Gauteng Department of Agriculture and Rural Development (GDARD)

Basic Assessment Report in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, and the Environmental Impact Assessment Regulations, 2010 (Version 1)

List of all organs of state and State Departments where the draft report has been submitted, their full contact details and contact person

Kindly note that:

1. This **Basic Assessment Report** is the standard report required by GDARD in terms of the EIA Regulations, 2010.

2. This application form is current as of 2 August 2010. It is the responsibility of the EAP to ascertain whether subsequent versions of the form have been published or produced by the competent authority.

3. **A draft Basic Assessment Report must be submitted to all State Departments administering a law relating to a matter likely to be affected by the activity to be undertaken. The draft reports must be submitted to the relevant State Departments and on the same day, two CD's of draft reports must also be submitted to the Competent Authority (GDARD) with a signed proof of such submission of draft report to the relevant State Departments.**

4. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.

5. Selected boxes must be indicated by a cross and, when the form is completed electronically, must also be highlighted.

6. An incomplete report shall be rejected.

7. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.

8. Five (5) copies (3 hard copies and 2 CDs-PDF) of the final report and attachments must be handed in at offices of the relevant competent authority, as detailed below.

9. No faxed or e-mailed reports will be accepted. Only hand delivered or posted applications will be accepted.

10. Unless protected by law, and clearly indicated as such, all information filled in on this application will become public information on receipt by the competent authority. The applicant/EAP must provide any interested and affected party with the information contained in this application on request, during any stage of the application process.

DEPARTMENTAL DETAILS

Gauteng Department of Agriculture and Rural Development
Attention: Administrative Unit of the Sustainable Utilisation of the Environment (SUE) Branch
P.O. Box 8769
Johannesburg
2000

Administrative Unit of the Sustainable Utilisation of the Environment (SUE) Branch
18th floor Glen Cairn Building
73 Market Street, Johannesburg

Admin Unit telephone number: (011) 355 1345
Department central telephone number: (011) 355 1900

(For official use only)

File Reference Number:						
Application Number:						
Date Received:						

* Submission to State Department (Number 3 above)

Has a draft report for this application been submitted to all State Department administering a law relating to a matter likely to be affected as a result of this activity? **Yes**

Is a list of State Departments referred to above been attached to this report? **Yes**

if no, state reasons for not attaching the list.

SECTION A: ACTIVITY INFORMATION

1. ACTIVITY DESCRIPTION

Project title (must be the same name as per application form):

Holding 179 Willowglen Agricultural Holdings: **Proposed Equestria Extension 242**

Select the appropriate box

The application is for an upgrade of an existing development		The application is for a new development	X	Other, specify	

Describe the activity and associated infrastructure, which is being applied for, in detail

The proposed subject property (Holding 179 Willowglen Agricultural Holdings, the proposed Equestria Extension 242) for the establishment of a township consisting of 2 erven proposed to be zoned "Residential 2" and the other to be zoned "Public Open Space". Future land-use on the property will consist of low density residential development that will consist of one residential erf zoned with a density of 12 units per hectare (± 11 units), and one erf for the proposed Public Open Space, created in the 1:100 year flood line. The proposed Public Open Space on the northern boundary will help protect the natural environment created by the river / wetland.

Which Listing Notice is the activity listed under?

Listing Notice 1	X	Listing Notice 3	

If listed under Listing Notice 3, describe the Geographical Area triggering the activity and its regional, provincial, national & international significance

Does the activity also require authorisation in terms of legislation other than NEMA EIA process?

~~YES~~	**NO**

If yes, describe the legislation and the Competent Authority administering such legislation

If yes, have you applied for the authorisation(s)?	YES	NO
If yes, have you received approval(s)? (attach in appropriate appendix)	YES	NO

2. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

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

Title of legislation, policy or guideline:	Administering authority:	Promulgation Date:
National Environmental Management Act No. 107 of 1998 as amended.	National & Provincial	27 November 1998
National Water Act No. 36 of 1998	National & Provincial	26 August 1998
National Heritage resources Act No. 25 of 1999	National	28 April 1999

3. ALTERNATIVES

Describe the proposal and alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished. The determination of whether the 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.

The no-go option must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. **Do not** include the no go option into the alternative table below.

Note: 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.
Provide a description of the alternatives considered

No.	**Alternative type**, either alternative: site on property, properties, activity, design, technology, operational or other(provide details of "other")	**Description**
1	Proposal	The proposal makes provision for the development of **2 erven** proposed to be zoned **"Residential 2"** and the other to be zoned **"Public Open Space".** Future land-use on the property will consist of **low density residential development** that will consist of one residential erf zoned with a density of **12 units per hectare (± 11 units)**, and one erf for the **proposed Public Open Space**, created in the 1:100 year flood line. The site is situated in close proximity to Lynwood road (M6).Vehicular access will be obtained from Cura Avenue, adjacent to the western boundary of the subject property.
2	Alternative	The proposal makes provision for the development of 2 erven proposed to be zoned "Residential 2" and the other to be zoned "Public Open Space". Future land-use on the property will consist of a low density residential development that will consist of one residential erf zoned with a density of **14 units per hectare**, and one erf for the proposed Public Open Space, created in the 1:100 year flood line. The site is situated in close proximity to Lynwood road (M6).Vehicular access will be obtained from Cura Avenue, adjacent to the western boundary of the subject property.

In the event that no alternative(s) has/have been provided, a motivation must be included in the table below.

NOTE: The numbering in the above table must be consistently applied throughout the application report and process

4. PHYSICAL SIZE OF THE ACTIVITY

Indicate the total physical size (footprint) of the proposal as well as alternatives. Footprints are to include all new infrastructure (roads, services etc), impermeable surfaces and landscaped areas:

	Size of the activity:
Proposed activity	2.69ha
Alternatives:	
Alternative 1 (if any)	2.69ha
Alternative 2 (if any)	
	Ha/ m^2

or, for linear activities:

	Length of the activity:
Proposed activity	
Alternatives:	
Alternative 1 (if any)	
Alternative 2 (if any)	
	k/km

Indicate the size of the site(s) or servitudes (within which the above footprints will occur):

	Size of the site/servitude:
Proposed activity	2.69ha
Alternatives:	
Alternative 1 (if any)	2.69ha
Alternative 2 (if any)	
	Ha/m^2

5. SITE ACCESS

Proposal

Does ready access to the site exist, or is access directly from an existing road?	**YES**	~~NO~~
If NO, what is the distance over which a new access road will be built		m

Describe the type of access road planned:

Access to the site will be obtained from Cura Avenue, adjacent to the western boundary of the site.

