

Head of Department: Environmental Resource and Waste Management

Cnr. Van Riebeeck Ave and Hendrik Potgieter Street PO Box 25 **Edenvale** 1610

Enquiries: Anél Hietbrink Tel: +27 11 999 3387

Email: anel.hietbrink@ekurhuleni.gov.za

Attention: Delia de Lange

Lokisa Environmental Consulting CC PO Box 219 Groenkloof 0027

Tel: +27 12 346 7655 Fax: +27 12 346 6074

Email: lokisa@lokisa.co.za

Dear Madam

Subject: COMMENTS ON THE DRAFT BASIC ASSESSMENT REPORT FOR THE

PROPOSED BULK SEWER AND WATER PIPELINES - BIRCHLEIGH NORTH

**EXTENSION 4, CITY OF EKURHULENI** 

Your Draft Basic Assessment Report refers.

Herewith kindly find comments by the City of Ekurhuleni.

# Comments from the Legislative Compliance Division of the Environmental Resource and Waste Management Department:

- 1. The Division in rendering its comments assessed the environmental parameters/constraints of the property against the following environmental management tools:
  - 1.1. Provincial Environmental Management Framework, 2015
  - 1.2. Ekurhuleni Biodiversity and Open Space Strategy (EBOSS), 2008
  - 1.3. The Ekurhuleni Bioregional Plan, 2012
  - 1.4. Applicable Environmental Legislation
- 2. Based on the above tools and the information contained in the application, the department comment as follows:
  - 2.1. The Department supports the proposed construction of the bulk sewer and water pipelines for Birchleigh North X4. However, alternative routes must be investigated for the bulk sewers leading to point I and point S. These bulk sewer lines are located within a wetland.
  - 2.2. The site proposed development consist of "Critical Biodiversity Areas", "Ecological Support Areas", Other Natural Areas" and "No Natural Remaining", in terms of the Bioregional Plan 2012. The majority of the proposed sewer pipelines fall within "Critical Biodiversity Areas".
  - 2.3. Portions of the proposed project falls within areas identified as a "Primary Open Space" node for ecological sensitive areas. And the wetland area is identified as a "natural open space area".

Comments on the Draft Basic Assessment Report for the proposed Bulk Sewer and Water Pipelines – Birchleigh North Extension 4, City Of Ekurhuleni

- 2.4. The proposed development sites may have ecological, geotechnical and hydrological development constraint with a **high** ecological sensitivity rating.
- 2.5. Point I, as indicated on the maps provided in the DBAR, are located within the centre of the wetland. Three (3) proposed sewer pipelines link to this centre point in the wetland.

Alternative routes must be investigated to avoid the construction of new bulk sewer pipelines within the wetland.

- 2.6. The Gauteng EMF indicate that the proposed development area falls within the following zone:
  - 2.6.1. Zone 1, Urban Development Zone; and
  - 2.6.2. Zone 2, High Control Zone (within the urban development zone).
- 2.7. Should any protected species need to be relocated, the necessary permits must be obtained from the competent authority prior to removal and/or relocation.
- 2.8. Recommendation contained in specialist reports must be implemented on site.
- 2.9. The report refer to the applicant as the "Ekurhuleni Metropolitan Municipality, this must be amended to correctly reflect the applicant as the "City OF Ekurhuleni".

All activities to be undertaken on the said property must be in accordance with all applicable By-Laws, policies and requirements of the City OF Ekurhuleni.

It should be noted that, in terms of Section 24F of the NEMA, Act No 107 of 1998, as amended, no listed activity may commence prior to an environmental authorization being granted by the competent authority.

Regards,

MS F. MABINDISA

**HEAD OF THE DEPARTMENT:** 

**ENVIRONMENTAL RESOURCE AND WASTE MANAGEMENT** 

Date: 12/04/2019



North West Region, 285 Francis Baard Street, Pretoria, Private Bag X995, Pretoria, 0001. Tel (012) 3921300, Fax: 012 392 2998. www.dwa.gov.za

Enquiries: L Magoba Email:Magobal@dws.gov.za

Tel: 012 392-1418 Fax: 012 392-1408

Ref no: 16/2/7/A210/N423

Lokisa Environmental Consulting CC P.O.Box 219 GROENKLOOF 0027

DRAFT BASIC ASSESSMENT REPORT FOR THE PROPOSED BULK SEWER AND WATER PIPELINES-BIRCHLEIGH NORTH X4 ON PORTION 63 OF THE FARM WITFONTEIN 15 IR, GAUTENG PROVINCE.

