DRAFT BASIC ASSESSMENT REPORT

PROPOSED CULTIVATION OF GRASSLAND ON YORK FARM, NEAR NEW HANOVER, UMSHWATHI LOCAL MUNICIPALITY, KWAZULU-NATAL

DEDTEA REF: DC22/0054/2014

PREPARED FOR:
York Landowners Association
09 October 2015

JEC
Environmental Services

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Economic Development, Tourism and Environmental Affairs
PROVINCE OF KWAZULU-NATAL

	(For official use only)
EIA File Reference Number:	DC/
NEAS Reference Number:	KZN/EIA/
Waste Management Licence Number: (if applicable)	
Date Received:	

BASIC ASSESSMENT REPORT

Submitted in terms of the Environmental Impact Assessment Regulations, 2010 promulgated 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 1or 3, 2010 (Government Notices No. R 544 or No. R 546 dated 18 June 2010); 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, 2010 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.
2. 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 40 days of such a request.
11. **Please note 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):	DC22/0054/2014
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:	JEC Environmental Services		
Physical address:	Salvo Farm D245 Table Mountain 3233		
Postal address:	PO Box 239 Pietermaritzburg		
Postal code:	3200	**Cell:**	082 828 7953
Telephone:	033 940 0450	**Fax:**	086 219 9059
E-mail:	janet@jecenviro.co.za		

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)
Janet Edmonds	B. Sc. Agric Hons. (Zoology, Wildlife Science)	IAIAsa, IWMSA	13 years
Garth Glaum	BSc. Geography	IAIAsa	8 years

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
Dr Hans Grobler	PhD (Zoology)	Fauna	Section C-4 / Appendix D1	Biodiversity Assessment: Proposed Cultivation of 99 Ha on York Farm, New Hanover, Umshwathi Local Municipality
Peter Le Roux	MSc. (Agriculture)	Flora	Section C-4 / Appendix D1	Biodiversity Assessment: Proposed Cultivation of 99 Ha On York Farm, New Hanover, Umshwathi Local Municipality

David Allan	MSc. (Zoology)	Avifaunal	Section C-4 / Appendix D2	Specialist Avifaunal Report: Proposed Cultivation of 99 Ha On York Farm, Near New Hanover, Umshwathi Local Municipality
Adam Texeira-Leita	BSc. Hons (Environmental Science), Pr. Sci. Nat	Wetlands	Sections C-3, C-4 & C-5 / Appendix D3	York Farm Cultivation Project, KZN: Wetland Assessment Report
Sian Hall	BA Hons (Anthropology)	Cultural Impact	Section C-6 / Appendix D4a	Heritage Impact Assessment: of the proposed cultivation of 99 ha on York Farm, near New Hanover, Umshwathi Local Municipality, Kwazulu Natal.
Mr. F. Prins	MA (Archaeology)	Heritage Impact	Section C-6 / Appendix D4b	Heritage Impact Assessment: of the proposed cultivation of 99 ha on York Farm, near New Hanover, Umshwathi Local Municipality, Kwazulu Natal (Revised Version)
Gavin Whitelaw	PhD (Archaeology)	Archaeology	Section C-6 / Appendix D5	Review of Heritage Assessment of York Farm, near New Hanover, Kwazulu-Natal
Gideon Groenewald	PhD (Geology)	Palaeontology	Section C-6 / Appendix D6	Desktop Palaeontological Assessment for the proposed agricultural development on the Farm York, Umshwathi Local Municipality, Umgungundlovu District Municipality, Kwazulu-Natal Province.

SECTION B: ACTIVITY INFORMATION

1. PROJECT TITLE

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

Proposed Cultivation of 99 ha on York Farm, near New Hanover, uMshwathi Local Municipality

2. PROJECT DESCRIPTION

Provide a detailed description of the project:

INTRODUCTION:
The Applicant, the York Landowners Association, has submitted an application for environmental authorisation, to cultivate 99 ha of indigenous grassland on York Farm, for the commercial cultivation of sugarcane, maize and other crops. The cultivation is proposed to make better use of the property in terms of its agricultural potential, as well as to improve the economic viability of all shareholders of the York Landowners Association.

The profits generated from this commercial production will enable the Applicant to implement improved management of the undisturbed portions of York Farm, e.g. erosion control, improvement of fencing for livestock etc.

York Farm is approximately 767 ha in size and is currently used for grazing by cattle, and mowing for the production of

hay. The site is currently dominated by *Aristida junciformis*, which has limited grazing potential, particularly during the winter months.

The properties on which the cultivation is proposed are Erf 73, 74 and 75 of York. The site is located approximately 4.5km north west of New Hanover.

The site can be accessed as follows:
From Pietermaritzburg, travel towards Greytown on the R33. Approximately 2km before New Hanover, turn left onto District Road D153. York Farm is located approximately 2km from the R33 (see Figures 1).

GPS co-ordinates for the centre of the site are as follows: 29° 20' 00" S;
30° 29' 24" E.

It was initially proposed to cultivate four compartments totalling 99ha (Alternative Layout, Appendix A2), however following specialist input, this was reduced to three compartments totalling 74.5 ha (Preferred Layout, Appendix A1). The details of this specialist input is summarised below. All Specialist Studies are included in Appendix D.

SPECIALIST STUDIES
Several specialist studies were commissioned to ascertain the level of impacts and possible mitigation for the proposed cultivation.

BIODIVERSITY (APPENDIX D1)
The findings of the biodiversity assessment revealed limited value in the indigenous grasslands present on the proposed cultivation areas. There is a low diversity of herbaceous species, and the grass species present are largely unpalatable.

Most faunal species observed on the property are not protected except for a breeding pair of Wattled Cranes, which were observed foraging, with a fledged juvenile, in the eastern section of York Farm. It is for this reason that the proposed cultivation of Com 1 has been excluded from the Application (see Figure 1).

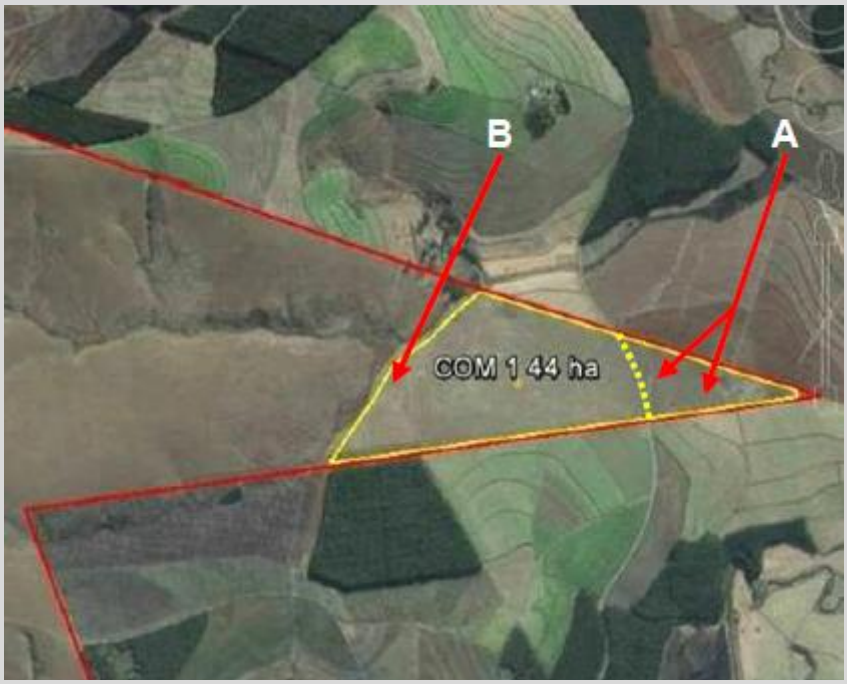


FIGURE 1: EXCLUSION OF COM 1 DUE TO PRESENCE OF BREEDING WATTLED CRANE (A AND B REPRESENT SIGHTINGS) (GROBLER & LE ROUX, 2015)

Additionally, maintaining internal ecological corridors was deemed important given the size of the property as a whole. It is likely that the application of buffers on the wetland habitat will achieve this connectivity by excluding areas from cultivation.

AVIFAUNAL ASSESSMENT (APPENDIX D2)
The Avifuanal Specialist did not identify any significant reasons for the cultivation not to proceed. The presence of

Wattled Crane, as mentioned in the Biodiversity Assessment, was not noted during the Avifaunal field work (6 and 9 August 2015). Consultation with local landowners revealed that the Wattled Cranes are present on the sight only for approximately 1 – 3 months of the year, thus excluding this site as a breeding ground. It is more likely that they are foraging on the property. For this reason, the Avifaunal Specialist has not excluded Com 1 from potential cultivation. He has suggested that a 100m buffer be imposed on the western boundary of Com 1, adjacent to the wetland. The Applicant has, however, agreed with excluding Com 1 from the preferred layout (Appendix A1).

Other crane species (Blue and Grey Crowned) were observed in and around the study area. The exclusion of Com 1 from the Application has the benefit of preserving additional habitat for the Blue Crane observed in this area.

Southern Ground-Hornbills were observed on the site. It was concluded that this site likely forms part of a larger foraging area and not as a breeding ground for this species.

