Msunduzi Municipality

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SUSTAINABLE DEVELOPMENT & CITY ENTERPRISES DEPARTMENT

Environmental Management Unit

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Date: 24 November 2016

Our Ref: ENV 041

EnviroPro
P. O. Box 1391
Kloof
3640

Attention: Mr. Jourdan

Dear Iain,

Draft Basic Assessment Report for the Proposed Extension of Bombay Road, Pietermaritzburg, Msunduzi Local Municipality, KwaZulu-Natal.

Please include the DC No. of the Draft BAR as provided by the Department of Economic Development, Tourism and Environmental Affairs (EDTEA) onto the document for reference.

Since the project did not provide an alternative route for the development of the proposed road, a Traffic Impact Assessment should be undertaken to indicate whether the outcomes of the construction of the road outweighs the environmental damage.

A site visit was conducted on the 20th November 2016 which has identified the proposed site to be an environmentally significant area.

The property has been assessed against the Municipal Environmental Management Framework (EMF), Msunduzi Conservation Plan (C Plan), the Draft Ecosystem Services Plan (ESP) and the Spatial Development Framework (SDF).

The Msunduzi Local Municipality, on the 10th June 2010, approved its Strategic Planning and Environmental Management Guidelines in the form of an Environmental Management Framework (EMF) with associated support documentation including an Environmental Status Quo Report, and Strategic Environmental Assessment. The Environmental Management Framework (EMF) for Msunduzi Municipality has also been adopted by the Competent Authority on the 3rd September 2015 (Provincial Notice 125 of 2015) in terms of subregulations 3(1) and 5(1) of the Environmental Management Framework Regulations 2010 (Government Notice No. R. 547).

While the DBAR has addressed certain aspects highlighted by the EMF, outstanding requirements have been raised below and will need to be addressed. The Polluters Pay Principle and Section 28 of National Environmental Management Act, Act 107 of 1998 Duty of Care and remediation of environmental damage needs to be added to section 3 headed Policy and Legislative Context on page 17.

The Municipal Environmental Management Framework (EMF) has identified the site to have the following constraints (Refer to Figure 1 and Figure 2);

1. <u>High Wetland Development Constraints</u> – Based on the Msunduzi Strategic Environmental Assessment (SEA) and Environmental Policy Msunduzi Municipality

does in principle not support the cumulative loss of floodplain, wetland and riparian areas. The Draft Basic Assessment Report has defined an offset in the ratio of 1:3 in order to address how potential loss of floodplain and riparian areas will be managed in this case and we require that the development and all associated impacts are managed and mitigated through an Environmental Management Programme (EMPr).

Please note that we require that the offset ratio be 1:5 not 1:3. Thus if the size requirement cannot be met on the proposed site for the offset, then the PES category will have to be improved by one category above the fulfillment of the 1:3 offset requirement currently being proposed. An offset report will be required to ensure that the wetland ties into the existing larger riparian system and is a functional wetland providing the following benefits; flood attenuation, nitrate, phosphate and toxicant assimilation, carbon storage, erosion control, sediment trapping and biodiversity promotion.

2. High Biodiversity Constraints – Impacts will need to be mitigated through sufficient indigenous landscaping and a Landscape Plan must be submitted to This Unit for comment and approval prior to site works commencing. Should species relocation be required, a Species Relocation Plan will be required to be submitted to this unit for comment and approval prior to site works commencing.

3. High Flood Potential - An Independent Engineer will be required to delineate a 1/50 year and 1/100 year flood line for the river (Baynespruit).

4. High Water Quality Constraints – A Storm Water Management Plan (SWMP) which must be prepared to address the quality and quantities of the storm water discharged from the hardened surface and incorporate storm water attenuation measures on site to ensure the proposed development is flood neutral. The SWMP must promote wetland creation and sustenance whilst not interfering with the fish populations by increasing the flows of the stream dramatically but rather slowly feeding the drained water through the wetland seep slowly. This must be submitted to this Unit as well as the Msunduzi Storm Water and Drainage Management Unit for comment and approval prior to any site works commencing.