ATTENTION: Delia de Lange

The Department of Water and Sanitation has evaluated the document and would like the following issues to be addressed in terms of the National Water Act, 1988 (Act 36 of 1998).

- On page 16 of EMP report it indicates that there will removal of soil and stockpiling of soil, please be advised that all activities must happen outside of a watercourse or must be authorized if it is happening within watercourse.
- On page 17 of EMP report indicates that, there will be increased runoff due to removal of vegetation and soil compaction, please be advised that stormwater management plan must be in place to prevent siltation and the maximum stream bank stability.
- 3. On page 18 of EMP report it indicates that during the construction phase, the sanitary wastewater will be generated at the site, if this wastewater is allowed to stagnate in water ponds on the site, it can percolate into the soil and contaminate groundwater, please be advised that all waste must be removed to an appropriate waste facility.
- 4. On page 16 of the EMP report it indicates that, construction activities may result in the discharge of solvents and other industrial chemicals, leakage of fuel/oil from vehicles and the disposal of sewage resulting in the loss of sensitive biota in the wetland/rivers and reduction in wetland function as well as human waste should be treated and disposed of at a permitted hazardous landfill site and the Department must be notified within 24 hours.



5. On page 19 of EMP report indicate that appropriate erosion and stormwater management structures must be installed around the construction site, please be advised that the stormwater management plan must also be adhered to municipality stormwater plan.

6. On page 26 of EMP report indicate that during trenching, the topsoil as well as the vegetation should be removed and be stockpiled outside the buffer area, please note that the activity triggers Section 21 (c) and (i) water use of National Water Act, 1998 (Act No.36 of 1998) which requires an authorization by the

7. On page 27 of EMP report indicate that there will be altered runoff patterns and alteration to flow patterns, leading to increased erosion and sedimentation of freshwater habitat, please note that the activity triggers Section 21 (c) and (i) water use of National Water Act, 1998 (Act No.36 of 1998) which requires an authorization by the Department.

8. No construction or development should take place within the scale of 1:100 year flood line or within 500 meters of wetland without an authorisation from this

9. This office will inspect this project at any time to ensure compliance.

10. No activity should proceed prior to the necessary authorisation.

For any enquiries on the above comments, do not hesitate to contact this office on the above indicated contacts.

Yours sincerely

DIRECTOR: INSTITUTIONAL ESTABLISHMENT

DATE: 22/03/2019



Reference: GAUT 002/18-19/E2292 Enquiries: Mokutu Nketu Tel: +27 (0)11 240 3389 mokutu.nketu2@gauteng.gov.za

Lokisa Environmental Consulting P. O. Box 219 GROENKLOOF 0027

Email: delia@lokisa.co.za

Dear Delia de Lange,

COMMENTS ON THE DRAFT BASIC ASSESSMENT REPORT FOR THE PROPOSED BULK SEWER AND WATER PIPELINES ON THE REMAINDER OF PORTION 39, PORTION 63 AND 64 OF THE FARM WITFONTEIN 15 IR, FARM 693 IR AND ERF 1480 ESSELEN PARK EXTESION 2, CITY OF EKURHULENI

Regarding the above-mentioned draft Basic Assessment Report (BAR) received by the department on 7 June 2019, herewith receive the comments from the Department.

# 1. Description of the development

The development entails the provision of bulk sewer and water pipelines to the Birchleigh North Extension 4 areas as well as the upgrading and extension of the existing link road to the north of the proposed Esselen Park Integrated Housing Development in the City of Ekurhuleni.

