sufficiently distant from the community to not have any immediate impact on proposals. No future development proposed under the Structure Plan intrudes into the 'no go' area.

7.2 Landform

Whilst Amata is located in an area of low rocky hills, the local soil conditions are generally acceptable for house and road construction. Rocky outcrops are not a major constraint for location of development, or installation of engineering services. There are areas within Amata where rock is close to surface. Investigation is recommended prior to development.

7.3 Localised Flooding

There is evidence of stormwater sheeting across the site in a north westerly direction following extended periods of rain. An interceptor drain system has been constructed along the eastern perimeter of the community to direct these flows primarily to the north around Amata. Drainage from the roads is also directed north and west.

No formal flood records have been maintained, however anecdotal evidence suggests that heavy flows do not pose a major threat to the residents or property of the community. Established overland flow paths need to be maintained to prevent stormwater becoming a major concern.



Floodway

7.4 Water Bores

There are a number of water bores developed north of Amata to supply residents with drinking water. Buffers are shown around the bores to ensure incompatible development does not affect the water source. Sewered residential development may be an acceptable land use within these buffers, however the storage of large quantities of diesel fuel and lubricating oil within the water source protection area may be unacceptable in the longer term. The proposal to de-commission the Amata Power station and connect to the electricity grid will potentially remove any immediate hazard to the water supply.

7.5 Sewerage Ponds

The Amata effluent treatment ponds are situated approximately 1.0 km south west of the community near the waste disposal area. The ponds are relatively remote from the community and are secured by a 1.8m wire mesh fence to prevent un-authorized access. The ponds do not have an immediate impact on the further development of the community.

The effluent pumping station is located adjacent to the power station and so although odour during maintenance is not a significant problem, any failure of the pump/s resulting from power interruption may lead to overflow. The effluent will have been through a primary treatment process, however contamination of the ground water supply may become a concern if the pump fails to operate for an extended period.

7.6 Waste Management

The waste management area is located a short distance from the community, past the sewerage ponds. There is no secure fencing to control where rubbish is dumped although it tends to be in a pit 3 to 4 m deep. The waste management area is filled from time to time, but domestic rubbish is left uncovered for extended periods. The waste management area does not have an impact on water source protection, but could benefit from improved management. It would also be beneficial to secure parts of the area and ensure dumping takes place in designated areas.



Amata Waste Management Area

7.7 Cattle Yards

Cattle yards are located approximately 2.0 km north of the community and are used from time to time. There is no cattle dip evident, so there is no concern for the yards to impact on water source protection areas.

8.0 LAND USE RISK ASSESSMENT/RESPONSE

Amata is located in a mostly stable natural environment where extreme events such as cyclones, bushfires and earthquakes are rare occurrences. Nevertheless, the impact of any major unforeseen emergency is likely to be exacerbated by the isolation from a major regional centre. The likelihood of specific hazards and risks can be modified through land use planning. Mitigation through land use planning is one mechanism to reduce future risk.

The most likely hazards to affect Amata are flood, isolation or fire.

8.1 Flood

Flooding may be defined as the overflowing by water of the normal confines of a stream or other body of water, or the accumulation of water by drainage over areas not normally submerged (DoTARS, 2002). Flooding may be a result of prolonged or heavy rainfall or severe thunderstorms. A common type of flood in this part of the country is slow onset flood that can last weeks. Flash flooding can result from relatively short intense bursts of rainfall, often from thunderstorms and poses the most serious threat to loss of life.

Flood mitigation is defined as measures aimed at decreasing or eliminating the impact of floods on society and the environment and should aim to reduce all forms of loss to an acceptable minimum.

Mitigation will vary in remote communities according to location and cost of implementing any mitigation measures. This is weighed against the level of risk a particular community is willing to accept. In terms of mitigation, there are three approaches commonly adopted;

- Flood modification,
- Property modification, and
- Response modification.

Land use planning is a property modification measure and can address future risk. It is effective because it is possible to prohibit development of substantial structures in flood areas, or require a modified form of development. It is not always possible to be precise because it relies upon gathering historical data to determine highest know flood levels. There may already be development that has occurred for other reasons, for example proximity to a reliable water supply, infrastructure provision that makes it difficult to re-locate parts or all of a community. Generally uses that will not be adversely affected by potential flood, such sporting ovals, open space, can be located in flood prone areas.

8.2 Isolation

The location of APY communities in the north west of SA is particularly remote and difficult to access at certain times of the year. When rain causes flooding, access roads can be cut which then limits supplies of essential goods such as fresh food, fuel for generators, and services such as medical attention. The only alternative is air transport and that cannot re-supply communities with heavy items.

8.3 Access

The level and standard of access roads to remote Aboriginal communities is the primary means to address the issue of isolation. This is directly connected to provision of adequate road funding. Reliability and travel safety is a key issue for roads servicing communities. Poor road condition contributes to isolation and in turn safety and sustainability.

The APY Road Network Study classifies the road network into major access, secondary access and homeland collector roads, sets construction standards and identifies improvement priorities. The major access roads from Pipalyatjara to Amata, which is prone to flooding has been given high road improvement priority

8.4 Potential Hazards

The Amata Community Structure Plan integrates a numbers of initiatives that will help reduce the potential for hazards to impact on the community and also to assist with the response to events should they occur. Possible hazards and what they may affect in the community are set out below:

Impact of Hazards on:	Hazards and What They Might Affect			
	Fire	Flooding	Storms	Transport Accident
People	x	x	x	x
Houses	x	x	x	
Community Buildings	x	x	x	
Services	x		x	
Environment	x	x		

The Amata Structure Plan integrates a numbers of initiatives that help reduce the potential impact of these hazards on the community and also to assist with the response to events should they occur. These measures include:

- A road pattern that has a legible layout for pedestrians and drivers;
- The use of buffers around water bores to protect water source areas from incompatible development;
- The use of buffers around the industrial area and sewerage ponds to highlight that these activities generate noise and/or odour problems and are not suitable for residential development;
- A layout pattern which accommodates existing watercourse flows with development avoided in potential floodways;
- Good access to the main road and the aerodrome in the case of an emergency;
- Direct road access is maintained to the Power station and industrial area for heavy trucks and machinery which avoids the need for these vehicles to travel though the community centre;
- Location of the Waste Management area away from the community as a protection from fires and from possible leaching impacts on water source areas;
- Water filling points and hydrants for the community's fire tanker are identified on the plan.

In addition to these initiatives it is recommended that a number measures are undertaken to reduce risks. These include:

- The access road between the aerodrome and community be sealed.

- The majority of roads within the community are sealed and dust caused by vehicles has been significantly reduced. However, the community would benefit from a significant increase in tree planting and other revegetation programs to help contain dust from the wider area around the settlement. While the Structure Plan depicts some planting areas, irrigation of the trees while they become established is a consideration.
- Although the waste management is distant from the community, it is recommended that the practice of burning the rubbish cease to avoid the potential for fires spreading to the community and the area fenced to control the practice of haphazard dumping away from designated areas. Burning waste is illegal under the relevant environmental legislation/guidance and should cease.