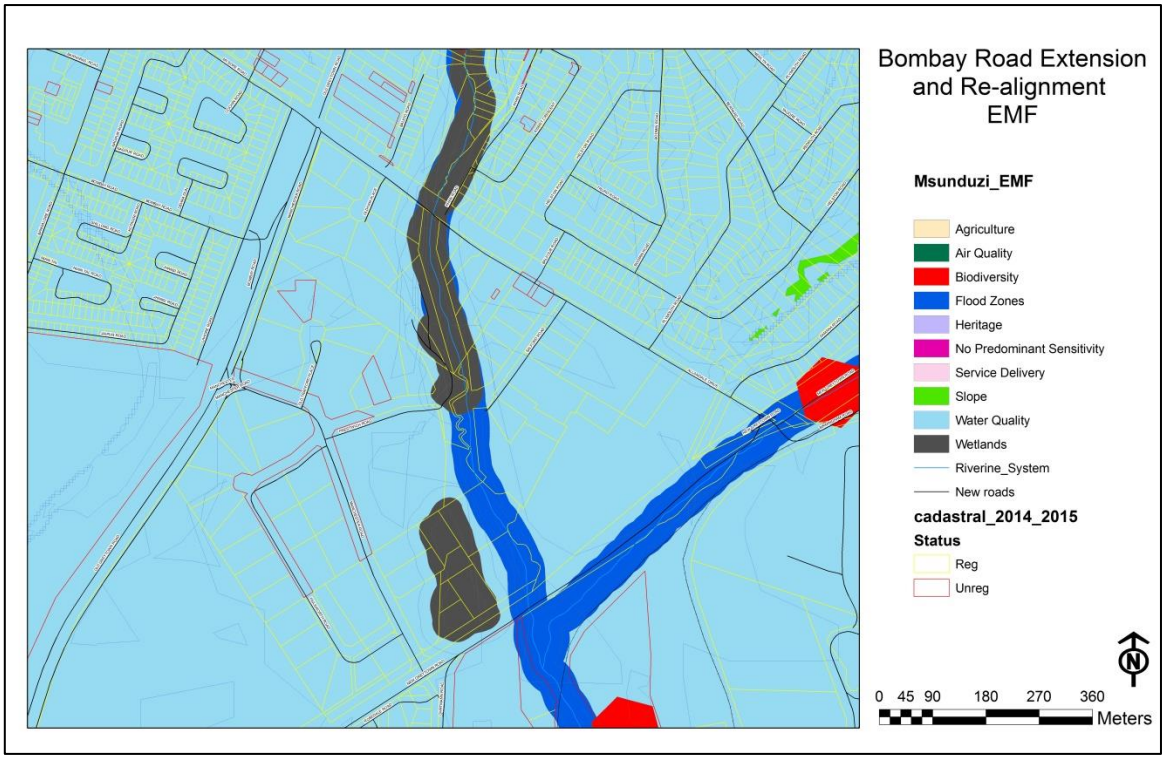

Figure 1: Municipal Environmental Management Framework (EMF)

