



COAL of AFRICA LIMITED

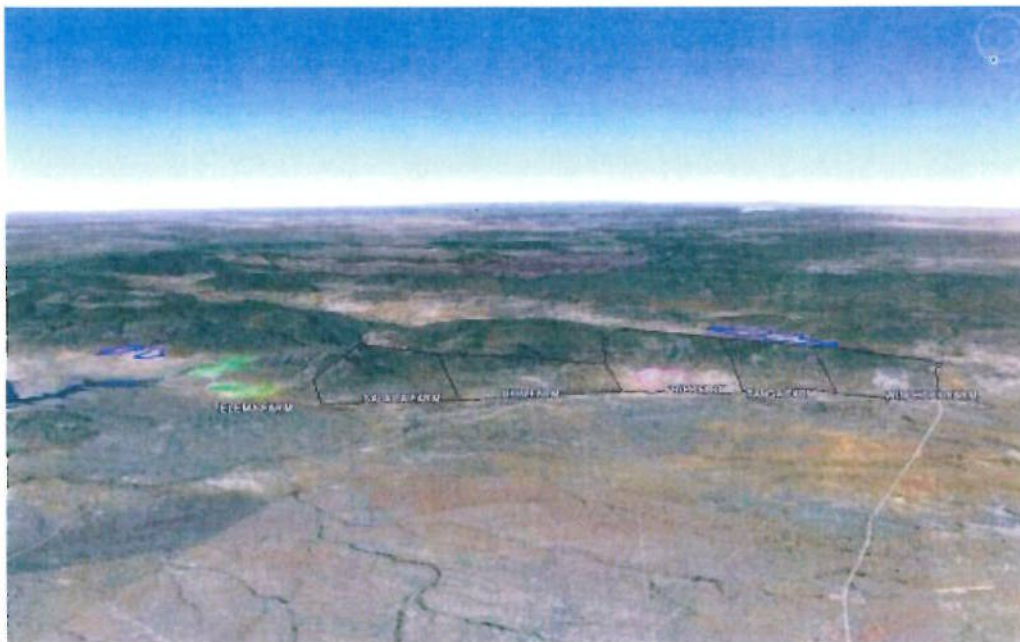
EXECUTED BY

BAOBAB MINING AND EXPLORATION (PTY) LTD

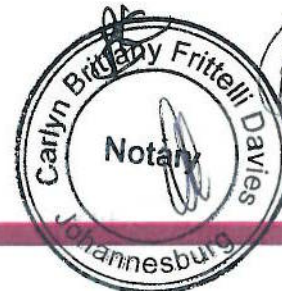
MAKHADO COLLIERY

NAME OF APPLICANT:	COAL OF AFRICA LIMITED
APPLICATION REFERENCE:	LP30/5/1/2/2/204MR

SOCIAL AND LABOUR PLAN (SLP)



July 2013
REVISION



1 SECTION 1: PREAMBLE (REGULATION 46 A)

1.1 Name of the company/applicant	Coal of Africa Limited Registration Number 008905388	
1.2 Name of mine/ production operation	Makhado Colliery	
1.3 Physical Address	2nd floor, Gabba Building, The Campus, 57 Sloane Str, Bryanston, 2021	
1.4 Postal Address	PO Box 69517, Bryanston, 2021	
1.5 Telephone Number	+27 (0) 11 575 4363	
1.6 Fax Number	+27 (0) 86 564 1335	
1.7 Location of mine or production operation	The Makhado Colliery is situated within the Makhado Local Municipal area within the Vhembe District of Limpopo Province. The mine is situated in the Soutpansberg Coal field approximately 30km from Louis Trichardt and 55km from Musina. See locality map as Annexure 1.7.	
1.8 Commodity	coal	
1.9 Life of mine	16 years	
1.10 Financial Year	February	
1.11 Reporting Year	February	
1.12. Responsible person	Mr Baldwin Khosa	
1.13 Geographic origin of employees (mine community and labour sending areas).	(a) Mine Community	(b) Labour Sending Area
	Province	Province
	Limpopo	Limpopo
	District Municipality	District Municipality
	Vhembe District Municipality	Vhembe District Municipality
	Local Municipality	Local Municipality
	Makhado Local Municipality	Makhado Local Municipality

See Appendix 1 for a locality map

2 SECTION 2: HUMAN RESOURCE DEVELOPMENT PROGRAMME (REGULATION 46 (B))

2.1 COMPLIANCE WITH SKILLS DEVELOPMENT LEGISLATION

Name of SETA.	Mining Qualifications Authority (MQA)
Registration number with the relevant SETA.	L070771995
Has your company appointed a Skills Development Facilitator? If yes provide name	Santa van Wyk
To which institution have you submitted your workplace skills plan?(i) Department of Labour (ii) Mining Qualifications Authority (iii) Mine Health and Safety	(i) Department of Labour (ii) Mining Qualifications Authority

An integrated Human Resource Development (HRD) Programme has been designed to maximise the productive potential of the human resource component of the Makhado Project through:

- A Skills Development Plan;
- A Career Progression Plan;
- A Mentorship Plan;

- Internship and Bursary Plans, and
- Effective and legally compliant Employment Equity Plan.

The primary objective of the HRD is to ensure the availability of mining and production operation specific skills and competencies of the workforce at various stages of the mining lifecycle; as well as providing employees with portable skills that the employees can utilise outside the mining industry.

The current programmes will be extended in respect of its five-year plan to address the following:

- ABET training
- Skills programmes
- Learnerships

The primary focus of the Skills Development Plan for the the Makhado project will be on improving access to quality education and providing skills that will increase the employability, self-employability or mobility of employees in the workplace and ensure sustainable employment.

This plan will focus on equipping employees with skills which will promote their progression in the minerals industry and development into other fields and sectors according to their aspirations.

The following plans are envisaged:

2.2 FORM Q - SKILLS DEVELOPMENT PLAN - REGULATION 46 (B) (I) IN CONJUNCTION WITH REGULATION 11 (1) G

2.2.1 Skills Development Plan (Form Q)

The labour plan is estimated for year 2 when operating staff will be recruited, the numbers as well as education levels will be confirmed once recruitment is underway. It is expected that the mine will employ 1106 people at steady state, estimated to be reached in year 7.

Band	NQF level	Classification system	Male				Female				Total	
			A	C	I	W	A	C	I	W	Male	Female
General Education and Training (GET)	1	No schooling									0	0
		Grade 0/Preschool									0	0
		Grade 1/Sub A									0	0
		Grade 2/Sub B									0	0
		Grade 3/Std 1/ABET 1									0	0
		Grade 4/Std 2									0	0
		Grade 5/Std 3/ABET 2									0	0
		Grade 6/Std 4	45				5				45	5
		Grade 7/Std 5/ABET 3	45				5				45	5
		Grade 8/Std 6	45				5				45	5
		Grade 9/Std 7/ABET 4	30				4				30	4
Further Education and Training (FET)	2	Grade 10/Std 8/N1	7			4	1			1	11	2
	3	Grade 11/Std 9/N2	6			3	1				9	1
	4	Grade 12/Std 10/N3	6			2	1			1	8	2
Higher Education and Training (HET)	5	Certificates / Diplomas	2			2	1				4	1
	6	First degrees/ Higher Diplomas	2			2	1				4	1
	7	Honours/Masters	1			1					2	0
	8	Doctorates									0	0
Total			189	0	0	14	24	0	0	2	203	26

2.2.2 Training Programmes to be offered through Skills Development Programme

- ABET
- Core Business Training
- Learnerships (internal)
- Learnerships (external) An ABET programme will be targeted initially at the community and those needs, focused at an ABET Category 1 and 2, and then upon commencement of the construction at the project, employees within Category 4 to 8 will be targeted. The socio-economic study of both the Municipal and the project area reveals that the education levels are very low. Only 17% of the economically active population in the project area is in possession of a Grade 12 certificate, while only 1% have a higher education qualification.

Please find further information on how this will be attained in Appendix 2.

2.2.3 Learnerships (Internal)

Thirty four learnerships will be provided during the SLP period. Please find further information on how this will be attained in Appendix 2.

2.2.4 Learnerships (External)

Please find further information on how this will be attained in Appendix 2.

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2.2.5 Artisans Training

This will form part of the Competencies of the Skills Development Centre and will be implemented within that programme.

Please find further information on how this will be attained in Appendix 2.

2.2.6 School support and post matric programmes

Field/ area of training	Targets and timelines					
	Note: Below, in year 1,2,3,4,5 put the actual calendar timelines					
	2015	2016	2017	2018	2019	Total budget
After school bridging programme		2	4	5	5	
Total number		2	4	5	5	
Budget		R 30 000.00	R 60 000.00	R 75 000.00	R 50 000.00	R 215 000.00

Please find further information on how this will be attained in Appendix 2.

2.3 FORM R: HARD-TO-FILL VACANCIES

Occupational level	Job Title of Vacancy	Main Reason for being unable to fill the vacancy
Top management	<i>General Managers</i>	<i>Shortage within the industry</i>
Senior Management	<i>Manager Production Technical Manager Mineral Resources Manager</i>	<i>Shortage within the industry</i>
Professionally qualified and experienced specialists and mid-management	<i>Mining Engineers Electrical & Mechanical Engineers Processing Engineers Geologists Surveyors Environmental professionals</i>	<i>Shortage within the industry confirmed by local skills assessment and MQA sector skills audit</i>
Skilled technical and academically qualified workers, junior management, supervisors, foreman and superintendents	<i>Artisans Instrumentation technicians Instrumentation mechanics Environmental professionals Health Professionals</i>	<i>Shortage within the industry confirmed by local skills assessment and MQA sector skills audit</i>
Semi-skilled and discretionary decision making		
Unskilled and defined decision making		

2.4 CAREER PROGRESSION (PATH) PLAN (REGULATION 46 (B) (II))

The career progression (path) plan details how the Colliery would address the career developmental needs and interests through identifying possible routes to enable a change from one role or position to another, by defining competencies, skills and experiences required by the various job categories.

Individuals will be provided with the opportunity to progress from lower skilled working levels to higher skilled and management levels as demonstrated by the table set out below, which shows the Starting Level of an employee, the process by which s/he can move to a higher level, and the status of such higher level. Some employees will start above the lowest level by virtue of experience and/ or training.

The tables below show the typical career paths for individuals entering the Engineering, Coal Processing and Mining streams.

2.4.1 Provide career development matrices of each discipline

A career progression plan aims to illustrate a career path indicating possible routes to move or change from one role or position by defining competences such as skills and experience required by the various job categories. Makhado Colliery has develop career path matrices in line with the current planned organigram. The matrix for each occupation will inform the mine and its employees about options for career progression. These career paths will be confirmed once development of the mine commence.

Please find attached as Appendix 3 the career path matrices.

2.4.2 Provide a comprehensive plan with targets, timeframes and how the plan would be implemented

Career pathing at Makhado Colliery consists of career paths which indicate possible routes to move or change from one role or position to another within a specific discipline. The movement could either be to a position on the same level or a position on a higher level. The career path will identify opportunities for people to excel and explain what is required to move forward in the company, based on the company's strategy. Career paths will be used to create short-term and long-term career plans for individuals, or to prepare for transitional changes or skill shortages that might occur in the

future. The paths will also be used during selection and recruitment, training and development, and talent management. The process will involve determining both the role potential and capacity requirements to enable delivery against key performance areas. In addition, the roles described in the career path will cover what is expected of an employee. This role description will provide information regarding the role title, general information about the department, nature of the appointment, grade, profile description, required abilities, work outputs, performance indicators, descriptions of tasks, role decisions and reporting relationships, as well as internal and external interfaces and their relationship to the role.

Individual Performance Agreements

Decisions on individual career paths will be based on Individual Performance Agreements (IPAs) which are career plans that would have been agreed between the manager/supervisor and the employee. An IPA will comprise:

- Roles and competencies;
- Barriers to performance; and
- Follow-up of review cycle.

With regard to future HDSA career pathing, Makhado Colliery intends to ensure that the necessary training and exposure is provided in alignment with the career pathing of identified HDSAs. The mine will:

- Identify critical positions;
- Establish role descriptions for all critical positions;
- Identify all the requirements of the role descriptions;
- Implement HDSA training;
- Formulate career paths to critical positions where shortages are anticipated; and
- Implement formal career planning for potential candidates.

Individual Development charters

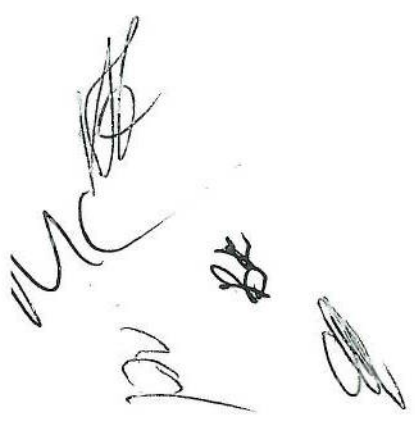
Makhado Colliery will produce competency profiles and skills grids for each discipline. Individual Development Charters (IDCs) for each employee will be completed in line with Coal of Africa Limited performance management policy to be developed.

Employees in the Paterson D and E Bands will complete their IDCs as part of their induction programme, after goals and key performance areas have been agreed upon. These IDCs will then need to be signed off by their immediate supervisors in a consultative process. As soon as departments are established with heads of departments on site, formal IDCs will be developed for the lower occupation levels. The strategy for future HDSA career pathing is dependent on the job position's Paterson Band grade:

A provisional Comprehensive plan contained in table H is attached in Appendix 3.

2.5 MENTORSHIP PLAN (REGULATION 46 (B) (III))

The strategy of the Colliery is to firstly identify potential mentors, and provide training to equip them with the necessary skills to mentor candidates identified. 2014 would be utilised for this training, with the mentorship programme implemented in 2015.



2.5.1 Provide a detailed plan with timeframes

	Mentoring Programmes	Career deliverables	Duration	Target		Gender	
				HDSA	Non-HDSA	Male	Female
2014	<i>Mentorship Development Programme</i>	<i>Train the Trainer</i>	<i>3 months</i>	<i>20</i>		<i>10</i>	<i>10</i>
2015	<i>Core business fields, operators & artisans</i>	<i>Increase productivity</i>	<i>6 months</i>	<i>25</i>		<i>10</i>	<i>15</i>
2016	<i>Core business fields, operators & artisans</i>	<i>Increase productivity</i>	<i>6 months</i>	<i>120</i>		<i>20</i>	<i>30</i>
2017	<i>Core business fields, operators & artisans</i>	<i>Promotion</i>	<i>6 months</i>	<i>150</i>		<i>20</i>	<i>30</i>
2018	<i>Core business fields, operators & artisans</i>	<i>Promotion</i>	<i>6 months</i>	<i>150</i>		<i>20</i>	<i>30</i>

Please refer to Appendix 4 for further background information on the planned mentorship programme.

2.6 BURSARY AND INTERNSHIP PLAN

2.6.1 Bursaries to be awarded (Internal)

Bursary Field	Targets and timelines									
	<i>Note: Below, in year 1,2,3,4,5 put the actual calendar timelines</i>									
	2015	2016		2017		2018		2019		Total budget
	New intake	New intake	Cont.	New intake	Cont.	New intake	Cont.	New intake	Cont.	
To be determined on internal assessment	<i>0</i>	<i>0</i>	<i>0</i>	<i>2</i>	<i>0</i>	<i>0</i>	<i>2</i>	<i>0</i>	<i>0</i>	
Total number	<i>0</i>	<i>0</i>	<i>0</i>	<i>2</i>	<i>0</i>	<i>0</i>	<i>2</i>	<i>0</i>	<i>0</i>	
Budget	<i>R 0.00</i>	<i>R 0.00</i>		<i>R 100 000.00</i>		<i>R 100 000.00</i>		<i>R 0.00</i>		<i>R 200 000.00</i>

Please refer to Appendix 5 for further background on how the plan will be implemented

2.6.2 Bursary to be awarded (external)

CoAL will launch the Bursary Programme for the Makhado Project which will offer 10 bursaires to the top 10 students in the project area. A roadshow will be embarked upon to all the schools within the project area to present the Bursary Programme, and to inspire learners.

The initial programme will not dictate the type of training courses to be implemented, but will make suggestions and provide guidance toward that end.

Bursary Field	Targets and timelines									
	Note: Below, in year 1,2,3,4,5 put the actual calendar timelines									
	2015	2016		2017		2018		2019		Total budget
	New intake	New intake	Cont.	New intake	Cont.	New intake	Cont.	New intake	Cont.	
Geology										
Environmental										
Engineering										
HR/Finance										
Other	0	0	10	2	10	2	12	2	14	
Total number	0		10	2	10	2	12	2	14	
Budget	R 0.00	R 1 200 000		R 1 440 000		R 1 660 000		R 1 800 000		R 6 100 000

Please refer to Appendix 5 for further background on how the plan will be implemented

2.6.3 Internships

Internship Fields	Targets and timelines.					
	Note: Below, in year 1,2,3,4,5 put the actual calendar timelines					
	2014	2015	2016	2017	2018	Total Budget
Geology			1		1	
Environmental						
Engineering			1			
HR/Finance			1			
Safety						
Other						
Total number			3		1	
Budget			R 45000.00		R 15 000.00	R 60 000.00

Please refer to Appendix 5 for further background on how the plan will be implemented

2.7 EMPLOYMENT EQUITY PLAN

2.7.1 Form S: Employment Equity Statistics

Form S indicating the planned Employment Equity Statistics by Year 2, when employment for operations commences. This Form will be updated annually and submitted to DMR. It is expected that the mine will employ 1106 people at steady state, estimated to be reached in year 7.

Occupational levels	Male				Female				Total	Disabled	
	A	C	I	W	A	C	I	W		Male	Female
Top Management (Board)									0		
Senior Management (Exco)	1			1					2		
Middle Management	4			4	2				10		
Junior Management	19			9	3			2	33		
Core Skills	165			0	19				184		
Total Permanent	189			14	24			2	229		
Non-Permanent employees											

Please refer to Appendix 6 for further information on Women in Mining and HDSA participation.





11

2.7.2 Annual HDSA Progressive Targets

Occupational Levels	2013		2014		2015		2016		2017	
		Minimum Progress to be achieved		Minimum Progress to be achieved		Minimum Progress to be achieved		Minimum Progress to be achieved		Minimum Progress to be achieved
Executive Management (Board)	20%	20%	25%	25%	30%	30%	35%	35%	40%	40%
Senior Management (Exco)	20%	20%	25%	25%	30%	30%	35%	35%	40%	40%
Middle Management	30%	30%	35%	35%	40%	40%	40%	40%	40%	40%
Junior Management level	50%	40%	50%	40%	50%	40%	50%	40%	50%	40%
Core Skills	60%	15%	60%	20%	60%	30%	60%	35%	60%	35%

Please refer to Appendix 6 for further information on Women in Mining and HDSA participation.

3 SECTION 3: MINE COMMUNITY ECONOMIC DEVELOPMENT

3.1 SOCIAL AND ECONOMIC BACKGROUND INFORMATION (REGULATION 46 (C) (I))

Gender Profile	The age structure of Makhado is relatively young with 73.9% of the residents being younger than 34 years of age. It is important to note that the age group 15-64 represents the main part of the population that is economically active. In this age group males represent 23.2% and females 30.8% of the total population.
Population Profile	The population growth of the Makhado region displayed a positive population growth rate of 1.4%, compared to the national growth rate of 1.04%. With analysis of the population distribution it is evident that migration into the area contributes significantly towards the current growth of the population. Estimated population for the Makhado municipal area is 1,2million people. The project area and affected communities have the following estimated households and population: Fripp farm (Mudimeli, Mulambwane, Nekuvule): 900 households, and 5400 population Makushu: 380 households, and 2280 population Mosholombe: 300 households, and 1800 population Pfumembe: 250 households, and 1500 population Musekwa: 2750 households, and 16500 population (located in 4 main villages) Total: 4,580 households, and 27,480 population
Economic Profile	The main economic sectors in the Makhado area are focussed on agricultural, manufacturing and trade. In the project area the economic sectors include surrounding beef and game farming with their associated tourism activities and approximately 20 km from the area the Tshipise/Nzhelele valley citrus irrigation agriculture.
Education levels	The Makhado Municipal area has relative low education levels. 50% only have primary education. The project area education is equally low. In the project area only 17% of the economically active population has Grade 12, and only 1% achieved Higher Education. Most skills available in the area are elementary.
Employment Profile	The population growth rates tends to be much higher than the economic growth rate, which implies that the economy is unable to produce sufficient employment opportunities to absorb new entrants to the labour market.
Income Profile	The largest part of the economically active population in Makhado Municipal area earns less than R1,000 per month. In the project area 57% of the economically active population earns less than R1,000 per month.
Infrastructure	Roads: Access to rural villages as well as the internal street systems in the rural areas is in a bad condition. Schools available in the local villages: Hospitals and Clinics available: Community Halls available: Other facilities
Housing	Housing in the affected villages are well built traditional or conventional structures, limited corrugated iron structures exist and in most cases are only visible as an additional structure on stands. Housing in the municipal area is under more strain. About 16 807 households stay in houses that are below RDP standard. Current allocations are insufficient to meet target dates as it will take approximately 20 years to eradicate the current backlog. The current population growth of 3.1% will worsen the situation. Most of the population in Makhado resides in the rural areas or in informal settlements.



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Water and Sanitation	The Vhembe District municipality is the water service authority for the Municipality. A service level agreement has been signed with the District and the municipality has the status of a water services provider. Most rural communities do not have access to water at household level. The provision of water is limited and the supply does not meet the required minimum RDP standards for water provision. The water backlog is estimated at approximately 38 204 households receiving water below the RDP level. In the project area, communities have access to basic water supply, but the service is regularly disrupted and not easily accessible by all community members. The communities are served with communal stand pipes/taps and water from boreholes. Water systems have broken down and are in need of refurbishment. Quality of water sources are not good, water has high sulphates. Most households in the vicinity of the project have pit latrines, but some do not have access to basic sanitation.
Electricity	ESKOM electricity is available in all the affected villages.
Unemployment	In the Makhado Municipal area 49% of the economically active population are unemployed; in the project area the unemployment figure is substantially higher at 68%.
Other (Specify)	Health services / facilities are limited in the affected communities. The prevalence of HIV/AIDS in the Makhado and project area is currently low (9% of population).

3.2 KEY ECONOMIC ACTIVITIES (REGULATION 46 (C) (II))

3.2.1 Provide the key economic activities of the mining community

Activity	Percentage of Employment
Agriculture	16%
Mining	1%
Manufacturing	7%
Electricity & Water	0%
Construction	5%
Wholesale	15%
Transport & Communication	2%
Finance	10%
Services	44%
Total	100%

3.2.2 Provide names of other mining companies that operate around your area of operation.

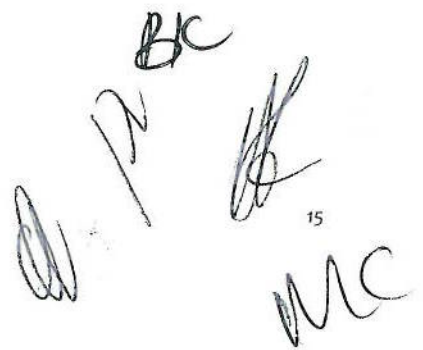
Name of Mining Company	Commodity
Exarro Tshikondeni mine	Coking coal
Copper mine	Copper
Salt pans	Salt
Aggregate mine	Aggregate & Sand

3.3 NEGATIVE IMPACT OF THE MINING OPERATION

Impact	Yes	No	If Yes, how will you address it?
Relocation of people		X	Monitoring
Exhumation of graves	X		Exhumation & reburial
Influx of people	X		Influx & land use management
Air quality impact - dust	X		Dust suppression
Blasting vibration impact	X		Pre-blast survey
Noise increase	X		Monitoring against standards

3.4 PROVIDE NEEDS OF THE AREA IN ORDER OF PRIORITY

General	Specific	Type of need	Municipality
Education	Afterschool support to Grade 10 - 12 students	Infrastructure & Service	Makhado Local Municipality
Water supply	Reliability, quantity and service distribution	Infrastructure	Makhado Local Municipality
Road	Upgrade of access district road	Infrastructure	Makhado Local Municipality
Road	Internal streets in villages	Infrastructure	Makhado Local Municipality
Employment	Job creation opportunities	Economic Development	Makhado Local Municipality
Business	Business opportunities	Economic Development	Makhado Local Municipality



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 15

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3.5 PROJECT PLANS

Please find attached the most recent consultation records. Records exist from 2010 where the needs assessments were conducted, but the results and final SLP was discussed recently with community representatives and thereafter presented to the broader community in June and July 2012.

Engagement with the Makhado Local Municipality has taken place in 2010 as well as throughout 2011, but due to changes within the municipality, the final SLP has not been workshopped with their various departments. CoAL has requested for such a meeting / workshop and is waiting the soonest date. Upon completion the results will be submitted to DMR.

3.5.1 Project 1: Skills Development Centre

Project Name	The name of the project:		Classification of project			
	District Municipality	Local Municipality	Village name	Project Date	Start	Project End date
Background	Skills Development Centre The education levels within the Makhado Municipal area are very low, with only 50% having primary school education. The education levels of the project area are equally low, with only 17% of the economically active population in possession of a Grade 12 certificate, and only 1% having obtained higher education. The educational needs in the affected communities are high, with many not completing their education, or achieving the results to further their studies. This limits the youth in the communities to access training and/or employment opportunities. New project to be established					
Geographical location of project	Vhembe	Makhado	Mudimeli, Makushu, Mosholombe & Pfumembe	Start 2015	2019	
Output	Key Performance Area	Key Indicator	Performance	Responsible entity (inclusive of all role players)	Quarterly timelines and year	Budget
Planning	Facilitation of agreements, phase 1 implementation	Implementation within 2 months of operation		CoAL	Q1 -2 2015	R 1 150 000
Equipping	Equipment & Furniture complete	Tender Procurement Delivery Installation		CoAL	Q1 2015	R 1 040 000
Implementation	Phase 2 implementation	Expansion of current Operations		CoAL	Q1 2016	R 6 430 000

Project Name	The name of the project:			Classification of project				
	Skills Development Centre			Further Education and Competence Based Training				
Operations	Operational expenses	Annual Operational Report	CoAL	Q1 2017	Q4 2017			R150 000
Management	Project Management	Project Progress Report	CoAL	Q1 2014	Q4 2018			R 1 840 000
TOTAL								R 10 190 000
Cash flow for the project		2015	2016	2017	2018	Total		
Budget								
Classification of jobs	No of jobs to be create	Male Adults	Female Adults	Male Youth	Female Youth	Total		R 10 610 000
Short Term	15	10	2	2	1	15		
Medium Term								
Long Term	10	5	2	2	1	10		
Completion date and exit strategy:								
It is expected that this project will continue for life of mine (16 yrs) and exit will take place in the second and third SLP term								

See further detail in Appendix 8

12



Project Name	The name of the project:		Classification of project				
	Nzhelele North Water Project		Infrastructure				
Medium Term	2	1	0	1		2	
Long Term	0	0	0	0	0	0	
Completion date and exit strategy:							
The project will be handed over to the Vhembe district municipality as Water Services Authority and the Makhado Local Municipality as Water Service Provider.							

