

**FINAL BASIC ASSESSMENT REPORT FOR
THE EXPANSION OF THE EXISTING CURRO
SCHOOL, PORTION 34 OF THE FARM
GROENVLEI 2844, LANGENHOVEN PARK,
BLOEMFONTEIN, FREE STATE.**

DETEA-FS REF. NO.: EMB/23(ii)/13/10



JULY 2013

BASIC ASSESSMENT REPORT



(For official use only)

File Reference Number:
Application Number:
Date Received:

Basic assessment report in terms of the Environmental Impact Assessment Regulations, 2010, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

Kindly note that:

1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2010 and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
2. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily 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 typing.
3. Where applicable **tick** the boxes that are applicable in the report.
4. An incomplete report may 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 may result in the rejection of the application as provided for in the regulations.
6. This report must be handed in at offices of the relevant competent authority as determined by each authority.
7. No faxed or e-mailed reports will be accepted.
8. The report must be compiled by an independent environmental assessment practitioner.
9. 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.
10. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.

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EXECUTIVE SUMMARY

Curro Holdings (Pty) Ltd has applied for Environmental Authorization to construct an extension to the existing Curro School complex, situated in Langenhovenpark. The proposed development shall be situated on Portion 34 of the Farm Groenvlei 2844, Langenhovenpark, Bloemfontein, Free State. Further to this application, a rezoning application is currently underway with the Bainsvlei Town Planning Scheme to change the zoning of Portion 34 from Smallholding to Educational and then consolidate this with Portion 33.

The affected portion currently comprises vacant land with no land use being undertaken. The proposed extension shall comprise a pre-primary school, a double-storey primary school, tennis courts, a swimming pool, store garages and a road network with parking. The total extent of the proposed project site is 38 250m².

A public participation process has been coupled to the Environmental Impact Assessment process to engage stakeholders and interested and affected parties on the development proposal. Key comments to date have orientated around traffic accommodation on existing infrastructure, as the extension shall immanently lead to a greater movement of motorists and pedestrians in the surrounding areas.

Three specialist studies were conducted which provided detailed investigations on traffic and heritage and paleontological aspects. Addressing the anticipated increase of traffic in the area, a Traffic Impact Study has been conducted and is discussed in this report. The triggering of the National Heritage Resources Act (No. 25 of 1999), led to a request by SAHRA for a Heritage Practitioner to investigate for any heritage resources on site which was conducted on 14 May 2013. SAHRA later requested that a Palaeontologist provide investigate for any fossil resources on site. This specialist found no sensitivities and recommended exemption from a Phase 1 PIA.

Finally an Environmental Management Programme has been prepared and included as an addendum to this report. The purpose of the EMPr is to act as a management tool for potential impacts to be experienced over the various phases of the development lifespan.

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section?

YES	NO
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If YES, please complete the form entitled “Details of specialist and declaration of interest” for appointment of a specialist for each specialist thus appointed: Any specialist reports must be contained in Appendix D.

1. ACTIVITY DESCRIPTION

Describe the activity, which is being applied for, in detail¹:

The proposed project involves the construction of several new facilities as an extension to the existing Curro School on the neighbouring farm portion. These shall entail:

- Pre-School - 1 000m² (10 classes)
- Primary School - 2 400m²
- Pool – 25m
- Pool House - 142m²
- Tennis courts X4
- Store - 100m²
- Refuse - 66m²
- Coverage - 6,5%
- Parking bays provided – 112 bays
- Future parking bays – 84 bays (to be added)

It is anticipated that the development of pre-school and primary school facilities shall, combined with the existing school cater for up to 1500 pupils in total.

2. 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. Activity Alternative 1 (Preferred)

(a) the property on which or location where it is proposed to undertake the activity;

The property on which the proposed development shall fall is Portion 34 of farm Groenvlei 2844. The land is currently vacant and as a result, Activity 23 of Listing Notice 1 (GR 544 of 19 June 2010) of the 2010 EIA Regulations is triggered. This affected portion is conveniently located adjacent to the existing school on neighboring Portion 33 which shall allow for the eventual expansion of the Curro school complex across a greater area. The proximity of these farm portions would allow for seamless accessibility between the existing school and proposed new facilities. As a result, no other locations were considered viable alternatives.

(b) the type of activity to be undertaken;

There are no alternatives to the proposed activity. Aside from providing facilities for a pre-primary and primary school, much needed amenities in the form of tennis courts and a swimming pool shall be constructed. These shall equip the existing pool premises and new schooling premises with an enriched sporting experience, standard to most schools.

(c) the design or layout of the activity;

The design of the new facilities has been applied to encourage an integrated school experience. The proximity of buildings and amenities to one another shall allow for a vibrant schooling environment for pupils and teachers alike. A cluster-type development, the layout allows for maximum, efficient use of space.

Herein, the primary school is orientated along the Northern boundary of the farm portion extending from the Eastern to Western quadrants, dominating the top half of the layout. In the South-Western corner, the pre-primary school is proposed, while a communal school hall is proposed for the central area of the facility. The remaining area to the South and South-East shall comprise of parking and amenities, the swimming pool and four tennis courts. Entrance and exit points flank these amenities while to the South and South West, additional car parking and a new two way road premiss lines the entire Southern boundary. A servitude road of 7.87m width and a third lane is proposed as bus parking.

This development further conforms with the high density needs as promoted in the Spatial Development Framework.

In summary, the development shall entail the following components:

- Pre-primary
- Primary school
- Hall
- Parking & internal access road
- Swimming Pool
- Tennis Courts

Appendix C provides the facility illustration for the described extension.