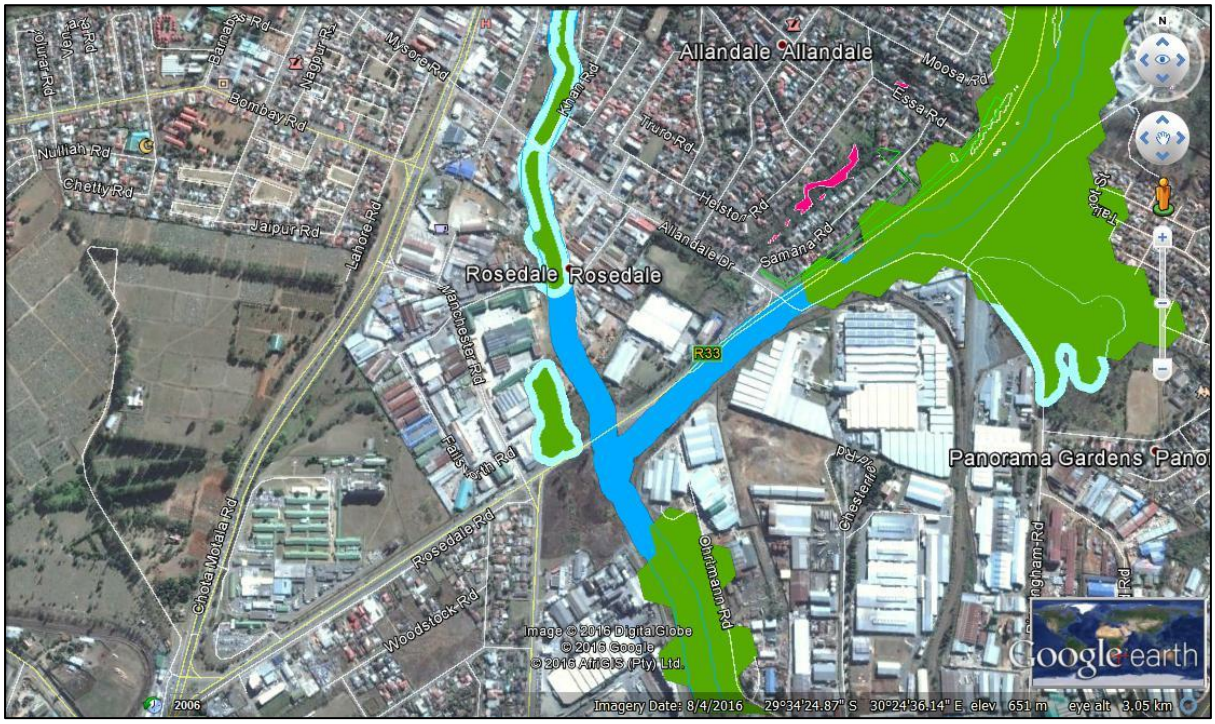

Figure 2: Adopted and Gazetted Municipal Environmental Management Framework (EMF)

The Msunduzi Conservation Plan (C-Plan) must be taken into account during the Environmental Impact Assessment Process for this development as the C Plan indicates environmental sensitivity on the proposed site with majority of the site having a value of 1; representing an area which is considered to be totally irreplaceable (Refer to Figure 3).