See further detail in Appendix 8

 
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3.5.3 Project 3: Community road upgrade

Project Name	The name of the project:		Classification of project				
	Road upgrade project		Infrastructure				
Background	The district road providing access for the local communities to the main economic centres is in such a bad state that limited public transport and/or private transport can utilise the road. The mine is planning the upgrade of a portion of the road for their access, but this will not reach all the communities. The district municipality has already upgraded the portion connecting the communities with the Dzanani economic node (see map). The portion to be upgraded includes a 12km portion between the mine and the district roads.						
	Upgrading of an existing road						
Geographical location of project	District Municipality	Local Municipality	Village name		Project Date	Project End date	
	Vhembe	Makhado	Mudimeli, Makushu, Mosholombe & Pfumembe				
Output	Key Area	Performance Indicator	Key Performance	Responsible entity (inclusive of all role players)	Quarterly timelines and year	Quarterly timelines and year	Budget
Planning	Design & Tender		Preliminary design Community consultation Final design Tendering	CoAL	Q 4 2016		R 726 000
Construction	Construction of road		Road upgrading & resurface construction complete Evaluation of road	CoAL	Q1 - 4 2017 - 2018		R 12 760 000
Hand-over	Hand-over of road		Hand-over to the Vhembe district & Makhado Municipality Monitoring road quality over life of mine	CoAL Vhembe district Makhado LM Communities		Q1-3 2019	R 1 300 000
TOTAL							R 14 786 000
Cashflow for the project	2015	2016	2017	2018	2019	Total	
Budget							
Classification of jobs	No of jobs created	Male Adults	Female Adults	Male Youth	Female Youth	Total	Comments
Short Term	40	15	2	20	3	40	
Medium Term							
Long Term							

Project Name	The name of the project:	Classification of project
Completion date and exit strategy:	Road upgrade project	Infrastructure
The project will be handed over to the Vhembe district municipality and the Makhado Local Municipality.		

See further detail in Appendix 8



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3.6 MEASURES TO ADDRESS HOUSING AND LIVING CONDITIONS (REGULATION) 46 (C) (IV))

3.6.1 Provide the current status of available dwelling for employees;

	Mark (x) the appropriate	Percentage
Hostels		
Own Home	X	100%
Rentals		
Other (specify)		

During the construction period, there will be an accommodation camp to provide temporary accommodation for employees or contract workers involved in the construction period.

Once the project is in its operational phase, it is expected that the majority of the employees will be sourced from the surrounding villages where housing facilities are already in place.

Please refer to Appendix 9 for further information.

3.6.2 Provide the municipality's strategy to address housing

The Makhado municipality has a current housing backlog of 16 807 (IDP 2012-2017), which is addressed through the RDP and the Peoples Housing Project (PHP) policies.

Please refer to Appendix 9 for further information.

3.6.3 Establish the preferred requirements for housing and living conditions of the workforce and the plan should include but is not limited to:

Aspect	Preferred requirements
Promotion of home ownership;	<i>Housing allowances Home ownership support programmes Facilitate Development of Suitable Housing for Purchase in collaboration with the Makhado Local Municipality Communication, Advice and Awareness programmes</i>
Converting hostels into single quarters and family units; and	<i>No hostels present, therefore none needed</i>

Please refer to Appendix 9 for further information.

3.6.4 Housing and living conditions plan over a five year period

TYPE OF ACCOMMODATION	2014	2015	2016	2017	2018
	Baseline	25%	50%	75%	100%
Home ownership	Unknown	25%¹	50%	75%	100%
Family units					
Single Quarters					
Other		25%	0%	0%	0%

Please refer to Appendix 9 for further information.

¹ Referring to all now, non local employees

4 SECTION 4: PROCESSES PERTAINING TO MANAGEMENT OF DOWNSCALING AND RETRENCHMENT

4.1 ESTABLISHMENT OF FUTURE FORUM

Date of Establishment	6 months post mining right
No. of planned meetings per annum	1 - 2 meetings

Please refer to Appendix 10 for further information.

4.2 MECHANISMS TO SAVE JOBS, PROVIDE ALTERNATIVE SOLUTIONS AND PROCEDURES FOR CREATING JOB SECURITY WHERE JOB LOSSES CANNOT BE AVOIDED

The Company will develop strategies to introduce measures that could prevent job loss in the event of circumstances threatening guaranteed employment. Certain processes will be followed when prevailing economic conditions cause the profit-to-revenue ratio of the company to drop below 6% on average for a continuous period of 12 months. These processes will include:

- Consultations – the consultation process in terms of Section 52 (1) of the Act;
- Implementing Section 189 of the Labour Relations Act, 1995 – the process to implement Section 189 of the Labour Relations Act, 1995;
- Notification to the Minerals and Mining Development Board – the notification process to the Board in terms of Section 52 (1) (a) of the Act; and
- Complying with ministerial directive – compliance with the Minister's directive and confirming how corrective measures will be taken.

Please refer to Appendix 10 for further information.

4.3 MANAGEMENT OF RETRENCHMENTS (ATTACH A COPY IN LINE WITH THE TERMS OF SECTION 52(I) OF THE MPRDA AND SECTION 189 OF THE LRA.)

When the mine is to be scaled down (with the possible effect of job losses) or when mining is to cease, the following processes will be followed:

- Consultations – the consultation process in terms of Section 52 (1) of the Act;
- Implementing Section 189 of the Labour Relations Act, 1995 – the process to implement Section 189 of the Labour Relations Act, 1995 which will deal with possible retrenchment details;
- Notification to the Minerals and Mining Development Board – the notification process to the Board in terms of Section 52 (1) (b) of the Act; and
- Communicating possible retrenchments – an effective communication strategy will be followed:
- Informing employees of possible retrenchments;
- Informing other affected parties (sending areas, municipalities, etc.) of the possible retrenchments at the operation; and
- Informing relevant outside parties of the possible retrenchments at the operation.

Please refer to Appendix 10 for further information.

4.4 MECHANISMS TO AMELIORATE THE SOCIAL AND ECONOMIC IMPACT ON INDIVIDUALS, REGIONS AND ECONOMIES WHERE RETRENCHMENT OR CLOSURE OF THE OPERATION IS CERTAIN

Please refer to Appendix 10 for further information.

5 SECTION 5: FINANCIAL PROVISION

	<i>Financial provision for a 5 year period</i>					TOTAL
ITEM	2015	2016	2017	2018	2019	
HUMAN RESOURCE DEVELOPMENT	R 0.00	R 1 200 000	R 1 440 000	R 1 660 000	R 1 880 000	R 6 180 000
LOCAL ECONOMIC DEVELOPMENT	R 2 340 000	R 7 156 000	R 8 350 000	R 12 160 000	R 1 390 000	R 31 396 000
MANAGEMENT OF DOWNSCALING				R 0.00	R 100 000	R 100 000
TOTAL	R 2 340 000	R 8 356 000	R 9 790 000	R 13 820 000	R 3 370 000	R 37 676 000

6 SECTION 6: UNDERTAKING

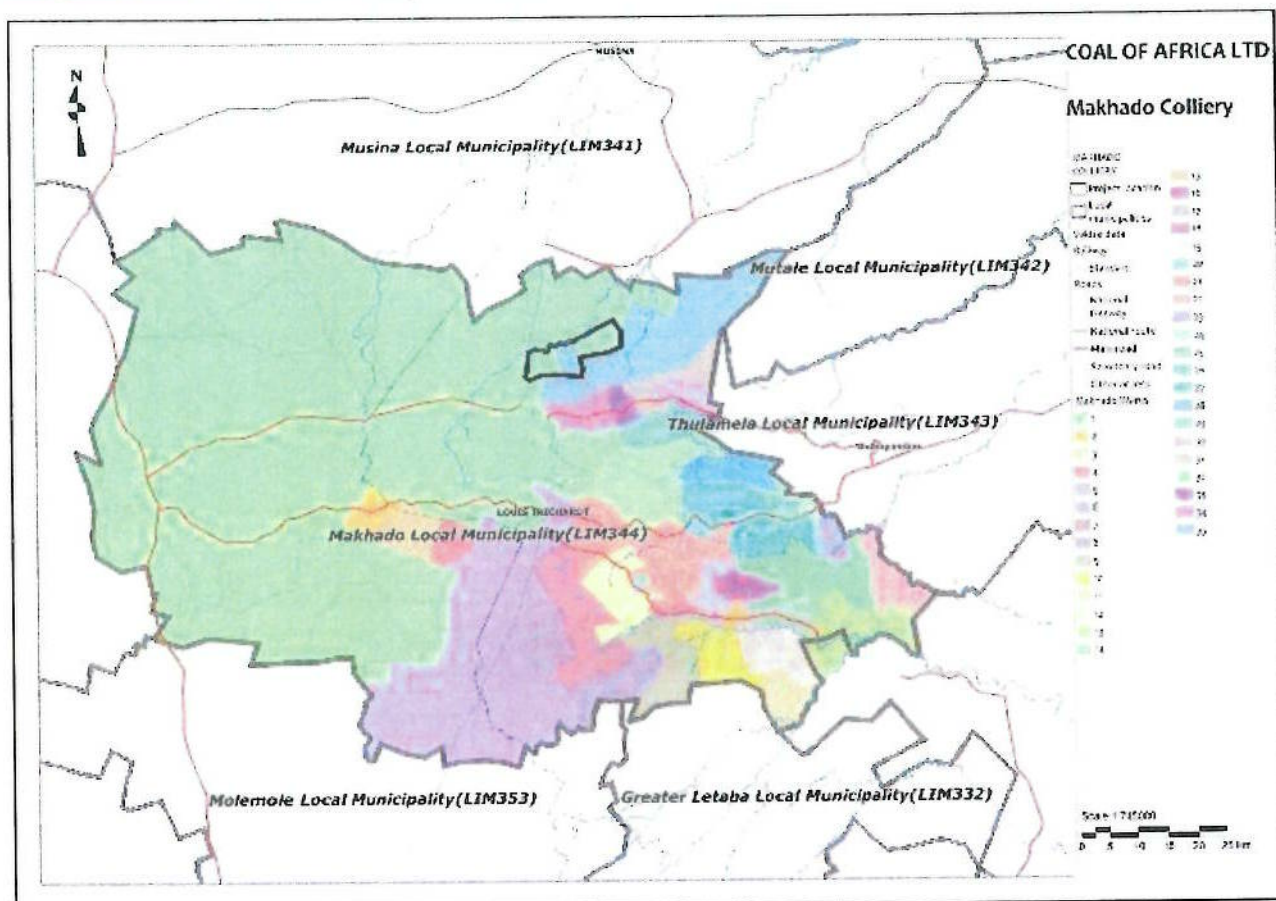
Herewith I, the person whose name and Identity Number is stated below, confirm that I am the Applicant or the person authorised to act as representative of the Applicant in terms of the resolution submitted with the application, and undertake to implement this Social and Labour Plan and adhere to the proposals set therein.

Full Name(s) and Surname	Baldwin Khosa
Identity Number	780502 5529 087

APPENDIXES

BR
CA
PR
MC

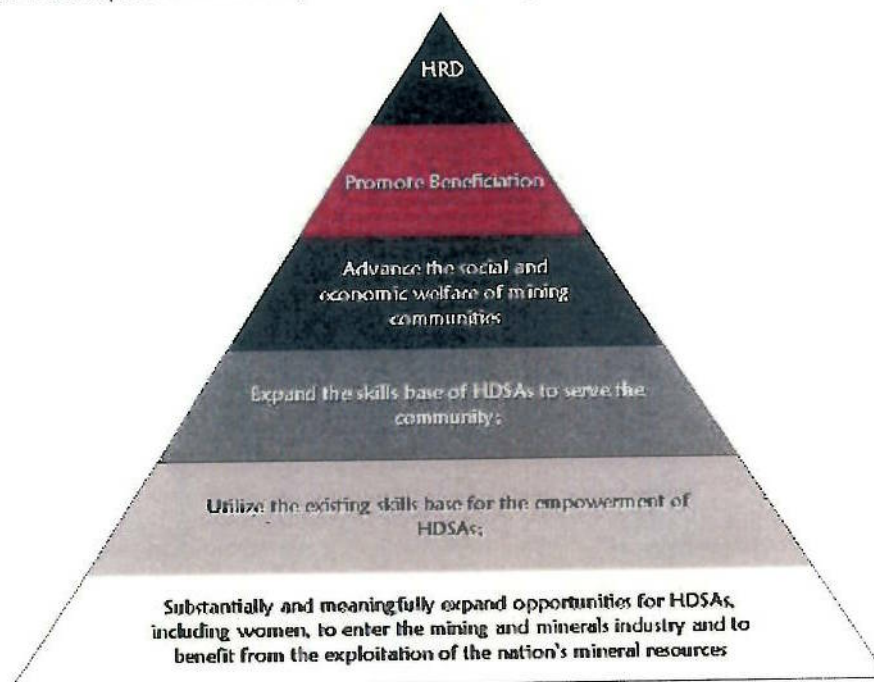
APPENDIX 1: LOCALITY MAP



MC
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APPENDIX 2: SKILLS DEVELOPMENT PLAN

The Human Resource Development related objectives of the Mining Charter are to:



This process will enable the local communities to take up opportunities provided by the Makhado Colliery. This will further be supported through an annual evaluation of the skills levels and the development of a Workplace Skills Plan (WSP). The objectives of skills development at the Makhado Colliery project are to:

- Identify positions as per the manpower plan
- Design and implement an Adult Basic Education and Training (ABET) programme to ensure that employees are granted an opportunity to become functionally literate and numerate
- Provide learnerships and vocational skills development programmes;
- Develop portable skills as mechanisms to mitigate the impact of job losses;
- Improve the employment prospects of Historically Disadvantaged South Africans (HDSAs) through education and training.

Adult Basic Education and Training

Where possible the Makhado Colliery will encourage potential applicants with some level of ABET qualification to apply for posts to assist in promoting a literate workforce. Where this is not possible or seems to limit the opportunities for local, the ABET programmes will include the following:

ACTION	2014	2015	2016	2017	2018
Finalize the anticipated operational needs	X				
Determine local capacity and resources requirements	X				
Identify service provider to conduct assessments and training	X				
Assess employees in terms of skills and competencies gaps		X	X	X	X
Implement ABET training programme		X	X	X	X
Report results to DMR as part of annual SLP reporting		X	X	X	X

Core Business Training

- Coherence with the National Skills Development Strategy: The Makhado Colliery's human resource development strategy and practices will be aligned with the National Skills Development Strategy and relevant national legislation. This will ensure that the Makhado Colliery's strategy is supported by the relevant authorities, particularly the MQA. In terms of this imperative, the mine will maintain a close and co-ordinated relationship with the Mine Qualifications Authority.

- Training facilities: Coal of Africa Limited will endeavour to use existing training centres within the Limpopo Province. An on-site practical training centre may be established if a need arises.
- Talent management programme: Coal of Africa Limited is committed to establish the principles and philosophy of a talent management programme within the business as part of the development of its human resources.

The following implementation plan is envisaged:

ACTION	2014	2015	2016	2017	2018
Develop skills and competency requirements for proposed operation	X				
Develop Workplace Skills Plan (WSP) and submit to DMR	X				
Identification of training facilities	X				
Identify workforce profiles and job requirements		X			
Continuous assessment of employees in terms of skills and competencies gaps		X	X	X	X
Implementation of WSP		X	X	X	X
Annual reporting on WSP		X	X	X	X

Learnerships

A Learnership is a vocational education and training programme that combines structured workplace learning governed by a contract between the employer, an accredited training provider and the learner. At the end of the programme the Learnership will culminate in a qualification registered on the National Qualifications Framework (NQF).

The specific learnership plan will be informed by the skills requirement of the Makhado Colliery (in line with the WSP) as well as the Sector Skills Audit (the forecast of skills scarcity within the industry for the next five years) as released by MQA and employment equity and or women in mining requirements.

Makhado Colliery will utilise a centrally managed Learnership programme. The following action steps will enable Makhado Colliery to achieve the above targets:

- The learnerships will be advertised
- Commitment of 40% HDSAs to be selected for these programmes
- Commitment of 10% of these HDSA learnership will be reserved for women
- Mentorship programmes will be implemented for all learnership candidates

Artisans Training

The following artisan fields will be focussed on:

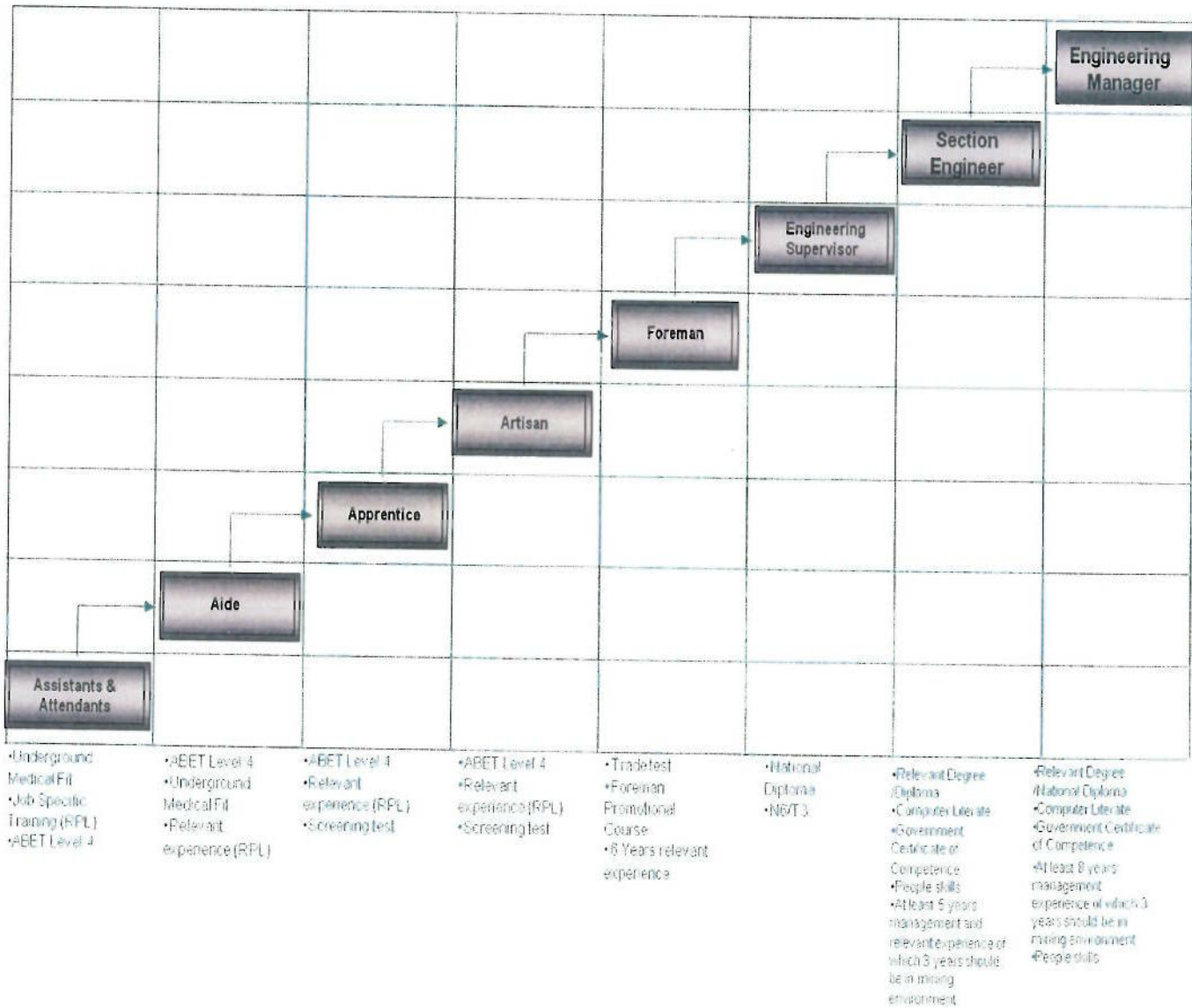
- Fitter and Turner
- Boilermaker
- Electricians

School support and post matric programmes

The schools support and post matric programmes will focus on bridging programmes for Grade 12 learners to access Higher Education.

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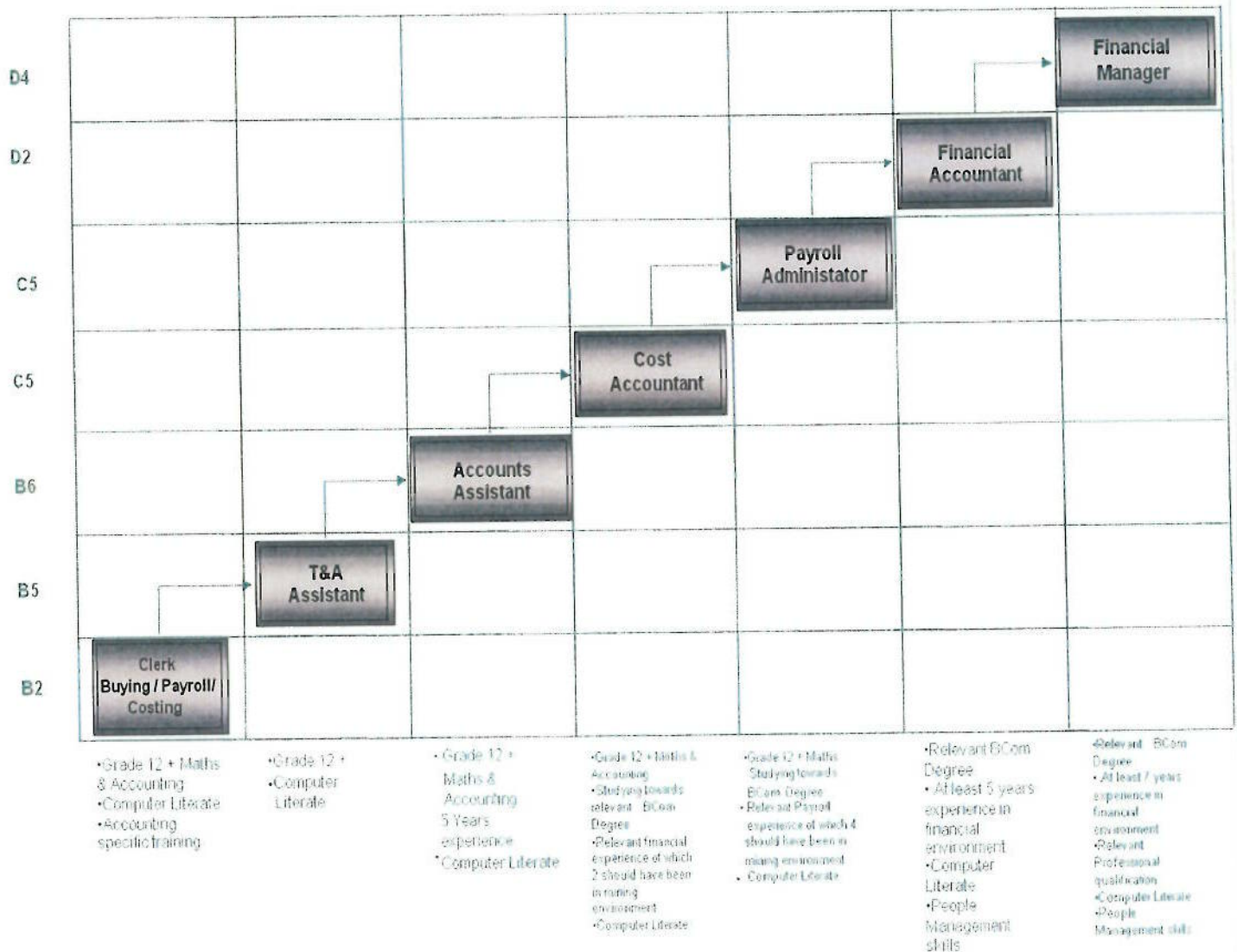
Mining Services : Engineering

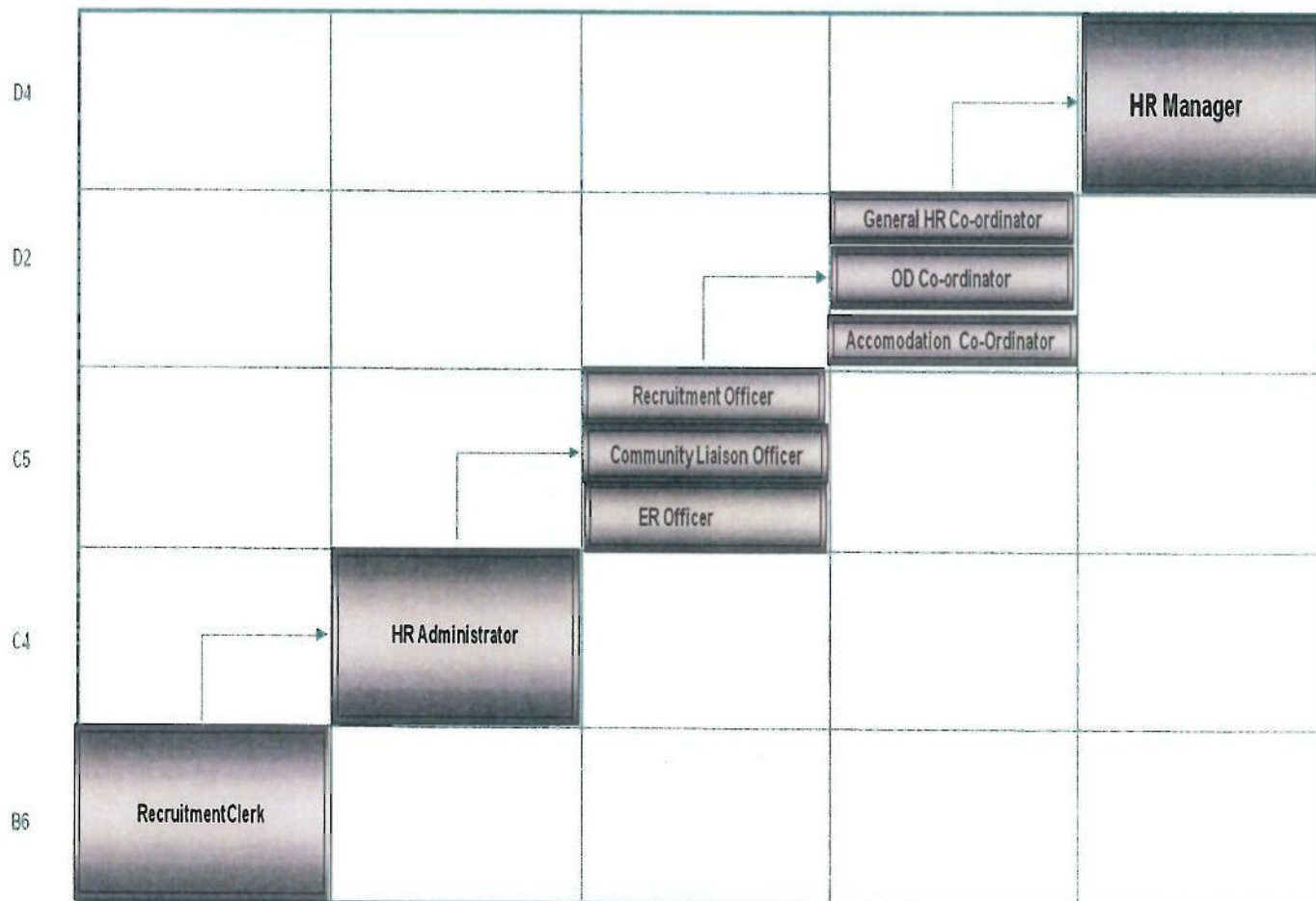






Financial Career Paths





- Grade 12
- Computer literate
- Newly graduated with HR degree/diploma
- Valid Drivers license

- Grade 12
- Computer Literate
- Relevant experience in Unionised environment
- 2 years in core HR functions