STRUCTURE PLAN

1.0 STRATEGIC DIRECTION

1.1 Community Aspirations or Vision

Amata is the second largest community on the APY Lands after Pukatja. It enjoys a full range of local services, school, health clinic, aged person complex, store, community office, active arts centre, oval and an aerodrome.

During the initial visits to the community and discussion with community members, the Community Structure Plan was explained as preparing for the future, making sure that buildings and activities are put in the right place so the people who live in the community can be safe and healthy.

It was explained that the Community Structure Plan is not a management plan, nor does it incorporate a financial program to undertake desired improvements, although it can assist the development of these strategies. The plan relates primarily to future building and infrastructure works and will assist with the consideration of measures for the ongoing sustainability of the community.

In addition to the views and aspirations of the community members, discussions were also held with administrative staff, APY and AP Services, government agencies and service providers regarding their existing and future programmes to fund housing, facilities, and infrastructure.

The types of issues raised included:

- Where should new houses go, do we need different areas for different families?
- Where should we put noisy or smelly activities?
- Are the roads safe, where do the trucks go?
- Where does the drinking water come from and how can we look after it?
- Is there flooding here?
- How should we look after visitors?
- Should there more parks or meeting places?
- Are there 'no-go' areas?
- Are there places for young people and old people?

Responses to these matters were incorporated into the draft plans and were then modified following further discussion with the stakeholders. The aspirations for the community were tempered by the knowledge that there are modest amounts of funding available for development, short budget time frames and limited opportunity for community members to influence funding decisions.

In Amata, school buildings are being replaced, the bush tucker garden has been successfully established and the Arts centre had a busy schedule of exhibitions during 2006.

The community is seeking funding for construction of a swimming pool and has nominated a suitable site close to the school and within the community.

The Environmental Health worker has promoted the merits of additional tree planting throughout the community and adjacent to the main entry road for shade and dust reduction.

The art centre has grown to the extent that it is in need of expansion with extra work areas, exhibition space and storage. Space is available adjacent to the existing art centre and should be protected for this purpose.

Extra housing and suitable sites were needed.

1.2 Strategic Direction

The direction being outlined for Amata was for the community to maintain its current status as a major settlement, with controlled growth and facilities being upgraded and services for residents improved. There was no apparent desire for the community to grow larger, although a programme to build more houses was supported. The possibility of extending the community housing east on elevated ground towards the Mulga Park Road was suggested. Control of dust and management of storm water run-off from the main road will be required if the community is to expand in this direction.

2.0 FUTURE DEVELOPMENT

This section of the report describes the Structure Plan for Amata. The Structure Plan is included as **Figure 1 Amata Community Structure Plan**.

2.1 Options Considered

The initial assessment of the community layout was that its location was sustainable and acceptable from servicing, accessibility and potential for future growth point of view. It was concluded that there was no need to relocate parts or all of the community. It is considered in that in the context of its location, history and existing development, future growth would be incremental and capable of being accommodated by way of infill.

There is no immediate funding available for investigation of a major expansion of housing or infrastructure works, however consideration was given in the preparation of the Structure Plan to longer term expansion. Services have been installed and a road constructed for the future development of houses sites north and south of existing houses.

2.2 The Structure Plan

The Structure Plan has been prepared from an assessment of the site's physical and environmental characteristics, existing infrastructure, regard for the population demographics and constraints (physical, servicing). These principles have guided the form of the plan.

The site is subject to localised flooding from heavy rains, so the area to be developed in the long term will be confined to the more elevated parts of the site. Drainage channels have also been constructed and maintained to divert stormwater away from residential areas.

2.3 Land Use Sites

The Structure Plan allocates land use sites throughout the community and provides objectives for each use type and development guidelines to help in the control of scale and location of buildings on each site.

The Plan identifies preferred locations for land uses. Land use sites include:

- Housing
- Future Housing
- Community Purposes
- Commercial
- Industry / Utilities
- Parkland / Recreation / Rural

Where an alternative land use is proposed for a site, the Community Council may consider the suitability of the use, taking into account the planning objectives for land uses and development guidelines set out in section 5.0 of this report.

2.4 Buffers

The Structure Plan includes buffers as a means of providing separation from incompatible uses or from those that generate noise, smell, or other emissions. The buffers also provide protection for sensitive uses or facilities.

There are two buffers identified on the plan.

The existing wastewater treatment ponds are located some distance from the community and have no impact in terms of odour.

The existing power station located on the north-west side of the community has a buffer of 200m. There are two or three existing residences located within the buffer.

The water bores located on the northern side of the community are shown with 100 m buffers to protect them from encroaching development.

The current power station location has an impact on the community through a 200m buffer for noise potentially excluding some residential sites. At the extremity of the noise buffer, some sound is noticeable during the day and this may be heightened at night time. There are firm plans to de-commission the station and connect Amata to the Umuwa electricity grid.

There is a Lore Area to the west of the community. This area has been identified on the plan as a 'no go' area, but has little impact on future development.

2.5 Street Network

The formal entrance to Amata is from the south and along the west side, arriving at the store and office. Many residents use a short-cut from the north through a cul-de-sac; it has been suggested that this should be made permanent, however it would be prudent to maintain the alignment of the existing entry.

The existing roads have been shown with possible links to make more of a 'grid' system. These roads generally have been designed to follow existing services.

Future housing areas to the east are located on higher ground with an indicative road alignment. The suggested road alignment is a response to the contours of the land and to connect to other existing roads. Before any development is actually proposed, detailed site investigations and design work should be conducted first.

2.6 Housing Areas

The community has identified immediate demand for additional single-family houses through the development of available land. Approximately nineteen (19) additional house sites are identified, however some of these may be constrained by the availability of a sewerage connection. Several 'infill' sites can be provided immediately.

A longer term housing area east of the community is identified, but requires further investigation, detailed design and provision of services.

It is proposed that the community form be extended primarily to the north and to a lesser extent to the south on higher ground close to community facilities (school, shop, clinic), outside the power station buffer, served by existing sealed roads and services.

2.7 Community Purpose Sites

The principal community purpose sites identified on the Structure Plan are:

- School
- Administration office
- Childcare centre
- Clinic
- Art centre
- Police station

Most of these sites are capable of being upgraded or expanded as demand arises and funding becomes available.

The SA State Government has advised of plans to establish a Police Facility in Amata in the near future, most likely built on the existing police post facility adjacent to the office. Generally the site needs to meet the criteria of the Police Service, being readily serviced and having sufficient land for construction of an office and lock up. It may be prudent not to locate houses close to the site.

2.8 Parks and Recreation

The community is generally well provided with recreation facilities including an oval for football, basketball courts and a planned aquatic centre. These sites are shown on the plan. A children's playground is located within school grounds. A full size basketball court has recently been constructed adjacent to the school on part of the school playing field.

Bore water is stored in a tank near the oval for the purpose of reticulating the football oval.

Several smaller pocket parks have been identified throughout the community.

The community has established a 'bush tucker' garden in a central location. The site is fenced and irrigated.

The recreation areas are shown as open space to ensure residential does not encroach further, however it is likely to remain as undeveloped natural space.

2.9 Visitor camping

A temporary camping area for visitors to Amata has been located south of the community. It is a temporary site only without access to any basic facilities such as water and ablutions.

