DRAFT

BASIC ASSESSMENT (BA) REPORT

for

THE PROPOSED ROAD AND STORMWATER UPGRADES IN THE EXISTING TOWNSHIPS OF FINETOWN PROPER AND ENNERDALE SOUTH

For submission to:

GAUTENG DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT

Prepared for:

City Of Johannesburg – Housing Department
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Date: May 2014

SEF Ref No. 505651

GDARD Ref No: GAUT 002/13-14/E0360

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 Departments (Number 3 above)

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

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

Refer to I&AP Database - Appendix E

if no, state reasons for not attaching the list.

N/A

SECTION A: ACTIVITY INFORMATION

1. ACTIVITY DESCRIPTION

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

Road and stormwater upgrades in the existing townships of Finetown Proper and Ennerdale South, Gauteng

Select the appropriate box

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

Does the activity also require any authorisation other than NEMA EIA authorisation?

YES X

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

A Water Use License in terms of Section 21 (c) and (i) of the National Water Act (Act 36 of 1998) from the Department of Water Affairs will be required.

If yes, have you applied for the authorisation(s)? **NO X**

If yes, have you received approval(s)? (attach in appropriate appendix) **N/A**

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 (DEA) and Provincial (GDARD)	27 November 1998
National Water Act, 1998 (Act No. 36 of 1998) (NWA)	National Department of Water Affairs (DWA)	1 October 1998
The National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA)	National (SAHRA) and Provincial Heritage Resources Agency Gauteng (PHRAG)	1 April 2000

National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEM:WA)	National (DEA) and Provincial (GDARD)	1 July 2009
National Environmental Management: Biodiversity, 2004 (Act No. 10 of 2004) (NEM: BA)	South African National Biodiversity Institute	1 September 2004
National Environmental Management: Air Quality Act (Act No. 39 of 2004) (NEMAQA)	City of Johannesburg	11 September 2005
Constitution of the Republic of South Africa Act, 1996 (Act No 108 of 1996)	National	4 February 1997
Development Facilitation Act, 1995 (Act No. 67 of 1995)	City of Johannesburg	22 December 1995
DEA Guidelines on Public Participation	National (DEA)	10 October 2012
DEA Guidelines on Alternatives	National (DEA)	2004
DEA Guidelines on Need & Desirability	National (DEA)	2004
Promotion of Access to Information Act, 2000 (Act No. 2 of 2000)	National	9 March 2001
Reconstruction and Development Plan	National	
Promotion of Administrative Justice Act, 2000 (Act No. 3 of 2000)	National	30 November 2000
Municipal Systems Act (Act 32 of 2000),	National	2000
City of Johannesburg Integrated Development Plan 2013/2014	City of Johannesburg	June 2013
City op Johannesburg Spatial Development Framework 2010/2011	City of Johannesburg	May 2010