- 1.1 The proposed development is for the provision of bulk sewer and water pipelines to the Birchleigh North Extension 4 area as well as the upgrading and extension of the existing link road to the north of the proposed Esselen Park Integrated Housing Development. The final Basic Assessment Report must also outline the size and the extent of water pipelines.
- 1.2 Sewer pipelines will be approximately 375m of new pipes ranging between 160ø to 500øfrom point A to Point D, approximately 640m of new sewer pipes ranging between 160ø to 250ø from Point G to point L, approximately 120m of new 160øsewer pipes from point K to point M, approximately 280m of new 160ø sewer pipes from point H to point J, approximately 1, 115m of new sewer pipe from point Q to point I, approximately 780m of new sewer pipe from point S to point I and approximately 400m of new 200ø sewer pipe from point B to point I.
- 1.3 The Road will be upgraded and extended to Road A with 25m road reserve and 531.360m length, Road B with 62m road reserve and 827.662 length, road C with 62m road reserve and 338.990 length and road D with 25m road reserve and 327.981 length.
- 1.4 The locality map which is in colour and in an A3 size with all visible cartographic elements, must be included the final BAR.

### 2. Description of the receiving environment

2.1 The proposed site is within sensitive environmental areas as identified by the departmental GIS Cplan v3 i.e. CBA, Ecological Support Areas, Important Area, Primary Vegetation, Threatened Ecosystem, Wetland and River.



- 2.2 Site inspection undertaken by departmental officials on 25 June 2019 confirmed that the site is environmentally sensitive in the form of a pan and non-perennial river.
- 2.3 Furthermore, the development is affected by the 50 or 100-year floodline from an existing non-perennial watercourse located in the central portion of the proposed development flowing from east to west.

# 3. Listed activities triggered by the development

- 3.1 Listing Notice 1 Activity 9 The development of infrastructure exceeding 1000 metres in length for the bulk transportation of water or storm water-
  - (i) With an internal diameter of 0,36 metres or more; or
  - (ii) With a peak throughput of 120 litres per second or more.

# Excluding where-

- (a) Such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve or railway line reserve; or
- (b) Where such development will occur within an urban area.
- 3.2 Listing Notice 1 Activity 10- The development and related operation of infrastructure exceeding 1000 metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes
  - (i) With an internal diameter of 0,36 metres or more; or
  - (ii) With a peak throughput of 120 litres per second or more;

### Excluding where-

- (a) Such infrastructure is for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes inside a road reserve or railway line reserve; or
- (b) Where such development will occur within an urban area.
- 3.3 Listing Notice 1 Activity 19 The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from:
  - (i) A watercourse;
  - (ii) The seashore; or
  - (iii) The littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or estuary, whichever distance is the greater
- 3.4 Listing Notice 1 Activity 25- The development and related operation of facilities or infrastructure for the treatment of effluent wastewater or sewage with a daily throughput capacity of more than 2000 cubic metres but less than 15 000 cubic metres.
- 3.5 Listing Notice 1 Activity 56 The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre-
  - (i) Where the existing reserve is wider than 13,5 meters; or
  - (ii) Where no reserve exists, where the existing road is wider than 8 metre;
  - Excluding where widening or lengthening occur inside urban areas.
- 3.6 Listing Notice 3 Activity 12 The clearance of 300 squares metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan
  - (i) Within Critical Biodiversity Areas or Ecological Support Areas identified in the Gauteng Conservation Plan or bioregional plans
- 3.7 Listing Notice 3 Activity 14 "The development of -
  - (i) canals exceeding 10 square metres in size;
  - (ii) channels exceeding 10 square metres in size;
  - (iii) bridges exceeding 10 square metres in size;
  - (iv) dams, where the dam, including infrastructure and water surface area exceeds 10 square metres in size:
  - (v) weirs, where the weir, including infrastructure and water surface area exceeds 10 square metres in size;



- (vi) bulk storm water outlet structures exceeding 10 square metres in size;
- (vii) marinas exceeding 10 square metres in size;
- (viii) jetties exceeding 10 square metres in size;
- (ix) slipways exceeding 10 square metres in size;
- (x) building exceeding 10 square metres in size;
- (xi) boardwalks exceeding 10 square metres in size; or
- (xii) infrastructure or structure with a physical footprint of 10 square metres or more
  - (i) dams or weirs, where the dam or weir, including infrastructure and water surface area exceeds 10 square metres; or
  - (ii) infrastructure or structures with a physical footprint of 10 square metres or more;

where such development occurs -

- (a) within a watercourse:
- (b) in front of a development setback; or
- (c) if no development setback has been adopted within 32 metres of a watercourse, measured from the edge of a watercourse;

excluding the development of infrastructure or structure within existing ports or harbours that will not increase the development footprint of the port or harbor.