2.10 Commercial

The community's store is located adjacent to the administration office. This store requires service access for trucks. If the shop were to be expanded in the future, the logical direction would be towards the east.

2.11 Light Industry

The site surrounding the power station is used for Light Industrial purposes and this is shown on the Structure Plan. The main site is being used for maintenance associated with CDEP activities. This site is separated from established residential and community purpose uses.

2.12 Development Issues

Issue	Response	Upgrading Proposals
Houses Construct new houses, replace some existing houses, upgrade other houses.	Incremental population growth through family formation Limited funding available for capital works	Funding for new single houses required Programme to upgrade existing houses Additional housing sites identified on plan
Recreation & Open Space Adequate recreation facilities available	Community bush tucker garden established Negotiations to fund swimming pool	Swimming Pool site near school oval New basketball court being constructed near school
Community Facilities	Visitors Area/sorry camp	Provision for camping facilities separate from residents, (water, toilets, rubbish), but permanent site not supported
Infrastructure Sustainability of water source is uncertain, water quality concerns exist	Continue monitoring of water supply Roads, water, sewerage, electricity to future development sites	Requirement for new water lines, sewer lines to service proposed lots
	Fencing of residences	Most residents seem to prefer their residences to be fenced
Education	School buildings deteriorating	New school buildings currently under construction, grounds to be improved
Police	Police Post requires upgrading	Police station to be constructed adjacent to existing buildings near office

2.13 Service Upgrades

2.13.1 Water

A preliminary engineering assessment suggests that there is sufficient pressure in the water reticulation system to accommodate short extensions to serve some new lots to be created within the system under the proposed Structure Plan.

All new water mains should be installed in accordance with the SA Water 'Water Supply Construction Manual'. Setback distances to roads and lots should follow the above manual wherever practicable.

It is recommended that all new lots and services be provided with a water meter.

2.13.2 Effluent Disposal

A preliminary design check based on available ground level data, invert levels of the existing sewer system and the Structure Plan indicates that the ability of the sewer system to be expanded to serve additional lots is limited, however it is possible to serve the new house sites to be created north and south of the community. Expansion of the community beyond its current boundaries is constrained by falling ground levels, to the extent that wastewater could only be collected and gravitated to the existing pump station inlet successfully from land to the north of the community. Any further expansion would require investigation of a new sewer system rather than expand the existing system which is too shallow.

2.13.3 Electricity

Installation or modifications of power lines should be carried out in accordance with ETSA Utilities Technical Standard TS-107 (Overhead Line Design Standard For Transmission & Distribution Systems).

Electrical generation and distribution capacity has to be part of assessment for expanding the community and be funded accordingly.

2.14 Development Priorities

It has been possible to gauge some of the Community's objectives, special needs and requirements through discussions with Amata Community Council Chairman, Municipal Services Officer and the Essential Services Officer.

Immediate Priorities (0-1 years)

- Generators to be replaced with power from central power network
- Additional housing stock to be provided.
- Ongoing upgrading of housing stock.
- New police station and magistrate's court to be established.

Medium Term Priorities (1-3 years)

- Swimming pool to be established.
- Additional landscaping and dust controls.
- Additional housing in accordance with funding availability.
- Ongoing upgrading of housing stock.
- Improvements to the road network.

Long Term Priorities (3-5 years)

- Additional housing in accordance with funding availability.
- Ongoing upgrading of housing stock.
- Improvements to the road network

3.0 POLICY AND ADMINISTRATIVE CONTEXT

3.1 Strategic and Statutory Planning Context

In South Australia, there are in excess of 100 Aboriginal communities, many of which are located on land vested in the Anangu Pitjantjatjara Yankunytjatjara under the Pitjantjatjara Land Rights Act 1981. These communities are outside local government areas planning controls.

The Development Act 1993 provides an assessment process for planning and building throughout the state. It also provides for development plans at a regional and Council level, against which development applications are assessed.

In the case of communities outside local government areas, it is the Development Assessment Commission that must approve any development or building work. The Development Assessment Commission receives development applications from a range of sources associated with Aboriginal communities, including the Office for Aboriginal Housing and contractors. It involves the owners of the land to ensure building plans have the agreement of the relevant community.

3.2 Land Not Within a Council Area (Far North) Development Plan

The Amata community is located within the Land Not Within a Council Area (Far North) Development Plan Area. The following policies for Far North South Australia apply across the area.

3.2.1 *Form of Development*

Objective 2: Protection of the environment and minimization of conflict between recreation, tourism and other uses of land.

Objective 4: The economic, social, and cultural interests of the Aboriginal communities safeguarded.

Outside of mining, administrative and service centres, Aboriginal people with traditional ties to the land make up the majority of the population. Provision needs to be made to improve the economic resource base for Aboriginal communities and to protect their culture and heritage.

Development should, whenever appropriate, make special provision to improve the balance and stability of the population and to improve the cultural and economic prospects of affected communities. This will require that all communities and in particular Aboriginal communities, be consulted on all developments which would significantly affect their livelihood, lifestyle or traditional interest in the land. When assessing proposed developments emphasis must be placed on the social impacts as well as other environmental impacts.

Objective 5: Industrial, commercial, tourist and residential development restricted to recognised settlements, so that such development can be efficiently provided with services and interference with pastoral, mining and conservation interests is minimized.

Objective 6: Development which meets adequate standards for public safety, convenience, economy and amenity.

Objective 7: The coordinated provision of roads, public facilities and services in a manner which optimises the use of resources and public funds.

The development of community facilities at new settlements in proximity to existing settlements should be integrated to achieve the best use of resources. As the provision of services, such as electricity, water, sewerage and roads, is very expensive in remote areas, design guides and other means should be used to encourage development which makes the optimum use of available resources.

3.2.2 *Waste Disposal (Landfill)*

Objective 8: The orderly and economic development of landfill facilities in appropriate locations.

Objective 9: Minimization of environmental impacts from the location, operation, closure and post management of landfill facilities.

3.2.3 *Conservation*

Objective 11: The identification and management of areas of heritage value or special environmental significance.

The Far North contains many areas, sites and structures which are worthy of preservation. These range from specific localised items, of geological, palaeontological, cultural, archaeological or historical importance, to large areas of sacred, scenic, wilderness, habitat, or other special environmental significance. Because of the vastness and remoteness of the area, many have yet to be identified. Land and development should be managed in a manner which protects the heritage and environmental significance of these items in the long term.

Objective 12: The retention of environmentally-significant areas of native vegetation.

Objective 13: The retention of native vegetation where clearance is likely to lead to problems of soil erosion, soil slip and soil salinisation, flooding or a deterioration in the quality of surface waters.

Objective 14: The retention of native vegetation for amenity purposes, for livestock shade and shelter and for the movement of native wildlife.

3.2.4 *Telecommunications Facilities*

Objective 18: Telecommunications facilities provided to meet the needs of the community.

Objective 19: Telecommunications facilities located and designed to minimise visual impact on the amenity of the local environment.

Telecommunications facilities are an essential infrastructure required to meet the rapidly increasing community demand for communications technologies. To meet this demand there will be a need for new telecommunications facilities to be constructed.

3.2.5 *Renewable Energy*

Objective 23: The development of renewable energy facilities, such as wind and biomass energy facilities, in appropriate locations.

Objective 24: Renewable energy facilities located, sited, designed and operated to avoid or minimise adverse impacts and maximise positive impacts on the environment, local community and the State.

3.3 **Anangu Pitjantjatjara Water Management Plan, May 2002**

The Arid Area Catchment Water Management Board has responsibility for 103,000 km² that accommodate several large Aboriginal communities. The area is home to a combined population of approximately 2,650 people living in communities of Kalka, Pipalyatjara, Amata, Pukatja, Kaltjiti, Yunyarinyi, Mimili and Iwantja.

The goals of the AP Water Management Plan include:

- Improve knowledge of groundwater resources and implement practices that will sustain groundwater resources.
- Maintain and improve groundwater quality.
- A management recommendation for the purpose of implementing management practices that will maintain the pristine condition of watercourses and surface water.
- Plans for improving community awareness regarding best water management practices.

The Plan makes recommendations for watercourse and surface water management and rehabilitation.

3.4 **Natural Resource Management Plan**

The Australian and the South Australian Governments are working together to manage and improve the state's natural resources. The Federal Government Departments of Agriculture, Fisheries and Forestry and the Environment and Heritage jointly administer the Natural Resource Management plan. The Aboriginal Lands Integrated Natural Resource Management Regional Group has been given responsibility for developing and implementing, in consultation with local communities, the Aboriginal Lands Regional Plan for South Australia.

The plan is based on a 'whole of region' approach and addresses significant natural resource management issues incorporating social, environmental and economic problems.

Activities to be undertaken include:

- reducing water pollution and maintaining adequate water supplies;
- cleaning and protecting rock holes for biodiversity and cultural values;
- developing a dust mitigation program for at-risk areas, including revegetation with local native vegetation and stock management;
- developing biodiversity management plans for the Anangu Pitjantjatjara Yankunytjatjara Lands.
- monitoring for native and introduced plants and animals and supporting integrated control of weeds and ferals;
- implementing patch burning for wildfire control and associated benefits.

Some planning has occurred in the Anangu Pitjantjatjara Yankunytjatjara Lands, which has helped to identify priorities for future investments and will provide a guide to similar planning elsewhere in the region to determine how to deliver programs and projects that satisfy the criteria for Natural Heritage Trust funding.

Finalisation of these plans will allow funds to flow to enhance environmental and natural resource standards in the region. The Aboriginal Lands region is therefore well placed to take advantage of these government programs to 2007-08.

4.0 AMATA COMMUNITY STRUCTURE PLAN - PLANNING OBJECTIVES

4.1 Form of Development

Development of the Amata settlement should primarily be in the form of consolidation with some controlled opportunities for expansion. Any immediate demand for housing sites can be satisfied by 'infill'.

Development should not cause undue nuisance, lead to a deterioration in health, living standards, or adversely impact on the environment, including groundwater.

4.2 Integrated Risk Management

The approach to land use planning of the community is to improve risk reduction while addressing requirements for community safety and sustainability. Specific objectives are:

1. Development is to avoid high risk areas.
2. Development should not cause people to have increased exposure to potential risk.
3. Minimise interference with natural processes in order to reduce the risk.
4. Incompatible uses are to be separated
5. Sensitive land uses and facilities are to be provided with adequate buffers
6. Identify adequate buffers to land uses that expose the community to potential risk.
7. New development is to incorporate design measures to facilitate a rapid response in an emergency situation

4.3 Housing Areas

The objectives for the Housing area are to:

1. Provide unconstrained land for housing while avoiding culturally sensitive locations.
2. Provide housing areas convenient to central facilities and amenities
3. Ensure that the design of housing areas provides for privacy, security and an attractive setting.
4. Provide housing areas with proper access to power, water, sewerage, communications and roads.
5. Provide a housing area where there is minimal disturbance from noise and incompatible activities.
6. Protect the housing area from incompatible development,
7. Provide for safety of pedestrians in the design of housing areas

4.4 Community Activity Areas

The objectives for the land in the Community Activity area are to:

1. Set aside land areas for community uses including civic and cultural activities;
2. Provide an appropriate location for special activity centres, meeting areas and special interest group activities;
3. Provide for schools and other educational or training facilities;
4. Provide an area where visitors from places, other than the community, can stay for a short time.

4.5 Commercial Activity Areas

The objectives for land used for Commercial purposes are to:

1. Set aside land areas for commercial uses, including shopping and business activities.

2. Ensure sufficient land is available for vehicle access and parking.
3. Provide areas for people to gather before or after visiting the commercial facilities.

4.6 Utilities/industry

The objectives for land to be used for Utilities / Industry are to:

1. Provide secure and strategic locations for utilities and industry.
2. Ensure that enough land is allocated to provide for major servicing utilities such as sewerage, water, power and telephone.
3. Select sites that are convenient to service and safeguard, but far enough away not to be a nuisance to living areas.
4. Ensure services are protected and not built over.

4.7 Parks/Recreation/Rural

The objectives for the Parks/Recreation and Rural land are to:

1. Provide areas where community people can play safely.
2. Landscape protection.
3. Assist in control of dust.
4. Set aside areas for informal and passive uses (sitting, walking, talking).
5. Ensure land areas are set aside in the proper location for major recreation uses.
6. Ensure that adequate and appropriate land is set aside for formal and active recreation.

4.8 Storm Water Management

Storm water management should address the following:

1. Stormwater from properties within the catchment area should be collected and used within the locality of the catchment.
2. Stormwater from the area surrounding the community should be managed through the use of ponding banks to avoid large volumes of storm water channelling through the community.
3. The flow of stormwater from hard surfaces within the community should be interrupted by changing the ground profile to arrest the flow and assist with the absorption of stormwater.

5.0 AMATA COMMUNITY STRUCTURE PLAN - DEVELOPMENT GUIDELINES

5.1 Integrated Risk Management

1. Building on the identified constraints, development is to occur in localities which avoid potential flood risk areas and buffers. Other areas which could expose residents to health risks and where housing is to be avoided include the vicinity around the sewerage ponds and the industrial / workshop area.
2. New housing areas have been located so as to avoid groundwater protection areas. Buffers have been identified around existing bores and future bores should be located away from areas proposed for future development.
3. Future subdivision design is to ensure access of emergency vehicles by incorporating where possible connected roads and a permeable street pattern. The provision of water tanker filling points and fire hydrants should be extended to newly developed areas.

5.2 House sites

1. House sites should be a sufficient size to meet family, cultural and environment needs. As a guide, a minimum of 1,000m² and preferably 1,100m² to 1,200m² should be provided for each house site to allow for outdoor living and to accommodate rain water tanks.

5.3 Siting of Buildings on House Sites

1. Front building setback distances should be staggered where desirable, but should generally not be less than 6.0 metres from the front (street) or rear boundary.
2. Houses should be located to take best advantage of prevailing cool breezes. Where possible houses should be oriented to overlook community and recreation facilities and provide privacy from neighbouring dwellings.
3. Preservation of existing trees is important and house siting can be varied to suit the location of trees.
4. Rainwater tanks should be provided for each house to reduce the impact of stormwater in the catchment area and provide irrigation for shade trees.

5.4 Stormwater Management

1. To avoid exporting stormwater from the community via the road network, sufficient land should be set aside for harvesting stormwater from the roads at regular intervals.
2. Road verges should be at least 5m to 10m in width unless they are adjacent to open space. Verges should be designed to accommodate construction of ponding banks, reduce flow velocity and retain the water that might otherwise flow away via the road system.
3. Sports ovals and other sporting facilities such as basketball courts, adjoining roads and parking areas provide an opportunity to collect water and to use it for irrigation purposes. It can be used to water shade trees in the vicinity of sports facilities, or sustain landscaped buffers.

5.5 Landscaping

1. Landscaping includes the planting and maintenance of trees, shrubs and grass and may include furniture, barriers and equipment. Existing trees should be preserved and maintained for shade and screening purposes.
2. Stormwater collected from rooves and overflow should be used to maintain landscaped areas. Landscaping also provides shade, helps reduce dust, assists in the control of vehicle movement and creates a more pleasant living environment.

5.6 Fences

1. All houses shall be fenced along the front, side and rear and shall be to the full perimeter of the lot. No front fences shall be higher than 1.2 metres, unless otherwise approved by the Community Council.

6.0 IMPLEMENTATION AND REVIEW OF THE COMMUNITY STRUCTURE PLAN

The Amata Community Structure Plan will be used as a guide to future development and to ensure orderly and proper planning. It will be a guiding document when the Community Council, APY Executive and Development Assessment Commission (DAC) consider future development proposals for housing, community services and facilities, essential services and road works.

6.1 Application Requirements for Development

Development is not to be carried out on the APY Lands within the areas covered by the Structure Plans until a development application is lodged with the Development Assessment Commission (DAC) relevant fees paid and consent approval is obtained.

Development includes building work, land use changes and subdivision. All development requires Development Plan Consent, buildings and structures also require Building Rules consent.

The DAC considers APY approval advice prior to issuing Development Plan Consent.

Bodies proposing development (including government agencies and service providers) are to put forward a development proposal with relevant documentation to APY. Proposals should be consistent with the current Structure Plan for the Community and APY policies regarding development.

The APY Lands Council shall examine the suitability of the proposal based on the objectives applicable to each use as shown on the Structure Plan and in the development guidelines and consult with its members, Community Councils and Traditional Owners, to ascertain their support. APY may request more information where it considers the application is not adequate for its members to arrive at a view.

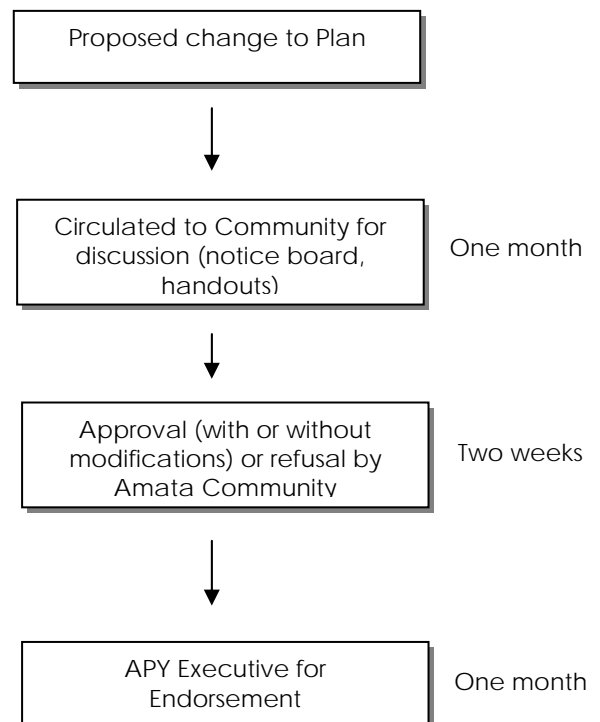
APY will inform the applicant and the DAC in writing whether or not it supports the proposed application. The DAC will assess the application and may grant Development Plan Consent.

6.2 Changes to the Structure Plan

A proposed change to the Structure Plan is prepared in a form that can be copied and circulated throughout the Community in such a way as to clearly show the proposed changes. The revised plan should show the existing situation and how the Plan will look with changes.

From the time the proposed revised plan has been circulated, the Community Council shall not make a decision for at least one month. This time is to let community members tell their elected Community Council members, about any concerns they might have for further discussion and consideration at the Council meeting.

Following approval of the revised plan and endorsement by the Community Council, the new plan shall be submitted to the APY Executive for its endorsement.



ENDORSEMENT

The **Amata Community** hereby endorses the Community Structure Plan No. 1 dated ...*2/ May*...
20*07* for the purpose of ensuring the proper and orderly planning of the community area, at the
meeting of the Council held on the ...*26th*... day of ...*April*... 20...*07*

[Signature]
.....
Chairperson

[Signature]
.....
Municipal Services Officer

The **APY Executive** hereby endorses the Amata Community Structure Plan No. 1 dated 20...
for the purpose of ensuring proper and orderly planning of the community area, at the Meeting
held on the...*9th*... day of ...*April*... 20...*08*

[Signature]
.....
Chairperson

[Signature]
.....
General Manager

BIBLIOGRAPHY

Australian Bureau of Statistics (2002). Census Data.

Bureau of Meteorology, Climate of Giles *Available:*
<http://www.bom.gov.au/weather/wa/giles/climate.shtml>

Davies, A, Harris, R, Kalotas, A, Tregenza, J, (2002) Anangu Pitjantjatjara Water Management Plan (draft)

South Australian Year Book, (1997) special article Aboriginal Lands in South Australia

APPENDIX 1

Consultation Process

APPENDIX 1 CONSULTATION PROCESS

PREPARATION OF THE COMMUNITY STRUCTURE PLAN

The format and process undertaken in the preparation of this structure plan has followed the methodology and consultation detailed below.

Stage 1 – Stakeholder Consultation, Background Research and Initial Community Meeting

Amata Community visited in August 2005, meetings were held with community representatives to inform them of the aims of the project and process to prepare the structure plan. The Stakeholders identified and consulted for issues and advice, included:

- Anangu Pitjantjatjara Yankunytjatjara Executive Board (APY Executive Board)
- APY Lands Community Councils
- Department of Families and Communities (DFC)
- Department of the Premier and Cabinet - Aboriginal Affairs & Reconciliation Division (DPC-AARD)
- Office of Aboriginal Housing (OAH)
- Department for Transport, Energy and Infrastructure (DTEI)
- Anangu Pitjantjatjara Services (AP Services)
- Nganampa Health
- Background research of the community, review of strategic plans and previous studies.

Detailed site inspections of the community by town planners and civil engineer to determine the condition of existing infrastructure and assess constraints and opportunities for development.

Stage 2 – Initial Community Consultation

Initial visit to the community was undertaken on 1 August 2005 by J. Meggitt, R. Stein and C. King (Arup). The objective was to introduce the team and inform the community of the aims of the project and process of preparing the Community Structure Plan.

Amata meeting with MSO Sue Packer and ESO, plus completed field survey. Chairperson Leonard Burton absent from community, however Deputy Chairperson (Grant) attended part of the meeting.

The community and associated infrastructure was inspected. Nearby Homelands Tulpul and Katchikuta also inspected. Few community members were present as they were returning from a football carnival. The team requested the assistance of a community resident for inspection, however no one available. Met briefly with art centre co-ordinator, Sarah Twigg-Patterson to discuss the Art Centre operations. Met with one of the school teachers. The team observed construction of the BMX track for children by men on court imposed community orders.

Amata operates as cattle station with approx. 3,000 head of stock. Another 900 – 1000 head of stock was being agisted. New school buildings to be constructed, BMX track being constructed near oval, Bush Tucker Garden to be developed, new swimming pool site identified.

Stage 3 – Community Visit 2

- Planning Meeting held on 1 November 2005 with MSO Sue Packer and other community members to present preliminary structure plan, inform the community and other interested parties of progress. Several community members entered and left the meeting separately throughout the morning. MSO advised other development proposals likely to occur since our last meeting included following;

- Police station to be located near existing building,
- Two new houses for CDEP Manager and Art Centre co-ordinator, plus one extra staff house to be constructed.
- DPC - AARD has confirmed new power line to enter community from south west direction to the power station.
- Various community members entered and left meeting over two hours (Ronnie, Lee, Janet) each expressing different points of view.
- Children's cemetery located in northeast corner of community should be protected.
- Entrance road to community to be shown landscaped with vegetation buffer to present attractive approach, reduce dust, control vehicle access points/routes.
- Buried rubbish and car bodies in vicinity of existing entrance point.
- Some people supported blocking off short cuts to town from north, force people to use existing access road others suggested provision should be made for alternative access. May be due in part to aerodrome previously located on south side of the community, but aerodrome now on north side.
- Proposed Pool site is ok.
- Lot Numbers to be shown as per existing numbering system
- Sorry camp/s in existence, but should not be defined on plan as they tend to move.
- AP Services must obtain approval from the community prior to building new houses or any other development
- Nothing more to happen with Homeland funding
- MSO advised that two house structure fires since she had been at Amata, fire vehicle often out of fuel, water pump, water tank empty, no one trained
- Spoke to Art Centre coordinator (Sara), who suggested the school grounds should be securely fenced and landscaped. She thought that the arts centre could be extended in the future and the area alongside existing building should be identified for that purpose.
- Oval can provide emergency assembly point, clear of power lines, flood lights.
- Two stand pipes evident at water tank & CDEP yard, several fire hydrants visible around town.
- Options for the community were discussed, including number of additional house sites, size and spacing of sites, swimming pool location, parkland, community facilities, basketball court, rural transaction centre.
- Draft Structure Plan prepared and distributed for comment.
- Meeting with Planning SA and Department for Transport, Energy and Infrastructure

Stage 4 – Community Visit 3

Draft Community Structure Plans prepared and distributed to the community for consideration and comment. A visit to the community was made in March 2006 and minor revisions identified by the community.

Attended meeting with acting MSO, Chairman, Leonard Burton and Environmental Health Worker, Robbie Stubbs, to present and discuss final draft Structure Plan and report. It was confirmed that the principal issue for the community was overcrowding of houses, with approximately 10 people per house. He didn't think the population of the community would grow as people would tend to move to Alice Springs, but additional housing would relieve pressure on existing conditions.

MSO and Chairman suggested a range of modifications to the plan including:

- House site 14 should be deleted due to presence of drainage channel – heavy rains a few days before had scoured the site. Site 14 can be moved directly south adjacent to existing house.
- House site 18 should be moved west next to site 19 for the same reason.
- Several other house sites were suggested, including south of the shop, clustered around the southern cul-de-sac turning head, north of water tanks and in the longer term east of the community. In particular, the Chairman specifically requested a future housing area to be identified east of the community.
- It was explained that east of the community, services would be limited and new roads would have to be constructed, plus water service pressure could be an issue. Advantages are that the ground is elevated and probably less prone to local flooding, close to the school, clinic and shop.
- Primary school buildings are being replaced.
- Full size basketball court is being constructed on the school oval site.
- Bush tucker garden has been planted and producing bush tomatoes, bush plums.
- Spoke to Art centre coordinator (Sarah Twigg-Patterson) and various women at the Arts Centre about the plan and report.
- Confirmed use of art work on plans and cover.
- Meeting to be held with Planning SA (21 April 2006) to discuss format of Community Structure Plan for Amata and any matters requiring special attention.

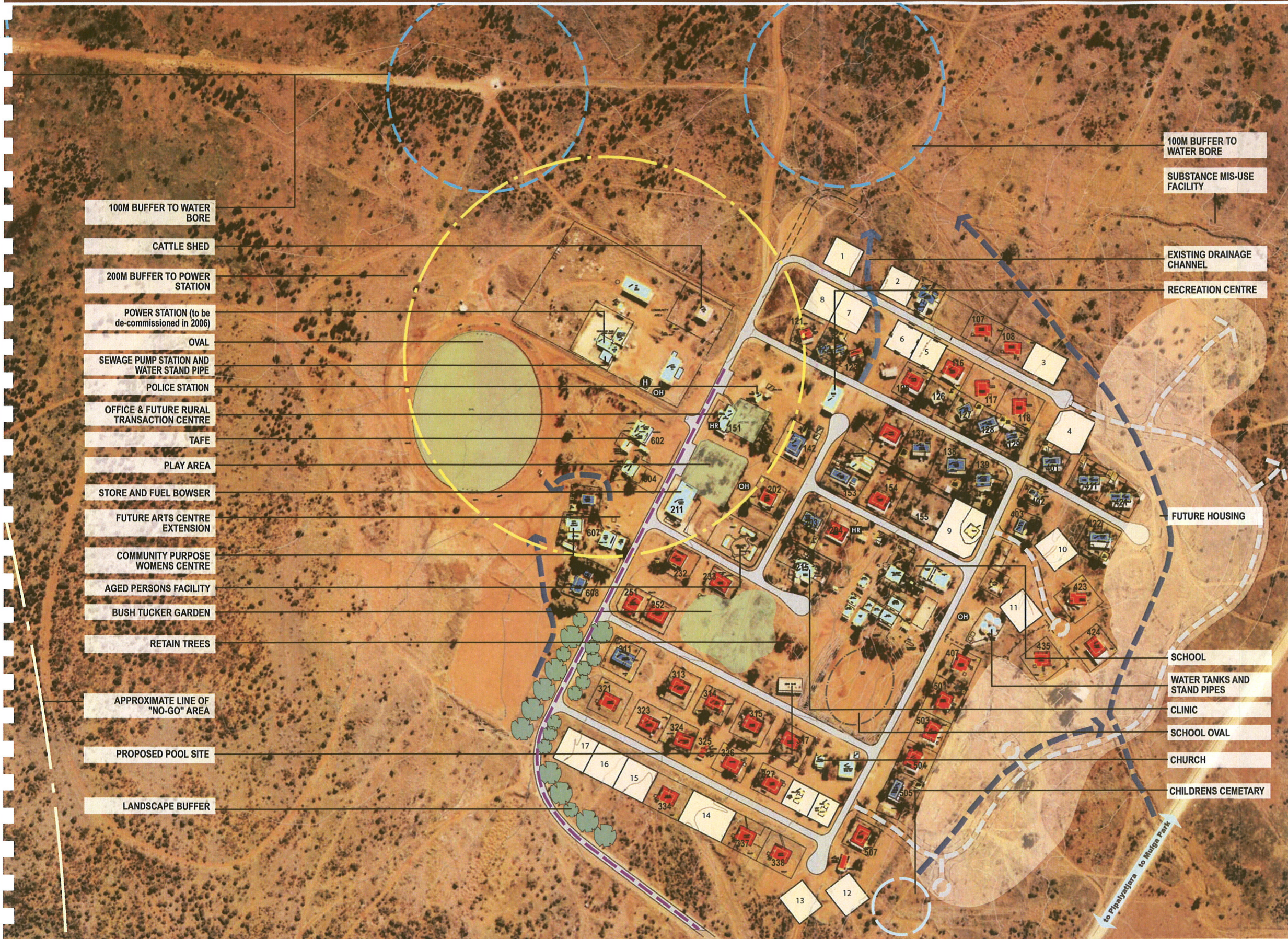
Stage 5 – Preparation of Final Structure Plan for Endorsement and Approval

Prior to returning to the APY Lands, copies of the revised drafts of the Plans were sent to the communities for consideration. These plans incorporated changes suggested during the March visit.

At the APY Executive meeting held at Mimili on 3 May 2006 the project team provided an update on progress of the Community Structure Plans to the representatives from the communities within the APY Lands. The meeting also had in attendance Ken Newman the General Manager of APY and other APY staff members and a representative from AP Services.

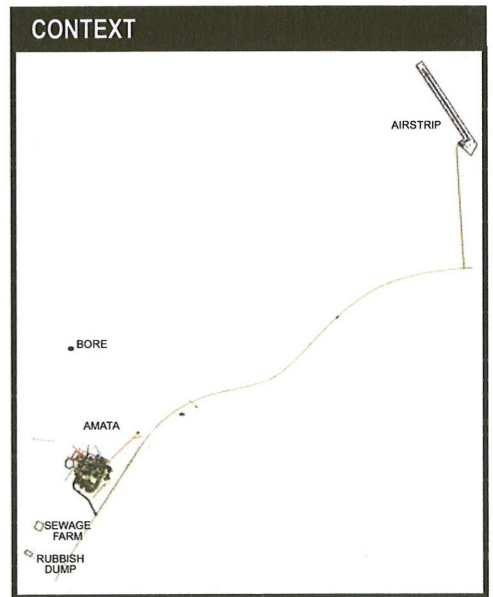
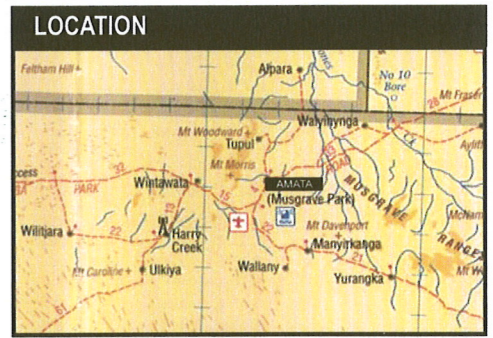
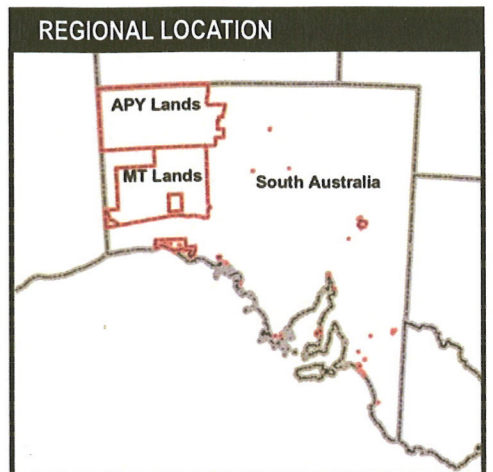
The following matters were discussed at the meeting:

- Explanation of why Community Structure Plans have been prepared for Pukatja, Kanpi, Nyapari, Amata, Pipalyatjara and Watarru.
- An overview of the process that has been undertaken for preparation of the Community Structure Plans.
- Identification of the major features of the plans.
- Future Community Structure Plans for Yunyarinyi, Iwantja (Indulkana) and Mimili.



- 100M BUFFER TO WATER BORE
- CATTLE SHED
- 200M BUFFER TO POWER STATION
- POWER STATION (to be de-commissioned in 2006)
- OVAL
- SEWAGE PUMP STATION AND WATER STAND PIPE
- POLICE STATION
- OFFICE & FUTURE RURAL TRANSACTION CENTRE
- TAFE
- PLAY AREA
- STORE AND FUEL BOWSER
- FUTURE ARTS CENTRE EXTENSION
- COMMUNITY PURPOSE WOMENS CENTRE
- AGED PERSONS FACILITY
- BUSH TUCKER GARDEN
- RETAIN TREES
- APPROXIMATE LINE OF "NO-GO" AREA
- PROPOSED POOL SITE
- LANDSCAPE BUFFER

- 100M BUFFER TO WATER BORE
- SUBSTANCE MIS-USE FACILITY
- EXISTING DRAINAGE CHANNEL
- RECREATION CENTRE
- FUTURE HOUSING
- SCHOOL
- WATER TANKS AND STAND PIPES
- CLINIC
- SCHOOL OVAL
- CHURCH
- CHILDRENS CEMETARY



LEGEND

- Community Houses
- Other Houses
- Non-Residential Buildings
- Serviced House Sites
- Future Housing Area
- Open Space
- Sealed Roads
- Creeks / Waterways / Drainage Lines
- Power Station Buffer (200m)
(Not suitable for Residential Development)
- Water Bore Buffer (100m)
- H Hydrant
- HR Hose Reel
- OH Overhead Water Point
- Heavy Vehicle Route

Adoption:
 Adopted by The Amata Community Council, held on 2006.
 Chairperson: *[Signature]* MSO