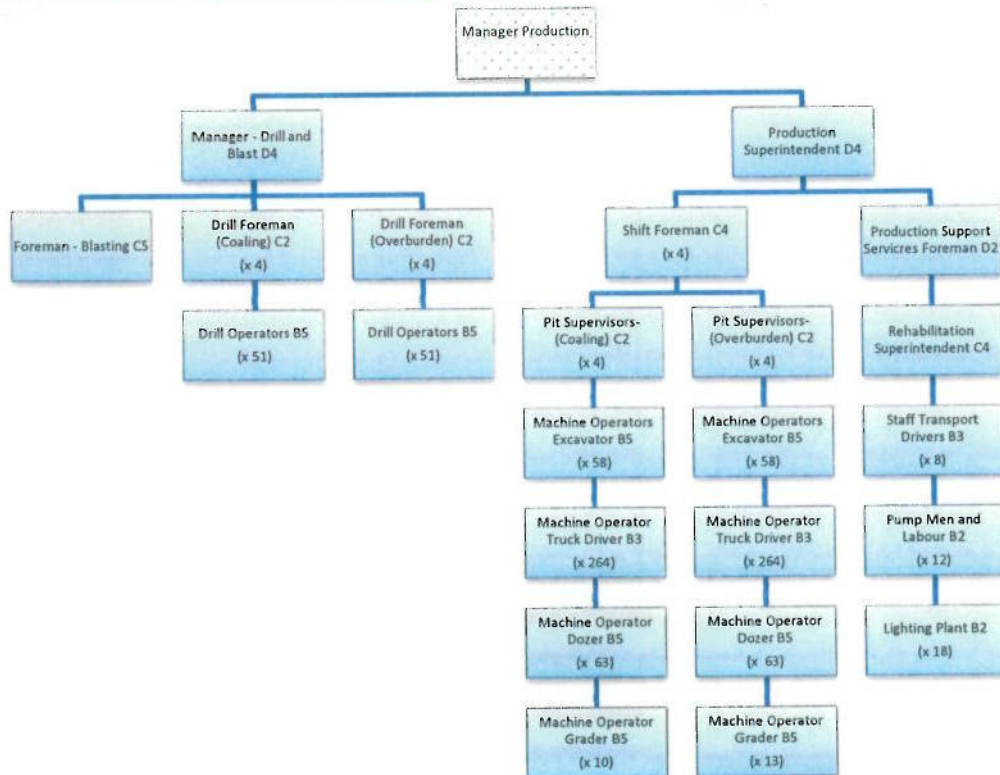
- HR related Degree/diploma
- Relevant Experience
- Computer literate
- Relevant experience in Unionised environment
- 3 years in core HR functions
- Knowledge and experience of relevant legislation
- Competent in functional HR/HRD systems

- HR related Degree/diploma
- Relevant Experience
- At least 4 years management experience
- Computer literate
- Relevant experience in Unionised environment
- Knowledge and experience of relevant legislation

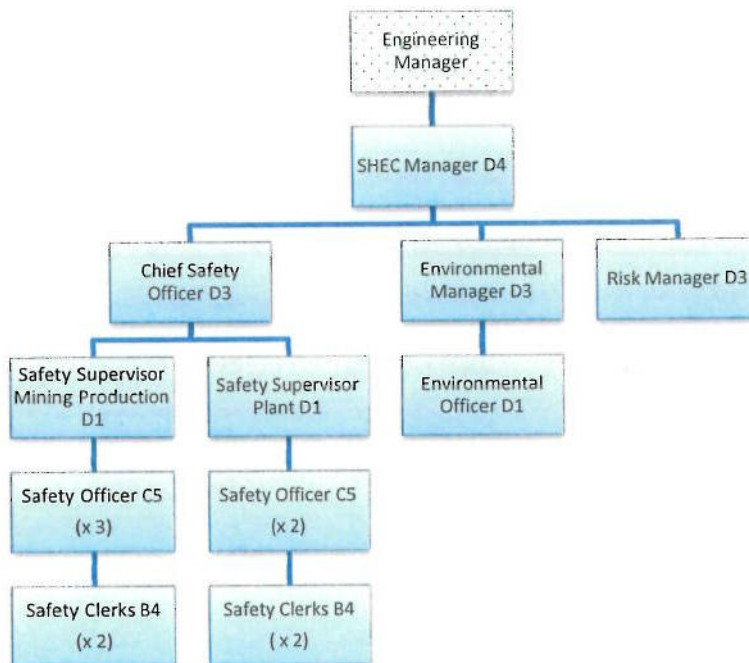
- HR related Degree/diploma
- Relevant Experience
- Computer literate
- Relevant experience in Unionised environment
- At least 8 years management experience of which 3 years should be in mining environment
- Knowledge and experience of relevant legislation

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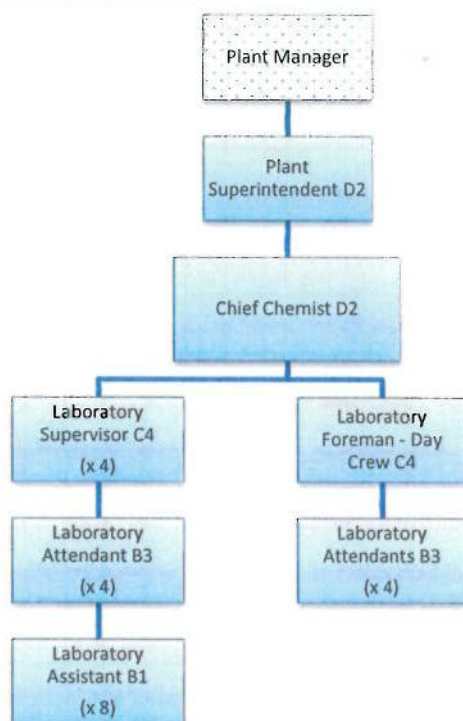
Technical Services and Mine Production Career paths



Safety, Health, Environment Services Career Paths



Beneficiation Plant Operations Career Paths



B/C
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Table H: Comprehensive Plan



APPENDIX 4: MENTORSHIP PLAN

Mentorship is acknowledged as a key process and tool in support of people development, equity, Human Resource planning, and performance management in CoAL. The mentorship policy will support CoAL in its endeavours to develop its employees in compliance with the MPRDA. In addition, mentorship supports CoAL's career and succession management system, providing for a transfer of knowledge, work and life experiences under the formal or informal guidance of selected suitable individuals and competent role models who act as mentors. The policy will provide a standardised approach and application guideline for mentoring, mainly in respect of:

- Young professionals;
- Identified employees, with specific focus on HDSAs and talent pools; and

The implementation of this programme will be aligned with the respective skills development plans for each discipline and will meet the specific needs of all employees. Coal of Africa Limited will design a formal policy and procedure to ensure an effective mentoring system. The role of a mentor will be multi-faceted. Makhado Colliery will regard a mentor as an individual who will facilitate the transfer of knowledge, work and life experience based on shared values in confidence through networking, advising, coaching, and directing /counselling.

The main features of the mentorship programme will be:

- The planned involvement, agreement and buy-in of suitable managers;
- The design of appropriate training materials, mentoring agreements and working documents;
- The training and accreditation of line managers responsible for mentoring;
- The matching of mentors to mentees;
- Regular audits and, if necessary, corrective action; and
- Institutionalization of the process throughout the Group.

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APPENDIX 5: BURSARY AND INTERNSHIP PLAN

This section covers Makhado Colliery's future internship and bursary plan and its implementation in line with the Skills Development Plan.

Bursary Scheme

The bursary scheme will be managed by CoAL or an elected service provider. Regular feedback and communication will be facilitated with the Makhado Colliery Community and Education structures to ensure the bursary scheme is understood. The targets set are for the Makhado Colliery specifically.

CoAL has established a bursary scheme orientated towards the development of suitably qualified and competent people who, upon graduation, will be afforded professional career paths in the company or other companies. Through this comprehensive and attractive bursary scheme, CoAL has already commenced with the development of its own young professionals. The emphasis in this scheme is to identify high-potential young HDSA candidates. To date R4million has been spent on bursaries and a total of 39 students enrolled in various tertiary institutions.

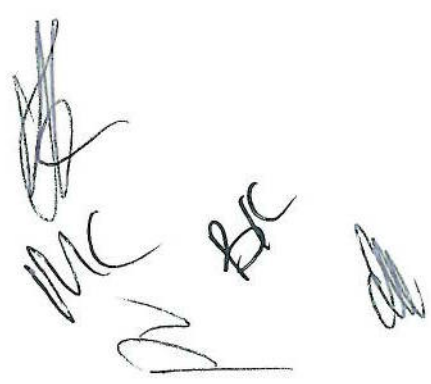
The focal disciplines will be:

- Mining Engineers;
- Electrical & Mechanical Engineers;
- Processing Engineers;
- Geological Sciences;
- Surveyors;
- Environmental professionals
- Other related science degrees.

Internship Programme

CoAL takes a broad view of the development of young professionals. The emphasis is on producing well-educated, competent and well-rounded young people with high potential. Internship programmes for new company employees will be aimed at all levels of employment. In addition, emphasis will be given to offering internships to people from HDSA groups. It is understood that an internship is a supervised pre-professional learning experience, in which employees can apply their skills and knowledge in a professional setting. The goals of the Internship programme are to:

- Provide employees with a full and realistic view of workplace culture and expectations
- Integrate academic preparation with professional challenges
- Build confidence and success through internship experiences
- Encourage contact between employee and professionals in their field of interest
- Help employees to build professional networks



APPENDIX 6: EMPLOYMENT EQUITY

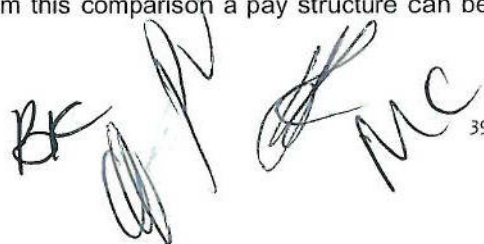
Women in Mining

To address the historical issues of South Africa, which resulted in the majority of South Africans being excluded from participating in the mainstream economy, especially women, CoAL's Employment Equity Policy ensures that women are presented in positions that traditionally have been considered male only. Makhado Colliery will make every effort to reach the target of 10% women participating in mining from the onset of recruiting a workforce in 2014. The mine is committed to the socio-economic empowerment of people who were previously disadvantaged and believes that Gender Equity is critical to economic growth and wealth creation in South Africa. Makhado Colliery will develop a number of strategies to enhance female representation and to ensure that Gender Equity targets are realistic and achievable. These strategies will include:

- Identifying positions in mining which will suit recruited women physical strength and skills
- Stimulating women interest in mining professions: The historical, systemic exclusion of women from participation in the mining industry has meant that females are poorly represented in the mining sector. Makhado Colliery will apply considerable effort to enhancing women's participation at all levels of mining and processing operations. Not many women are attracted to furthering their education in mining occupations, so there is a lack of women qualified for mining careers. Companies therefore compete aggressively for suitably qualified women to fill vacant or newly created positions.
- Women in Mining Internal succession and promotion plan: The development of the female workforce must be supported through a strategic and targeted internal succession and promotions plan. Makhado Colliery will develop targets to achieve greater representation of women at all levels of responsibility at the mine. In addition, management will support future recruitment through ongoing skills development and promotions for future management positions.
- Women in Mining networking support: Females working in the mining industry are often working in remote and isolated areas where there is little opportunity for interaction with other women working in similar situations. Makhado Colliery will facilitate interaction between women in various positions to encourage the sharing and expression of views, concerns and ideas. This process will feed information into higher-level decision making to ensure the provision of required support and removal of obstacles to women's development.
- Ensuring the availability of the necessary facilities such as change houses and female-only ablution facilities to retain female workers in an environment which is conducive.
- Women in mining and physical labour: Mining is generally a demanding physical activity that requires levels of physical strength and endurance not necessarily associated with women. Makhado Colliery, being a new mine, will endeavour to set-up equipment in such a way that it takes into account physical limitations, a further assessment of physical capability testing and counselling will be done during recruitment. In addition, an inventory of mine jobs will be created that fall within the range of a female's normal strength and endurance ability. These could include the creation of new jobs, such as mining assistants or other positions, where women's lack of physical ability would not impede their employment prospects. The latter will be considered according to need and budget constraints in the current economic climate. In addition, a risk assessment will be conducted and all policies relating to the recruitment of women and their suitability for a particular job will be revised.
- Health and Safety for women in mining: CoAL faces a major challenge in ensuring that pregnant women are not adversely affected by hazardous conditions inherent in their work environment. Significant work will be directed at identifying positions and working areas on and around the mine site that are not hazardous to pregnant women's needs.

HDSA Participation in Management

CoAL fully subscribes to the principles of the Mining Charter, and strives to achieve the minimum requirements. The company believes that Employment Equity is an integral part of building an effective and representative workforce and to ensuring equality for all employees. CoAL will develop a demographically representative talent pool, ensuring effective career and succession planning to retain talent, and construct and implement a sound mentorship programme to create a workplace that will support and respect all employees' values and cultures. CoAL uses the Paterson evaluation method to classify jobs. This classification tool contends that all jobs, regardless of level, industry or country, can be compared by looking at the number and complexity of decisions that must be made by the employee. From this comparison a pay structure can be established that should reflect the organization and its levels of responsibility.



39

It is the Company's intention to increase the level of HDSA representation in management levels. The Company is committed to ensure that three of the possible six positions will be filled with HDSA candidates. An individual career development plan will specifically be developed and introduced in this regard.

CoAL will develop strategies to ensure that its Employment Equity targets are realistic and achievable. These will be:

- Developing future employees with potential;
- Recruiting externally for qualified staff, trainees and bursars; and

The objectives of these strategies are to ensure that the Makhado Colliery will have at least 40% of available management positions filled by HDSA employees at steady state (full employment).

- HDSA candidates development and fast-tracking programme: Previous lack of experience and a scarcity of the skills that are required by the mining industry mean that HDSA candidates need to be developed and fast-tracked to enable the mine to reach its more senior HDSA management targets. Of crucial operational importance is that HDSA candidates are suitably qualified for the positions into which they will be appointed. The scarcity of skills in the mining industry means that employment equity targets for Makhado Colliery will only be achievable through the implementation of learnerships and mentorship programmes.
- Talent management for HDSA's: The mine will be faced with a difficulty to identify high-performing HDSA candidates to fast-track into more senior levels of responsibility within the company. Again, the issue is compounded by a general scarcity of skills and relevant experience. The intervention will be addressed in the following ways:
 - Candidates for training will be recruited with a minimum literacy and numeracy level at least to ABET Level 4. From this process, candidates will be identified as potential artisans, superintendents and plant operators;
 - While undergoing role-specific training, trainees with potential will also be identified for future development and, where appropriate, switched from one programme to another;
 - Developing a process to assess and identify high-potential candidates;
 - Encouraging graduate appointments;
 - Communicating with recruitment agencies offering mining-related positions;
 - Liaising with organizations that cater for mining programmes;
 - Sending all new recruits in C Band and above through a rigorous assessment process as part of their screening, including Verbal Critical Reasoning, Numerical Critical Reasoning, OPQ Personality Profiling and career path assessment;
 - Improving selection procedures to ensure that candidates with an internal locus of control and adequate self-discipline are given the opportunity for accelerated development; and
 - Consulting with unions and associations on the process and ensuring selection procedures are fair.
- Providing training and development for HDSA candidates: Training and development initiatives will be implemented at the mine for those employees who desire career progression, but who may not be suitable candidates for the talent pool. This intervention will be addressed through:
 - Providing experiential training through coaching and mentoring;
 - Developing a focused bursary programme;
 - Consulting with the MQA and training service providers to accelerate and enhance training programmes for HDSAs;
 - Appointing HDSA candidates to vacancies on a contract or temporary basis so that they can gain experience until such time as they or other suitably qualified candidates are competent to be permanently appointed to the positions in question.

APPENDIX 7: SOCIAL AND ECONOMIC BACKGROUND INFORMATION

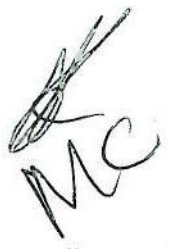
Background

Makhado Municipality forms part of the Vhembe District Municipality and is situated 100km from the Zimbabwean border along the N1 Route. The Makhado Municipality is located next to the N1 highway, which is the main access route to and from South Africa and other countries in Southern Africa such as Zimbabwe. The Municipality also forms part of the Maputo corridor. The Maputo road branches off 30km south of Louis Trichardt to the east. The Phalaborwa sub-corridor will link up with the N1 Highway via Soekmekaar. This improved road link will significantly reduce the distance to and from other

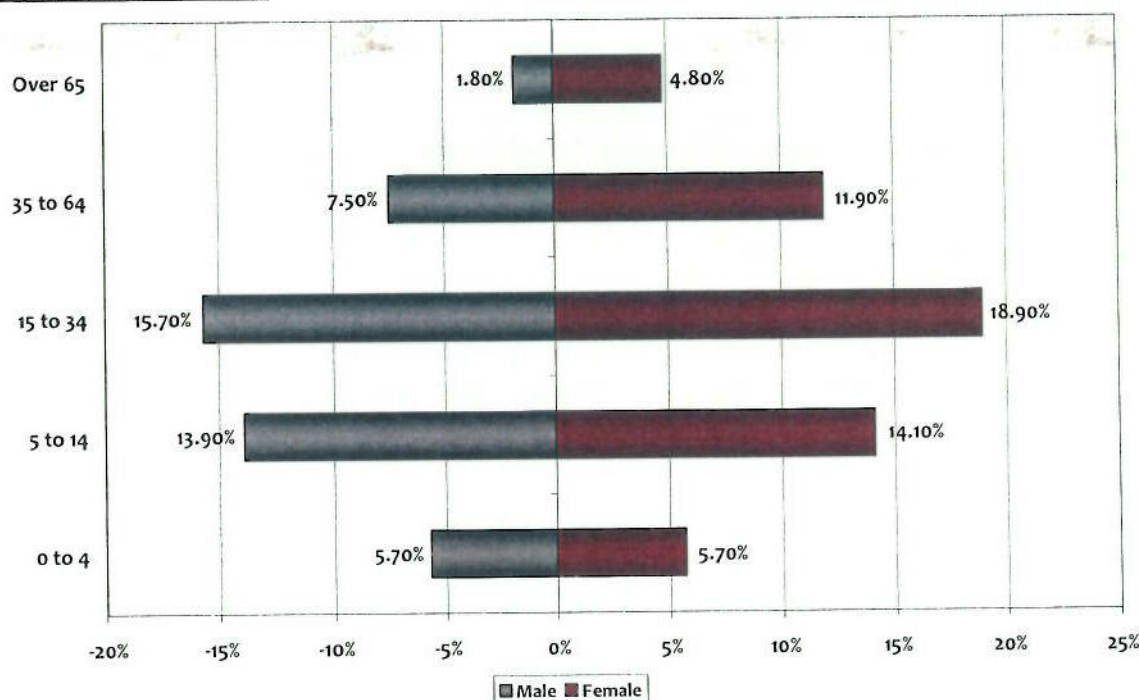
provinces such as Mpumalanga, as well as harbours such as Maputo. The R293 links towns with surrounding farms and the rural areas. The north-south railway line to Zimbabwe runs through the area with a station in Louis Trichardt town. The rail carries both passengers and goods. People travelling to Zimbabwe mostly use the rail link. Most of the people in Makhado area reside far from the railway station, which makes it difficult for them to use the train on a daily basis. Makado Local municipality is made up of 5 formal towns being Makhado, Vleifontein, Waterval, Vuwani and Dzanani. Approximately 279 villages are found within the municipal boundaries. The municipality is divided into 35 wards. The main administrative office is situated in Louis Trichardt town with three other administrative offices in Dzanani, Vuwani and Waterval. There are about 129 665 households in Makhado municipal area with about 217 641 registered voters. The total population of Makhado is estimated at 471 802 and is growing at about 1.4% per annum.

The rural area is mostly underdeveloped with large open spaces. Large sections of the open spaces are used for farming purposes with approximately 10,478 farms in the area. The local population is concentrated in certain areas, specifically those that were part of the former Gazankulu and Venda. This has resulted in a generally dispersed settlement. Due to this dispersed nature of settlement most of the municipality services are costly to develop and maintain. Villages generally do not have an economic base and serve as dormitories for people working elsewhere. Most of the areas in-between settlements are utilised for extensive farming purposes, resulting in these areas being under constant threat of environmental degradation. The physical development in these areas has up to now largely taken place in reaction to new needs that manifest over time. There has been no planning giving direction to the physical development of the area. Large disparities exist between the different communities with regard to their respective levels of development. The size of the Municipality has brought about a situation where there are villages that are fairly well developed, in contrast with other rural areas, which have developed very slowly. In addition to this there are villages which have over time proven themselves as natural growth centres; villages that have larger populations with somewhat better infrastructure but which are not proclaimed townships. The formal economy of the Makhado Municipality can be considered a "dual economy", as it comprises two distinct elements namely the sophisticated economy of Louis Trichardt town and surrounding farms and the more informal economies of surrounding townships and rural areas. Louis Trichardt provides a regional function to the surrounding areas providing trade services, banking, manufacturing, storage, transport, etc to these areas. Because of its size and level of sophistication, the economy of the town is able to generate a significant number of direct employment opportunities for the local communities. Due to the continued migration of people from the rural areas to the urban areas urgent provision has to be made for housing in order to avert uncontrolled settlement.





41

Gender and age Profile



According to the profile the largest population group is female between the ages of fifteen and thirty four years old. This group comprises 18.9% of the total population in the area. The smallest population group is males above the age of 65. In total the dominant gender is female, consisting of 55.3% of the total population. This is due to the fact that many males work outside the area i.e. in Johannesburg or Pretoria.

The age structure of Makhado is relatively young with 73.9% of the residents being younger than 34 years of age. It is important to note that the age group 15-64 represents the main part of the population that is economically active. In this age group males represent 23.2% and females 30.8% of the total population. This raises concern because this group has to support the rest of the population (46%). It should also be kept in mind that many people in this age category leave the area in search of employment opportunities.

A big number of economically active people in the population also put pressure on the employment sector as they have to be able to find work. It can also be positive as economic growth depends on the number of economically active people, provided that they have obtained the correct and sufficient skills. In the case of Makado this increases the pressure on the employment sector as unemployment levels are already high. The number of childbirths is decreasing; usually indicating an improvement in schooling and general socio-economic conditions. A lower number of children being born also put less pressure on already overloaded education facilities.

A study done by the Provincial Department of Health and Welfare however indicates a severe under-registration of births in the province which might explain the fact that the number of childbirths is lower than expected. There is an indication however that the childbirths might increase, given the youthful age structure of the population. The area houses relatively few people older than 65 years of age. Males above 65 constitute 1.8% of the population while females accounts for 4.8% of the total population in the area. Usually a low number of people in this age group indicates a lower than accepted level of health services. The role of HIV/Aids in this regard can also not be ignored as it brings down live expectancy levels.

Population Profile

The table below indicates the race distribution and population size of the Makhado Local Municipal area.

	South Africa	Limpopo	Makhado	Project area
Population	44,82m	5,27m	1,20m	583,491
Average annual population growth (estimated in 2004)	1.04%	1.28%	1.4%	1.35%

The population growth of the Makhado region displayed a positive population growth rate of 1.4%. The national population growth was approximately 1.04% and the provincial population growth was estimated to be approximately 1.3% for the same period. It is evident that the population growth in Makhado is relatively high compared to the provincial and national population

growth. The average annual population growth in Makhado is 0.12% higher than the provincial population growth and 0.36% higher than the national population growth rate.

Growth in population can normally be expected if a high portion of the population falls within the age groups between 18 and 35 as this result in an increase in childbirths. In the case of Makhado, however, the population graphs indicate a decrease in childbirths. It must be assumed then that migration into the area contributes significantly towards the current growth of the population. The future significance of this young age structure is that the population will grow rapidly. This implies an increased growth rate in the labour force. At present the local economy is not able to provide sufficient employment opportunities to provide in the needs of the economically active population. Expected increase in the birth rates will also in future increase the demand for more educational facilities.

Economic Profile

Summary of major findings; 2006 – Makhado LM

GDP-R per capita contribution	3.9%
Average annual growth (Constant 2000 Prices)	2.7%
Unemployment rate (%)	49.3%
Economically active population	28.8%
Rate of literacy	58.5
Percentage of people in poverty	62.5%
Population density	58.33
Human Development Index	0.51
Urbanization rate per municipality	5%
Number of households	297 753
Population	1 248 369
Current growth rate	0.74%
Size of area (km2)	21 402

The economic sectors in an area are distributed into three main sectors namely the primary, secondary and tertiary sectors. The primary sector consists of the agricultural and the mining activities. The manufacturing, electricity, construction and the trade activities form the secondary sector while the tertiary sector consists of the transport, financial and services activities. Makhado economy is tertiary sector-oriented with the largest service sector the Community, social and personal services sector that contributes 38.9% to its economy.

Agriculture also makes a big contribution to the local economy. Citrus and cattle farming are major activities. The mining sector contributes only 2.27% of Makhado Municipality GGP. Within Makhado Local Municipality the important economic activities are the wholesale & retail trade; catering and accommodation; finance and business services, general government services, and transport & communication. These sectors contribute approximately 78.30% share to Makhado's production.

Percentage Contribution to GVA

Municipality	Percentage Contribution to GVA in Vhembe		
	1993	1998	2003
Musina	9.98%	9.82%	10.80%
Mutale	7.22%	7.85%	8.72%
Thulamela	41.08%	40.09%	37.20%
Makhado	41.71%	42.24%	43.27%
Vhembe	100%	100%	100%

Makhado Local Municipality contributes the most to the GVA (Gross Value Added) of the Vhembe economy and is therefore the driving economy in this region. Makhado Municipality's contribution to the GVA of Vhembe increased from 41.71% to 43.27% from 1993 to 2003. This share is the biggest, contributing 7.2%, or R24.6 billion, to the Limpopo Province economy in 2003.

Contribution to the national total

Categories	Limpopo	Vhembe	Makhado
Agriculture	14.1%	2.9%	2.0%

Mining	14.3%	0.3%	0.1%
Manufacturing	1.5%	0.2%	0.1%
Electricity	6.7%	1.2%	0.5%
Construction	4.0%	0.7%	0.4%
Trade	6.5%	0.4%	0.3%
Transport	3.1%	0.4%	0.2%
Finance	2.1%	0.3%	0.2%
Community services	7.5%	1.9%	0.8%
Households	7.8%	1.6%	0.8%
Total	6.2%	1.0%	0.5%

During 1993 to 1998 Makhado Local Municipality experienced an average annual growth rate of 4.0% in GVA; compared to 3.8% growth for Vhembe DM. Makhado Local Municipality experienced the second highest growth rate for this period. This indicates that Makhado Local Municipality performed very well from 1993 to 1998 and fairly poor (but still above Vhembe's average of 2.4%) from 1998 to 2003 when compared to the rest of the District Municipality. Makhado Local Municipality's percentage annual growth rate declined from 4.0% to 2.9% respectively, which illustrates the need for economic development that will broaden its economic base and increase economic growth.

Percentage Average Annual Growth in GVA for Makhado Municipality

District Municipality	Percentage Average Annual Growth Rate	
	1993-1998	1998-2003
Musina	3.4	4.4
Mutale	5.5	4.6
Thulamela	3.3	0.9
Makhado	4.0	2.9
Vhembe	3.8	2.4

Makhado Local Municipality has a comparative advantage and experience an increasing growth rate in the following sectors:

- Wholesale & retail trade; catering and accommodation
- Transport & communication

Other sectors which indicated a comparative advantage but experienced decreasing sectoral growth include the following:

- Agriculture, forestry and fishing
- Manufacturing
- Electricity & water
- Construction
- Finance and business services

The trends in these sectors are important as it provides an indication of the future movements within the comparative advantages.