- (iii) Sites identified as Critical Biodiversity Areas (CBAs) or Ecological Support Areas (ESAs) in the Gauteng Conservation Plan or bioregional plans.
- 3.8 Listing Notice 3 Activity 18- The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.
  - (vi) Sensitive areas identified in an environmental management framework adopted by the relevant environmental authority;

# 4. Applicable legislation and policies

4.1 The report has made provisions to accommodate the following legislations, policies, and guidelines for the Bulk sewer and water pipelines as well as the upgrade and extension of the existing Link road which has an impact in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998 as amended); National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008), National Water Act, (Act No 36 of 1998); National Heritage Resources Act, 1999 (Act No. 25 of 1999), Occupational Health Resources Act, 1993 (Act No. 85 of 1993), National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004), Gauteng Conservation Plan (C-plan Version 3.3), Gauteng Spatial Development Framework, City of Ekurhuleni: Integrated Development Plan and City of Ekurhuleni By-Laws. Gauteng Provincial Environmental Management Framework, 2015 (GPEMF, 2015) identifies the proposed site as Environmental Management Zone 1 which streamline urban development activities in it and to promote development infill and Zone 2 which is a sensitive areas within the urban development zone must be conserved and where linear development (roads etc.) cannot avoid these areas, a proper assessment and implementation of alternatives must be undertaken.

# 5. GDARD guidelines and requirements

- 5.1 The Departmental Conservation Plan indicates that the proposed activity is within CBA, ASA Important Area, Primary Vegetation, Pan, Threatened Ecosystem, Wetland and River. Therefore, the following studies must form part of the final BAR and the studies must follow regulation 13 of EIA Regulation 2014:
  - 5.1.1 Wetland Delineation and Ecological Surveys, Terrestrial Fauna and Flora Surveys, Ecological Impact Surveys prepared by EnviRoss CC dated May 2019 must form part of the final BAR.



- 5.1.2 Stormwater Management Plan Report prepared by GIBB Engineering and Architecture dated February 2015 must also form part of the final BAR.
- 5.1.3 Geotechnical Investigations prepared by Geohazard Solutions Consulting Engineering Geologists dated 23 November 2018 must form part of the final BAR.
- 5.2 The comments from City of Ekurhuleni Metropolitan Municipality Department of Environmental Resource Management must form part of the final BAR.
- 5.3 The Water Use License (WUL) or Authorisation must be obtain from the Department of Water and Sanitation.

# 6. Impacts Identification, Assessment and Mitigation

6.1 Based on all the above the assessment of impacts included in the draft report is noted and must form part of the final BAR.

#### 7. Assessment of alternatives

7.1 Alternatives were assessed, this include site or route alternative and must be included in the final BAR.

# 8. Need and desirability of the development

8.1 The detailed need and desirability of the development outlined in the report is noted and it must form part of the final report.

# 9. Layout plans, route positioning

9.1 The layout provided is in A3 size, therefore it must be included in the final BAR with visible legend, and clearly indicate the proposed activities on site with different colours.

# 10. Environmental Management Programme (EMPr)

10.1 The attached EMPr is noted however it must form part of the final BAR. An EMPr is a binding document and all the conditions in it should be clear and enforceable, it is therefore important that words that do not emphasise enforcement be avoided therefore, the final EMPr must comply with the above outline requirement.

#### 11. Public Participation Process

11.1 The Public Participation Process attached is noted, however it does not include the road, therefore the Public Participation Process including the road activity must be undertaken and form part of the final BAR.

If you have any queries regarding the contents of this letter, please contact the official of the Department using any of the above indicated contact details.

Yours faithfully.

Mr. S. Mukhola

Director: Impact Management

Date: