

EIA File Reference Number: NEAS Reference Number: Waste Management Licence Number (if applicable) Date Received:

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DC/	
KZN/EIA/.	

BASIC ASSESSMENT REPORT

Submitted in terms of the Environmental Impact Assessment Regulations, 2014promulgated in terms of the National Environmental Management Act, 1998(Act No. 107 of 1998)

This template may be used for the following applications:

- Environmental Authorization subject to basic assessment for an activity that is listed in Listing Notices 1 or 3, 2014 (Government Notices No. R 983 or No. R 985 dated 04 December 2014, as amended in April 2017); or
- Waste Management Licence for an activity that is listed in terms of section 20(b) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) for which a basic assessment process as stipulated in the EIA Regulations must be conducted as part of the application (refer to the schedule of waste management activities in Category A of Government Notice No. 718 dated 03 July 2009).

Kindly note that:

- 1. This **basic assessment report** meets the requirements of the EIA Regulations, 2017 and is meant to streamline applications. This report is the format prescribed by the KZN Department of Economic Development, Tourism & Environmental Affairs. Please make sure that this is the latest version.
- The report must be typed within the spaces provided in the form. The size of the spaces provided is not indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with text.
- 3. Where required, place a cross in the box you select.
- 4. An incomplete report will be returned to the applicant for revision.
- 5. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it will result in the rejection of the application as provided for in the regulations.
- 6. No faxed or e-mailed reports will be accepted.
- 7. The report must be compiled by an independent environmental assessment practitioner ("EAP").
- 8. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
- 9. The KZN Department of Economic Development, Tourism & Environmental Affairs may require that for specified types of activities in defined situations only parts of this report need to be completed.
- 10. The EAP must submit this basic assessment report for comment to all relevant State departments that administer a law relating to a matter affecting the environment. This provision is in accordance with Section 24 O (2) of the National Environmental Management Act 1998 (Act 107 of 1998) and such comments must be submitted within 30 days of such a request.

11.	<u>Please note</u> that this report must be handed in or posted to the District Office of the KZN Department of Economic Development, Tourism & Environmental Affairs to which the application has been allocated (please refer to the details provided in the letter of acknowledgement for this application).

DEPARTMENTAL REFERENCE NUMBER(S)

File reference number (EIA):	
File reference number (Waste	
Management Licence):	

SECTION A: DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER AND SPECIALISTS

1. NAME AND CONTACT DETAILS OF ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)

Name and contact details of the EAP who prepared this report:

Business name of EAP:	Nature's Environmental Agency (Pty) Ltd (Enviro	nmental Agency)	
Physical		,		
address:	27 Umkhamba Drive, Ladysmith, 3370			
Postal address:	27 Umkhamba Drive, Ladysmith			
Postal code:	3370	Cell:	074 141 4157	
Telephone:	036 631 0806 Fax: 086 272 4442			
E-mail:	enviroagency@gmail.com			

2. NAMES AND EXPERTISE OF REPRESENTATIVES OF THE EAP

Names and details of the expertise of each representative of the EAP involved in the preparation of this report:

Name of representative of the EAP	Education qualifications	Professional affiliations	Experience at environmental assessments (yrs)
Dan Mkhwanazi	B.Sc.	IAIAsa	16
Slindile Ngubeni	BA Enviro Man	IAIAsa	4

3. NAMES AND EXPERTISE OF SPECIALISTS

Names and details of the expertise of each specialist that has contributed to this report:

Name of specialist	Education qualifications	Field of expertise	Section/ s contributed to in this basic assessment report	Title of specialist report/ s as attached in Appendix D	
Kevin Diemont B Eng (Civil) G		Geotechnical	Geotechnical	Geotechnical	
	Geotechnical	Engineer	Assessment	Report	
M Bhayat	B Eng	Mechanical &	Mechanical &	Mechanical &	
(Mechanical & Ele		Electrical	Electrical Design	Electrical	
	Electrical)	Engineer		Preliminary Design	
	Health and Safety	Risk	Waste	Health and Safety	
		Management and	Management	Waste	
		Health and Safety		Management Plan	

SECTION B: ACTIVITY INFORMATION

1. PROJECT TITLE

Describe the project title as provided on the application form for environmental authorization:

Proposed construction of Ladysmith Private Hospital, Storage and Handling of Waste and Associated Facilities on ERF 17817 Ladysmith, Alfred Duma Local Municipality, Uthukela District Municipality, KwaZulu-Natal

2. PROJECT DESCRIPTION

Provide a detailed description of the project:

Proposed construction of Ladysmith Private Hospital and the Medical Waste Storage Facility (for General and Hazardous Waste) on ERF 17817 Ladysmith, Alfred Duma Local Municipality, UThukela District (DC23), KwaZulu-Natal.

The proposed Ladysmith Private Hospital comprises of a 52 bed facility complete with theatres, radiology, general and medical wards, ICU, high care, consulting rooms, general waiting rooms, examination rooms, general administration areas and parking bays (approximately 81 parking areas). The proposed development area is 3, 4419 ha extent.

The proposed development is located approximately 1,8 km Southwest of Ladysmith CBD. It a corner site at the intersection between the Delhi Road and N11. Currently the site is zoned commercial, under the process of being rezoned to institutional. The site is surrounded

Medical Waste:

Medical Waste will be stored on the proposed waste temporal storage facility and will be collected by Buhle Waste an approved medical waste contractor and disposed of correctly at the medical waste facility.

3. ACTIVITY DESCRIPTION

Describe each listed activity in Listing Notice 1 (Regulation No 983, 04 December 2014), Listing Notice 3 (Regulation No. 983, 04 December 2014) or Category A of GN 718, 29 November 2013 (Waste Management Activities) which is being applied for as per the project description:

R983 of Amended 2014 EIA regulations	27	The clearance of an area of 4 hectares or more, but
(07 April 2017) Listing Notice 1		less than 20 hectares of indigenous vegetation,
Category C of Listing Notice 921 of	2	The storage and handling of medical waste facility
2013		with a capacity of 146 cubic metres.

4. FEASIBLE AND REASONABLE ALTERNATIVES

"alternatives", in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

- (a) the property on which or location where it is proposed to undertake the activity;
- (b) the type of activity to be undertaken:

- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

Describe alternatives that are considered in this report. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. The determination of whether site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

NO.	ALTERNATIVE TYPE	DESCRIPTION
1.	Preferred Site - Alternative Site 1 (ERF 17817)	Nulane Investment 254 Pty Ltd proposes a construction of Ladysmith Private Hospital and a Temporal Waste Storage for General and Hazardous Medical Waste on Erf 17817, Ladysmith. The site is 3,4419 ha in extent. The preferred site is approximately 1,8 km southwest of Ladysmith CBD. Currently the site is vacant and previously used as a dumping site. This site is a viable option in terms of location it is closer to town and is along the road which makes easily accessible.
2.	Proposed Alternative Site	There is no alternative site for the proposed development. The applicant has already purchased the site and specifically chosen it for the Medical Facility.
3.	Alternative Layout 1- Preferred Alternative Layout (Single story 52 Bed Facility)	The preferred layout is a single story building which is perfect on the proposed site. A single story hospital will have enough open space, with wide corridors and open entrances. There will be higher degree of safety, with no risk of patients falling down the stairs and lift failure. It will be easier to evacuate during emergency situation such as fire. It will be user-friendly to old, sick and disables people.
4.	Waste Management Process	The applicant proposes a Temporal Medical Waste Storage for both Hazardous and General Waste. The waste will be stored temporally onsite, then collected by an approved medical waste contractor known as Buhle Waste. Buhle Waste will collect and dispose of waste on regular basis. Medical waste will be segregated according to classification, corresponding with the implemented waste management plan for the hospital.