Include the position of the access road on the site plan.

Alternative 1

Does ready access to the site exist, or is access directly from an existing road?	**YES**	~~NO~~
If NO, what is the distance over which a new access road will be built		m

Describe the type of access road planned:

Access to the site will be obtained from Cura Avenue, adjacent to the western boundary of the site.

Include the position of the access road on the site plan.

Alternative 2

Does ready access to the site exist, or is access directly from an existing road?	YES	NO
If NO, what is the distance over which a new access road will be built		m

Describe the type of access road planned:

Include the position of the access road on the site plan.

PLEASE NOTE: Points 6 to 8 of Section A must be duplicated where relevant for alternatives

Section A 6-8 has been duplicated **0** Number of times

(only complete when applicable)

6. SITE OR ROUTE PLAN

A detailed site or route (for linear activities) plan(s) must be prepared for each alternative site or alternative activity. It must be attached as **Appendix A** to this document. The site or route plans must indicate the following:

- the scale of the plan, which must be at least a scale of 1:2000 (scale can not be larger than 1:2000 i.e. scale can not be 1:2500 but could where applicable be 1:1500)
- the property boundaries and numbers of all the properties within 50m of the site;
- the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
- the exact position of each element of the application as well as any other structures on the site;

- the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, septic tanks, storm water infrastructure and telecommunication infrastructure;
- walls and fencing including details of the height and construction material;
- servitudes indicating the purpose of the servitude;
- sensitive environmental elements on and within 100m of the site or sites including (but not limited thereto):
    - Rivers and wetlands;
    - the 1:100 and 1:50 year flood line;
    - ridges;
    - cultural and historical features;
    - areas with indigenous vegetation (even if it is degraded or infested with alien species);
- for gentle slopes the 1m 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
- the positions from where photographs of the site were taken.
- Where a watercourse is located on the site at least one cross section of the water course must be included (to allow the 32m position from the bank to be clearly indicated)

7. SITE PHOTOGRAPHS

Colour photographs from the center 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 the appropriate **Appendix B.** It should be supplemented with additional photographs of relevant features on the site, where applicable.

8. FACILITY ILLUSTRATION

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

SECTION B: DESCRIPTION OF RECEIVING ENVIRONMENT

Note: Complete Section B for the proposal and alternative(s) (if necessary)

Further:

Instructions for completion of Section B for linear activities

1) For linear activities (pipelines etc) it may be necessary to complete Section B for each section of the site that has a significantly different environment.
2) Indicate on a plan(s) the different environments identified
3) Complete Section B for each of the above areas identified
4) Attach to this form in a chronological order
5) Each copy of Section B must clearly indicate the corresponding sections of the route at the top of the next page.

Section B has been duplicated for sections of the route | 0 | times

Instructions for completion of Section B for location/route alternatives

1) For each location/route alternative identified the entire Section B needs to be completed
2) Each alterative location/route needs to be clearly indicated at the top of the next page
3) Attach the above documents in a chronological order

Section B has been duplicated for location/route alternatives | 0 | times
(complete only when appropriate)

Instructions for completion of Section B when both location/route alternatives and linear activities are applicable for the application

Section B is to be completed and attachments order in the following way

- All significantly different environments identified for Alternative 1 is to be completed and attached in a chronological order; then
- all significantly different environments identified for Alternative 2 is to be completed and attached chronological order, etc.

Section B - Section of Route | | (complete only when appropriate for above)

Section B – Location/route Alternative No. | | (complete only when appropriate for above)

1. PROPERTY DESCRIPTION

Property description: Holding 179 Willowglen Agricultural Holdings: **Proposed Equestria Extension 242**

(Farm name, portion etc.)

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

Alternative:	**Latitude (S):**	**Longitude (E):**
	S25.764700	E28.342590

In the case of linear activities:

Alternative:	**Latitude (S):**	**Longitude (E):**
• Starting point of the activity	°	°
• Middle point of the activity	°	°

• End point of the activity	°	°

For route alternatives that are longer than 500m, please provide co-ordinates taken every 250 meters along the route and attached in the appropriate Appendix

Addendum of route alternatives attached	

3. GRADIENT OF THE SITE

Indicate the general gradient of the site.

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

4. LOCATION IN LANDSCAPE

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

Ridgeline	Plateau	Side slope of hill/ridge	Valley	**Plain**	Undulating plain/low hills	River front

5. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

a) Is the site located on any of the following?

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

(Information in respect of the above will often be available at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

b) are any caves located on the site(s) YES **NO**

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S):	**Longitude (E):**
°	°

c) are any caves located within a 300m radius of the site(s) YES **NO**

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S):	**Longitude (E):**
°	°

d) are any sinkholes located within a 300m radius of the site(s) YES **NO**

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S):	**Longitude (E):**
°	°

If any of the answers to the above are "YES" or "unsure", specialist input may be requested by the Department

6. AGRICULTURE

Does the site have high potential agriculture as contemplated in the Gauteng Agricultural Potential Atlas (GAPA 3)?	YES	**NO**

Please note: The Department may request specialist input/studies in respect of the above.

7. GROUNDCOVER

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

Indicate the types of groundcover present on the site and include the estimated percentage found on site

Natural veld - good condition % = 0	Natural veld with scattered aliens % =0	Natural veld with heavy alien infestation % =5	Veld dominated by alien species % =50	Landscaped (vegetation) % =10
Sport field % =0	Cultivated land % =0	Paved surface (hard landscaping) % =5	Building or other structure % =20	Bare soil % =10

Please note: The Department may request specialist input/studies depending on the nature of the groundcover and potential impact(s) of the proposed activity/ies.