The specialist concludes that the cultivation could go ahead without adverse affects on the avifauna of York Farm.

During the Avifaunal Specialists field work, he observed Oribi on several occasions, at the locations indicated in Figure 2 below. These were not observed by the Biodiversity Specialists during their fieldwork, most likely due to the recently burnt conditions on site at the time of the avifaunal specialist's fieldwork.

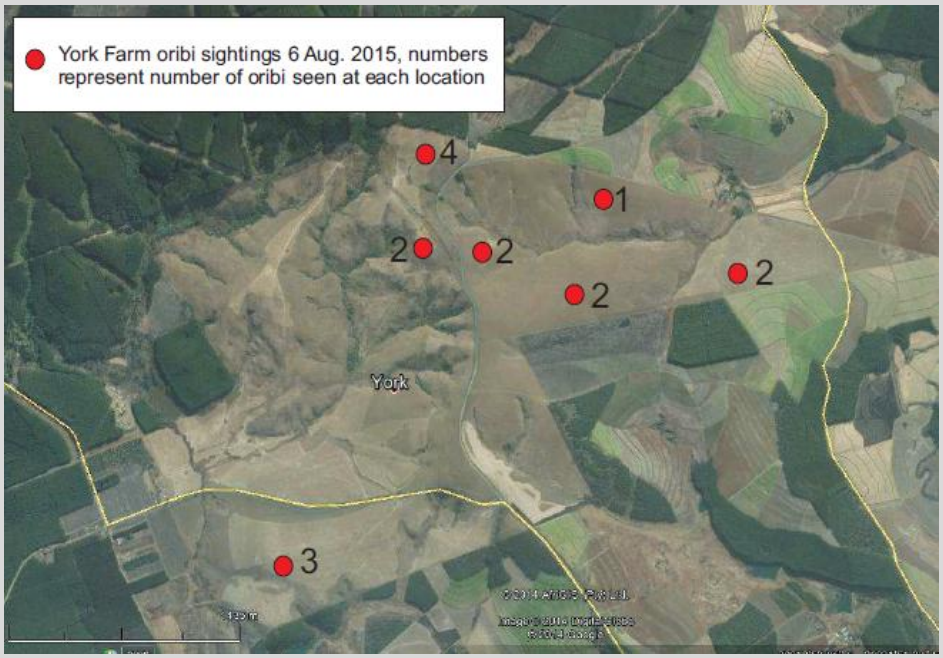


FIGURE 2: LOCATION OF ORIBI SIGHTINGS ON YORK FARM, DURING AVIFAUNAL FIELD WORK (ALLAN, 2015)

WETLAND FUNCTIONAL ASSESSMENT (APPENDIX D3)
This comprised an initial desktop assessment and a phase two site assessment.

Three wetland systems were identified and delineated in the study area and buffers were applied based on an assessment of wetland functionality. Buffer widths range from 47 – 66m. This has resulted in the reduction of the proposed cultivation area by approximately 14ha, bringing the total cultivation area (excluding Com 1) to 74.5 ha.

HERITAGE IMPACT ASSESSMENT
Amafa requested a Heritage Impact Assessment that was to include the archaeological component, the palaeontological desktop study and any other applicable heritage components. These components were carried out separately, in two different studies.

HERITAGE (ARCHAEOLOGICAL) ASSESSMENT (APPENDIX D4)
The phase 1 archaeological assessment was conducted by Sian Hall of Cultural Solutions on behalf of Active Heritage (Appendix D4a) and revised further by Frans Prins (Appendix D4b). The report identified no archaeological relics, though cited the dense grass cover as a possible reason for this. Furthermore, the heritage consultant identified the York Commonage as a Living Heritage Landscape worthy of preservation as such, and recommended that the proposed cultivation not be allowed to proceed. There was no data presented in the report to support this conclusion.

HERITAGE (ARCHAEOLOGICAL) ASSESSMENT PER REVIEW (APPENDIX D5)
The Applicant was concerned with the lack of factual content in the Heritage Report, and requested a peer review of the Report. The review was conducted by Dr Gavin Whitelaw, an independent heritage consultant (Appendix D5). He concluded that the Heritage Report was indeed flawed and that the conclusions drawn therein were not based on collected data, but on supposition.

Amafa is aware that the Heritage Report has been subjected to a peer review. We await further recommendations from Amafa on the way forward with regard to the heritage value of the site.

PALAEONTOLOGICAL DESKTOP STUDY (APPENDIX D6)
The Palaeontological desktop study revealed that portions of the site have a moderate palaeosensitivity. The specialist recommends that the Applicant must be aware of this sensitivity and if trenches deeper than 1.5m are dug, a Palaeontologist should be present on site to record any fossil findings. Trenches deeper than 1.5m are not proposed as part of the cultivation activities.

3. ACTIVITY DESCRIPTION

Describe each listed activity in Listing Notice 1 (GNR 544, 18 June2010), Listing Notice 3 (GNR 546, 18June 2010) or Category A of GN 718, 3 July 2009 (Waste Management Activities) which is being applied for as per the project description:

In terms of the Environmental Impact Assessment (EIA) Regulations (2010), promulgated in terms of the National Environmental Management Act (NEMA), certain Listed Activities are specified for which either a Basic Assessment (GNR 544 and 546) or a Scoping and EIA (GNR 545) is required.

The following Listed Activity in Government Notice (GN) R 546 (Listing Notice 3), requiring a **Basic Assessment (BA) Process** will be applicable to the proposed cultivation:

Listing Notice 3 (GNR 546):	Item 14	"*The clearance of an area of 5 hectares or more of vegetation where 75% or more of the vegetation cover constitutes indigenous vegetation (a) in KwaZulu-Natal (i) in all areas outside urban areas.*"

This Listed Activity is relevant as the proposed project would involve the clearance (permanent removal) of up to 74.5ha (greater than 5ha) of indigenous vegetation (grassland), for the purposes of commercial agriculture.

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.

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.

PLEASE NOTE
The proposed cultivation has been conceptualised as a way to better utilise York Farm. It is therefore not possible to consider other properties, as the Applicant is York Landowners Association and this is the land that the associated landowners own.

Alternative:	**Latitude (S):**			**Longitude (E):**		
Alternative S1[1] (preferred or only site alternative)	29°	20′	00″	30°	29′	24″
Alternative S2 (if any)						
Alternative S3 (if any)						

6. PHYSICAL SIZE OF THE ACTIVITY

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

Alternative:		**Size of the activity:**
Alternative A1[2] (preferred activity alternative)	**Appendix A1**	74.5ha
Alternative A2 (if any)	**Appendix A2**	99ha
Alternative A3 (if any)		~~m~~^{2}

PLEASE NOTE
The proposed cultivation has been conceptualised as a way to better utilise York Farm. It is therefore not possible to consider other properties as the Applicant is York Landowners Association and this is the land that they own.

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)	767ha
Alternative A2 (if any)	~~m~~^{2}
Alternative A3 (if any)	~~m~~^{2}

7. SITE ACCESS

Does ready access to the site exist?	YES	~~NO~~
If NO, what is the distance over which a new access road will be built		N/A

[1] "Alternative S.." refer to site alternatives.
[2] "Alternative A.." refer to activity, process, technology or other alternatives.

Describe the type of access road planned:

The proposed cultivation blocks are accessed for the mowing of grass for hay.

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 Appendix A to this report.

The site or route plans must indicate the following:

1.1. the scale of the plan which must be at least a scale of 1:500;
1.2. the property boundaries and numbers/ erf/ farm numbers of all adjoining properties of the site;
1.3. the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
1.4. the exact position of each element of the application as well as any other structures on the site;
1.5. 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;
1.6. walls and fencing including details of the height and construction material;
1.7. servitudes indicating the purpose of the servitude;
1.8. sensitive environmental elements within 100 metres 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);

1.9. 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
1.10. 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 Appendix B 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 Appendix C. 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?	R 3.96 million	
What is the expected yearly income that will be generated by or as a result of the activity?	R 2.97 million	
Will the activity contribute to service infrastructure?	-	NO
Is the activity a public amenity?	-	NO
How many new employment opportunities will be created in the development phase of the activity?	10	
What is the expected value of the employment opportunities during the development phase?	R 220 000.00	
What percentage of this will accrue to previously disadvantaged individuals?	95%	
How many permanent new employment opportunities will be created during the operational phase of the activity?	20	
What is the expected current value of the employment opportunities during the first 10 years?	R 7.15 million	
What percentage of this will accrue to previously disadvantaged individuals?	95%	

11.2. Need and desirability of the activity

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

The cultivation is proposed to make better use of the property in terms of its agricultural potential, as well as to increase the economic returns for all shareholders of the York Landowners Association. The profits generated from this commercial production will enable the Applicant to implement improved management of the undisturbed portions of York Farm, e.g. erosion control, improvement of fencing for livestock etc.

York Farm is approximately 767 ha in size and is currently used for grazing by cattle, and mowing for the production of hay. The site is currently dominated by *Aristida junciformis* , which has limited grazing potential, particularly during the winter months.

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

None.

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

Permanent new employment opportunities will be created during the Operational Phase of the development.

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:
National Environmental Management Act (Act 107 of 1998) – for its potential to cause degradation of the environment (Section 28).	Department of Environmental Affairs	1998
National Water Act (Act 36 of 1998) – for potential to cause pollution of water resources defined under the Act (Section 19).	Department of Water Affairs and Forestry	1998
Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983) – for protection of agricultural resources and for control and removal of	National Department of Agriculture	1983

alien invasive plants.		
National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004) – for protection of biodiversity.	Department of Agriculture and Environmental Affairs & Ezemvelo KZN Wildlife	2004
The National Heritage Resources Act (Act No 25 of 1999 as amended) – for the identification and preservation of items of heritage importance.	Department of Arts and Culture (Amafa KwaZulu-Natal)	1999
Guideline 4: Public Participation in support of the EIA Regulations (2005)	Department of Environmental Affairs and Tourism	2006
Guideline 7: Detailed Guide to Implementation of the Environmental Impact Assessment Regulations (2006)	Department of Environmental Affairs and Tourism	2007

13. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

13.1. 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?		~~m³~~

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

No construction waste will be produced as the activity is for the cultivation of grassland, therefore there are no construction related activities.

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

N/A

Will the activity produce solid waste during its operational phase?	~~YES~~	NO
If yes, what estimated quantity will be produced per month?		~~m³~~

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

N/A

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

N/A

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 relevant legislation?	~~YES~~	NO

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 facility?	~~YES~~	NO

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

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:	-		
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:

NOTE: No effluent will be produced on site. The activity is for the cultivation of grassland.

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

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

No emissions will be released into the atmosphere as a result of the activity, other than dust during ploughing, should the conditions at the time be dry and windy.

13.4. 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:

No noise will be generated by the proposed cultivation that will have a detrimental impact on the surrounding environment. Any noise from the proposed cultivation would be in keeping with surrounding agricultural activities.

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

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:		~~litres~~
Does the activity require a water use permit from the Department of Water Affairs?	~~YES~~	NO

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

As per the Wetland Report is Appendix D3, there could be a requirement for a Water Use Licence as the activities would occur within 500m of a wetland. Further clarity from the Department of Water and Sanitation is required in this regard.

15. ENERGY EFFICIENCY

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

N/A

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

N/A

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 C 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 – Sites A & B:

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

Alternative S2 (if any):

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

Alternative S3 (if any):

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

2. LOCATION IN LANDSCAPE

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

Alternative S1 (preferred site) – Sites A & B:

~~Ridgeline~~	~~Plateau~~	~~Side slope of hill/mountain~~	~~Closed valley~~	Open valley	~~Plain~~	Undulating plain/low hills	~~Dune~~	~~Sea front~~

Alternative S2 (if any):

~~Ridgeline~~	~~Plateau~~	~~Side slope of hill/mountain~~	~~Closed valley~~	~~Open valley~~	~~Plain~~	~~Undulating plain/low hills~~	~~Dune~~	~~Sea front~~

Alternative S3 (if any):

~~Ridgeline~~	~~Plateau~~	~~Side slope of hill/mountain~~	~~Closed valley~~	~~Open valley~~	~~Plain~~	~~Undulating plain/low hills~~	~~Dune~~	~~Sea front~~

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Has a specialist been consulted for the completion of this section?	~~YES~~	NO

If YES, please complete the following:

Name of the specialist:	
Qualification(s) of the specialist:	
Postal address:	
Postal code:	

Telephone:	-	Cell:	
E-mail:		Fax:	-

Are there any rare or endangered flora or fauna species (including red data species) present on any of the alternative sites?	YES	~~NO~~
If YES, specify and explain:	Please refer to: • Appendix D1: Biodiversity Assessment: Proposed Cultivation of 99 ha on York Farm, New Hanover, uMshwathi Local Municipality; and • Appendix D2: Specialist Avifaunal Report: Proposed Cultivation of 99 Ha On York Farm, Near New Hanover, Umshwathi Local Municipality.	
Are their any special or sensitive habitats or other natural features present on any of the alternative sites?	YES	~~NO~~
If YES, specify and explain:	Ngongoni Veld Type. Please refer to Appendix D1: Biodiversity Assessment: Proposed Cultivation of 99 Ha on York Farm, New Hanover, Umshwathi Local Municipality	
Are any further specialist studies recommended by the specialist?	~~YES~~	NO
If YES, specify:	-	
If YES, is such a report(s) attached in Appendix D?	YES	~~NO~~

Signature of specialist:	See Appendix D1 and D2	Date:	September 2015

Is the site(s) located on any of the following (cross 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

Has a specialist been consulted for the completion of this section?	YES	~~NO~~

If YES, please complete the following:

Name of the specialist:	Dr Hans Grobler (Fauna) Peter Le Roux (Flora) David Allan (Avifauna)
Qualification(s) of the specialist:	Dr Hans Grobler (Fauna) – PhD Zoology Peter Le Roux (Flora) – MSc. Agriculture David Allan (Avifauna) – MSc. Zoology
Postal address:	See details on specialist reports in Appendix D1 and D2 respectively
Postal code:	-

Telephone:	-	Cell:	-
E-mail:	-	Fax:	-

Are there any rare or endangered flora or fauna species (including red data species) present on any of the alternative sites?	YES	~~NO~~

If YES, specify and explain:

Please refer to:
- Appendix D1: Biodiversity Assessment: Proposed Cultivation of 99 ha on York Farm, New Hanover, uMshwathi Local Municipality; and
- Appendix D2: Specialist Avifaunal Report: Proposed Cultivation of 99 Ha on York Farm, Near New Hanover, Umshwathi Local Municipality.

BIODIVERSITY

The findings of the biodiversity assessment revealed limited value in the indigenous grasslands present on the proposed cultivation areas. There is a low diversity of herbaceous species and grass species present are largely unpalatable.

Regarding faunal species, a number of protected species have been observed on site, including Crane and Oribi, as per Figures 1 and 2 above, and detailed in the relevant specialist reports.

Additionally, maintaining internal ecological corridors was deemed important given the size of the property as a whole. It is likely that the application of buffers on the wetland habitat will achieve this connectivity by excluding areas from cultivation.

It is for this reason that the proposed cultivation of Com 1 has been excluded from the Application (see Figure 1 above).

Are there any special or sensitive habitats or other natural features present on any of the alternative sites?	YES	~~NO~~

If YES, specify and explain: Ngongoni Veld Type. Please refer to Appendix D1: Biodiversity Assessment: Proposed Cultivation of 99 Ha on York Farm, New Hanover, Umshwathi Local Municipality

Are any further specialist studies recommended by the specialist?	~~YES~~	NO
If YES, specify:		
If YES, is such a report(s) attached in Appendix D?	YES	~~NO~~

Signature of specialist: See Appendix D1 and D2 Date: September 2015

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

PLEASE NOTE

Whilst the floral specialist did not make note of prolific alien vegetation in the Biodiversity Report, this does not imply that the natural veld is in good condition. The absence of alien vegetation does not automatically imply that veld is in good condition. Condition is a measure of other factors which contribute ultimately to the carrying capacity.

For the purposes of the limited classification below, the first box is selected, however, please read this in conjunction with the Biodiversity Report in Appendix D1.

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.

Please refer to Appendix D1: Biodiversity Report.

5. LAND USE CHARACTER OF SURROUNDING AREA

Cross the land 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		There would be approx 690 ha of natural area that would remain intact on the property, outside the proposed cultivation block areas.
Low density residential	YES		The area comprises farms and smallholdings with associated housing.
Medium density residential		NO	
High density residential		NO	
Informal residential		NO	
Retail commercial & warehousing		NO	
Light industrial		NO	
Medium industrial		NO	
Heavy industrial		NO	
Power station		NO	
Office/consulting room		NO	
Military or police base/station/compound		NO	
Spoil heap or slimes dam		NO	
Quarry, sand or borrow pit		NO	
Dam or reservoir	YES		A farm dam is located to the south of the property.
Hospital/medical centre		NO	
School/ creche		NO	
Tertiary education facility		NO	
Church	YES		There is a church in York village.
Old age home		NO	
Sewage treatment plant		NO	
Train station or shunting yard		NO	
Railway line		NO	
Major road (4 lanes or more)		NO	
Airport		NO	
Harbour		NO	
Sport facilities		NO	
Golf course		NO	
Polo fields		NO	
Filling station		NO	
Landfill or waste treatment site		NO	
Plantation	YES		There are numerous plantations surrounding the cultivation sites.
Agriculture	YES		Sugarcane fields border onto the site.
River, stream or wetland	YES		See Appendix D3.
Nature conservation area		NO	
Mountain, hill or ridge		NO	
Museum		NO	
Historical building	YES		The York church is older than 60 years.
Protected Area		NO	
Graveyard	YES		There is a graveyard in York village.
Archaeological site		NO	
Other land uses (describe)		NO	

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 archaeological or palaeontological sites, on or within 20m of the site?	YES	~~NO~~

If YES, contact a specialist recommended by AMAFA to conduct a heritage impact assessment. The heritage impact assessment must be attached as an appendix to this report.

Briefly explain the recommendations of the specialist:	

Amafa requested a Heritage Impact Assessment to be conducted, and this was to include the archaeological component, the palaeontological desktop study and any other applicable heritage components. These components were carried out separately, in two different studies.