Economic Sector Contribution

Sector	Location Quotient				Sectoral Growth		
	1993	1998	2003	Increase/ Decrease in Comparative Advantage	1993 - 1998	1998-2003	Increase/ Decrease in Sectoral Growth
Agriculture, forestry and fishing	1.23	1.17	1.10	▼	1.0	2.1	▲
Mining	0.32	0.25	0.20	▼	-1.2	1.1	▲
Manufacturing	1.16	1.15	1.12	▼	0.2	-0.2	▼
Electricity & water	0.98	1.07	1.12	▲	9.1	4.7	▼
Construction	0.95	0.98	1.00	▲	1.1	-1.1	▼

Wholesale & retail trade; catering and accommodation	1.34	1.38	1.41	▲	3.2	4.6	▲
Transport & communication	1.34	1.22	1.13	▼	7.6	10.8	▲
Finance and business services	1.10	1.10	1.09	▼	2.1	0.5	▼
Community, social and other personal services	1.13	1.23	1.33	▲	5.6	5.6	-
General government services	0.86	0.89	0.90	▲	5.9	0.1	▼

- Agriculture
 - The comparative advantage of this sector has decreased slightly but its sectoral growth improved in the medium term.
- Manufacturing
 - The comparative advantage of this sector has remained stable but experienced a slight decrease in sectoral growth.
- Electricity
 - The comparative advantage of this sector has increased with a decline in sectoral growth from 1993 to 2003.
 - Wholesale & retail trade; catering and accommodation
 - The comparative advantage of this sector has increased and experienced an increase in sectoral growth from 3.2 to 4.6%.
- Transport & communication
 - Similar to the wholesale and retail trade sector, the comparative advantage of this sector has increased and experienced an increase in sectoral growth from 7.6 to 10.8% from the period under study.
 - Construction; Finance and business services
 - These sectors also indicate a comparative advantage but experienced a decline in sectoral growth from 1993 to 2003.





Economic Sector Contribution to Vhembe District

Sector	Makhado LM Contribution to Vhembe DM GVA per sector			
	1993	1998	2003	Increase/ Decrease to District GVA
Agriculture, forestry and fishing	51.44	49.51	47.56	▼
Mining	13.39	10.50	8.53	▼
Manufacturing	48.29	48.77	48.61	▲
Electricity & water	40.81	45.29	48.54	▲
Construction	39.66	41.42	43.20	▲
Wholesale & retail trade; catering and accommodation	56.06	58.32	60.90	▲
Transport & communication	56.02	51.62	48.82	▼
Finance and business services	45.87	46.30	47.30	▲
Community, social and other personal services	47.01	52.05	57.58	▲
General government services	35.88	37.39	39.06	▲
Total	41.71	42.24	43.27	▲

The smallest contribution to total production is by the primary sector. The primary sector contributes approximately 15.45% percent to Vhembe's primary sector economy. The General Government sector of Vhembe is the most important sector and also contributes the most to the total production of the tertiary sector of Vhembe with 45.05%. The biggest sector is the secondary sector of Makhado which contributes 55.87% to Vhembe's Economy with the Retail trade as the biggest secondary sector. Makhado Local municipality contributes approximately 43.27% towards Vhembe District Municipality's economy. This contribution has increased from 41.71% in 1993 to 43.27% in 2003.

The following sectors experienced an increase in the sectoral contribution to the overall district performance:

- Manufacturing
- Electricity & water
- Construction
- Wholesale & retail trade; catering and accommodation
- Finance and business services
- Community, social and other personal services
- General government services

The above-mentioned sectors contribute a large amount to Vhembe District Municipality's GVA, hence the importance of Makhado Municipality as a driving economy in the district context.

Education levels



About 21.2% of the population, above 20 years of age, has a Grade 12 or higher education qualification; while 34.9% have no schooling at all. This has serious implications for employment and money generating opportunities for the population. In total 65.1% of the population in Makhado have some form of schooling and can be regarded as literate. Cognizance should

be taken of the fact that these figures include only formal qualifications and does not take technical experience into consideration.

Currently the pupil-teacher and pupil-classroom ratio exceeds the planning norms, particularly so in the rural areas. There is a big backlog in the provision of classrooms. Some schools cannot function properly as they are not adequately provided with basic infrastructure and facilities such as water, electricity, sanitation and sports facilities. In some schools the existing infrastructure is totally dilapidated and examples of this include broken windows, broken desks and chairs. Such conditions are not conducive to proper and constructive education.

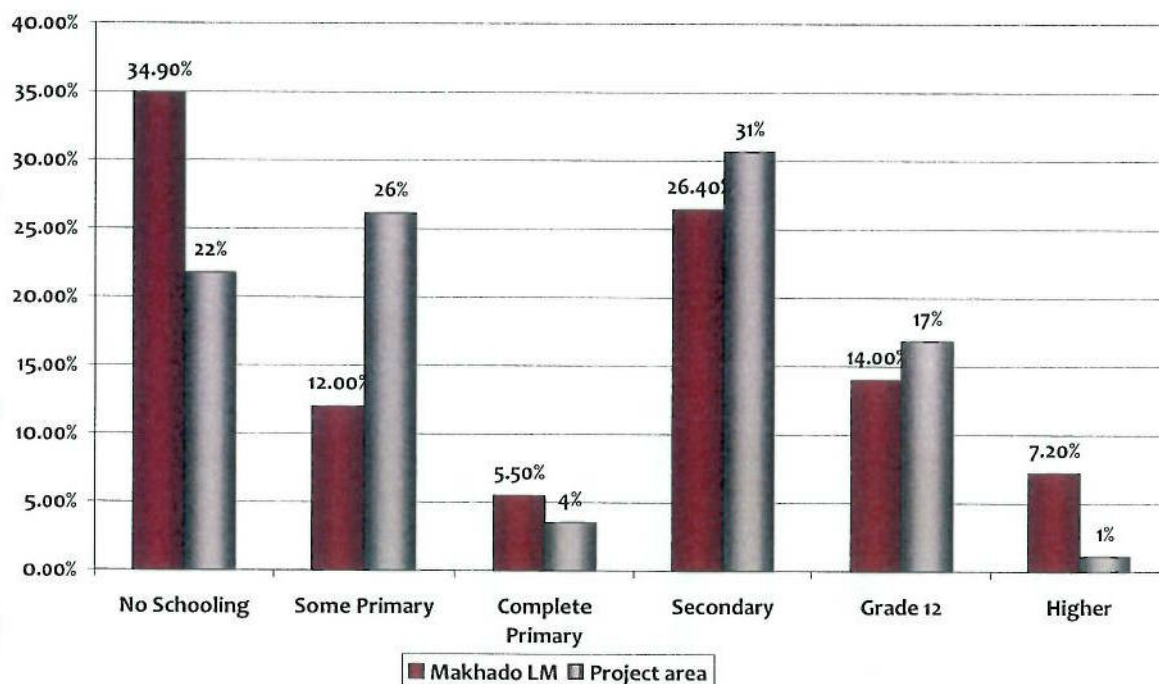
The provincial Department of Education is responsible for the operation and maintenance of public educational facilities. At present, by far the largest percentage of the departmental budget is spent on salaries and wages of teachers with not enough money available for to the maintenance of buildings and infrastructure. Funds from elsewhere is needed to properly address this issue. Extramural activities such as sports, art or cultural activities are seldom provided, largely as a result of budgetary constraints.

The educational needs in Makhado include the following:

- Ensuring textbooks arrive on time
- Construction of additional classrooms
- General improvement of the existing schools
- Facilities such as libraries

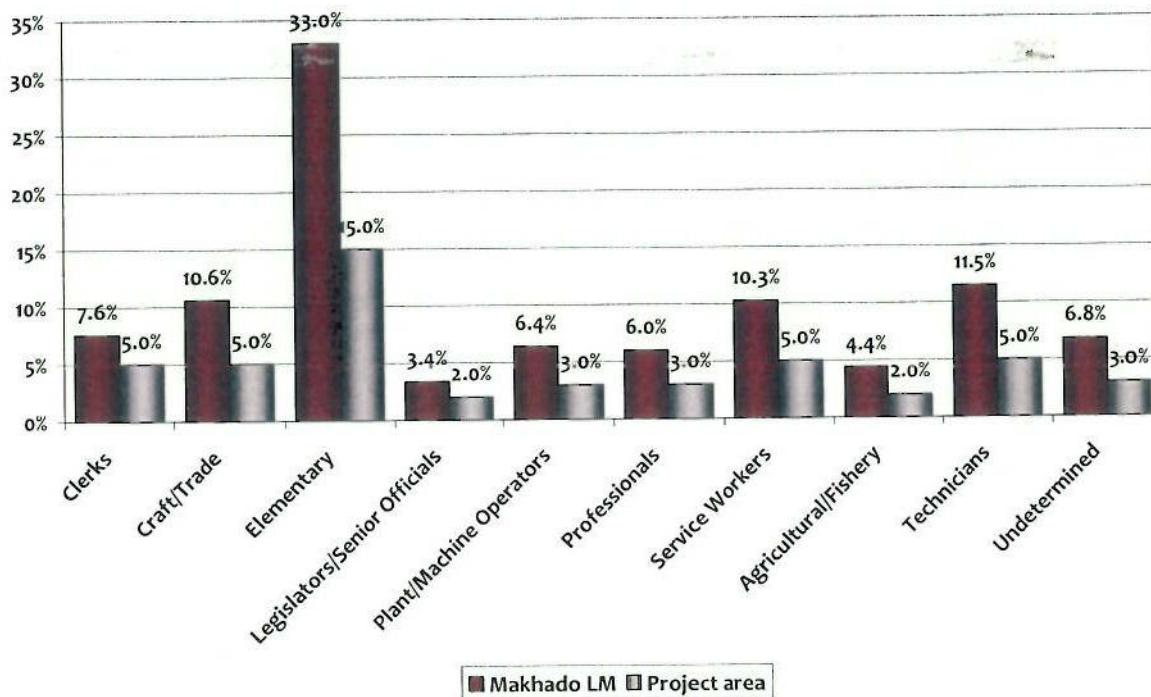
The very low general literacy rate amongst adults in the rural area stresses the demand for Adult Basic Education and Training (ABET) programs and centers that focus particularly on developing basic reading and writing skills.

The number of colleges of education has been reduced from ten to four in the province. The number of colleges has been reduced due to the oversupply and undersupply of some professions. Students exclude themselves from certain study directions such as medicine and engineering. Because of this there is a total over supply of some degrees such as BA, and a critical shortage of the more technical degrees such as engineering. This is also reflected in the Makado Municipality where a shortage of technical skills exists. Although there is one college in the area, it is not sufficient to supply in the demand for technical skills.



Education levels

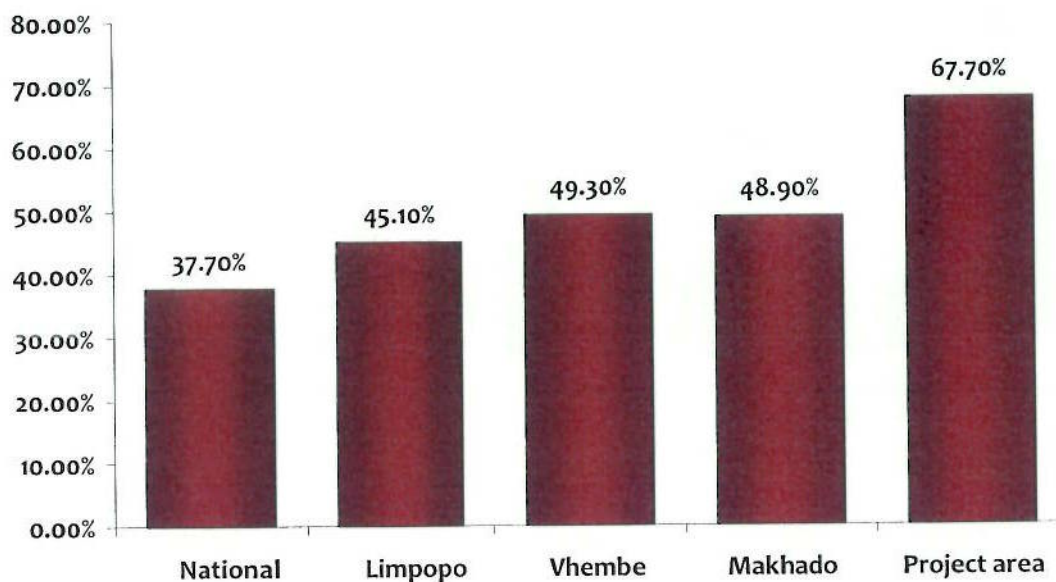
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Level of skills among the employed in Makhado and project area

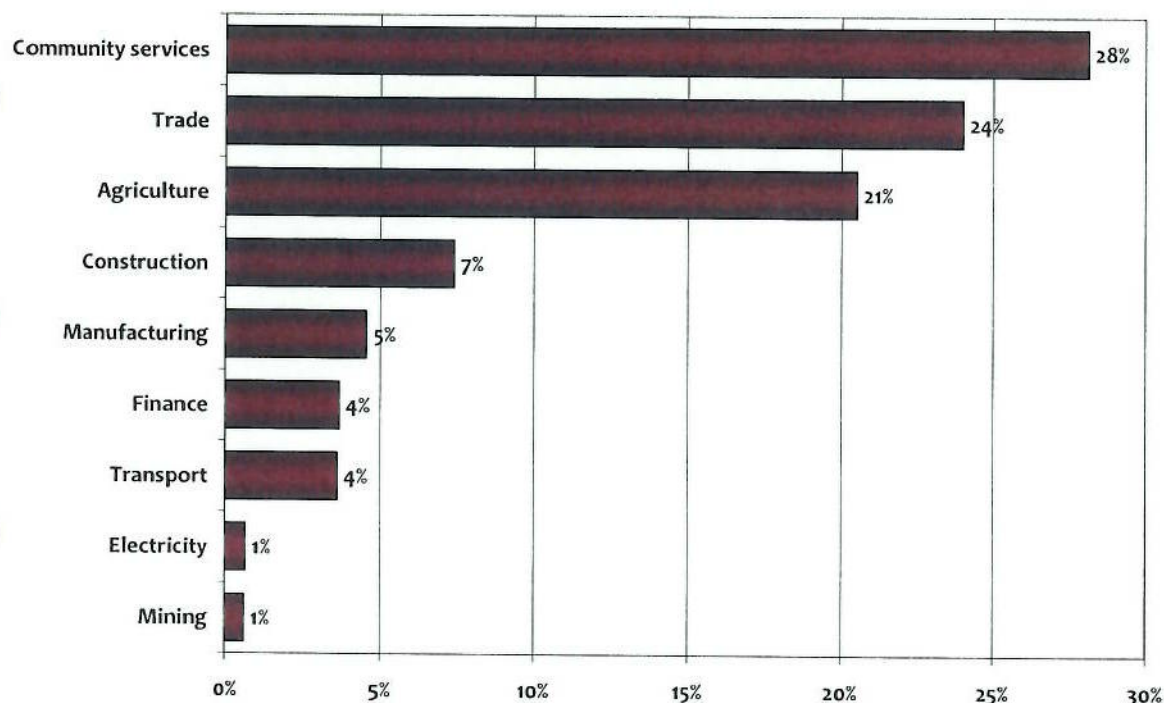
Approximately 10.6% of the working population has some form of craft and trade related skills that could be used to the benefit of the local economy, 6.4% are plant and machine operators, 10.3% are service workers, shop and market sales workers and 4.4% consist of skills in agriculture and fishery.

Employment Profile



From the above, it is evident that the large portion of the economically active population is employed. Forty five percent (45%) of the economically active population are unemployed. The Musina and Makhado Local Municipalities had an increase in unemployment of 4% and 13% respectively. The unemployment figures in Makhado will be exacerbated by the recent closure of businesses. The project area has high unemployment levels and therefore mining activities planned for the area

will have a positive impact on employment, creating work for people with technical skills. There might also be an increase in opportunities for unskilled people.



It is clear from the table above that the majority of the people are employed in the services sector within Makhado Municipality; this is followed by trade (wholesale and retailing). Agriculture is the third largest employer within Makhado municipality.

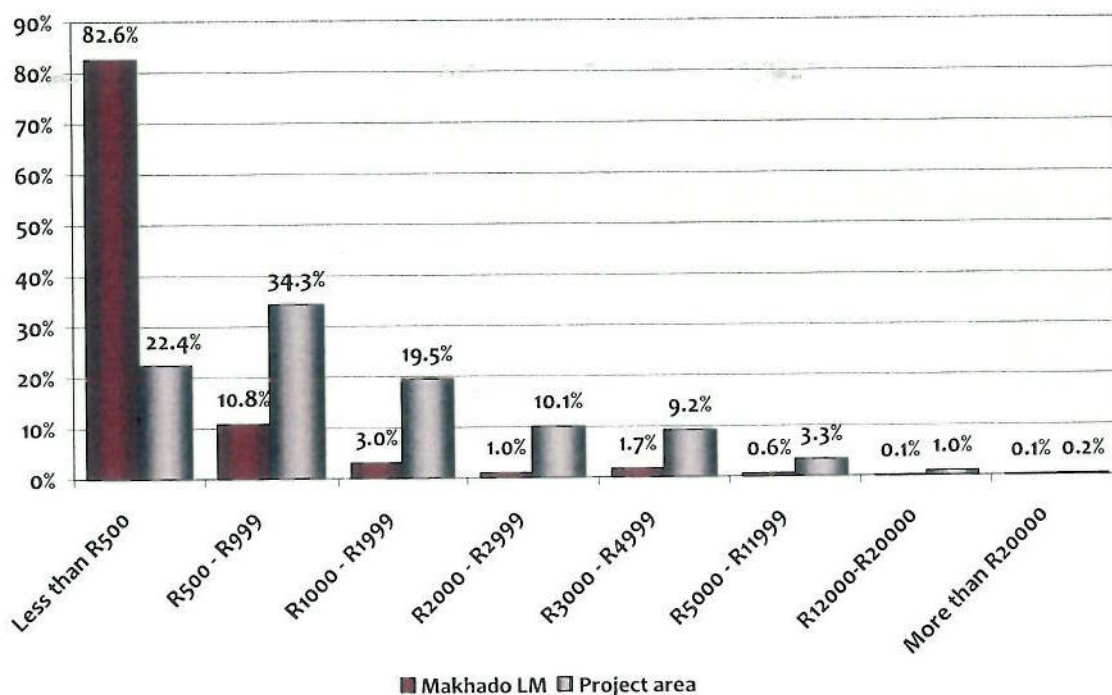
An increase in the levels of unemployment implies a decrease in monetary income. The low levels of income have an impact on the ability of the community to pay the full economic cost of services consumed. It also increases general social problems such as crime, alcohol abuse and lower moral standards.

Income Profile



In order to determine people's living standards as well as their ability to pay for basic services such as water and sanitation, the income levels of the population are analyzed and compared to the income levels of Limpopo. It is evident that the largest share of the economically active population in Makhado earns less than R3200 per month. This trend is very similar to that of Limpopo Province. A very small share of the economically active population (15 – 64 years of age) in Makhado earns R12 800 and more per month, while a much larger share of the economically active population in the province fall in this category. It is also evident in the table that the majority of the population in Makhado is very poor and is experiencing relatively low living standards and a poorer quality of life. These low income levels indicate that the majority of the population is dependant on a small income implying that the local population of Makhado is not able to afford basic services such as water and sanitation. These poverty levels also do not enable these people to afford the cost of educational needs of their children.

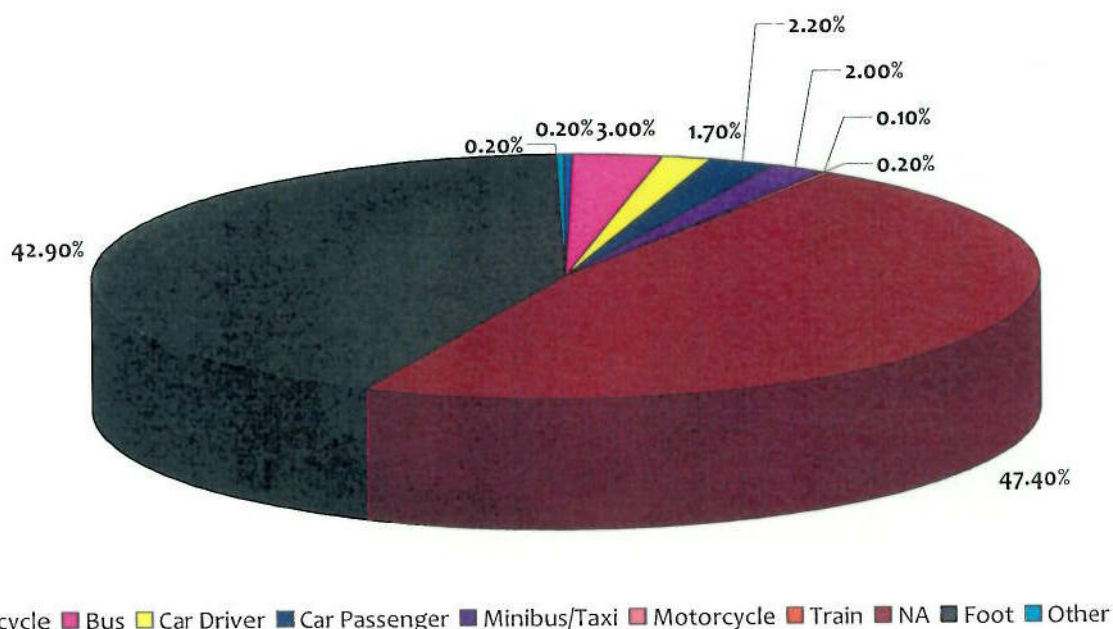
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Most of households consist of between 3 and 5 persons per household. About 30% of households consist of 6 or more people per household, which is above the national average. The average household size of households in Makhado is approximately 4.6 persons per household.

Infrastructure

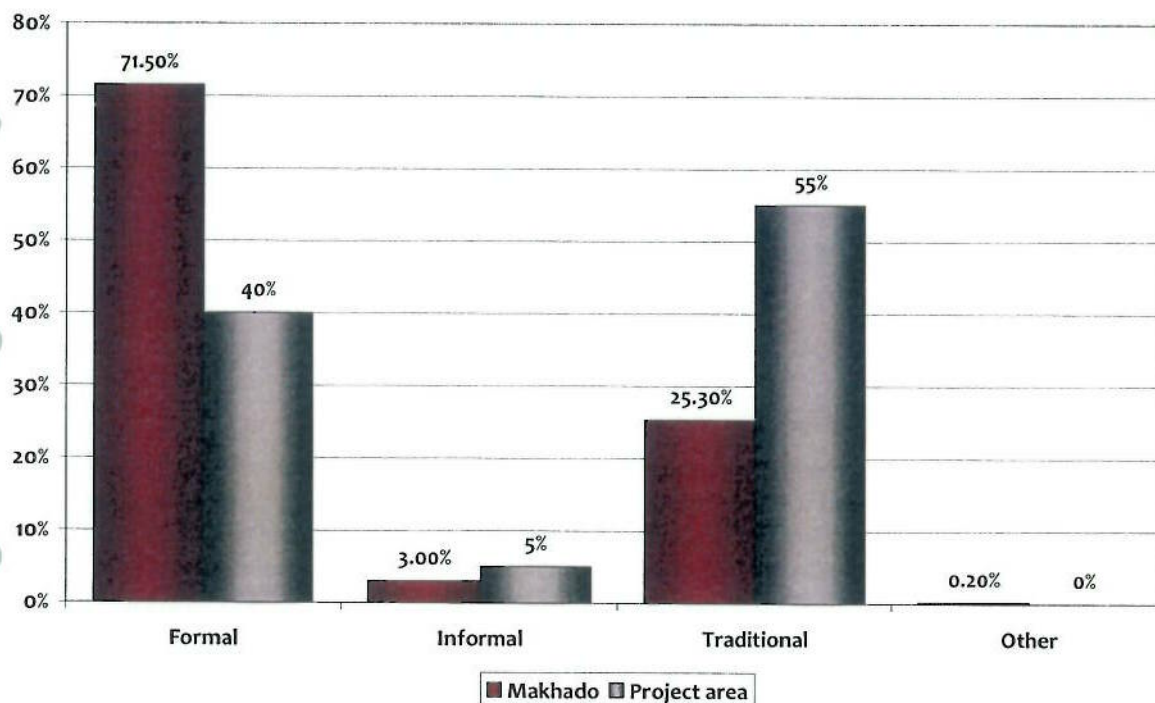
The figure below illustrates the major modes of transport used to get to work or school by the residents in Makhado.



It is evident from the above table and figure that the majority of the population (42.9%) walks to their destinations. Approximately 3% make use of buses, 2.2% are passengers in a private vehicle, 2% uses a minibus or taxi, 1.7% has their own car, 0.2% uses trains and 0.2% makes use of a bicycle as their primary mode of transport to work or school. About 47.9% does not attend work or school. The internal street systems in the rural areas in general are in a bad condition and dust is a problem. Most of the roads linking the villages are graveled and lack proper maintenance. These roads can mostly

not be used in very wet conditions. In certain rural areas there are roads that have not been maintained and upgraded. This has led to a situation where certain villages are not easily accessible. In general, the roads in the Makhado Municipal area are in a bad condition and require upgrading to cope with heavy rainfalls during the summer season. Louis Trichardt town and surrounding townships are provided with storm water drainage systems. In many instances the infrastructure is not sufficient to cope with heavy rains. Deaths due to uncontrolled storm water have been reported in the past. The N1 Highway between Makhado town and Polokwane was upgraded, as well as the N1 between Makhado and Musina.

Housing



The majority of households (71.5%) in Makhado have formal dwelling types and the proportion increased with 15.1% from 1996. The amount of informal dwelling units also increased which indicates the effect of the rapid population growth in the area. Traditional housing on the other hand had decreased from 41.8% in 1996 to 25.3% in 2001 but large portion of the population in the rural areas still live in traditional huts. About 16 807 households stay in houses that are below RDP standard. Current allocations are insufficient to meet target dates as it will take approximately 15 years to eradicate the current backlog. The current population growth of 3.1% will worsen the situation.

Private land ownership is very difficult to obtain in the rural areas and there is no real housing market driven by the market forces of supply and demand. Very few of the current house owners have bought their current house from another owner, or have sold a house to another person. Most of the population resides in the rural areas or in informal settlements. In general, people are informed about the housing schemes and policy through their tribal chiefs, ward committees and ward councillors.

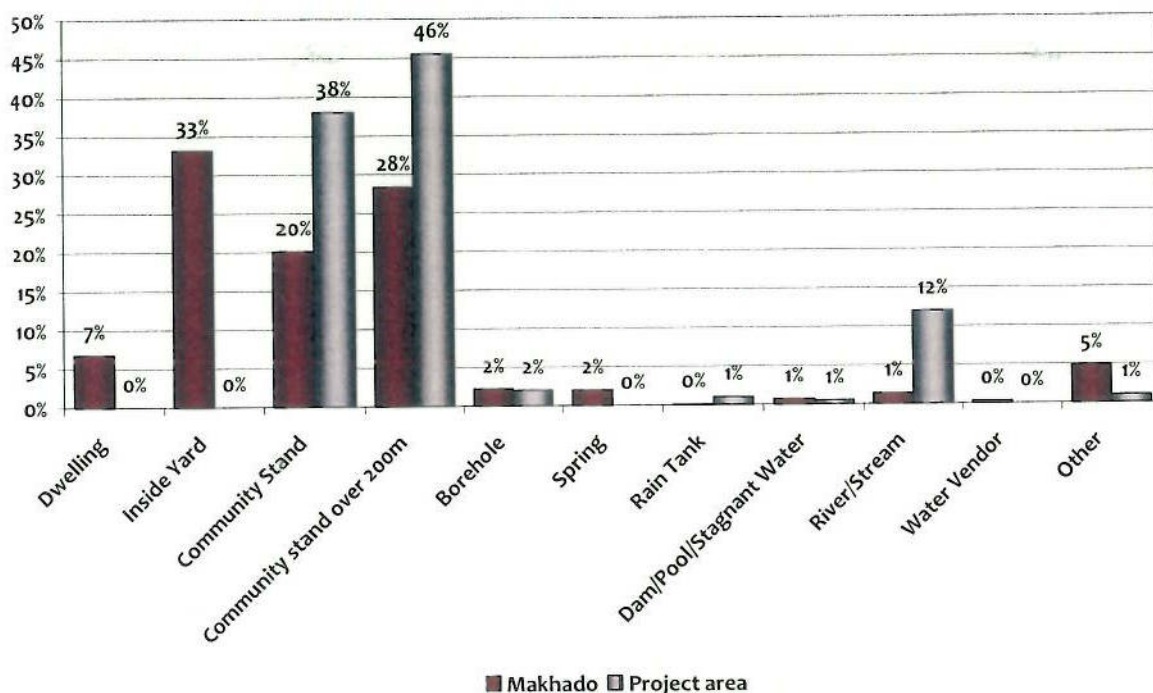
Housing projects are focused in urban and in the rural areas where housing problems remain unsolved. Both the RDP and the Peoples Housing Project (PHP) policies are being used. For the RDP housing scheme approach, the Department of Housing and Local Government appoints developers who built houses where the communities are residing in the villages. For the PHP approach the DHLG transfers funds to the municipality whereby local builders from the communities are appointed to build the houses with the assistance of the beneficiaries.