3. ALTERNATIVES

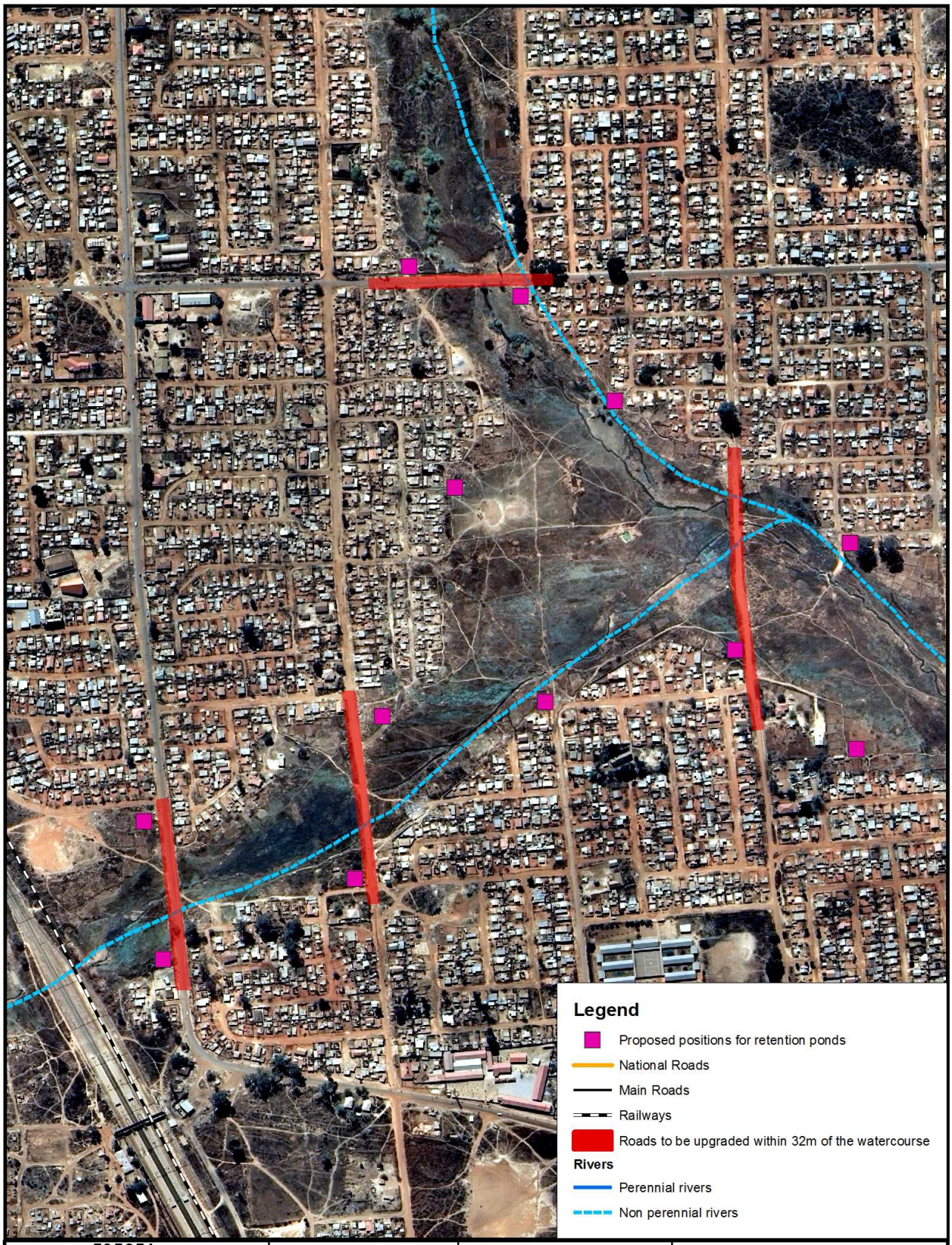
Describe the proposal and alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished. The determination of whether the site or activity (including different processes 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
	Proposed Activity (Alternative 1)	As part of the current programme of formalising townships the City of Johannesburg (CoJ), the CoJ: Housing Department proposes to upgrade roads and stormwater drainage systems in the existing townships of Finetown Proper and Ennerdale South. The proposed upgrades will provide improved vehicular and pedestrian access and ensure proper stormwater drainage which will prevent flooding and/or damage to existing infrastructure. The relevant roads to be upgraded consist of local collectors as well as taxi/bus routes. The purpose of this project is to ensure that residents will be able to access safe and accessible routes throughout the year regardless of weather conditions and typical traffic types. It is proposed that run-off water from the area should flow into a retention/attenuation pond, where sediment and rubbish can be trapped. This pond will be constructed in such a way, that it can be cleaned out by excavation equipment (i.e. TLB). Two types of drainage systems are proposed along with 2 types of retention structures: <u>Drainage</u> • Stormwater drainage pipes (subsurface): o Wide reserves - Stormwater drainage pipes in conventional positions; o Narrow reserves - Stormwater drainage pipes directly underneath travelled way; • Concrete lined open drains (surface): o Stormwater discharge point - Concrete lined V-drains from the network end point into the Retention pond(s) and into the discharge area. <u>Structures</u> • "Trash traps" - Trash to be trapped before it reaches the wetland area; and • Retention pond - Sediment needs to be retained in retention pond to prevent it from contaminating the wetland area. The proposed road works will include the following: <u>Bitumen surfaced streets</u> • Repair edge break as well as other surface and pavement failures; • Seal cracks; • Clean blocked pipes/culverts and improve drainage by open concrete-lined surface • drains and/or mitre drains; • Reconstruct/reinstate gravel shoulder where required; • Provide concrete edge beams; • Apply a fog spray; • Apply texture slurry; • Apply single and double bituminous surfacing where applicable with modified bitumen • binder; • Rework areas of severe pavement distress (cold in-situ recycling process) and surface with asphalt; • Overlay intersections with asphalt; and • Apply street markings.

		Gravel surfaced streets (existing street reserves wide enough) • Rework and stabilise 150mm base; • Provide 30mm asphalt surfacing/80mm Interlocking block paving; • Clean blocked pipes/culverts and improve drainage by open concrete-lined surface side • drains and/or mitre drains; • Reconstruct/reinstate walkways where required; • Provide concrete edge beams; and • Apply street markings. Gravel surfaced streets (existing street reserves too narrow) • Provide storm water drainage pipes directly below travelled way with mountable kerbs • and inlet structures/Shape travelled way as wide V-drain; • Rework and stabilise 150mm base; • Provide 30mm asphalt surfacing/80mm interlocking block paving; • Clean blocked pipes/culverts; • Reconstruct/reinstate walkways where required; • Provide concrete edge beams; and • Apply street markings. Unsurfaced streets (existing street reserves wide enough) • Build new layer works utilising existing materials to optimum; • Provide 30mm asphalt surfacing/80mm interlocking block paving; • Clean blocked pipes/culverts and improve drainage by open concrete-lined surface side • drains and/or mitre drains; • Reconstruct/reinstate walkways where required; • Provide concrete edge beams; and • Apply street markings. Unsurfaced streets (existing street reserves too narrow) • Provide storm water drainage pipes directly below travelled way with mountable kerbs • and inlet structures/Shape travelled way as wide V-drain; • Build new layer works; • Provide 30mm asphalt surfacing/80mm interlocking block paving; • Clean blocked pipes/culverts; • Reconstruct/reinstate walkways where required; • Provide concrete edge beams; and • · Apply street markings. Refer to the Figure below for an outline of the study area and proposed infrastructure upgrades (Refer to A3 copy in Appendix 1).