ARCHAEOLOGICAL HERITAGE ASSESSMENT

The phase 1 archaeological assessment was conducted by Sian Hall of Cultural Solutions on behalf of Active Heritage (Appendix D4a), This report was later revised by Frans Prins of Active Heritage (Appendix D4b). The report identified no archaeological relics, though cited the dense grass cover as a possible reason for this.

Furthermore, the heritage consultant identified the York Commonage as a Living Heritage Landscape, worthy of preservation as such, and recommended that the proposed cultivation not be allowed to proceed. There was no data presented in the report to support this conclusion.

HERITAGE PEER REVIEW

Due to the Applicant querying certain information in the Heritage Report, a peer review of the report was conducted by Dr Gavin Whitelaw, an independent heritage consultant (see Appendix D5), who concluded that the Heritage Report was indeed flawed and that the conclusions drawn therein were not based on collected data, but on supposition.

Amafa is aware that the Heritage Report has been subjected to a peer review. We await further recommendations from Amafa on the way forward with regards to the heritage value of the site.

PALEONTOLOGICAL DESKTOP STUDY

The Palaeontological Desktop Study revealed that portions of the site have a moderate palaeosensitivity. The specialist recommends that the Applicant be aware of this sensitivity and if trenches deeper than 1.5m are dug, a Palaeontologist should be available to record any fossil findings.

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 the necessary application to AMAFA and attach proof thereof to this report.

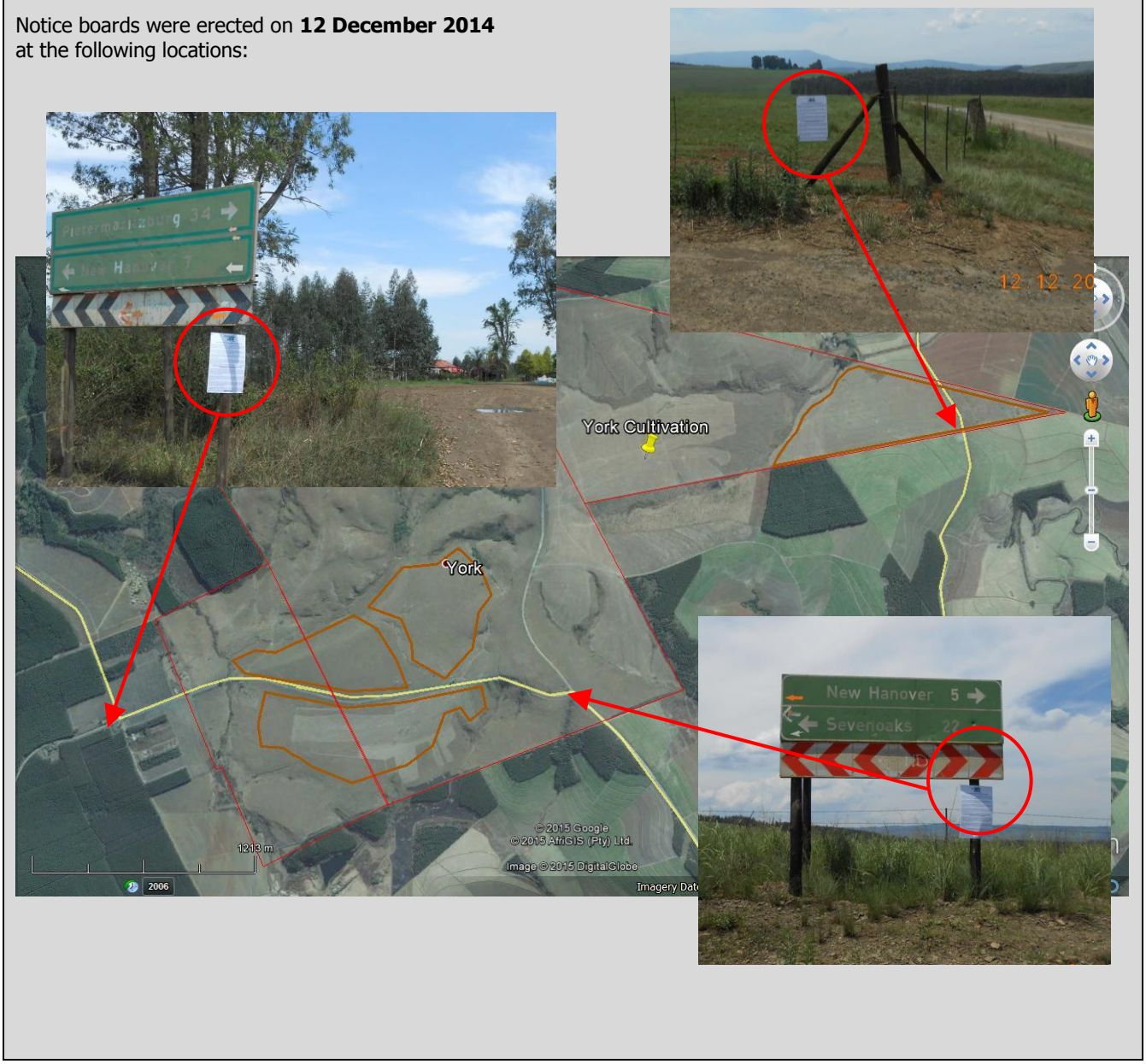
SECTION D: PUBLIC PARTICIPATION

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;

Notice boards were erected on **12 December 2014** at the following locations:



(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;

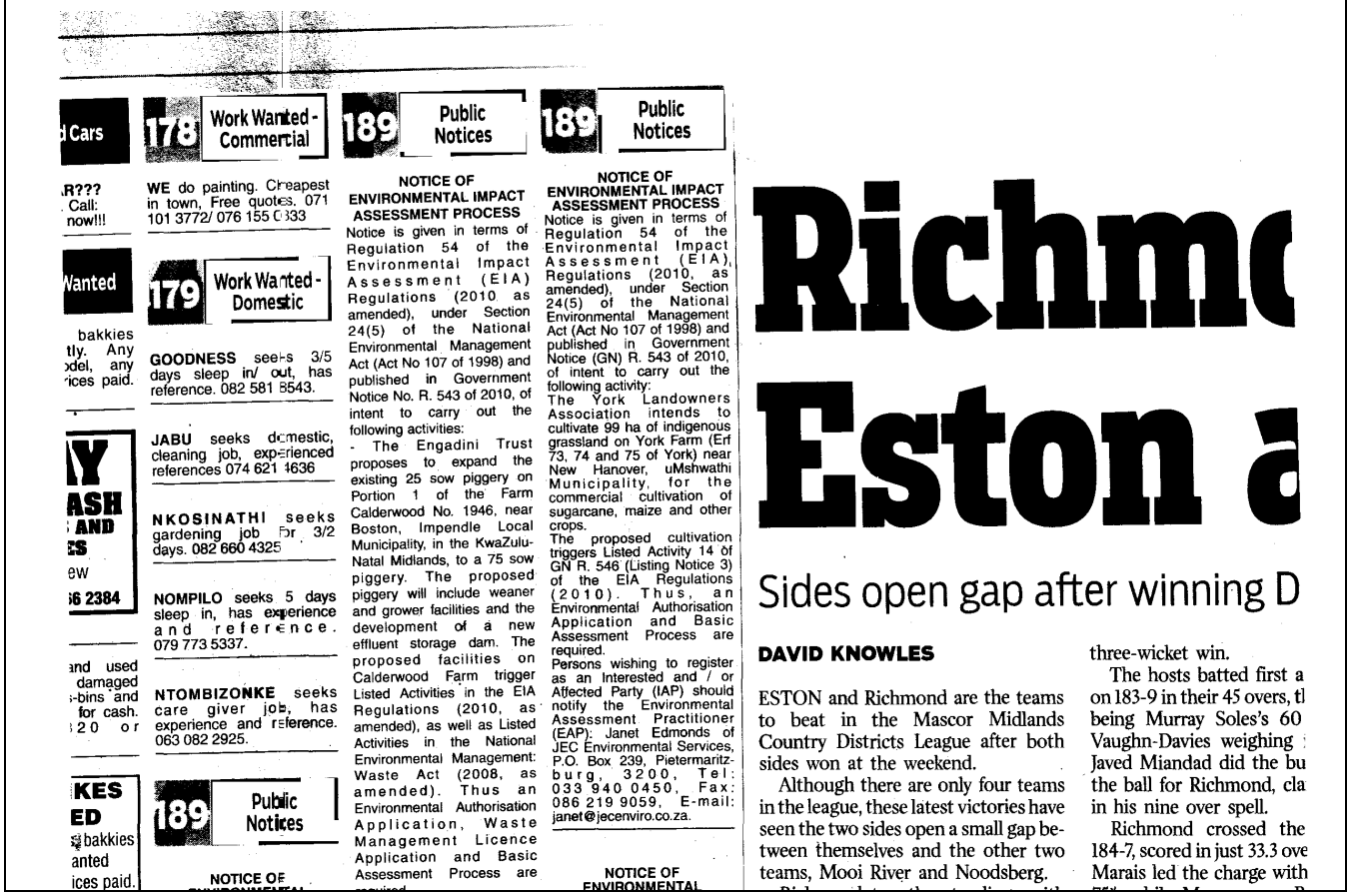
Background Information Documents were sent to all neighbours within 100m of the property, Organs of State and other parties with an interest in the proposed cultivation on **12 December 2014**.