The following problems are identified:

- About 23 320 housing backlogs.
 - Not all developers follow the correct procedures resulting in unnecessary delays, which ultimately affect the applicants.
 - Low-income levels marginalize the feasibility of the housing projects.
 - The communities are not properly informed about housing schemes, as confusion and misconceptions exist.
- There is no housing market in the rural area and there are no cases of people selling a house and buying another one. Some people have more than one house in more than one village.

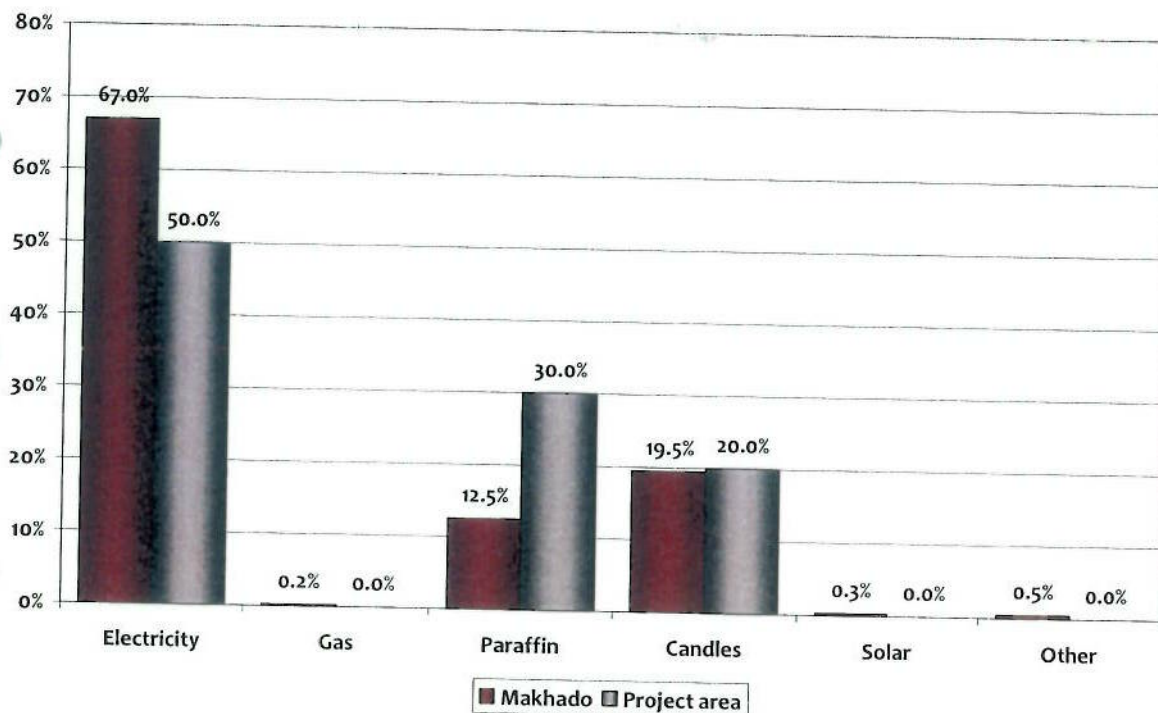
Water and Sanitation

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The municipal area is supplied with water from the Albasin Dam. Mutshedzi Dam Water treatment works is being upgraded to address the problem of water shortages within Dzanani region. Vondo and Tshakhuma Dam supply water in the Vuwani region. The impact of the Middle Letaba Dam will be fully realized with the doubling of a bulk pipe line and the construction of the Command reservoir at Majosi village. Nandoni Dam which is situated in Thulamela municipality will supply water to areas such as Waterval, Sinthumule/Kutama and Makhado air force base. Water supply in the R293 towns of Dzanani and Waterval is not sufficient and the communities do not receive water regularly. Most rural villages are served with communal taps and water from the boreholes. 49% of the households (50488) still receive water below the RDP standard. Makhado Municipality has inadequate and fragmented water service provision with different standards and plans. The inadequate water provision implies that less water will be available for agriculture, which is one of the pillars of the economy. The shortage of water will also hamper future growth and development of the area. Although the percentage of households with access to flush toilets have increased since 1996 to 2001, the majority of rural households still make use of pit latrines or have no access to sanitation facilities at all. About 74 590 households do not have sanitation at RDP standards.

Electricity



It is clear in figure 4.9 that the number of households with access to electricity increased dramatically between 1996 and 2001. It increased from 28.7% to approximately 67%, which means that the number of households with access to electricity in 2001 was more than double the amount in 1996. About 65 000 households have access to electricity. The pre-paid card system is mostly used in the municipal area and the end-users can purchase these cards at selected outlets in town and in the villages. The IDP contains a 5-year priority list, but none of the villages close to the project area is included. Regional Electricity Distribution (RED's) will be established in future. The establishment of RED's will imply more uniformity on issues such as tariffs. However, the establishment of RED's is a very controversial issue as the sale of electricity generates a significant source of income for the Municipality.

Free Basic Electricity (FBE) and Free Basic Energy: The municipality has a FBE policy that targets poor households. Free 50 Kilowatts units of electricity are given to the indigent households monthly. An indigent register of the households earning less than R1 100 per month and or are unemployed is kept and is updated annually. About 13 094 indigent households are receiving FBE. A further 1100 households who are using solar systems in areas where there is no electricity grid are receiving Free Basic Energy subsidy of an amount of R40 per month per household.

Problem areas identified:

- About 21 302 households are without electricity.
- The community is not educated on the correct use of electricity.
- Pre-paid cards are not accessible to all villages.
- A very serious concern is currently being expressed with regard to the past, current and future continuation of vandalism and theft of the electrical infrastructure.

Unemployment

The HDI is a summary measure of human development. The HDI measures the average achievements in an area in three basic dimensions of human development:

- A long and healthy life, as measured by life expectancy at birth
- Knowledge, as measured by the adult literacy rate (with two-thirds weight) and the combined primary, secondary and tertiary gross enrolment ratio (with one-third weight)
- A decent standard of living, as measured by GDP per capita.

The unemployment rate in Limpopo is 36.1%, which is the highest in South Africa, whereas, the households under the poverty line of R800 per month are 36.4%. This situation is much worse than the national rate.

The Human Development Index for Limpopo Province is 0.63 which is lower than the national HDI (0.69). The HDI for Makhado is 0.65 indicating that relatively higher life expectancy, income and literacy levels are present in Makhado than in Limpopo, although it is still lower than the national average.

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The poverty gap in Makhado represents 0.5% of the poverty gap in Limpopo Province. This ranks Makhado as an area with one of the highest poverty gaps in Limpopo Province.

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APPENDIX 8: PROJECT PLANS

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NAME OF APPLICANT:	COAL OF AFRICA LIMITED
APPLICATION REFERENCE:	LP30/5/1/2/2/204MR

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COAL of AFRICA LIMITED

MAKHADO COLLIERY

PROJECT EXECUTION PLAN

Makhado Project
Skills Development Centre

TRANSFORMATION
THROUGH
EDUCATION

REVISED

JULY 2013

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TRANSFORMING OUR COMMUNITIES THROUGH EDUCATION



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TABLE OF CONTENTS

1	INTRODUCTION	4
2	OVERVIEW OF AFFECTED COMMUNITIES	6
3	PROJECT NEED AND MOTIVATION	16
4	PROJECT DEFINITION AND SCOPE	17
5	PROJECT PROGRAMMES	24
6	PROJECT SCHEDULING	27
7	SKILLS/ JOBS REQUIRED AND TRAINING INTERVENTIONS	28
8	COST ESTIMATE AND CASH FLOW	32

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1 INTRODUCTION

Coal of Africa Limited (CoAL) intends to establish the Makhado mine with an annual coal product output of 5 Mtpa (13 698 tpd) in the Limpopo province in the Soutpansberg coal field. This will be the first of a number of possible mines that could be developed in the area directly north of the Soutpansberg. The Makhado Project is owned by Baobab Exploration and Mining (Pty) Ltd.

CoAL developed a Sustainable Development Model which seeks to fundamentally transform the lives of the communities in its area of operation.



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Education has been identified as a key driver of socio economic transformation. In line with the goals of the National Development Plan (NDP).



CoAL, through its investment in education at a tertiary and further education level, seeks to build sustainable communities.

The potential of communities can be unlocked through the development of partnerships with our communities to establish a Skills Development Centre which will provide skills to communities for not only the mining operation, but also long after the mines have closed.

One of the most effective ways to support economic development that will last beyond the mining operation is

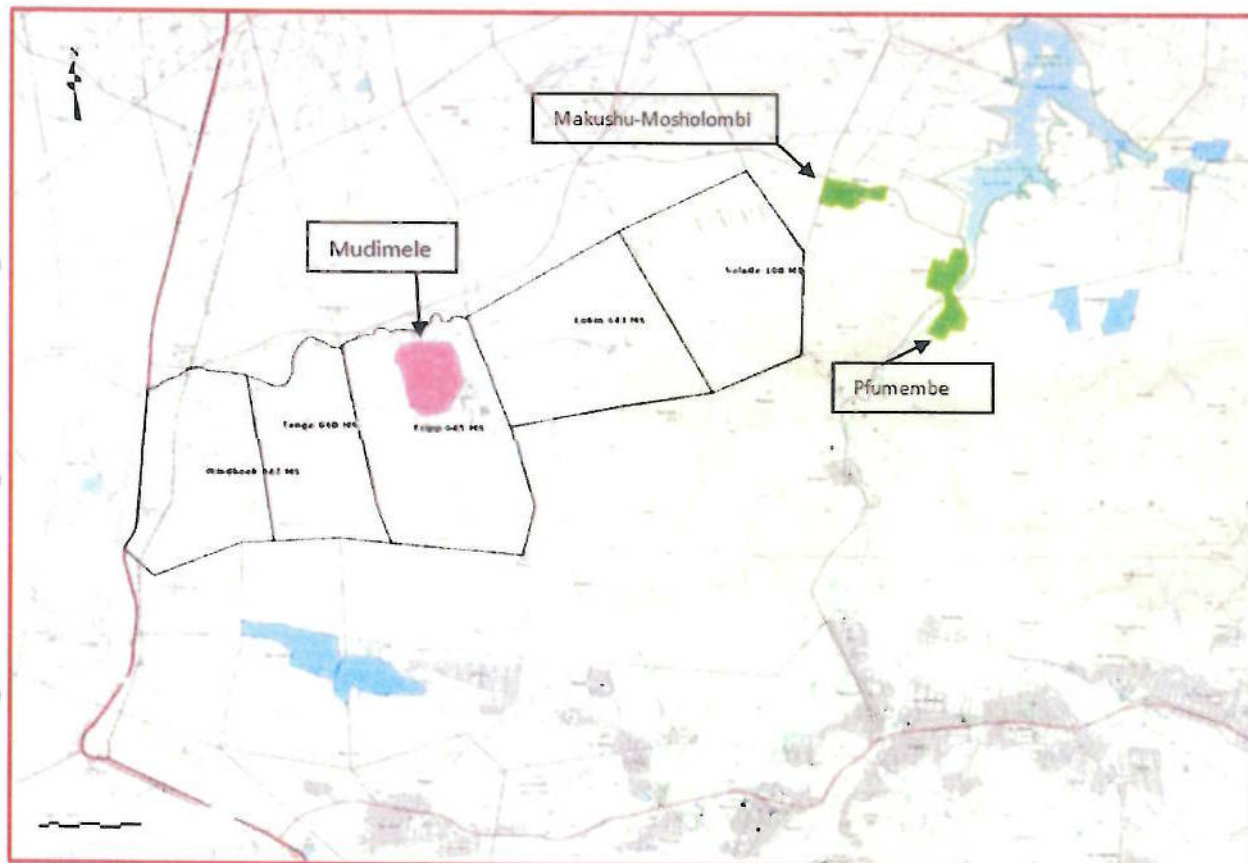
The Skills Development Centre would target the following:

- Students who have completed matric
- People within communities who have particular skills requiring further development
- Unskilled people who have had no access to any vocational training or otherwise.

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Host communities are normally located within 5km of the outer perimeter of a mine. Under this restriction there are four communities that qualify, as highlighted in the figure below. Communities residing on Farm Fripp, namely Mudimeli, Mulwambwane & Kuvule communities, are located on one of the Mining Right Application properties. Makushu, Mosholombe and Pfumembe are located outside the eastern perimeter of the proposed mining area.

Figure 1: Communities Adjacent to the Proposed Mine

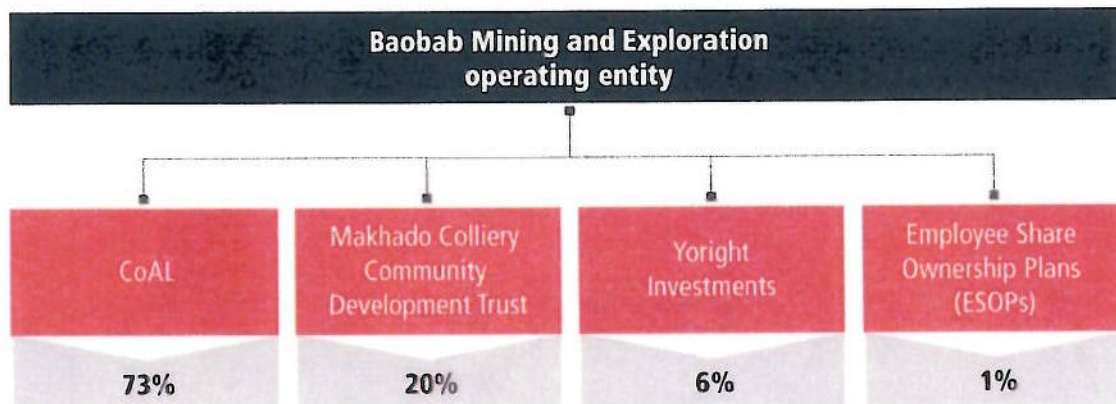


Population density to the south of the proposed mining area is very high, but the mountainous area forms a natural separation with limited direct road access. Planning information for Fripp and the three communities outside the eastern perimeter is provided below.

In March 2014, the communities signed a Memorandum of Agreement with CoAL to acquire a 20% stake in the project. The agreement was finalized in March 2015.

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The ownership of Baobab Mining and Exploration is as follows:



Seeking to understand our communities, CoAL launched a house to house Community Socio Economic Assessment (CSEA) on each community to understand their:

1. Needs
2. Priorities
3. Aspirations
4. Current status
5. Issues which are important to them.

The data is being captured onto CoAL's Stakeholder Management System (SMS) which forms the central repository from which all stakeholder information is drawn. Critical information will be captured on the SMS from which will be drawn skills to access employment and procurement

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Table 1: Planning Information on Mine Host Communities

Village	Households	Current population (estimated)
Frapp (Mudimeli, Mulwambane, Kuvule)	83	4 986
Makushu	250	1 750
Mosholombe	18	1 295
Pfumembe	220	1 540
Total	1 486	9 571

2.1 FRIPP (MUDIMELI, MULWAMBANE, KUVULE)

Figure 2: Google Map of Mudimeli Village



Frapp was established in the 1960's as part of the homeland consolidation process of the previous government. It has some impressive houses, but the settlement is too small to be fully functional. The village has access to a secondary school in their village, and two primary schools.

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2.2 MAKUSHU, MOSHOLOMBE, PFUMEMBE COMMUNITIES

Figure 3: Google Map of Makushu-Mosholombi Village

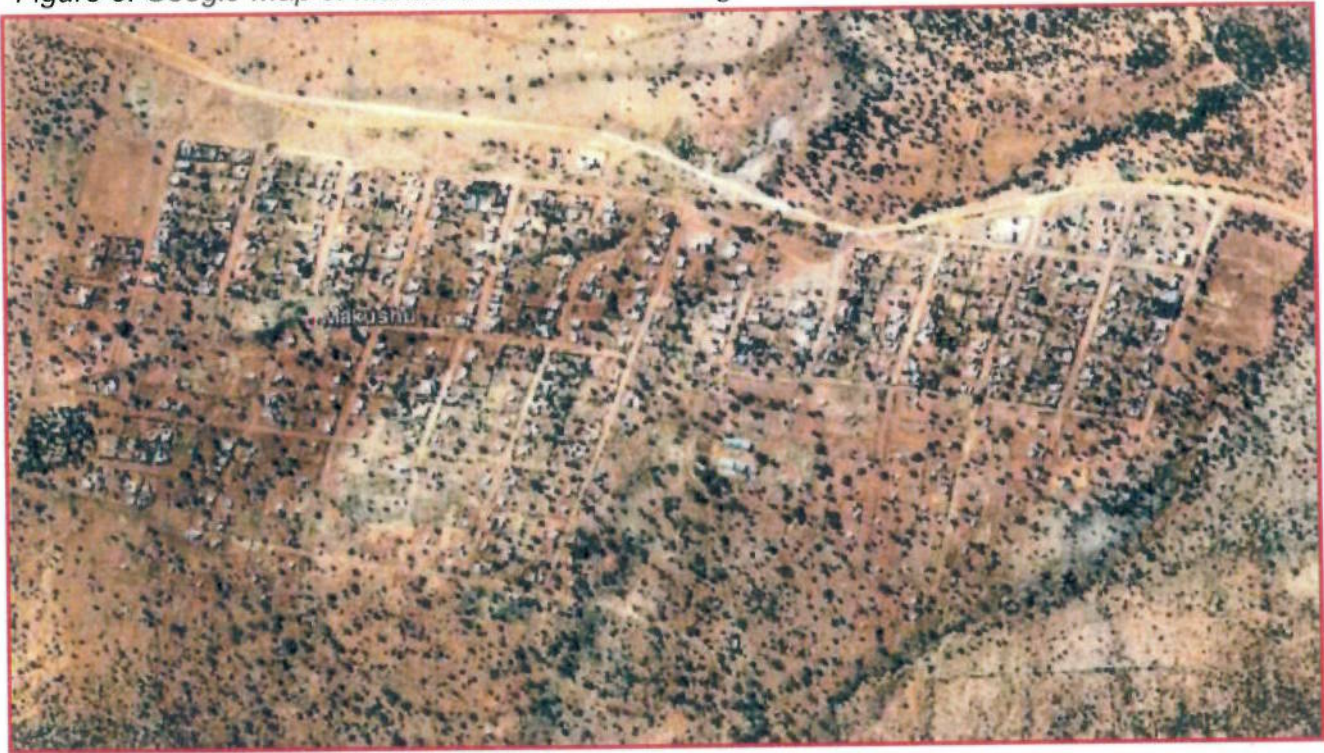
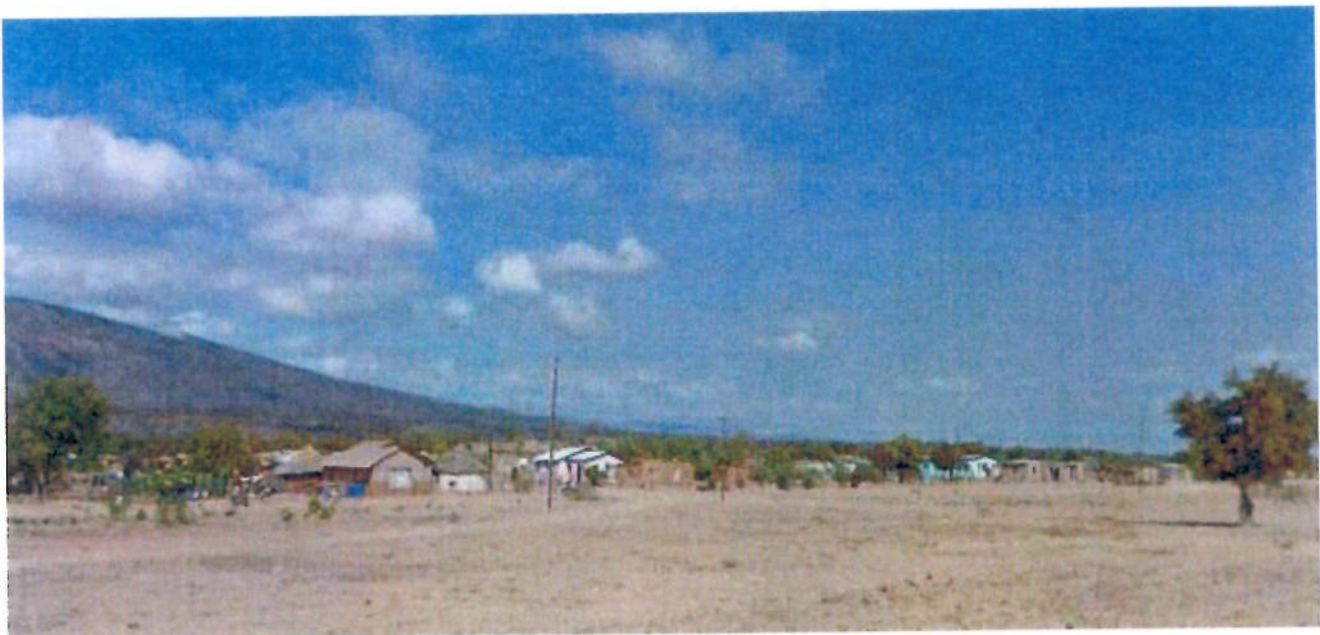


Figure 1: Makushu & Mosholombi community



Makushu-Mosholombi Villages is smaller than Mudimeli and the service level is more rudimentary. This villages is located approximately 17 km from the current mine gate.

Makushu Community: The village was established in 1980, with settlements growing for the last 30 years. The people of Makushu originally come from the Musina area. There are currently approximately 250 households and a

population of 1,750 people. The community is managed under Traditional Leadership. The village has only 1 primary school and limited access to health facilities. There are some businesses (shops) located within the village. The village graveyard is to the west of the village, bordering the Telema / The Duel property. The village water supply comes from boreholes close the river bed and is mostly electrified by ESKOM power. The most important needs identified by this community are job opportunities for the youth, safe water supply, secondary school, improved access road and access to health services.

Mosholombi Community: The village was established in 1980 and has been settled here for the last 30 years. The people of Mosholombe originally come from the Pontdrift area. There are currently approximately 185 households and a population of 1,295 people. The community is managed by an established committee with community representatives and Traditional Leadership, decision are taken jointly. The village has only 1 primary school and no access to health facilities. There are some businesses (shops) located within the village. The village water supply comes from boreholes close the river bed and is mostly electrified by ESKOM power. The most important needs identified by this community are job opportunities for the youth, safe water supply, youth development, secondary school, improved access road and access to health services.

UPDATE ON COMMUNITY SOCIO ECONOMIC ASSESSMENT

The CSEA for the Makushu Community is completed, with 206 households being interviewed and the data captured on the SMS.

The results of the survey reveal 45% of the population is aged 55 years or older, a situation which differs quite considerably from the national average where national census statistics from 2012 show that close to 60% of the population is under the age of 35. In Musekwa, excluding children below the age of 18, of the rest of the community 21% is aged 18-25, 13% is 36-45 and 21% is aged 46-55 years.

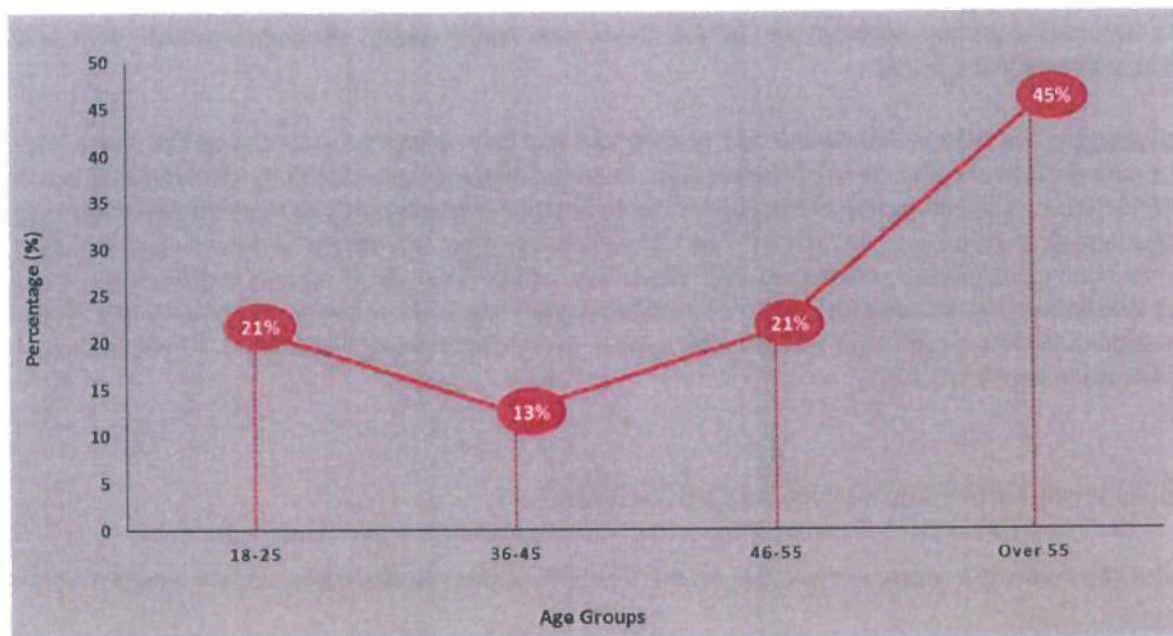
Within the community, the highest proportion of people (56%) is unemployed, with 33% being involved in formal employment, 9% in informal employment and 2% describe themselves as self-employed.

The spread of household income largely follows the employment statistics. Earning below R1,600 a month is fully 40% of households in the community, while 59% of households earn between R1,600 and R12,800. Approximately 1% of the population earns more than R12,800.

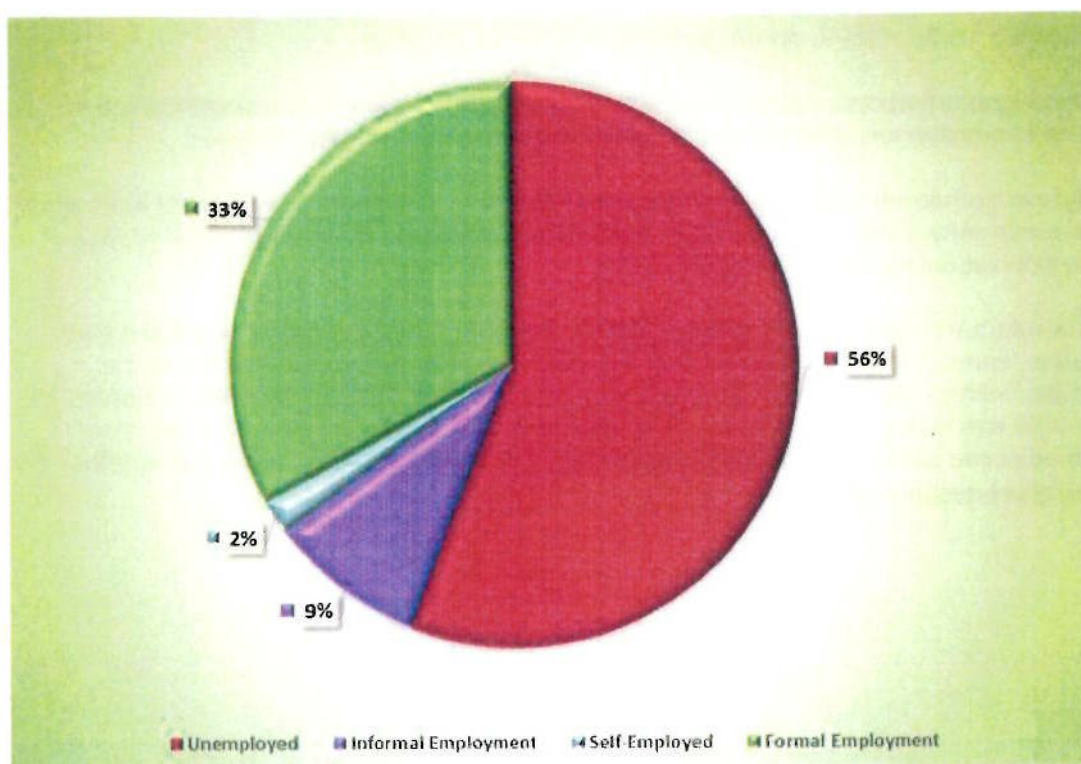
Underlining the need for CoAL's education and bursary initiative, employment and income levels are also broadly similar to education levels. Our survey has revealed that the majority (54%) of residents of the community have had no schooling – with just 46% having some schooling. Of these, 20% were schooled all the way up to grade 12, 30% made it to grades 10-11, 41% to grades 7-9, and 46% to grades 3-6. Nine percent of residents had achieved some post grade 12 qualification, with 4% having a Certificate, another 4% a Diploma and 1% sitting a university degree.