505651
Finetown Proper and Ennerdale South

Layout Map

Source of Information:
Cadastral Boundaries (Planet GIS: 2011)
Roads: CDSM 2009

N

1:6 137

0 0.05 0.1 0.2 Km

Map Produced By:

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Date: May 2014

	Alternative 2 (not feasible)	Based on the existing nature of the roads in Finetown and Ennerdale, additional alternatives are not feasible. All possible alternatives relating to the design and implementation of the roads and stormwater upgrades has been taken into account by the CoJ. The preferred alternative is the only practicably implementable option considered by the CoJ. It is however suggested that the recommendations and EMPr is adhered to in order to mitigation potential environmental and social impact emanating from the construction and operational phases.

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

No-go Alternative

One of the options to be considered for this report is one of no development at all. That means leaving the roads and stormwater system in its present state. If the No-go Alternative is adopted current problems with regards to poor access and flooding will persist causing further damage to private and public property and infrastructure. The City of Johannesburg will also continue not to fulfil its mandate under the Municipal Systems Act (Act 32 of 2000), i.e. to provide basic services (roads and stormwater) to its residents.

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: **Retention Ponds within 32m of a watercourse**	15m^2 each 3 x15 = 45m^2 in total
Alternatives:	
Alternative 1 (if any)	15m^2 each 3 x15 = 45m^2 in total
Alternative 2 (if any)	**N/A**
	Ha/ m^2

or, for linear activities: **Roads to be upgraded within 32m of a watercourse**

	Length of the activity:
Proposed activity	1.095 km in total
Alternatives:	
Alternative 1 (if any)	
Alternative 2 (if any)	**N/A**
	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: **Finetown Proper and Ennerdale South townships**	312 ha
Alternatives:	
Alternative 1 (if any)	312 ha
Alternative 2 (if any)	**N/A**
	Ha/m^2

5. SITE ACCESS

Proposal

Does ready access to the site exist, or is access directly from an existing road?	**YES X**
If NO, what is the distance over which a new access road will be built	
Describe the type of access road planned:	

N/A

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	
X	

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

Describe the type of access road planned:

N/A

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
N/A	

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

Describe the type of access road planned:

N/A

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 **1** Number of times

(only complete when applicable)

6. SITE OR ROUTE PLAN - *Refer to Appendix A*

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 - *Refer to Appendix B*

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**.** It should be supplemented with additional photographs of relevant features on the site, where applicable.

8. FACILITY ILLUSTRATION - *Refer to Appendix C*

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.

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 | **1** | 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. [X] (complete only when appropriate for above)

1. PROPERTY DESCRIPTION

Property description:

No portion /parent farm data available

Finetown Proper and Emmerdale South are existing townships located on the corner of the N1 and R553

Refer to Locality Map - Appendix A

(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.

Proposal and Alternative 1: Retention Pond Locations	**Latitude (E):**	**Longitude (S):**
• **Retention Pond No. 1**	26.416570° E	27.867071° S
• **Retention Pond No. 2**	26.417788° E	27.868168° S
• **Retention Pond No. 3**	26.419466° E	27.870933° S
• **Retention Pond No. 4**	26.420716° E	27.869569 ° S
• **Retention Pond No. 5**	26.421328° E	27.867346° S
• **Retention Pond No. 6**	26.421881° E	27.870991° S
• **Retention Pond No. 7**	26.423401° E	27.865119° S
• **Retention Pond No. 8**	26.424348° E	27.862877° S
• **Retention Pond No. 9**	26.421498° E	27.865441° S
• **Retention Pond No. 10**	26.418810° E	27.866294° S
• **Retention Pond No. 11**	26.422731° E	27.862653° S
• **Retention Pond No. 12**	26.416219° E	27.865756° S

In the case of linear activities:

Proposal and Alternative 1: Roads to be upgraded	**Latitude (E):**	**Longitude (S):**
Beatrice Street		
• Starting point of the activity	26.416412° E	27.865316° S
• Middle point of the activity	26.416361° E	27.866150° S
• End point of the activity	26.418378° E	27.567390° S
2nd Avenue		
• Starting point of the activity	26.418378° E	27.569545° S
• Middle point of the activity	26.419947° E	27.569566° S
• End point of the activity	26.421618° E	27.869835° S
4th Avenue		
• Starting point of the activity	26.421217° E	27.865045° S
• Middle point of the activity	26.422492° E	27.865151° S
• End point of the activity	26.423657° E	27.865354° S
5th Avenue		
• Starting point of the activity	26.°422530 E	27.862849° S
• Middle point of the activity	26.423626° E	27.862975° S
• End point of the activity	26.424635° E	27.863083° S

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 **N/A**

3. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Flat	**1:50 – 1:20 X**	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 X**	Undulating plain/low hills	**River front X**

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 X**	NO
Dolomite, sinkhole or doline areas		**NO X**
Seasonally wet soils (often close to water bodies)	**YES X**	NO
Unstable rocky slopes or steep slopes with loose soil		**NO X**

Dispersive soils (soils that dissolve in water)		NO X
Soils with high clay content (clay fraction more than 40%)		NO X
Any other unstable soil or geological feature		NO X
An area sensitive to erosion	YES X	

(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).

Refer to Wetland Impact Assessment - Appendix G

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

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) NO X

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) NO X

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)? NO X

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 % =	**Natural veld with scattered aliens % = 50**	Natural veld with heavy alien infestation % =	Veld dominated by alien species % =	Landscaped (vegetation) % =
Sport field % =	Cultivated land % =	**Paved surface (hard landscaping) % =30**	**Building or other structure % = 20**	Bare soil % =

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.

