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# **COMPANY PROFILE**

### www.miningsolutionsafrica.com



P.O. Box 735 Blantyre –MALAWI Tel: +265 885 717 481 / 88 0 88 07 07 E-mail:

> md@miningsolutionsafrica.com info@miningsolutionsafrica.com



www.miningsolutionsafrica.com

Offices: Oak House, 1254 Kapeni Road near St Columba CCAP Church -BLANTYRE





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### 1.0 Introduction about Mining Solutions

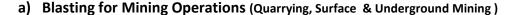
**Mining Solutions** is an international company with registrations and accreditation from both government and private bodies in Malawi and Mozambique.

**Mining Solutions** operates has headquarters in Malawi and operates internationally. Based on this understanding, we upholds with dignity the international codes of ethics and performs our work with high integrity & dignity. Our core values are Quality; Focused and Acumen

Our main reason of existence is to doing business of Rocks Drilling and Blasting using Explosives, Demolitions of infrastructures using Explosives and Mining Consultants in general. We offer high quality rock breaking services using Explosives in a safely manner without human or property damages. We are experienced Mining Engineers Consultants in all Mining (Safety & Health; Design & Planning; Mine Asserts Management and Mine Finance), Geotechnical and geological matters.

**Mining Solutions** since its establishment, has been awarded various contracts ranging from Government, private sectors as well as individuals. In summary our projects are in the following categories:-

### 1) Rocks Drilling & Blasting) Includes:-





### b) Dams and water pipelines Construction.





Tedzani 4 HEP Project Tunnel Construction

### c) Roads Constructions and Buildings Foundation Rocks Breaking



Rocks near Robins Park –Blantyre (2016) (Now built factory) Now built Factory

Inside Blantyre City at Malawi Sun Hotel Ltd. Blantyre 2017 – Now built 3 store Hotel Rooms



### d) Demolitions; Concrete Breaking



### Power substation Concrete Demolitions:

Special case where JCB was not allowed because of being a confined space with power lines overheads

### 2) Mining Consultants includes:-

- a) Mine Design and Planning using Software
- **b)** Geotechnical Engineering / Rocks Mechanics Services
- c) Geological Investigations and Research,
- d) Geophysical Seismic Blasting
- e) Safety & Risk Management
- f) Mining Finance and Economics Analysis



### 2.0 Business Contacts

**Mining Solutions** has its head Office in Blantyre and we work throughout Malawi. You can contact us using the following below details

### **Contact Details:**

### 1) Office Premises

The Oak House (Near St. Columba C.C.A.P.)

1452 Kapeni Road -Manja

BLANTYRE



P.O. Box 735 Blantyre



### 3) Phones:

+265 88 088 07 07; + 265 885 717 481 / +265 888 318 860

4) Email Address info@miningsolutionsafrica.com

 $\underline{md@miningsolutionsafrica.com}$ 

miningsolutionsafric@gmail.com

5) Website: <a href="https://www.miningsolutionsafrica.com">www.miningsolutionsafrica.com</a>



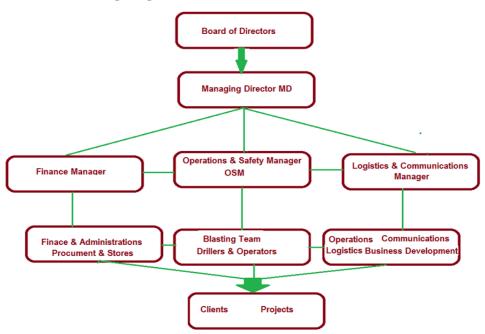
Mining Solution Office in Blantyre



### 3.0 Company Organogram

**Mining Solutions** is a corporate entity, as such it has a well-established organizational structure. The Board of Directors oversees all the operations. They meet every quarter (3 months) of the year to scrutinize the operations and management appraisal. The Board also put emphasis on Safety of Operations and Audit of Quality of Service Delivery to our valuable customers.

### 3.1 The current organogram is as follows:-







**Mining Solutions Offices** 



### 3.2 Staffing Level (Fast 5 Facts you need to know about Mining Solutions)

- i. Currently Mining Solutions has got 4 Managers
- ii. 10 full time employees and 30 temporarily employees.
- iii. 5 Licenced and Experienced Blasters / Short Firers
- iv. All staff are local Malawians.
- v. 100% owned by Malawians.