Below is a copy of the IAP Register that has been maintained throughout the Application process.

NAME	**COMPANY/ PRIVATE**
AUTHORITIES	
Reka Kallicharan	Dept of Economic Development Tourism and Environmental Affairs
Dominic Weiners	Ezemvelo KZN Wildlife
Weziwe Tshabalala	Amafa Heritage KZN
Strini Govender	Dept of Water and Sanitation
Hlamalani Mongwe	Dept of Agriculture and Rural Development
Nonkululeko Memela	Dept of Agriculture and Rural Development
Robin Baca	Dept of Agriculture, Forestry and Fisheries
Judy Reddy	Dept of Transport
Tanya Smith	Endangered Wildlife Trust
Ian Little	Endangered Wildlife Trust
Cobus Theron	Endangered Wildlife Trust
Penny Rees	DUCT
Nick Theron	Birdlife SA
MUNICIPALITIES	
Sbahle Ngubane	Umshwati Local Municipality: Town Planner
Nokulunga Nxumalo	uMgungundlovu District Municipality
Cllr M P Dlamini	Ward 1
Cllr. T.A Hlatshwayo P.R Ward 1	Ward 1
LOCAL ASSOCIATIONS	
Ethel von Abo	Kwanalu
Gail Diack	Noodsberg Cane Growers Association
Annamie Viljoen (Secretary)	Umshwathi Agricultural Union (UAU)
NEIGHBOURS	
Martin De Kock	Sappi
Steve Richardson	Mondi
Horst Voigts	
Belinda Wolhuter	St Johns York Church
Lyn and Mike McKenzie	St Johns York Church
Trayton Dougherty	Newington Farm / Albert Falls Crocodile Farm
OTHER IAPS	
Lawrence Trotter	J Leslie Smith & Co
Daan Steenkamp	Sproxton Trust

(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 subregulation 54(c)(ii); and

The Application was advertised in The Witness on **11 December 2014**.



Cars

178 Work Wanted - Commertial

WE do painting. Cheapest in town, Free quotes. 071 101 3772/ 076 155 0333

179 Work Wanted - Domestic

GOODNESS seeks 3/5 days sleep in/ out, has reference. 082 581 8543.

JABU seeks domestic, cleaning job, experienced references 074 621 1636

NKOSINATHI seeks gardening job for 3/2 days. 082 660 4325

NOMPILO seeks 5 days sleep in, has experience and reference. 079 773 5337.

NTOMBIZONKE seeks care giver job, has experience and reference. 063 082 2925.

189 Public Notices

NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

Notice is given in terms of Regulation 54 of the Environmental Impact Assessment (EIA) Regulations (2010 as amended), under Section 24(5) of the National Environmental Management Act (Act No 107 of 1998) and published in Government Notice No. R. 543 of 2010, of intent to carry out the following activities:

- The Engadini Trust proposes to expand the existing 25 sow piggery on Portion 1 of the Farm Calderwood No. 1946, near Boston, Impendle Local Municipality, in the KwaZulu-Natal Midlands, to a 75 sow piggery. The proposed piggery will include weaner and grower facilities and the development of a new effluent storage dam. The proposed facilities on Calderwood Farm trigger Listed Activities in the EIA Regulations (2010, as amended), as well as Listed Activities in the National Environmental Management: Waste Act (2008, as amended). Thus an Environmental Authorisation Application, Waste Management Licence Application and Basic Assessment Process are

189 Public Notices

NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

Notice is given in terms of Regulation 54 of the Environmental Impact Assessment (EIA), Regulations (2010, as amended), under Section 24(5) of the National Environmental Management Act (Act No 107 of 1998) and published in Government Notice (GN) R. 543 of 2010, of intent to carry out the following activity:

The York Landowners Association intends to cultivate 99 ha of indigenous grassland on York Farm (Erf 73, 74 and 75 of York) near New Hanover, uMshwathi Municipality, for the commercial cultivation of sugarcane, maize and other crops.

The proposed cultivation triggers Listed Activity 14 of GN R. 546 (Listing Notice 3) of the EIA Regulations (2010). Thus, an Environmental Authorisation Application and Basic Assessment Process are required.

Persons wishing to register as an Interested and / or Affected Party (IAP) should notify the Environmental Assessment Practitioner (EAP): Janet Edmonds of JEC Environmental Services, P.O. Box 239, Pietermaritzburg, 3200, Tel: 033 940 0450, Fax: 086 219 9059, E-mail: janet@jecenviro.co.za.

NOTICE OF ENVIRONMENTAL

Richmo

Eston a

Sides open gap after winning D

DAVID KNOWLES

ESTON and Richmond are the teams to beat in the Mascor Midlands Country Districts League after both sides won at the weekend.

Although there are only four teams in the league, these latest victories have seen the two sides open a small gap between themselves and the other two teams, Mooi River and Noodsberg.

three-wicket win.

The hosts batted first a on 183-9 in their 45 overs, tl being Murray Soles's 60 Vaughn-Davies weighing Javed Miandad did the bu the ball for Richmond, cla in his nine over spell.

Richmond crossed the 184-7, scored in just 33.3 ove Marais led the charge with

(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, 2010;(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 54 of the EIA Regulations, 2010, but may deviate from the requirements of subregulation 54(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.

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 this application is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations (regulation 57 in the EIA Regulations, 2010) and be attached as Appendix E 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 comment received.

Has any comment been received from the local 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 comment received.

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):

N/A

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):

COMMENTS RECEIVED ON THE BACKGROUND INFORMATION DOCUMENT
(PLEASE SEE APPENDIX E FOR THE COMMENTS AND RESPONSES TABLE)

20 January 2015
Thabede Sthandiwe – Department of Agriculture and Rural Development

1. GENERAL
The Provincial Department of Agriculture and Environmental Affairs: Macro Planning acknowledges the receipt of the above mentioned application.

The main objective of the application is to request comments on establishment of maize, sugarcane and other crop fields. By this fields addition the applicant intends to increase the farm productivity and profitability on Erf 73, 74 and 75 of the Farm York. These fields will occupy only 99 hectares extent of +/- 767 lands which is currently used for cattle grazing, production of hay and timber.

2. COMMENTS ON LAND DEVELOPMENT PROPOSAL
The site inspection to evaluate the significance of agricultural resources that are likely to be impacted upon by this construction was conducted on the 17th December 2014. During the site inspection the following were noted:

- The proposed sites consist of good reddish brown soils which are an indication of profitable crop production.
- The possible limitation will be the slope as it varies between 8% and 14%. Since there will be also planting sugarcane the steeper sloping areas should be highly reserved for sugarcane.
- The farm is encircled by the sugarcane and wattle neighbouring farms. According to KZN Land Potential Categories, Version 1, 2012 (Draft) this site has a mixture of high and moderate potential land where for moderate significant interventions will be required as to achieve viable and sustainable food production.

3. RECOMMENDATIONS

- It is recommended that the proposed cultivation must be properly done in order to alleviate possible soil erosion and surface water management.
- Steeper slopes should be strictly reserved for annual crops to prevent possible soil erosion.

4. CONCLUDING STATEMENT
Please be advised that the Provincial Department of Agriculture and Rural Development: Land Use Regulatory

Component has no objection to the activity in principle but awaits further documentation before concluding our comments on the proposed project.
26 January 2015 Ian Little – Endangered Wildlife Trust I went out to assess the proposed cultivation on York Farm on Friday. We were alerted to this because there are Oribi and Cranes on the property. I learnt on the day that you were dealing with the application so I thought I would give you our insights from the visit. The property is generally in good hands as the owners intentions are good. However the history and current management could be improved considerably. The key thing is that they need to reduce the frequency and extend of mowing and bailing as the grassland is almost entirely unpalatable, diversity is low and it is increaser I grass dominated. Currently the mowing and bailing is the only income generated from the property. My personal opinion is that the areas which they are proposing to cultivate currently offer little to no biodiversity value and this development will NOT have a significant negative impact on the Oribi or Cranes. Further, the income generated will allow them to reduce the amount of grassland being mowed and bailed which will then result in considerable improvement in the condition of the remaining grassland. In summary I feel that due process in terms of in-depth specialist reports etc are necessary but ultimately I think that this application is not one of conservation concern.
02 February 2015 Penny Rees – Duzi-Umgeni Conservation Trust DUCT will not be commenting on this Application.
13 April 2015 Bernadet Pawandiwa – Heritage KwaZulu-Natal The proposed project is for the cultivation of 99ha of indigenous grassland on York Farm, for the purposes of cultivation to sugarcane and maize. The 99ha comprises 5 blocks proposed for cultivation, based on soil type and slope suitability. The site is located near New Hanover, KwaZulu-Natal. Thank you for your indication that development is to take place in this area. We have reviewed the Basic Information document that you provided us and overlaid the information provided on our database. According to our database, the general area of proposed development occurs in an area that is associated with the Stone Age and Iron Age as well as historical period cultural activities. This means that the area has to be subjected to an impact assessment. Version 2 of the fossil sensitivity map (http://www.sahra.org.za/map/palaeo) the area is considered to be of moderate palaeo-sensitivity. For this reason a palaeontological desktop assessment is required. Considering the heritage value of the area of proposed development, a Heritage Impact Assessment is required for the above proposed project in terms of the KwaZulu Natal Heritage Act No. 4 of 2008 and the National Heritage Resources Act No.25 of 1999 (Section 38 (1)). This must include the archaeological component (Phase 1), the paleontological desktop study and any other applicable heritage components. Amafa KZN Heritage therefore requires the appointment of an Amafa accredited Heritage Practitioner to assist in the provision of recommendations and mitigation procedures. Please download our list of Heritage Practitioners from our website www.heritagekzn.co.za and also visit the website of the Paleontological Society of South Africa , http://www.palaeontologicalsociety.co.za) for a list of specialists. The Heritage assessment must satisfy SAHRA's minimum requirements for impact assessments and must comply with the requirements in Section 38(3) of the NHRA and as such, this assessment must clearly provide recommendations regarding the mitigation of any identified direct and indirect impacts to heritage resources. Should you have any further queries, please contact the designated official using the case number quoted above in the case header.
15 April 2015 Roy Ryan – Department of Transport