Refer to Ecological Impact Assessment - Appendix G

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

If YES, specify and explain:

No rare or endangered flora or fauna species (including red list species) were observed at the time of the field survey and due to the extensive disturbance within the area the habitat is considered unsuitable for any of these species.

Please, however, refer to the Ecological Impact Assessment (Specifically Appendix A, B and C) for lists of Mammal, Bird, Reptile and Amphibian species that could occur in the study area – including their conservation status.

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.		**NO X**

If YES, specify and explain:

No rare or endangered flora or fauna species (including red list species) were observed at the time of the field survey and due to the extensive disturbance within the area the habitat is considered unsuitable for any of these species.

Please, however, refer to the Ecological Impact Assessment (Specifically Appendix A, B and C) for lists of Mammal, Bird, Reptile and Amphibian species that could occur in the study area – including their conservation status.

Are there any special or sensitive habitats or other natural features present on the site?	**YES X**	

If YES, specify and explain:

The watercourse area is categorised as a Critical Biodiversity Area: "Important" in terms of C-Plan.

Was a specialist consulted to assist with completing this section	**YES X**	

If yes complete specialist details

Name of the specialist:	Karin Van Der Walt		
Qualification(s) of the specialist:	• South African Council for Natural Science Professions (Certified Natural Scientist Level 2: 300028/12) for Botany and Ecology; • Botanical Society of South Africa (Botsoc) (2006 – 2011); • Baccalaureus Technologiae degree in Nature Conservation		
Postal address:	Po Box 74785 Lynnwood Ridge		
Postal code:	0040		
Telephone:	012 349 1307	Cell:	
E-mail:	karin@sefsa.co.za	Fax:	012 349 1229

Are any further specialist studies recommended by the specialist?		**NO X**
If YES, specify:	**N/A**	
If YES, is such a report(s) attached?		**NO X**

If YES list the specialist reports attached below

N/A

Signature of specialist: _____ Date:

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	**24/9**	**2**	**9**	**9**
9	**24/9**	**2**	**9/4**	**9**
9	**24/9**	**2**	**9**	**9**
9	**23/2/9**	**9/19**	**2**	**9**
9/2	**24/9**	**27**	**9**	**2**

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 ***Refer to Appendix G***

YES	NO
X	

If yes indicate the type of reports below

- Wetland Impact Assessment
- Ecological Impact Assessment
- Phase 1 Heritage Impact Assessment
- Social Impact Assessment
- Traffic Impact Assessment

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.

Refer to Social Impact Assessment - Appendix G

Finetown Proper and Ennerdale South, City of Johannesburg

The area of jurisdiction of City of Johannesburg is subdivided into 7 administrative regions, with each region being operationally responsible for the delivery of health care, housing, sports and recreation, libraries, social development, and other local community-based services.

Finetown and Ennerdale falls under Region G (Deep South) of the CoJ and forms the extreme southern boundary of Johannesburg. Region G borders Soweto in the northwest; its north-eastern suburb, Lenasia, borders Johannesburg South.

Finetown and Ennerdale South lies just to the west of the N1 route in close proximity to the Grasmere toll plaza. The area can be classified as a high density urban township with a mix of formal and informal houses. Main roads are tarred but in a deteriorating state, with secondary roads all being gravel (in various states of functionality). Beatrice Street is used by a good deal of pedestrians as this is the main feeder road for the area in terms of the status quo of the site, the existing roads and storm water infrastructure is severely degraded and poses health and safety risks to the community. Since nearly all the residents travel on foot there is an added risk that the deteriorated roads close to the storm water infrastructure could lead to injuries or even drowning in the worst case scenario. The upgrade of the infrastructure will address issues surrounding community health (stormwater) as well as safety (roads).

The region was founded for two main reasons. The first was the apartheid legislation that created an Indian residential area in the northern part of the region, known as Lenasia. The second was the influx of large numbers of people seeking work, resulting in the spontaneous development of informal settlements, especially in the south. As a result, Region G has two fairly distinct areas and is divided for developmental purposes into the Greater Ennerdale, Lenasia, Eldorado Park and Protea areas in the north, and the Orange Farm and Weilers Farm (Kanana Park) area in the south (www.joburg.org.za).

Geographically displaced from the rest of greater Johannesburg, it is largely a marginalized dormitory residential area. With no economic base of its own, it is dependent on Johannesburg and, to a lesser extent, on Vanderbijl Park and Vereeniging. Because of the region's distance from the central business districts of Johannesburg and Sandton, public transport is expensive (www.joburg.org.za).

The total population of Region G is estimated at 270 000, with 170 000 of these people living in the Greater Orange Farm and Weilers Farm area (www.joburg.org.za). For Greater Ennerdale and Lenasia, pressing issues that have been identified include informal settlements; the absence of higher-income residential areas; and the lack of control of local economic activities. For Greater Orange Farm and Weilers Farm (Kanana Park) the issues that have been identified include extreme levels of poverty and unemployment; the geographic isolation and marginalisation from the economic and social opportunities afforded by greater Johannesburg; low quality basic services - both infrastructural and social; invasion of planned residential areas, public and private land; and civil disobedience.

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

Comment to be provided in the Final Basic Assessment

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?		**NO X**

If YES, explain:

N/A

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:

The Heritage Impact Assessment survey and desktop investigation for the proposed Finetown Proper and Ennerdale South revealed a feature belong to the Apostolic Church. However the proposed project does not intend to disturb the identified feature as it occurs outside of the proposed construction boundary. Therefore from a heritage point of view, the proposed development and associated activities can proceed.