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AGE PROFILE OF MAKUSHU COMMUNITY

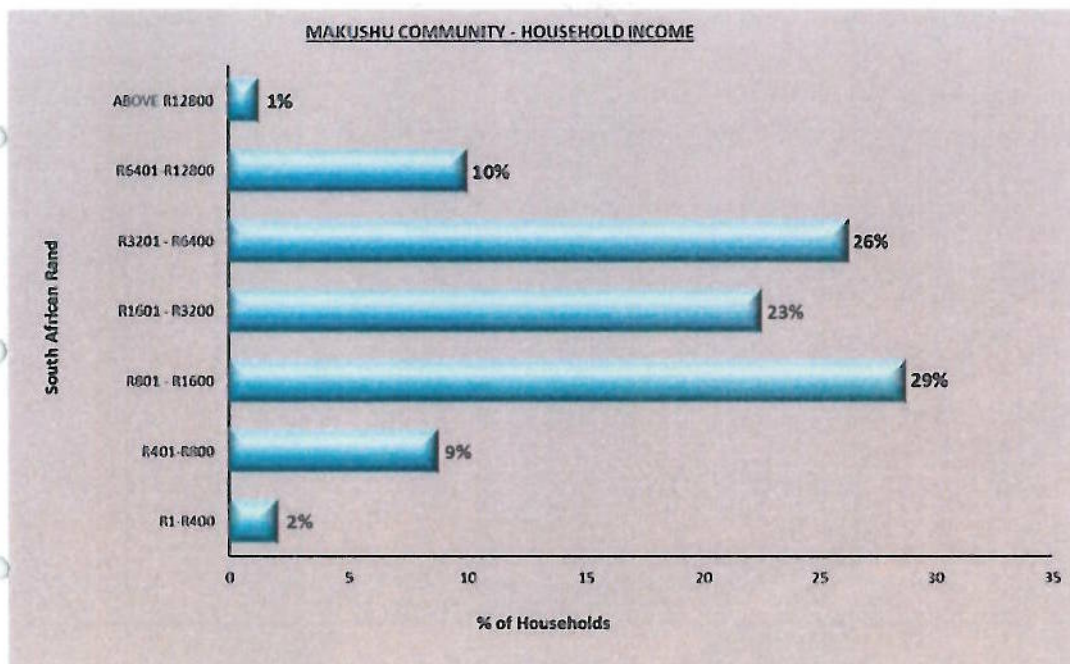


EMPLOYMENT STATUS



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INCOME LEVELS

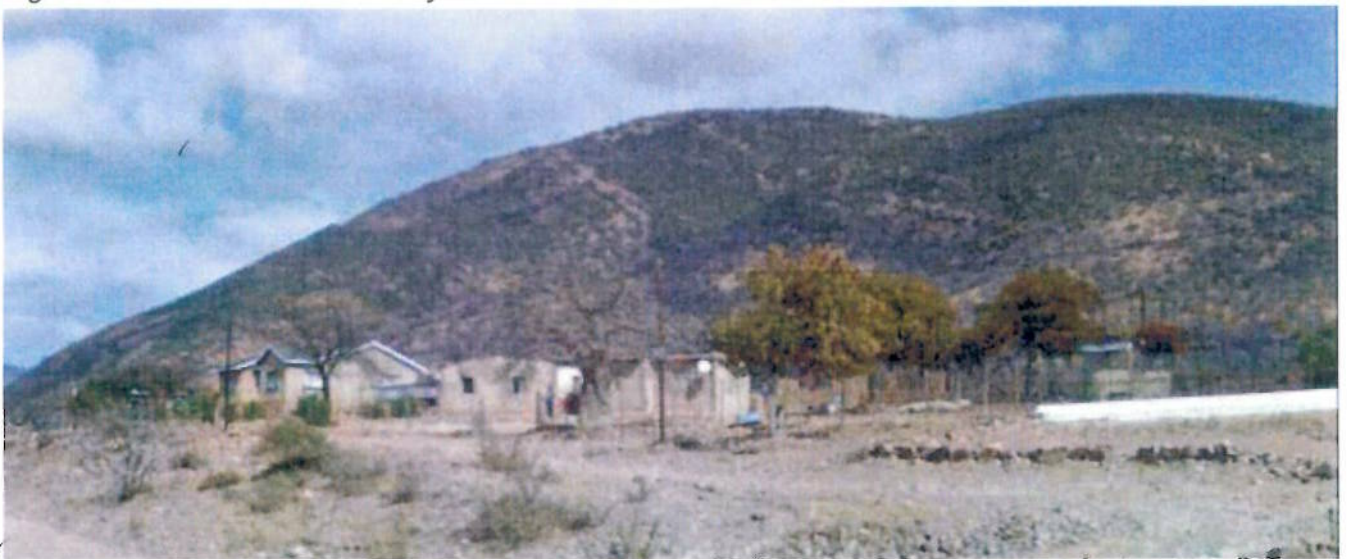


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Figure 4: Google Map of Pfumembe Village



Figure 2: Pfumembe Community



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This community has resided in this area for more than 100 years. The edges of Pfumembe and Makushu-Mosholombe are approximately 2km apart and the land between them is vacant. Pfumembe is located approximately 21 km from the current mine gate. There are currently approximately 220 households and a population of 1,540 people. The community is managed Traditional Leadership. The village has only 1 primary school and no secondary school. There are no health facilities in the community. There are some businesses (shops) located within the village. The village water supply comes from the river and private boreholes (no municipal system). The village is electrified by ESKOM power. The most important needs identified by this community are job opportunities, safe water supply, secondary school, improved access road and access to health services.

3 PROJECT NEED AND MOTIVATION

The Integrated Development Plan (IDP) of Makhado Local Municipality (2012-2017) states that the local economy is unable to provide sufficient employment opportunities to meet the needs of the economically active population. More than half of all households (75,000 out of 130,000) are considered to be indigent.

The level of education and technical skills in the communities affected by the Makhado Colliery Project is limited and for the community to be empowered and fully benefit from the mine development this aspect needs to be addressed.

Most of the population of the municipal area resides in rural areas. Usually education levels in these areas are low and this is also applicable to the Makhado municipal area:

- About 21.2% of the population, above 20 years of age, has a Grade 12 or higher qualification; while 34.9% have no schooling at all. The figure for illiterate people is high compared to the rest of the Limpopo province (33%), as well as nationally (17.9%).
- In total 65.1% of the population in Makhado have some form of schooling and can be regarded as literate. This figure also does not compare favorably with the rest of the province (79%).
- CoAL has committed to a bursaries programme per year for all its operations – none of the students from the communities of Makhado is passing the competency to engage in studies. This has serious implications for employment and money generating opportunities for the population.

Unemployment in Makhado LM is quite high, averaging at 35%. The expanded unemployment rate (EUR) includes discouraged work seekers (DWS) as unemployed and is therefore always higher than the strict unemployment rate.

Discouraged work seekers have given up on trying to find work and are therefore technically not included in the internationally used definition of unemployment.

A table on educational qualifications is provided below.

Table 1: Employment Profile in the Project Area

Area	Employed	Unemployed	DWS ²	SUR ³ %	EUR ⁴ %
Makhado LM	78,768	45,705	24,383	36.7	47.1

Source: Statistics South Africa, Census 2011

The census does not indicate employment per sector, but useful information in this regard can be obtained from commercial providers of statistical information such as Quantec.

² DWS: Discouraged Work Seeker

³ SUR: Strict Unemployment Rate

⁴ EUR: Expanded Unemployment Rate

The information below has been procured from them. It indicates that only 1.2% of the workforce in Makhado LM is employed in the mining sector, but this could change in the foreseeable future considering the pipeline of potential coal mining projects. Increased employment in the mining sector will have a positive impact on employment in other sectors through the indirect employment effect, particularly on construction, trade and transport.

Table 5: Employment by Sector in Makhado Municipality, 2011

Sector	Makhado	Makhado %
Agriculture, forestry and fishing	5578	7.8
Mining and quarrying	832	1.2
Manufacturing	4735	6.6
Electricity, gas and water	264	0.4
Construction	6062	8.5
Wholesale & retail trade, catering and accommodation	21193	29.7
Transport, storage and communication	2943	4.1
Finance, insurance, real estate and business services	5622	7.9
Community, social and personal services	10320	14.5
General government	13801	19.3
Total	71350	100.0

Source: Quantec 2013

Due to the low levels of skills which exist in the project area, CoAL has committed to training 1 000 people on a competence based training programme to enable access to employment opportunities.

4 PROJECT DEFINITION AND SCOPE

4.1 GEOGRAPHICAL LOCATION OF THE PROJECT

The project will be located within the Vhembe District and Makhado Local Municipality, amongst the villages surrounding the Makhado Colliery.

The map below indicates possible localities for the learning centre. It is envisaged that the phase 1 implementation process will see the learning centre being housed at the Tanga Engagement Centre, which will provide the hub for the services. During the 5 year period, additional facilities will be added on to the current infrastructure. The final locality will be secured as a first step in the project implementation.

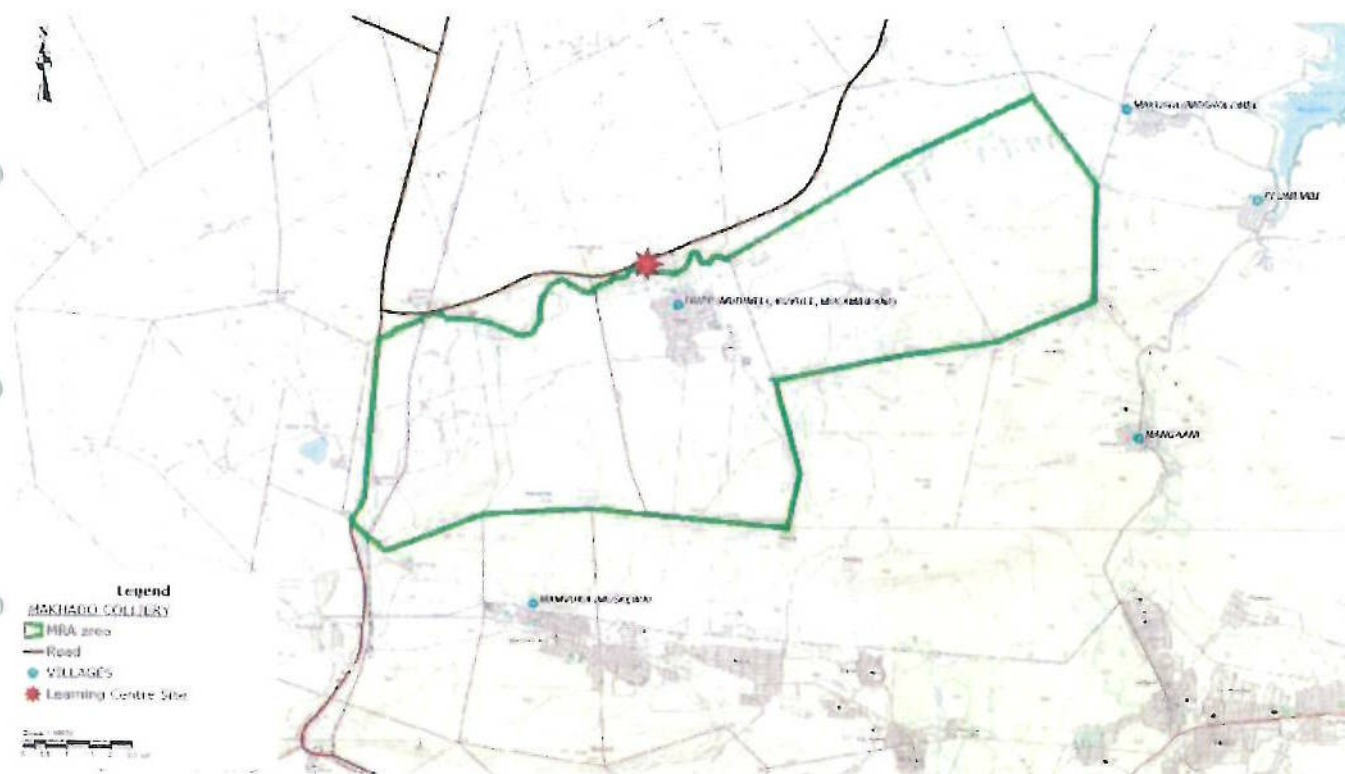
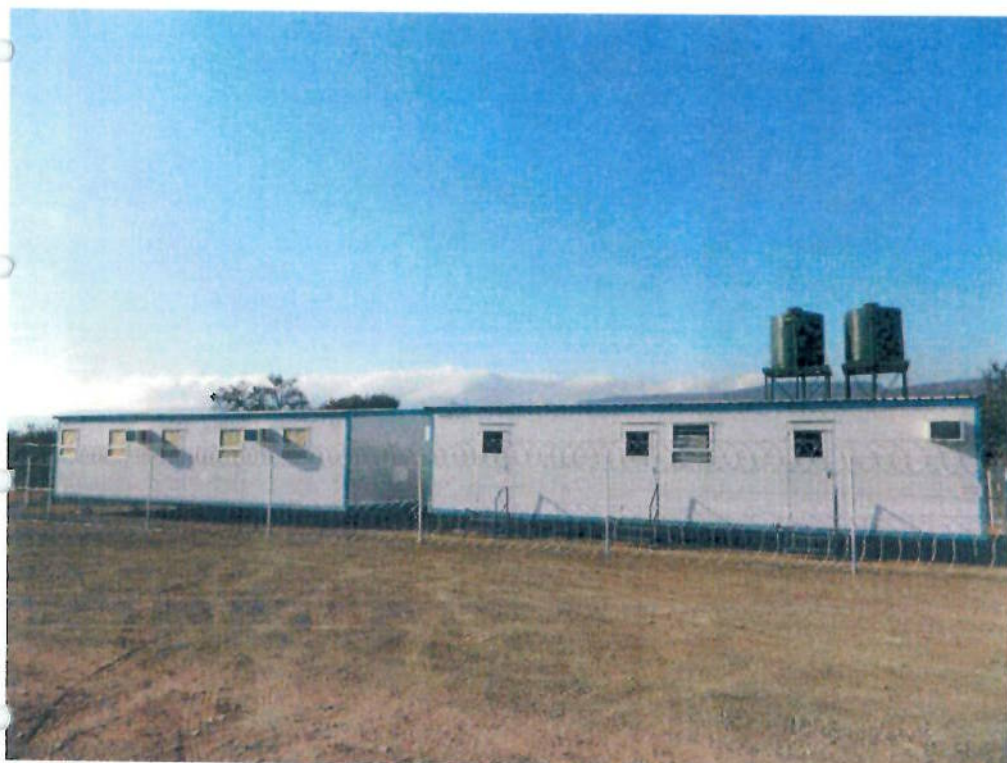


Figure 3: Proposed Locality of the Learning Centre

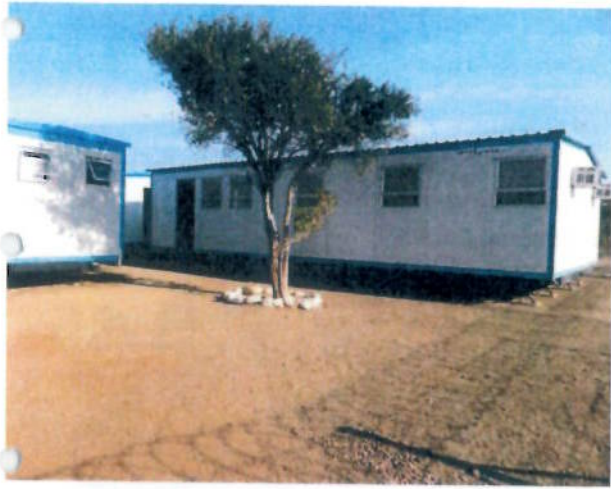
Figure 4: Photo of Tanga Engagement Centre – Proposed Structure for the Learning Centre Phase 1 and 2



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4.2 PROJECT OBJECTIVES

Education is none of the key factors for human resources development. Government's efforts to provide secondary and tertiary schools have not achieved the goals of access, quality improvement and provision of relevant education for all.

Makhado Colliery seeks to establish a Skills Centre earning which will create an environment for adult learners of all levels firstly to have access to competence based short, medium and long term training programmes to enable access to job opportunities.



4.2.1 COMPETENCE BASED TRAINING

The objectives of the Skills Centre is:

- To provide short, medium and long term training programmes to communities
- To create a pipeline of semi and skilled people for employment through the mining operation
- To address shortfalls in competence based training, and English and basic literacy skills
- To obtain and apply the knowledge provided in a productive environment
- Develop ability to use technical equipment like computers properly

4.2.2 TECHNICAL TRAINING PROGRAMME

6.1

The objective of the technical programme is:

- To improve the technical skills level amongst the local communities in both mining related and other technical programmes to be able to access the working environment
- To develop local communities skills levels to fit into mining and other sectors
- To provide learners not finishing grade 12 or not obtaining full exemption with the opportunity to find meaningful employment in the mining industry.

4.2.3 LITERACY AND NUMERACY PROGRAMME

It has proven from past experience that basic literacy and numeracy often stand in the way of people accessing the work or entrepreneur environment. Normally mining companies are only required to provide Basic Education, Literacy and numeracy to workers, it is however believed that both students and adults from the local communities can benefit in this programme.

The objective of the project is:

- To improve basic education, literacy and numeracy amongst students to assist in their performance in all subjects in schools.
- To provide an opportunity for local community members to access basic education, literacy and numeracy programmes to increase their access to the work / business environment
- Access to ABET facilities for learners and adults

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4.3 PROJECT COMPONENTS, CAPACITY AND RESOURCES

4.3.1 SKILLS FRAMEWORK

- Partnerships are being finalized with MerSETA and MQA, with Capricorn FET as the implementing agent, which will be finalized prior to execution.

4.4 EQUIPMENT AND FITTINGS

Provision is made for the following equipment and fittings in the Learning Centre:

- Classrooms
 - Pinning Boards, Writing boards, etc
 - Cupboards
 - Projector & Screen
 - Learner's Desks
 - Learner's Chairs
 - Teacher's Desks
 - Teacher's Chairs
- Workstations
- Library
 - Pinning Boards, Writing boards, etc
 - Cupboards
 - Projector & Screen
 - Learner's Work Tables
 - Learner's Chairs
 - Teacher's Desks
 - Teacher's Chairs
 - Bookshelves
 - Books
- Computer Room
 - Pinning Boards, Writing boards, etc
 - Cupboards
 - Projector & Screen
 - Learner's Desks
 - Learner's Chairs
 - Teacher's Desks
 - Teacher's Chairs
 - Computers
 - Printers
 - Servers
 - Network

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- Office
 - Personnel table
 - Cupboards
 - Admin / Principle Desk
 - Chairs
 - Coffee station

- Training Centre
 - Pinning Boards, Writing boards, etc
 - Cupboards
 - Projector & Screen
 - Learner's Desks
 - Learner's Chairs
 - Teacher's Desks
 - Teacher's Chairs

4.5 PROJECT RESOURCING

Appointment and payment of the following resources for a period of 3 years (Year 3 – 5) has been included:

- A centre manager
- An administrator
- Five (5) teachers
- Five (5) teachers' aides
- Two (2) security guards
- Two (2) cleaners
- (2) maintenance workers

Continuation of the support of the resources will be evaluated in Year 5, and if required provision will be made for this support in the following SLP term (year 6 – 10).

4.6 CONSUMABLES

Payment of the following consumables has been provided for a period of 3 years (Year 3 – 5):

- Stationary
- Coffee & Tea
- Maintenance & Gardens
- IT Systems / Internet
- Water Supply
- Electricity
- Science material






4.7 POTENTIAL PARTNERSHIPS

During the planning and implementation of the Learning Centre, future partnerships and support will be discussed with other role players such as:

- Department of Education
- Existing FET centres
- Research institutions (e.g. the CSIR) and tertiary educational institutions (University of Johannesburg and University of Pretoria have both in the past engaged in enrichment programmes for school)
- Government Communication and Information System (Responsible for the erection of Multi-Purpose Community Centres)
- Private sector

4.8 COMPLETION DATE AND EXIT STRATEGY

This project is seen as a long term initiative to assist the local communities to access to job market through being better educated and equipped to obtain proper paying jobs. Although the project will be implemented in cooperation with various stakeholders, this project will continue after the 5 year term and will not initiate an exit strategy during the first SLP term.

5 PROJECT PROGRAMMES

6.2

The following programmes will be implemented in line with the project's objectives and desired outcomes.

6.3 5.1 ILLITERACY LEVEL AND ABET NEEDS

An ABET programme will be targeted initially at the community and those needs, focused at an ABET Category 1 and 2, and then upon commencement of the construction at the project, employees within Category 4 to 8 will be targeted. The socio-economic study of both the Municipal and the project area reveals that the education levels are very low. Only 17% of the economically active population in the project area is in possession of a Grade 12 certificate, while only 1% have a higher education qualification.

This programme will be implemented within the Skills Development Centre Objectives, and Strategy.

Level	Number of illiteracy	Need	Cumulative need
No Schooling	Unknown - no labour force yet	Estimated - None	
ABET 1	Unknown - no labour force yet	Estimated - None	
ABET 2	Unknown - no labour force yet	Estimated - None	
ABET 3	Unknown - no labour force yet	Estimated - 10	10
ABET 4	Unknown - no labour force yet	Estimated - 10 per year	30

6.4

6.5 THE FINAL NUMBERS OF THOSE TO BE TRAINED AND BUDGET TO BE SPENT

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6.6

6.7 5.2 CORE BUSINESS TRAINING

Field/ area of training	Targets and timelines					
	2015	2016	2017	2018	2019	Total
Drill operators	5	5		5		15
Excavator Operators	5	5		5		15
Dozer Operators			5	5		10
Truck Drivers			5			5
Grader Operators		5	5	5		15
Learner miners					12	12
Total number	10	15	15	20	12	72

6.8 5.2 LEARNERSHIPS (INTERNAL)

Field/ area of training	Targets and timelines					
	2015	2016	2017	2018	2019	Total budget
Operators			3	2	2	7
Safety officers			3	2	2	7
Artisans			3	2	2	7
Administration			2	1	1	4
Geology			1	1	1	3
Engineering			1	1	1	3
Learner miners			1	1	1	3
Total number			14	10	10	34

6.9 5.3 LEARNERSHIPS (EXTERNAL)

Field/ area of training	Targets and timelines					
	2015	2016	2017	2018	2019	Total
Operators		1	2	5	5	13
Safety officers			1			1
Artisans		1	4	5	5	15
Administration			1			1
Geology		1	1			2
Engineering		1	1			2

Total number		4	10	10	10	24
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6.10

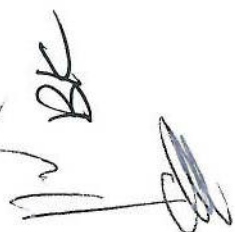
Field/ area of training	Targets and timelines					
	<i>Note: Below, in year 1,2,3,4,5 put the actual calendar timelines</i>					
	2015	2016	2017	2018	2019	Total
Fitter	5	5	3	5	2	
Electrician	5	5	3	5	2	
Boilermaker	3	5	4	3	2	
Artisan assistants	5	10	10	5	4	
Total number	18	25	20	20	20	




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6 PROJECT SCHEDULING

No	Line item	Year 1	Year 2	Year 3	Year 4	Year 5
A	Construct all Building Works for Learning Centre					
B	Construct Practical Training Area					
C	Procure & Install Equipment and Fittings					
D	Appoint and Support Human Resources					
E	Procure & Dispense Consumables					
F	Project Design & Management					


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SKILLS LEVELS	Job Descriptions	MQA Training Programme	Duration/ Description	MerSETA Training	Duration/ Description
Unskilled					
Services	Cleaning staff				
Piling	General labour				
Earthworks	General Labour				
	Spotters				
	Survey Assistants				
	Workshop assistants				
	Diesel attendants				
Building work	General Labour				
	Concrete hands				
	Mixing hands				
Concrete Works	General labour				
	Concrete hands				
	Steelfixers(rebar)				
	Assistant shutterhands				
Steelwork	General labour				
	Bolting teams				
Mechanical	General Labour				
	Bolting teams				
Piping	General labour				
	Bolting teams				
Electrical	General labour				
	Cable pullers				
	Strapping teams				
SEMI SKILLED					
Services	Safety Representatives				
	Administration				
	Security assistants				

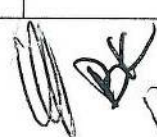




SKILLS LEVELS	Job Descriptions	MQA Training Programme	Duration/ Description	MerSETA Training	Duration/ Description
	Fire Marshall				
Piling	Drill assistants				
Earthworks	Blasting assistant				
Building Work	Bricklayers				
	Plasterers				
	Tilers				
	Shutterhands				
	Glaziers				
	Fencing				
	Painters				
Concrete Work	Shutterhands				
	Concrete team leaders				
	Carpenters				
	Portable electric tool operators.(Grinders, skill saw etc)				
Steelwork	Rigging and slinging				
	Steel catchers				
	Rigger assistants				
SKILLED					
Services	Safety Manager/Super.				
	Discipline Supervisors				
	Security Manager				
	Occupational Practitioner				
	Paramedic				
	First aiders				
	Surveyor				
Piling	Drill operators				
	Machine operators				
	Boilermakers				

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SKILLS LEVELS	Job Descriptions	MQA Training Programme	Duration/ Description	MerSETA Training	Duration/ Description
	Drivers				
Earthworks	Machine Operators				
	Truck drivers				
	Mechanics				
	Surveyor				
	Drivers				
	Blasters				
Building Works	Plumbers				
	Electricians				
	Machine operators				
	Batch Plant operators				
	Drivers				
	Working at heights				
Concrete Works	Boilermakers				
	Crane operators				
	Concrete technologists				
	Batch Plant Operators				
	Mechanics				
	Formwork Erectors				
	Formwork Inspectors				
	Scaffold erectors				
	Scaffold inspectors				
	Drivers				
Steelwork	Riggers				
	Machine Operators				
	Crane operators				
	Scaffold erectors				
	Scaffold inspectors				
	Drivers				
	Working at heights				



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SKILLS LEVELS	Job Descriptions	MQA Training Programme	Duration/ Description	MerSETA Training	Duration/ Description
Mechanical	Fitters				
	Crane operators				
	Machine operators				
	Riggers				
	Boilermakers				
	Welders				
	Mechanics				
	Drivers				
	Working at heights				
Piping	Welders				
	Boilermakers				
	Crane operators				
	Machine operators				
	Pipe fitters				
	Riggers				
	Mechanics				
	Drivers				
	Working at heights				
Electrical	Boilermakers				
	Welders				
	Electrician				
	Instrumentation Tech				
	Riggers				
	Scaffold erectors				
	Scaffold inspectors				
	Drivers				
	Working at heights				

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8 COST ESTIMATE AND CASH FLOW

A. SUMMARY COST ESTIMATE

BUDGET

No	Project	2015	2016	2017	2018	2019	Total
1	Learning Centre						
	Facilitation of Agreements	R 75 000.00					R 75 000.00
	Stakeholder Engagement and Awareness Campaign	R 75 000.00					R 75 000.00
	Phase 1 Implementation Process	R 1 150 000.00					R 1 150 000.00
	Equipping	R 1 040 000.00					R 1 040 000.00
	Phase 2 Implementation		R 6 430 000.00				R 6 430 000.00
	Operations						R 0.00
	Management			R 1 420 000.00	R 420 000.00		R 1 840 000.00
	Sub-total	R 2 340 000.00	R 6 430 000.00	R 1 420 000.00	R 420 000.00	R 0.00	R 10 610 000.00




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PROJECT 2

MAKHADO COMMUNITY WATER SUPPLY SCOPING REPORT

1. INTRODUCTION

Coal of Africa Limited (CoAL) intends to establish the Makhado mine with a coal product output of 5 Mtpa (13 698 tpd) in the Limpopo province in the Soutpansberg coal field. This will be the first of a number of possible mines that could be developed in the area directly north of the Soutpansberg. Water in the northern parts of the Limpopo Province is scarce and there is strong competition between various water users for the limited water resources.