Are there any rare or endangered flora or fauna species (including red list species) present on the site	YES	**NO**

If YES, specify and explain:

Are there any rare or endangered flora or fauna species (including red list species) present within a 200m (if within urban area as defined in the Regulations) or within 600m (if outside the urban area as defined in the Regulations) radius of the site.	YES	**NO**

If YES, specify and explain:

Are there any special or sensitive habitats or other natural features present on the site?	YES	**NO**

If YES, specify and explain:

Was a specialist consulted to assist with completing this section	**YES**	NO

If yes complete specialist details

Name of the specialist:	SAS		
Qualification(s) of the specialist:	Ecological and aquatic specialist		
Postal address:	Po box 751779		
Postal code:	2047		
Telephone:	011 616 7893	Cell:	
E-mail:	nelanie@sasaenvironmental.co.za	Fax:	011 615 6240

Are any further specialist studies recommended by the specialist?	**YES**	NO
If YES, specify:	Geotechnical report Basic Heritage Scan	
If YES, is such a report(s) attached?	**YES**	NO

If YES list the specialist reports attached below

Appendix G
Geotechnical report – 2006
Basic Heritage Scan - 2012

Signature of specialist: Digital signature Date: 2012/07/09

Additional Information:

1. Wetland delineation and Present Ecological Status of the subject property:

- A riverine, lower intermittent, aquatic bed wetland, running from east to west, was identified on the study area.
- The study area falls within the Bushveld Basin Ecoregion, and also falls within the A23A quaternary catchment which is classified as a Class C system and is targeted to be managed as a Class B system.
- The wetland function and service provision assessment indicated a low level of ecological function and service provision.
- The wetland feature's present ecological state was determined to fall within class E – Severely Modified. The ecological management class determined by the *South African Wetland Assessment Classification System* is C – Moderately Modified.
- No buffer zone is recommended, but the wetland area must be rehabilitated and no activities are to infringe upon the wetland boundary in order to enhance the Present Ecological State and to ultimately achieve the ecological management class determined by the *South African Wetland Assessment Classification System,* sections above.

Red / Orange Data Listed Species:

- No red or orange data listed flora and fauna species were found during the assessment.

Recommendations:

- A rehabilitation plan must be developed with focus on bank stabilisation, erosion control and alien vegetation removal.
- No infrastructure development is to infringe upon the wetland boundary.
- The duration of impacts on the system should be minimised as far as possible by ensuring that the duration of time in which flow alteration and sedimentation will take place is minimised.
- During the construction phase, no vehicles should be allowed to indiscriminately drive through the wetland and areas.
- No dumping of waste should take place within the wetland areas.
- If any spills occur, they should be immediately cleaned up.
- For a minimum period of one year after construction, active management of the rehabilitated areas should take place to remove any recruited alien vegetation.

Conclusion:

- After conclusion of the biodiversity assessment it is the opinion of the ecologists that the site can be developed provided that the recommendations are adhered to.

Please refer to **Appendix G** for the **Wetland delineation and PES Assessment**.

2. Geotechnical report:

- Plot 179, Willowglen in Pretoria is underlain by an estimated 2.0 – 3.0m thick, stiff, highly active clay with estimated total movement of between 80-150mm (Zone A) and very stiff medium active clay with estimated movement of between 12-30mm (Zone B).
- However, about 80% of the zone A area is covered with 0.3-1.5m thick unconsolidated fill that consist mainly of builders, rubble, tree trunks and spoiled soil with boulders.
- The P-value of the in situ active clay (under pressure moisture conditions) is 500kPa.
- The slicken sided surfaces on the underlying clay, is indicative of prior movement due to moisture changes that occurred in the past.
- Water seepage was recorded in most of the test pits excavated in the zone A area, where unconsolidated fill covers the in situ profile. This waster represents “trapped” surface water, and not the natural ground water or a perched table.
- The upper fill is unstable when exposed in excavations while instability also occurs where water seepage takes place. However, no instability was recorded in test pits 4 and 8, excavated in zone B, where imported fill and water seepage was absent.

Recommendations:

Residential development can only take place once one of the following alternatives has been considered and approved by the Local Authority:

- Alternative 1

Remove all unconsolidated fill from the site, mainly in zone A area.
Mark out the 1:50 and 1:100 year flood line and develop only above the line as approved by the local authority.
All structures in zone A area should be designed to accommodate 150mm total movement while structures in the zone B area should be designed to accommodate 30mm total movement.

- Alternative 2

Develop the zone A area as a parkland. No structures should be developed in this area.
Allow residential development on the zone B area only where is falls above the flood line approved by the Local Authority.
All structures in zone B area should be designed to accommodate 30mm total movement.

3. Heritage report:

- The proposed development area is a flat piece of land mainly covered by grass. A single modern house build in the 1970/80`s is on the site. The existing house will be incorporate in the new development.
- No archaeological sites or graves are present on the site.

Conclusion:

- There are no important cultural heritage resources or graves present on the proposed development site.

Recommendations:

- There is no objection to the proposed development from a cultural history resources point of view.

- If during construction any cultural heritage resources or graves are unearthed all work has to be stopped until the site has been inspected and mitigated by a cultural heritage practitioner

Please note; If more than one specialist was consulted to assist with the filling in of this section then this table must be appropriately duplicated

8. LAND USE CHARACTER OF SURROUNDING AREA

Using the associated number of the relevant current land use or prominent feature from the table below, fill in the position of these land-uses in the vacant blocks below which represent a 500m radius around the site

1. Vacant land	2. River, stream, wetland	3. Nature conservation area	4. Public open space	5. Koppie or ridge
6. Dam or reservoir	7. Agriculture	8. Low density residential	9. Medium to high density residential	10. Informal residential
11. Old age home	12. Retail	13. Offices	14. Commercial & warehousing	15. Light industrial
16. Heavy industrial[AN]	17. Hospitality facility	18. Church	19. Education facilities	20. Sport facilities
21. Golf course/polo fields	22. Airport[N]	23. Train station or shunting yard[N]	24. Railway line[N]	25. Major road (4 lanes or more)[N]
26. Sewage treatment plant[A]	27. Landfill or waste treatment site[A]	28. Historical building	29. Graveyard	30. Archeological site
31. Open cast mine	32. Underground mine	33.Spoil heap or slimes dam[A]	34. Small Holdings	
Other land uses (describe):				

NOTE: Each block represents an area of 250m X250m

NORTH

9	**9**	**9**	**9**	**31**
9	**34**	**34**	**34**	**31**
9	**34**		**34**	**8**
9	**34**	**9**	**2**	**9**
9	**9**	**9**	**2**	**9**

WEST EAST

SOUTH

= Site

Note: More than one (1) Land-use may be indicated in a block

Please note: The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed activity/ies. Specialist reports that look at health & air quality and noise impacts may be required for any feature above and in particular those features marked with an "[A]" and with an "[N]" respectively.

Have specialist reports been attached	YES	**NO**

If yes indicate the type of reports below

9. SOCIO-ECONOMIC CONTEXT

Describe the existing social and economic characteristics of the area and the community condition as baseline information to assess the potential social, economic and community impacts.

The subject property falls within the Eastern Region of the Tshwane Regional Spatial Development Framework. According to the Eastern RSDF, the only area that has been development potential in the region is the Willowglen / Equestria area. Most of the region has developed up to the eastern border of the Municipality, and only infill and densification should take place.

Because of the proposed nodal development at the intersection of the N4 and Hans Strijdom Drive, the rest of the Willowglen area has been identified for residential developments. The area around the subject property has mostly been developed in the past few years as residential areas and range in densities.

A Spatial Development framework for Willowglen / Equestria has been approved in the City of Tshwane Metropolitan Municipality in August 2003. In the SDF, the area is earmarked as a strategic area for residential densification in support of the new regional node on the north-western corner of the N4 and Hans Strijdom Drive intersection. Accordingly, the RSDF and the SDF for Willowglen / Equestria supports the residential development with a density of up to 25 units per hectare on all remaining agricultural holdings west of the Vergelegen Avenue

10. CULTURAL/HISTORICAL FEATURES

Please be advised that if section 38 of the National Heritage Resources Act 25 of 1999 is applicable to your proposal or alterantives, then you are requested to furnish this Department with written comment from the South African Heritage Resource Agency (SAHRA) – Attach comment in appropriate annexure

38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-

(a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;

(b) the construction of a bridge or similar structure exceeding 50m in length;

(c) any development or other activity which will change the character of a site-

(i) exceeding 5 000 m2 in extent; or

(ii) involving three or more existing erven or subdivisions thereof; or

(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or

(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;

(d) the re-zoning of a site exceeding 10 000 m2 in extent; or

(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

Are there any signs of culturally (aesthetic, social, spiritual, environmental) 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 close (within 20m) to the site?	YES	**NO**

If YES, explain:

If uncertain, the Department may request that specialist input be provided to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist if one was already appointed:

A specialist was has been appointed to conduct a site assessment. The proposed development area is a flat piece of land mainly covered by grass. A single modern house build in the 1970/80`s is on the site. The existing house will be incorporate in the new development. No archaeological sites or graves are present on the site.

The specialist findings have been send to SAHRA and are awaiting feedback.

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)? If yes, please attached the comments from SAHRA in the appropriate Appendix	YES	**NO**

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT

The Environmental Assessment Practitioner must follow any relevant guidelines adopted by the competent authority in respect of public participation and must at least –

1(a) Fix a site notice at a conspicuous place, on the boundary of a property where it is intended to undertake the activity which states that an application will be submitted to the competent authority in terms of these regulations and which provides information on the proposed nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations on the application may be made;

1(b) inform landowners and occupiers of adjacent land of the applicant's intention to submit an application to the competent authority;

1(c) inform landowners and occupiers of land within 100 metres of the boundary of the property where it is proposed to undertake the activity and whom may be directly affected by the proposed activity of the applicant's intention to submit an application to the competent authority;

1(d) inform the ward councillor and any organisation that represents the community in the area of the applicant's intention to submit an application to the competent authority;

1(e) inform the municipality which has jurisdiction over the area in which the proposed activity will be undertaken of the applicant's intention to submit an application to the competent authority; and

1(f) inform any organ of state that may have jurisdiction over any aspect of the activity of the applicant's intention to submit an application to the competent authority; and

1(g) place an advertisement in one local newspaper and any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of these regulations.

2. LOCAL AUTHORITY PARTICIPATION

Local authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of the application at least thirty (30) calendar days before the submission of the application to the competent authority (GDARD).

Has any comment been received from the local authority?	YES	**NO**

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

If "NO" briefly explain why no comments have been received

The draft BA report has been circulated to the local department (Tshwane Municipal offices) and to the Department of Water Affairs (DWA) for comments and to confirm that the GN route will be followed within DWA and no Water Use Licence (WUL) is necessary. Comments are Pending.

3. CONSULTATION WITH OTHER STAKEHOLDERS

Any stakeholder that has a direct interest in the activity, site or property, such as servitude holders and service providers, should be informed of the application at least thirty (30) calendar days before the submission 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):

Two I&AP's have registered, with the following feedback / requests:

SAHRA - SAHRA APM Unit comment relating to the above mentioned development - SAHRA document. SAHRA requested that a letter from a specialist be sent for their review and that exception from a full investigation be accepted.

ESKOM - The application of the proposed development is not affected by Eskom

Draft Basic Assessment Report:

The report was made available for public comment from 24 July 2012 to 24 August 2012.

Additional Information:

Notices were placed on site at strategic places to inform I&APs of the environmental process for the proposed development on 29 June 2011.
Advertisements were placed in the following newspapers to inform I&APs of the environmental process for the proposed development:
"Star Newspaper" on 29 June 2011
A Background Information Document (BID) that explains the proposed activity and the location of the site was prepared and distributed to adjacent landowners (hand delivery). These I&APs were encouraged to respond to the BID in order to compile an I&AP list.
The ward councillor, Mr Sam Moimane, was informed of the proposed development via fax on 01 July 2011.