Refer to Heritage Impact Assessment - Appendix G

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

If yes, please attached the comments from SAHRA in the appropriate Appendix

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 x

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

N/A

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

All comments will be submitted with the Final Basic Assessment Report

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 x

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

N/A

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

All comments to be submitted with the Final Basic Assessment Report

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 *- to be included in the Final BAR*

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 advertisement
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) | **1** | times

1. WASTE, EFFLUENT, AND EMISSION MANAGEMENT

Solid waste management

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

If yes, what estimated quantity will be produced per month? Undetermined at this stage of the project

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

The project is still in conceptual design stages and therefore it is difficult to determine exactly what the volume of solid construction waste that the construction of the upgrades will generate.

The solid waste produced however will be collected on site by the contractor on a regular basis and will be disposed of at a registered landfill site. It is recommended that the site contractor rent large steel skips for construction waste. Such skips can be provided by reputable waste disposal contractors. Building rubble and spoils should be placed in these skips as necessary. No waste or construction rubble should be allowed to sit on site for any extended period of time. Empty 22 gallon steel drums should be placed at convenient locations at each of the sites to be upgraded for workers to dispose of domestic waste produced during construction. Again, these drums should be emptied when full for disposal at a registered landfill site.

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

Construction solid waste will be disposed of at a registered landfill site by the contractor. The Ennerdale landfill site is located within 2km the study area. This landfill site should be considered in order to minimize the distance over which solid waste needs to be transported for disposal. All hazardous waste should be separated from other construction solid waste and disposed of at a registered hazardous landfill site and not at a domestic landfill.

Will the activity produce solid waste during its operational phase? **NO X**

If yes, what estimated quantity will be produced per month? m^3

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

N/A

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? **NO X**

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

N/A

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?		NO X
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?		NO X

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:

N/A

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

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

N/A

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?		NO X

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:

N/A

Liquid effluent (domestic sewage)

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

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

N/A

Emissions into the atmosphere

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

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:

Dust could potentially be generated by the proposed activity. The quantity of dust generated would be minimal in the opinion of the EAP. However, the wetting of bare soil surfaces should be carried out if complaints are received from adjacent landowners and if excessive dust is generated on the sites.

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** **X**

If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month: **N/A**

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 X**

If yes, list the permits required

A Section 21 (c) and (i) Water Use License is required as the activity is taking place within 500m of a watercourse

If yes, have you applied for the water use permit(s)? **NO X**

If yes, have you received approval(s)? (attached in appropriate appendix) **NO X**

3. POWER SUPPLY

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

Construction phase: The contractor responsible for construction would need to supply his own on-site power should this be necessary.

Operational phase: For the purpose of street lighting, power supply will be obtained from the City of Johannesburg

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

N/A

4. 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 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.

Issues will be recorded and submitted with the Final Basic Assessment Report

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):

Responses will be recorded and submitted with the Final Basic Assessment Report

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

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

The potential impacts of the proposed development were identified through a desktop study, a site visit, specialist studies and comments received during the public participation process.

In the Basic Assessment Report, the potential impacts are broadly identified and outlined. An assessment of the potential impacts is provided, identifying the impacts that are potentially significant and recommending management and mitigation measures to reduce the impacts.

In general, it is recognised that every development has the potential to pose various risks to the environment as well as to the residents or businesses in the surrounding area. Therefore, it is important that these possible risks are taken into account during the planning phase of the development. Risks and key issues were identified and addressed through an internal process based on similar developments, and an environmental evaluation.

Previous experience has shown that it is often not feasible or practical to only identify and address possible impacts. The rating and ranking of impacts is often a controversial aspect because of the subjectivity involved in attaching values to impacts.

Significance is determined through a synthesis of impact characteristics. Significance is an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required.
The classes are rated as follows:

1) No significance
The impact is not substantial and does not require any mitigatory action.

2) Low
The impact is of little importance, but may require limited mitigation.

3) Medium
The impact is of importance and therefore considered to have a negative impact. Mitigation is required to reduce the negative impacts to acceptable levels.

4) High
The impact is of great importance. Failure to mitigate, with the objective of reducing the impact to acceptable levels, could render the entire development option or entire project proposal unacceptable. Mitigation is therefore essential.

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.

Proposed Activity (Alternative 1)

Potential impacts:	Significance rating of impacts:	Proposed mitigation:	Significance rating of impacts after mitigation:
NEGATIVE IMPACTS			
Potential ground and surface water pollution	**Medium**	**<u>Construction phase:</u>** • Make use of existing roads and tracks where feasible, rather than creating new routes through vegetated areas; • Vegetation and soil must be retained in position for as long as possible, and removed immediately ahead of construction / earthworks in that area (DWAF, 2005); • Runoff from roads must be managed to avoid erosion and pollution problems. • Where excessive loose sediment is created, attenuation swales and / or soils screens should be installed; • Construction vehicles are to be maintained in good working order, to reduce the probability of leakage of fuels and lubricants; • A walled concrete platform, dedicated store with adequate flooring or bermed (110% capacity) area should be used to accommodate chemicals such as fuel, oil, paint, herbicide and insecticides, as appropriate, in well-ventilated areas; • Storage of potentially hazardous materials should be above any 100-year flood line, or as agreed with the ECO. These materials include fuel, oil, cement, bitumen etc.; • Sufficient care must be taken when handling these materials to prevent pollution; • Surface water draining off contaminated areas containing oil and petrol would need to be channelled towards a sump which will separate these chemicals and oils; • Oil residue shall be treated with oil absorbent such as Drizit or similar and this material removed to an approved waste site; • Concrete, if used, is to be mixed only, not on exposed soil; • Concrete and tar shall only be mixed on mixing trays and in areas which have been specially demarcated for this purpose; • All concrete and tar that is spilled outside these areas shall be promptly removed by the Contractor and taken to an approved dumpsite; • After all the concrete / tar mixing is complete all waste concrete / tar shall be removed from the batching area and disposed of at an approved dumpsite;	**Low**