During various meetings with DWA it was repeatedly stated that they are concerned about the potential impact of mining activities and ground water harvesting by CoAL on the current predominantly borehole systems of the communities around and close to the proposed mine. DWA indicated that unless this concern is addressed to their satisfaction it is unlikely that CoAL will be issued with an IWULA.

In a study commissioned by CoAL and conducted by WSM Leshika on the impact of the mining activities on ground water resources in the vicinity of the proposed mine, it was confirmed that the yield of the boreholes in the villages of Pfumembe (Musekwa), Mudimeli, Makushu and Mosholombe will be significantly affected. The latter two villages are adjacent to each other and receive water from the same distribution system. For the purposes of this scoping report the effects on Mosholombe will be considered together with those of Makushu.

The purpose of this report is to address the technical concerns associated with the water supply to the affected villages and to formulate a proposal to ensure the current level of water supply to the affected villages is sustained by implementing mitigating measures to counteract the negative effect on the borehole yields as a result of mining activities. All proposed work discussed in this report forms part of a technical evaluation and is subject to discussions with Makhado Municipality, the Water Services Provider for the villages as well as the Vhembe District Municipality, the Water Services Authority for the villages.

It is expected that all necessary steps required to secure the current level of service to residents currently residing in the affected villages should form part of the Makhado Mining Project's early works programme. Any further upgrades and improvements to the level of service within these villages will be reliant on the bulk water infrastructure to be constructed for the implementation of Phase 2 of the mining project.

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The extent of the Makhado Project's mining developments and the location of the affected villages are indicated on drawing 1856.00.ZA.05.S006 attached in Annexure A.

2. AFFECTED COMMUNITIES

Surveys conducted for the Makhado mining project indicated that the communities of Mudimeli (Fripp), Makushu, and Pfumembe (Musekwa) will potentially be impacted on. The table below summarises the population figures for each village.

6.10.1 Table 1: Population Figures

Village	Households	Current population (estimated)
Mudimeli (Fripp)	831	4 986
Makushu	475	2 850
Pfumembe (Musekwa)	220	1 320

A total of 1 526 households and 9 156 persons are affected.

Each of the affected villages is equipped with communal standpipes within 200 m walking distance and a number of households are supplied from private boreholes. The table below summarises the number of privately owned boreholes per village established during a recent survey:

Table 2: Village Boreholes

Village	No. Boreholes
Mudimeli (Fripp)	44
Makushu	2
Pfumembe (Musekwa)	2

The current theoretical average water demand on the existing municipal water supply system for each village was calculated based on the prescribed 25 l/cap/day for RDP standpipe level of service

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Table 3: Current Theoretical Village Water Demand Excluding Private Boreholes

Village	RDP (25 ℓ/cap/day)	
	Average m ³ /day	Peak (ℓ/s)
Mudimeli (Fripp)	125	2,16
Makushu	71	1,24
Pfumembe (Musekwa)	33	0,57
	229	3,97

Taking the effect of the mining activities into consideration, an additional water demand for each village is assumed for those households currently supplied with water from private boreholes. The assumed level of service for these households is house connections with a full low cost service resulting in a water demand of 1000 ℓ/borehole/day. The resultant effect on the water demand is shown in the table below. This report is based on the assumption that CoAL will be required to ensure that the current level of service available to every house hold in the villages must be retained.

Table 4: Current and Future Theoretical Village Water Demand including Private Boreholes

Demographics					Existing Water Demand without level of water			Phase 1: Water Demand at current level of water										Phase 2: Water Demand at higher level with water supplemented from bulk water						
Village/ Community	Actual Households	Current Estimated Population	Private Boreholes	Est 2032 Population	Current AAD (kl/day)	SPD (l/s)	RDP Demand (kl/day)	BH repl. (kl/day)	Total AAD (kl/day)	SPD (l/s)	Y con Demand (kl/day)	Total BH repl. (kl/day)	Total AAD (kl/day)	Available from Sand Wells (kl/day)	Total Bulk Water pipeline supply with sand wells	Total Bulk Water pipeline supply w/o sand wells	SPD (l/s)	Storage required (kl/day)						
Musekwa	220	1 320	2	1 981	33	0.57	50	2	52	0.89	119	2	121				2.10	242						
Makushu	475	2 850	2	4 277	71	1.24	107	2	109	1.89	257	2	259				4.49	517						
Mudimeli/Fripp	831	4 986	44	7 482	125	2.16	187	44	231	4.01	449	44	493				8.98	986						
Total	1 526	9 156	48	13 739	229	3.97	343	48	391	6.39	824	48	872	256	616	872	15.1	1 745						

Community Water Supply Storage

Village/Community	Available Storage			Required Phase 2 Storage			Required Phase 2 Storage		
	Regional	Local	kl	Regional	Local	kl	Regional	Local	Shortfall
Musekwa	48	59	121	121	134	10	10	12	27
Makushu	104	63	259	259	350	10	10	6	33
Mudimeli/Fripp	198	246	493	493	542	10	10	12	26
Total	350	368	872	872	1 027				

Pipeline capacity deemed adequate Pump rate to be increased for Phase 2

Notes:

- 1 Stated Pump Rate from Sand Wells 8.89 l/s
- 2 RDP demand 25 l/cap/day
- 3 YC demand 60 l/cap/day
- 4 Borehole replacement 1000 l/cap/day
- 5 People/household 6
- 6 Annual average daily demand (AAD) (SPD) = 1.5
- 7 Summer peak demand (SPD)
- 8 Storage requirement = 2xAADD (48 hrs)
- 9 Growth rate of villages assumed to be an average of 1.3% per annum over 20 year period.
- 10 Total population increase Total growth of 30% over 20 year period.

Assume pumping 12 hour per day per sand well 384 m³/d

150 l/h/day
360 l/h/day

2 %
50 %

3. EXISTING SYSTEMS

Existing bulk water infrastructure is indicated on drawings 1856.00.ZA.05.U001, U002 and U003 in Annexure B. In the past water was abstracted from an alluvial sand abstraction system on the banks of the Nzhelele River upstream of the dam. This water was chlorinated and pumped to a bulk storage reservoir via a 2 517 m, 110 mm diameter class 16 mPVC pipeline. From the bulk storage reservoir, the water is distributed to three distribution tanks supplying water to the villages of Mudimeli, Makushu and Pfumembe (Musekwa) via internal distribution networks.

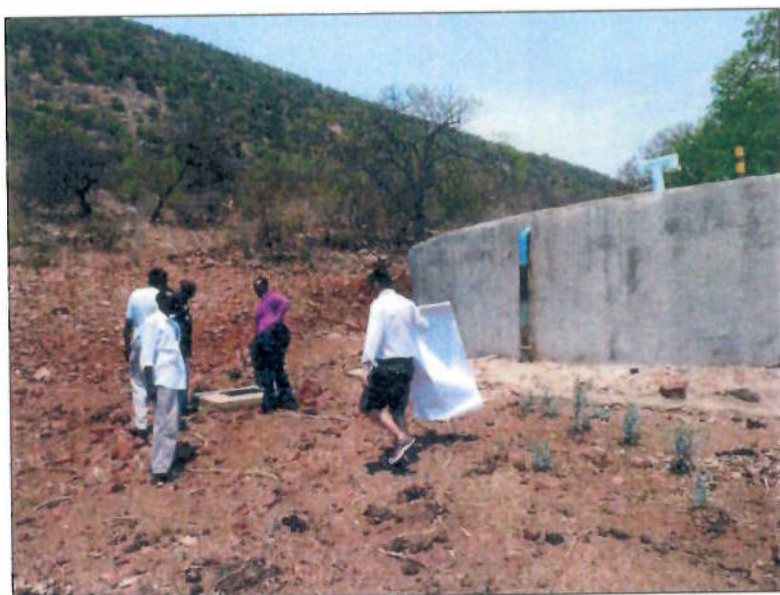


Figure 1 – Village Water Supply Storage Tank

The bulk water system described above is currently partially in operation and cannot supply sufficient water to the abovementioned communities and therefore residents of the affected villages also obtain water from municipal boreholes from where water is pumped into the three distribution tanks mentioned above. Water then gravitates into the distribution system to communal standpipes.

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Figure 2 – Damage Alluvial Sand Abstraction System

Table 5 below summarises the known existing infrastructure.

Table 5: Existing Village Water Supply Infrastructure

Infrastructure	Description	Condition
Ground Water Abstraction	Alluvial sand abstraction system consisting of well points of which only 2 are functional.	Functional (Capacity not sufficient)
Disinfection System	Chlorine gas dosing facility in close proximity to abstraction point	Dysfunctional
Rising Main	110 mm diameter, class 16, mPVC, length = 2 517 m in	Functional but refurbishment required
Bulk Storage Reservoir	length 300 m ³	Functional but refurbishment required
Gravity Main to Mudimeli	110 mm diameter, mPVC, length = 18 134	Functional but refurbishment required
Gravity Main to Makushu	110 mm diameter, mPVC, length included under Mudimeli gravity main	Functional but refurbishment required
Gravity Main to Pfumembe	110 mm diameter, mPVC,	Functional but refurbishment

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(Musekwa)	length = 1 072 m	required
Mudimeli Distribution Tank	110 m ³	Basic maintenance required
Makushu Distribution Tank	90 m ³	Basic maintenance required
Pfumembe (Musekwa) Distribution Tank	90 m ³	Basic maintenance required
Mudimeli Distribution Network	63 mm diameter PVC pipelines	Poor
Makushu Distribution Network	63 mm diameter PVC pipelines	Poor
Pfumembe (Musekwa) Distribution Network	63 mm diameter PVC pipelines	Poor
Mudimeli Standpipes		Poor – majority require refurbishment
Makushu Standpipes		Poor – majority require refurbishment
Pfumembe (Musekwa) Standpipes		Poor – majority require refurbishment

4. POSSIBLE FUTURE PHASES

It is possible for CoAL to improve the water supply assurance to the villages by abstracting raw water from the Nzhelele Dam, treating the water before distributing it to the villages of Mudimeli, Pfumembe (Musekwa) and Makushu. This will be a policy decision to be taken by CoAL and may be required to improve relations with interested and affected parties. This future plan can however only come into effect once the raw water abstraction allocation from the Nzhelele Dam has been approved. Depending on future investigations into population growth rates, raw water abstraction yields and water qualities, CoAL may consider the following future options:

- Provide an improved standpipe system with more conveniently located standpipes. This will also increase the water usage to approximately 400 to 500m³/day. Purification facilities will have to be provided unless the sand abstraction system can provide this volume.
- Upgrade to house connections and accept the demand will be 600 to 800 m³/day. This will have to be managed by means of water meters. Free basic water is 6 kℓ/month or 200 ℓ/house/day. More than that must be paid for.

The above options will be further refined in co-operation with the WSA.

CoAL has committed in principal to provide every stand with a yard connection. This was discussed with Makhado Local Municipality and they support this provided metering and cost recovery is also implemented.

CoAL can only undertake this if sufficient water (for use by the communities) is allocated by DWA from the Nzhelele Dam. CoAL can then convey the water in its own bulk system and purify it to SANS241 quality in a suitable sized and located purification plant before feeding it into an enhanced bulk water system to the improved reticulation systems of the communities.

At this stage Bigen Africa has only undertaken conceptual designs to obtain a first order cost estimate for the improved water supply.

This estimate is:

1,5Mℓ/d Water Treatment Works	R10m
Link bulk services	R7m
Storage	R2m
Improved internal reticulation	R11m
Contingencies	R3m
Feed design	R1,8m
VAT	R4,872m
Total	R39,672m

The proposed budget is R40m. This allows for $\pm 30\%$ growth in water demand due to the expected migration into the villages as a result of the economical stimulus of the mining activity.

5. RECOMMENDED VILLAGE SUPPLY REFURBISHMENT

As a first phase and as part of the early works of the Makhado Mine development to ensure the sustainable supply of water to the affected villages, it is recommended to reinstate the alluvial sand abstraction system and refurbish the bulk supply, distribution and standpipe systems to the communities. After the refurbishment and

reinstatement of the existing infrastructure, CoAL can make a policy decision together with the Makhado Local Municipality as to whether to further improve systems to higher levels of service as described in Section 4 above.

5.1 Raw Water Abstraction

The following actions are proposed for the refurbishment of the alluvium sand abstraction point:

- Re-develop the four existing well points damaged in past floods

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- Replace borehole pumps
- Replace existing pump manifold pipework
- Conduct a Geotechnical Investigation including a sand profiling exercise, and
- Power supply

5.2 Disinfection System

The current chlorination system is dysfunctional and must be completely refurbished. A new chlorine gas system is to be installed

5.3 Metering

Additional bulk water meters are to be installed for proper water demand management and control. This includes a meter on each of the borehole pumps, inlet and outlet meters on the bulk storage reservoir and each of the village distribution tanks. It will also be considered to install meters on each of the standpipes in the village.

5.4 Distribution and Storage

The following refurbishment actions are proposed for the water distribution network and storage:

- Repair bandages on concrete reservoir and tanks
- Replace/ repair damaged air valves
- Replace/ repair damaged stand pipes
- Repair pipeline leaks
- Repair joints, and
- Remove illegal connections

6. EIA / IWULA CONSIDERATIONS

The bulk water supply pipeline and the potential additional 600m³/day of water required for the communities has been included in the NEMA and IWULA application for Makhado Colliery.

7. COST ESTIMATE

The estimated total cost of the refurbishment is R5 384 500.00. The cost estimate is detailed below.

Table 6: Village Water Refurbishment Cost Estimate

Item Description	Sub-Total	Amount
Alluvial Sand Abstraction System		R2 675 000.00
Re-instate 4 existing well points	R 300 000.00	
4 No borehole pumps	R1 200 000.00	
Refurbish / replace manifold pipework	R 100 000.00	
Installation of new flow meters	R 75 000.00	
Power Supply	R1 000 000.00	
Rising Main		R 120 000.00
Replace damaged air valves	R 100 000.00	
Miscellaneous repairs	R 20 000.00	
Bulk Storage Reservoir		R 200 000.00
Bandages and valve chambers	R 200 000.00	
Gravity Mains to Distribution Tanks		R 350 000.00
Mudimeli	R 250 000.00	
Pfumembe (Musekwa)	R 100 000.00	
Distribution Tanks		R 150 000.00
Mudimeli	R 50 000.00	
Makushu	R 50 000.00	
Pfumembe (Musekwa)	R 50 000.00	
Distribution Networks		R 900 000.00
Mudimeli	R 500 000.00	
Makushu	R 200 000.00	
Pfumembe (Musekwa)	R 200 000.00	
Standpipes		R 500 000.00
Mudimeli	R 200 000.00	
Makushu	R 200 000.00	
Pfumembe (Musekwa)	R 100 000.00	
Sub-Total		R4 895 000.00
Contingencies (10%)		R 489 500.00
Total Refurbishment Cost		R5 384 500.00

8. PROGRAMME

It is recommended that the refurbishment work to the village water supply be conducted as part of the Makhado Mining Project's early works programme commencing as soon as possible with an estimated duration of 12 months. The programme will fit with the "Early Works" Programme of the project and will take 12 months to complete.

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PROJECT 3 MAKHADO ROAD UPGRADE

1. SYNOPSIS

This report details the technical requirements for the upgrading of the existing Provincial Makushu Road starting at the proposed Makhado Mine entrance on the D745 up to the D3672 intersection. From the D3672 intersection it runs past Makushu village terminating at Musekwa village on the D3671 intersection. The length of road to be upgraded is in the order of 15km (refer Figure 1: Keyplan below).

The upgrade will be to a gravel standard and will basically improve the vertical alignment and stormwater drainage but will also improve the driving comfort by means of a final gravel wearing course on top.

The project will be financed through the Road Social and Labour (SLP) action plan and has a fixed budget. The available budget however limits the improvements that can be done to the road.

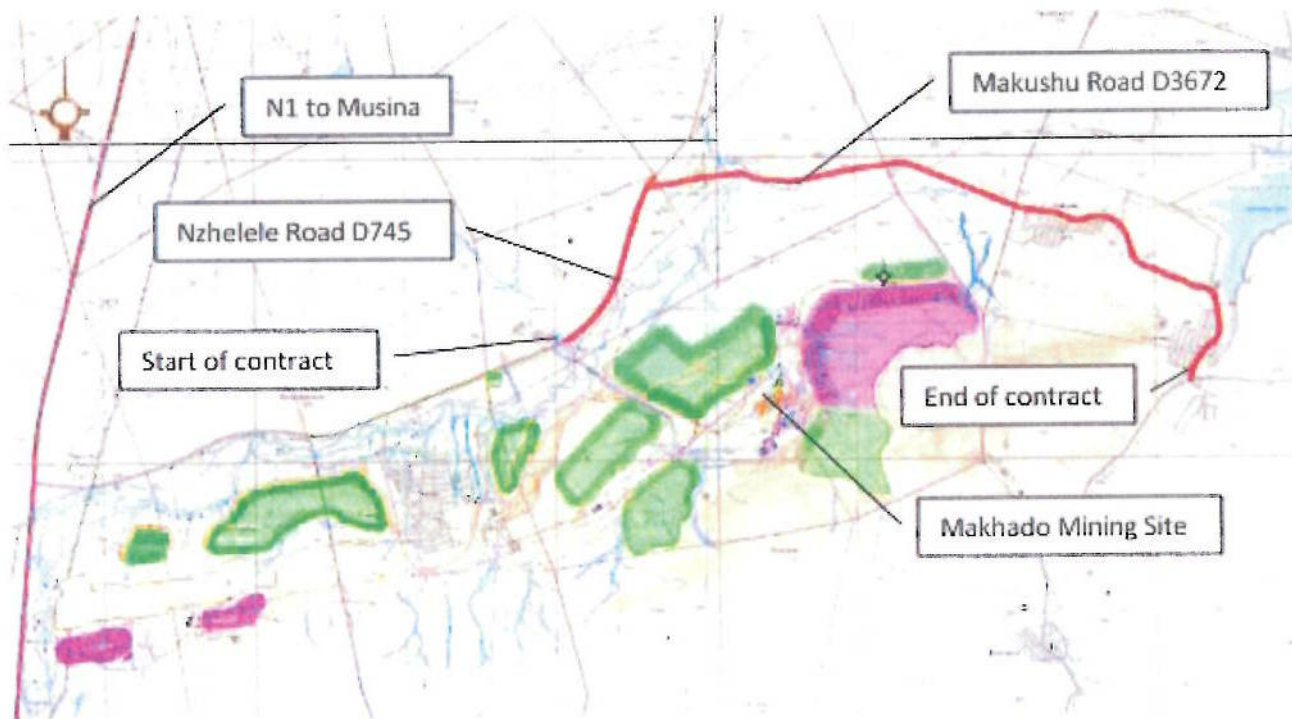


Figure 1: Keyplan

2. INTRODUCTION

The Nzhelele Provincial Road (D745) is a gravel road frequented by local traffic. The structure of the road is typically for low volume traffic and consists mainly of fill where necessary and a wearing course on top. Typically with these roads they lose the fines during the dry seasons and end up with loose sand on the surface which is the reason for the corrugation forming (refer Figure 2: Nzhelele Road surface showing corrugations).



Figure 2: Nzhelele Road surface showing corrugations



Figure 3: Typical condition of culverts on the Nzhelele Road

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Most of the culverts along the road have silted up with sand forcing the storm water to flow across the road. (refer Figure 3: Typical condition of culverts on the Nzhelele Road).

The stretch of Makushu Road adjacent and east of the Mutamba Bridge, over a distance of approximately 300m, is occasionally flooded during the wet season making the road impassable for up to two days or more, the reason being that the road crosses a natural drainage channel at this point where silt has been deposited over the years. The road will be flooded at this point or so slippery that vehicles cannot pass. (see Figure 4: Makushu Road east of Mutamba Bridge) below.



Figure 4: Makushu Road east of Mutamba Bridge crossing

The road leading past Makushu village (D3672) is a gravel district road but has no layerworks. It has been graded to the extent that the road level is generally below the natural ground level. This presents problems with storm water drainage. These areas have been illustrated in Figure 5: Makushu Road alignment, and requires the road to be raised above the natural ground level by adding additional fill layers.



Figure 5: Makushu Road alignment

As a result of insufficient fill (layer works) over most of the storm water pipe culverts, pipes have been broken and will require replacement. Wing walls on the inlet and outlet of culverts will also have to be repaired.



Figure 6: Broken wing walls and pipe culverts

No traffic studies have been carried out or future growth patterns determined. It is however, envisaged that traffic on this road will increase substantially due to the future mining activities in the area.

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 Middle right: *[Signature]*
 Bottom left: *PV*
 Bottom middle: *[Signature]*
 Bottom right: *MC*

3. PROPOSED UPGRADING

As discussed above, the Makushu Road is currently in a poor state of repair and needs upgrading to ensure continuous access, especially when the Makhado Mine comes into operation and labourers are to be transported along this route generating increased traffic flow. As this is a Provincial Road the Limpopo Roads Agency will need to be involved when this proposal is taken to the implementation stage.

As a basic upgrade the following work has been costed:

- The entire length of the road ripped to a depth of 150mm and re-compacted to 93% Mod. AASHO at OMC;
- Where required fill layers of G7 material will be imported to improve the road vertical alignment;
- Two layers of wearing course material will be placed on top of the subgrade;
- Storm water drains and side drains will be cut;
- Existing culverts will be repaired and replaced where necessary.

4. ROAD PROFILE.

As shown in the cross section, the road will have a 3% camber and will have two 4.5m wide lanes given a total of 9m wide driving surface. The longitudinal grade is generally flat, with a total vertical difference of about 50m over the entire length of about 15km. A typical cross section of the roadworks is shown in Figure 7: Typical Road Section below.

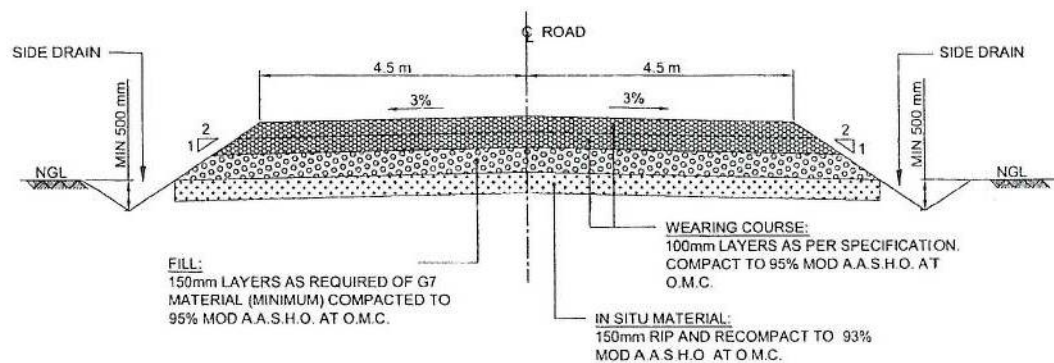


Figure 7: Typical Road Section

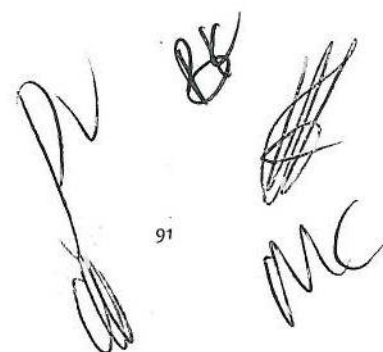
References:

TECHNICAL RECOMMENDATIONS FOR HIGHWAYS

Draft TRH 20

THE STRUCTURAL DESIGN, CONSTRUCTION AND MAINTENANCE OF
UNPAVED ROADS 1990

ISBN 0 908381 87 5 Pretoria, South Africa, 1990

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5. Annexures A – Cost Estimate

		Makhushu Road Gravel Option				
		Roadway width	m	9	-	-
		Roadway length	m	15,000	-	-
	SANS 1200C	<u>SITE CLEARANCE</u>				
	8.2.1	- <u>Clear and Grub</u>				
32.1		- Clear and Grub site to total width of road	ha	0.00	6,544.00	-
	8.2.2	- <u>Remove and grub large trees and tree stumps of girth</u>				
32.2	8.2.2 a)	Over 1m and up to and including 2m	No	0	918.00	-
32.3	8.2.2 b)	Over 2m and up to and including 3m	No	0	1,836.00	-
	8.2.10	- <u>Remove topsoil and stockpile</u>				
32.4		- 150mm Nominal depth	m³	0	30.00	-
	SANS 1200 DM	<u>EARTHWORKS</u>				
		- Bulk Excavation				
	8.3.2	- <u>Excavate in all materials other than rock, haul and use as backfill</u>				
32.5		Road box cut to depth of 150mm	m³	0	31.78	-
32.6		Extra over items 32.5 for excavating in hard rock material	m³	0	228.66	-
		TOTAL CARRIED FORWARD				00.00




No.	Refers	Short Description	Unit	Qty	Rate	Amount
		TOTAL BROUGHT FORWARD				11,112,000.00
		Concrete pipe culverts: On class A bedding: Type SC 600mm D-load pipes with ogee joints Excavating soft material situated within the following depth ranges below the surface level 0 m up to 1,5 m Backfilling of trench Road Marking Road Furniture	m m ³ m ³ m sum	250 300 300 0 1	1,000.00 45.00 60.00 8.00 250,000.00	250,000.00 13,500.00 18,000.00 - 250,000.00
		Total Carried to Summary : Preliminary and general TOTAL			R 30.00%	11,643,500.00 3,493,050.00 15,136,550.00





6. Annexures B – Drawings

Drawing Number	Drawing Title
0410000ID-A300-332-01-01-0011	NZHELELE AND MAKUSHU ROAD – LAYOUT
0410000ID-A300-332-01-01-0005 SECTION	MAKUSHU ROAD UPGRADE - LAYOUT AND LONG
0410000ID-A300-332-01-01-0012 DETAILS	NZHELELE AND MAKUSHU ROAD - LAYERWORKS
0410000ID-A100-111-01-01-0017	PIPE CULVERT DETAIL 2 (900 DIA) TYPICAL DETAILS

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MC BK
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Year	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1987	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100														

[illegible]