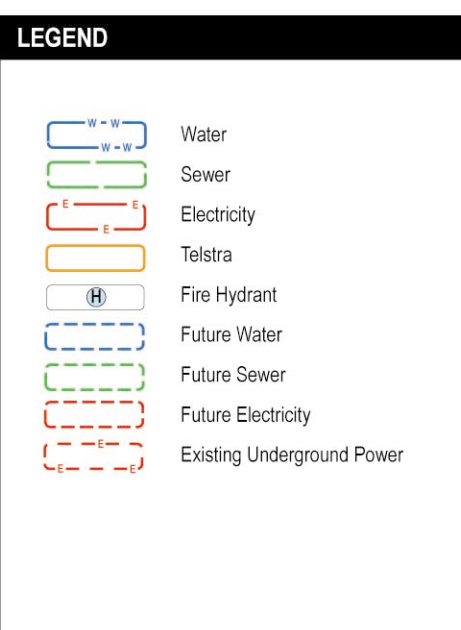
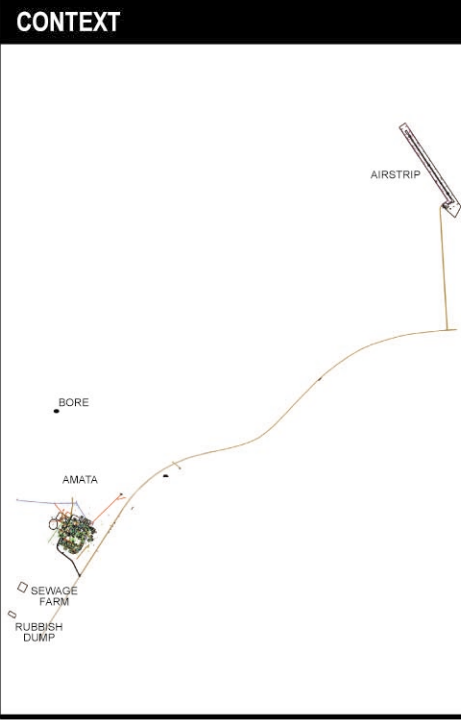
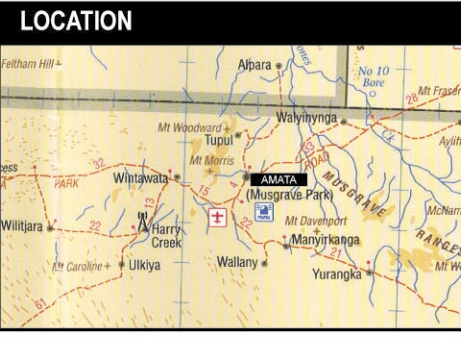
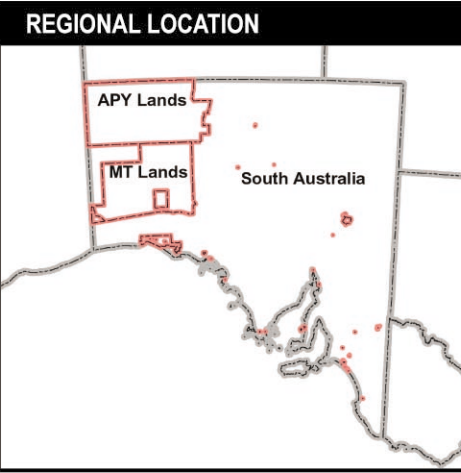
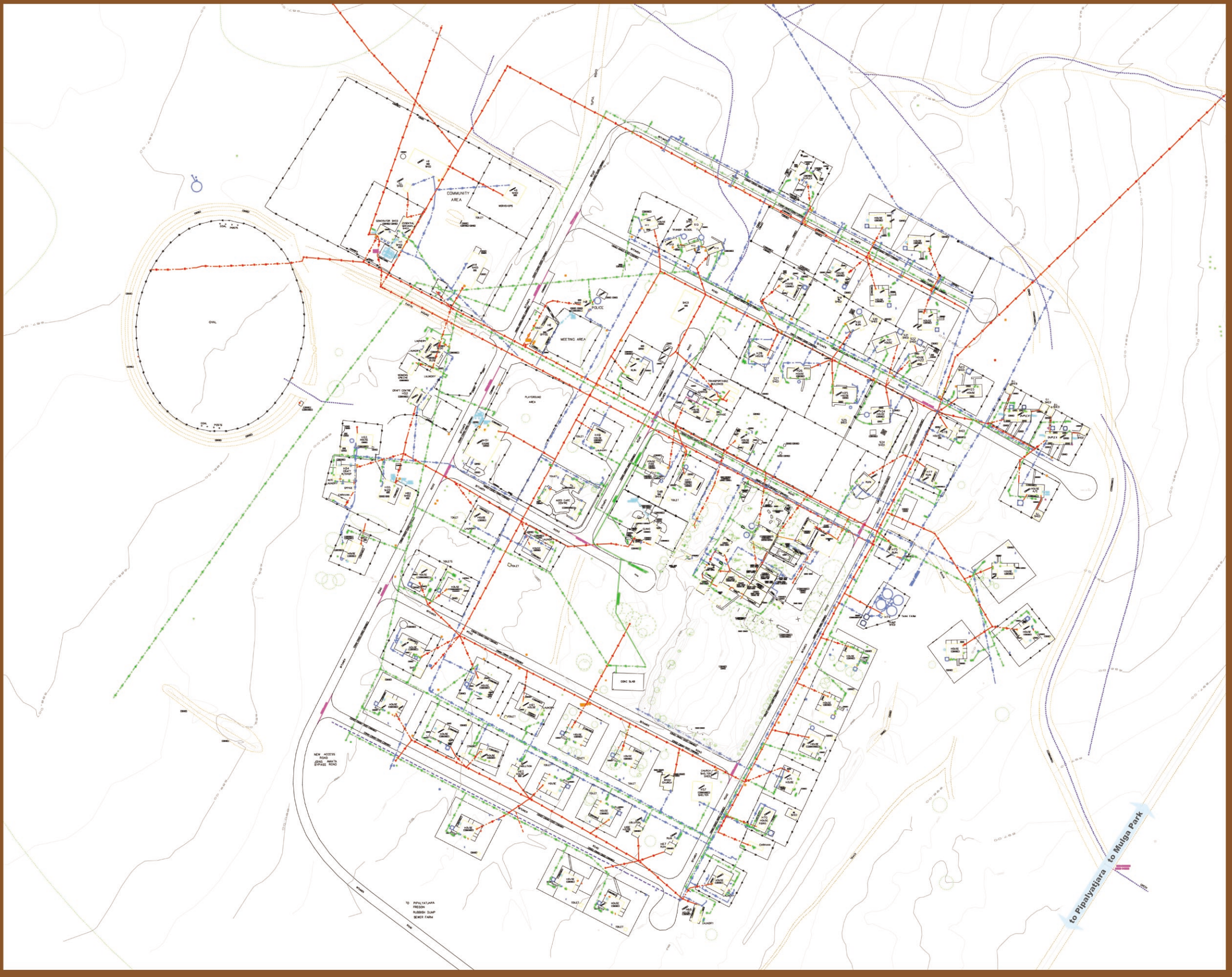
Endorsement
 APY Executive hereby endorses The Amata Community Structure Plan No.1, dated 2006, as a guide for development to ensure proper and orderly planning within the community area.
 Chairperson: *[Signature]* General Manager

Amata - APY Lands, S.A.
COMMUNITY STRUCTURE PLAN No. 1



TAYLOR BURRELL BARNETT
 Town Planning and Design
 187 Roberts Road Subiaco
 Western Australia 6008
 Telephone: (08) 9382 2911
 Facsimile: (08) 9382 4526
 admin@tbbplaning.com.au

d: 3 Jan 2008 | p: 05/019/010sp | s: 1:2000@A1



Amata - APY Lands, S.A.

SERVICES PLAN



TAYLOR BURRELL BARNETT
 Town Planning and Design
 187 Roberts Road, Subiaco
 Western Australia 6008
 Telephone: (08) 9482 2911
 Facsimile: (08) 9482 2166
 admin@tbbplanning.com.au

d: 9 March 2006 | p: 05/019/010s | s: 1:3,000@A3