		• Storm water shall not be allowed to flow through the batching area. Cement sediment shall be removed from time to time and disposed of in a manner as instructed by the Consulting Engineer; • All construction materials liable to spillage are to be stored in appropriate structures with impermeable flooring; • Portable septic toilets are to be provided and maintained for construction crews. • Maintenance must include their removal without sewage spillage; • Portable septic toilets are to be located outside of the 1:100 year floodline; • Under no circumstances may ablutions occur outside of the provided facilities; • No uncontrolled discharges from the construction crew camps to any surface water resources shall be permitted. Any discharge points need to be approved by the relevant authority; • In the case of pollution of any surface or groundwater, the Regional Representative of the Department of Water Affairs (DWA) must be informed immediately; • Where construction in close proximity to sewer lines is unavoidable then excavations must be done by hand while at all times ensuring that the soil beneath the sewer lines is not destabilised; • Store all litter carefully so it cannot be washed or blown into any of the water courses within the study area; • Provide bins for construction workers and staff at appropriate locations, particularly where food is consumed; • The construction site should be cleaned daily and litter removed; • Conduct ongoing staff awareness programs so as to reinforce the need to avoid littering; and • Backfill must be compacted to form a stabilised and durable blanket; and • The current load above the sewer lines must at no time be exceeded. **<u>Operational Phase:</u>** • Storm water infrastructure must be designed in such a manner that surface water flow is limited. • Road users must ensure their vehicles are in good working condition so as to prevent the unnecessary leaks of fuels, oils, or other motor vehicle lubricants. • Refer to site specific mitigation recommendations and measures as outlined by the Wetland Specialist on Page 26 to 33 of Appendix G: Wetland Impact Assessment.	

Potential soil disturbances and erosion	**Medium**	**Construction Phase:** • The construction phase should preferably take place in the dry winter months. • As much vegetation as possible should remain on site wherever possible to help decrease surface water flow velocity, and increase filtration. • No stockpiles or construction materials may be stored or placed within any drainage line on site, or in areas where water naturally accumulates. • Stockpiles must not exceed more then 2m in height. • Stockpiles must not be stored for excessively long periods. If it is found that a stockpile will be stored for long periods then it must not exceed a vertical horizontal ratio or 1:1.5m to prevent compaction. • Any stockpile stored for long periods must be retained in a bermed area. • Stockpiles must be covered during excessively windy conditions. • All recommendations made by the geotechnical engineer must be implemented during the construction phase, and/or where applicable. • All foundation excavations should be inspected by a Geotechnical Engineer prior to placing any road layers, or commencement of backfilling. • Regular checks on the quality and compaction of the backfill below slab level should be conducted. • Construction camps should be situated well away from the wetland areas (32m) and should be determined in consultation with the appointed Ecological Control Officer (ECO) **Operational Phase:** • As mentioned previously, an adequate storm water management plan must be implemented to decrease surface water run-off as result of the increased paved surfaces.	**Low**
Potential disturbance of heritage resources	**Medium**	**Construction Phase:** • Should sites be found, the necessary process is to be followed as per the National Heritage Resources Act, 1999 (Act No. 25 of 1999). • Construction personnel must be alert and must inform the SAHRA should they come across any culturally significant findings or unmarked graves. • Under no circumstances shall archaeological artefacts be removed, destroyed or interfered.	**Low**

Potential vegetation degradation / destruction	**Medium**	**<u>Construction Phase:</u>** • An independent Environmental Control Officer (ECO) should be appointed to oversee all construction activities; • No open fires should be allowed; • All mitigation measures are recommended by the Wetland report (SEF, 2014) must be adhered to; • An ecologically-sound stormwater management plan must be implemented during construction and appropriate water diversion systems put in place; • Erosion must not be allowed to develop on a large scale before effecting repairs; • Runoff from roads must be managed to avoid erosion and pollution problems; • During the construction phase, measures must be put in place to control the flow of surface water so that it does not impact on the vegetation, i.e., energy dissipaters and canal flow designs must be used to prevent scouring and erosion; • Stormwater management must be implemented into the construction of roads. • All areas susceptible to erosion must be protected and ensure that there is no undue soil erosion resultant from activities within and adjacent to the construction camp and work areas; • Areas exposed to erosion due to construction should be vegetated with species naturally occurring in the area; and • Surface water or stormwater must not be allowed to concentrate, or flow down cut or fill slopes without erosion protection measures being in place. • During construction, the construction area and immediate surroundings should be monitored regularly for emergent invasive vegetation; • All alien seedlings and saplings must be removed as they become evident for the duration of construction and operational phase; • Manual / mechanical removal is preferred to chemical control; • All construction vehicles and equipment, as well as construction material should be free of plant material. Therefore, all equipment and vehicles should be thoroughly cleaned prior to access on to the construction site. This should be verified by the ECO; and • An alien invasive eradication and monitoring plan must be compiled and implemented during the construction phase whereby all emergent invasive species are removed during construction. • During the construction phase hazardous waste should be stored in compliance with regional, national and local legislation; • Water passing through vehicle bays and	**Low**