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ROAD SETTING OUT DATA									
LINE	CH	VB	X ₁₀	DA	WGS 84				
EC1	1510.678			01.15					
EC2	1510.678		2208.4833	31.043841 ROAD					
EC3	1510.678								
EC4	1510.678		2517.84	4.57					
EC5	1510.678		2517.84	1.56					
EC6	1510.678		2517.84	1.56					
EC7	1510.678		2517.84	1.56					
EC8	1510.678		2517.84	1.56					
EC9	1510.678		2517.84	1.56					
EC10	1510.678		2517.84	1.56					
EC11	1510.678		2517.84	1.56					
EC12	1510.678		2517.84	1.56					
EC13	1510.678		2517.84	1.56					
EC14	1510.678		2517.84	1.56					
EC15	1510.678		2517.84	1.56					
EC16	1510.678		2517.84	1.56					
EC17	1510.678		2517.84	1.56					
EC18	1510.678		2517.84	1.56					
EC19	1510.678		2517.84	1.56					
EC20	1510.678		2517.84	1.56					

MATERIAL SPECIFICATIONS FOR WEARING COURSE

W-150mm LAYERS AS FOLLOWS:
MATERIAL (MINIMUM) COMPACTED TO 03% MOOD A ASH D 110 MC
IN SITU M-VEB/M

WEARING COURSE
150mm LAYERS AS FOLLOWS:
MATERIAL (MINIMUM) COMPACTED TO 03% MOOD A ASH D 110 MC
IN SITU M-VEB/M

150mm RIPA AND RECOMPACT TO 03%
MOOD A ASH D 110 MC

MAKUSHU ROAD
LAYERSWORKS

DESIGN SPEED 80 KM/H
NTS

NOTES:
TEMPORARY BYPASS TO BE CONSTRUCTED AND
MAINTAINED BY CONTRACTOR FOR DURATION OF
CONTRACT

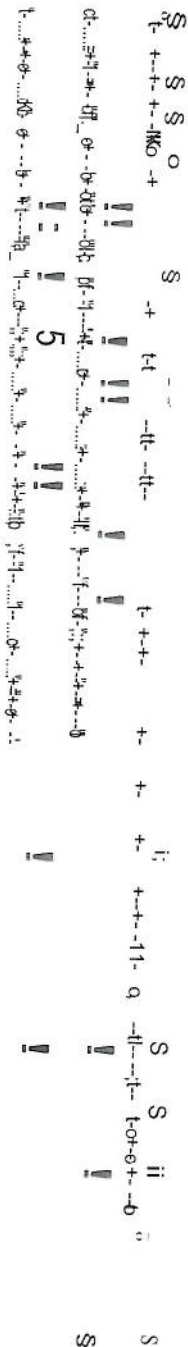
CULVERT DETAILS
NTS

ROAD CENTRELINE
NGL CENTRELINE

Horizontal 1:1000
Vertical 1:100

Datum : 612 m

CUT / FILL
ROAD CENTRELINE
C/L GROUND LEVEL
CHAINAGE (m)
VERTICAL PROFILE
HORIZONTAL
SECTION PROFILE



1 IN 12863
000844%

1 IN 12863
000844%

left-to-right

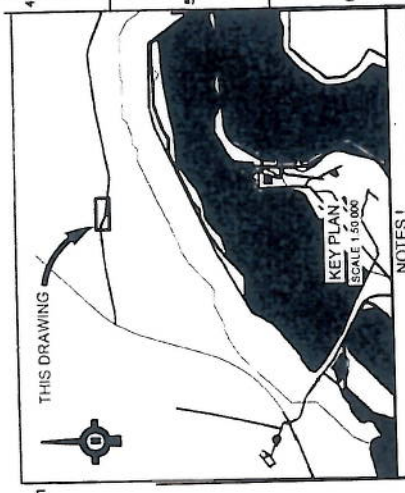
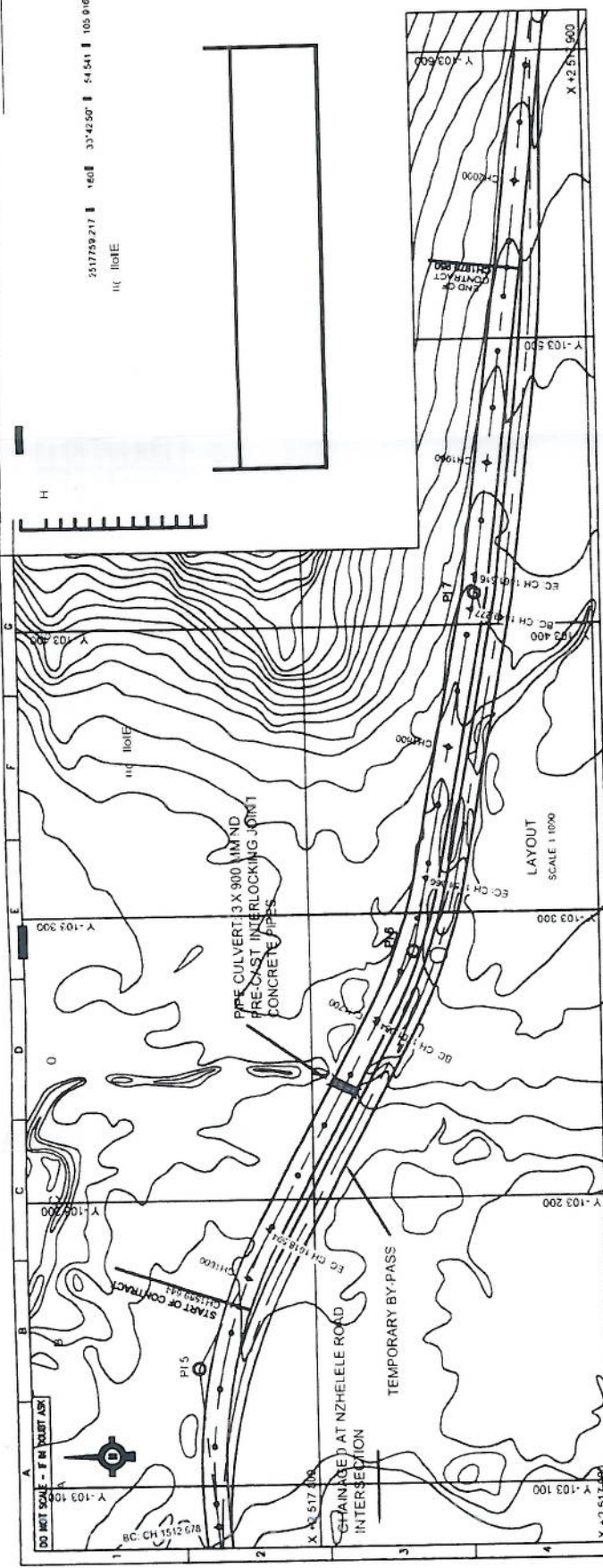
MAKUSHU ROAD (CH1560 - CH2000)
DESIGN SPEED 80

DESIGN
STRUCTURE

DESIGN
STRUCTURE

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The graph displays the U.S. population distribution by age group and sex from 1950 to 2000. The vertical axis represents age groups from 0 to 100 in 10-year increments. The horizontal axis represents the population in millions, ranging from 0 to 200 million. The graph is divided into two main sections: 'Male' on the left and 'Female' on the right. The data is presented as a series of horizontal bars for each age group, with the length of the bar indicating the population size. The graph shows a significant shift in the population structure over time, with a large increase in the young population (0-20 years) in the 1950s and 1960s, followed by a decline in the young population and a corresponding increase in the middle-aged and elderly populations in the 1970s and 1980s. The graph also shows a steady increase in the total population over the entire period.

Age Group	Male (Millions)	Female (Millions)
0-10	~100	~100
10-20	~100	~100
20-30	~100	~100
30-40	~100	~100
40-50	~100	~100
50-60	~100	~100
60-70	~100	~100
70-80	~100	~100
80-90	~100	~100
90-100	~100	~100

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REV	SHT	DISP	ITEM	COMP	COUNT	PHASE	PROJ
1	NO.	CODE					
MAK-E-B-18-332-0005-01-01							

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COAL
COAL of AFRICA LIMITED
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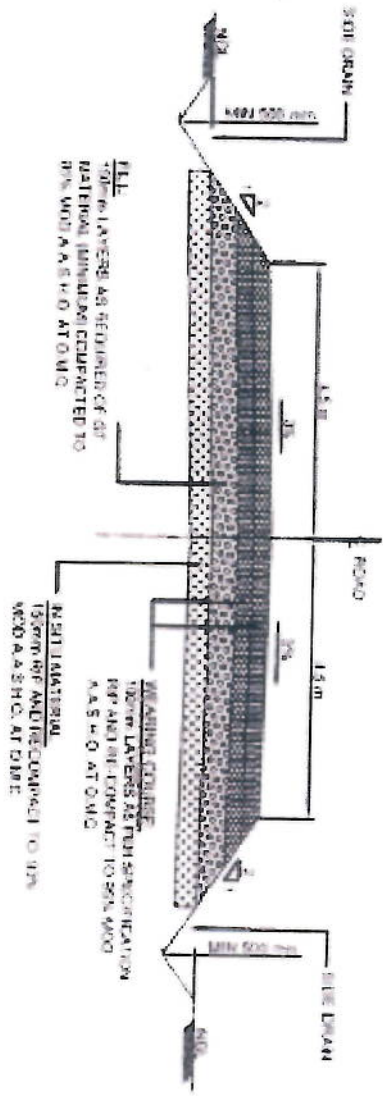
REMARKS

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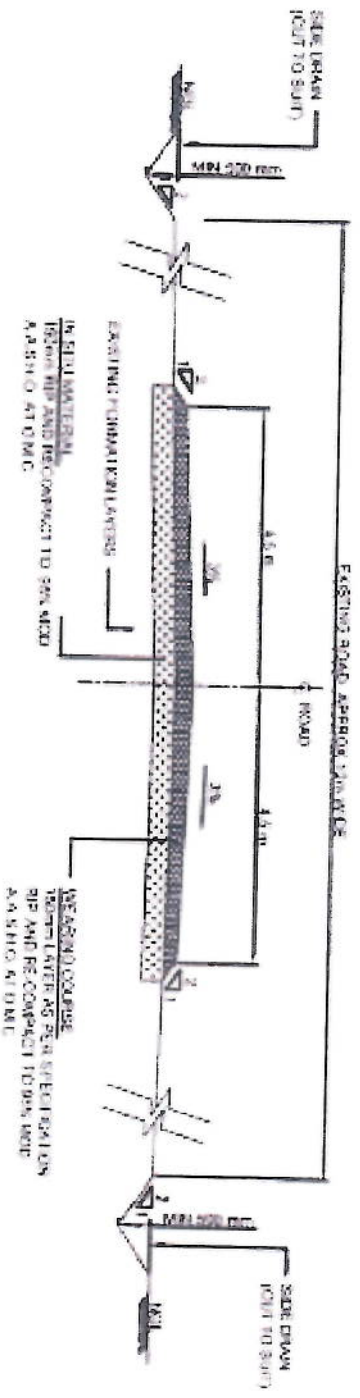
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THE CLIENT - DETAILS

[illegible][illegible]



**MAKUSHU ROAD
LAYERWORKS**
DESIGN SPEED: 60 KPH
N.T.S.



**NTSHELLE ROAD
LAYERWORKS**
DESIGN SPEED: 60 KPH
N.T.S.

NOTES:
1. THE ROAD WIDTH IS 12.00 M.
2. THE ROAD WIDTH IS 12.00 M.
3. THE ROAD WIDTH IS 12.00 M.

NO.	REVISION	DATE	BY	CHECKED BY	APPROVED BY
1	ISSUED FOR CONSTRUCTION	15/05/2012	...	...	...

PROJECT: Makushu Impervious Road - Phase 1

CLIENT: East Mac

LOCATION: Ntshelile and Makushu Roads

DATE: 15/05/2012

PROJECT NO: MAK-E-B-18-332-0012-01-01

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APPENDIX 9: HOUSING STRATEGY

South Africa in general and in the mining industry, it is widely acknowledged that housing have historically been sub-standard. This situation has impacted negatively on the productivity, health, and well-being of mineworkers. The mining industry is facing an enormous challenge to reverse this historical problem and to provide reasonable and affordable accommodation to all employees.

Construction Period Housing

A contractor's camp will be developed on the mine footprint, with sufficient capacity to house all contractors, this approach will be used to eliminate the formation of squatter camps due to the focussed local recruitment.

This development phase has an increased albeit temporary workforce and as such does not lend itself to permanent arrangements or burdening the towns infrastructure for a temporary period.

The locally sourced employees will already be living in their own accommodation, and will not require any additional housing arrangements. Employees with special skills may need to be recruited from outside of the area, and will presumably settle in the neighbouring towns. All housing developments will however be done by private developers.

Permanent Housing

CoAL will develop a well research housing strategy. The strategy will take into account factors such as the proximity of the mine to the nearest town, the economic sustainability of that town, various accommodation options, and housing requirements. Makhado Colliery will promote and encourage home ownership to its employees.

External issues that are considered in the development of the housing strategy include current infrastructure constraints, land availability, informal settlements, housing demands and the housing market.

In line with the concerted effort to employ wherever possible from the labour sending areas closest to the project, the advantage from a housing perspective is that if the Company is successful in this regard, then there is a lesser influx of people and in turn alleviates the pressure on accommodation in the area.

As it is expected that all employees will live in their own accommodation off-site, these houses will not form part of the conditions of employment, but will rather be a matter of choice and assistance. It is further expected that employees from C level and above will probably live in one of the neighbouring towns, although the total package concept allows employees to live where they choose.

Makhado Colliery will require housing schemes that make owning a home an attractive investment opportunity. Home ownership can represent a sound investment opportunity for mine employees and the provision of permanent housing contributes to sustainable communities. The Colliery will consider these factors in its plan to promote and encourage home ownership.

The mine will offer remuneration on the basis of the total package approach. All costs of company benefits are included in the package and employees will fund their particular accommodation choices from within their agreed remuneration packages. For the purposes of the Feasibility study and the costing exercise a 12% Housing subsidy has been included.

Action plan

The following strategies will be implemented:

- Housing Allowance
 - Employees will have a total remuneration package arrangement which includes a housing allowance component in line with current practice; and
 - Employees will be encouraged to take maximum advantage of this salary package to become home owners.
- Home-Ownership Support Programme

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- Encourage employees through dedicated communication plans at the mine to effectively utilise their all inclusive remuneration packages to cover bond repayments on their privately owned houses;
 - The mine will work with commercial banks to establish an effective financial home ownership support programme; and
 - Consult with the Department of Housing to apply for government subsidies to assist qualifying employees with obtaining the necessary funds to enable them to purchase their own houses.
- **Facilitate Development of Suitable Housing for Purchase**
 - The mine will facilitate, through discussions with various land developers in areas that best suit employee needs, the development of suitable housing which can be accessed by interested mine employees; and
 - Send a representative of Mine Management to Local Economic Development (LED) Forums in order to influence housing developments in the region such that it benefits the employees in the long term. These plans must include developments in respect of recreation, leisure and access to schooling and other welfare facilities.
 - **Communication and Advice**
 - Offer advice to employees in respect of the various options open to them regarding their accommodation; and
 - Facilitate an appropriate communication programme at the mine on the various strategies in respect of housing. The requisite strategies and mechanisms for this communication structure will be discussed with key stakeholder groups.
 - **Monitoring, Evaluation and Reporting Mechanisms**

Ensure that there is continuous monitoring and evaluation of progress on accommodation related issues. The information will be used by Mine Management and the Joint Forum to become involved by ensuring that living conditions of the mine employees are of an acceptable standard. Reporting will focus on the following:

 - To determine improvements in the housing and living conditions;
 - To determine the number of employees purchasing and occupying houses; and
 - Improvement in health and nutrition profiles of the employees and their families.

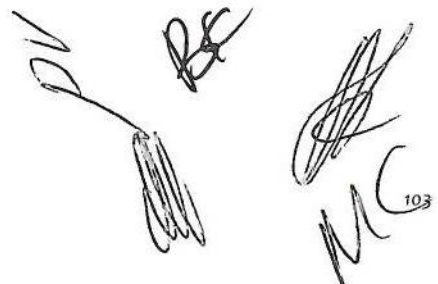
Municipal Strategy to address backlog in housing

The Makhado Municipality's housing projects are focused in urban and in the rural areas where housing problems remain unsolved. Both the RDP and the Peoples Housing Project (PHP) policies are being used. For the RDP housing scheme approach, the Department of Housing and Local Government appoints developers who built houses where the communities are residing in the villages. For the PHP approach the DHLG transfers funds to the municipality whereby local builders from the communities are appointed to build the houses with the assistance of the beneficiaries.

The following problems are identified:

- About 16 807 housing backlogs
- Not all developers follow the correct procedures resulting in unnecessary delays, which ultimately affect the applicants.
- Low-income levels marginalize the feasibility of the housing projects.
- The communities are not properly informed about housing schemes, as confusion and misconceptions exist.

Private land ownership is very difficult to obtain in the rural areas and there is no real housing market driven by the market forces of supply and demand. Very few of the current house owners have bought their current house from another owner, or have sold a house to another person. There is no housing market in the rural area and there are no cases of people selling a house and buying another one. Some people have more than one house in more than one village



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APPENDIX 10: DOWNSCALING & RETRENCHMENT

The establishment of the Future Forum

The establishment of a Future Forum is required under Regulation 46 (d) (i) of the MPRDA. A Future Forum is a site-specific labour management body that will focus on the implementation and monitoring of the Social and Labour Plan. The purpose is to provide a formal vehicle where all affected parties can consult and discuss challenges and possible solutions to problems facing the mine that may have the potential to lead to possible retrenchment in the future.

The Future Forum will comprise of management and workers or their representatives. The functions of the Future Forum will include but are not limited to:

- Promote ongoing discussions between worker representatives and the Company about the future of the mine;
- Look ahead to identify problems, challenges and possible solutions with regard to productivity and employment;
- Identify production and employment turnaround strategies; and
- Implement strategies agreed upon by both the Company and worker parties.

Mechanisms to save jobs, provide alternative solutions and procedures for creating job security where job losses cannot be avoided

"Organizations have to retrench workers from time to time for economic reasons and to remain globally competitive. This is one of the worst things that can happen to a worker and affects his or her whole life. It is therefore important that employers should first make sure that no other viable options to achieve operational requirements are available before considering downscaling of workers" - Social and Labour Plan guidelines for the mining and production industries.

The Company will develop strategies to introduce measures that could prevent job loss in the event of circumstances threatening guaranteed employment. Certain processes will be followed when prevailing economic conditions cause the profit-to-revenue ratio of the company to drop below 6% on average for a continuous period of 12 months. These processes will include:

- Consultations – the consultation process in terms of Section 52 (1) of the Act;
- Implementing Section 189 of the Labour Relations Act, 1995 – the process to implement Section 189 of the Labour Relations Act, 1995;
- Notification to the Minerals and Mining Development Board – the notification process to the Board in terms of Section 52 (1) (a) of the Act; and
- Complying with ministerial directive – compliance with the Minister's directive and confirming how corrective measures will be taken.

The most direct and appropriate intervention is for Makhado Colliery to assist employees who could be retrenched in securing alternative employment. Makhado Colliery has, in co-operation with CoAL and its other mining operations, put a number of mechanisms in place to mitigate the impact of job losses in the event of a downscaling or closure of the mine.

Makhado Colliery will support multi-skilling of employees. Where applicable, one of the mine's strategies encompasses an understanding by employees that jobs and duties, subject to individual skills and capabilities, are flexible within CoAL's operations. Consequently, as part of the strategy to broaden the skills base, Makhado Colliery will provide training and retraining in the employee's existing career path as well as in new technological developments.

This means that if security of jobs is threatened, Makhado Colliery is better placed to transfer an employee to another operation or division of CoAL. Depending on the agreements with trade unions and other worker representative bodies, the transfer would only be accomplished after consultation and reasonable notice to the employee.

Reskilling of workers for other jobs on the mine or for jobs outside the mining sector: One of the objectives of multi-skilling workers is to increase the opportunity for alternative employment either in a different occupation on the mine or in a job outside the mining sector. In pursuit of this aim, Makhado Colliery will provide alternative skills training to workers to enable them to be in a better position to seek work in a greater variety of positions or occupations. The focus of this training will be on subsistence, life skills and entrepreneurial activities. In addition Makhado Colliery will:

- Apply for technical assistance and support from the National Productivity Institute (NPI) via which access is given to the Department of Labour's Advice Centres and Social Plan Centres;
- Apply to the MQA which is the mining sector's education and training authority for applicable grants in terms of the Skills Development Act, 97 of 1998 and its regulations; and
- Identify and consider SMME initiatives which have the potential to create future employment opportunities in the event of a large-scale retrenchment.

In the life skills education programme, Makhado Colliery will address critical retrenchment and retirement planning issues such as:

- Collection of mine pensions;
- Access to state benefits for pensioners;
- Financial planning for retirement; and
- Possibilities for supplementing pension income.

Management of Retrenchments

The following legislations will be followed when retrenchments is considered. A more detailed action plan will be developed once employees have been recruited and Unions identified.

Section 52 of the MPRDA

Section 52 of the MPRDA provides that the holder of a mining right must notify the Minister of Minerals and Energy (the Minister) -

- (a) where prevailing economic conditions cause the profit to revenue ratio of the relevant mine to be less than 6% on average for a continuous period of 12 months, or
- (b) if any mining operation is to be scaled down or to cease with the possible effect that 10% or more of the workforce or more than 500 employees whichever is the lesser, are likely to be retrenched in any 12 month period.

The Minister may then, in consultation with the Minister of Labour and any registered trade union or affected persons or their nominated representatives where there is no such trade union, direct the holder of a mining right to take such corrective measures subject to the terms and conditions which the Minister may determine. It is only once such corrective measures have failed, the holder of a mining right would then be entitled to embark on a retrenchment exercise as envisaged in the Labour Relations Act, 66 of 1995 (the LRA).

Consultation In Terms Of Section 189(2) Labour Relations Act

Section 189(2) of the LRA determines that:

"(2) The employer and the other consulting parties must in the consultation envisaged by subsections (1) and (3) engage in a meaningful joint consensus-seeking process and attempt to reach consensus on

- (a) appropriate measures
 - i. to avoid the dismissals;
 - ii. to minimise the number of dismissals;
 - iii. to change the timing of the dismissal; and
 - iv. to mitigate the adverse effects of the dismissals and
- (b) the method for selecting the employees to be dismissed; and
- (c) the severance pay for dismissed employees."

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Process to follow

When the mine is to be scaled down (with the possible effect of job losses) or when mining is to cease, the following processes will be followed:

- Consultations – the consultation process in terms of Section 52 (1) of the Act;
- Implementing Section 189 of the Labour Relations Act, 1995 – the process to implement Section 189 of the Labour Relations Act, 1995 which will deal with possible retrenchment details;
- Notification to the Minerals and Mining Development Board – the notification process to the Board in terms of Section 52 (1) (b) of the Act; and
- Communicating possible retrenchments – an effective communication strategy will be followed:
- Informing employees of possible retrenchments;
- Informing other affected parties (sending areas, municipalities, etc.) of the possible retrenchments at the operation; and
- Informing relevant outside parties of the possible retrenchments at the operation.

Plan when job loss is unavoidable

Besides disciplinary action, the primary reasons for loss of employment will be technological changes, redundancies, retrenchments, mine closure, adverse economic and trading conditions, and business process streamlining.

Under these circumstances, the key issues that need to be considered are the degree of dependence of the mine community and labour-sending areas on Makhado Colliery's operations, and the policies and procedures in place at Makhado Colliery to provide financial security for individual employees.

On a more formal HR policy level, the CoAL Retrenchment Policy, Retirement Policy and Medical Repatriation Policy will provide compensation in line with South Africa labour legislation for job loss or retirement funding.

- Support to SMMEs: There may be people affected by down-scaling operations who are keen to start their own enterprise. In this context, Makhado Colliery will consider the following options which have been suggested by the Department of Labour:
 - Facilitate links with a Local Business Service Centre or other appropriate support institutions;
 - Provide business support services to workers while they are still at work and can explore the options;
 - Give assistance and mentoring in feasibility studies and the development of business plans;
 - Include business and technical training for self-employment in the range of the Department of Labour's services;
 - Provide time-off so that workers can undergo such training before they leave their workplace;
 - Identify opportunities to supply Makhado Colliery with goods or services; and
 - Engage with banks and other lending institutions to explore and facilitate arrangements for workers who want to use all or part of their retrenchment packages as collateral security for business loans.
- Reskilling of workers for other jobs on the mine or for jobs outside the mining sector: One of the objectives of multi-skilling workers is to increase the opportunity for alternative employment either in a different occupation on the mine or in a job outside the mining sector. In pursuit of this aim, Makhado Colliery will provide alternative skills training to workers to enable them to be in a better position to seek work in a greater variety of positions or occupations. The focus of this training will be on subsistence, life skills and entrepreneurial activities. In addition Makhado Colliery will:
 - Apply for technical assistance and support from the National Productivity Institute (NPI) via which access is given to the Department of Labour's Advice Centres and Social Plan Centres;
 - Apply to the MQA which is the mining sector's education and training authority for applicable grants in terms of the Skills Development Act, 97 of 1998 and its regulations; and
 - Identify and consider SMME initiatives which have the potential to create future employment opportunities in the event of a large-scale retrenchment.
- Address critical retrenchment and retirement planning issues such as:
 - Collection of mine pensions;
 - Access to state benefits for pensioners;
 - Financial planning for retirement; and
 - Possibilities for supplementing pension income.

Mechanisms to ameliorate the social and economic impact on individuals, regions and economies where retrenchment or closure of the mine is certain

The Company will make every effort to ameliorate the social and economic impact on individuals, regions and economies where retrenchment and mine closure is certain.

Should downscaling and retrenchment take place, The Company will assist affected employees in finding alternative employment or livelihood opportunities. This will be done where employees cannot be integrated or redeployed to any of the other Company operations, and where they are not of retirement age.

The Company, in partnership with the Department of Provincial and Local Government, will jointly manage any process of this nature. The integration of the workforce into various LED projects, if required, will be done in collaboration with the district and local municipalities, and other stakeholders serving on the LED Forum. Where workers cannot be absorbed into LED initiatives, they will be furnished with skills training opportunities which will enable them to find alternative employment after decommissioning or retrenchment. Other initiatives will focus on assessment and counselling services for affected individuals.

Plan to Ameliorate the Social and Economic Impact

Makhado Colliery will develop a closure plan that considers the optimum use of mine land and infrastructure during the operational phase as well as the closure phase of the mining life cycle. This plan will be a focus area of the operations Local Economic Development (LED) strategy to diversify the economy and will take into account the potential social benefits of utilizing the existing land and infrastructure. Of importance is the consideration of alternative uses of the physical infrastructure in the event of mine closure, which will require an amendment to the existing Environmental Management Plan Reports (EMPRs) in consultation with the Department of Mineral Resources (DMR).

While the Social and Labour Plan is geared towards mitigating the impact of mine-closure on mine communities and labour-sending areas, specific planning is required regarding the concurrent and post-mining use of the physical assets of Makhado Colliery for potential community development purposes. These physical assets include:

- Land holdings by the mine;
- Physical infrastructure;
- Social infrastructure⁵;
- Commercial and industrial infrastructure⁶; and
- Administrative infrastructure⁷.

All infrastructure and mine management programmes on projects will be conceived and implemented within the context of the accepted standards of sustainable development.

The strategy will be further developed taking the following into account:

- Comprehensive self-employment training programmes
- Comprehensive training and re-employment programmes
- Comprehensive portable skills development plan
- The projects earmarked for absorbing the retrenched should be outlined

The abovementioned plans will be submitted to DMR 24 months prior to the commencement of the downscaling process.

⁵ On-site clinics, hospitals, crèches, schools, etc.

⁶ Industrial facilities, workshops, shops, offices, etc.

⁷ Offices, training centres, auditoriums, etc.

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APPENDIX 11: CONSULTATION


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