Please refer to Appendix E – Public Participation Report

If "NO" briefly explain why no comments have been received

4. GENERAL PUBLIC PARTICIPATION REQUIREMENTS

The Environmental Assessment Practitioner must ensure that the public participation is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees and ratepayers associations. 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.

The practitioner must record all comments and respond to each comment of the public / interested and affected party before the application is submitted. The comments and responses must be captured in a Comments and Responses Report as prescribed in the regulations and be attached to this application.

5. APPENDICES FOR PUBLIC PARTICIPATION

All public participation information is to be attached in the appropriate Appendix. The information in this Appendix is to be ordered as detailed below

Appendix 1 – Proof of site notice
Appendix 2 – Written notices issued to those persons detailed in 1(b) to 1(f) above
Appendix 3 – Proof of newspaper advertisements
Appendix 4 –Communications to and from persons detailed in Point 2 and 3 above
Appendix 5 – Minutes of any public and/or stakeholder meetings
Appendix 6 - Comments and Responses Report
Appendix 7 –Comments from I&APs on Basic Assessment (BA) Report
Appendix 8 –Comments from I&APs on amendments to the BA Report
Appendix 9 – Copy of the register of I&APs
Appendix 10 – Comments from I&APs on the application
Appendix 11 - Other

SECTION D: RESOURCE USE AND PROCESS DETAILS

Note: Section D is to be completed for the proposal and alternative(s) (if necessary)

Instructions for completion of Section D for alternatives

1) For each alternative under investigation, where such alternatives will have different resource and process details (e.g. technology alternative), the entire Section D needs to be completed
4) Each alterative needs to be clearly indicated in the box below
5) Attach the above documents in a chronological order

Section D has been duplicated for alternatives (complete only when appropriate) | **0** | times

Section D Alternative No. | "insert alternative number" | (complete only when appropriate for above)

1. WASTE, EFFLUENT, AND EMISSION MANAGEMENT

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?	150m³	

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

All the building rubble, not required for filling is to be removed to a permitted landfill site

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

The material is to be removed to a permitted landfill site

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 (describe)?

Has the municipality or relevant service provider confirmed that sufficient air space exists for treating/disposing of the solid waste to be generated by this activity?	YES	**NO**

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

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

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation?	YES	**NO**

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

Is the activity that is being applied for a solid waste handling or treatment facility?	YES	**NO**

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.

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

Liquid effluent (other than domestic sewage)

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	
If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the liquid effluent to be generated by this activity(ies)?	YES	**NO**
Will the activity produce any effluent that will be treated and/or disposed of on site?	Yes	**NO**
If yes, what estimated quantity will be produced per month?	m³	

If yes describe the nature of the effluent and how it will be disposed.

Note that if effluent is to be treated or disposed on site the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA

Will the activity produce effluent that will be treated and/or disposed of at another facility?	YES	NO

If yes, provide the particulars of the facility:

Facility name:			
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:

Liquid effluent (domestic sewage)

Will the activity produce domestic effluent that will be disposed of in a municipal sewage system?	**YES**	NO
If yes, what estimated quantity will be produced per month?		$10m^3$
If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the domestic effluent to be generated by this activity(ies)?	YES	**NO**
Will the activity produce any effluent that will be treated and/or disposed of on site?	YES	**NO**

If yes describe how it will be treated and disposed off.

Emissions into the atmosphere

Will the activity release emissions into the atmosphere?	YES	**NO**
If yes, is it controlled by any legislation of any sphere of government?	YES	**NO**

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

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

During construction dust emissions will take place. Mitigation measure and recommendations will be described in the EMPR document to minimize this impact.

2. WATER USE

Indicate the source(s) of water that will be used for the activity

Municipal	~~Directly from 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: liters

If Yes, please attach proof of assurance of water supply, e.g. yield of borehole, in the appropriate Appendix

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

If yes, list the permits required

If yes, have you applied for the water use permit(s)?	YES	NO
If yes, have you received approval(s)? (attached in appropriate appendix)	YES	NO

3. POWER SUPPLY

Please indicate the source of power supply eg. Municipality / Eskom / Renewable energy source

Municipality

If power supply is not available, where will power be sourced from?

Solar power

4. ENERGY EFFICIENCY

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

Compact fluorescent lights (CFL) will be used for non-security purposes. All of the houses will be fitted with CFL lighting when built. Future buyers will be informed of the reason for this by the developer and or his representatives. The residents will also be encouraged to replace any burnt out bulbs with like bulbs. Roofs will be insulated which will ensure a reduction in heating and cooling requirements. The use of time activated switches for geysers and other high energy utilising devices.

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

N/A

SECTION E: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2006, 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

Summarise the issues raised by interested and affected parties.

SAHRA - SAHRA APM Unit comment relating to the above mentioned development - SAHRA document. SAHRA requested that a letter from a specialist be sent for their review and that exception from a full investigation be accepted.
ESKOM - The application of the proposed development is not affected by Eskom

Summary of response from the practitioner to the issues raised by the interested and affected parties
(A full response must be provided in the Comments and Response Report that must be attached to this report):

SAHRA - The document was noted and recommended that a Heritage Scan be done of the above mentioned development.
ESKOM - The response was noted and will form part of the Basic Assessment Process Documentation

2. IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION AND OPERATIONAL PHASE

Briefly describe the methodology utilised in the rating of significance of impacts

In order for the EAP to allow for sufficient consideration of all environmental impacts, impacts were assessed using a common, defensible method of assessing significance that will enable comparisons to be made between risks/impacts and will enable authorities, stakeholders and the client to understand the process and rationale upon which risks/impacts have been assessed. The method to be used for assessing risks/impacts is outlined in the sections below.