(d) the technology to be used in the activity;

The type of activity does not require for the use of specialized technology.

(e) the operational aspects of the activity; and

The activity when operational shall provide learners with pre-primary and primary schooling as well as associated amenities.

b. Activity Alternative 2

(a) the property on which or location where it is proposed to undertake the activity;

Same as for activity alternative 1.

(b) the type of activity to be undertaken;

The alternative shall make provision for a school of a low density layout. This shall include a pre-primary school, primary school, hall and roads and parking.

(c) the design or layout of the activity;

The alternative shall comprise of a low density development of 38 250m² comprising:

- Pre-primary
- Primary school
- Hall
- Parking & internal access road

This layout is sparse with larger landscaped open spaces together with a roads network and parking areas.

Such a low density option would not prove to use the available space optimally as well as deprive learners of sporting facilities proposed in the preferred alternative. This would in addition defy the objectives of the Spatial Development Framework, which seeks for the densification of new developments.

(e) the operational aspects of the activity; and

The activity when operational shall provide learners with pre-primary and primary schooling. This would however pose short-comings for learners due to the absence of sporting facilities.

No Go Alternative

(f) The option of not implementing the activity

The site will remain as untransformed and vacant land. This option shall prevent further expansion of the school and the provision of a pre-primary and primary school to the area of Langenhovenpark and adjacent residential areas. A considerable growth of residential development which has taken place to date in the suburb, shall not be complimented by much needed local schooling facilities for pre-primary and primary school learners.

3. 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 and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

List alternative sites, if applicable.

Alternative:

Alternative S1² (preferred or only site alternative)

Alternative S2 (if any)

Alternative S3 (if any)

29°	2.692'	26°	9.319'
0	'	0	'
0	'	0	'

In the case of linear activities:

Latitude (S):

Longitude (E):

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Alternative:

Alternative S1 (preferred or only route alternative)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

Latitude (S):	Longitude (E):		
0	‘	0	‘
0	‘	0	‘
0	‘	0	‘

Alternative S2 (if any)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

0	‘	0	‘
0	‘	0	‘
0	‘	0	‘

Alternative S3 (if any)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

0	‘	0	‘
0	‘	0	‘
0	‘	0	‘

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

4. PHYSICAL SIZE OF THE ACTIVITY

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

Size of the activity:

Alternative:

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

38 250m²
38 250m²
m ²

5. SITE ACCESS

Does ready access to the site exist?

If NO, what is the distance over which a new access road will be built

YES	NO
m	

Describe the type of access road planned:

Internal roads shall be constructed connecting to existing road infrastructure adjacent the site.

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.

6. 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 Appendix A to this document.

The site or route plans must indicate the following:

- 6.1 the scale of the plan which must be at least a scale of 1:500;
- 6.2 the property boundaries and numbers of all the properties within 50 metres of the site;
- 6.3 the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
- 6.4 the exact position of each element of the application as well as any other structures on the site;
- 6.5 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;
- 6.6 all trees and shrubs taller than 1.8 metres;
- 6.7 walls and fencing including details of the height and construction material;
- 6.8 servitudes indicating the purpose of the servitude;
- 6.9 sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto):
 - rivers;
 - the 1:100 year flood line (where available or where it is required by DWA);
 - ridges;
 - cultural and historical features;
 - areas with indigenous vegetation (even if it is degraded or invested with alien species);
- 6.10 for gentle slopes the 1 metre 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
- 6.11 the positions from where photographs of the site were taken.

7. 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 Appendix B to this form. It must be supplemented with additional photographs of relevant features on the site, if applicable.

8. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 1:200 as Appendix C for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity.

9. ACTIVITY MOTIVATION

9(a) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	R 40m	
What is the expected yearly income that will be generated by or as a result of the activity?	R 3.6m	
Will the activity contribute to service infrastructure?	YES	NO
Is the activity a public amenity?	YES	NO
How many new employment opportunities will be created in the development phase of the activity?	50	
What is the expected value of the employment opportunities during the development phase?	R 600 000	
What percentage of this will accrue to previously disadvantaged individuals?	100%	
How many permanent new employment opportunities will be created during the operational phase of the activity?	10	
What is the expected current value of the employment opportunities during the first 10 years?	R 12m	
What percentage of this will accrue to previously disadvantaged individuals?	50%	

9(a) Need and desirability of the activity

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

NEED:			
1.	Was the relevant provincial planning department involved in the application?	YES	NO
2.	Does the proposed land use fall within the relevant provincial planning framework?	YES	NO
3.	If the answer to questions 1 and / or 2 was NO, please provide further motivation / explanation:		

DESIRABILITY:			
1.	Does the proposed land use / development fit the surrounding area?	YES	NO
2.	Does the proposed land use / development conform to the relevant structure plans, SDF and planning visions for the area?	YES	NO
3.	Will the benefits of the proposed land use / development outweigh the negative impacts of it?	YES	NO
4.	If the answer to any of the questions 1-3 was NO, please provide further motivation / explanation:		
	1. Although the majority of surrounding farm portions comprises of low density residential plots, the adjacent farm portion holds the existing Curro School facility.		
5.	Will the proposed land use / development impact on the sense of place?	YES	NO
6.	Will the proposed land use / development set a precedent?	YES	NO
7.	Will any person's rights be affected by the proposed land use / development?	YES	NO
8.	Will the proposed land use / development compromise the "urban edge"?	YES	NO

11. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

11(a) Solid waste management

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

YES	NO
-----	----

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

50 m ³

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

All construction solid waste will be collected and disposed of via municipal trucks for disposal at the registered Mangaung Northern or Southern landfill sites.

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

At the registered Mangaung Northern or Southern landfill site.