		workshops must pass through oil traps to ensure that all hazardous material is removed; **Operational Phase:** • CoJ to monitor all disturbed areas to prevent alien plant invasion.	
Potential loss of faunal species	**Medium**	**Construction Phase:** • Workers must be made aware of the Animal Protection Act (Act 71 of 1962), as well as the penalties that will incur should an animal be intentionally harmed, or harmed as a result of negligence. • No animals may be brought into the construction site, or camp. • The construction site must be kept clean and litter free to prevent attracting vermin or pest species. • Construction camps should be situated well away from the wetland areas (32m) and should be determined in consultation with the appointed Ecological Control Officer (ECO) **Operational Phase:** • After construction, the study area and associated roads should be landscaped with indigenous plant species that will be beneficial to faunal species such as bats and birds. • The development must be kept clean and maintained for reasons stated in the last bullet point above.	**Low**

Potential air pollution	**Medium**	**Construction Phase:** • Areas cleared of vegetation must be wet down or cleared to prevent unnecessary dust entering the air. • Stockpiled material must be either covered with a tarpaulin or wet down to prevent particulates from entering the atmosphere. • Vehicles transporting friable materials such as sand, gravel etc. must be covered with a tarpaulin, and their speed must be limited to 40km/hr. • Rubbish/waste bins must remain covered at all times.	**Low**
Potential visual Impacts	**Medium**	**Construction Phase:** • The construction camp (if required) must be placed in an area that will least impact adjacent land owners. • The construction site and camp must be kept neat and tidy at all times to minimise the visual impact on adjacent land owners. • A screen should be erected near the entrance points to the site, (and along the site boundaries if deemed necessary) to limit the unpleasant aesthetics of the construction site. **Operational Phase:** • All infrastructure must be regularly maintained.	**Low**
Potential noise pollution	**Medium**	**Construction Phase:** • Construction activities must be limited to normal working hours during the week, i.e. 07:00am until 17:00pm. • If construction is required on the weekend, permission to do so must be granted from the adjacent land owners beforehand. • Construction vehicles must be kept in good working condition at all times to prevent becoming the source of excess noise. • The construction crew must abide by the National Noise laws and the local "by-laws" regarding noise. **Operational Phase:** • As stated above, the National Noise Laws must be adhered to, including the local by-laws where applicable.	**Low**
Potential safety and security impacts	**Medium**	**Construction Phase:** • Access to the site must be limited to the workforce only. • Excavated areas must be clearly demarcated. • A fence or similar barrier must be erected around the site to prevent public entrance. • The site and crew are to be managed in strict accordance with the Occupational Health and Safety Act, 1993 (Act No.85 of 1993) and the	**Low**

		National Building Regulations. • Ensure that the handling of equipment and material is under control of competent personnel and is supervised and adequately instructed. • Ensure all members of the work force are well-informed of all necessary emergency procedures. • The provision of temporary (safe) pedestrian walkways and crossings at all sites proposed for upgrading is a necessity during construction. • Access to the driveways of adjacent landowners should never be totally restricted at any time. The provision of adequate temporary measures to ensure consistent access to such points of access is essential.	
Potential traffic impacts	**Medium**	**Construction Phase:** • Vehicular movement beyond the site boundaries must be limited during peak hour traffic, i.e. between 07:00-09:00am, and 16:00-18:00pm. • Refer to recommendations in the Traffic Impact Assessment (Appendix G).	**Low**
Positive Impacts			**Significance rating**
• Improved vehicular and pedestrian access and proper stormwater drainage which will prevent future flooding and damage to existing infrastructure. The upgrades will improve the overall traffic flow as well as management therefore decreasing the congestion during peak time traffic.			**High Positive**
• The upgrade will fall within the ANC's manifesto that emphasizes growing the economy, fighting poverty, creating jobs, building roads, rails networks and dams and providing skills required by the economy.			**High Positive**
• The project will form part of the Reconstruction and Development Plan (RDP) of National Government and can therefore be seen a community upliftment project.			**High Positive**
• Improved safety for road users and pedestrians			**High Positive**

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

Refer to Appendix G

- Wetland Impact Assessment
- Ecological Impact Assessment
- Phase 1 Heritage Impact Assessment
- Social Impact Assessment
- Traffic Impact Assessment

Alternative 2 (not feasible)

Potential impacts:	Significance rating of impacts:	Proposed mitigation:	Significance rating of impacts after mitigation:
Based on the existing nature of the roads in Finetown and Ennerdale, additional alternatives are not feasible. All possible alternatives relating to the design and implementation of the roads and stormwater upgrades has been taken into account by the CoJ. The preferred alternative is the only practicably implementable option considered by the CoJ. It is however suggested that the recommendations and EMPr is adhered to in order to mitigation potential environmental and social impact emanating from the construction and operational phases.			

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.

It is not anticipated that the proposed activities will be decommissioned.

Proposal - N/A

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

Alternative 1 - N/A

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.