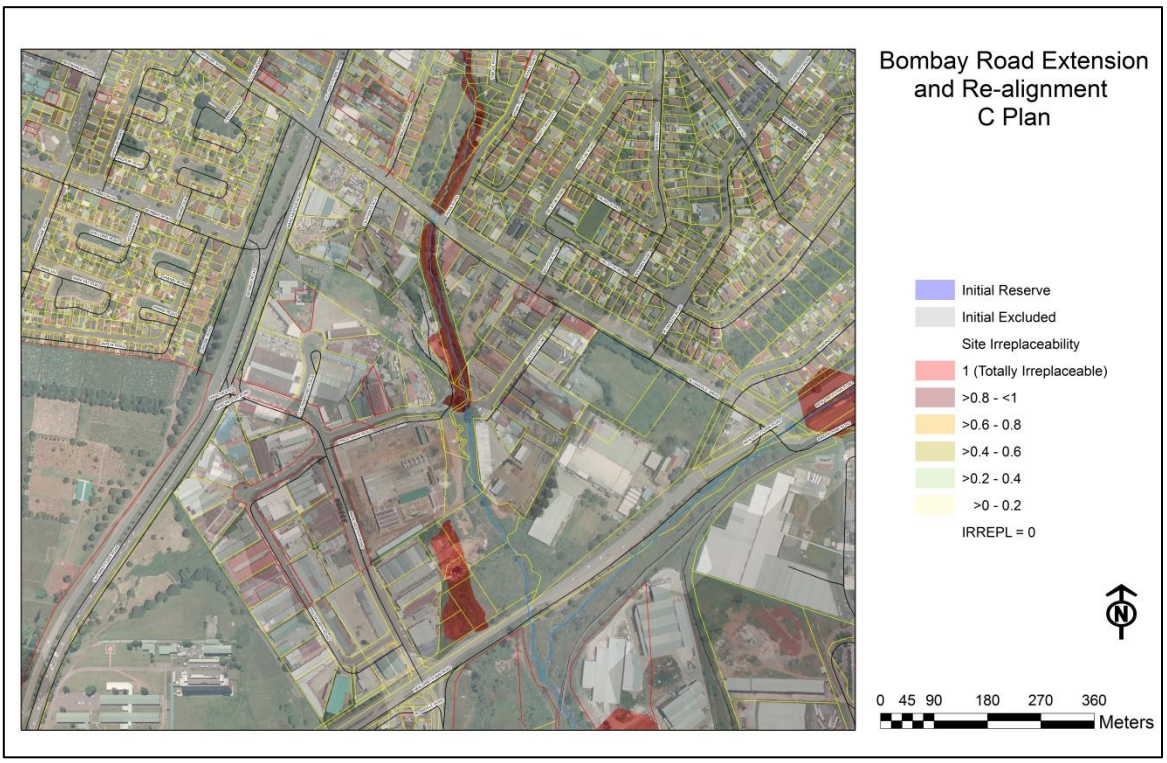

Figure 3: The Msunduzi Conservation Plan (C-Plan)

The Draft Ecosystem Services Plan (ESP) has indicated the proposed sites to be environmentally sensitive with Key areas and Riparian Corridors, Riparian Corridors and Untransformed Public Open Space covering the proposed site as indicated by the ESP (Refer to Figure 4).

Based on the Msunduzi Strategic Environmental Assessment (SEA) and Environmental Policy Msunduzi Municipality does in principle not support the cumulative loss of protected areas, ecological corridors, floodplain, wetland and riparian areas. The potential loss of these areas is to be addressed in this case and we require that the development and all associated impacts are managed and mitigated through an Environmental Management Programme (EMPr).

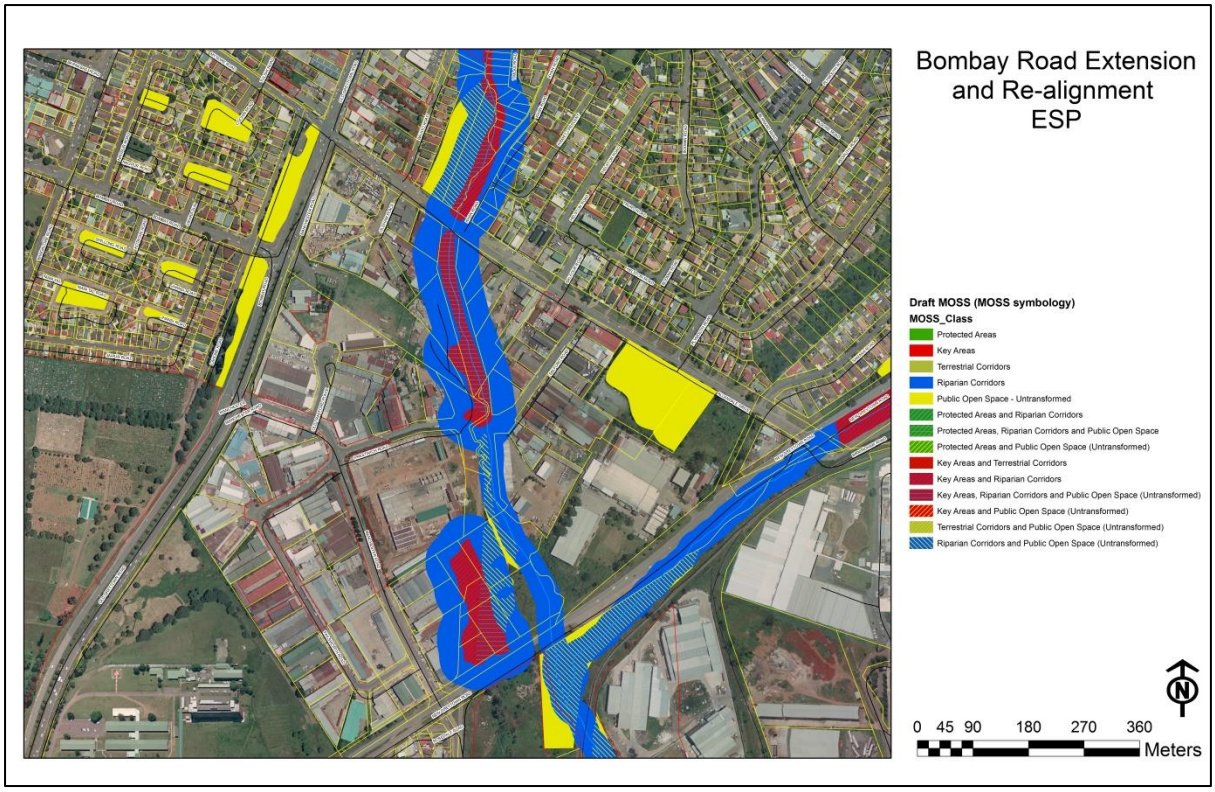

Figure 4: The Draft Ecosystem Services Plan (ESP)

The Spatial Development Framework (SDF) indicates the presence of a watercourse within 500m of the proposed site (Refer to Figure 5) and therefore a Water Use License will be required.

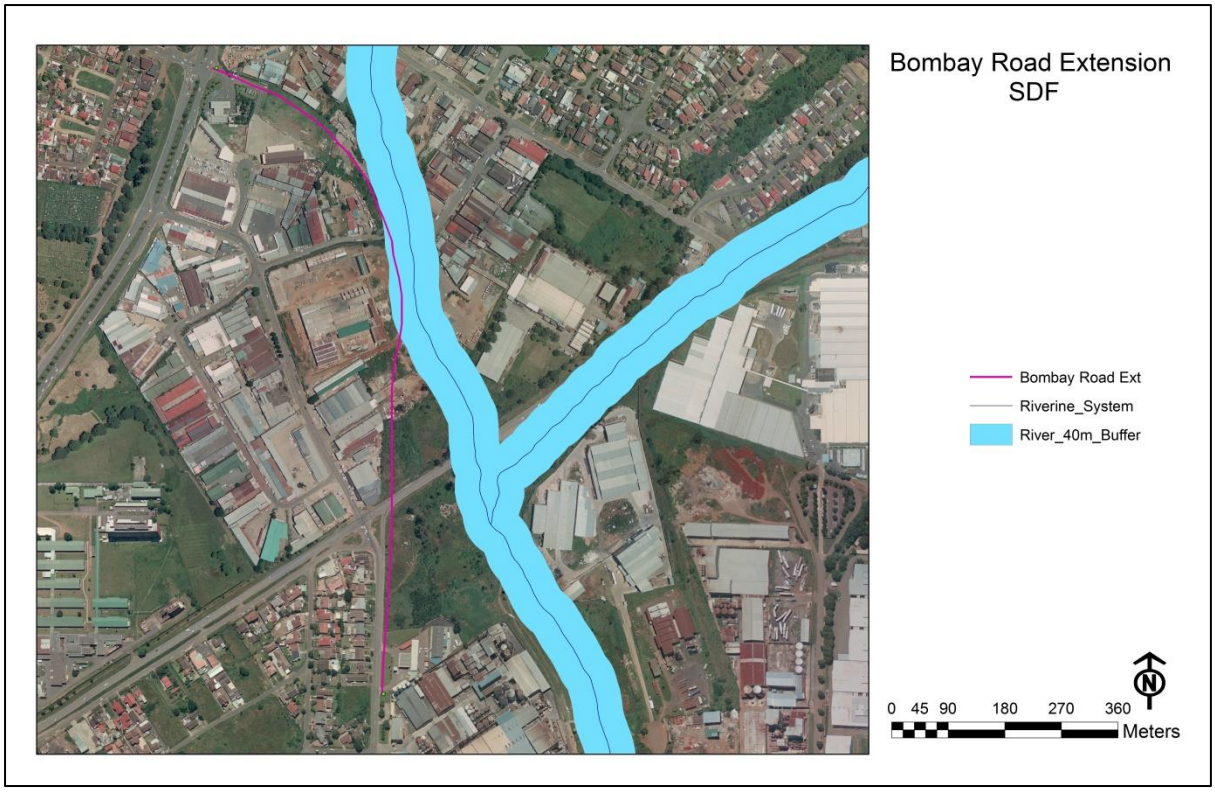

Figure 5: Spatial Development Framework (SDF)

With regards to the delineation of floodlines please note that Msunduzi Municipality would require both 1:50 year and 1:100 year floodlines to be submitted in hard copies of reports as well as electronic copies saved as shapefiles. Please refer to the excerpt below adapted from the National Water Act;

Excerpt from National Water Act, (Act 26 of 1998) Chapter 14, Part 3, Section 144

Part 3: Information on floodlines, floods and droughts

Part 3 requires certain information relating to floods, droughts and potential risks to be made available to the public. Township layout plans must indicate a specific floodline. Water management institutions must use the most appropriate means to inform the public about anticipated floods, droughts or risks posed by water quality, the failure of any dam or any other waterworks or any other related matter. The Minister may establish early warning systems to anticipate such events.

Floodlines on plans for establishment of townships

144. For the purposes of ensuring that all persons who might be affected have access to information regarding potential flood hazards, no person may establish a township unless the layout plan shows, in a form acceptable to the local authority concerned, lines indicating the maximum level likely to be reached by floodwaters on average once in every 100 years.

The Department of Water and Sanitation is to be consulted with regards to a Water Use License (WUL) as this development occurs within 500m of a watercourse and wetland / riparian area which may trigger section 21 (c) and (i) of the National Water Act, (Act 26 of

1998). The Department of Water and Sanitation (DWS) will determine if a Water Use License or General Authorisation is required and a letter from the Department stating the outcome of their decision must be provided in the Final BAR.

Please note the zoning for the proposed site is public open space with reference to Figure 6 below. Based on the Msunduzi Strategic Environmental Assessment (SEA) and Environmental Policy Msunduzi Municipality does in principle not support the cumulative loss of public open space and provision must therefore be made to incorporate open space into the layout design of the proposed development.