1. Your letter dated December 2014 refers.
2. In terms of the Kwazulu-Natal Provincial Roads Act No. 4 of 2001 this Department has no objections to the abovementioned PROPOSED CULTIVATION.

3.1 In terms of section 10 of the Kwazulu-Natal Provincial Roads Act No. 4 of 2001 no random access will be permitted.

3.2 Access shall be taken via the existing accesses to Main Road 150.

3.3 The existing access points to Main Road 150 shall be upgraded in consultation with and to the satisfaction of this Cost Centre Manager, Pietermaritzburg (Tel No. 033-3926600) to a Type "B3" gravel standard.

3.2 A safe sight distance shall be maintained at all times by cutting of grass or other vegetation on either side of the accesses.

4. All costs incurred, as a result of these requirements shall be borne entirely by the developer.
5. This correspondence does not grant authorization or exemption from compliance with any other relevant and applicable legislation.

SECTION E: IMPACT ASSESSMENT

The assessment of impacts must adhere to the 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.

- Legitimacy of York Landowners Association;
- Authority given to EAP;
- Owner of York Farm;
- Consent of York Landowners.

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):

See Comments and Response Table in Appendix E.

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

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)

THE PREFERRED SITE IS LOCATED ON ERF 73 AND ERF 74 OF YORK.

Direct impacts:

- Recognition of concerns raised by IAPs;
- Identify sensitive habitats / areas of concern and appoint independent and suitability qualified specialists to conduct assessments of these habitats / areas. Specialist Studies conducted for sensitive habitats / areas of concern identified on site are:
  - Biodiversity Assessment
  - Avifaunal Assessment

- Wetland Functional Assessment
- Heritage Impact Assessment (incorporating archaeological and palaeontological aspects)

Please see Appendix D for all Specialist Studies listed above.

Indirect impacts:
- None.

Cumulative impacts:
- None.

Alternative S2 (if any)

THE ALTERNATIVE SITE IS LOCATED ON ERF 73 AND ERF 74 AND ERF 75 OF YORK (incorporation of Com 1 cultivation block).

Direct impacts:
- Recognition of concerns raised by IAPs;
- Identify sensitive habitats / areas of concern and appoint independent and suitability qualified specialists to conduct assessments of these habitats / areas. Specialist Studies conducted for sensitive habitats / areas of concern identified on site are:
  - Biodiversity Assessment
  - Avifaunal Assessment
  - Wetland Functional Assessment
  - Heritage Impact Assessment (incorporating archaeological and palaeontological aspects)

  Please see Appendix D for all Specialist Studies listed above.

Indirect impacts:
- None.

Cumulative impacts:
- None.

No-go alternative (compulsory)

THE NO-GO ALTERNATIVE WOULD RESULT IN THE SITE NOT BEING UTILISED FOR CULTIVATION.

Direct impacts:
- None. There will be no physical change to the property.

Indirect impacts:
- None. Species composition would remain unchanged on the property; and
- Potential for erosion over time from cattle movement on site.

Cumulative impacts:
- No loss of grassland and faunal habitat for foraging and / or breeding.

Indicate mitigation measures to manage the potential impacts listed above:

Alternative S1

- Due measures must be taken to mitigate concerns raised by IAPs;
- Any necessary Specialist Studies must be identified in order to inform the project team, Applicant and relevant authorities of any specific conditions on the site.

Alternative S2

- Due measures must be taken to mitigate concerns raised by IAPs;
- Any necessary Specialist Studies must be identified in order to inform the project team, Applicant and relevant authorities of any specific conditions on the site.

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)

Direct impacts:
- No direct impacts from the Planning and Design Phase.

Indirect impacts:
- No indirect impacts from the Planning and Design Phase.

Cumulative impacts:
- No cumulative impacts from the Planning and Design Phase.

Alternative A2 (if any)

N/A

No-go alternative (compulsory)

Direct impacts:
- No direct impacts from the Planning and Design Phase.

Indirect impacts:
- No indirect impacts from the Planning and Design Phase.

Cumulative impacts:
- No cumulative impacts from the Planning and Design Phase.

Indicate mitigation measures to manage the potential impacts listed above:

Alternative A1:

No mitigation necessary as no impacts identified during the Planning and Design Phase.

Alternative A2:

No mitigation necessary as no impacts identified during the Planning and Design Phase.

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)

THE PREFERRED SITE IS LOCATED ON ERF 73 AND ERF 74 OF YORK.

Direct impacts:
- Low potential for impacts on nearby water resources from fertiliser due to buffers from wetlands;
- Disturbance of the site may lead to encroachment of alien plant species on-site and into the surrounding areas;
- Dust will be evident during the ploughing activity; and
- There will be a loss of approximately 75ha of Ngongoni Grassland due to the proposed cultivation activity.

Indirect impacts:
- Disturbance of fauna and flora;
- Transforming natural habitat to a niche habitat where only select species can persist;
- Soil erosion; and
- Stormwater run-off will increase during and immediately after ploughing as vegetation will not be present to

decrease the velocity and erosive potential of water during a rainfall event.

Cumulative impacts:
- Proliferation of niche species;
- Contamination of water resources and soil through fuel leakages from mechanised farming equipment;
- Low potential for eutrophication of water resources due to application of fertilizers; and
- If not properly managed, the activity could result in environmental degradation.

Alternative S2 (if any)

THE ALTERNATIVE SITE IS LOCATED ON ERF 73 AND ERF 74 AND ERF 75 OF YORK.

Direct impacts:
- Low potential for impacts on nearby water resources from fertiliser due to buffers from wetlands;
- Disturbance of the site may lead to encroachment of alien plant species on-site and into the surrounding areas;
- Dust will be evident during the ploughing activity; and
- There will be a loss of approximately 99ha of Ngongoni Grassland due to the proposed cultivation activity.

Indirect impacts:
- Disturbance of fauna and flora;
- Transforming natural habitat to a niche habitat where only select species can persist;
- Soil erosion; and
- Stormwater run-off will increase during and immediately after ploughing as vegetation will not be present to decrease the velocity and erosive potential of water during a rainfall event.

Cumulative impacts:
- Proliferation of niche species;
- Contamination of water resources and soil through fuel leakages from mechanised farming equipment;
- Low potential for eutrophication of water resources due to application of fertilizers; and
- If not properly managed, the activity could result in environmental degradation.

No-go alternative (compulsory)

THE NO-GO ALTERNATIVE WOULD RESULT IN THE SITE NOT BEING UTILISED FOR CULTIVATION.

Direct impacts:
- The property could be overgrazed if correct grazing densities are not enforced;
- Due to lack of income from the farm, there will be limited surplus funds to attend to erosion control, rehabilitation of dongas and fencing for livestock.

Indirect impacts:
- Degradation of indigenous grassland.

Cumulative impacts:
- Continued habitat use for local fauna and flora.

Indicate mitigation measures to manage the potential impacts listed above:

Alternative S1

- Initial ploughing should not be done prior to forecasted heavy rainfall events so as to limit soil erosion;
- It is however recommended, that initial ploughing be conducted after the first rains when the soil moisture content is elevated, so as to prevent potential sheet run-off and/ or wind erosion / dust;
- Fertiliser application rates must be strictly adhered to;
- Where possible, avoid applying fertiliser prior to forecasted heavy rainfall events;
- Fertiliser should not be applied until the site is properly contoured, to reduce the surface run-off during rainfall events;

- Seed should be planted immediately after ploughing to prevent the land from lying fallow for too long;
- The site should be monitored for signs of soil erosion. Should such signs be noted, immediate remedial action should be implemented as per the appropriate soil conservation structures and the EMPr (Appendix F);
- The proposed cultivation will be conducted along contour lines, thus using natural run-off controls as per normal farming practices. Additional run-off control structures (e.g. grassed waterways) will also be implemented;
- Disturbance to fauna and flora is difficult to mitigate fully. The Biodiversity and Avifaunal Assessments have not highlighted any reasons for the cultivation as per the Preferred Layout (Appendix A1) not to proceed; and
- The establishment of any alien plant species must be monitored and controlled so as to prevent the re-establishment thereof.

Alternative S2

N/A

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)

Direct impacts:
- The loss of natural vegetation;
- The loss of natural habitat for grassland faunal species including:
  - Micro habitat for small mammals; and
  - Hunting and foraging area for birds and mammals.
- Alien vegetation encroachment from imported seed;
- Change in soil characteristics including structure as a result of ploughing machinery; and
- Potential for soil erosion to occur.

Indirect impacts:
- Potential contamination of off-site water resources due to over application of fertilisers;
- Alien plant infestation;
- Siltation of dams as a result of soil erosion; and
- Increase in road strikes of birds and wildlife, especially stationary or slow-moving organisms such as frogs and bird nests / eggs.

Cumulative impacts:
- Decline in number of animals utilising the land;
- Possible changes in soil characteristics due to over application of fertilisers;
- Possible changes in soil characteristics due to mechanical ploughing; and
- Disturbance of wetland habitat due to siltation.

Alternative A2

N/A

No-go alternative (compulsory)

Direct impacts:
- None.

Indirect impacts:
- None.

Cumulative impacts:
- None.

Indicate mitigation measures to manage the potential impacts listed above:
Alternative A1:

- Loss of habitat and natural vegetation has not been highlighted as a fatal flaw in the Biodiversity Assessment and Avifaunal Assessment;
- Seed should be purchased from a reputable nursery / supplier and follow-up alien vegetation control must be implemented;
- Where possible, initial ploughing should not be done prior to forecasted heavy rainfall events so as to limit soil erosion;
- Initial ploughing should ideally be conducted after the first rains when some soil moisture is present and the potential for sheet run-off and wind erosion is limited;
- Fertiliser application rates must be strictly adhered to;
- Where possible, avoid applying fertiliser prior to forecasted large rainfall events;
- Top dressing with fertiliser should not be conducted until the site is well vegetated to reduce the surface run-off during rainfall events;
- Machinery use should be limited only to the development footprint; and
- Signs of soil erosion must be monitored and immediately rectified should evidence of such be found.

Alternative A2:

N/A

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)

THE PREFERRED SITE IS LOCATED ON ERF 73 AND ERF 74 OF YORK.

Direct impacts:

- Low potential for impacts on nearby water resources from fertilisers due to implemented buffers and correct countouring;
- Alien plants may invade the site if not monitored and removed on an on-going basis; and
- Movement of fauna and flora inhibited.

Indirect impacts:

- Potential for availability of funds to implement rehabilitation measures on remainder of York Farm
- Fauna and flora species will still be attracted to the site, *albeit* different species to those originally found;
- A large area of indigenous grassland on the remainder of the property will still exist with species rich and diverse grasslands, potentially providing habitat to those species disturbed during construction and operational activities;
- Transforming natural habitat to a niche habitat where only select species can persist; and
- Employment opportunities will be created.

Cumulative impacts:

- Proliferation of niche species; and
- Low potential for eutrophication of water resources.

Alternative S2 (if any)

THE ALTERNATIVE SITE IS LOCATED ON ERF 73 AND ERF 74 AND ERF 75 OF YORK.

Direct impacts:

- Low potential for impacts on nearby water resources from fertilisers due to implemented buffers and correct

contouring;
- Alien plants may invade the site if not monitored and removed on an on-going basis; and
- Movement of fauna and flora inhibited.

Indirect impacts:
- Potential for availability of funds to implement rehabilitation measures on remainder of York Farm
- Fauna and flora species will still be attracted to the site, *albeit* different species to those originally found;
- A large area of indigenous grassland on the remainder of the property will still exist with species rich and diverse grasslands, potentially providing habitat to those species disturbed during construction and operational activities;
- Transforming natural habitat to a niche habitat where only select species can persist; and
- Employment opportunities will be created.

Cumulative impacts:
- Proliferation of niche species; and
- Low potential for eutrophication of water resources.

No-go alternative (compulsory)

THE NO-GO ALTERNATIVE WOULD RESULT IN THE SITE NOT BEING UTILISED FOR CULTIVATION.

Direct impacts:
- Continued functioning of the grassland as Ngongoni Grassland.

Indirect impacts:
- Stormwater run-off will not increase as the grassland remains undisturbed.

Cumulative impacts:
- No adverse impact on faunal species.

Indicate mitigation measures to manage the potential impacts listed above:

Alternative S1

- Fertiliser application rates must be strictly adhered to;
- Top dressing with fertiliser should not be conducted until the site is well vegetated to reduce the surface run-off during rainfall events;
- Where possible, avoid applying fertiliser prior to forecasted large rainfall events;
- The site is to be monitored for signs of alien encroachment and removed as per the requirements of the EMPr;
- Mechanical removal of alien vegetation is preferred to the use of chemicals, as long as the disturbance to the soils are minimised; and
- Disturbance to fauna and flora is difficult to mitigate, however, the Biodiversity and Avifaunal Assessments have not highlighted any reasons for the cultivation as per the Preferred Layout (Appendix A1) not to proceed;
- Recommended buffers must be imposed on the wetlands.

Alternative S2

- Fertiliser application rates must be strictly adhered to;
- Top dressing with fertiliser should not be conducted until the site is well vegetated to reduce the surface run-off during rainfall events;
- Where possible, avoid applying fertiliser prior to forecasted large rainfall events;
- The site is to be monitored for signs of alien encroachment and removed as per the requirements of the EMPr;
- Mechanical removal of alien vegetation is preferred to the use of chemicals, as long as the disturbance to the soils are minimised; and
- Disturbance to fauna and flora is difficult to mitigate, however, the Biodiversity and Avifaunal Assessments have not highlighted any reasons for the cultivation as per the Preferred Layout (Appendix A1) not to proceed;

Recommended buffers must be imposed on the wetlands.

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)

Direct impacts:
- Increase in agricultural production;
- Alien vegetation encroachment may occur;
- Soil and fauna disturbance during harvesting;
- Change in soil characteristics, including structure, as a result of heavy machinery; and
- Potential disturbance to wetland habitat.

Indirect impacts:
- Dust impacts as a result of harvesting practices and traffic; and
- Low risk of contamination of off-site water resources if over-application of fertilisers occurs.

Cumulative impacts:
- Decline in numbers of animals utilising the land; and
- Ongoing management requirements.

Alternative A2

N/A

No-go alternative (compulsory)

Direct impacts:
- None.

Indirect impacts:
- None.

Cumulative impacts:
- None.

Indicate mitigation measures to manage the potential impacts listed above:

Alternative A1

- Care must be taken to impact the least amount of area possible when harvesting;
- Remove any alien plant species and control the re-establishment thereof;
- Fertiliser rates must be closely monitored and off-site water resources tested where potential for contamination exists; and
- As per the recommendations of the Wetland Report (Appendix D3), the recommended buffer widths should be implemented around the respective wetlands, in order to ensure the preservation of the habitat and catchment area, and to ensure connectivity between land parcels.

Alternative A2

N/A

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:

Alternative S1 (preferred alternative)

THE PREFERRED SITE ALTERNATIVE IS LOCATED ON ERF 73 AND ERF 74 OF YORK

Direct impacts:

- Invasion of the area by alien plant species; and
- Elevated dust levels - Removal of plant species and soil disturbance could result in increased dust levels in the area.

Indirect impacts:

- Alien plant infestation:
  - Seed-bank contamination: Seed dispersal via equipment imports, vehicles and workers; and
  - Soil and vegetation disturbance: Increased competition from alien plants; and
- Faunal disturbance - Potentially from the additional noise from increased vehicular movement at decommissioned site.

Cumulative impacts:

- Additive disturbance of soil, flora and fauna during Decommissioning Phase.

Alternative S2

THE ALTERNATIVE SITE IS LOCATED ON ERF 73 AND ERF 74 AND ERF 75 OF YORK.

Direct impacts:

- Invasion of the area by alien plant species; and
- Elevated dust levels - Removal of plant species and soil disturbance could result in increased dust levels in the area.

Indirect impacts:

- Alien plant infestation:
  - Seed-bank contamination: Seed dispersal via equipment imports, vehicles and workers; and
  - Soil and vegetation disturbance: Increased competition from alien plants; and
- Faunal disturbance - Potentially from the additional noise from increased vehicular movement at decommissioned site.

Cumulative impacts:

- Additive disturbance of soil, flora and fauna during Decommissioning Phase.

No-go alternative (compulsory)

THE NO-GO ALTERNATIVE WOULD RESULT IN THE SITE NOT BEING UTILISED FOR CULTIVATION.

Direct impacts:

- None.

Indirect impacts:

- None.

Cumulative impacts:

- None.

Indicate mitigation measures to manage the potential impacts listed above:

Alternative S1

- Plant removal:
  - All exposed earth should be rehabilitated promptly with suitable vegetation to protect the soil. Necessary rehabilitation measures (e.g. burning, seeding, irrigation, removing alien plants etc.) should be introduced to ensure species composition reverts to a more natural state.
- Soil erosion:
  - All exposed earth should be rehabilitated promptly with suitable vegetation to protect the soil.
- Alien plant infestation:
  - A monitoring programme should be implemented to enforce the continual eradication of alien and invasive species during the Decommissioning Phase and continually monitored after decommissioning.