- The first stage of risk/impact assessment is the identification of environmental activities, aspects and impacts.
- The significance of the impact is then assessed by rating each variable numerically according to the defined criteria
- The model outcome of the impacts was then assessed in terms of impact certainty and consideration of available information.

Refer to **Appendix H – EMPR** for more potential impacts within each phase of the development

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the construction phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

Proposal

Potential impacts:	**Significance rating of impacts:**	**Proposed mitigation:**	**Significance rating of impacts after mitigation:**
Site clearing	*Medium*	• Clearing of site only where needed. • Careful and good practices will ensure that erosion will be kept at bay, during construction	*Low*
Fauna and flora disturbances	*Low*	• No snaring / hunting • Environmental awareness training – construction workers • No clearing of vegetation that is not approved by Environmental Control Officer • No wood harvesting • Existing vegetation to be retained as far as possible • A large private open space will be retained for increased biodiversity	*Very low*

Alien invasive plant species	*Medium*	• Site dominated by exotic vegetation. Adhere to EMPR	*Low*
Encroachment on wetland area	*Medium-high*	• Ensure that all construction activities take the wetland boundaries into account. No activities are to infringe upon the wetland boundaries unless absolutely unavoidable. • Sensitive wetland features should not be included in the development planning and should be marked to ensure that no construction activity fringe upon these areas. • Demarcate all wetland boundaries with pegs and danger tape; • No vehicles are to enter or drive through demarcated areas; • No construction related activities are to infringe upon the wetland boundaries; • No dumping of waste or any other materials is allowed within these areas; and • Ensure that construction waste and effluent do not affect the wetland boundaries	*Low*
Development within 1:50 and 1:100 year flood line	*High*	• No mitigation possible as construction will take place within the flood lines • The channel is badly silted which could impact negatively on its capacity	*High*
Vehicles entering sensitive area	*Medium*	• Ensure that wetland areas are clearly marked and no vehicles indiscriminately drive through or encroach upon these areas. If disturbance is unavoidable, ensure that these areas are suitably rehabilitated	*Low*
Ineffective rehabilitation	*Medium-high*	• Commission a suitably qualified specialist to design and implement a comprehensive rehabilitation plan. During the development of the rehabilitation plan, a suitably qualified wetland ecologist should be included in the team developing the plan to ensure that wetland rehabilitation targets are met. • Identify activities, which are causing erosion and incision of any of the wetland features and mitigate these impacts immediately. • Obtain relevant legislative approval for any activities to be undertaken within the wetland features to rectify excessive erosion. • Reprofiling of the banks of disturbed drainage areas to a maximum gradient of 1:3 to ensure bank stability. • Reinforce banks and drainage features where necessary with	*Low*

		gabions, reno mattresses and geotextiles. • Reseed any areas where earthworks have taken place with indigenous grasses to prevent further erosion.	
Wetland loss of ecological services	*Medium*	• Ensure that effective rehabilitation takes place in order to restore wetland service provision. • Ensure that all activities take the wetland boundaries into account. • Ensure that project related waste and effluent do not affect the wetland areas.	*Low*
Soil compaction	*Medium*	• Designated routes in areas already disturbed • Compacted areas to be ripped and re-seeded • Access clearly marked • Fenced erected around areas that are off limits	*Low*
Contamination of soil during construction phase	*Medium*	• Materials such as fuel, oil, paint, herbicide and insecticides shall be stored under lock and key and in well-ventilated areas. • These materials shall be stored in a bunded area with adequate containment (at least 1.5 times the volume of the fuel) for potential spills and leaks. • Sufficient care shall be taken when handling these materials so that no pollution occurs. If pollution occurs, it shall immediately be dealt with in the prescribed manner so that the environment is not damaged in any way and reported to the Engineer. • Construction only to take place in demarcated area. • Storage of potentially dangerous materials should be above 1-100 year flood line	*Low*
Visual impact due to construction activities, including aspects such as air pollution related to dust	*Low*	• Dust liberation and watering of surfaces	*Very low*
Erosion during construction operations	*Medium-low*	• Runoff management • Susceptible surfaces clad with biodegradable material • No vehicle access in wet areas • Construction of swales • Large areas to be followed by planting of indigenous veld mix • Areas to be cleared to be kept to a minimum	*Low*
Loss of valuable topsoil	*Medium-high*	• Stripping of topsoil prior to construction and re-use during rehabilitation	*Low*
Waste during construction activities	*Medium-high*	• No dumping of waste or any other materials is allowed within these	*Medium-low*

		areas; and • Ensure that construction waste and effluent do not affect the wetland boundaries	
Increased traffic due to construction activities – specifically construction vehicles and deliveries,	*Low*	• Delivery during off-peak periods as far as possible	*Very low*
Ecological effects of pollution	*Medium-high*	• A concerted effort to control pollution should take place in order to improve the water quality in the system	*Medium*
Safety and Security risk - construction	*Medium*	• Adherence to EMPR	*Low*
Storm water management	*Medium*	• Adhere to EMPR	*Low*

Alternative 1

Potential impacts:	**Significance rating of impacts:**	**Proposed mitigation:**	**Significance rating of impacts after mitigation:**
Site clearing	*Medium*	• Clearing of site only where needed. • Careful and good practices will ensure that erosion will be kept at bay, during construction	*Low*
Fauna and flora disturbances	*Low*	• No snaring / hunting • Environmental awareness training – construction workers • No clearing of vegetation that is not approved by Environmental Control Officer • No wood harvesting • Existing vegetation to be retained as far as possible • A large private open space will be retained for increased biodiversity	*Very low*
Alien invasive plant species	*Medium*	• Site dominated by exotic vegetation. Adhere to EMPR	*Low*
Encroachment on wetland area	*Medium-high*	• Ensure that all construction activities take the wetland boundaries into account. No activities are to infringe upon the wetland boundaries unless absolutely unavoidable. • Sensitive wetland features should not be included in the development planning and should be marked to ensure that no construction activity fringe upon these areas. • Demarcate all wetland boundaries with pegs and danger tape; • No vehicles are to enter or drive through demarcated areas; • No construction related activities are to infringe upon the wetland boundaries; • No dumping of waste or any other materials is allowed within these areas; and • Ensure that construction waste and	*Low*