Sections B 5 – 15 below should be completed for each alternative.

5. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees, minutes and seconds. List alternative sites were applicable.

alternative sites were applicable.	Latitude (S):		Longitude	(E):		
Alternative:							
Alternative S1¹ (preferred or only	28°	34'	03.47"	29°	46'	04.58"	

Alternative S11 (preferred or only	28°	34	03.47	29°	46	04.58
site alternative)						
Alternative S2 (if any)	0	6	"	0		"
Alternative S3 (if any)	0	6	Œ	0	6	ш

In the case of linear activities:

Alternative: Alternative S1 (preferred or only route alternative)	Latitude (S):		Longitude	(E):	
 Starting point of the activity 	0	•	íí.	0		66
 Middle point of the activity 	0	6	и	0	6	ss.
 End point of the activity 	0	6	и	0	6	ss.
Alternative S2 (if any)			ű			ii.
 Starting point of the activity 	0	•	tt.	0		ss.
 Middle point of the activity 	0	•	íí.	0		66
 End point of the activity 	0		ű	0		ss.
Alternative S3 (if any)			ű			и
 Starting point of the activity 	0	6	и	0	6	ss.
 Middle point of the activity 	0	ŧ	ű	0	í	
 End point of the activity 	0		u	0		и

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 500m along the route for each alternative alignment.

6. PHYSICAL SIZE OF THE ACTIVITY

Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

activities/teerinologies (tootprints).	
Alternative:	Size of the activity:
Alternative A1 ² (preferred activity alternative)	34 419 m ²
Alternative A2 (if any)	m ²
Alternative A3 (if any)	m ²
or, for linear activities:	

Alternative:	Length of the
	activity:
Alternative A1 (preferred activity alternative)	M
Alternative A2 (if any)	M

Alternative A3 (if any)

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¹ "Alternative S.." refer to site alternatives.

 $^{^{\}rm 2}$ "Alternative A.." refer to activity, process, technology or other alternatives.

Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

Alternative: Size of the site/servitude:

Alternative A1 (preferred activity alternative)
Alternative A2 (if any)
Alternative A3 (if any)

Olto/Ool Vitaaol	
34 419 m ²	
m ²	
m ²	

7. SITE ACCESS

Does ready access to the site exist? If NO, what is the distance over which a new access road will be built Describe the type of access road planned:

YES	NO
	М

The site is located along the road, corner site at the intersection between the Delhi Road and N11 which make it easily accessible.

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

8. SITE OR ROUTE PLAN

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as <u>Appendix A</u> to this report.

The site or route plans must indicate the following:

- 8.1. the scale of the plan which must be at least a scale of 1:500:
- 8.2. the property boundaries and numbers/ erf/ farm numbers of all adjoining properties of the site;
- 8.3. the current land use as well as the land use zoning of each of the properties adjoining the site or sites:
- 8.4. the exact position of each element of the application as well as any other structures on the site:
- 8.5. the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, storm water infrastructure and telecommunication infrastructure;
- 8.6. walls and fencing including details of the height and construction material;
- 8.7. servitudes indicating the purpose of the servitude:
- 8.8. sensitive environmental elements within 100metres of the site or sites including (but not limited thereto):
 - rivers, streams, drainage lines or wetlands;
 - the 1:100 year flood line (where available or where it is required by DWA);
 - ridges;
 - cultural and historical features;
 - areas with indigenous vegetation including protected plant species (even if it is degraded or infested with alien species);

- 8.9. for gentle slopes the 1metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
- 8.10. the positions from where photographs of the site were taken.

9. SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under <u>Appendix B</u> to this report. It must be supplemented with additional photographs of relevant features on the site, if applicable.

10. FACILITY ILLUSTRATION

A detailed illustration of the facility must be provided at a scale of 1:200 and attached to this report as <u>Appendix C</u>. The illustrations must be to scale and must represent a realistic image of the planned activity/ies.

11. ACTIVITY MOTIVATION

11.1. Socio-economic value of the activity

What is the expected capital value of the activity on completion? R109 Mil What is the expected yearly income that will be generated by or as a result of the R 27 Mil activity? YES NO Will the activity contribute to service infrastructure? YES NO Is the activity a public amenity? How many new employment opportunities will be created in the development 60 phase of the activity? R 6 Mil What is the expected value of the employment opportunities during the development phase? What percentage of this will accrue to previously disadvantaged individuals? 97% How many permanent new employment opportunities will be created during the 40 operational phase of the activity? What is the expected current value of the employment opportunities during the first R 450 Mil 10 years? What percentage of this will accrue to previously disadvantaged individuals? 98%

11.2. Need and desirability of the activity

Motivate and explain the need and desirability of the activity (including demand for the activity):

Nulane Investment 254 Pty Ltd proposes the construction of Ladysmith Private Hospital. With the operation of this hospital, there will be production of medical waste (general and hazardous waste), therefore there is a need for a Temporal Waste Storage to avoid environmental hazard if waste not managed properly. With Ladysmith population growing rapidly, the existing Ladysmith Provincial Hospital and Laverna Hospital have become

crowded; hence the construction of a new medical facility will impact positively to the communities of Ladysmith.

Other reasons include:

- a. The site is located conveniently along the road and closer to the CBD, easily accessible by pedestrians and vehicles.
- b. With an increase of specialist doctors, there will be better medical services in Ladysmith.
- c. Patients will receive high quality, personal, and compassionate health care.
- d. Increased economic services for public transport, by transporting workers and public for consultation/visitations.
- e. Employment opportunities (temporal and permanent.)
- f. Improved national GDP and local economy

Indicate any benefits that the activity will have for society in general:

- a. Better health services for the public at convenient location.
- b. An increase of specialists doctors, specialising in specific diseases and patience personal care
- c. Creation of job opportunities
- d. Better service delivery in Ladysmith
- e. Economic opportunities for local business.

Indicate any benefits that the activity will have for the local communities where the activity will be located:

- a. Employment Opportunities
- b. Better health services for the public at convenient location.
- c. Skills development in medical, paramedical, sanitary works, etc.
- d. The safe management of risk and non-risk diseases to protect public health.
- e. New hospital will reduce overcrowding in Ladysmith Provincial and Laverna Hospital.
- f. Waste storage will ensure safe management of medical waste (general and hazardous waste).

12. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are relevant to the application as contemplated in the EIA regulations, if applicable:

Title of	legislation, policy or guideline:	Administering authority:	Date:
b.	The Constitution of the Republic of South	All authorities	1996
	Africa		August
C.	2014 EIA Regulations under NEMA	National and Provincial	2014
d.	Heritage Resources Act	Amafa and Dept. of Arts and Culture	1999
e.	National Water Act	Dept. of Water Affairs	1998
f.	Health Act	Dept. of Health	1977

g.	KwaZulu-Natal and Affairs Act	Dept. of Cooperative Governance and and Traditional Affairs	1992
h.	National Environmental Management: Air Quality Act (No 39 of 2004)	Department of Environmental Affairs and	2004
i.	Integrated Development Plan and Spatial Development Plan	Tourism Alfred Duma Local Municipality	2016/2017

13. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

How will the construction solid waste be disposed of? (describe)

13.1.	Solid v	vaste	manag	ement
-------	---------	-------	-------	-------

Will the activity produce solid construction waste during the construction/initiation phase?

If yes, what estimated quantity will be produced per month?

Inert construction waste will be taken by locals for Road and Driveway maintenance. Other will be disposed at Ladysmith disposal Site

Where will the construction solid waste be disposed of? (provide details of landfill site)

Ladysmith Disposal Site

Will the activity produce solid waste during its operational phase? If yes, what estimated quantity will be produced per month?

NO 1 460 m³

NO

8m³

How will the solid waste be disposed of? (provide details of landfill site)

Will be collected by an approved medical waste contractor Buhle Waste and disposed correctly.

Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

The solid waste (medical waste) will be collected by Buhle Waste and disposed of on the medical waste facility. A Disposal Certificate will be produced by Buhle Waste and kept on record by the Applicant.

If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, then the applicant should consult with the competent authority to determine the further requirements of the application.

Can any part of the solid waste be classified as hazardous in terms of the YES relevant legislation?

If yes, contact the KZN Department of Economic Development, Tourism & Environmental Affairs to obtain clarity regarding the process requirements for your application.

Is the activity that is being applied for a solid waste handling or treatment YES facility?

If yes, contact the KZN Department of Economic Development, Tourism & Environmental Affairs to obtain clarity regarding the process requirements for your application.

13.2. Liquid effluent

Will the activity p	YES	NO	
•	sewage system?		
•	nated quantity will be produced per month?		m ³
•	produce any effluent that will be treated and/or disposed of on	Yes	NO
site?	he K7N Denostment of Economic Development, Tourism 9 Er		o o o to l
	the KZN Department of Economic Development, Tourism & En n clarity regarding the process requirements for your applicat		ientai
	produce effluent that will be treated and/or disposed of at another	YES	NO
facility?	roduce enident that will be treated and/or disposed of at another	ILO	
•	ne particulars of the facility:		<u> </u>
Facility name:	NA		
Contact			
person:			
Postal			
address:			
Postal code:			
Telephone:	Cell:		
E-mail:	Fax:		
	asures that will be taken to ensure the optimal reuse or recycling o	f waste	water,
if any:			
N/A			
13.3. E	Emissions into the atmosphere		
Will the activity r	elease emissions into the atmosphere?	ES D	<u>a</u>
•	· · · · · · · · · · · · · · · · · · ·	ES D	\longrightarrow
•	the KZN Department of Economic Development, Tourism		
	tal Affairs to obtain clarity regarding the process		
	or your application.		
If no, describe th	ne emissions in terms of type and concentration:		
Limited dust gen	eration during the construction activities.		
40.4	Noncontinuo of males		
13.4.	Seneration of noise		
Will the activity of	renerate noise?	ES N	$\overline{\Omega}$
, ,	,	S N	_
•	ant should consult with the competent authority to determine	<u>-0 </u>	
•	essary to change to an application for scoping and EIA.		
	ne noise in terms of type and level:		
Limited noise wil	l be generated during construction by construction and delivery ve	hicles.	The
	e generated at the site during the construction and operational		
	e negligible, and is not expected to exceed the existing ambient r		/els
in the area. Nois	e will not be considered further in this environmental assessment.		

14. WATER USE

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es):

municipal	water	groundwater	river, stream,	Other	the ac	ne activity will				
	board		dam or lake		use w	•				
						-				
If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:										
Does the activity require a water use permit from the Department of Water Affairs?										
10.70	1 200		P P C C D				11 I			

If YES, please submit the necessary application to the Department of Water Affairs and attach proof thereof to this report.

15. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

- a. Energy efficient fluorescent lighting will be used
- b. Energy efficient plant and machinery will be used

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

- a. Solar energy is being investigated.
- b. The installation of Power Generators as power back up in case of power outages

SECTION C: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

For linear activities (pipelines, etc) as well as activities that cover very large sites, it may be
necessary to complete this section for each part of the site that has a significantly different
environment. In such cases please complete copies of Section C and indicate the area,
which is covered by each copy No. on the Site Plan.

Section	С	Copy	No.	
(e.g. A):				

• Subsections 1 - 6 below must be completed for each alternative.

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1: Flat 7:50 1:20 1:15 – 1:10 1:10 1:7,5 – 1:5 Steeper than 1:20 1:15 1:7,5 1:5 Alternative S2 (if any): Flat 1:50 1:20 1:15 - 1:101:10 1:7,5-1:5Steeper than 1:20 1:15 1:7,5 1:5 Alternative S3 (if any): 1:10 Flat 1:50 1:20 1:15 - 1:101:7,5-1:5Steeper than

1:7,5

1:5

2. LOCATION IN LANDSCAPE

1:20

1:15

Indicate the landform(s) that best describes the site (Please cross the appropriate box).

^	Alternative 51 (preferred Site).								
	Ridgeline	Plateau	Side slope of	Closed	Open	Plain	Undulating	Dune	Sea-
			hill/mountain	valley	valley		plain/low hills		front
Α	Alternative S2 (if any):								
	Ridgeline	Plateau	Side slope of	Closed	Open	Plain	Undulating	Dune	Sea-
			hill/mountain	valley	valley		plain/low hills		front
Α	Alternative S3 (if any):								
	Ridgeline	Plateau	Side slope of	Closed	Open	Plain	Undulating	Dune	Sea-
	_		hill/mountain	valley	valley		plain/low hills		front

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

				-		
Has a specialist be			NO			
If YES, please con	•	ing: Kevin Diemont				
Name of the speci						
Qualification(s) of						
Postal address:		PO Box 794, Hilton				
Postal code:		3245				
Telephone:		43 6700	Cell:			
E-mail:	terrate	est@terratest.co.za	Fax:	033 34	13 6788	
			(including red data species)	YES	NO
present on any of		tes?				
	NA					
and explain:						
	ial or sensitive h	abitats or other natura	I features present on any o	f the	YES	NO
alternative sites?						
= =, =	N/A					
and explain:					<u> </u>	
· -		ecommended by the s			XES	NO
			ngineering geologist or geo			
			d foundation excavations	during th	e developme	nt of
		ervices Report is also	attached.		\/F0	NO
If YES, is such a re	eport(s) attached	d in <u>Appendix D</u> ?			YLS.	NO
0: 1 1	l: 1 (0		D (- 1
Signature of speci	alist: (See	signed 2 Reports)	Date:			
la 4la a alta/a\ la a	-41	t de a fallacciona /	46	\0		
is the site(s) loca	ated on any of	• ,	ss the appropriate box	,		00 ///
		Alternative S1:	Alternative S2	(if	Alternative	S3 (if
			any):		any):	

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Shallow water table (less than 1.5m deep)	YES	MO	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	YES	MO	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES	MO	YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES	MO	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)	YES	MO	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	MO	YES	NO	YES	NO
Any other unstable soil or geological feature	YES	MO	YES	NO	YES	NO
An area sensitive to erosion	YES	MO	YES	NO	YES	NO

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. (Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted).

4. GROUNDCOVER

Has a specialist been cons	ulted fo	r the completion of this	s section?			YES	NO<
If YES, please complete the	e follow	ing:					
Name of the specialist:		NA					
Qualification(s) of the speci	alist:						
Postal address:							
Postal code:							
Telephone:				Cell:			
E-mail:				Fax:			
Are there any rare or endar			(including red data	species)		YES	NO
present on any of the altern	native si	tes?					
If YES, specify NA							
and explain:							
Are their any special or sen	isitive h	abitats or other natura	I features present o	n any of the		YES	NO
alternative sites?							
If YES, specify							
and explain: NA					ı		N
Are any further specialist st	udies r	ecommended by the s	pecialist?			YES	>₩ 0 <
If YES, NA							
specify:							1
If YES, is such a report(s) a	attached	d in <u>Appendix D</u> ?				YES	NO
			<u> </u>				
Signature of specialist:	NA		Date:				

The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Natural veld - good		Natural veld with		
condition ^E	with scattered	heavy alien	dominated by	Gardens
Condition	aliens ^E	infestation ^E	alien species ^E	
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil

If any of the boxes marked with an "E "is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise.

5. LAND USE CHARACTER OF SURROUNDING AREA

Cross theland uses and/or prominent features that currently occur within a 500m radius of the site and give a description of how this influences the application or may be impacted upon by the application:

Land use character			Description
Natural area	YES	NO	Vacant land with natural vegetation,
Low density residential	YES	X9<	_
Medium density residential	YES	NO	Van Riebeeck Park
High density residential	YES	X9<	
Informal residential	YES	7000	
Retail commercial & warehousing	YES	7000	
Light industrial	YES	7000	
Medium industrial	YES	7000	
Heavy industrial	YES	X9<	
Power station	YES	X9<	
Office/consulting room	YES	X9<	
Military or police base/station/compound	YES	NO	5 SAI (Ladysmith Military Base)
Spoil heap or slimes dam	YES	X9<	
Quarry, sand or borrow pit	YES	X9<	
Dam or reservoir	YES	\nearrow	
Hospital/medical centre	YES	X9<	
School/ crèche	YES	X9<	
Tertiary education facility	YES	\nearrow	
Church	YES	\nearrow	
Old age home	YES	\nearrow	
Sewage treatment plant	YES	\nearrow	
Train station or shunting yard	YES	\nearrow	
Railway line	YES	\nearrow	
Major road (4 lanes or more)	YES	\nearrow	
Airport	YES	\nearrow	
Harbour	YES	\nearrow	
Sport facilities	YES	NO	Indoor Sport Centre
Golf course	YES	M	
Polo fields	YES	M	
Filling station	YES	NO	Total and Engen Service Stations
Landfill or waste treatment site	YES	M	
Plantation	YES	M	
Agriculture	YES	\searrow	

River, stream or wetland	YES	NO	Klipriver
Nature conservation area	YES	X6<	
Mountain, hill or ridge	YES	X6<	
Museum	YES	X6<	
Historical building	YES	X6<	
Protected Area	YES	X6<	
Graveyard	YES	X6<	
Archaeological site	YES	740<	
Other land uses (describe)	YES	740<	

6. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or hi	istorically significant elements, as	YES	NO /
defined in section 2 of the National He	eritage Resources Act, 1999, (Act		
No. 25 of 1999), including archaeolog	gical or palaeontological sites, on		
or within 20m of the site?	•		
If YES, contact a specialist recom	mended by AMAFA to conduct	a heritag	je impact
assessment. The heritage impact asse	essment must be attached as an app	endix to t	his report.
Briefly explain the	N/A		
recommendations of the specialist:			
Will any building or structure older than	n 60 years be affected in any way?	YES	MO <
Is it necessary to apply for a permit	in terms of the National Heritage	YES	MO
Resources Act, 1999 (Act 25 of 1999))?		
If YES, please submit the necessary	application to AMAFA and attach	proof there	eof to this
report.			

SECTION D: PUBLIC PARTICIPATION

1. ADVERTISEMENT

The person conducting a public participation process must take into account any guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of the application which is subjected to public participation by—

- (a) fixing a notice board (of a size at least 60cm by 42cm; and must display the required information in lettering and in a format as may be determined by the competent authority) at a place conspicuous to the public at the boundary or on the fence of—
 - (i) the site where the activity to which the application relates is or is to be undertaken; and
 - (ii) any alternative site mentioned in the application;
- (b) giving written notice to—
 - (i) the owner or person in control of that land if the applicant is not the owner or person in control of the land;
 - (ii) the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;

- (iii) owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken:
- (iv) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;
- (v) the local and district municipality which has jurisdiction in the area;
- (vi) any organ of state having jurisdiction in respect of any aspect of the activity (as identified in the application form for the environmental authorization of this project); and
- (vii) any other party as required by the competent authority;
- (c) placing an advertisement in-
 - (i) one local newspaper; or
 - (ii) any official Gazette that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;
- (d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or district municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official *Gazette* referred to in subregulation44(c)(ii); and
- (e) using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desiring of but unable to participate in the process due to—
 - (i) illiteracy;
 - (ii) disability; or
 - (iii) any other disadvantage.

2. CONTENT OF ADVERTISEMENTS AND NOTICES

A notice board, advertisement or notices must:

- (a) indicate the details of the application which is subjected to public participation; and
- (b) state—
 - (i) that an application for environmental authorization has been submitted to the KZN Department of Economic Development, Tourism & Environmental Affairs in terms of the EIA Regulations, 2014;(ii)
 - (iii) a brief project description that includes the nature and location of the activity to which the application relates;
 - (iv) where further information on the application can be obtained; and
 - (iv) the manner in which and the person to whom representations in respect of the application may be made.

3. PLACEMENT OF ADVERTISEMENTS AND NOTICES

Where the proposed activity may have impacts that extend beyond the municipal area where it is located, a notice must be placed in at least one provincial newspaper or national newspaper, indicating that an application will be submitted to the competent authority in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application

can be made, unless a notice has been placed in any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of the EIA regulations.

Advertisements and notices must make provision for all alternatives.

4. DETERMINATION OF APPROPRIATE PROCESS

The EAP must ensure that the public participation process is according to that prescribed in regulation 44 of the EIA Regulations, 2014, but may deviate from the requirements of sub-regulation 44(2) in the manner agreed by the KZN Department of Economic Development, Tourism & Environmental Affairs as appropriate for this application. Special attention should be given to the involvement of local community structures such as Ward Committees, ratepayers associations and traditional authorities where appropriate.

<u>Please note</u> that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

5. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments and respond to each comment of the public before this application is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations (regulation 47 in the EIA Regulations, 2014) and be attached as <u>Appendix E</u> to this report.

6. PARTICIPATION BY DISTRICT, LOCAL AND TRADITIONAL AUTHORITIES

District, local and traditional authorities (where applicable) are all key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of this application and provided with an opportunity to comment.

Has any comment been received from the district municipality?

YES NO

If "YES", briefly describe the feedback below (also attach any correspondence to and from this authority with regard to this application):

No comments has been received as yet, All comments received from the authorities will be included to the final BAR.

Has any comment been received from the local municipality?

YES XX

If "YES", briefly describe the feedback below (also attach any correspondence to and from this authority with regard to this application):

No comments has been received as yet, All comments received from the authorities will be included to the final BAR

Has any comment been received from a traditional authority?

YES NO

If "YES", briefly describe the feedback below (also attach any correspondence to and from this authority with regard to this application):

NA

The area does not fall within the Traditional Authority's jurisdiction.

7. CONSULTATION WITH OTHER STAKEHOLDERS

Any stakeholder that has a direct interest in the site or property, such as servitude holders and service providers, should be informed of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders?

YES NO

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

No comments has been received as yet from stakeholders, there will be included on the final BAR

SECTION E: IMPACT ASSESSMENT

The assessment of impacts must adhere to the requirements in the EIA Regulations, 2014, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

No comments has been received as yet, All comments received from the PPP will be recorded, and with responses where necessary, attached to the final BAR.

Response from the practitioner to the issues raised by the interested and affected parties (A full response must be given in the Comments and Response Report that must be attached as Appendix E to this report):

No comments has been received as yet, All comments received from the PPP will be recorded, and with responses where necessary, attached to the final BAR.

2. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIEDIMPACTS ANDPROPOSED MITIGATION MEASURES

2.1. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN PHASE

a. Site alternatives

List the potential impacts associated with site alternatives that are likely to occur during the planning and design phase:

Alternative S1 (preferred alternative): ERF 17817

Direct impacts:

- Specialist Studies
- Checking presence of sensitive vegetation and species
- Social and economic impacts on surrounding communities.
- Waste Management design

Indirect impacts:

- Traffic management impacts
- Access to the site

Cumulative impacts:

Visual impacts

Mitigation Measures

- Proper demarcation of the targeted area for the development.
- Proper planning and engineering designs to ensure that environmental, social and economic impacts are taken into consideration.
- Community consultation in order to provide information to allay concern.

Alternative S2 (if any): NONE

Direct impacts:

N/A

Indirect impacts:

N/A

Cumulative impacts:

N/A

Mitigation Measures

 There is no alternative site, the applicant has already purchased the land specifically for a medical facility

No-go alternative (compulsory)

 If the project does not take place, no direct, indirect or cumulative impacts associated with planning and design will occur. The site remains the same, with some erosion occurring on site. There are also unauthorised activities such as Vehicle Driving Schools practice grounds. The Municipality will enforce the illegal use of the land and control erosion and invasive species growth.

b. Process, technology, layout or other alternatives

List the impacts associated with any process, technology, layout or other alternatives that are likely to occur during the planning and design phase (please list impacts associated with each alternative separately):

Alternative A1 (preferred alternative): Single Story 52 Mitiga Bed Facility

Direct impacts:

- · Loss of natural vegetation
- Geotechnical study for stability of buildings and hydrological study for 50 and 100 year floodline.

Indirect impacts:

- Stormwater management system problems.
- Employment opportunities for specialists and engineers.

Cumulative impacts:

Mitigation Measures

- It very crucial that the structure of the medical facility to be well designed
- There must be an effective waste management plan to avoid health and environmental risks.
 Waste segregation is very crucial in medical waste.
- Proper stormwater management plan must be prepared for the site.

- Medical waste management (Hazardous and general waste)
- Poor traffic management designs
- Ensure implementation of surface and groundwater quality monitoring program.
- Efficient waste storage facility for proper management of waste.
 Adequate collection and transportation of waste by an approved waste disposal site.
- Proper traffic management system to avoid traffic congestion and accidents.

Alternative A2 (if any): NONE

Direct impacts:

N/A

Indirect impacts:

N/A

Cumulative impacts:

N/A

No-go alternative (compulsory)

Direct impacts:

 There will be no direct impacts if the development does not occur.

Indirect impacts:

 There will be no indirect impacts if the development does not occur.

Cumulative impacts:

 There will be no cumulative impacts if the development does not occur. The site remains the same, with some erosion occurring on site. There are also unauthorised activities such as Vehicle Driving Schools practice grounds. The Municipality will enforce the illegal use of the land and control erosion and invasive species growth.

2.2. IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION PHASE

a. Site alternatives

List the potential impacts associated with site alternatives that are likely to occur during the construction phase:

Alternative S1 (preferred site): ERF 17817

Direct impacts:

- Clearance of vegetation resulting to loss of natural vegetation and protected species.
- Surface water pollution due to spills of mixed hazardous chemicals during construction.
- Ground water contamination due to oil and fuel leaks from vehicles.
- Traffic caused by delivery vehicles during construction.

Mitigation Measures Alternative S1

- Minimise the clearance of vegetation to avoid exposure of soil.
- Spills must be removed/cleaned up immediately and the contaminated soils or spilled material must be disposed of to the registered hazardous landfill site.
- Construction vehicles/machines must be maintained to a good standard at all times so that fuel or oil leaks are avoided.

- Generation of noise due to construction activities
- Dust generation by construction activities.
- Visual impacts
- Soil erosion as result of loose soils.
- Employment opportunities

Indirect impacts:

 Stormwater run-off due to loose soils leading to sedimentation of water bodies. Stormwater run-off may also arise due increase coverage of paved surfaces

Cumulative impacts:

Generation waste as a result of construction rubble.

- Traffic management must be ensured on site, hence avoid transporting construction material during peak hours.
- Noise disturbance must be kept within acceptable levels, must comply with Noise Development Act and must be limited to normal working hours (07h00 to 17h00).
- Dust generation must be avoided during windy days. Ensure that dust suppression measures are implemented on site, such as water spraying and commercial suppressants.
- Plantation of trees surrounding the site for visual screening.
- Should erosion occur during construction, diversion of berms and drains must be constructed to divert run-off away from exposed areas.
- Proper stormwater management plan must be implemented on site.
- Waste generated on site must be collected and disposed of regularly at Ladysmith disposal site.

Alternative S2 (if any): NONE

Direct impacts:

N/A

Indirect impacts:

N/A

Cumulative impacts:

N/A

Mitigation Measures

 There is no alternative site, the applicant have already purchased the site, specifically for construction of the medical facility.

No-go alternative (compulsory)

Direct impacts:

- There will be no impacts associated with the proposed development.
- Loss of job opportunities.
- Failure to improve the medical services in Ladysmith.

Indirect impacts:

None

Cumulative impacts:

None

 The site remains the same, with some erosion occurring on site. There are also unauthorised activities such as Vehicle Driving Schools practice grounds. The Municipality will enforce the illegal use of the land and control erosion and invasive species growth.

b. Process, technology, layout or other alternatives

List the impacts associated with process, technology, layout or other alternatives that are likely to occur during the construction phase (please list impacts associated with each alternative separately):

Alternative A1 (preferred alternative): Single Story 52 Bed Facility

Direct impacts:

- Loss/disturbance to indigenous vegetation
- Disturbance to habitat
- Infestation of alien species
- Soil erosion due to exposed soils
- Traffic congestion
- Damages to access roads
- Noise generation due to hauling construction vehicles
- Possible crime increase.

Indirect impacts:

- Surface and ground water contamination as a result of spillages of hazardous materials.
- Stormwater run-off

Cumulative impacts:

 Generation of waste on site, leading to increase of waste at Ladysmith landfill site

associated with the proposed

Mitigation Measures

- Clearance of vegetation must be limited to demarcated area. After construction bare areas must be re-vegetated with indigenous plants.
- Disturbance of fauna and their habitat must be kept to the absolute minimum.
- Alien control and monitoring programme must be implemented.
- Should erosion occur during construction, diversion of berms and drains must be constructed to divert run-off away from exposed areas.
- Effective Traffic Management Plan must be implemented to avoid traffic congestion.
- Access roads must be maintained to a good standard at all times. As soon potholes appear roads must be rehabilitated.
- Noise levels must be kept to a minimum level and must be limited to normal working hours (07h00 to 17h00).
- Construction site must be fenced and have security to ensure safe and avoid crime.
- Regular sampling of water must be done to monitor the water quality.
- Waste generated onsite must be collected regularly and disposed of to a registered landfill site.

There are also unauthorised activities such as Vehicle Driving

Alternative A2: NONE **Mitigation Measures** Direct impacts: N/A N/A Indirect impacts: N/A Cumulative impacts: No-go alternative (compulsory) Direct impacts: The site remains the same, with There will be no impacts some erosion occurring on site.

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development. The site will remain to its current condition.

- Loss of job opportunities.
- Failure to improve medical services in Ladysmith.

Schools practice grounds. The Municipality will enforce the illegal use of the land and control erosion and invasive species growth.

Indirect impacts:

None

Cumulative impacts:

None

2.3. IMPACTS THAT MAY RESULT FROM THE OPERATIONAL PHASE

a. Site alternatives

List the potential impacts associated with site alternatives that are likely to occur during the operational phase:

Alternative S1 (preferred alternative): ERF 17817

Direct impacts:

- Traffic congestion forthcoming from ambulances, private cars and public vehicles for admission and visitation of patients.
- Waste of generation of medical waste (general and hazardous waste). Medical waste could cause threat to health and the environment, if not managed properly.
- Visual pollution due to newly constructed hospital and lighting
- Noise generation due to ambulances, private and public transport, and as a result of increased traffic in National road (N11).
- Permanent employment opportunities for doctors, nurses, sanitary workers etc.

Indirect impacts:

- Contamination of water if waste water and medical waste if not managed correctly.
- Soil erosion due to exposed areas.
- Stormwater run-off

Mitigation measures

Traffic Management:

- Traffic management study must be conducted with Ladysmith Traffic Department.
- The road must be maintained to a good condition at all times, to avoid potholes.

Waste Management:

- With the proposed waste storage facility, medical waste must be segregated according to classification, corresponding with the proposed waste management plan.
- Ensure waste segregation to reduce health and environmental risk, preventing contamination of other waste (such as recyclable waste) with infectious waste.
- Hazardous and non-hazardous medical waste packaging must be done accordingly, with use of colour code and visible sign indications.
- Waste bins/containers must be hermetic to avoid unnecessary exposure, resistance to sharps, easy to wash, carry and transport.

Cumulative impacts:

- An increase in electric power and water supply causing a strain on municipal services
- Improved medical services in Ladysmith.

 Collection and transportation of waste must be performed in a hygienic and fast way.

Visual environment:

- Erection of friendly outdoor lighting for security.
- Screening with trees and shrubs must be applied.
- Waste generated onsite must be collected on regular basis.

Noise:

 Noise levels must be kept within acceptable limits and all operations must meet the noise standard requirements by Alfred Duma Municipality.

Soil and Water quality:

- Re-vegetation rehabilitation must be applied to avoid soil erosion.
- Effluents must not be applied to areas where there is ground water bores.
- Install surface water diversions to direct clean runoff around areas containing waste
- A water quality monitoring must be done on regular basis to ensure water quality.
- If spills occur, immediate action must be taken to contain spillage and prevent it from entering the stream.

Management of Alien Invasive Plants:

- Alien invasive management plan to control and monitor the infestation of alien species.
- Alien invasive plants must be removed as soon as they appear.
- Introduction of alien vegetation and animals is prohibited. Only indigenous trees must be used and these must mirror the natural vegetation of the surrounding environment.

Waste Water Management:

	 Install surface water diversions to direct clean runoff around areas containing waste.
--	--

Alternative S2 (if any): NONE	Mitigation Measures
Alternative 32 (ii arry). NONE	willigation weasures

Direct impacts:

N/A

Indirect impacts:.

N/A

Cumulative impacts:

N/A

 There is no alternative site, the applicant have already purchased the land, specifically for the construction of a medical facility.

No-go alternative (compulsory)

Direct impacts:

- There will be no impacts associated with the proposed development. There will be no change to the condition of the site.
- Loss of job opportunities.
- Failure of support local economy
- Failure to improved medical services in Ladysmith.

Indirect impacts:

None

Cumulative impacts:

None

- The site remains environmentally degraded and rehabilitation must be undertaken.
- Illegal use of site by Driving Schools would be stopped by the Municipality
- There will be loss of employment opportunities for Medical and non-medical personnel.
- Loss of rates and taxes revenue for the Municipality who has to source it elsewhere including increasing current rates.
- Lost opportunity for provisioning of better quality of healthcare in and around Ladysmith, Estcourt, Bergville and other areas within the 100km radius of Ladysmith which will have to be mitigated.

b. Process, technology, layout or other alternatives

List the impacts associated with process, technology, layout or other alternatives that are likely to occur during the operational phase (please list impacts associated with each alternative separately):

Alternative A1 (preferred alternative): Single Story 52 Bed Facility

Direct impacts:

- Permanent provision of employment to local members.
- Traffic congestion due ambulances, private and public vehicles transporting patients and public for consultation, admission and visitation.
- Noise generation due to increased traffic and ambulances, private and public transport.

Mitigation Measures

Traffic congestion:

- Access roads must be maintained to a good condition to avoid potholes.
- Delivery of hospital equipment must not be done during peak hours to avoid traffic.
- Ambulances must be serviced and maintained to a good standard at all times.

Noise:

- Light and Visual impacts as a result of new buildings
- Generation of waste (general and hazardous medical waste).

Indirect impacts:

Stormwater run-off

Cumulative impacts:

- Increase of municipal supply to basic services (electricity, water and sewage).
- Improved medical services in Ladysmith.

 Noise generation must be kept to minimum levels and comply with the Occupational Health and Safety Act (Act No. 85 of 1993).