Alternative S2

- Plant removal:
  - All exposed earth should be rehabilitated promptly with suitable vegetation to protect the soil. Necessary rehabilitation measures (e.g. burning, seeding, irrigation, removing alien plants etc.) should be introduced to ensure species composition reverts to a more natural state.
- Soil erosion:
  - All exposed earth should be rehabilitated promptly with suitable vegetation to protect the soil.
- Alien plant infestation:
  - A monitoring programme should be implemented to enforce the continual eradication of alien and invasive species during the Decommissioning Phase and continually monitored after decommissioning.

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)

Direct impacts:

- Rehabilitating to pre-existing conditions;
- Preventing alien vegetation encroachment; and
- Potential contamination of water and soil resources by fuel from leaking machinery;
- Discontinuation of use of fertiliser.

Indirect impacts:

- On-going alien control; and
- Intensive management requirements.

Cumulative impacts:

- Alien vegetation encroachment.

Alternative A2

N/A

No-go alternative (compulsory)

Direct impacts:

- None.

Indirect impacts:

- None.

Cumulative impacts:

- None.

Indicate mitigation measures to manage the potential impacts listed above:

Alternative A1

- An Alien Control Rehabilitation Plan must be implemented; and
- Water quality monitoring should be implemented to assess whether contamination has occurred in the neighbouring water resources.

Alternative A2

N/A

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)

An Environmental Management Programme (EMPr) has been compiled and is attached to this report (see Appendix F). It is recommended that an Environmental Control Officer is appointed to monitor all activities associated with the proposed cultivation and report directly to the DEDTEA. Monitoring will ensure that the requirements of the EMPr are being correctly implemented.

Alternative S2

An Environmental Management Programme (EMPr) has been compiled and is attached to this report (see Appendix F). It is recommended that an Environmental Control Officer is appointed to monitor all activities associated with the proposed cultivation and report directly to the DEDTEA. Monitoring will ensure that the requirements of the EMPr are being correctly implemented.

Alternative A1 (preferred alternative)

An Environmental Management Programme (EMPr) has been compiled and is attached to this report (see Appendix F). It is recommended that an Environmental Control Officer is appointed to monitor all activities associated with the proposed cultivation and report directly to the DEDTEA. Monitoring will ensure that the requirements of the EMPr are being correctly implemented.

Alternative A2

An Environmental Management Programme (EMPr) has been compiled and is attached to this report (see Appendix F). It is recommended that an Environmental Control Officer is appointed to monitor all activities associated with the proposed cultivation and report directly to the DEDTEA. Monitoring will ensure that the requirements of the EMPr are being correctly implemented.

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)

- The preferred site alternative is illustrated in Appendix A1. This site alternative will meet the need and desirability of the project and covers an area of 74.5ha;
- The preferred site alternative takes cognisance of potential Blue Crane nesting habitat and Wattled Crane foraging area;
- The Biodiversity Assessment recommended the removal of Com 1 from the Application. This has been adhered to and the proposed cultivation area has been reduced from 99 ha to 74.5 ha;
- The Biodiversity Assessment also concluded that the Ngongoni Veld present on site is degraded and unpalatable. No plant species of conservation concern were found;
- The Avifaunal Assessment did not highlight reasons for the proposed cultivation not to proceed, despite the presence of several endangered bird species on site;
- The Wetland Functional Assessment recommended the implementation of varying buffer widths on all wetland habitat on site;
- The Heritage Impact Assessment has been peer reviewed, as disputes revolved around the findings therein. It is still to be decided by Amafa KZN on the heritage value of the site in this regard;
- Agricultural production on the farm would increase, thereby improving profitability of the property;
- Should the recommendations of this report and the EMPr be implemented, the EAP is of the opinion that the potential impacts associated with the proposed activity can be largely avoided, and mitigated where these cannot be avoided altogether; and
- The EAP is of the opinion that this is the Preferred Alternative from an environmental perspective.

Alternative S2

- The alternative site is illustrated in Appendix A2. This site alternative will meet the need and desirability of the project and covers an area of approximately 99ha;
- The Alternative site **does not** takes cognisance of potential Blue Crane nesting habitat and Wattled Crane foraging area;
- The Biodiversity Assessment recommended the removal of Com 1 from the Application. This has been not adhered to;
- The Biodiversity Assessment also concluded that the Ngongoni Veld present on site is degraded and unpalatable. No species of conservation concern were found;
- The Avifaunal Assessment did not highlight reasons for the proposed cultivation not to proceed, despite the presence of several endangered bird species on site;
- The Wetland Functional Assessment recommended the implementation of varying buffer widths on all wetland habitat on site;
- The Heritage Impact Assessment has been peer reviewed, as disputes revolved around the findings therein. It is still to be decided by Amafa KZN on the heritage value of the site in this regard;
- Agricultural production on the farm would increase, thereby improving profitability of the property.
- The EAP is of the opinion that this Non-preferred Alternative does not take cognisance of avifaunal habitat and the requirement for wildlife corridors.

Alternative A1 (preferred alternative)

- The preferred technology alternative is the 'no till' or direct drilling method for the planting of maize crops;
- Agricultural production will increase as the proposed cultivation will increase the economic viability of the property;
- Alien vegetation encroachment may occur;
- Soil and vegetation disturbance will occur during harvesting as a result of machinery, but the impact will be limited due to this only occurring once or twice a year when necessary. With a sugarcane crop, soil disturbance only occurs once every 10 – 15 years;
- Faunal disturbance will occur during harvesting, but it will be an infrequent, short term impact;
- Species diversity may alter due to a the cultivation of mono-culture crops on site, however crops also provide foraging areas for endangered species;
- An EMPr has been drawn up and should be implemented during all phases of the development;

- Should the recommendations of this report and the EMPr be implemented, the EAP is of the opinion that the potential impacts associated with the proposed activity can be largely avoided, and where these cannot be avoided altogether, mitigated against; and
- The EAP is of the opinion that this is the Preferred Technology Alternative from an environmental perspective.

Alternative A2

N/A

No-go alternative (compulsory)

- The site would remain as it is in its current state;
- Stormwater run-off will not increase as the grassland remains undisturbed;
- The site would potentially continue to degrade due to limited funds being available for required levels of management;
- The site would continue to support the current fauna and flora on site; and
- Agricultural production would not increase.

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.

YES	~~NO~~

If "YES", please attach the draft EMPr as Appendix F 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:

- Fertiliser application rates must be strictly adhered to, and must be based on annual soil nutrient sampling;
- Top dressing with fertiliser should not be conducted until the site is well vegetated to reduce the surface run-off during rainfall events;
- Where possible, avoid applying fertiliser prior to forecasted large rainfall events;
- The Specialist Studies conducted recommend the following, should the proposed activity be granted Environmental Authorisation (please refer to Appendix D for full recommendations in the complete Specialist Study Reports):
  - **Biodiversity Assessment** recommended the exclusion of Com 1 due to the presence of Wattled Crane;
  - **Avifaunal Assessment** did not highlight reasons for the cultivation not to proceed;
  - **Wetland Assessment** has recommended appropriate buffers of varying widths on all wetland habitat;
  - **Heritage Impact Assessment** recommended the protection of the entire farm as a living heritage landscape. This has been disputed and the HIA has been peer reviewed. The peer review did not find any evidence to support the findings in the HIA. Furthermore, no archaeological relics were discovered on-site;
  - **Palaeontological Desktop Study** rated the palaeosensitivity as moderate. Cultivation can proceed provided the Applicant is aware of the potential to disturb fossils at depths greater than 1.5m. This depth will not be exceeded with the proposed cultivation activities.
- Where possible, initial ploughing should not be done prior to forecasted heavy rainfall events so as to limit soil erosion;
- It is however recommended, that initial ploughing be conducted after the first rains when the soil moisture content is elevated, to as to prevent potential sheet run-off and dust / wind erosion;
- Alien plant encroachment must be monitored and prevented as outlined in the EMPr;
- Mechanical removal of alien vegetation is preferred to the use of chemicals, as long as the disturbance to the soils are minimised;
- Loss of habitat and natural vegetation could be offset in other areas, pending agreements with the Applicant;
- Seed must be purchased from a reputable nursery / supplier and follow up alien vegetation control rigorous;
- Seed should be sown immediately after ploughing to prevent the land from lying fallow for the least amount of time;
- Machinery use should be limited only to the development footprint only;
- Care must be taken to impact the least amount of area possible when harvesting;
- The EMPr must include an alien vegetation management plan to mitigate any potential negative impacts (see Appendix F);
- The site should be monitored for signs of soil erosion. Should such signs be noted, immediate remedial action should be implemented as per the EMPr (Appendix F);
- The proposed cultivation will be conducted along contour lines, thus using natural run-off controls as per normal farming practices. Additionally, run-off control structures (grassed waterways) will also be incorporated on site;
- An EMPr has been compiled and is attached to this report (see Appendix F). It is recommended that an Environmental Control Officer is appointed to monitor all activities associated with the proposed cultivation and report directly to the DEDTEA. Monitoring will ensure that the requirements of the EMPr are being correctly implemented.

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