### 3.3 Board of Directors

	Name of Board Member	Who is Who
1	Dr. Bunda Besa (Chairman)	Uni of Zambia – Dean of School of Mines >PhD
2	Mustafa Saidi	Voice of God Recordings –Malawi Manager
3	Leonard Umali	The Polytechnic. IT Lecturer > MSc. Degree
4	Chimwemwe Josiya	Chitedze Research Station > Master's Degree

### 3.4 The Managing Director

The Current Managing Director is Mr Fredrick Lemekezani Josiya.

### 3.4.1 Qualification: -

o Masters of Engineering in Petroleum Engineering (Oil & Gas)

University of Eduardo Mondlane (UEM) Maputo –Mozambique In-conjaction with Texas State University in USA

- O Honours Degree (BEng Hons. (Mining Engineering) 2:1 class (78%)

  Curtin University Western Australia
- o **Diploma In Mechanical Engineering** (University of Malawi)



### www.miningsolutionsafrica.com



Mr. Fredrick Josiya (backline 3<sup>rd</sup> from left hand side) This photo was taken with Mining Professors (all frontline) at Western Australia School of Mines in Kalgoorlie 2014



Managing Director Engineer Fredrick Josiya

### 3.4.2 Work Experience

- 2017 to Current Mining Solutions MD and Chief Mining Engineer
  - Rock Drilling and Blasting Design
  - Explosives Blasting licensed Blaster
  - Geotechnical Engineer & Mine Designs
  - Senior Mining & Petroleum Consultant
  - Mining Finance and Economics Analyst
- 2016 2017 Malawi University of Science and Technology (MUST)
  - Academic Staff on Minerals Governance (Law and Policy)
  - Geological Engineering Research and Teaching.
  - Research Fellow on Minerals Resources Sector of Malawi
  - o 2004 -2012 & 2015 2016 Department of Mines (Malawi Government)
    - Mining Engineer/Inspector of Mines
    - Mining Governance Minerals Laws & Policy
  - 2012 -2013 Norton Goldfield Ltd (Paddington Operations)

### Homestead Underground Mine (Western Australia)

- Underground Mining Engineer Explosives Magazine supervisor
- Blaster/ Short Firer
- 2013 2015 Ausdrill Blasting Contractors (Western Australia)
  - Superpit Bench drilling blasting Surface Mining of Gold.
  - Working as Blasting Engineer.



Rocks Drilling and Explosive Blasting Contractors 9 of 30



Mr. F. Josiya and classmate at one of the mine site visit in Kalgoorlie Western Australia

### 4.0 Our Services

Our main business is in two parts, namely Explosives Rock Breaking and Mining Consultants. The details is as follows:

### 4.1 Explosives Rocks Breaking

We are Main Rocks Drilling and Blasting Contractors in Malawi. Our Existence is to serve you



Pit Excavation to 4m depth for Power lines 400KV Pylons constructions for our Client Kalpataru Power Transmission Ltd –India, a Project under Millennium Challenge Account (MCA) -USA



### www.miningsolutionsafrica.com





Pylons footing foundations:- Mining Solutions drilled and blasted for Kalpataru Power Transmission Ltd for distance coverage <a href="Over350km">Over 350km</a>

### 4.2 Rocks drilling and blasting for the purposes of:-

- a) Mining Operations (Both Underground and Surface Mining) Quarry operations for Rocks aggregates.
- b) Tunnel / trench excavations



Tedzani 4 Project (2018): All Rock Drilling and Blasting was done by Mining Solutions

100,000m³ rock Volume was blasted and removed.



- c) Water pipeline and Agricultural irrigations blasting
- d) Road Constructions / Building Foundations Constructions



Mining Solutions at Rock Drilling s Breaking Service

- e) Dams Constructions
- f) Any other work that need rock clearing by Explosive for e Rocks blasting

### 4.3 Special Explosives Usages

a. Blasting to induce seismic vibration for Geophysical Analysis Surveys



Mining Solution at Geophysical seismic Survey – Mpatamanga in Neno & Fufu in Mzimba District

The Main Contractor was ASST (Pvt) Ltd of South Africa



### b. Building Demolitions / Concrete Breaking

### c. Explosives Destructions Specialists

We are experts in destroying the expired Explosives.