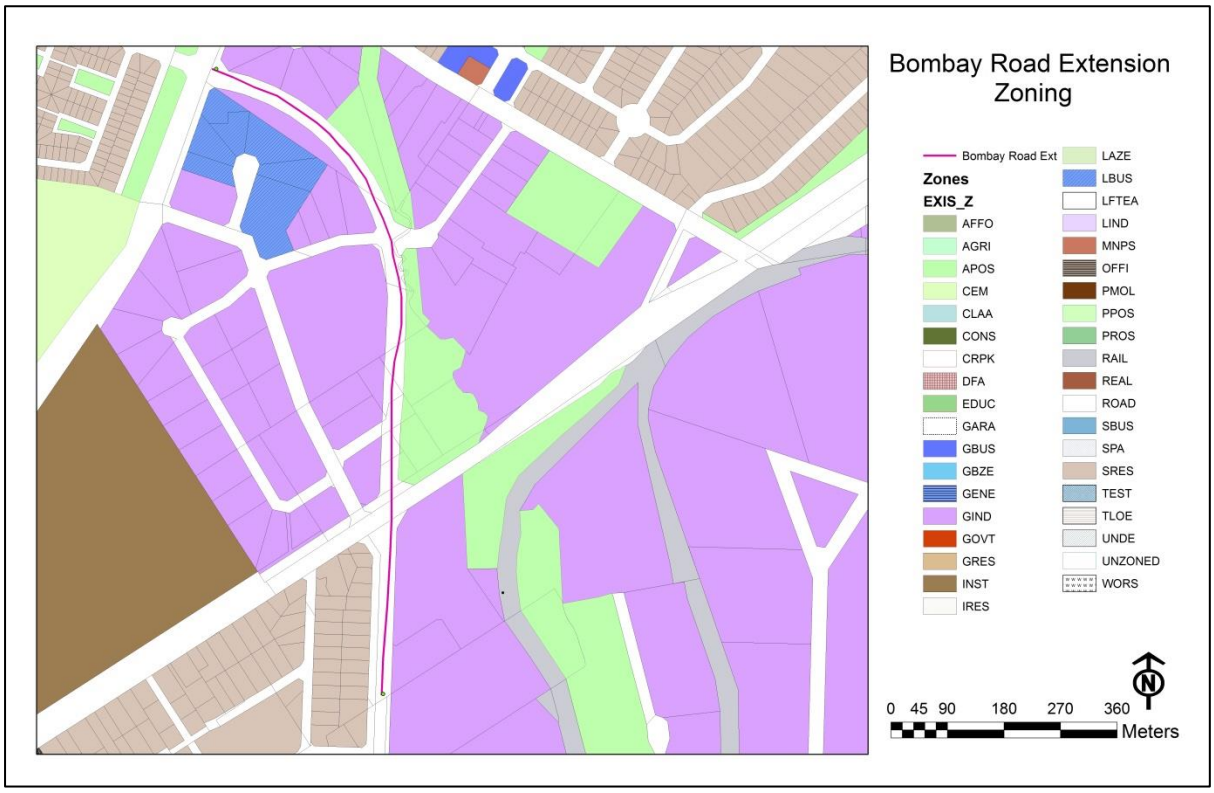

Figure 6: Zoning of the surroundings of the proposed development

The advertisement placed in the Ilanga contains an error as it mentions the upgrade of the road and a bridge. However, the scope of this study does not include a bridge.

Aquatic Monitoring Survey Reports which is to be done after construction, bi-annually for a period not exceeding one year, must be sent to this Unit.

Please note that alien plant clearing is on-going throughout the duration of the construction (lifespan of the development) and therefore an Alien Plant Control Plan must be attached to the EMPr; this plan must include follow up clearing for post construction and rehabilitation using indigenous grasses, plants, trees and shrubs. Please note that a list of suitable species can be made available to you from Msunduzi Municipality's Environmental Management Unit upon request.

The Municipal Climate Change Policy and Draft Mitigation and Adaptation Strategy must be considered and measures implemented to reduce the carbon footprint and encourage the use of renewable resources which must be considered and implemented.

Msunduzi Municipality's Environmental Management Unit must be informed of all Construction and Post-Construction/ Rehabilitation phases of this development and will therefore be required to attend a monthly Environmental Audit to ensure compliance with the EMPr. Therefore please note that All ECO reports and audits must be sent to Msunduzi Municipality's Environmental Management Unit and the Department of Economic Development Tourism and Environmental Affairs. Rehabilitation must also be considered as acceptable by the Msunduzi Municipality's Environmental Management Unit upon close out.

The following comments are based on the EMPr;

- Page 23 makes reference to the management of top soil only. However each horizon profile must be stockpiled separately. Topsoil (top 200 mm) is not to be mixed with subsoil. Stockpiling of top and subsoils must be in the correct sequence. The soil profile must be restored to the natural structure with topsoil and sub-soil being replaced in sequence.
- Soil is not to be stockpiled against tree trunks as this will encourage ant infestations.
- In instances where soil compaction has taken place, the compaction must be reversed.
- Excess material must first be used for:
  − Creation of rock gabions where required for slope protection and erosion control;
  − Rehabilitation of cuts;
  − Backfill for excavations.
- The Contractor must enter into negotiation with the local community regarding the identification of areas where excess spoil can be used for rehabilitation purposes.

- Should the volume of spoil to be disposed of be too large to use in the manner described above, or if the density of spoil stockpiles becomes too high, the spoil will have to be removed from the working area to a permitted landfill site.
- Page 33 with reference to bullet point 2, states that damage to infrastructure must be repaired on a timely basis by the contractor and it is to be noted that any damage to water pipes or sewer infrastructure must be considered as emergency incidents whereby correction must be immediate so as not to waste water resources and to not create environmental damage.

Please ensure this unit is provided with an electronic and hard copy of the final Basic Assessment Report and Environmental Management Programme.

Please do not hesitate to contact this office should you have any further queries.

FOR: MANAGER: ENVIRONMENTAL MANAGEMENT UNIT