		effluent do not affect the wetland boundaries	
Development within 1:50 and 1:100 year flood line	*High*	• No mitigation possible as construction will take place within the flood lines • The channel is badly silted which could impact negatively on its capacity	*High*
Vehicles entering sensitive area	*Medium*	• Ensure that wetland areas are clearly marked and no vehicles indiscriminately drive through or encroach upon these areas. If disturbance is unavoidable, ensure that these areas are suitably rehabilitated	*Low*
Ineffective rehabilitation	*Medium-high*	• Commission a suitably qualified specialist to design and implement a comprehensive rehabilitation plan. During the development of the rehabilitation plan, a suitably qualified wetland ecologist should be included in the team developing the plan to ensure that wetland rehabilitation targets are met. • Identify activities, which are causing erosion and incision of any of the wetland features and mitigate these impacts immediately. • Obtain relevant legislative approval for any activities to be undertaken within the wetland features to rectify excessive erosion. • Reprofiling of the banks of disturbed drainage areas to a maximum gradient of 1:3 to ensure bank stability. • Reinforce banks and drainage features where necessary with gabions, reno mattresses and geotextiles. • Reseed any areas where earthworks have taken place with indigenous grasses to prevent further erosion.	*Low*
Wetland loss of ecological services	*Medium*	• Ensure that effective rehabilitation takes place in order to restore wetland service provision. • Ensure that all activities take the wetland boundaries into account. • Ensure that project related waste and effluent do not affect the wetland areas.	*Low*
Soil compaction	*Medium*	• Designated routes in areas already disturbed • Compacted areas to be ripped and re-seeded • Access clearly marked • Fenced erected around areas that are off limits	*Low*
Contamination of soil during construction phase	*Medium*	• Materials such as fuel, oil, paint, herbicide and insecticides shall be stored under lock and key and in well-	*Low*

		ventilated areas. • These materials shall be stored in a bunded area with adequate containment (at least 1.5 times the volume of the fuel) for potential spills and leaks. • Sufficient care shall be taken when handling these materials so that no pollution occurs. If pollution occurs, it shall immediately be dealt with in the prescribed manner so that the environment is not damaged in any way and reported to the Engineer. • Construction only to take place in demarcated area. • Storage of potentially dangerous materials should be above 1-100 year floodline	
Visual impact due to construction activities, including aspects such as air pollution related to dust	*Low*	• Dust liberation and watering of surfaces	*Very low*
Erosion during construction operations	*Medium-low*	• Runoff management • Susceptible surfaces clad with biodegradable material • No vehicle access in wet areas • Construction of swales • Large areas to be followed by planting of indigenous veld mix • Areas to be cleared to be kept to a minimum	*Low*
Loss of valuable topsoil	*Medium-high*	• Stripping of topsoil prior to construction and re-use during rehabilitation	*Low*
Waste during construction activities	*Medium-high*	• No dumping of waste or any other materials is allowed within these areas; and • Ensure that construction waste and effluent do not affect the wetland boundaries	*Medium-low*
Increased traffic due to construction activities – specifically construction vehicles and deliveries,	*Low*	• Delivery during off-peak periods as far as possible	*Very low*
Ecological effects of pollution	*High*	• A concerted effort to control pollution should take place in order to improve the water quality in the system	*Medium*
Safety and Security risk - construction	*Medium*	• Adherence to EMPR	*Low*
Storm water management	*High*	• Adhere to EMPR	*Low*

Alternative 2

Potential impacts:	**Significance rating of impacts:**	**Proposed mitigation:**	**Significance rating of impacts after mitigation:**

List any specialist reports that were used to fill in the above tables. Such reports are to be attached in the appropriate Appendix.

3. IMPACTS THAT MAY RESULT FROM THE DECOMISSIONING AND CLOSURE PHASE

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the decommissioning and closure phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

Proposal

Potential impacts:	Significance rating of impacts:	Proposed mitigation:	Significance rating of impacts after mitigation:
Construction Camp	**Medium-low**	• All structures of the construction camp are to be removed from the site. This includes all hard surfaces that need to be ripped. The area should be inspected for spills such as oil, paint and if any are found need to be disposed of accordingly and re-vegetated / landscaped /rehabilitated as prescribed. The contractor must arrange the cancellation of all temporary services such as the chemical toilets, waste receptacles, water and electricity. All imported material needs to be removed by the contractor should there be any remaining re-use for it.	**Low**
Rehabilitation management	**Medium-high**	• Once construction has been completed on site and all excess material has been removed, the disturbed areas must be rehabilitated. If the area was badly damaged, re-seeding must be done and fencing in of the area must be considered. • Such areas must be rehabilitated to their natural state. Any spilled concrete must be removed and soil compacted during construction must be ripped, leveled and re-vegetated. • Re-vegetation of disturbed surfaces should occur immediately after construction activities are completed. • The contractor should commence rehabilitation of exposed soil surfaces as soon as practical after completion of earthworks.	**Low**

Alternative 1

Potential impacts:	Significance rating of impacts:	Proposed mitigation:	Significance rating of impacts after mitigation:
Construction Camp	**Medium-low**	• All structures of the construction camp	**Low**

		are to be removed from the site. This includes all hard surfaces that need to be ripped. The area should be inspected for spills such as oil, paint and if any are found need to be disposed of accordingly and re-vegetated / landscaped /rehabilitated as prescribed. The contractor must arrange the cancellation of all temporary services such as the chemical toilets, waste receptacles, water and electricity. All imported material needs to be removed by the contractor should there be any remaining re-use for it.	
Rehabilitation management	**Medium-high**	• Once construction has been completed on site and all excess material has been removed, the disturbed areas must be rehabilitated. If the area was badly damaged, re-seeding must be done and fencing in of the area must be considered. • Such areas must be rehabilitated to their natural state. Any spilled concrete must be removed and soil compacted during construction must be ripped, leveled and re-vegetated. • Re-vegetation of disturbed surfaces should occur immediately after construction activities are completed. • The contractor should commence rehabilitation of exposed soil surfaces as soon as practical after completion of earthworks.	**Low**

Alternative 2

Potential impacts:	Significance rating of impacts:	Proposed mitigation:	Significance rating of impacts after mitigation:

List any specialist reports that were used to fill in the above tables. Such reports are to be attached in the appropriate Appendix.

4. CUMULATIVE IMPACTS

Describe potential impacts that, on their own may not be significant, but is significant when added to the impact of other activities or existing impacts in the environment. Substantiate response:

- The construction site may serve as a source of silt which could runoff into the artificial drainage system.
- Waste including accidental spills and domestic waste could be a source of pollution during construction.
- Deterioration of landscape character due to mismanagement – increase in invasive exotic species

5. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that sums up the impact that the proposal 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.

Proposal

Development on this preferred site of investigation, Holding 179 Willowglen Agricultural Holdings: **Proposed Equestria Extension 242**, will not have significant impacts on the site due to the following:

- No red data listed fauna; flora or aquatic species were assessed during the Ecological and Aquatic Assessment.
- No ecological sensitivity areas were noted on the site.
- The agricultural potential of the site is zero.
- No cultural heritage resources were found on the site.
- No areas that are prone to erosion occur, should mitigation measures be followed.

Because of the proposed nodal development at the intersection of the N4 and Hans Strijdom Drive, the rest of the Willowglen area has been identified for residential developments. The area around the subject property has mostly been developed in the past few years as residential areas and range in densities.

Alternative 1

This Alternative, similar to Alternative 1 will have a long term positive impact on the area as it will enhance the economic benefit and development in the area.

This alternative is however not preferred because of the lower density layout, thus impacting on the overall and long term economic benefit

No-go (compulsory)

The no-go alternative, at first glance, does not pose any negative impacts, however in the same light does not reveal any positive impacts. Maximum economic benefit and job opportunities will not be provided. Should the proposed development not take place, optimum use and full potential of the land cannot be ensured, thus increasing the development pressure and discouraging the urban sprawl.

6. IMPACT SUMMARY OF THE PROPOSAL OR PREFERRED ALTERNATIVE

Identify preferred proposal

Alternative 1 (proposed)

Having assessed the significance of impacts of the proposal and alternative(s), please provide an overall summary and reasons for selecting the proposal or preferred alternative.

The proposed development would not have a significant negative impact on the surrounding environment or the specific site, provided that mitigation measures are adequately implemented. Fauna and flora biodiversity will not be affected, due to the surrounding developments and infrastructure. Alien and invaders species occur throughout the artificial drainage systems and the rest of the subject property has been altered with landscaping. The proposed development will provide job opportunities during the construction and operational phases, while increasing an economic benefit in the area. Service capacity will be expanded upon (water and sanitation). The proposed office development will bring long-term economic benefits to the area by increasing the efficiency and supporting continued growth of the Region

Development on this preferred site of investigation, Holding 179 Willowglen Agricultural Holdings: **Proposed Equestria Extension 242**, will not have significant impacts on the site due to the following:

- No red data listed fauna; flora or aquatic species were assessed during the Ecological and Aquatic Assessment.
- The Wetland system was the only ecological sensitivity area noted on the site.
- The agricultural potential of the site is zero.
- No cultural heritage resources were found on the site.
- No areas that are prone to erosion occur, should mitigation measures be followed.

Because of the proposed nodal development at the intersection of the N4 and Hans Strijdom Drive, the rest of the Willowglen area has been identified for residential developments. The area around the subject property has mostly been developed in the past few years as residential areas and range in densities.

The current zoning of the holding is Agriculture. To enable the client to develop Residential erven, a Township has to be established. The property density of 12 units per hectare is less than the density earmarked for this are which is 13-16 dwelling units per hectare.

Residential Development is local as well as National objective. This proposal is thus in accordance with those objectives, as also stipulated in the Tshwane Integrated Development Plan 2004. This particular are is also characterised by residential development. Several agricultural holdings in Willowglen areas have already been developed. This proposal is thus in accordance with the existing development trend in the area.

As the density proposed would be very low, no substantial additional traffic will be generated by the propped development. The amenities of the adjacent land owners will thus not be adversely affected by the proposed development. Densification within the Urban Edge is encouraged and supported by the City of Tshwane Metropolitan Municipality. The proposal is thus in all ways in accordance with the development objectives of the City Council.

7. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the Environmental Assessment Practitioner).	**YES**	NO

If "NO", indicate the aspects that require further assessment before a decision can be made (list the aspects that require further assessment):

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

• A Wetland Rehabilitation plan must be developed and form part of the landscaping and rehabilitation process after construction.
• Adhere to the Environmental Management Plan
• Ensure that wetland areas are clearly marked and no vehicles indiscriminately drive through or encroach upon these areas. If disturbance is unavoidable, ensure that these areas are suitably rehabilitated
• In the event that any spillage occur, immediate steps must be taken towards the appropriate clean up thereof.
• Any waste generated on site during construction phase and operation must be disposed of at a permitted Waste disposal site
• Only necessary areas should be disturbed and the construction footprint should be kept to a minimum and only where necessary.

8. ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr)

If the EAP answers yes to Point 7 above then an EMP is to be attached to this report as an Appendix

EMPr attached	**YES**

SECTION F: APPENDIXES

The following appendixes must be attached as appropriate:

It is required that if more than one item is enclosed that a table of contents is included in the appendix

Appendix A: Site plan(s)
Appendix B: Photographs
Appendix C: Facility illustration(s)
Appendix D: Route position information
Appendix E: Public participation information
Appendix F: Water use license(s) authorisation, SAHRA information, service letters from municipalities, water supply information
Appendix G: Specialist reports
Appendix H: EMPr
Appendix I: Other information

CHECKLIST

To ensure that all information that the Department needs to be able to process this application, please check that:

- Where requested, supporting documentation has been attached and;
- All relevant sections of the form have been completed.