### d. Explosives Training and Explosives Selection Advisory Experts

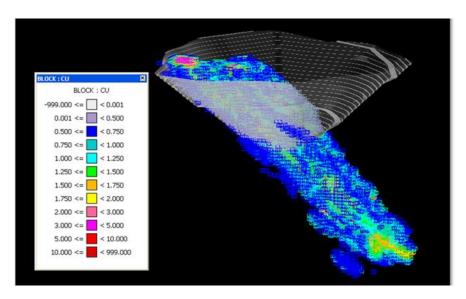
We run various training sessions of Blasting Courses and Explosives Selections and applications; Safety and Environment.

### 4.4 Mining Consultants

We are the first of this kind of consultants in Malawi. Under this service category, we serve our valuable clients in the following areas:-

### a. Mines Design and Planning

(Production scheduling; Building and Infrastructures; Equipment & Staff requirement)



Mine Design and Planning: We use Vulcan, Minesight; Datamine and Surpac Softwares

- b. Mining and Geological Research; Investigation and Surveys
- c. Mining Tenements & Licence Acquisitions
- d. Geotechnical Engineering / Rocks Mechanics
- e. Mining Finance and Economics
- f. Mining Advisory Services



### g. Mining Training, Staff Inductions & Safety Trainings





**Project Site Staff Induction Trainings** 

We believe in Trainings of staff for knowledge is power. Trainings is the force behind our success stories.



Operations & Safety Manager (OSM) Mr. W.D. Gwemba –RHS and his team at a Project Site Photo 2018

### 5.0 Projects Record

Since its official established in September 2015; **Mining Solutions** has been contracted by various clients to do a lot of jobs. We are delighted to report that since then, we have not register any statistics of human injuries and property damage despite in some cases the blasting was conducted in a much built-up areas and with high population density. Below is a summary of the work carried out with great satisfaction to our clients.



### www.miningsolutionsafrica.com

k	Project Category	Project & Site Name	Client
1	Hydro Electricity Power (HEP) Water tunnel	Tedzani 4 HEP Extension Project. Construction and Installation of Plant No.4	JICA/ EGENCO
2	400KV Power line National Grid Line –Pit Footing	Powerline stretches from Neno to Lilongwe.	Kalpataru Power Transmission Limited project of ESCOM with funding from MCA &World Bank
3		Pioneer Drive Road - Kanjedza Blantyre	Tahit Networks
4		Mwanza – KuneneKude Road	Hema Construction Ltd
5	Road Construction Rocks Breaking Services	BCA Residential Plot Development Roads network construction BCA –Blantyre	Malawi Housing Cooperation (MHC)
6	Set vices	Jenda –Edingeni Bridge Foundation Rocks Breaking - <b>Mzimba District</b>	China Railways No. 5 Construction Ltd.
7		Nkula Power Station Transformer Pillars Foundation Breaking	Appolo International Construction Ltd.
8	Concrete Breaking Services	North Gate Shops Complex Electricity Underground Cable laying <b>BT</b>	Peoples Trading Company (PTC)
9		Railways line Rehabilitations / Maintenance Breaking of Concrete <b>BT</b>	Central and Eastern African Railways (CEAR) Ltd.
10	Building Foundation Rocks Breaking	Soche Technical College 3 store Building – <b>Limbe</b> -Blantyre	Paramount Holdings Limited
11		Sire River Basin Office Complex Basement and Foundation. Chichiri -Blantyre	City Building Construction (CBC) Ltd.
12		Various individual Building projects A cross Malawi	Across Malawi
13	Irrigation Water Pipe Tunnel Rocks Breaking	Thabwa Irrigation Scheme <b>Chikwawa</b> - trenching of 2m x 2.5 m depth pipe line for 2 km	Hema Construction Company Ltd Ministry of Agriculture
14	Geophysical Seismic	Mpatamanga Hydro Electricity Power (HEP) Station Dam Projects Geophysical Survey. <b>Neno District</b>	ASST Pvt Ltd. Applied Scientific Services & Technology. South Africa
15	Analysis Survey	FuFu HEP Dam Project Geophysical Survey Rumphi District	MSJ Geotechnical Consulting Services (Pvt) Ltd Germany
16	Surface Mining Open Pit Mining	Tourmaline Gemstones Mining Mponera – <b>Dowa District</b>	Consortium Mining Ltd. Dow District
17	Mining Advisory Services	Giving professional advice to business people about Mining Ventures	Local Investors in Coal, Gemstones; Limestones etc.
18	Geological nvestigations Tenements acquisitions	Identifying mining Sites for quarry; Limestone, Coal and Mining licences	Tahit Networks, Zalco, CSL Varibu; & many others
19	Trainings	-SSM training in Mining Techniques of Gemstones; Lime Making and Finance -Various Blasting and Safety Courses	Ministry of Trade and Industries Various Companies





Mining Solutions at Work 2017 at Chancellor College in Zomba for Paramount Construction Company.