Visual:

- Erection of friendly outdoor lighting for security.
- Screening with trees and shrubs must be applied.
- Waste generated onsite must be collected on regular basis.

Stormwater:

 Stormwater control must be implemented to ensure no ponding occurs. And a monitoring plan for groundwater quality must be implemented.

Waste Management:

- With the proposed waste storage, medical waste must be segregated according to classification, corresponding with the proposed waste management plan.
- Ensure waste segregation to reduce health and environmental risk, preventing contamination of other waste (such as recyclable waste) with infectious waste.
- Hazardous and non-hazardous medical waste packaging must be done accordingly, with use of colour code and visible sign indications.
- Waste bins/containers must be hermetic to avoid unnecessary exposure, resistance to sharps, easy to wash, carry and transport.
- Collection and transportation of waste must be performed in a hygienic and fast way.

Alternative A2: NONE	Mitigation Measures
Direct impacts:	• N/A
N/A	. 1771
Indirect impacts:	
N/A	
Cumulative impacts:	
N/A	

No-go alternative (compulsory)

Direct impacts:

- There will be no impacts associated with the proposed development. The site will remain to its current condition.
- Loss of job opportunities.
- Failure of support local economy.
- Failure to improve medical services in Ladysmith

Indirect impacts:

None

Cumulative impacts:

None

The site remains the same, with some erosion occurring on site. There are also unauthorised activities such as Vehicle Driving Schools practice grounds. The Municipality will enforce the illegal use of the land and control erosion and invasive species growth.

2.4. IMPACTS THAT MAY RESULT FROM THE DECOMISSIONING OR CLOSURE PHASE

a. Site alternatives

List the potential impacts associated with site alternatives that are likely to occur during the decommissioning or closure phase:

NB:The Decommissioning of the project would occur if there was a catastrophic destruction of the building infrastructure caused by natural disaster such as earthquake, volcano or landslides. There are highly unlikely in South Africa. However should there be an unforeseen need to demolish the building structures, the following are likely impacts

Alternative S1 (preferred alternative): ERF 17817

Direct impacts:

- Odour and dust generation due to demolition of buildings.
- Waste generation and increased waste disposal at the landfill site.
- Soil erosion due to the movement of heavy duty vehicles.
- Destruction of flora and fauna.
- Loss of habitat
- Water contamination due to erosion and other contaminating material.
- Loss of economic benefits such as employment and local economic development activities.
- Loss of medical services.

Mitigation measures

- Proper rehabilitation/demolition of the buildings.
- Install surface water diversions to direct clean runoff around areas containing waste
- Implementation of a surface water and groundwater quality monitoring program.
- Waste management by collecting regularly and disposed of at the registered landfill site.
- Proper stormwater management plan must be implemented on site.
 - Avoid using extra heavy duty vehicle

Indirect impacts:

- Loss of rates and taxes revenue by the State and the Municipality.
- Overcrowding at Ladysmith Provincial and Laverna Hospital.
- Flooding as a result of uncontrolled stormwater passing through and generated by the site.

Cumulative impacts:

- Water pollution due to erosion and waste generated during decommissioning.
- Crime increase as a result of unemployment.
- Social unrest due to lack of opportunities.
- Lack of development and life improvement for citizens.

Alternative S2: NONE

Direct impacts:	•	N/A
N/A		14/74
Indirect impacts:		
N/A		
Cumulative impacts:		
N/A		

No-go alternative (compulsory)

Direct impacts:

- There will be no impacts associated with the proposed development.
- Loss of job opportunities.
- Failure of support local economy.
- Failure to improve medical services in Ladysmith

Indirect impacts:

None

Cumulative impacts:

None

 The site remains the same, with some erosion occurring on site. There are also unauthorised activities such as Vehicle Driving Schools practice grounds. The Municipality will enforce the illegal use of the land and control erosion and invasive species growth.

b. Process, technology, layout or other alternatives

List the impacts associated with process, technology, layout or other alternatives that are likely to occur during the decommissioning or closure phase (please list impacts associated with each alternative separately):

Alternative A1 (preferred alternative): Single Story 52 Bed Facility

Direct impacts:

 Odour and dust generation due to demolition of buildings.

Mitigation Measures

 Proper rehabilitation/demolition of the buildings.

- Waste generation and increased waste disposal at the landfill site.
- Soil erosion due to the movement of heavy duty vehicles.
- Destruction of flora and fauna.
- Loss of habitat
- Water contamination due to erosion and other contaminating material.
- Loss of economic benefits such as employment and local economic development activities.
- Loss of medical services.

Indirect impacts:

- Loss of rates and taxes revenue by the State and the Municipality.
- Overcrowding at Ladysmith Provincial and Laverna Hospital.
- Flooding as a result of uncontrolled stormwater passing through and generated by the site.

Cumulative impacts:

- Water pollution due to erosion and waste generated during decommissioning.
- Crime increase as a result of unemployment.
- Social unrest due to lack of opportunities.
- Lack of development and life improvement for citizens.

- Install surface water diversions to direct clean runoff around areas containing waste
- Implementation of a surface water and groundwater quality monitoring program.
- Waste management by collecting regularly and disposed of at the registered landfill site.
- Proper stormwater management plan must be implemented on site.

Avoid using extra heavy duty vehicle

Alternative A2: NONE	Mitigation Measures
Direct impacts:	• N/A
N/A	- 14// (
Indirect impacts:	

No-go alternative (compulsory)

Direct impacts:

Cumulative impacts:

N/A

N/A.

- There will be no impacts associated with the proposed development.
- Loss of job opportunities.
- Failure of support local economy.
- Failure to improve medical services in Ladysmith.

Indirect impacts:

The site remains the same, with some erosion occurring on site. There are also unauthorised activities such as Vehicle Driving Schools practice grounds. The Municipality will enforce the illegal use of the land and control erosion and invasive species growth.

None	
Cumulative impacts: None	

2.5. PROPOSED MONITORING AND AUDITING

For each phase of the project and for each alternative, please indicate how identified impacts and mitigation will be monitored and/or audited.

Alternative S1 (preferred site): ERF 17817

- Formulation of a site specific Environmental Management Programme (EMPr) containing all the recommendations made shall be implemented.
- The ECO will be responsible for perform all task assigned to the ECO in the EMPr, keep record of all the activities on site, problems identified and transgressions noted, assist in ensuring environmental implementation of appropriate environmental authorisation and approved EMPr, and **Providing** guidance/advice that ensures implementation of appropriate environmental management measures and adherence with environmental legislation/regulations
- The ECO will be required to conduct monthly environmental audit and submits reports every month end.
- The ECO must quarterly monitor surface and ground water quality at points that will be established in consultation with the Department of Water Affairs.

Alternative S2: NONE

• N/A

Alternative A1 (preferred alternative) Single Story 52 Alternative A2: NONE Bed Facility

- Formulation of a site specific Environmental Management Programme containing all the recommendations made shall be implemented.
- The ECO will be responsible for perform all task assigned to the ECO in the EMPr, keep record of all the activities on site, problems identified and transgressions noted, assist in ensuring environmental implementation of

N/A

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appropriate environmental authorisation and approved EMPr, and Providing guidance/advice that ensures implementation of appropriate environmental management measures and adherence with environmental legislation/regulations

- The ECO will be required to conduct monthly environmental audit and submits reports every month end.
- The ECO must quarterly monitor surface and ground water quality at points that will be established in consultation with the Department of Water Affairs.

3. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account, with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Alternative S1 (preferred site): ERF 17817

The proposed site is well located, closer to town and along the road which makes easily accessible. The construction of a new hospital will reduce overcrowding at Ladysmith Provincial and Laverna Hospital, provide employment opportunities and improve medical services in Ladysmith. If the identified negative impacts are well mitigated, there will be no significant environmental impacts associated with the development.

Alternative S2: NONE

There is no alternative site for the proposed development, the applicant have already purchased the land specifically for the construction of the medical facility.

Alternative A1 (preferred alternative): Single Story 52 Bed Facility

The single story 52 Bed Acute Facility is the preferred alternative layout. The implementation of appropriate mitigation measures given on both construction and operation phase will limit or reduce the major negative impacts associated with the proposed development. The major potential impacts will occur during construction.

The project offers the following advantages:

- Employment opportunities due to construction and operation of the project
- Improved national GDP and local economy
- Better health services for the public at convenient location.
- An increase of specialists doctors, specialising in specific diseases and patience personal care
- Skills development in medical, paramedical, sanitary works, etc.

- New hospital will reduce overcrowding in Ladysmith Provincial and Laverna Hospital.
- Better service delivery in Ladysmith
- Economic opportunities for local business.

Alternative A2

N/A

No-go alternative (compulsory)

- For no-go option, there will be no impacts associated with the development.
- Loss of employment opportunities
- Lack of local economy empowerment.
- Failure to improve medical services in Ladysmith.
- The site remains the same, with some erosion occurring on site. There are
 also unauthorised activities such as Vehicle Driving Schools practice
 grounds. The Municipality will enforce the illegal use of the land and control
 erosion and invasive species growth.

SECTION F. RECOMMENDATION OF EAP

Is the information contained in this report and the documentation attached hereto in the view of the EAPr sufficient to make a decision in respect of this report?

If "NO", please contact the KZN Department of Economic Development, Tourism & Environmental Affairs regarding the further requirements for your report.



If "YES", please attach the draft EMPr as <u>Appendix F</u> to this report and list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

GENERAL

- a) An EMPr for site establishment, construction and operational phases must be finalised and approved by DEDTEA prior to the contractor moving onto site.
- b) The Environmental Control Officer (ECO) must be appointed prior to site establishment and construct to prevent contravention of the approved EMPr and Environmental Authorisation.
- c) The working areas must be clearly demarcated by the ECO prior to commencement of the installation and no access is to be allowed to sensitive areas.
- d) The ECO is to conduct monthly audits and prepare monthly audit reports. Copies of these reports are to be supplied by the ECO to the developer and DEDTEA.
- e) The ECO's duties extend to the end of the construction phase.

DESIGN PHASE

Engineering Design:

 A stormwater management plan must be implemented to ensure that all storm-water is properly channelled through drainage to prevent soil erosion and pollution.

CONSTRUCTION PHASE

Noise Pollution and Blasting:

- Noise disturbance must be kept to a minimum.
- During the construction phase, maintain machinery regularly, as per the manufacturer's instructions
- During the construction phase, limit working hours from 07:00 to 17:00 on weekdays, 07:00 to 13:00 on Saturday and no work must be conducted on Sundays unless for emergency purposes, or as approved by the Municipality.
- All blasting and handling of blasting materials must be done in accordance with the Explosives Act and the Mine Health and Safety Act
- Risk assessment must be done after ground vibrations and blasting for the safety of residents, livestock and surrounding infrastructures.

Air Pollution:

- The liberation of dust into the surrounding environment must be effectively controlled.
- During dry/windy periods water sprays precautions must be undertaken to the construction access road.
- Construction phase stockpiles which have the potential of generating dust must be covered with plastic sheeting.
- Maintain construction vehicles and machinery to control exhaust emissions.

Water Pollution:

- Construction activities must remain within the footprint of the development.
- Construction machinery must be maintained by a suitably qualified mechanic, at an appropriately lined site, during working hours, so that diesel and/or oil leaks are avoided.
- Prevent run-off by constructing diversion berms and/or placing straw bales on denuded areas.
- Measures must be taken to ensure that ground and surface water are not polluted

Erosion measures:

- Should erosion become a problem during the construction phase then diversion berms and drains shall be constructed to divert run-off away from exposed areas.
- During the construction phase, bales can be used as filters across run-off pathways.
- The applicant must have alien invasive control programme that will be used to eliminate infestation of these plants.
- The applicant must have alien invasive control programme that will be used to eliminate the infestation of this plants.

Accidental spillages:

- Spills shall be cleared up immediately. The contaminated soils and the spilled material shall be taken to the nearest registered landfill site capable of receiving such spills.
- A register of all incidents shall be kept on site showing measures taken to clear up the spillages.
- Spillages occurring at the dispensing (i.e. offloading) area must be contained and cleaned up, must be disposed of safely and in accordance with

environmental legislation. No product must be allowed to be discharged into municipal storm water and/or sewer system.

A petrol and oil interceptor must be provided.

Heritage Issues:

 During construction, if heritage findings are made (graves, archaeological objects, etc.), contact AMAFA and stop the works immediately.

Health & Safety:

- Traffic signage shall be erected to advice people of machinery driving in the area.
- Pollution that could be detrimental to humans, flora and fauna shall be prevented as much as possible.
- The area must be fenced off to deny unauthorised access and to avoid potential risks associated with it.

Construction Site:

• Constructors must be encouraged to keep within the proposed development site, and not trespass on private property.

OPERATIONAL PHASE

Water pollution

- An operational spill management plan must be compiled by a suitably qualified specialist and implemented.
- Accidental spillages in the filler area and the forecourt are to be contained by allowing entering the drain at the edge of the spill containment slabs, diverting the spillages to the separator located at a low point on the site.
- Concrete drying beds must be provided to allow for solidification of wastewater into agricultural manure for fields application.

Stormwater

 A stormwater management system must be implemented and maintained throughout the operational phase of the proposed development.

Health and Safety

 All relevant health and safety requirements under the Occupational Health and Safety Act, as amended (Act 85 of 1993) must be complied with in the operational phase.

Monitoring and Reporting

- Routine monitoring, sampling and analysis of the early warning system should be carried out.
- Quarterly monitoring and bi-annual sampling is recommended.
- Records of monitoring must be kept and made available to the Department of Economic Development, Tourism and Environmental Affairs on request.
- Monthly stock reconciliations must be taken and recorded. These records must be made available to the Department of Water Affairs on request.
- The leak detectors must be regularly tested and records kept.
- All machinery must be maintained in good working order as to prevent soil or water pollution from oil, fuel or other leaks.

SECTION G: APPENDIXES

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports

Appendix E: Comments and responses report

Appendix F: Draft Environmental Management Programme (EMPr)

Appendix G: Other information