N/A

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:

Cumulative impacts result from actions, which may not be significant on their own, but which are significant when added to the impact of other similar actions construction of an internal road. Cumulative impacts relating to the proposed activities include:

- Increased storm water runoff due to the increase in paved surfaces;
- Ground or Surface water contamination due to vehicles on site, and construction and operational waste, as well as the possibility of contaminated storm water runoff;
- The vegetation clearing, earthworks and alteration of drainage lines will result in the alteration of the vegetation in the immediate area of the open space areas and areas in proximity to the graveyards;
- Decreased air quality due to the contribution of vehicle-entrained dust emissions, and motor vehicle emissions.

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.

Proposed Activity (Alternative 1)

This report is intended to offer an objective assessment of the concerns, which were raised during the basic assessment phase of the proposed project as well as through the technical expertise, which lie within the environmental practitioners.

The purpose of this report is to ascertain the impact of the proposed development on the environment, of which we are part, and the probability of the impacts manifesting themselves. Ultimately the report should allow the relevant competent authority the opportunity to make an informed decision regarding the development.

As part of the current programme of formalising townships the City of Johannesburg (CoJ), the CoJ: Housing Department proposes to upgrade roads and stormwater drainage systems in the existing townships of Finetown Proper and Ennerdale South. The proposed upgrades will provide improved vehicular and pedestrian access and ensure proper stormwater drainage which will prevent flooding and/or damage to existing infrastructure. The relevant roads to be upgraded consist of local collectors as well as taxi/bus routes.

A number of potential short and long-term environmental and social impacts can be expected during the construction phase of the proposed activities. The Environmental Management Plan compiled for the proposed activities, if properly implemented on site, will mitigate these potential impacts to an acceptable level. (Refer to Appendix H: EMPr). The proposed activities will however, ultimately serve to ensure that residents will be able to access safe and accessible routes throughout the year regardless of weather conditions and typical traffic types.

Alternative 2: Not Feasible

Based on the existing nature of the roads in Finetown and Ennerdale, additional alternatives are not feasible. All possible alternatives relating to the design and implementation of the roads and stormwater upgrades has been taken into account by the CoJ. The preferred alternative is the only practicably implementable option considered by the CoJ. It is however suggested that the recommendations and EMPr is adhered to in order to mitigation potential environmental and social impact emanating from the construction and operational phases.

No-go (compulsory)

The proposed activities are intended to alleviate flooding and bad access issues currently experienced in Finetown Proper and Ennerdale South. These issues would thus persist under the No-go project alternative.

Road user safety will also remain impacted upon by a lack of appropriate vehicular and pedestrian access. Flooding will also persist, causing damage to infrastructure, injury and even loss of life.

The temporary jobs that would be created under the preferred project alternative would also not materialise under the No-go alternative.

The temporary social impacts associated with a project of this nature (noise, dust, temporary access to properties etc.) within a predominantly residential setting would not result under the No-go alternative.

6. IMPACT SUMMARY OF THE PROPOSAL OR PREFERRED ALTERNATIVE

Proposed Activity (Alternative 1)

The proposed alternative will result in numerous **negative**, predominantly social, impacts over the **short-term to medium term.**

Alternative 2: Not Feasible

Based on the existing nature of the roads in Finetown and Ennerdale, additional alternatives are not feasible.

No-go

The No-go alternative would, result in **negative**, impacts (flooding and access) over the **long-term**.

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 preferred alternative (Proposal) proposes to upgrade roads and stormwater drainage systems in the existing townships of Finetown Proper and Ennerdale South as part of the current programme of formalising townships in the City of Johannesburg (CoJ).

The preferred alternative will transform relevant townships and provide residents with better vehicular and pedestrian access. This development also provide formalised employment to a number of individuals during construction.

The City of Joburg intends to upgrade the relevant roads and stormwater system in order to comply with the ANC's manifesto that emphasizes growing the economy, fighting poverty, creating jobs, building roads, rails networks and dams and providing skills required by the economy.

The project will form part of the Reconstruction and Development Plan (RDP) of National Government and can therefore be seen a community upliftment project.

Should the project be approved, implementing the mitigation measures identified in Section E

heading 2 as well as in the appended EMPr (Appendix H) of this report will greatly reduce the risk the development could have on the environment. Once the Basic Assessment Report has been approved by GDARD, the EMPr will be a legally binding document.

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** **X**

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

N/A

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:

If environmental authorisation for the proposed project, to upgrade roads and stormwater drainage systems in the existing townships of Finetown Proper and Ennerdale South, is granted, the following measures should be included in the authorisation:

- All recommendations made by the specialists should be adhered to during the construction and operational phases of the development.
- All recommendations and mitigation measures in the Environmental Management Programme (EMPr) should be complied with and monitored.
- A Storm water management plan should be drafted and complied with.
- A Section 21 (c) and (i) Water Use License should be obtained.

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** **X**

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) ***- Attached***

Appendix B: Photographs ***- Attached***

Appendix C: Facility illustration(s) ***- Attached***

Appendix D: Route position information ***– N/A***

Appendix E: Public participation information ***– to be submitted with the final BAR***

Appendix F: Water use license(s) authorisation, SAHRA information, service letters from municipalities, water supply information ***– to be submitted with the final BAR***

Appendix G: Specialist reports ***- Attached***

Appendix H: EMPr ***- Attached***

Appendix I: Other information ***– N/A***

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;
- All relevant sections of the form have been completed;