### 6.0 Projects in Pictures (some few selected sites)



Some of the Individual Building Projects. –BlantyreHEMA Construction Company – Mwanza – Tsangano Border Road Construction



HEMA Construction Company – Mwanza – Tsangano Border Road Construction



Off-loading of 25 Tonnes Explosives imported by Mining Solutions. Photo 2018

### 7.0 Equipment Capacity

Mining Solutions has equipment to handle your project at the fastest rate possible. Our equipment and staff capacity are able to handle the following tasks for your project.

### 7.1 Rocks Drilling Equipment

Drilling is the primary operation for blasting operation. It involves the making of a hole into the inside of the rock to a certain depth. This hole is important because the explosives are inserted inside this whole way down to the bottom so that the explosion that cause rock breakage must start inside the rock.

### A. Air track, Hydraulic Drilling Machine

Specifications

- Drilled hole diameters 80m 2000mm
- Hole maximum Depth 30m
- Movement System Craw tracks
- Penetration Rate- average 3m /min



Hydraulic Rock Drilling Machine (Airtrack) at work. Photo MS 2019



### B. Hand Held Rock Drilling

This system uses separate Heavy Duty Compressor and hand Held Rock Drill Machines as below picture shows.





Hand held Rock Drilling Machine at work

Drill Rods & Bits

Mining Solutions has 3 compressors and 15 Hand held Rock Drilling Machines.

### 7.2 Utility Vehicle for Operation Support

Mining Solutions has the following vehicles dedicated for operations support

### A. Staff Bus







### **B.** Other Utility Vehicles for Operation Support





**Utility Vehicles that Supports our Drill and Blasting Operations** 

### 7.3 Summary of Equipment and Staff Capability

Item	Description	Quantity	Remarks
1	Licenced Blasters / Short Firers	5	Well experienced
2	Airt Track / Hydraulic Drilling Machine	2	Av. 120 holes/day - 3m deep
3	Heavy Duty Air Compressors	3	For hand held drilling
4	Hand Held Rock Drill Machines	15	Drill rods & bits available
5	Excavation JCB - front & back loader	1	For Blasting Rocks removal
6	Staff Buses	2	To ease staff movements
7	Utility Vehicles for field operations	4	For loads & goods transport
8	Explosive in stock now ready for blast	15 Tonnes	Includes ANFO & Detonators



### 8 Explosives Handling

Mining Solutions is authorised by Mines Department to Import, hold and use explosives for the purposes of Civil / Construction works; Mining operations and other commercial uses.

### 8.1 Explosives Storage

Mining Solutions has two magazine where explosives are kept. One in the south and the other in the cetral part of Malawi.





Off-loading of Explosives into the Magazine

Blaster inside Magazine -Detonators Room

For other projects far from these mentioned magazine sites, Mining Solutions is authorised to set up a temporary Project site Magazine if the project requires more quantities of Explosives. These are made from Truck Metal Containers, with plywood lining inside it and with provision of ventilation facilities. The Security is provided by Malawi Police Services to ensure maximum Security. Minimum of two containers are adequate one for ANFO and the smaller one for Detonators.

### 8.2 Explosives Security

All the time, Explosive security is provided by the Malawi Police Service. These situations includes:-

- Explosives Magazine guarding 24/7
- Explosives Transferring / Movements
- Carrying out of Blasting Operation at sites.



### 8.3 Safety Measures

Mining Solutions always conduct Safety assessment(s) before any blast to know the safety tools requirement to avoid injuries and damages to the community. Because of our ZERO Harm Safety Policy, since we started blasting operations we have never register any human injury or property damages. Mines Department can testify to this records. For every Project, Mining Solutions develop the Blasting Operation Work Tool kit, which act as a guideline to all blasting procedures and controls to ensure safety and efficient operations.

### 8.3.1 Flying rocks Prevention measures

On top of explosive charging and blast hole designs, fly rocks is further prevented by putting bags on top of the blasting holes.





Sand bags over wire mesh

Wire mesh over Rubber sheet then sand will be on top

One method used to exposed rocks to minimise flying rocks – Mesh wire with Sand Bags

8.3.2Public control Measures.