Will the activity produce solid waste during its operational phase?

YES	NO
-----	----

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

90 m ³

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

Municipal waste collection services shall clear bins on a weekly basis. A letter requesting that the Mangaung Local Municipality has the capacity to accommodate solid waste has been sent to the authority for confirmation.

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

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 whether it is necessary to change to an application for scoping and EIA.

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

YES	NO
-----	----

If yes, inform the competent authority and request a change to an application for scoping and EIA.

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

YES	NO
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If yes, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

11(b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

YES	NO
-----	----

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

m³

Will the activity produce any effluent that will be treated and/or disposed of on site?

Yes	NO
-----	----

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Will the activity produce effluent that will be treated and/or disposed of at another facility?

YES	NO
-----	----

If yes, provide the particulars of the facility:

Facility name:	N/A		
Contact person:			
Postal address:			
Postal code:			
Telephone:	Cell:		
E-mail:	Fax:		

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

--

11(c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere?

YES	NO
-----	----

If yes, is it controlled by any legislation of any sphere of government?

YES	NO
-----	----

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the emissions in terms of type and concentration:

N/A

11(d) Generation of noise

Will the activity generate noise?

YES	NO
-----	----

If yes, is it controlled by any legislation of any sphere of government?

YES	NO
-----	----

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the noise in terms of type and level:

The activity will produce noise during the construction period but not during the operational period.

12. WATER USE

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

Municipal	water board	groundwater	river, stream, dam or lake	other	the activity will not use water
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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:

N/A	Litres
YES	NO

Does the activity require a water use permit from the Department of Water Affairs?

If yes, please submit the necessary application to the Department of Water Affairs and attach proof thereof to this application if it has been submitted.

13. ENERGY EFFECIENCY

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

- CFL bulbs – These use roughly one-fourth less electricity than incandescent bulbs. These also carry a typical lifespan of 10 000 hours, making them considerably more durable than incandescent and reducing the waste to landfill drawn from this energy source;
- Lighting Zoning - Decentralized lighting controls allow for the control of energy usage to be reduced to a smaller scale. Where more lighting zones exist, energy usage can be manually limited to the areas only where lighting is needed for that period;
- Ventilation and Thermal Comfort – All rooms should be fitted with manually functioning windows to allow for passive air flow and thermal control, limiting the necessity for use of air-conditioning;
- Daylight – Buildings should maximise the surface area of windows to allow for penetration of natural light into spaces, reducing the need to use artificial lighting during daylight hours. Large windows should be placed on North elevations and small windows on East and West elevations;
- Natural cooling – Trees should be planted sporadically between buildings to cool classrooms and provide shading for facility occupants when outside. Deciduous trees should be selected for North elevations while evergreens can be planted everywhere else.

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

N/A

SECTION B: SITE/ AREA/ PROPERTY DESCRIPTION

Important notes:

1. 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 C Copy No.
(e.g. A):

2. Paragraphs 1 - 6 below must be completed for each alternative.

3. Has a specialist been consulted to assist with the completion of this section?

YES	NO
YES	NO

If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed:

All specialist reports must be contained in Appendix D.

See attached

Property description/physical address:

The proposed site is located on portion 34 of the Farm Groenvlei 2844, off Frans Kleynhans Street, Groenvlei, Bloemfontein. The site is characterized by veld dominated with grasses *Themeda grandiglumis* and *Rhynchosia nervosa* which is common on sandy loam soils found in the northern and western boundaries of Bloemfontein.

(Farm name, portion etc.) Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application.

N/A
N/A

Current land-use zoning:

Smallholding (A rezoning application to change the zoning to educational has been made to the Bainsvlei Town Planning Scheme)

In instances where there is more than one town or district involved, please attach a list of towns or districts to this application.

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.

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Is a change of land-use or a consent use application required?

YES	NO
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Must a building plan be submitted to the local authority?

YES	NO
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Locality map: An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.) The map must indicate the following:

- an indication of the project site position as well as the positions of the alternative sites, if any;
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (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 and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection)

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

Flat	1:50	–	1:20	–	1:15 – 1:10	1:10	–	1:7,5 – 1:5	Steeper than 1:5
	1:20		1:15			1:7,5			

Alternative S2 (if any):

Flat	1:50	–	1:20	–	1:15 – 1:10	1:10	–	1:7,5 – 1:5	Steeper than 1:5
	1:20		1:15			1:7,5			

Alternative S3 (if any):

Flat	1:50	–	1:20	–	1:15 – 1:10	1:10	–	1:7,5 – 1:5	Steeper than 1:5
	1:20		1:15			1:7,5			

2. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site:

- 2.1 Ridgeline
- 2.2 Plateau
- 2.3 Side slope of hill/mountain
- 2.4 Closed valley
- 2.5 Open valley
- 2.6 Plain**
- 2.7 Undulating plain / low hills
- 2.8 Dune

2.9 Seafront

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following (tick the appropriate boxes)?

	Alternative S1:		Alternative S2 (if any):		Alternative S3 (if any):	
Shallow water table (less than 1.5m deep)	YES	NO	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	YES	NO	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES	NO	YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES	NO	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)	YES	NO	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	NO	YES	NO	YES	NO
Any other unstable soil or geological feature	YES	NO	YES	NO	YES	NO
An area sensitive to erosion	YES	NO	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

Indicate the types of groundcover present on the site:

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

Natural veld – good condition ^E	Natural veld with scattered aliens ^E	Natural veld with heavy alien infestation ^E	Veld dominated by alien species ^E	Gardens
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

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

5.1 Natural area

5.2 Low density residential

5.3 Medium density residential

5.4 High density residential

5.5 Informal residential^A

5.6 Retail commercial & warehousing

5.7 Light industrial

5.8 Medium industrial^{AN}

5.9 Heavy industrial^{AN}

5.10 Power station

5.11 Office/consulting room

5.12 Military or police base/station/compound

5.13 Spoil heap or slimes dam^A

5.14 Quarry, sand or borrow pit

5.15 Dam or reservoir

5.16 Hospital/medical centre

5.17 School

5.18 Tertiary education facility

5.19 Church

5.20 Old age home

5.21 Sewage treatment plant^A

5.22 Train station or shunting yard^N

5.23 Railway line^N

5.24 Major road (4 lanes or more)^N

5.25 Airport^N

5.26 Harbour

5.27 Sport facilities

5.28 Golf course

5.29 Polo fields

5.30 Filling station^H

5.31 Landfill or waste treatment site

5.32 Plantation

5.33 Agriculture

5.34 River, stream or wetland

5.35 Nature conservation area

5.36 Mountain, koppie or ridge

5.37 Museum

5.38 Historical building

5.39 Protected Area

5.40 Graveyard

5.41 Archaeological site

5.42 Other land uses (describe)

If any of the boxes marked with an “^N” are ticked, how will this impact / be impacted upon by the proposed activity?

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N/A

If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity?

If YES, specify and explain:

If YES, specify:

N/A

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity.

If YES, specify and explain:

If YES, specify:

N/A

6. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including	YES	NO
Archaeological or palaeontological sites, on or close (within 20m) to the site?	Uncertain	

If YES, explain: N/A

If uncertain, conduct a specialist investigation by a recognised specialist in the field to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist:

A heritage practitioner investigated whether any heritage resources were present on site. No archaeological, cultural or historical resources were observed on site and exemption from further Phase 1 studies was recommended for. SAHRA accepted the recommendation.

SAHRA requested for a Paleontological investigation of the site, which yielded no sensitivities and an exemption from further Phase 1 studies was recommended.

Will any building or structure older than 60 years be affected in any way?	YES	NO
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	YES	NO

If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.

See included in Appendix E – Comments & Response Report

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT – APPENDIX E

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 municipality which has jurisdiction in the area;
 - (vi) any organ of state having jurisdiction in respect of any aspect of the activity; 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 local 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 subregulation 54(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.

A press advert was placed in the Volksblad Newspaper on the 27th March 2013.

2. CONTENT OF ADVERTISEMENTS AND NOTICES–APPENDIX E

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 the application has been submitted to the competent authority in terms of these Regulations, as the case may be;
 - (ii) whether basic assessment or scoping procedures are being applied to the application, in the case of an application for environmental authorisation;
 - (iii) the nature and location of the activity to which the application relates;
 - (iv) where further information on the application or activity can be obtained; and
 - (iv) the manner in which and the person to whom representations in respect of the application may be made.

Site notices were placed on the on the boundaries of the site and in nearby public locations.

3. PLACEMENT OF ADVERTISEMENTS & 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 MEASURES

The practitioner must ensure that the public participation is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees, ratepayers associations and traditional authorities where appropriate. Please note 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 the application is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to this application. The comments and response report must be attached under Appendix E.

6. AUTHORITY PARTICIPATION

BASIC ASSESSMENT REPORT



Please note that a complete list of all organs of state and or any other applicable authority with their contact details must be appended to the basic assessment report or scoping report, whichever is applicable.

Authorities are 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.

List of authorities informed:

Mangaung Metropolitan Municipality: Environmental Unit – Mr. Mpolokeng Kolobe
Mangaung Metropolitan Municipality: Land Transport Planning – Mr. W. A. Naude
Councillor Ward 22 (Langenhovenpark) – Mr. Jacobus Abraham Adriaan
Provincial Department of Basic Education – Ms. Prudence Nombula
South African Heritage Resources Agency – Mr. Andrew Salomon

List of authorities from whom comments have been received:

Mangaung Metropolitan Municipality: Environmental Unit – Mpolokeng Kolobe
Mangaung Metropolitan Municipality: Land Transport Planning – Mr. W. A. Naude
Provincial Department of Basic Education – Prudence Nombula
South African Heritage Resources Agency – Andrew Salomon

CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for linear activities, or where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that subregulation to the extent and in the manner as may be agreed to by the competent authority.

Proof of any such agreement must be provided, where applicable.

Has any comment been received from stakeholders?

YES	NO
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If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

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SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2010, 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.

1. Comment from surrounding landowners was received from Drea Pauw and Jan Earle, both surrounding landowners of Portion 34. These participants raised concerns around increased traffic and associated impacts. These with particular reference relate to:
 - The current incapacity of existing road infrastructure to cope with increased road traffic to the area caused by the existing school;
 - The existing dangers associated at the intersection of an unnamed road with Frans Kleynhans Roads when crossing;
 - The endangerment of human safety as a result of ill-equipped roads.
 - General comments relating to the draft status of the Traffic Impact Study and reference to portion 33 in the Site Development Plan and Traffic Impact Study (see addendum E).

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 to this report as Annexure E):

The comments of these affected parties were responded to, acknowledging these and informing of the Traffic Impact Study which was undertaken as part of the rezoning application. This study has been attached and suggests various upgrades which are proposed or previously approved and have yet to be implemented.

Summary findings are as follows:

- Proposed upgrade to the Road 2 / Frans Kleynhans (S850) Intersection where the intersection of Road 1 / Frans Kleynhaus is not used. An alternative layout is provided if otherwise;
- Road safety concerns at the Road 1/ Frans Kleynhans Road intersection will be addressed if upgraded;
- Further upgrading to previously identified signalling and identification of the Woodland Hills Access / Frans Kleynhans Road is suggested;
- Previously identified upgrade to the Ray Champion / Frans Kleynhans intersection is appropriate;
- Previously identified upgrade and signalling at Lucas Steyn / General Dan Pienaar will need to be

implemented to ensure acceptable service.

- The Final Traffic Impact Study is included in addendum D.

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

List the potential direct, indirect and cumulative property/activity/design/technology/operational alternative related impacts (as appropriate) that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed.

Alternative (preferred alternative)

The proposed development shall accommodate a primary and pre-primary school, as well as associated amenities, to be situated on Portion 34 of Farm Groenvlei 2844, Langenhovenpark, Bloemfontein.

2.1. INDICATION OF THE METHODOLOGY ADOPTED IN THE ASSESSMENT OF POTENTIAL IMPACTS

The impacts were evaluated by applying the methodology as described below. The impact is defined and the significance is rated from Low to High as indicated in the table below with an explanation of the impact magnitude and a guide that reflects the extent of the proposed mitigation measures deemed necessary.

Significance	Low	Low-Medium	Medium	Medium-High	High
Impact Magnitude	Impact is of very low order and therefore likely to have very little real effect. Acceptable.	Impact is of low order and therefore likely to have little real effect. Acceptable.	Impact is real, and potentially substantial in relation to other impacts. Can pose a risk to company	Impact is real and substantial in relation to other impacts. Poses a risk to the company. Unacceptable	Impact is of the highest order possible. Unacceptable. Fatal flaw.
Action Required	Maintain current management measures. Where possible improve.	Maintain current management measures. Implement monitoring and evaluate to determine potential increase in risk. Where possible improve	Implement monitoring. Investigate mitigation measures and improve management measures to reduce risk, where possible.	Improve management measures to reduce risk.	Implement significant mitigation measures or implement alternatives.

Following is a short description of the assessment criteria as mentioned above:

The **Nature of impact** is a broad indication of what is being affected and how.

Severity relates to the nature of the event, aspect or impact to the environment and describes how severe the aspects impact on the biophysical and socio-economic environment.

Type of criteria	1	2	3	4	5
Quantitative	0-20%	21-40%	41-60%	61-80%	81-100%
Qualitative	Insignificant / Non-harmful	Small / Potentially harmful	Significant / Harmful	Great / Very harmful	Disastrous / Extremely harmful
Social / Community response	Acceptable / I&AP satisfied	Slightly tolerable / Possible objections	Intolerable / Sporadic complaints	Unacceptable / Widespread complaints	Totally unacceptable / Possible legal action
Irreversibility	Very low cost to mitigate / High potential to mitigate impacts to level of insignificance/ Easily reversible	Low cost to mitigate	Substantial cost to mitigate / Potential to mitigate impacts / Potential to reverse impact	High cost to mitigate	Prohibitive cost to mitigate / Little or no mechanism to mitigate impact Irreversible
Biophysical (Air quality, water quantity and quality, waste production, fauna and flora)	Insignificant change / deterioration or disturbance	Moderate change / deterioration or disturbance	Significant change / deterioration or disturbance	Very significant change / deterioration or disturbance	Disastrous change / deterioration or disturbance

Extent refers to the spatial influence of an impact as local (extending only as far as the activity, or will be limited to the site and its immediate surroundings), regional (will have an impact on the region), national (will have an impact on a national scale) or international (impact across international borders);

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Rating	Description
1: Low	Immediate, fully contained area
2: Low-Medium	Surrounding area
3: Medium	Suburb/ Business District
4: Medium-High	Local Municipality
5: High	Regional, National, International

Frequency refers to how often the specific activity, related to the event, aspect or impact, is undertaken.

Rating	Description
1: Low	Once a year or once / more during operation / LOM
2: Low-Medium	Once / more in 6 Months
3: Medium	Once / more a Month
4: Medium-High	Once / more a Week
5: High	Daily

Probability considers the likelihood of an impact / incident occurring over time.

Rating	Description
1: Low	Almost never / almost impossible
2: Low-Medium	Very seldom / highly unlikely
3: Medium	Infrequent / unlikely / seldom
4: Medium-High	Often / regularly / likely / possible
5: High	Daily / highly likely / definitely

Duration: Duration refers to the amount of time that the environment will be affected by the event, risk or impact, if no intervention e.g. remedial action takes place.

Rating	Description
1: Low	Almost never / almost impossible
2: Low-Medium	Very seldom / highly unlikely
3: Medium	Infrequent / unlikely / seldom
4: Medium-High	Often / regularly / likely / possible
5: High	Daily / highly likely / definitely

2.2. DESCRIPTION AND ASSESSMENT OF THE POTENTIAL IMPACTS ON THE ENVIRONMENT

CONSTRUCTION PHASE IMPACTS

Impacts that may result from the **construction** phase (briefly describe and compare the potential impacts (as appropriate),significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the operational phase.

Haphazard placement of materials and equipment	Rating	I	M
	Severity	1	1
	Extent	1	1
	Frequency	3	1
	Probability	3	1
	Duration	3	1
I = Impact; M = Mitigation			
Significance: MEDIUM (55%)			
The poor placement and storage of materials and equipment on site could lead to poor management of spills, the spread of materials and reduced safety for construction personnel.			
Mitigation:			
<ul style="list-style-type: none"> The provision of a a Site Layout Master Plan to illustrate the position of all temporary structures and facilities to house materials and equipment. The planning of a site camp must be done in consultation with the Environmental Site Officer. 			
Post Mitigation			20%

Hazard to animals and security of materials	Rating	I	M
	Severity	1	1
	Extent	1	1
	Frequency	3	1
	Probability	3	1
	Duration	5	1
I = Impact; M = Mitigation			
Significance: MEDIUM (52%)			
The accessibility of the site camp if not properly fenced could lead to the access of animals and their endangerment. Furthermore theft of materials and equipment may also result.			

Mitigation:

The placement of a secure fence around the site camp
The instatement of security personnel on site after hours

Post Mitigation **20%**

Erosion and dilapidation of the access route I = Impact; M = Mitigation	Rating	I	M
	Severity	1	1
	Extent	1	1
	Frequency	1	1
	Probability	3	1
	Duration	2	1

Significance: LOW-MEDIUM (32%)

The frequent movement of heavy machinery on roads surrounding the site leading to deterioration.

Mitigation:

- Upgrade the access road to an acceptable condition
- Proper maintenance should be done to ensure the quality of the access road
- Implement erosion protection works at identified problem areas.

Post Mitigation **20%**

Destruction or loss of topsoil I = Impact; M = Mitigation	Rating	I	M
	Severity	3	1
	Extent	1	1
	Frequency	3	1
	Probability	3	1
	Duration	5	2

Significance: MEDIUM (60%)

The deterioration of topsoil integrity and loss to construction and building activities.

Mitigation:

- Remove topsoil approx. 300 mm deep from establishment area and stockpile areas
- Provide containment and settlement facilities for effluents from concrete mixing and washing (concrete vehicle wash bag) facilities
- Provide spill containment facilities for hazardous materials like fuel and oil
- All spoils, soil not utilized to close the trench should be used to increase the effectiveness of the existing drainage channels by constructing designed and

BASIC ASSESSMENT REPORT



appropriate cross berms, angle, height and length for the slope specific for the area

Post Mitigation 24%

	Rating	I	M
Dust nuisance from the excavated and stockpiled materials I = Impact; M = Mitigation	Severity	2	1
	Extent	1	1
	Frequency	3	2
	Probability	3	3
	Duration	3	2

Significance: MEDIUM (60%)

The frequent upwelling of dust as consequence of construction may impact on workers causing asthma and other respiratory conditions.

Mitigation:

- Implement dust suppression measures e.g. regular watering
- Concrete mixing to be carried out away from sensitive areas
- Build a settling dam off the concrete vehicle wash

Post Mitigation 36%

	Rating	I	M
Loss of Flora I = Impact; M = Mitigation	Severity	1	1
	Extent	1	1
	Frequency	1	1
	Probability	1	1
	Duration	1	1

Significance: LOW (20%)

Although vegetation on-site is not deemed to be sensitive, the loss of on-site plant species and communities is imminent as the entire area of portion 34 constitutes the development footprint.

Mitigation:

- The Environmental Site Agent is to conduct a search and review prior to site clearance
- Do not remove any large tree without permission from the ESA
- No open fires permitted under trees
- Rehabilitate denuded areas with an appropriate vegetative cover

Post Mitigation 20%

Disturbance of fauna I = Impact; M = Mitigation	Rating	I	M
	Severity	1	1
	Extent	1	1
	Frequency	1	1
	Probability	1	1
	Duration	1	1

Significance: LOW (20%)
Although no large mammal or notable animal species occur on the development site, this could form habitat or migratory corridors for small mammals.

Mitigation:

- The Environmental Site Agent is to conduct a search and review prior to site clearance

Post Mitigation	20%
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Uncontrollable Fire Outbreak I = Impact; M = Mitigation	Rating	I	M
	Severity	4	1
	Extent	2	1
	Frequency	1	1
	Probability	1	1
	Duration	1	1

Significance: LOW-MEDIUM (36%)
The ignition of fires as a result of activity on site.

Mitigation:

- Establish and maintain fire breaks around the Work Sites if as and when specified by the ESA and as required by applicable legislation and the local authority.
- Ensure Work Site and the contractor’s camp is equipped with adequate fire fighting equipment. This includes at least rubber beaters when working in veld areas, and at least one fire extinguisher of the appropriate type irrespective of the site,
- No open fires are permitted anywhere on site. Restrict contained fires for heating and cooking (i.e. in a fire drum) to designated areas on site,
- Prevent employees from creating fires randomly outside designated areas,
- Do not store any fuel or chemicals under trees,
- Do not store gas and liquid fuel in the same storage area,
- Do not permit any smoking within 3m of any fuel or chemical storage area, or refuelling

area.

Post Mitigation **20%**

Soil and water contamination I = Impact; M = Mitigation	Rating	I	M
	Severity	1	1
	Extent	1	1
	Frequency	3	1
	Probability	3	1
	Duration	3	1

Significance: MEDIUM (44%)

The contamination of soil and water from diesel, oil and other chemical spills.

Mitigation:

Construction phase impacts will be mitigated through the implementation of the approved EMP. Dust control via watering of the affected area.

Soils:

Ensure ready mix concrete is used to minimise possible impacts and that it is stored on hard surfaced area.

Hydrology:

Appropriate containment measures to be instituted where appropriate for construction equipment that could leak and kept in good working order. Any refuelling must be carried out in a designated area.

Spill kits must be made available. An oil trap is present on site. Measures to prevent risks to hydrology should be stipulated in the EMP.

Post Mitigation **20%**

Pollution of environment with waste materials I = Impact; M = Mitigation	Rating	I	M
	Severity	2	1
	Extent	2	1
	Frequency	3	1
	Probability	2	1
	Duration	3	1

Significance: MEDIUM (46%)

Aim to avoid pollution of the environment with waste materials

Mitigation:

- Provide adequate waste bins on-site equipped with a lid to ensure no pollution
- Set up system for regular waste removal to approved facility

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- Minimize waste by sorting wastes into recyclable and non recyclable wastes
- No solid waste may be burned on site
- Contain chemical spills, and arrange for cleanup / control by the supplier, or by professional pollution control personnel
- Hazardous substances, e.g. diesel, oil, etc. required by the contractors shall be stored in dedicated areas developed to minimize spills and protect the environment. All storage areas, spillage containment areas

Post Mitigation	20%
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	Rating	I	M		
Potential for employment opportunities <i>(Not rated due to positive nature)</i> I = Impact; M = Mitigation	Severity	-	-		
	Extent	-	-		
	Frequency	-	-		
	Probability	-	-		
	Duration	-	-		
Significance: NEUTRAL (0%) Positive Impact: The construction phase of the project will result in the generation of temporary employment opportunities for no more than 50 persons. Where possible these will be offered to the local community through preference to local contractors.					
Mitigation: N/A					
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Post Mitigation</td> <td style="background-color: #00AEEF; text-align: center;">0%</td> </tr> </table>		Post Mitigation	0%
Post Mitigation	0%				

	Rating	I	M
Excessive noise emanating from construction activities. I = Impact; M = Mitigation	Severity	2	1
	Extent	2	2
	Frequency	4	2
	Probability	4	2
	Duration	4	2
Significance: MEDIUM-HIGH (64%) The area is flanked by the existing Curro school to the West, as well as vacant land and low density smallholdings. Construction related noise will comprise increased vehicular movements, cement mixing, crane lifting, grinding, hammering and welding activities.			
Mitigation: <ul style="list-style-type: none"> • Implementing best practice management of construction activities • Noise impacts from grinding, hammering and welding are not continuous which will limit 			

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their nuisance level.

- The operation of heavy machinery will occur on isolated days during the construction programme again limiting the impact to short term and temporary.
- All workers must be aware of the proximity of neighbouring companies, and if excessive noise is expected then neighbours should be notified timeously

Post Mitigation **36%**

Potential visual disturbance during construction	Rating	I	M
	Severity	1	1
	Extent	2	2
	Frequency	5	3
	Probability	4	2
	Duration	1	1

I = Impact; M = Mitigation

Significance: MEDIUM (52%)

The site is located on flat topography in a relatively rural area dominated by open land, and small holdings. Tree lines and intermittent trees are present in the area which shall conceal activities during construction to a degree. The existing Curro school is located to the East which shall form a barrier to visual exposure to this orientation.

This will be visible to neighbouring properties, as well as school and road users primarily

Mitigation:

The use of any large equipment must be limited to periods of need and thereafter be removed off site. The construction site should be kept neat and tidy with materials being stockpiled neatly within the site. Construction activity shall however be limited to daylight hours.

Post Mitigation **36%**

Potential traffic implications due to on site construction and civil works of supporting infrastructure.	Rating	I	M
	Severity	3	1
	Extent	2	2
	Frequency	3	2
	Probability	3	3
	Duration	5	5

I = Impact; M = Mitigation

Significance: MEDIUM (64%)

Traffic implications as a result of movement of additional vehicles and machinery, as well as the potential upgrade of existing roads.

Mitigation:

- Implement road safety signage and flag bearers where appropriate
- Place temporary signage on arterial roads to indicate available detour routes
- Introduce traffic control, stop and go measures where necessary

Post Mitigation **52%**

OPERATIONAL PHASE IMPACTS

Impacts that may result from the operational phase (briefly describe and compare the potential impacts (as appropriate),significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the operational phase.

Noise emanating from operational phase I = Impact; M = Mitigation	Rating	I	M
	Severity	1	1
	Extent	1	1
	Frequency	2	1
	Probability	2	1
	Duration	2	1
Significance: LOW-MEDIUM (32%)			
Sounds from school activities.			
Mitigation:			
<ul style="list-style-type: none"> The placement of solid barriers like walls to insulate sound The planting of trees to act as a sound barrier to reduce the volume of sound. 			
Post Mitigation			20%

Visual impact I = Impact; M = Mitigation	Rating	I	M
	Severity	1	1
	Extent	1	1
	Frequency	2	1
	Probability	2	1
	Duration	2	1
Significance: LOW-MEDIUM (32%)			
The existence of the new building and infrastructure shall lead to the further change to the rural character of the area.			
Mitigation:			
<ul style="list-style-type: none"> The planting of natural barriers like tree lines and landscaping shall over the long term camouflage the new buildings from surrounding land users 			
Post Mitigation			20%

Potential traffic implications due to on site operational and civil works of supporting infrastructure.	Rating	I	M
	Severity	4	2
	Extent	2	2
	Frequency	3	2
Probability	4	2	

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I = Impact; M = Mitigation	Duration	5	2
<p>Significance: MEDIUM-HIGH (72%) Traffic implications at intersections and arterial roads as a result of additional road users to the new schooling facilities. This could lead to serious accidents if roads are underequipped.</p>			
<p>Mitigation:</p> <ul style="list-style-type: none"> The upgrade and maintenance of existing road infrastructure as suggested by the Traffic Impact Study 			
		Post Mitigation	40%

<p>Potential for employment opportunities <i>(Not rated due to positive nature)</i></p> <p>I = Impact; M = Mitigation</p>	Rating	I	M
	Severity	-	-
	Extent	-	-
	Frequency	-	-
	Probability	-	-
	Duration	-	-
<p>Significance: NEUTRAL (0%)</p> <p>Positive Impact: The operational phase of the project will result in the generation of permanent employment opportunities for teachers, support staff and grounds staff. Where possible these will be offered to the local community through preference to local contractors.</p> <p>Mitigation: N/A</p>			
		Post Mitigation	0%

DECOMMISSIONING PHASE

Impacts that may result from the decommissioning and closure phase (briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the decommissioning and closure phase.

Potential impacts, mitigation and their significance rating will be largely the same as those experienced during the construction phase of the development.

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 A (preferred alternative)

An Environmental Impact Assessment process was initiated by the application for Environmental Authorization and acknowledgement thereof made by the DETEA on the 20th March 2013.

Following completion of a Basic Assessment process with investigations made by specialists and engagement of public participants and stakeholders, it has been determined that no significant environmental impacts shall be caused as a result of the proposed development. Mitigation measures are however required to avoid, limit and offset any potential impacts caused and the Environmental Management Programme must form an integral tool and guideline during the phases of the development. .

No-go Alternative (compulsory)

The expansion of Langenhovenpark as a residential area over the past 10 years has led to an increased requirement for local schooling of children from residing families of the area.

The proposed development will not go ahead and the existing Curro School shall remain limited to provide schooling for senior pupils from grades 8 – 12 only. In addition amenities like a swimming pool and tennis courts shall not be catered for.

SECTION E: RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?

YES	NO
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If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment):

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If "YES", please 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:

The following standard conditions are believed to be applicable with respect to the proposed development:

1. Soil and water pollution

- Concrete must not be mixed directly on the ground;
- Concrete batching must be located in an area of low environmental sensitivity approved by the engineer;
- All runoff from the batching area must be collected and disposed of at a waste disposal site approved by the engineer;
- Mixing trays must be available at mixing areas;
- Store used cement bags in weather proof containers to prevent dust and contamination and dispose thereof regularly;
- Store unused bags so as not to be affected by rain or run off;
- Storage areas must have bund walls, impermeable floors and roofed with impervious material;
- Fuel and oil is to be kept in sealed, air-tight containers at all times;
- Conduct vegetation clearance in sections to minimise sedimentation of storm water from soil;
- No chemicals are to be discharged onto the site and surrounding soil.

2. Sewerage

- Chemical toilets are to be provided during construction for workers, placed outside of depressions and cleaned frequently;
- Conservancy tank or treatment plant to be used during the operational phase due to absence of a municipal sewer network;

3. Waste

- Construction and operational waste must be disposed of at an existing municipal landfill site in Bloemfontein;
- The contain domestic waste and prevent littering, bins with fixed lids should be provided;

- No waste is to be buried on site;
- No illegal dumping of materials is to take place;

4. Water Supply

- The proposed development must link onto the existing municipal water supply in the area;

5. Noise

- .Construction activities are to be limited to working hours between 07H00 and 17H00;
- If blasting is required, neighbouring landowners are to be notified in advance and full precautions be taken to avoid damage to surrounding buildings and infrastructure;
- All laws and regulations pertaining to blasting are to be adhered to;

6. Air Pollution

- During construction dust suppression is to be undertaken through routine water spraying or exposed soil;
- The excavation, handling and transportation of erodible material must be avoided during high wind conditions;
- Removal of vegetation is to be avoided until soil stripping is needed and exposed surfaces must be re-vegetated or stabilized as soon as practically possible;
- Speed limits must be enforced on gravel roads;
- Waste generating dust is to be covered when transported;

7. Access and Traffic

- The existing tarred road to the site must be used and a new road must not be constructed, unless motivated for and approved by other authorities;
- Appropriate traffic warning signs must be erected during the construction phase;

8. Protection of Flora and Fauna

- Construction vehicle routes to and from the site and adjacent construction areas must be clearly demarcated prior to construction commencement, with vehicles remaining on these designated areas;
- Only vegetation occupying demarcated routes and construction areas must be removed;
- Trenches are to be barricaded after hours to prevent animals from falling inside;
- Construction personnel are to be educated not to damage or disturb plants and animals on site;
- Disturbed areas are to be rehabilitated to the condition of surrounding vegetation as soon as construction is completed;

9. Topsoil

- Topsoil removed from construction areas is to be stockpiled separately from other soils for later use in re-vegetation of landscaping;
- Stockpiles are to be located outside of depressions and those exposed to wind;
- Stockpiles should be limited to 2m in height to prevent compaction and shall be vegetated if left for two or more months;
- Stockpiles must remain free of weeds;

10. Storm water & Soil Erosion

- A storm water management system must be installed on site to avoid overland flowing water from producing soil erosion;
- Erosive effects of storm water runoff are to be controlled by the contractor;
- Areas vulnerable to erosion are to be protected by the contractor;
- Storm water drainage outlets must ensure that water is dissipated before entering the natural environment;

11. Safety, Health & Security

- Access to neighbouring properties is prohibited;
- Supervision of employees must be ensured by the contractor at all times;
- Access to the construction site must be controlled at all times and unauthorized access prohibited;
- All construction activities are to adhere to the Occupation Health and Safety Act (Act 85 of 1993);
- Fire fighting equipment approved by the local fire department must be available on site during construction and operational phases;
- Safety signs conforming with SANS 1186 must be conspicuously displayed in and around fuel storage areas;
- No smoking is to be allowed in the vicinity of stores;

12. Electricity

- The proposed school will be supplied by the existing 11kv overhead line found in the area;

13. Environmental Control Officer

- An Environmental Control Officer (ECO) must be appointed to ensure compliance with conditions of the Environmental Authorization and Environmental Management Programme.

SECTION F: APPENDICES

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 Response report

Appendix F: Environmental Management Programme (EMPr)

Appendix G: Other information