Public control is being done with assistance from Malawi Police Service and main roads are managed by traffic police



### 9.0 References

Some of our clients are as follows in a below table and you are free to contact them any time for references.

Name of Referee	Address	Contact Person and Phone
Tedzani 4 HEP Project	ANT Insaat (Turkey)	Health & Safety Mnager
(Egenco)	Construction Co.	Mr. Abraham Nhlane
	www.antinsaat.com/en	+265888752551
Kalpataru Power	Plot No. 3/103/1, Area 3	Uday Gite – Project Coordinator
Transmission Limited	P.O. Box 30952 Lilongwe	+256999912116 / 882669889
of India	www.kalpatarupower.com	
ZALCO Limited	P.O. Box 1669	Mr. Martin Saunders - MD
	Blantyre	zalco@africa-online.net +265999822802
Malawi Housing	MHC Head Office	Mr. L. Nyanda. National Project Manager
Cooperation (MHC)	Kwacha – <b>Blantyre</b>	+265 884143850 /999 642691
Head Office		
Terrastone Limited	P.O. Box 995 <b>Lilongwe</b>	Ms Isabell Oriviera -MD
Lilongwe & Blantyre	www.terrastone.mw	+265 888 217 33 <u>blt@terrastone.mw</u>
Applied Scientific and	181 Lisdogan Street ,	Mr. Johan Bornman – MD Africa
Services Technology	Arcadia , <b>Pretoria</b>	+27810277345. <u>www.asstgroup.com</u>
(ASST) -RSA	South Africa	
Lafarge Mw Ltd	Lafarge Malawi	Operations Manager
-Pozzolana Mine esign	P.O. Box 523. Blantyre	Mr. H. R. Manyinda :+265995189400
Limestone Mining	Malawi	Hendricks.rmanyinda@lafargeholcim.com
Subcontracting	www.lafargeholcim.com	

### Education Support of Mining and Geological Sector in Malawi



Mining Solutions takes on board Students and graduates to do some vacation & internship trainings respectively from Malawi University of Science and Technology (MUST) AND University of Malawi.



### 10. Business Dedication 2019

Mining Solutions Office and Businesses were re-dedicated for more businesses and success in developments on 4<sup>th</sup> February, 2019 by Pastor Hope Livingstone from South Africa.

Mining Solution's 2019 Scripture pillars are 3 verses as follows:-

- 1) 1 Chronicles 4 v 10
- 2) Proverbs 3 v 6
- 3) Mark 9 v 23



(L-R) MD-Eng. F. Josiya ; Pastor H. Livingstone; Br. Steve Moore & OSM Mr. W. Gwemba. ( Pic-MS Office-  $4^{th}$  Feb,2019 )

### 1 Chronicles 4 v 10

"And Jabez called on the God of Israel, saying, <sup>1</sup>Oh that thou wouldest bless me indeed, and <sup>2</sup>enlarge my coast, and <sup>3</sup>that thine hand might be with me, and <sup>4</sup>that thou wouldest keep *me* from evil, that it may not grieve me! And <sup>5</sup>God granted him that which he requested."

### Proverbs 3 v 6

In all thy ways acknowledge Him, and He shall direct thy paths.

### Mark 9 v 23

Jesus said unto him, if thou canst believe, all things are possible to him that believeth.







### 11.0 Testimonies & Documents

### 11.1 Reference Letter from Department of Mines

Ref. No.: INSP/17/12

Tel: (265) 1 754 777/ 1 755 303 Fax: 01 757 235 / 01 759 165 E-mail: mines@malawi.net

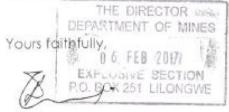
Department of Mines, P.O. Box 251, Lilongwe, Malawi, 6th February, 2017,

All correspondence should be Addressed to: Director of Mines

### TO WHOM IT MAY CONCERN

We hereby write to inform you that Mining Solutions of P.O. Box 735, Blantyre are authorised and permitted by the Department of Mines in the Ministry of Natural Resources, Energy and Mining to possess and use commercial explosives and conduct blasting operations for auarrying/mining and civil engineering purposes.

Should there be anything that does not fully comprehend please do not hesitate to contact the Director of Mines or the undersigned.



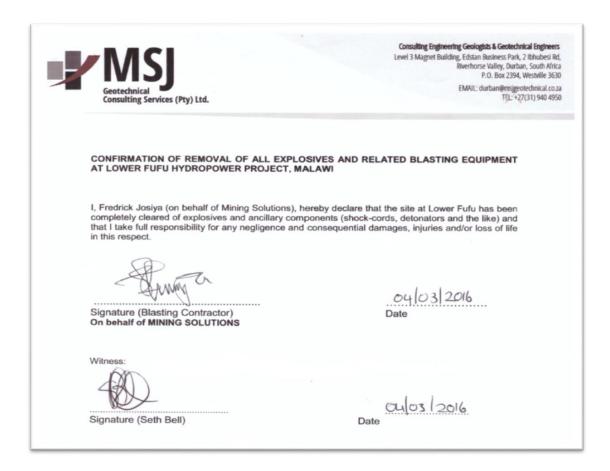
W.D Chigamba

For: DIRECTOR OF MINES



### 11.2 Mining Solutions: Evidence of International Clients

### - We handle Explosives safely and professionally







### 11.3 – International Confidence





Public Release: 27 May 2017 **Mining Solutions** Company Profile

### 11.4 Sample of Magazine Licence

FORM EXP/E

MALAWI GOVERNMENT

**EXPLOSIVES REGULATIONS, 1972** 

REGULATION 15 (1)

STORAGE LICENCE

(Not Transferable)

LICENCE NO: 10/2018

Licence is hereby granted to:

Name: MINING SOLUTIONS,

Address: P.O. BOX 735,

BLANTYRE, MALAWI.

To use a building situated at TEDZANI HYDRO POWER STATION IN MWANZA DISTRICT.

Approved by the Chief Inspector of Explosives for use as a magazine. For the storage of explosives not exceeding the following quantities, subject to any conditions hereunder set forth or attached hereto.

Type of Explosives

Quantity

NITRO - GLYCERINE AND WATER GEL BASED AMMONIUM NITRATE **ACCESSORIES** 

10,000 Kg 3,000 Kg LIMITED BY SPACE

THE DIRECTOR MINESDAte: 12th JUNE, 2018. Licence issued at: LILONGWE

Date of expiry:

11<sup>TH</sup> JUNE, 2019.

W.D. Chigamba Chief Inspector of Explosives

### CONDITIONS

1. Nitro - Glycerine /Watergel based Explosives may be substituted by detonating fuses on direct carton - size proportion.

7AN 5018

2. Ammonium Nitrate bags shall be laid on plastic sheets, stacked not higher than 2m and at least 300mm from the wall all around.

Fee Paid: K 4, 000.00

G.R. No: 5609127

Date: 28-04-2018



### 11.5 Sample of Import Permit of Explosive



### MALAWI GOVERNMENT

### EXPLOSIVES REGULATIONS, 1972 FORM B REGULATIONS 6 (2)

### IMPORT PERMIT OF EXPLOSIVES

(Not Transferable)

PERMIT No.....42/2018/01......

ermission is hereby granted to:

vame.....MINING SOLUTIONS, MW, LTD , P.O. 735, BLANTYRE .

o possess the following quantities of explosives

Description of explosives	Quantities
Bagged Anfo (Ammonium Nitrate 25 Kgs/Bagx2,800 bg)	70 Kgs
Packed Emulsion (Busters 25 mm Diameter)	80 Cases
Detonating Cord 10 G/M	70 Cases
Detonating Relays 25 MS	40 Cases
Down Hole Detonators 8,4 x500MS SPDs	1,050 Pieces
Capped Safety Fuse 7-10 Min Delay Time	100 Pieces

Subject to the following special conditions

To be Imported from Fabrica De Explosives Mozambique Lda, Contribuinte Na 400019024,AV, Samora Machel-Parcela 10,1100-Matola as per pro forma invoice 62/2018 Dated 12<sup>th</sup> March ,2018.

Address and storage License Number of Magazine in which the above explosives are to be stored.

TO BE STORED AT M60 Magazine.S/L 01/2018,Lilongwe.

Purpose for which explosives are to be used: STONE QUARRYING PURPOSES AND OTHER CIVIL

ENGINNERING WORKS .

Application .....received........... 14/03/2018......

Approved......14/03/2018

Forwarded to the registrar of firearms for approval......14/03/2018

E.H. Mwinama. A.C.P.

For/The Registrar of Firearms



### 11.6 Sample of Commercial Explosives



